



## EXTRUSION DIE LIBRARY

STOCKED & NON-STOCKED PRODUCTS





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## Who is Capral Aluminium and what do we offer?

Established in 1936, Capral Aluminium is now Australia's largest manufacturer, stockholder and distributor of aluminium and other semi-finished non-ferrous products located in Australia. We understand the Australian market and its environmental conditions and this has helped us become Australia's leading designer, manufacturer and distributor of aluminium extrusions.

Capral Aluminium's manufacturing footprint includes the largest extrusion facility in the Southern Hemisphere at its Bundamba operation in Queensland. In addition, extrusion manufacturing facilities are also located in Victoria, New South Wales, South Australia and Western Australia, all supplying world class products at short lead times.

We operate a strategic regional network of mill direct account managers and distribution centres. These supply solutions and immediate stock availability to a wide range of industries and market sectors.

Capral Aluminium understands the Australian market and its environmental conditions and this has made it Australia's leading designer, manufacturer and distributor of aluminium extrusions.

### National Distribution Network

Capral Aluminium's extensive metropolitan and regional distribution network, services a wide range of industries including residential and commercial construction, transport, marine and general engineering. Regional distribution centres support a network of conveniently located trade centres operating throughout metropolitan and regional Australia supplying a comprehensive range of aluminium geometric extrusions, machining rod, plate and sheet products.

### Our commitment

Capral Aluminium maintains a significant investment in research and development. We have a committed team of professionals in its Technology Solutions Group

who use NATA accredited testing facilities to support the design and development of sustainable, energy efficient residential and commercial glazing systems.

Capral Aluminium is committed to minimising the environmental impacts of its activities by; examining its operations to identify environmentally responsible improvement opportunities; by reducing adverse consequences of new plant, equipment and processes; by managing waste materials using the hierarchy of reduce/reuse/recycle; and by ensuring that any necessary disposals are managed to appropriate environmental standards.

Where possible, our extrusions, are produced close to where they are required. This helps minimise the impact of road freight, reducing carbon dioxide emissions.

## Our Capabilities

Our focus on the requirements of our customers has seen us make a significant investment in our processing and fabrication facilities, including nine extrusion presses and Australia's largest extrusion press – the 4400MT SMS Eumuco Extrusion Press with interchangeable 9"/12" container.

## Special Extruded Products

Capral Aluminium has the capability to design, produce and stock our customer's own sections. Our extrusion manufacturing facilities can provide technical information along with in-house facilities to help design and produce extruded profiles specific to our customer's needs.

Our extrusion manufacturing facilities produce profiles to the highest quality for use in numerous applications, such as architectural, automotive, marine, electrical, general engineering, road and transport.

A typical route from conception to section:

- Customer product requirement in the form of a rough drawing;
- Design development utilising CAD/CAM technology;
- Die print/drawing produced and then approved by customer;
- Die produced and sample section extruded;
- Bulk material is extruded once off-tool sample approved.

This catalogue is intended to be an aid to our customers; it is not a comprehensive listing of all the products and services available. If you are unable to find the product, service or information you require, please contact your local Capral Aluminium sales representative or our mill sales team. Contact information can be found on back page of this catalogue.

## Alloy Range

Our alloy range includes 6005A, 6060, 6061, 6063, 6082, 6082B, 6101, 6106 and 6351.

## Plant capabilities

| FACILITIES              | LOG DIAMETER | ALLOYS USED                   |                       |                           | TABLE WEIGHT (kg/m)                               |                           | CIRCUMSCRIBING CIRCLE DIAMETER (mm) |            |
|-------------------------|--------------|-------------------------------|-----------------------|---------------------------|---------------------------------------------------|---------------------------|-------------------------------------|------------|
|                         |              | Soft / Semi Structural        | Hard / Structural     | Extruded Finishes         | Customer Length Range Saw (m)                     | Min Section Weight (kg/m) | Solid                               | Hollow     |
| CANNING VALE 7" PRESS   | 178mm        | 6060<br>6063<br>6106          |                       | Architectural, Structural | 1.8 – 7.2                                         | 0.15                      | 160                                 | 120        |
| ANGASTON 8" PRESS       | 203mm        | 6005A<br>6060<br>6063<br>6106 |                       | Architectural, Structural | 3.0 - 7.0 Mill<br>3.7 – 6.5 Paint                 | 0.2                       | 290w x 160h                         | 200        |
| CAMPBELLFIELD 9" PRESS  | 228 mm       | 6060<br>6106<br>6351          | 6005A<br>6061<br>6082 | Architectural, Structural | 2.5 –17<br>Longer/shorter lengths - refer to mill | 0.275                     | 420w x 60h                          | 380w x 90h |
| CAMPBELLFIELD 12" PRESS | 304 mm       | 6060<br>6063<br>6101<br>6351  | 6005A<br>6061<br>6082 | Architectural, Structural | 2.5 –17<br>Longer/shorter lengths - refer to mill | 0.7                       | 420w x 60h                          | 380w x 90h |
| PENRITH 8" PRESS        | 203 mm       | 1350<br>6060<br>6063<br>6106  | 6005A                 | Architectural, Structural | 3.0 –9.0<br>Shorter lengths - refer to mill       | 0.2                       | 190w x 40h                          | 160w x 40h |
| BREMER - B1 8" PRESS    | 203 mm       | 6060                          | –                     | Architectural, Structural | 3.0 – 7.5<br>Shorter lengths - refer to mill      | 0.2                       | 190                                 | 180        |
| BREMER - B2 7" PRESS    | 178mm        | 6060                          | –                     | Architectural, Structural | 3.0 – 7.5<br>Shorter lengths - refer to mill      | 0.15                      | 165                                 | 150        |
| BREMER - B3 7" PRESS    | 178mm        | 6060<br>6063<br>6106          | –                     | Architectural, Structural | 3.0 – 7.5<br>Shorter lengths - refer to mill      | 0.15                      | 165                                 | 150        |
| BREMER - B4 8" PRESS    | 203 mm       | 6060<br>6063<br>6106          | –                     | Architectural, Structural | 3.0 – 7.5<br>Shorter lengths - refer to mill      | 0.35                      | 250                                 | 180        |

## Accreditation and Certification

All extrusions manufactured by Capral Aluminium are produced to the chemical composition, mechanical property and dimensional tolerances in AS/NZS 1866:1997.

Capral Aluminium is also accredited to:

- AS/NZS ISO 9001:2015 (*issued by Lloyd's Register Quality Assurance Limited*) - *Quality Management Systems applicable to manufacture, warehousing and stockholding of aluminium alloy extrusions including powder coating and anodising. Provision of national functions associated with customer service, organisational development and procurement of aluminium extrusion and value adding products.*
- TS14001.
- TS16949.
- AS/NZS ISO 14001:2004 - Environmental Management Systems.
- ISO/IEC 17025 - NATA Accredited Mechanical Testing Laboratory.

- All major international marine classification societies including DNV (Det Norske Veritas) and Lloyds Register.
- AS/NZ 4801:2001 OHS Management Systems Accreditation.

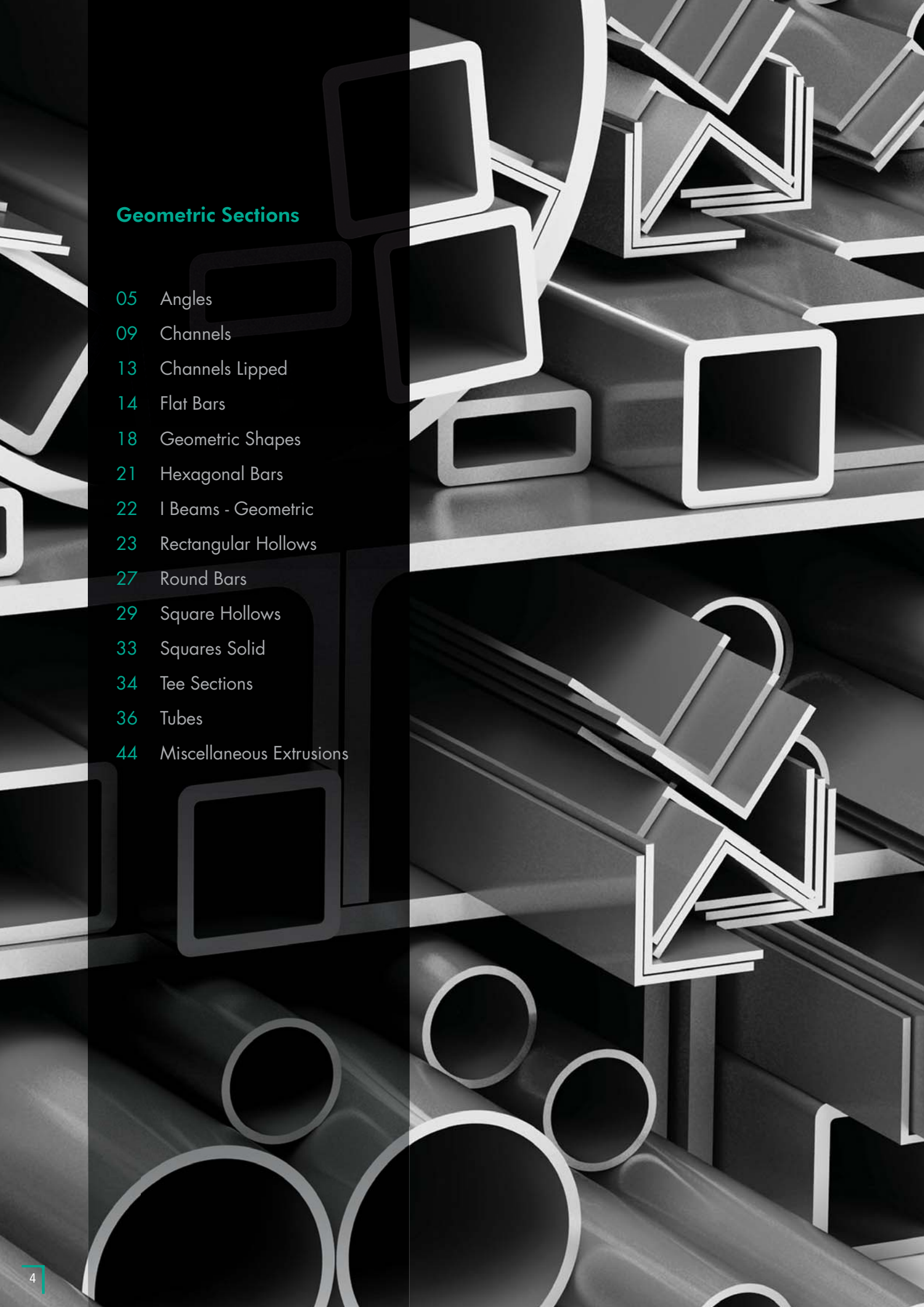
Capral Aluminium can supply extrusions to the following certification:

|          |                             |
|----------|-----------------------------|
| DNV      | Det Norske Veritas          |
| ABS      | American Bureau of Shipping |
| BV       | Bureau Veritas              |
| Lloyds   | Lloyds Register of Shipping |
| Class NK | Nippon Kaioi Kyokai         |
| GL       | Germanischer Lloyd          |

Less common testing organisations are available by request, as is independent third party testing.

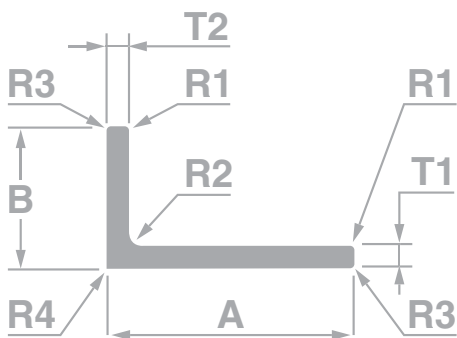






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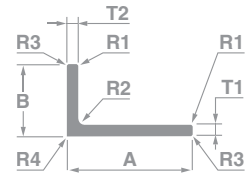


## Angles

| SECTION  | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EME7420  | 12.00 | 10.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.088     |
| EQ1908   | 12.00 | 12.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.086     |
| EAL12287 | 12.00 | 12.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.091     |
| EK9102   | 12.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.096     |
| EK9103   | 12.00 | 12.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.170     |
| EAL12392 | 15.00 | 15.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.115     |
| EB1118   | 16.00 | 16.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.132     |
| EK9104   | 16.00 | 16.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.235     |
| E72238   | 19.00 | 19.00 | 1.20  | 1.20  |       |       |       |       | 100 | 100 | 0.111     |
| ED1247   | 19.05 | 12.70 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.130     |
| E20581   | 20.00 | 6.00  | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.105     |
| EQ1909   | 20.00 | 12.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.116     |
| EK9105   | 20.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.130     |
| EK9106   | 20.00 | 12.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.235     |
| EQ1917   | 20.00 | 20.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.146     |
| EAL12245 | 20.00 | 20.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.156     |
| EK9107   | 20.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.165     |
| EK9108   | 20.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.300     |
| EQ1910   | 25.00 | 12.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.135     |
| EU7473   | 25.00 | 12.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.143     |
| EK9109   | 25.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.153     |
| EK9110   | 25.00 | 12.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.275     |
| EQ2841   | 25.00 | 20.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.165     |
| EAL21198 | 25.00 | 20.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.165     |
| EAL12183 | 25.00 | 20.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.176     |
| EU7474   | 25.00 | 20.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.176     |
| EK9111   | 25.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.187     |
| EB1157   | 25.00 | 20.00 | 2.50  | 2.50  |       |       |       |       | 100 | 100 | 0.286     |
| EK9112   | 25.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.340     |
| EQ1914   | 25.00 | 25.00 | 1.40  | 1.40  |       |       |       |       | 100 | 100 | 0.184     |
| EU7475   | 25.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.197     |
| EK9216   | 25.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.209     |
| EK9217   | 25.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.381     |
| EB1117   | 25.00 | 25.00 | 4.00  | 4.00  |       |       |       |       | 100 | 100 | 0.497     |
| EU2611   | 25.00 | 25.00 | 6.00  | 6.00  |       |       |       |       | 100 | 100 | 0.712     |
| E34653   | 25.40 | 12.70 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.157     |
| EQ2028   | 28.00 | 28.00 | 3.00  | 3.00  |       |       | 1.50  | 1.50  | 110 | 110 | 0.425     |
| EL7572   | 30.00 | 20.00 | 2.00  | 2.00  |       |       |       |       | 100 | 100 | 0.259     |
| E05095   | 31.75 | 19.05 | 1.15  | 1.15  | 0.58  | 1.60  | 0.58  |       | 100 | 100 | 0.154     |
| EAL2313  | 31.75 | 19.05 | 1.57  | 1.57  |       |       |       |       | 101 | 101 | 0.208     |

Sizes are indicative only – refer to die drawings for accurate sizes

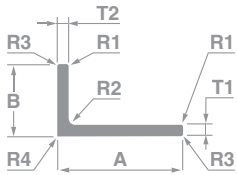
## Angles continued



| SECTION  | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EME1987  | 31.75 | 31.75 | 1.57  | 1.57  |       |       |       |       | 127 | 127 | 0.263     |
| EB1166   | 32.00 | 9.00  | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.170     |
| EK9113   | 32.00 | 20.00 | 1.20  | 1.20  |       |       |       |       | 103 | 103 | 0.164     |
| EQ2842   | 32.00 | 20.00 | 1.40  | 1.40  |       |       |       |       | 103 | 103 | 0.191     |
| EK9114   | 32.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 104 | 104 | 0.218     |
| EK9115   | 32.00 | 20.00 | 2.50  | 2.50  |       |       |       |       | 104 | 104 | 0.334     |
| EK9116   | 32.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 103 | 103 | 0.397     |
| EK9117   | 32.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 114 | 114 | 0.437     |
| EAL12243 | 32.00 | 32.00 | 1.50  | 1.50  |       |       |       |       | 127 | 127 | 0.253     |
| EB1126   | 32.00 | 32.00 | 1.60  | 1.60  |       |       |       |       | 128 | 128 | 0.270     |
| EK9118   | 32.00 | 32.00 | 3.00  | 3.00  |       |       |       |       | 128 | 128 | 0.494     |
| EK9119   | 32.00 | 32.00 | 4.00  | 4.00  |       |       |       |       | 128 | 128 | 0.648     |
| E20562   | 35.00 | 35.00 | 2.00  | 2.00  |       |       |       |       | 140 | 140 | 0.367     |
| EP7328   | 35.00 | 35.00 | 3.00  | 3.00  |       |       |       |       | 139 | 139 | 0.543     |
| EG9661   | 38.10 | 12.70 | 1.60  | 1.60  |       |       |       |       | 102 | 102 | 0.209     |
| EK5994   | 38.10 | 25.40 | 1.57  | 1.57  |       |       |       |       | 127 | 100 | 0.263     |
| EH1816   | 38.10 | 38.10 | 4.75  | 4.75  |       |       |       |       | 151 | 151 | 0.918     |
| EE3421   | 38.10 | 38.10 | 4.75  | 4.75  |       | 5.54  |       |       | 150 | 150 | 0.934     |
| EQ1911   | 40.00 | 12.00 | 1.40  | 1.40  |       |       |       |       | 104 | 104 | 0.191     |
| E20434   | 40.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 104 | 104 | 0.218     |
| EN1778   | 40.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 103 | 103 | 0.216     |
| EK9120   | 40.00 | 12.00 | 3.00  | 3.00  |       |       |       |       | 103 | 103 | 0.397     |
| EQ2843   | 40.00 | 20.00 | 1.40  | 1.40  |       |       |       |       | 120 | 120 | 0.221     |
| EAL12334 | 40.00 | 20.00 | 1.50  | 1.50  |       |       |       |       | 119 | 119 | 0.237     |
| EL3257   | 40.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 119 | 119 | 0.252     |
| EK9121   | 40.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 119 | 119 | 0.462     |
| EQ2844   | 40.00 | 25.00 | 1.40  | 1.40  |       |       |       |       | 130 | 130 | 0.240     |
| EL8124   | 40.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 129 | 129 | 0.273     |
| EK9122   | 40.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 130 | 130 | 0.502     |
| EQ3361   | 40.00 | 40.00 | 1.40  | 1.40  |       |       |       |       | 160 | 160 | 0.297     |
| EU7481   | 40.00 | 40.00 | 1.50  | 1.50  |       |       |       |       | 160 | 160 | 0.318     |
| EK9123   | 40.00 | 40.00 | 1.60  | 1.60  |       |       |       |       | 160 | 160 | 0.339     |
| EK9124   | 40.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 160 | 160 | 0.624     |
| E20672   | 40.00 | 40.00 | 4.00  | 4.00  |       | 4.00  |       |       | 158 | 158 | 0.830     |
| EK9125   | 40.00 | 40.00 | 4.00  | 4.00  |       |       |       |       | 160 | 160 | 0.821     |
| EK9126   | 40.00 | 40.00 | 6.00  | 6.00  |       |       |       |       | 160 | 160 | 1.199     |
| E20673   | 40.00 | 40.00 | 6.00  | 6.00  |       | 4.00  |       |       | 158 | 158 | 1.208     |
| E06156   | 44.40 | 19.00 | 1.65  | 1.65  |       |       |       |       | 127 | 100 | 0.275     |
| EK7714   | 44.45 | 19.05 | 1.57  | 1.57  |       |       |       |       | 127 | 127 | 0.263     |
| EH4835   | 44.45 | 25.40 | 1.57  | 1.57  |       |       |       |       | 140 | 140 | 0.289     |
| EB1159   | 45.00 | 20.00 | 1.50  | 1.50  |       |       |       |       | 129 | 129 | 0.257     |
| EQ4120   | 50.00 | 12.00 | 1.40  | 1.40  |       |       |       |       | 124 | 124 | 0.230     |
| EK9127   | 50.00 | 12.00 | 3.00  | 3.00  |       |       |       |       | 124 | 124 | 0.478     |
| E34020   | 50.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 140 | 140 | 0.294     |

Sizes are indicative only – refer to the drawings for accurate sizes



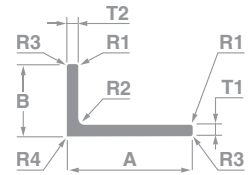


## Angles continued

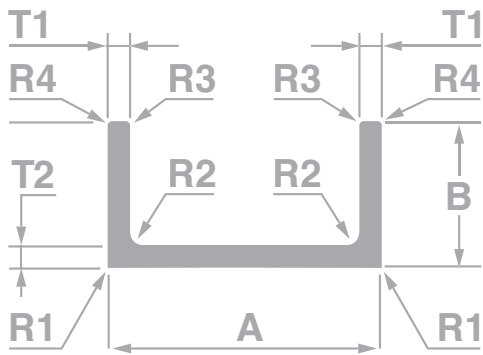
| SECTION | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EK9128  | 50.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 140 | 140 | 0.543     |
| EQ2558  | 50.00 | 25.00 | 1.40  | 1.40  |       |       |       |       | 149 | 149 | 0.278     |
| EU7482  | 50.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 150 | 150 | 0.297     |
| EK9129  | 50.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 149 | 149 | 0.317     |
| EK9130  | 50.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 150 | 150 | 0.583     |
| EK9131  | 50.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 180 | 180 | 0.705     |
| EU7483  | 50.00 | 50.00 | 1.50  | 1.50  |       |       |       |       | 200 | 200 | 0.399     |
| EL9417  | 50.00 | 50.00 | 1.60  | 1.60  |       |       |       |       | 199 | 199 | 0.425     |
| EK9132  | 50.00 | 50.00 | 3.00  | 3.00  |       |       |       |       | 200 | 200 | 0.786     |
| E20687  | 50.00 | 50.00 | 3.00  | 3.00  |       | 2.50  |       |       | 198 | 198 | 0.788     |
| EK9133  | 50.00 | 50.00 | 4.00  | 4.00  |       |       |       |       | 200 | 200 | 1.037     |
| E20688  | 50.00 | 50.00 | 4.00  | 4.00  |       | 2.50  |       |       | 198 | 198 | 1.040     |
| EK9134  | 50.00 | 50.00 | 6.00  | 6.00  |       |       |       |       | 200 | 200 | 1.523     |
| EN5408  | 50.00 | 50.00 | 6.00  | 6.00  |       | 4.00  |       |       | 198 | 198 | 1.532     |
| EG6420  | 50.80 | 31.75 | 4.75  | 4.75  | 3.18  | 4.75  |       |       | 160 | 160 | 0.999     |
| EG6419  | 50.80 | 50.80 | 6.35  | 6.35  |       | 6.10  |       |       | 201 | 201 | 1.655     |
| EB1164  | 60.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 159 | 159 | 0.338     |
| EB1155  | 60.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 169 | 169 | 0.664     |
| E20560  | 60.00 | 40.00 | 4.00  | 4.00  | 1.00  |       | 1.00  | 1.00  | 198 | 198 | 1.033     |
| EK9135  | 60.00 | 60.00 | 3.00  | 3.00  |       |       |       |       | 240 | 240 | 0.948     |
| EK9136  | 60.00 | 60.00 | 6.00  | 6.00  |       |       |       |       | 240 | 240 | 1.847     |
| EN1567  | 63.50 | 38.10 | 4.00  | 4.00  |       |       |       |       | 203 | 203 | 1.053     |
| EG6412  | 63.50 | 63.50 | 6.35  | 6.35  |       | 6.86  |       |       | 251 | 251 | 2.092     |
| E20580  | 64.00 | 9.00  | 1.80  | 1.80  |       |       |       |       | 146 | 146 | 0.346     |
| E34019  | 70.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 180 | 180 | 0.382     |
| EU7484  | 70.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 190 | 190 | 0.378     |
| EN5714  | 70.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 190 | 190 | 0.402     |
| EP3031  | 70.00 | 40.00 | 1.50  | 1.50  |       |       |       |       | 220 | 220 | 0.439     |
| EN7492  | 70.00 | 40.00 | 1.60  | 1.60  |       |       |       |       | 220 | 220 | 0.467     |
| E20561  | 75.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 200 | 200 | 0.425     |
| EL5923  | 75.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 200 | 200 | 0.788     |
| EL6067  | 75.00 | 40.00 | 4.00  | 4.00  |       |       |       |       | 229 | 229 | 1.198     |
| E20558  | 75.00 | 50.00 | 10.00 | 10.00 | 1.00  | 1.00  | 1.00  | 1.00  | 248 | 248 | 3.102     |
| EP13733 | 75.00 | 75.00 | 3.00  | 3.00  |       |       |       |       | 299 | 299 | 1.190     |
| EP13720 | 76.00 | 55.00 | 5.00  | 5.00  |       |       |       |       | 261 | 261 | 1.701     |
| EU5701  | 76.00 | 76.00 | 8.00  | 8.00  |       |       |       |       | 304 | 304 | 3.110     |
| E03237  | 76.20 | 25.40 | 3.18  | 3.18  |       |       |       |       | 202 | 202 | 0.845     |
| EG6410  | 76.20 | 50.80 | 6.35  | 6.35  |       | 6.80  |       |       | 251 | 251 | 2.095     |
| EH5813  | 76.20 | 76.20 | 3.18  | 3.18  |       |       |       |       | 304 | 304 | 1.284     |
| E06168  | 76.20 | 76.20 | 3.20  | 3.20  |       |       |       |       | 305 | 305 | 1.279     |
| EG6408  | 76.20 | 76.20 | 6.35  | 6.35  |       | 7.62  |       |       | 301 | 301 | 2.538     |
| EG6407  | 76.20 | 76.20 | 9.52  | 9.52  |       | 7.62  |       |       | 302 | 302 | 3.707     |
| EK9137  | 80.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 199 | 199 | 0.785     |
| EB1160  | 80.00 | 40.00 | 6.00  | 6.00  |       |       |       |       | 240 | 240 | 1.847     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Angles continued



| SECTION  | A mm   | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|--------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| E20559   | 80.00  | 50.00  | 2.50  | 2.50  |       |       |       |       | 260 | 260 | 0.861     |
| EN5324   | 80.00  | 50.00  | 6.00  | 6.00  | 0.50  | 4.00  | 0.50  | 0.50  | 257 | 257 | 2.017     |
| E20536   | 80.00  | 80.00  | 4.00  | 4.00  |       |       |       |       | 320 | 320 | 1.685     |
| EK9138   | 80.00  | 80.00  | 6.00  | 6.00  |       |       |       |       | 319 | 319 | 2.494     |
| E20707   | 80.00  | 80.00  | 6.00  | 6.00  |       | 4.00  |       |       | 318 | 318 | 2.504     |
| E20709   | 80.00  | 80.00  | 10.00 | 10.00 |       | 6.00  |       |       | 317 | 317 | 4.071     |
| EP14541  | 85.00  | 50.00  | 3.00  | 3.00  |       |       |       |       | 269 | 269 | 1.069     |
| E02447   | 88.90  | 31.75  | 3.20  | 3.20  |       | 3.95  |       |       | 240 | 240 | 1.015     |
| EME30823 | 90.00  | 40.00  | 1.60  | 1.60  |       |       |       |       | 259 | 259 | 0.554     |
| EP1328   | 90.00  | 70.00  | 6.00  | 6.00  |       |       |       |       | 319 | 319 | 2.494     |
| EME4121  | 91.44  | 15.87  | 2.54  | 2.54  |       |       |       |       | 213 | 213 | 0.717     |
| E20577   | 100.00 | 25.00  | 3.00  | 3.00  |       | 1.00  |       |       | 248 | 248 | 0.986     |
| EP12434  | 100.00 | 50.00  | 2.00  | 2.00  |       |       |       |       | 299 | 299 | 0.799     |
| EP12372  | 100.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 299 | 299 | 1.190     |
| E20525   | 100.00 | 50.00  | 4.00  | 4.00  |       |       |       |       | 300 | 300 | 1.577     |
| EQ1558   | 100.00 | 50.00  | 6.00  | 6.00  |       | 4.00  |       |       | 298 | 298 | 2.342     |
| EU4569   | 100.00 | 80.00  | 10.00 | 10.00 | 1.00  | 9.00  |       |       | 354 | 354 | 4.633     |
| EME8156  | 100.00 | 100.00 | 2.50  | 2.50  |       | 8.50  | 1.00  | 11.00 | 391 | 391 | 1.303     |
| EP13992  | 100.00 | 100.00 | 4.00  | 4.00  |       | 5.00  |       |       | 397 | 397 | 2.131     |
| EP12627  | 100.00 | 100.00 | 6.00  | 6.00  |       |       |       |       | 399 | 399 | 3.142     |
| E20714   | 100.00 | 100.00 | 8.00  | 8.00  |       | 6.00  |       |       | 397 | 397 | 4.168     |
| EL2398   | 100.00 | 100.00 | 8.00  | 8.00  |       |       |       |       | 400 | 400 | 4.147     |
| EAL10958 | 100.00 | 100.00 | 10.00 | 10.00 |       |       |       |       | 399 | 399 | 5.145     |
| EB1153   | 101.60 | 50.80  | 3.18  | 3.18  |       |       |       |       | 305 | 305 | 1.282     |
| EL4195   | 101.60 | 50.80  | 6.35  | 6.35  |       | 7.60  |       |       | 302 | 302 | 2.537     |
| EG6405   | 101.60 | 63.50  | 6.35  | 6.35  |       | 8.13  |       |       | 326 | 326 | 2.767     |
| EG6403   | 101.60 | 101.60 | 9.53  | 9.53  |       | 9.14  |       |       | 402 | 402 | 5.031     |
| EAL22315 | 110.00 | 20.00  | 2.00  | 2.00  |       |       |       |       | 259 | 259 | 0.690     |
| E20723   | 110.00 | 110.00 | 8.00  | 8.00  |       | 8.00  |       |       | 437 | 437 | 4.616     |
| EN4996   | 125.00 | 25.00  | 2.80  | 2.80  |       |       |       |       | 300 | 300 | 1.112     |
| EK9139   | 125.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 350 | 350 | 1.393     |
| EN2911   | 125.00 | 50.00  | 6.00  | 6.00  | 1.00  | 4.00  | 1.00  | 1.00  | 346 | 346 | 2.743     |
| E20700   | 125.00 | 50.00  | 6.00  | 6.00  |       | 4.00  |       |       | 348 | 348 | 2.747     |
| EN5323   | 125.00 | 80.00  | 8.00  | 8.00  | 0.50  | 6.00  | 0.50  | 0.50  | 407 | 407 | 4.275     |
| EP13734  | 150.00 | 80.00  | 10.00 | 10.00 |       |       |       |       | 458 | 458 | 5.937     |
| EP11544  | 160.00 | 130.00 | 10.00 | 12.00 | 1.00  | 10.00 | 1.00  | 1.00  | 574 | 574 | 8.263     |
| EP14441  | 200.00 | 80.00  | 10.00 | 10.00 |       | 10.00 |       |       | 554 | 554 | 7.345     |
| EP9471   | 200.00 | 100.00 | 8.00  | 8.00  | 1.00  | 9.50  | 1.00  | 1.00  | 594 | 594 | 6.357     |
| EP10189  | 250.00 | 50.00  | 3.00  | 3.00  | 1.00  | 5.00  | 1.00  | 1.00  | 596 | 596 | 2.417     |

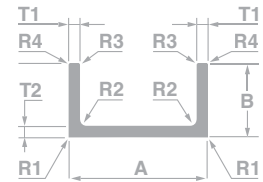


## Channels

| SECTION  | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EK9146   | 10.00 | 10.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.116     |
| EAL4183  | 10.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.132     |
| EK9147   | 10.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.133     |
| EK9148   | 12.00 | 10.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.124     |
| EK9149   | 12.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.141     |
| E20767   | 12.00 | 16.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.176     |
| EK9151   | 12.00 | 20.00 | 2.50  | 2.50  |       |       |       |       | 100 | 100 | 0.317     |
| E20770   | 16.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.159     |
| EK9152   | 16.00 | 16.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.194     |
| E20772   | 16.00 | 16.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.340     |
| E01922   | 19.00 | 25.40 | 1.60  | 1.60  |       |       |       |       | 137 | 137 | 0.289     |
| EN4620   | 19.16 | 20.00 | 1.20  | 1.20  | 1.00  |       | 0.60  | 0.60  | 114 | 114 | 0.182     |
| ED3923   | 20.00 | 16.00 | 1.30  |       |       |       |       |       | 100 | 100 | 0.171     |
| EK9153   | 20.00 | 16.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.211     |
| EL1812   | 20.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 116 | 116 | 0.245     |
| EK9154   | 20.00 | 20.00 | 2.50  | 2.50  |       |       |       |       | 115 | 115 | 0.371     |
| EK9155   | 20.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 114 | 114 | 0.437     |
| EN2190   | 22.20 | 25.40 | 1.50  | 1.50  |       | 0.50  | 0.75  | 0.75  | 141 | 141 | 0.284     |
| E09060   | 22.25 | 25.40 | 1.35  | 1.35  |       | 0.80  | 0.68  | 0.68  | 140 | 140 | 0.265     |
| EAL20349 | 22.30 | 20.00 | 1.20  | 1.20  |       |       | 0.60  | 0.60  | 121 | 121 | 0.193     |
| EN4619   | 22.32 | 20.00 | 1.20  | 1.20  | 1.00  |       | 0.60  | 0.60  | 120 | 120 | 0.192     |
| EK9156   | 25.00 | 12.00 | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.348     |
| EL1813   | 25.00 | 20.00 | 1.60  | 1.60  |       |       |       |       | 127 | 127 | 0.267     |
| EK9157   | 25.00 | 20.00 | 2.50  | 2.50  |       |       |       |       | 124 | 124 | 0.405     |
| EL5249   | 25.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 147 | 100 | 0.310     |
| EK9158   | 25.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 143 | 143 | 0.558     |
| EK9159   | 25.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 203 | 105 | 0.802     |
| EB1196   | 25.40 | 15.88 | 1.58  | 1.58  |       |       |       |       | 111 | 111 | 0.230     |
| E02213   | 25.45 | 19.00 | 1.60  | 1.60  |       |       |       |       | 124 | 100 | 0.256     |
| E09059   | 25.80 | 25.40 | 1.40  | 1.40  |       | 0.80  | 0.70  | 0.70  | 148 | 148 | 0.280     |
| EAL11195 | 28.00 | 15.00 | 1.40  | 1.40  |       |       |       |       | 112 | 112 | 0.209     |
| EAL11194 | 28.00 | 25.00 | 1.40  | 1.40  |       |       |       |       | 152 | 152 | 0.285     |
| E73242   | 29.00 | 20.00 | 1.60  | 1.60  | 0.50  |       | 0.80  | 0.80  | 133 | 100 | 0.282     |
| EE4240   | 29.33 | 20.65 | 1.57  | 1.57  |       |       |       |       | 138 | 138 | 0.286     |
| EQ4498   | 29.72 | 16.20 | 1.20  | 1.20  |       | 1.00  |       |       | 121 | 121 | 0.195     |
| E20784   | 32.00 | 16.00 | 1.60  | 1.60  |       |       |       |       | 125 | 125 | 0.262     |
| EK9160   | 32.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 158 | 158 | 0.616     |
| EU6157   | 32.00 | 32.00 | 2.50  | 2.50  | 1.50  | 1.50  |       |       | 184 | 184 | 0.616     |
| EQ4497   | 32.68 | 16.20 | 1.20  |       | 1.20  |       |       |       | 127 | 127 | 0.202     |
| EQ2250   | 35.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 167 | 167 | 0.332     |

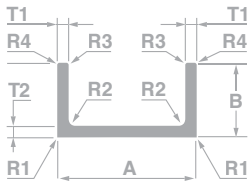
Sizes are indicative only – refer to die drawings for accurate sizes

## Channels continued



| SECTION  | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EN4618   | 37.95 | 20.00 | 1.20  | 1.20  | 1.00  |       | 0.60  | 0.60  | 151 | 151 | 0.243     |
| EH5368   | 37.95 | 25.40 | 1.45  | 1.27  |       |       | 0.73  | 0.73  | 174 | 174 | 0.318     |
| E04704   | 38.10 | 25.40 | 1.35  | 1.25  |       | 0.80  | 0.68  | 0.68  | 173 | 100 | 0.304     |
| EAL2863  | 38.36 | 25.40 | 1.40  | 1.40  |       |       |       |       | 174 | 174 | 0.325     |
| EN4503   | 38.60 | 25.00 | 1.40  | 1.27  |       |       |       |       | 175 | 100 | 0.311     |
| EP8272   | 40.00 | 9.00  | 3.00  | 3.00  | 3.00  | 1.00  |       |       | 106 | 106 | 0.410     |
| EQ1556   | 40.00 | 20.00 | 2.00  | 2.00  |       |       |       |       | 156 | 156 | 0.410     |
| EK9161   | 40.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 153 | 153 | 0.599     |
| EP7418   | 40.00 | 25.00 | 2.50  | 2.50  |       |       |       |       | 174 | 174 | 0.572     |
| EK9162   | 40.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 174 | 174 | 0.680     |
| EP13860  | 40.00 | 25.00 | 3.00  |       | 3.00  |       |       |       | 171 | 171 | 0.670     |
| E20790   | 40.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 233 | 126 | 0.923     |
| EL6732   | 40.00 | 50.00 | 6.00  | 6.00  |       | 1.00  |       |       | 267 | 267 | 2.074     |
| EL7536   | 41.00 | 50.00 | 4.80  | 4.80  |       |       |       |       | 272 | 272 | 1.709     |
| EN4617   | 41.29 | 20.00 | 1.20  | 1.20  | 1.00  |       | 0.60  | 0.60  | 158 | 158 | 0.254     |
| EH5367   | 41.90 | 25.40 | 1.58  | 1.58  |       |       | 0.79  | 0.79  | 181 | 181 | 0.385     |
| E17073   | 43.40 | 35.00 | 3.00  | 3.00  |       |       |       |       | 221 | 221 | 0.869     |
| EG1021   | 44.45 | 25.40 | 3.18  | 3.18  |       |       |       |       | 184 | 184 | 0.763     |
| EK5215   | 44.45 | 44.45 | 6.35  | 6.35  |       |       |       | 3.18  | 252 | 252 | 2.057     |
| E70579   | 47.65 | 27.00 | 1.60  | 1.60  | 1.60  |       |       | 1.60  | 196 | 196 | 0.420     |
| E20818   | 50.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 197 | 197 | 0.394     |
| EB1220   | 50.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 197 | 100 | 0.418     |
| EK9215   | 50.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 194 | 194 | 0.761     |
| EP13326  | 50.00 | 25.00 | 4.00  | 4.00  |       |       |       |       | 191 | 191 | 0.993     |
| EK9163   | 50.00 | 50.00 | 3.00  |       |       |       |       |       | 294 | 294 | 1.166     |
| E70848   | 50.75 | 25.40 | 1.25  | 1.40  | 1.40  |       |       | 1.25  | 198 | 198 | 0.356     |
| EME6185  | 53.00 | 23.40 | 1.50  | 1.60  |       | 1.00  |       |       | 196 | 196 | 0.407     |
| E20830   | 53.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 203 | 103 | 0.405     |
| EME8792  | 54.00 | 39.70 | 1.60  | 1.60  |       |       |       |       | 265 | 265 | 0.565     |
| EP14111  | 54.00 | 65.00 | 4.00  | 5.00  |       |       |       |       | 353 | 236 | 2.001     |
| E20821   | 54.20 | 20.00 | 1.60  | 1.60  |       |       |       |       | 185 | 185 | 0.393     |
| EAL6225  | 56.50 | 31.80 | 4.50  | 4.50  |       | 6.00  |       |       | 226 | 226 | 1.392     |
| EAL22945 | 57.15 | 31.75 | 3.96  | 3.96  |       | 5.08  |       |       | 228 | 228 | 1.237     |
| EP13675  | 60.00 | 32.00 | 3.00  | 3.00  | 3.00  | 3.00  |       |       | 236 | 236 | 0.955     |
| EK9164   | 60.00 | 32.00 | 3.00  | 3.00  |       |       |       |       | 242 | 242 | 0.956     |
| EG7534   | 63.50 | 31.75 | 4.75  | 3.96  |       | 5.08  |       |       | 241 | 241 | 1.424     |
| EQ1773   | 65.50 | 25.00 | 1.50  | 1.50  |       |       | 0.75  | 0.75  | 227 | 227 | 0.455     |
| EP8859   | 70.00 | 30.00 | 2.50  | 2.50  |       | 2.00  |       |       | 253 | 253 | 0.844     |
| EG5771   | 76.20 | 38.10 | 3.96  | 3.96  |       |       |       |       | 295 | 295 | 1.549     |
| EG6435   | 76.20 | 38.10 | 7.93  | 6.35  |       |       |       | 7.62  | 286 | 286 | 2.733     |
| EP7868   | 78.00 | 25.00 | 1.50  | 1.50  |       |       |       |       | 252 | 128 | 0.505     |
| EME31374 | 78.20 | 25.00 | 1.60  | 1.60  |       |       |       | 1.00  | 251 | 251 | 0.538     |

Sizes are indicative only – refer to die drawings for accurate sizes



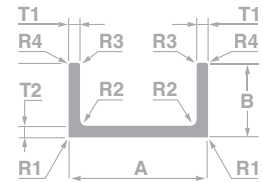
## Channels continued

| SECTION  | A mm   | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|--------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EME9171  | 78.20  | 38.00  | 1.60  | 1.60  |       |       |       | 1.00  | 305 | 305 | 0.651     |
| EAL5813  | 80.00  | 25.00  | 1.60  | 2.30  |       |       |       |       | 255 | 255 | 0.693     |
| EK9165   | 80.00  | 25.00  | 3.00  | 3.00  |       |       |       |       | 253 | 253 | 1.004     |
| EN8649   | 80.00  | 40.00  | 3.00  | 3.00  |       |       | 0.50  | 0.50  | 313 | 161 | 1.247     |
| E20921   | 80.00  | 40.00  | 4.00  | 4.00  |       | 2.50  |       |       | 309 | 309 | 1.647     |
| EK9166   | 80.00  | 40.00  | 4.00  | 4.00  |       |       |       |       | 312 | 312 | 1.642     |
| E20922   | 80.00  | 40.00  | 6.00  | 6.00  |       | 4.00  |       |       | 305 | 305 | 2.416     |
| EQ3461   | 80.00  | 40.00  | 8.00  | 6.00  |       | 6.00  |       |       | 303 | 303 | 2.805     |
| EP13661  | 80.00  | 45.00  | 4.00  |       |       | 3.00  |       |       | 328 | 328 | 1.759     |
| EME5683  | 81.00  | 25.40  | 2.35  | 2.35  |       |       |       |       | 259 | 100 | 0.806     |
| EW6037   | 88.00  | 135.00 | 5.00  |       | 6.00  |       |       |       | 698 | 698 | 4.655     |
| EQ3078   | 92.00  | 25.00  | 1.50  | 3.00  |       |       |       |       | 278 | 278 | 0.923     |
| EAL12324 | 92.30  | 25.00  | 1.80  | 3.00  |       | 2.00  |       |       | 276 | 145 | 0.966     |
| EK9168   | 100.00 | 25.00  | 3.00  | 3.00  |       |       |       |       | 294 | 294 | 1.166     |
| EK9169   | 100.00 | 40.00  | 3.00  | 3.00  |       |       |       |       | 354 | 354 | 1.409     |
| EAL22966 | 100.00 | 45.00  | 4.80  | 4.80  | 0.50  | 3.00  | 0.75  | 0.75  | 366 | 366 | 2.346     |
| EL7540   | 100.00 | 45.00  | 4.90  | 4.90  |       | 5.00  |       |       | 365 | 365 | 2.413     |
| EAL4288  | 100.00 | 45.00  | 5.00  | 5.00  |       | 5.00  |       |       | 366 | 366 | 2.459     |
| EB1208   | 100.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 394 | 394 | 1.571     |
| EAL6222  | 100.00 | 50.00  | 5.00  | 5.00  |       | 6.00  |       |       | 385 | 385 | 2.607     |
| EN3527   | 100.00 | 50.00  | 5.00  | 5.00  |       | 5.00  |       |       | 386 | 386 | 2.594     |
| E25060   | 100.00 | 50.00  | 6.00  | 9.00  | 1.00  | 2.00  | 1.00  | 1.00  | 378 | 378 | 3.758     |
| EP13664  | 100.00 | 50.00  | 7.50  | 6.00  | 6.00  | 2.00  |       |       | 379 | 379 | 3.363     |
| E20929   | 100.00 | 50.00  | 9.00  | 6.00  |       | 6.00  |       |       | 382 | 382 | 3.800     |
| EN3528   | 100.00 | 50.00  | 9.00  | 6.00  |       | 6.00  |       |       | 383 | 383 | 3.799     |
| E02930   | 101.60 | 44.40  | 4.75  | 4.75  |       | 4.00  |       |       | 368 | 368 | 2.338     |
| EG6434   | 101.60 | 50.80  | 7.93  | 6.35  |       | 9.14  |       |       | 385 | 385 | 3.742     |
| E60158   | 117.50 | 25.38  | 1.50  | 3.20  |       | 1.25  | 0.75  | 0.75  | 328 | 171 | 1.195     |
| EAL12335 | 118.00 | 25.00  | 1.80  | 2.98  |       | 2.00  |       |       | 328 | 168 | 1.168     |
| EQ2512   | 125.00 | 50.00  | 3.00  | 3.00  |       | 5.00  |       |       | 440 | 440 | 1.803     |
| EN1587   | 125.00 | 60.00  | 6.00  | 6.00  |       | 4.00  |       |       | 475 | 475 | 3.794     |
| E25411   | 125.00 | 70.00  | 6.00  | 6.00  | 11.00 | 5.00  | 1.50  | 1.50  | 502 | 502 | 3.982     |
| EP12540  | 127.00 | 50.80  | 4.00  | 4.00  |       | 6.00  |       |       | 442 | 442 | 2.421     |
| EQ2556   | 127.00 | 63.50  | 9.00  | 6.00  | 12.00 | 6.00  |       |       | 481 | 481 | 4.728     |
| EG6433   | 127.00 | 63.50  | 9.53  | 6.35  |       | 10.67 |       |       | 485 | 485 | 5.250     |
| E05804   | 133.35 | 88.90  | 9.55  | 9.55  | 12.70 | 6.35  | 3.20  | 3.20  | 581 | 581 | 7.366     |
| E71766   | 150.00 | 25.00  | 3.00  | 3.00  |       |       |       |       | 394 | 394 | 1.571     |
| EAL12285 | 150.00 | 50.00  | 5.00  | 5.00  |       |       |       |       | 489 | 489 | 3.240     |
| EN2276   | 150.00 | 50.50  | 5.00  | 5.00  |       |       |       |       | 492 | 492 | 3.253     |
| EAL9623  | 150.00 | 70.00  | 6.00  | 6.00  | 10.00 | 4.00  |       |       | 556 | 556 | 4.406     |
| EU5381   | 152.00 | 63.00  | 6.00  | 6.00  | 12.50 | 6.50  |       |       | 528 | 528 | 4.177     |
| EG8570   | 152.40 | 50.80  | 4.78  | 4.78  |       | 3.18  |       |       | 496 | 496 | 3.167     |

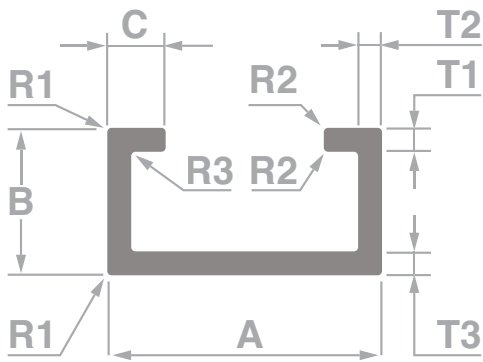
Sizes are indicative only – refer to die drawings for accurate sizes



## Channels continued



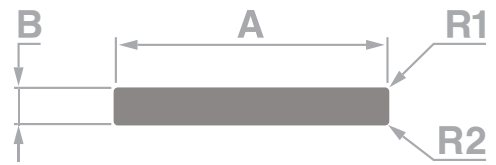
| SECTION  | A mm   | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP   | PP   | MASS kg/m |
|----------|--------|--------|-------|-------|-------|-------|-------|-------|------|------|-----------|
| E03233   | 152.40 | 63.50  | 7.90  | 6.35  |       | 10.65 |       |       | 537  | 537  | 5.191     |
| E06330   | 152.40 | 76.20  | 9.55  | 9.55  | 15.90 | 6.35  |       |       | 571  | 571  | 7.121     |
| E26561   | 153.00 | 60.00  | 6.00  | 6.00  | 12.50 | 6.50  |       |       | 512  | 512  | 4.096     |
| E20934   | 160.00 | 60.00  | 6.00  |       |       | 6.00  |       |       | 543  | 543  | 5.258     |
| ED7674   | 168.00 | 25.00  | 1.50  | 2.50  | 0.60  | 1.25  | 0.75  | 0.75  | 428  | 221  | 1.316     |
| EME8668  | 170.00 | 100.00 | 5.00  | 5.00  | 10.00 | 5.00  |       |       | 716  | 716  | 4.772     |
| EG6430   | 177.80 | 76.20  | 11.10 | 6.35  |       | 12.19 |       |       | 637  | 637  | 7.407     |
| EAL12325 | 180.00 | 80.00  | 5.50  | 5.50  | 11.00 | 5.50  |       |       | 654  | 331  | 4.780     |
| EU6362   | 180.00 | 80.00  | 6.00  | 6.00  | 12.00 | 6.00  | 1.00  | 1.00  | 651  | 651  | 5.186     |
| EU6360   | 180.00 | 80.00  | 9.00  | 6.00  | 12.00 | 6.00  | 1.00  | 1.00  | 651  | 651  | 6.386     |
| EAL7833  | 180.00 | 80.00  | 9.00  | 6.00  | 9.00  | 5.00  |       |       | 656  | 656  | 6.447     |
| E20935   | 180.00 | 80.00  | 11.00 | 6.00  |       | 6.00  |       |       | 662  | 662  | 7.353     |
| EN3529   | 200.00 | 90.00  | 10.00 | 8.00  | 10.00 | 4.00  | 1.00  | 1.00  | 730  | 730  | 8.648     |
| E25446   | 250.00 | 110.00 | 12.00 | 12.00 | 19.00 | 7.00  | 1.60  | 1.60  | 891  | 891  | 14.083    |
| EN5691   | 250.00 | 110.00 | 12.00 | 12.00 | 19.00 | 7.00  | 1.60  | 1.60  | 891  | 891  | 14.083    |
| EU1691   | 254.00 | 115.00 | 12.50 | 12.50 | 18.50 | 6.00  |       |       | 919  | 919  | 15.127    |
| EN3530   | 280.00 | 95.00  | 7.50  | 5.50  | 5.00  | 1.00  | 1.00  | 1.00  | 922  | 922  | 7.752     |
| EP10447  | 304.80 | 101.60 | 8.90  | 8.90  | 15.00 | 12.00 | 1.00  | 1.00  | 973  | 973  | 11.683    |
| E05721   | 381.00 | 152.40 | 12.70 | 9.50  | 15.90 | 15.90 | 0.80  | 0.80  | 1324 | 1324 | 19.572    |



## Channels Lipped

| SECTION | A mm   | B mm  | C mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | AP  | PP  | MASS kg/m |
|---------|--------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| E03494  | 76.20  | 25.40 | 12.70 | 2.35  | 2.35  | 0.40  | 0.40  | 0.80  | 289 | 289 | 0.913     |
| EB1477  | 76.20  | 38.10 | 12.70 | 1.57  | 1.57  | 1.57  | 1.57  | 1.57  | 341 | 341 | 0.727     |
| EH8137  | 97.79  | 76.20 | 22.23 | 4.75  | 4.75  | 3.18  | 3.18  | 6.35  | 541 | 541 | 3.985     |
| E10174  | 101.60 | 76.20 | 25.4  | 6.35  | 6.35  | 1.60  | 1.00  | 3.20  | 563 | 305 | 4.808     |

## Flat Bars



| SECTION | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| E20120  | 9.80  | 2.80  |       |       |       |       |       |       | 100 | 100 | 0.074     |
| EQ4885  | 11.00 | 9.00  |       |       | 0.70  | 0.70  |       |       | 100 | 100 | 0.266     |
| E20113  | 11.80 | 2.80  |       |       |       |       |       |       | 100 | 100 | 0.089     |
| EX4095  | 12.00 | 1.60  |       |       |       |       |       |       | 100 | 100 | 0.052     |
| EX4012  | 12.00 | 4.00  |       |       |       |       |       |       | 100 | 100 | 0.130     |
| EX4019  | 12.00 | 6.00  |       |       |       |       |       |       | 100 | 100 | 0.194     |
| EX4028  | 12.00 | 10.00 |       |       |       |       |       |       | 100 | 100 | 0.324     |
| E00209  | 12.70 | 3.20  |       |       | 1.60  | 1.60  |       |       | 100 | 100 | 0.103     |
| EAL1012 | 12.70 | 4.75  |       |       |       |       |       |       | 100 | 100 | 0.162     |
| EME4861 | 15.88 | 4.75  |       |       |       |       |       |       | 100 | 100 | 0.204     |
| EX4003  | 16.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.130     |
| EB1090  | 16.00 | 3.00  |       |       | 1.50  | 1.50  |       |       | 100 | 100 | 0.124     |
| EX1467  | 19.05 | 3.18  |       |       |       |       |       |       | 100 | 100 | 0.164     |
| EAL2353 | 19.05 | 3.18  |       |       | 1.59  | 1.59  |       |       | 100 | 100 | 0.157     |
| EX4000  | 20.00 | 1.60  |       |       |       |       |       |       | 100 | 100 | 0.086     |
| E22074  | 20.00 | 3.00  |       |       | 1.50  | 1.50  |       |       | 100 | 100 | 0.157     |
| EX4004  | 20.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.162     |
| EX4013  | 20.00 | 4.00  |       |       |       |       |       |       | 100 | 100 | 0.216     |
| EX4068  | 20.00 | 5.00  |       |       |       |       |       |       | 100 | 100 | 0.269     |
| EX4020  | 20.00 | 6.00  |       |       |       |       |       |       | 100 | 100 | 0.324     |
| E20016  | 20.00 | 10.00 |       |       |       |       |       |       | 100 | 100 | 0.540     |
| EX4036  | 20.00 | 12.00 |       |       |       |       |       |       | 100 | 100 | 0.648     |
| EX4104  | 25.00 | 1.60  |       |       |       |       |       |       | 100 | 100 | 0.108     |
| EX4005  | 25.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.203     |
| EX4014  | 25.00 | 4.00  |       |       |       |       |       |       | 100 | 100 | 0.270     |
| EX4063  | 25.00 | 5.00  |       |       |       |       |       |       | 100 | 100 | 0.338     |
| EX4021  | 25.00 | 6.00  |       |       |       |       |       |       | 100 | 100 | 0.405     |
| EX4029  | 25.00 | 10.00 |       |       |       |       |       |       | 100 | 100 | 0.675     |
| EX4037  | 25.00 | 12.00 |       |       |       |       |       |       | 100 | 100 | 0.810     |
| EX4045  | 25.00 | 20.00 |       |       |       |       |       |       | 100 | 100 | 1.350     |
| E02329  | 25.40 | 3.20  |       |       | 3.20  |       |       |       | 100 | 100 | 0.208     |
| E08752  | 25.40 | 6.35  |       |       | 3.18  | 3.18  |       |       | 100 | 100 | 0.413     |
| EME7281 | 27.00 | 4.00  |       |       |       |       |       |       | 100 | 100 | 0.291     |
| EME1423 | 31.75 | 3.18  |       |       |       |       |       |       | 100 | 100 | 0.272     |
| EX4006  | 32.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.259     |
| EX4086  | 32.00 | 4.00  |       |       |       |       |       |       | 100 | 100 | 0.346     |
| EX4062  | 32.00 | 5.00  |       |       |       |       |       |       | 100 | 100 | 0.431     |
| EX4022  | 32.00 | 6.00  |       |       |       |       |       |       | 100 | 100 | 0.518     |
| EX4030  | 32.00 | 10.00 |       |       |       |       |       |       | 100 | 100 | 0.864     |
| EX1503  | 34.93 | 2.77  |       |       |       |       |       |       | 100 | 100 | 0.261     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Flat Bars continued

| SECTION  | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| E20127   | 38.00 | 2.50  |       |       |       |       |       |       | 100 | 100 | 0.257     |
| EAL23909 | 38.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.307     |
| EAL7484  | 38.00 | 4.50  |       |       | 2.25  | 2.25  |       |       | 100 | 100 | 0.450     |
| EN1558   | 38.00 | 4.50  |       |       | 2.25  | 2.25  |       |       | 100 | 100 | 0.450     |
| EAL12316 | 38.00 | 5.50  |       |       | 2.75  | 2.75  |       |       | 100 | 100 | 0.547     |
| EAL2556  | 38.10 | 3.18  |       |       | 1.59  | 1.59  |       |       | 100 | 100 | 0.321     |
| E10817   | 38.10 | 6.35  |       |       | 3.18  | 3.18  |       |       | 100 | 100 | 0.629     |
| EX4007   | 40.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.324     |
| EX4015   | 40.00 | 4.00  |       |       |       |       |       |       | 100 | 100 | 0.432     |
| E22071   | 40.00 | 4.00  |       |       | 2.00  | 2.00  |       |       | 100 | 100 | 0.422     |
| EX4054   | 40.00 | 5.00  |       |       |       |       |       |       | 100 | 100 | 0.541     |
| EX4023   | 40.00 | 6.00  |       |       |       |       |       |       | 100 | 100 | 0.648     |
| EN9028   | 40.00 | 6.30  |       |       | 3.15  | 3.15  |       |       | 100 | 100 | 0.656     |
| EX4031   | 40.00 | 10.00 |       |       |       |       |       |       | 100 | 100 | 1.080     |
| EX4038   | 40.00 | 12.00 |       |       |       |       |       |       | 104 | 104 | 1.296     |
| E20038   | 40.00 | 16.00 |       |       |       |       |       |       | 112 | 112 | 1.728     |
| EAL4031  | 40.00 | 20.00 |       |       |       |       |       |       | 120 | 120 | 2.160     |
| EX4047   | 40.00 | 25.00 |       |       |       |       |       |       | 130 | 130 | 2.700     |
| EAL2207  | 44.45 | 3.96  |       |       | 1.98  | 1.98  |       |       | 100 | 100 | 0.467     |
| EP7208   | 45.00 | 3.00  |       |       |       |       |       |       | 100 | 100 | 0.365     |
| EP7324   | 45.00 | 5.00  |       |       |       |       |       |       | 100 | 100 | 0.607     |
| E20094   | 45.00 | 25.00 |       |       |       |       |       |       | 140 | 140 | 3.038     |
| EP8503   | 48.00 | 37.00 |       |       | 0.70  | 0.70  |       |       | 169 | 169 | 4.794     |
| EX4008   | 50.00 | 3.00  |       |       |       |       |       |       | 106 | 106 | 0.405     |
| E22070   | 50.00 | 4.00  |       |       | 2.00  | 2.00  |       |       | 105 | 105 | 0.532     |
| EX4016   | 50.00 | 4.00  |       |       |       |       |       |       | 108 | 108 | 0.540     |
| EX4060   | 50.00 | 5.00  |       |       |       |       |       |       | 110 | 110 | 0.675     |
| EAL4035  | 50.00 | 6.00  |       |       |       |       |       |       | 112 | 112 | 0.810     |
| E22067   | 50.00 | 6.00  |       |       | 3.00  | 3.00  |       |       | 107 | 107 | 0.788     |
| EX4024   | 50.00 | 6.00  |       |       | 1.00  | 1.00  |       |       | 110 | 110 | 0.808     |
| E22053   | 50.00 | 6.30  |       |       | 3.15  | 3.15  |       |       | 107 | 107 | 0.827     |
| EAL6099  | 50.00 | 8.00  |       |       |       |       |       |       | 116 | 116 | 1.080     |
| EQ3141   | 50.00 | 8.00  |       |       | 1.60  | 1.60  |       |       | 113 | 113 | 1.075     |
| EP5401   | 50.00 | 8.00  |       |       | 1.00  | 1.00  |       |       | 114 | 114 | 1.078     |
| EP14613  | 50.00 | 10.00 |       |       | 5.00  | 5.00  |       |       | 111 | 111 | 1.292     |
| EX4032   | 50.00 | 10.00 |       |       |       |       |       |       | 120 | 120 | 1.350     |
| EX4039   | 50.00 | 12.00 |       |       |       |       |       |       | 124 | 124 | 1.620     |
| EX4046   | 50.00 | 20.00 |       |       |       |       |       |       | 140 | 140 | 2.700     |
| EX4048   | 50.00 | 25.00 |       |       |       |       |       |       | 150 | 150 | 3.375     |
| EK1150   | 50.80 | 3.96  |       |       | 1.98  | 1.98  |       |       | 106 | 106 | 0.535     |
| EAL2551  | 50.80 | 4.75  |       |       | 2.38  | 2.38  |       |       | 107 | 107 | 0.638     |
| EK1130   | 50.80 | 4.75  |       |       | 2.38  | 2.38  |       |       | 107 | 107 | 0.638     |
| EH9873   | 50.80 | 6.35  |       |       | 3.18  | 3.18  |       |       | 109 | 109 | 0.847     |
| EAL3627  | 50.80 | 6.35  |       |       | 3.18  | 3.18  |       |       | 109 | 109 | 0.850     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Flat Bars continued



| SECTION  | A mm   | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EAL0910  | 50.80  | 15.88 |       |       |       |       |       |       | 133 | 133 | 2.177     |
| EP12652  | 55.00  | 3.00  |       |       |       |       |       |       | 115 | 115 | 0.445     |
| EQ4452   | 55.00  | 3.00  |       |       | 1.50  | 1.50  |       |       | 113 | 113 | 0.440     |
| EX4071   | 55.00  | 5.00  |       |       |       |       |       |       | 120 | 120 | 0.743     |
| EX4009   | 60.00  | 3.00  |       |       |       |       |       |       | 126 | 126 | 0.486     |
| EP9812   | 60.00  | 4.00  |       |       | 2.00  | 2.00  |       |       | 125 | 125 | 0.639     |
| EP9811   | 60.00  | 5.00  |       |       | 2.50  | 2.50  |       |       | 126 | 126 | 0.796     |
| E20111   | 60.00  | 6.00  |       |       | 1.60  | 1.60  |       |       | 129 | 129 | 0.966     |
| EX4069   | 60.00  | 6.00  |       |       |       |       |       |       | 132 | 132 | 0.972     |
| EAL7321  | 60.00  | 6.00  |       |       | 3.00  | 6.00  |       |       | 127 | 127 | 0.951     |
| EX4070   | 60.00  | 10.00 |       |       |       |       |       |       | 140 | 140 | 1.620     |
| EX4040   | 60.00  | 12.00 |       |       |       |       |       |       | 144 | 144 | 1.944     |
| EAL0764  | 63.50  | 15.88 |       |       |       |       |       |       | 159 | 159 | 2.732     |
| EAL11818 | 64.00  | 12.00 |       |       |       |       |       |       | 151 | 151 | 2.080     |
| EAL23629 | 65.00  | 3.00  |       |       |       |       |       |       | 135 | 135 | 0.526     |
| EX4059   | 65.00  | 5.00  |       |       |       |       |       |       | 139 | 139 | 0.877     |
| EAL7519  | 65.00  | 20.00 |       |       |       |       |       |       | 170 | 170 | 3.510     |
| EP9177   | 75.00  | 3.00  |       |       |       |       |       |       | 155 | 155 | 0.607     |
| EAL11192 | 75.00  | 6.00  |       |       |       |       |       |       | 161 | 161 | 1.218     |
| EK3573   | 76.20  | 6.35  |       |       | 3.18  | 3.18  |       |       | 160 | 160 | 1.282     |
| EX4010   | 80.00  | 3.00  |       |       |       |       |       |       | 166 | 166 | 0.648     |
| EX4017   | 80.00  | 4.00  |       |       |       |       |       |       | 168 | 168 | 0.864     |
| EX4025   | 80.00  | 6.00  |       |       |       |       |       |       | 172 | 172 | 1.296     |
| EB1092   | 80.00  | 6.30  |       |       | 3.15  | 3.15  |       |       | 167 | 167 | 1.336     |
| EX4072   | 80.00  | 8.00  |       |       |       |       |       |       | 176 | 176 | 1.728     |
| EX4033   | 80.00  | 10.00 |       |       |       |       |       |       | 180 | 180 | 2.160     |
| EX4041   | 80.00  | 12.00 |       |       | 1.00  | 1.00  |       |       | 182 | 182 | 2.590     |
| E20061   | 80.00  | 12.00 |       |       |       |       |       |       | 184 | 184 | 2.592     |
| EX4044   | 80.00  | 16.00 |       |       |       |       |       |       | 192 | 192 | 3.456     |
| EAL12319 | 80.00  | 20.00 |       |       |       |       |       |       | 199 | 199 | 4.320     |
| EX4049   | 80.00  | 25.00 |       |       |       |       |       |       | 210 | 210 | 5.400     |
| ET6561   | 88.90  | 9.52  |       |       | 1.60  | 1.60  |       |       | 194 | 194 | 2.279     |
| E34113   | 100.00 | 1.50  |       |       | 0.50  | 0.50  |       |       | 202 | 202 | 0.404     |
| EP10682  | 100.00 | 2.00  |       |       | 0.50  | 0.50  |       |       | 203 | 203 | 0.539     |
| EX4011   | 100.00 | 3.00  |       |       |       |       |       |       | 206 | 206 | 0.810     |
| EX4018   | 100.00 | 4.00  |       |       |       |       |       |       | 208 | 208 | 1.080     |
| E22068   | 100.00 | 5.00  |       |       | 2.50  | 2.50  |       |       | 206 | 206 | 1.337     |
| EQ6803   | 100.00 | 6.00  |       |       | 3.00  | 3.00  |       |       | 206 | 206 | 1.599     |
| EX4026   | 100.00 | 6.00  |       |       |       |       |       |       | 212 | 212 | 1.620     |
| EB1093   | 100.00 | 6.30  |       |       | 3.15  | 3.15  |       |       | 207 | 207 | 1.676     |
| EP8310   | 100.00 | 8.00  |       |       |       |       |       |       | 214 | 214 | 2.158     |
| EP7910   | 100.00 | 8.00  |       |       | 1.00  | 1.00  |       |       | 214 | 214 | 2.157     |
| EX4034   | 100.00 | 10.00 |       |       |       |       |       |       | 220 | 220 | 2.700     |
| EX4042   | 100.00 | 12.00 |       |       |       |       |       |       | 224 | 224 | 3.240     |

Sizes are indicative only – refer to die drawings for accurate sizes

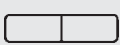
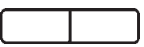
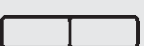
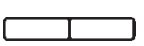


## Flat Bars continued

| SECTION  | A mm   | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EP11146  | 100.00 | 16.00 |       |       |       |       |       |       | 231 | 231 | 4.320     |
| E20071   | 100.00 | 20.00 |       |       |       |       |       |       | 239 | 239 | 5.400     |
| EX4050   | 100.00 | 25.00 |       |       |       |       |       |       | 250 | 250 | 6.750     |
| EAL0666  | 101.60 | 15.88 |       |       |       |       |       |       | 235 | 235 | 4.356     |
| EP9360   | 108.00 | 8.00  |       |       |       |       |       |       | 231 | 231 | 2.332     |
| EP13732  | 120.00 | 10.00 |       |       |       |       |       |       | 259 | 259 | 3.240     |
| EQ6144   | 125.00 | 6.00  |       |       |       |       |       |       | 261 | 261 | 2.025     |
| E33674   | 125.00 | 6.30  |       |       | 3.15  | 3.15  |       |       | 257 | 257 | 2.103     |
| EP14366  | 125.00 | 12.00 |       |       |       |       |       |       | 272 | 272 | 4.048     |
| EX1728   | 127.00 | 9.52  |       |       |       |       |       |       | 273 | 273 | 3.274     |
| EX1730   | 127.00 | 12.70 |       |       |       |       |       |       | 279 | 279 | 4.355     |
| EP11727  | 130.00 | 6.00  |       |       | 1.00  | 1.00  |       |       | 270 | 270 | 2.104     |
| EP2255   | 140.00 | 20.00 |       |       | 1.00  | 1.00  |       |       | 316 | 316 | 7.546     |
| EP13819  | 144.00 | 2.50  |       |       |       |       |       |       | 291 | 291 | 0.970     |
| EP13523  | 150.00 | 3.00  |       |       |       |       |       |       | 305 | 305 | 1.215     |
| EAL5809  | 150.00 | 4.00  |       |       |       |       |       |       | 308 | 308 | 1.620     |
| EAL23273 | 150.00 | 6.00  |       |       | 0.50  | 0.50  |       |       | 311 | 311 | 2.429     |
| EP11453  | 150.00 | 8.00  |       |       | 1.00  | 1.00  |       |       | 314 | 314 | 3.238     |
| EAL12095 | 150.00 | 10.00 |       |       |       |       |       |       | 319 | 319 | 4.050     |
| EN3716   | 150.00 | 12.00 |       |       | 5.00  | 5.00  |       |       | 315 | 315 | 4.803     |
| EX1748   | 152.40 | 15.88 |       |       |       |       |       |       | 337 | 337 | 6.534     |
| EAL12721 | 160.00 | 4.00  |       |       |       |       |       |       | 327 | 327 | 1.728     |
| EX4027   | 160.00 | 6.00  |       |       |       |       |       |       | 330 | 330 | 2.590     |
| EX4035   | 160.00 | 10.00 |       |       |       |       |       |       | 340 | 340 | 4.320     |
| EX4043   | 160.00 | 12.00 |       |       |       |       |       |       | 344 | 344 | 5.184     |
| EW5469   | 160.00 | 12.00 |       |       |       |       |       |       | 339 | 339 | 5.154     |
| E20076   | 160.00 | 16.00 |       |       |       |       |       |       | 352 | 352 | 6.912     |
| EX4051   | 160.00 | 25.00 |       |       |       |       |       |       | 370 | 370 | 10.800    |
| EP7947   | 170.00 | 6.00  |       |       | 0.50  | 0.50  |       |       | 351 | 351 | 2.754     |
| E20103   | 170.00 | 10.00 |       |       |       |       |       |       | 360 | 360 | 4.600     |
| EP1303   | 180.00 | 20.00 |       |       | 0.50  | 0.50  |       |       | 399 | 399 | 9.719     |
| EP15745  | 190.00 | 16.00 |       |       | 1.00  | 1.00  |       |       | 410 | 410 | 8.206     |
| EP5564   | 200.00 | 6.00  |       |       |       |       |       |       | 411 | 411 | 3.240     |
| EP4404   | 200.00 | 8.00  |       |       | 1.00  | 1.00  |       |       | 414 | 414 | 4.318     |
| EP13059  | 200.00 | 15.00 |       |       | 2.00  | 2.00  |       |       | 427 | 427 | 8.091     |
| EQ5997   | 210.00 | 20.00 |       |       | 3.00  | 3.00  |       |       | 454 | 454 | 11.319    |
| EAL12754 | 250.00 | 6.00  |       |       | 3.00  | 3.00  |       |       | 507 | 507 | 4.029     |
| EP14367  | 300.00 | 16.00 |       |       |       |       |       |       | 630 | 630 | 12.958    |
| EP14440  | 350.00 | 20.00 |       |       | 1.00  | 1.00  |       |       | 738 | 738 | 18.898    |

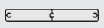
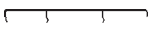


## Geometric Shapes

| PROFILE                                                                             | SECTION | DESCRIPTION                                        | AP   | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|----------------------------------------------------|------|-----|-----------|
|    | EQ4521  | Post – Internal Screw Flutes 50.8 x 50.8           | 192  | 192 | 2.095     |
|    | EP9281  | Channel Louvre Frame 51 x 50 Mates EQ6860          | 297  | 297 | 0.855     |
|    | EP15848 | Fence Post Channel Adaptor 20 x 25                 | 155  | 104 | 0.305     |
|    | EP15847 | 50mm Concealed Fix 1 Way Post 75.8 x 50 x 2 Gap 17 | 315  | 315 | 1.157     |
|   | EP0372  | Channel Uneven 175 x 100/75 x 7.0 RAD              | 664  | 664 | 6.162     |
|  | EQ4183  | Channel Uneven 200 x 90/50 x 8.0/6.0               | 647  | 647 | 5.860     |
|  | E26927  | Channel Uneven 350 x 175/150 x 10.0 RAD            | 1276 | 647 | 16.987    |
|  | E17151  | Channel Uneven 29.2 x 29/19.6 x 1.6/2.4            | 149  | 149 | 0.405     |
|  | EP15190 | RHS 38 x 16 RAD Two Part Self Mating Slat          | 155  | 104 | 0.246     |
|  | EP13045 | Tee 39.7 x 59.4 x 2.85 Bulb                        | 206  | 206 | 0.845     |
|  | EP12070 | RHS 65 x 10 x 1.2 RAD Partitioned                  | 145  | 145 | 0.482     |
|  | EP13245 | RHS 65 x 16 RAD Two Part Self Mating               | 209  | 100 | 0.334     |
|  | EP12034 | RHS 65 x 16 x 1.20 RAD Partitioned                 | 157  | 157 | 0.540     |
|  | EP13679 | RHS 65 x 16 x 1.27 RAD Partitioned                 | 157  | 157 | 0.570     |
|  | EP12951 | RHS 65 x 16 x 1.4 RAD Partitioned                  | 157  | 157 | 0.625     |
|  | EP12952 | RHS 90 x 16 x 1.40 RAD Partitioned                 | 207  | 207 | 0.814     |

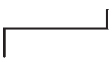
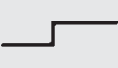
Sizes are indicative only – refer to die drawings for accurate sizes

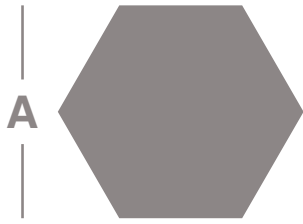
## Geometric Shapes continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                        | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|----------------------------------------------------|-----|-----|-----------|
|    | EP13246  | RHS 100 x 16 RAD Two Park Self Mating              | 291 | 116 | 0.514     |
|    | EP12022  | RHS 100 x 16 x 1.20/1.40 Partitioned               | 227 | 227 | 0.780     |
|    | EP12072  | Baluster Slat 125 x 16.00 RAD                      | 277 | 277 | 1.211     |
|    | EP14489  | RHS 150 x 16 RAD Two Park Self Mating Slat         | 383 | 255 | 1.021     |
|    | E06295   | Misc Tee 25.4 x 19 x 6.35                          | 100 | 100 | 0.188     |
|    | EME50386 | Lamp Post Fluted 50 x 1.3                          | 155 | 155 | 0.531     |
|  | EP13697  | 50mm 1 Way Post 70 x 50 x 2.0 Gap 17.0 RAD         | 258 | 212 | 1.134     |
|  | EP10721  | 50mm 2 Way Corner Post 90 Deg 70 x 70 x 2 Gap 16.5 | 347 | 347 | 1.422     |
|  | EP10719  | 50mm 2 Way Post 180 Deg 90 x 50 x 2.0 Gap 16.5     | 347 | 347 | 1.422     |
|  | EP10720  | 50mm 1 Way Post 70 x 50 x 2.0 Gap 16.5             | 268 | 268 | 1.206     |
|  | E36759   | Tube Fluted 30 x 2.5                               | 111 | 111 | 0.540     |
|  | EE3449   | Top Hat 76.2 x 38.1                                | 293 | 293 | 1.277     |
|  | EP13339  | Top Hat 90 x 16 x 2.5                              | 238 | 159 | 0.787     |
|  | EP13338  | Top Hat 90 x 22.5 x 2.5                            | 264 | 176 | 0.874     |
|  | EP7926   | Cladding Top Hat 90 x 25                           | 275 | 275 | 0.907     |
|  | EQ2029   | Transport V Groove Angle 76 x 55 x 5.0 RAD         | 260 | 260 | 1.687     |
|  | EAL23226 | Triangle Rod 17.4 x 15.2 RAD                       | 100 | 100 | 0.382     |
|  | E00211   | Tube Fluted 25.15 x 1.5                            | 100 | 100 | 0.349     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Geometric Shapes continued

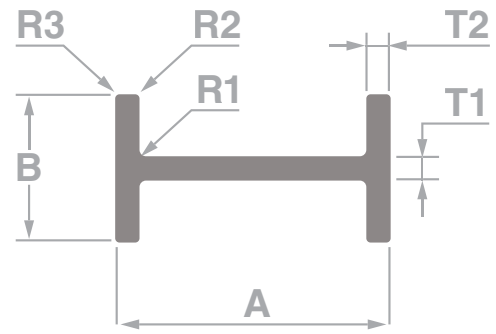
| PROFILE                                                                             | SECTION  | DESCRIPTION                                     | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------------------|-----|-----|-----------|
|    | E34797   | Tube Fluted 25.4 x 1.15                         | 100 | 100 | 0.257     |
|    | EME50187 | Mirror Door Suite – Hanger Rod 30 x 15          | 100 | 100 | 0.275     |
|    | EAL22962 | Cladding Zed 20 x 30 x 20 x 1.6                 | 136 | 136 | 0.287     |
|    | EP7928   | Cladding Zed 18.7 x 24.1 x 18.7 x 1.6 to EP7927 | 120 | 120 | 0.235     |
|    | EP7927   | Cladding Zed 18.7 x 25.4 x 18.7 x 1.4 to EP7928 | 122 | 122 | 0.213     |
|    | E73639   | Zed 22.2 x 25.4 x 22.2 x 3.2                    | 133 | 133 | 0.547     |
|  | E00752   | Zed 25.4 x 31.75 x 25.4 x 3.2 RAD               | 156 | 156 | 0.667     |
|  | EAL22963 | Cladding Zed 40 x 31.6 x 20 x 1.6               | 179 | 179 | 0.380     |
|  | E22091   | Zed 25 x 60 x 25 x 4                            | 212 | 212 | 1.102     |
|  | E15270   | Zed 19 x 66.7 x 12.7 x 1.4                      | 194 | 194 | 0.367     |
|  | E06895   | Zed 67.45 x 25.4 x 56.35 x 3.2 RAD              | 295 | 295 | 1.250     |



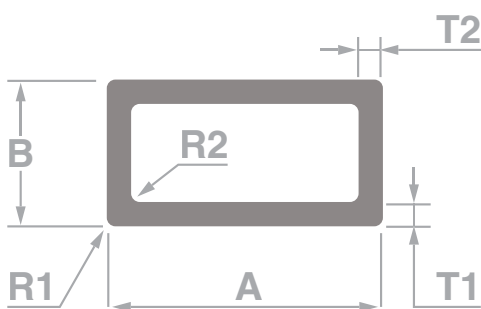
## Hexagonal Bars

| SECTION | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EX1207  | 11.10 |      |       |       |       |       |       |       | 100 | 100 | 0.288     |
| E20399  | 20.00 |      |       |       |       |       |       |       | 100 | 100 | 0.935     |

## I Beams – Geometric



| SECTION  | A mm   | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP   | PP   | MASS kg/m |
|----------|--------|--------|-------|-------|-------|-------|-------|-------|------|------|-----------|
| EQ1961   | 22.00  | 18.00  | 1.50  | 1.50  |       | 0.75  | 0.75  |       | 110  | 100  | 0.221     |
| EME9994  | 22.64  | 18.00  | 1.57  | 1.57  |       |       |       |       | 114  | 100  | 0.235     |
| EP15461  | 34.50  | 42.30  | 2.00  | 1.60  |       |       |       |       | 232  | 155  | 0.534     |
| EAL12321 | 54.00  | 51.00  | 1.50  | 1.50  |       |       |       |       | 308  | 107  | 0.619     |
| E00793   | 88.90  | 38.10  | 4.75  | 6.35  | 6.35  |       |       |       | 310  | 310  | 2.376     |
| EP5402   | 100.00 | 75.00  | 6.40  | 4.80  | 9.50  | 3.20  | 1.00  |       | 463  | 463  | 3.689     |
| EG6460   | 101.60 | 76.20  | 4.75  | 6.35  | 9.40  |       |       |       | 482  | 482  | 3.958     |
| E00798   | 127.00 | 50.4   | 4.75  | 6.35  | 7.00  | 0.40  | 0.40  |       | 463  | 463  | 3.322     |
| E22015   | 130.00 | 80.00  | 4.75  | 6.35  | 4.00  | 3.18  | 3.18  |       | 553  | 553  | 4.234     |
| EP14915  | 140.00 | 89.00  | 4.50  | 7.00  | 12.80 |       |       |       | 593  | 593  | 5.218     |
| EU1690   | 140.00 | 89.00  | 8.00  | 8.00  | 6.00  | 1.50  | 1.50  |       | 605  | 605  | 6.596     |
| E22011   | 140.00 | 90.00  | 7.50  | 7.50  | 4.00  | 3.75  | 3.75  |       | 605  | 605  | 6.148     |
| EAL11335 | 140.00 | 90.00  | 8.00  | 8.00  | 4.00  | 4.00  | 4.00  |       | 603  | 603  | 6.549     |
| EL4432   | 150.00 | 150.00 | 12.00 | 12.00 | 16.00 |       |       |       | 844  | 844  | 14.655    |
| E05679   | 152.40 | 101.60 | 7.90  | 9.50  | 3.20  | 0.80  | 0.80  |       | 687  | 687  | 8.078     |
| EP13969  | 165.10 | 101.60 | 5.60  | 7.90  | 7.80  |       |       |       | 699  | 699  | 6.658     |
| EU7083   | 176.00 | 80.00  | 5.00  | 8.00  | 5.00  | 1.00  | 1.00  |       | 650  | 650  | 5.669     |
| EN5812   | 178.00 | 153.00 | 10.00 | 13.00 | 5.00  |       |       |       | 939  | 939  | 14.901    |
| EP13970  | 190.50 | 111.10 | 5.85  | 8.90  | 7.80  |       |       |       | 786  | 786  | 8.114     |
| EG6461   | 203.20 | 101.60 | 7.92  | 11.10 | 11.43 |       |       |       | 777  | 777  | 10.263    |
| EN5219   | 216.00 | 80.00  | 5.00  | 8.00  | 10.00 |       |       |       | 725  | 725  | 6.366     |
| EU8404   | 220.00 | 100.00 | 5.00  | 10.00 | 4.00  |       |       |       | 823  | 823  | 8.137     |
| E27501   | 270.00 | 100.00 | 6.00  | 10.00 | 5.00  | 1.00  | 1.00  |       | 916  | 916  | 9.503     |
| EU8405   | 316.00 | 150.00 | 6.00  | 8.00  |       |       |       |       | 1209 | 1209 | 11.423    |

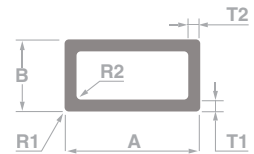


## Rectangular Hollows

| SECTION   | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EG5172    | 15.88 | 11.10 | 2.36  | 3.18  |       | 0.80  |       |       | 100 | 100 | 0.313     |
| EQ4750    | 19.10 | 9.60  | 1.00  | 1.00  | 0.50  |       |       |       | 100 | 100 | 0.144     |
| EP11381   | 24.50 | 10.50 | 1.50  | 1.50  |       |       |       |       | 100 | 100 | 0.259     |
| EL8010    | 25.00 | 12.00 | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.292     |
| EME30171  | 30.00 | 8.00  | 1.20  | 1.20  |       |       |       |       | 100 | 100 | 0.230     |
| EA3032    | 32.00 | 12.00 | 2.00  | 2.00  |       |       |       |       | 100 | 100 | 0.432     |
| EN6137    | 32.00 | 20.00 | 1.60  | 1.60  | 1.40  |       |       |       | 102 | 102 | 0.417     |
| EALH0545  | 34.93 | 12.70 | 1.57  | 1.57  | 3.75  | 2.18  |       |       | 100 | 100 | 0.355     |
| EP12071   | 35.00 | 10.00 | 1.20  | 1.20  | 3.00  | 1.80  |       |       | 100 | 100 | 0.263     |
| EP13739   | 38.00 | 16.00 | 1.20  | 1.20  | 3.00  | 1.80  |       |       | 103 | 103 | 0.321     |
| EP7822    | 38.00 | 16.00 | 1.60  | 1.60  | 1.00  |       |       |       | 106 | 106 | 0.437     |
| E22174    | 38.00 | 25.00 | 1.50  | 1.50  | 3.00  | 1.50  |       |       | 120 | 120 | 0.470     |
| EQ4361    | 38.00 | 25.00 | 1.80  | 1.80  | 0.80  |       |       |       | 125 | 125 | 0.576     |
| EQ6813    | 38.00 | 25.00 | 2.00  | 2.00  | 3.00  | 1.00  |       |       | 120 | 120 | 0.619     |
| EN9524    | 38.00 | 25.00 | 2.00  | 2.00  | 2.80  | 0.80  |       |       | 121 | 121 | 0.621     |
| EALH12221 | 38.00 | 25.00 | 2.50  | 2.50  |       |       |       |       | 125 | 125 | 0.783     |
| EALH11321 | 38.00 | 25.00 | 2.50  | 2.50  | 1.80  |       |       |       | 123 | 123 | 0.778     |
| EH2938    | 38.10 | 17.45 | 3.18  | 3.18  |       |       |       |       | 111 | 111 | 0.845     |
| EN8872    | 38.10 | 25.40 | 1.60  | 1.60  | 1.50  |       |       |       | 124 | 124 | 0.516     |
| EQ4084    | 38.10 | 25.40 | 1.60  | 1.60  | 3.00  | 1.40  |       |       | 121 | 121 | 0.505     |
| E22164    | 38.10 | 25.40 | 2.00  | 2.00  | 1.50  |       |       |       | 124 | 124 | 0.637     |
| E22166    | 38.10 | 25.40 | 2.50  | 2.50  | 3.20  | 0.70  |       |       | 122 | 122 | 0.767     |
| EQ6819    | 38.10 | 25.40 | 2.50  | 2.50  | 3.00  | 0.50  |       |       | 121 | 121 | 0.769     |
| EG2205    | 38.10 | 25.40 | 2.54  | 2.54  |       |       |       |       | 127 | 127 | 0.801     |
| E01384    | 38.10 | 25.40 | 2.54  | 2.54  |       | 1.57  |       |       | 127 | 127 | 0.806     |
| EN6565    | 38.30 | 25.30 | 1.95  | 1.95  | 0.80  |       |       |       | 126 | 126 | 0.626     |
| E22159    | 40.00 | 15.00 | 1.50  | 1.50  |       |       |       |       | 110 | 110 | 0.421     |
| EP12950   | 40.00 | 16.00 | 1.40  | 1.40  | 3.00  | 1.60  |       |       | 107 | 107 | 0.387     |
| E22169    | 40.00 | 20.00 | 2.00  | 2.00  | 2.00  |       |       |       | 117 | 117 | 0.597     |
| EN2262    | 40.00 | 20.00 | 3.00  | 3.00  |       |       |       |       | 120 | 120 | 0.875     |
| EQ4702    | 40.00 | 25.00 | 2.40  | 2.40  |       |       |       |       | 130 | 130 | 0.780     |
| EB1014    | 40.00 | 25.00 | 2.50  | 2.50  |       |       |       |       | 130 | 130 | 0.810     |
| E22122    | 40.00 | 25.00 | 3.00  | 3.00  | 3.00  | 1.00  |       |       | 125 | 125 | 0.937     |
| EALH21676 | 48.00 | 37.30 | 1.60  | 1.60  |       |       |       |       | 170 | 170 | 0.709     |

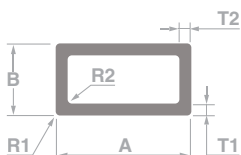
Sizes are indicative only – refer to die drawings for accurate sizes

## Rectangular Hollows continued



| SECTION   | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EP12680   | 50.00 | 10.00 | 1.10  | 1.10  | 1.50  |       |       |       | 117 | 117 | 0.338     |
| EP15350   | 50.00 | 10.00 | 1.20  | 1.20  | 1.50  |       |       |       | 117 | 117 | 0.368     |
| EP13740   | 50.00 | 10.00 | 1.60  | 1.60  |       |       |       |       | 119 | 119 | 0.491     |
| EP14037   | 50.00 | 16.00 | 1.40  | 1.40  | 1.60  | 3.00  |       |       | 127 | 127 | 0.463     |
| E22167    | 50.00 | 25.00 | 1.50  | 1.50  | 1.00  | 0.50  |       |       | 148 | 148 | 0.581     |
| EQ3359    | 50.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 149 | 149 | 0.620     |
| EP16189   | 50.00 | 25.00 | 1.60  | 1.60  | 3.00  | 1.50  |       |       | 145 | 145 | 0.605     |
| EP13677   | 50.00 | 25.00 | 2.00  | 2.00  | 3.00  |       |       |       | 145 | 145 | 0.748     |
| EU7751    | 50.00 | 25.00 | 2.50  | 2.50  |       |       |       |       | 150 | 150 | 0.945     |
| EP13238   | 50.00 | 25.00 | 3.00  | 3.00  | 3.50  | 0.50  |       |       | 144 | 140 | 1.090     |
| EL8012    | 50.00 | 25.00 | 3.00  | 3.00  |       |       |       |       | 150 | 150 | 1.118     |
| EW5373    | 50.00 | 25.00 | 3.00  |       | 3.00  |       |       |       | 144 | 144 | 1.097     |
| EP13327   | 50.00 | 25.00 | 4.00  | 4.00  |       |       |       |       | 149 | 149 | 1.447     |
| EL8013    | 50.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 180 | 180 | 1.361     |
| EQ1636    | 50.00 | 40.00 | 5.00  | 5.00  | 5.00  | 5.00  |       |       | 171 | 171 | 2.166     |
| E22176    | 50.80 | 25.40 | 2.00  | 2.00  | 3.00  | 1.00  |       |       | 147 | 147 | 0.759     |
| E03495    | 50.80 | 25.40 | 2.35  | 2.35  |       | 0.80  |       |       | 152 | 152 | 0.909     |
| EQ1148    | 50.80 | 25.40 | 2.50  | 2.50  | 1.40  |       |       |       | 150 | 150 | 0.957     |
| ET1406    | 50.80 | 25.40 | 3.17  | 3.17  | 0.78  | 3.17  |       |       | 152 | 152 | 1.220     |
| EE3956    | 50.80 | 38.10 | 3.18  | 3.18  |       | 3.18  |       |       | 178 | 178 | 1.441     |
| EALH0041  | 50.80 | 38.10 | 3.18  | 3.18  |       |       |       |       | 178 | 178 | 1.414     |
| EL8014    | 60.00 | 25.00 | 2.50  | 2.50  |       |       |       |       | 170 | 170 | 1.080     |
| E32698    | 60.00 | 35.00 | 2.00  | 3.60  | 1.00  | 5.00  |       |       | 188 | 188 | 1.306     |
| EALH21840 | 60.00 | 40.00 | 1.60  | 1.60  |       |       |       |       | 200 | 200 | 0.836     |
| EP13847   | 60.00 | 40.00 | 2.10  | 2.10  |       | 3.00  |       |       | 195 | 195 | 1.067     |
| EL8015    | 60.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 200 | 200 | 1.523     |
| EP13731   | 60.00 | 40.00 | 4.00  | 4.00  | 2.00  | 2.00  |       |       | 197 | 197 | 1.987     |
| EL8016    | 60.00 | 50.00 | 3.00  | 3.00  |       |       |       |       | 220 | 220 | 1.685     |
| EE3867    | 63.50 | 50.80 | 3.18  | 3.18  |       | 4.75  |       |       | 229 | 229 | 1.904     |
| EQ6823    | 65.00 | 16.00 | 1.20  | 1.20  | 3.00  | 1.80  |       |       | 157 | 157 | 0.496     |
| EQ6948    | 65.00 | 16.00 | 1.40  | 1.40  | 3.00  | 1.60  |       |       | 156 | 156 | 0.576     |
| EP12154   | 65.00 | 16.00 | 2.50  | 2.50  | 3.00  |       |       |       | 157 | 157 | 1.006     |
| EP11589   | 70.00 | 16.00 | 3.00  | 3.00  |       |       |       |       | 171 | 171 | 1.296     |
| EP13680   | 70.00 | 30.00 | 2.00  | 2.00  |       | 3.00  |       |       | 195 | 195 | 1.018     |
| EP13689   | 70.00 | 30.00 | 3.00  | 3.00  | 1.40  |       |       |       | 198 | 198 | 1.519     |
| EP15621   | 70.00 | 30.00 | 3.00  | 3.00  | 3.00  |       |       |       | 195 | 195 | 1.502     |
| EP10126   | 75.00 | 25.00 | 1.60  | 1.60  |       |       |       |       | 199 | 199 | 0.836     |
| EN2319    | 75.00 | 50.00 | 2.00  | 2.00  |       |       |       |       | 250 | 250 | 1.307     |

Sizes are indicative only – refer to die drawings for accurate sizes



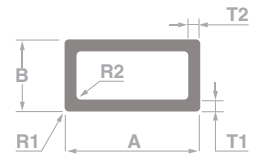
## Rectangular Hollows continued

| SECTION  | A mm   | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EL8017   | 75.00  | 50.00 | 3.00  | 3.00  |       |       |       |       | 250 | 250 | 1.928     |
| EP13676  | 75.00  | 50.00 | 3.00  |       | 6.00  |       |       |       | 240 | 240 | 1.865     |
| EALH9257 | 75.00  | 50.00 | 4.00  | 4.00  | 5.00  | 1.00  |       |       | 241 | 241 | 2.479     |
| EQ2435   | 75.00  | 50.00 | 6.00  | 6.00  | 6.00  | 6.00  |       |       | 240 | 240 | 3.661     |
| EP15688  | 75.60  | 35.60 | 2.00  |       |       | 2.00  |       |       | 219 | 219 | 1.148     |
| E03493   | 76.20  | 25.40 | 2.35  | 2.35  |       | 0.80  |       |       | 203 | 203 | 1.231     |
| EL4238   | 76.20  | 25.40 | 2.40  | 2.40  |       |       |       |       | 203 | 203 | 1.255     |
| EG4433   | 76.20  | 38.10 | 3.18  | 3.18  |       | 6.35  |       |       | 229 | 229 | 1.947     |
| E01864   | 76.20  | 50.50 | 3.20  | 3.20  |       |       |       |       | 253 | 253 | 2.079     |
| EQ1915   | 76.20  | 50.80 | 1.60  | 1.60  |       |       |       |       | 254 | 254 | 1.070     |
| EH2941   | 76.20  | 50.80 | 3.18  | 3.18  |       |       |       |       | 253 | 253 | 2.068     |
| EP6049   | 76.20  | 50.80 | 6.35  | 6.35  | 1.00  | 1.00  |       |       | 252 | 252 | 3.919     |
| EL8018   | 80.00  | 25.00 | 3.00  | 3.00  |       |       |       |       | 210 | 210 | 1.604     |
| EP12365  | 80.00  | 25.00 | 3.00  | 3.00  | 3.00  |       |       |       | 205 | 205 | 1.583     |
| EP13741  | 80.00  | 40.00 | 3.00  | 3.00  | 3.00  | 0.50  |       |       | 235 | 235 | 1.827     |
| EL8019   | 80.00  | 40.00 | 3.00  | 3.00  |       |       |       |       | 240 | 240 | 1.847     |
| EQ6383   | 80.00  | 40.00 | 3.00  | 3.00  | 6.00  | 4.70  |       |       | 229 | 229 | 1.815     |
| EL8020   | 80.00  | 50.00 | 3.00  | 3.00  |       |       |       |       | 260 | 260 | 2.009     |
| EP9944   | 80.00  | 50.00 | 3.00  | 3.00  | 6.00  | 4.70  |       |       | 250 | 250 | 1.977     |
| EH5716   | 82.55  | 28.58 | 2.29  | 2.29  |       |       |       |       | 222 | 222 | 1.318     |
| EL8021   | 100.00 | 25.00 | 2.50  | 2.50  |       |       |       |       | 250 | 250 | 1.620     |
| EQ2698   | 100.00 | 25.20 | 1.60  | 1.60  |       |       |       |       | 250 | 250 | 1.054     |
| EL8023   | 100.00 | 40.00 | 3.00  | 3.00  |       |       |       |       | 280 | 280 | 2.171     |
| EALH0658 | 100.00 | 50.00 | 1.50  | 1.50  |       |       |       |       | 299 | 299 | 1.190     |
| EL8024   | 100.00 | 50.00 | 1.60  | 1.60  | 0.50  | 0.50  |       |       | 299 | 299 | 1.268     |
| EP8087   | 100.00 | 50.00 | 1.60  | 1.60  |       |       |       |       | 299 | 299 | 1.269     |
| E22160   | 100.00 | 50.00 | 2.00  | 2.00  |       |       |       |       | 300 | 300 | 1.577     |
| EL8025   | 100.00 | 50.00 | 3.00  | 3.00  |       |       |       |       | 300 | 300 | 2.333     |
| E22177   | 100.00 | 50.00 | 3.00  | 3.00  | 1.00  | 2.00  |       |       | 298 | 298 | 2.340     |
| EME50157 | 100.00 | 50.00 | 3.00  | 3.00  | 6.00  | 3.00  |       |       | 290 | 290 | 2.270     |
| EB1592   | 100.00 | 50.00 | 6.00  | 6.00  | 8.00  | 2.00  |       |       | 286 | 286 | 4.332     |
| EP13663  | 100.00 | 60.00 | 4.00  |       |       |       |       |       | 313 | 313 | 3.283     |
| EP15196  | 100.00 | 80.00 | 6.00  | 6.00  | 7.00  | 1.00  |       |       | 348 | 348 | 5.332     |
| EG9425   | 101.60 | 50.80 | 1.57  | 1.57  |       |       |       |       | 304 | 304 | 1.265     |
| EG6913   | 101.60 | 50.80 | 3.18  | 3.18  |       |       |       |       | 305 | 305 | 2.508     |
| E02801   | 101.60 | 63.50 | 4.00  | 4.00  | 3.20  |       |       |       | 330 | 330 | 3.417     |
| EG5074   | 101.60 | 76.20 | 2.29  | 2.29  | 5.54  | 3.18  |       |       | 346 | 346 | 2.102     |
| EQ4284   | 101.60 | 76.20 | 3.50  | 3.50  | 5.50  | 2.00  |       |       | 346 | 346 | 3.167     |

Sizes are indicative only – refer to die drawings for accurate sizes

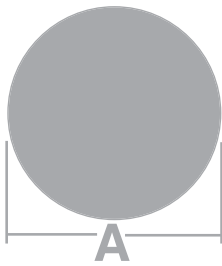


## Rectangular Hollows continued



| SECTION  | A mm   | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|--------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EL8027   | 125.00 | 25.00  | 3.00  | 3.00  |       |       |       |       | 300 | 300 | 2.333     |
| EL8028   | 125.00 | 40.00  | 3.00  | 3.00  |       |       |       |       | 330 | 330 | 2.576     |
| EP11635  | 125.00 | 50.00  | 1.60  |       |       |       |       |       | 349 | 349 | 1.484     |
| EL8030   | 125.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 349 | 349 | 2.737     |
| EU6344   | 125.00 | 100.00 | 4.00  | 4.00  | 6.00  | 5.00  |       |       | 440 | 440 | 4.662     |
| EB1015   | 150.00 | 30.00  | 3.00  | 3.00  |       |       |       |       | 360 | 360 | 2.819     |
| EP10494  | 150.00 | 50.00  | 1.95  | 1.95  |       |       |       |       | 399 | 399 | 2.065     |
| EL8033   | 150.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 400 | 400 | 3.143     |
| E22178   | 150.00 | 50.00  | 3.00  | 3.00  | 1.00  | 2.00  |       |       | 398 | 398 | 3.150     |
| EP11518  | 150.00 | 50.00  | 5.00  | 5.00  | 3.00  | 1.00  |       |       | 395 | 395 | 5.111     |
| E22168   | 150.00 | 75.00  | 6.00  | 6.00  | 10.00 | 4.00  |       |       | 432 | 432 | 6.707     |
| EP1239   | 150.00 | 80.00  | 6.00  | 6.00  | 5.00  |       |       |       | 451 | 451 | 7.005     |
| EP16465  | 150.00 | 100.00 | 5.00  | 5.00  | 10.00 | 7.50  |       |       | 483 | 483 | 6.379     |
| EP13822  | 152.00 | 76.00  | 6.00  | 6.00  | 2.00  | 6.00  |       |       | 446 | 446 | 6.924     |
| E01795   | 152.40 | 38.10  | 3.20  | 3.20  |       |       |       |       | 381 | 381 | 3.181     |
| E03267   | 152.40 | 76.20  | 6.35  | 6.35  | 1.60  | 0.25  |       |       | 454 | 454 | 7.397     |
| EP15156  | 152.40 | 101.60 | 6.35  | 6.35  | 2.00  | 6.30  |       |       | 497 | 497 | 8.191     |
| E22179   | 152.50 | 76.20  | 6.35  | 6.35  | 1.60  | 2.00  |       |       | 455 | 455 | 7.410     |
| E22154   | 160.00 | 100.00 | 3.00  | 3.00  |       |       |       |       | 520 | 520 | 4.115     |
| EP11556  | 160.00 | 106.00 | 6.00  | 6.00  | 6.40  |       |       |       | 521 | 521 | 8.135     |
| EL8034   | 180.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 459 | 459 | 3.628     |
| EL8035   | 200.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 500 | 500 | 3.953     |
| E22155   | 200.00 | 50.00  | 4.00  | 4.00  |       |       |       |       | 500 | 500 | 5.227     |
| EH3532   | 203.20 | 50.80  | 4.75  | 7.92  | 0.80  |       |       |       | 507 | 507 | 6.977     |
| E22173   | 250.00 | 50.00  | 3.00  | 3.00  |       |       |       |       | 600 | 600 | 4.763     |
| EP15970* | 300.00 | 50.00  | 3.00  | 3.00  | 0.50  | 0.50  |       |       | 699 | 699 | 5.934     |
| EP8251   | 365.00 | 100.00 | 6.00  |       |       |       |       |       | 920 | 920 | 14.677    |

\*with centre web

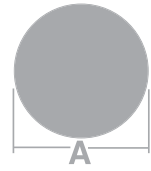


## Round Bars

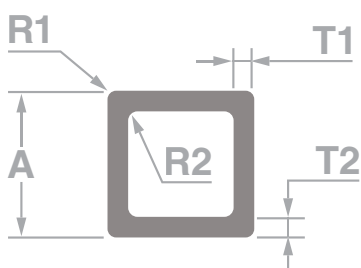
| SECTION  | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EAL4066  | 8.00  |      |       |       |       |       |       |       | 100 | 100 | 0.135     |
| EQ6445   | 8.00  |      |       |       |       |       |       |       | 100 | 100 | 0.136     |
| EX6000   | 10.00 |      |       |       |       |       |       |       | 100 | 100 | 0.212     |
| EX6001   | 12.00 |      |       |       |       |       |       |       | 100 | 100 | 0.305     |
| EX3015   | 12.70 |      |       |       |       |       |       |       | 100 | 100 | 0.342     |
| EX6023   | 14.00 |      |       |       |       |       |       |       | 100 | 100 | 0.416     |
| EX3017   | 14.48 |      |       |       |       |       |       |       | 100 | 100 | 0.446     |
| EX3020   | 15.88 |      |       |       |       |       |       |       | 100 | 100 | 0.535     |
| EX6002   | 16.00 |      |       |       |       |       |       |       | 100 | 100 | 0.543     |
| EAL3232  | 19.05 |      |       |       |       |       |       |       | 100 | 100 | 0.769     |
| EX6003   | 20.00 |      |       |       |       |       |       |       | 100 | 100 | 0.848     |
| EAL10312 | 21.03 |      |       |       |       |       |       |       | 100 | 100 | 0.941     |
| E20303   | 22.00 |      |       |       |       |       |       |       | 100 | 100 | 1.026     |
| EX3028   | 22.23 |      |       |       |       |       |       |       | 100 | 100 | 1.032     |
| E20304   | 24.00 |      |       |       |       |       |       |       | 100 | 100 | 1.221     |
| EAL12628 | 25.00 |      |       |       |       |       |       |       | 100 | 100 | 1.325     |
| EX3000   | 25.40 |      |       |       |       |       |       |       | 100 | 100 | 1.369     |
| EX6004   | 27.00 |      |       |       |       |       |       |       | 100 | 100 | 1.546     |
| EX3035   | 28.58 |      |       |       |       |       |       |       | 100 | 100 | 1.733     |
| E20306   | 30.00 |      |       |       |       |       |       |       | 100 | 100 | 1.909     |
| EX3038   | 30.16 |      |       |       |       |       |       |       | 100 | 100 | 1.929     |
| EX3040   | 31.75 |      |       |       |       |       |       |       | 100 | 100 | 2.226     |
| EX6005   | 33.00 |      |       |       |       |       |       |       | 104 | 104 | 2.309     |
| E20329   | 35.00 |      |       |       |       |       |       |       | 110 | 110 | 2.597     |
| EX6036   | 36.00 |      |       |       |       |       |       |       | 113 | 113 | 2.749     |
| EAL12308 | 37.00 |      |       |       |       |       |       |       | 116 | 116 | 2.903     |
| EX6006   | 39.00 |      |       |       |       |       |       |       | 123 | 123 | 3.227     |
| E20335   | 39.60 |      |       |       |       |       |       |       | 124 | 124 | 3.325     |
| EX6007   | 42.00 |      |       |       |       |       |       |       | 132 | 132 | 3.892     |
| EX6008   | 45.00 |      |       |       |       |       |       |       | 141 | 141 | 4.294     |
| EAL12307 | 46.00 |      |       |       |       |       |       |       | 145 | 145 | 4.487     |
| EAL4083  | 48.00 |      |       |       |       |       |       |       | 151 | 151 | 4.887     |
| EX6010   | 50.00 |      |       |       |       |       |       |       | 157 | 157 | 5.301     |
| EX3053   | 50.80 |      |       |       |       |       |       |       | 160 | 160 | 5.473     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Round Bars continued



| SECTION | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EX6011  | 55.00 |      |       |       |       |       |       |       | 173 | 173 | 6.415     |
| E20315  | 60.00 |      |       |       |       |       |       |       | 188 | 188 | 7.634     |
| EX3058  | 60.33 |      |       |       |       |       |       |       | 190 | 190 | 7.718     |
| EX6012  | 65.00 |      |       |       |       |       |       |       | 204 | 204 | 8.959     |
| EX6013  | 70.00 |      |       |       |       |       |       |       | 220 | 220 | 10.391    |
| EX6014  | 75.00 |      |       |       |       |       |       |       | 236 | 236 | 11.929    |
| EX3066  | 76.19 |      |       |       |       |       |       |       | 239 | 239 | 12.811    |
| EX6015  | 80.00 |      |       |       |       |       |       |       | 251 | 251 | 13.570    |
| EX6016  | 90.00 |      |       |       |       |       |       |       | 283 | 283 | 17.176    |

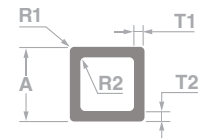


## Square Hollows

| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EL8001    | 12.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.180     |
| EH2913    | 12.70 |      | 1.57  |       |       |       |       |       | 100 | 100 | 0.189     |
| EQ4681    | 16.00 |      | 1.20  |       | 1.57  | 0.38  |       |       | 100 | 100 | 0.186     |
| EP8516    | 16.00 |      | 1.75  |       | 1.60  |       |       |       | 100 | 100 | 0.264     |
| EP15437   | 18.95 |      | 1.20  |       |       | 1.50  |       |       | 100 | 100 | 0.225     |
| EP12679   | 19.00 |      | 1.20  |       | 1.00  |       |       |       | 100 | 100 | 0.228     |
| E00363    | 19.00 |      | 1.60  |       | 1.60  |       |       |       | 100 | 100 | 0.291     |
| EALH0544  | 19.00 |      | 1.80  |       | 1.50  |       |       |       | 100 | 100 | 0.329     |
| EG8354    | 19.02 |      | 1.57  |       | 1.57  | 0.38  |       |       | 100 | 100 | 0.290     |
| EALH11169 | 19.05 |      | 1.15  |       |       |       |       |       | 100 | 100 | 0.223     |
| EK1333    | 19.05 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.231     |
| EALH0053  | 19.05 |      | 1.57  |       |       |       |       |       | 100 | 100 | 0.298     |
| EG5799    | 19.05 |      | 1.83  |       | 1.57  | 1.57  |       |       | 100 | 100 | 0.340     |
| EB1000    | 20.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.244     |
| EL6216    | 20.00 |      | 1.60  |       | 1.60  |       |       |       | 100 | 100 | 0.316     |
| E22101    | 20.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.319     |
| EALH12288 | 20.00 |      | 2.50  |       |       |       |       |       | 100 | 100 | 0.472     |
| EL2299    | 20.00 |      | 3.00  |       |       |       |       |       | 100 | 100 | 0.551     |
| E51872    | 20.00 |      | 3.00  |       | 3.00  |       |       |       | 100 | 100 | 0.529     |
| EP13738   | 20.00 |      | 2.80  |       | 2.50  |       |       |       | 100 | 100 | 0.506     |
| EP15622   | 25.00 |      | 1.30  | 1.30  | 2.50  | 2.50  |       |       | 100 | 100 | 0.322     |
| EL8819    | 25.00 |      | 1.50  |       | 1.60  | 1.60  |       |       | 100 | 100 | 0.381     |
| E22103    | 25.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.404     |
| EN3238    | 25.00 |      | 2.00  |       | 1.60  | 1.60  |       |       | 100 | 100 | 0.497     |
| E22113    | 25.00 |      | 2.00  |       |       |       |       |       | 100 | 100 | 0.497     |
| EME50165  | 25.00 |      | 2.00  |       | 3.00  | 1.00  |       |       | 100 | 100 | 0.479     |
| EQ4067    | 25.00 |      | 3.00  |       | 3.00  | 3.00  |       |       | 100 | 100 | 0.713     |
| E22120    | 25.00 |      | 3.00  |       | 3.00  |       |       |       | 100 | 100 | 0.692     |
| EL8003    | 25.00 |      | 3.00  |       |       |       |       |       | 100 | 100 | 0.713     |
| EALH23705 | 25.40 |      | 1.20  |       | 2.00  | 0.80  |       |       | 100 | 100 | 0.305     |
| E50413    | 25.40 |      | 1.20  |       | 3.20  | 1.60  |       |       | 100 | 100 | 0.297     |
| E22114    | 25.40 |      | 1.22  |       | 0.80  |       |       |       | 100 | 100 | 0.317     |
| EALH0265  | 25.40 |      | 3.25  |       | 3.18  | 3.18  |       |       | 100 | 100 | 0.780     |
| EG1842    | 25.40 |      | 3.25  |       | 3.18  | 3.18  |       |       | 100 | 100 | 0.777     |

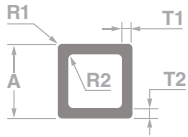
Sizes are indicative only – refer to die drawings for accurate sizes

## Square Hollows continued



| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EU9316    | 30.00 |      | 1.60  |       | 2.50  | 0.90  |       |       | 116 | 116 | 0.478     |
| E22127    | 30.00 |      | 1.60  |       | 3.00  | 2.00  |       |       | 115 | 115 | 0.477     |
| EN6459    | 31.55 |      | 2.43  |       |       |       |       |       | 126 | 126 | 0.764     |
| ET2636    | 31.75 |      | 2.54  |       |       |       |       |       | 127 | 127 | 0.804     |
| EG3496    | 31.75 |      | 3.18  |       |       | 0.80  |       |       | 127 | 127 | 0.981     |
| EALH0055  | 31.75 |      | 3.20  |       |       |       |       |       | 229 | 229 | 0.984     |
| EG1857    | 31.75 |      | 4.75  |       |       | 3.18  |       |       | 127 | 127 | 1.416     |
| EALH10989 | 32.00 |      | 1.60  |       |       |       |       |       | 127 | 127 | 0.527     |
| EQ1557    | 32.00 |      | 2.00  |       |       |       |       |       | 128 | 128 | 0.648     |
| EL8005    | 32.00 |      | 3.00  |       |       |       |       |       | 128 | 128 | 0.940     |
| EP10014   | 32.00 |      | 3.00  |       | 3.00  | 2.00  |       |       | 123 | 123 | 0.928     |
| E51264    | 37.35 |      | 2.50  |       | 5.00  | 2.50  |       |       | 141 | 141 | 0.896     |
| EP9743    | 38.00 |      | 2.00  |       |       |       |       |       | 151 | 151 | 0.777     |
| EN9549    | 38.00 |      | 2.00  |       | 2.80  | 0.80  |       |       | 147 | 147 | 0.761     |
| EP15351   | 38.00 |      | 2.50  | 2.50  | 1.50  |       |       |       | 149 | 151 | 0.954     |
| EP1483    | 38.00 |      | 2.50  |       | 2.80  |       |       |       | 147 | 147 | 0.940     |
| EH1152    | 38.10 |      | 1.57  |       |       |       |       |       | 152 | 152 | 0.618     |
| EME176    | 38.10 |      | 1.57  |       |       |       |       |       | 153 | 153 | 0.620     |
| E02130    | 38.10 |      | 1.60  |       |       |       |       |       | 152 | 152 | 0.631     |
| EG2803    | 38.10 |      | 2.92  |       |       | 3.18  |       |       | 152 | 152 | 1.133     |
| EALH0038  | 38.10 |      | 3.18  |       |       |       |       |       | 152 | 152 | 1.199     |
| EMEH31842 | 40.00 |      | 1.60  |       | 3.00  | 1.40  |       |       | 155 | 155 | 0.647     |
| EL7938    | 40.00 |      | 1.60  |       |       |       |       |       | 159 | 159 | 0.664     |
| EP7163    | 40.00 |      | 1.60  |       | 3.20  | 2.00  |       |       | 154 | 154 | 0.648     |
| EQ6818    | 40.00 |      | 2.00  |       | 3.00  | 0.50  |       |       | 154 | 154 | 0.801     |
| EQ4000    | 40.00 |      | 2.00  |       |       |       |       |       | 160 | 160 | 0.821     |
| EN9769    | 40.00 |      | 2.50  |       | 3.75  | 1.25  |       |       | 154 | 154 | 0.984     |
| EU7743    | 40.00 |      | 2.50  |       |       |       |       |       | 160 | 160 | 1.012     |
| E22108    | 40.00 |      | 3.00  |       |       |       |       |       | 159 | 159 | 1.198     |
| E73599    | 40.00 |      | 3.00  |       | 3.00  | 2.00  |       |       | 155 | 155 | 1.185     |
| EP7164    | 40.00 |      | 3.00  |       | 3.20  |       |       |       | 154 | 154 | 1.175     |
| EK5979    | 44.45 |      | 2.36  |       |       |       |       |       | 178 | 178 | 1.073     |
| EB4116    | 44.45 |      | 2.40  |       |       |       |       |       | 177 | 177 | 1.090     |
| EN8367    | 45.00 |      | 1.80  |       |       |       |       |       | 180 | 180 | 0.840     |
| EAL20079  | 45.00 |      | 2.00  |       |       |       |       |       | 179 | 179 | 0.929     |
| E22109    | 45.00 |      | 2.50  |       |       |       |       |       | 180 | 180 | 1.148     |
| EP10439   | 45.00 |      | 7.00  |       |       |       |       |       | 179 | 179 | 2.873     |
| EQ6446    | 50.00 |      | 1.60  |       | 6.30  | 4.70  |       |       | 189 | 189 | 0.796     |

Sizes are indicative only – refer to the drawings for accurate sizes

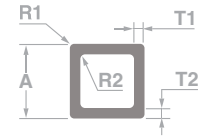


## Square Hollows continued

| SECTION  | A mm  | B mm  | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EQ2259   | 50.00 |       | 1.60  |       |       |       |       |       | 200 | 200 | 0.836     |
| E22116   | 50.00 |       | 1.70  |       | 6.00  | 4.30  |       |       | 190 | 190 | 0.846     |
| EQ4584   | 50.00 |       | 1.95  |       | 6.35  | 4.40  |       |       | 189 | 189 | 0.963     |
| EP12031  | 50.00 |       | 2.00  |       | 6.00  | 4.00  |       |       | 190 | 190 | 0.990     |
| EB1003   | 50.00 |       | 2.00  |       |       |       |       |       | 200 | 200 | 1.037     |
| EME50410 | 50.00 |       | 2.00  |       | 6.00  | 4.00  |       |       | 190 | 190 | 0.986     |
| EL8008   | 50.00 |       | 2.50  |       |       |       |       |       | 200 | 200 | 1.283     |
| EB1004   | 50.00 |       | 3.00  |       |       |       |       |       | 200 | 200 | 1.523     |
| EP12033  | 50.00 |       | 3.00  |       | 6.00  | 3.00  |       |       | 190 | 190 | 1.460     |
| EP15366  | 50.00 |       | 4.00  |       |       |       |       |       | 199 | 199 | 1.987     |
| EP10392  | 50.00 |       | 5.00  |       | 3.00  |       |       |       | 195 | 195 | 2.411     |
| EP12032  | 50.00 |       | 5.00  |       | 6.00  | 1.00  |       |       | 190 | 190 | 2.349     |
| E11901   | 50.80 | 50.80 | 3.20  |       | 4.75  | 1.55  |       |       | 195 | 195 | 1.598     |
| EN7174   | 50.80 |       | 1.60  |       | 6.30  | 4.70  |       |       | 192 | 192 | 0.810     |
| EL4998   | 50.80 |       | 1.83  |       | 6.30  | 4.47  |       |       | 192 | 192 | 0.922     |
| EB1242   | 50.80 |       | 1.85  |       | 6.30  | 4.45  |       |       | 192 | 192 | 0.932     |
| E09511   | 50.80 |       | 2.00  |       |       |       |       |       | 203 | 203 | 1.053     |
| EH2940   | 50.80 |       | 2.03  |       |       |       |       |       | 203 | 203 | 1.069     |
| EK1537   | 50.80 |       | 2.03  |       | 6.35  | 4.32  |       |       | 192 | 192 | 1.019     |
| EP7607   | 50.80 |       | 2.50  |       | 4.05  | 1.55  |       |       | 196 | 196 | 1.272     |
| EQ6822   | 50.80 |       | 3.00  |       | 6.35  | 3.35  |       |       | 192 | 192 | 1.481     |
| EL6217   | 50.80 |       | 3.18  |       | 3.18  |       |       |       | 198 | 198 | 1.612     |
| EP7619   | 50.80 |       | 4.00  |       | 5.55  | 1.55  |       |       | 194 | 194 | 1.955     |
| EP13209  | 53.00 |       | 5.00  |       | 5.00  | 1.00  |       |       | 203 | 203 | 2.536     |
| EP12806  | 60.00 | 60.00 | 3.00  |       |       |       |       |       | 239 | 239 | 1.847     |
| EQ1351   | 60.00 |       | 1.60  |       | 0.80  | 1.50  |       |       | 239 | 239 | 1.013     |
| EQ6326   | 60.00 |       | 2.00  |       | 6.00  | 4.00  |       |       | 229 | 229 | 1.206     |
| EP13805  | 62.00 |       | 5.00  |       | 2.00  | 6.00  |       |       | 238 | 238 | 3.004     |
| EME178   | 63.50 |       | 3.18  |       |       |       |       |       | 254 | 254 | 2.078     |
| E06230   | 63.50 |       | 3.20  |       |       | 3.20  |       |       | 254 | 254 | 2.108     |
| EP13846  | 63.50 |       | 4.50  |       | 7.50  |       |       |       | 241 | 241 | 2.758     |
| EQ6382   | 65.00 |       | 2.50  |       |       |       |       |       | 259 | 259 | 1.687     |
| EU2011   | 65.00 |       | 3.00  |       | 5.00  | 5.00  |       |       | 251 | 251 | 2.009     |
| EL8536   | 65.50 |       | 1.60  |       | 1.60  |       |       |       | 259 | 259 | 1.102     |
| EL8435   | 70.00 |       | 1.60  |       | 1.60  |       |       |       | 277 | 277 | 1.177     |
| E22124   | 75.00 |       | 1.60  |       |       |       |       |       | 299 | 299 | 1.268     |
| EU9613   | 75.00 |       | 2.25  |       | 5.00  | 2.75  |       |       | 291 | 291 | 1.727     |
| EQ6032   | 75.00 |       | 3.00  |       | 6.00  | 3.00  |       |       | 290 | 290 | 2.270     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Square Hollows continued



| SECTION   | A mm   | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|--------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EP9568    | 75.00  |      | 4.00  |       |       |       |       |       | 299 | 299 | 3.067     |
| EALH9258  | 75.00  |      | 5.00  |       | 5.00  | 1.00  |       |       | 291 | 291 | 3.735     |
| EW6156    | 75.00  |      |       |       | 5.00  |       |       |       | 291 | 291 | 2.284     |
| EQ4171    | 76.00  |      | 6.35  |       | 16.00 | 9.65  |       |       | 277 | 277 | 4.398     |
| EP11531   | 76.20  |      | 3.00  |       | 6.00  | 3.00  |       |       | 294 | 294 | 2.309     |
| EME436    | 76.20  |      | 3.18  |       |       |       |       |       | 304 | 304 | 2.504     |
| E11077    | 76.20  |      | 6.35  |       | 15.90 | 9.55  |       |       | 278 | 278 | 4.416     |
| EP13188   | 80.00  |      | 2.50  |       | 3.00  | 1.00  |       |       | 315 | 315 | 2.074     |
| EQ1108    | 80.00  |      | 6.00  |       |       | 4.00  |       |       | 320 | 320 | 4.833     |
| E22129    | 80.00  |      | 6.00  |       | 1.00  | 2.00  |       |       | 320 | 320 | 4.803     |
| EB1206    | 80.00  |      | 6.50  |       | 12.50 | 6.00  |       |       | 299 | 299 | 4.881     |
| EALH22379 | 90.00  |      | 2.00  |       | 3.00  | 1.00  |       |       | 355 | 355 | 1.882     |
| E22119    | 100.00 |      | 3.00  |       | 1.40  |       |       |       | 398 | 398 | 3.138     |
| EN5813    | 100.00 |      | 3.20  |       | 2.00  | 2.00  |       |       | 397 | 397 | 3.345     |
| EP11740   | 100.00 |      | 4.50  |       | 9.50  | 5.00  |       |       | 384 | 384 | 4.490     |
| EP13662   | 100.00 |      | 6.00  |       |       | 12.00 |       |       | 379 | 379 | 5.841     |
| EL8009    | 100.00 |      | 6.00  |       |       |       |       |       | 400 | 400 | 6.091     |
| EP13751   | 100.00 |      | 6.00  |       | 6.40  | 0.50  |       |       | 389 | 389 | 5.997     |
| EG7152    | 101.60 |      | 6.35  |       | 12.70 | 6.35  |       |       | 384 | 384 | 6.252     |
| E05620    | 127.00 |      | 6.35  |       | 12.70 | 6.35  |       |       | 486 | 486 | 7.994     |
| EP13699   | 150.00 |      | 3.00  |       | 3.00  | 1.60  |       |       | 595 | 595 | 4.748     |
| EP12030   | 150.00 |      | 16.00 |       | 3.00  | 3.00  |       |       | 595 | 595 | 23.155    |
| EP4953    | 178.00 |      | 9.00  |       | 8.00  | 5.00  |       |       | 698 | 698 | 16.336    |



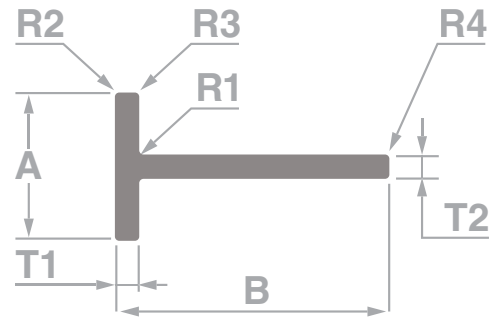
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## Squares Solid

| SECTION | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EX6500  | 6.00  |      |       |       |       |       |       |       | 100 | 100 | 0.097     |
| EX1104  | 7.92  |      |       |       |       |       |       |       | 100 | 100 | 0.170     |
| EX6501  | 10.00 |      |       |       |       |       |       |       | 100 | 100 | 0.270     |
| EX6502  | 12.00 |      |       |       |       |       |       |       | 100 | 100 | 0.389     |
| EX6503  | 16.00 |      |       |       |       |       |       |       | 100 | 100 | 0.691     |
| EX6504  | 20.00 |      |       |       |       |       |       |       | 100 | 100 | 1.080     |
| EX6505  | 25.00 |      |       |       |       |       |       |       | 100 | 100 | 1.688     |
| EX1117  | 31.75 |      |       |       |       |       |       |       | 127 | 127 | 2.832     |
| EX6506  | 40.00 |      |       |       |       |       |       |       | 160 | 160 | 4.256     |
| EX6507  | 50.00 |      |       |       |       |       |       |       | 200 | 200 | 7.025     |
| EX6508  | 65.00 |      |       |       |       |       |       |       | 260 | 260 | 11.408    |

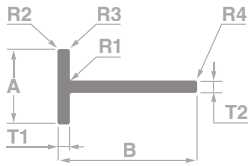


## Tee Sections



| SECTION | A mm  | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|-------|--------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| E01453  | 19.05 | 19.05  | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.155     |
| EK9140  | 20.00 | 20.00  | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.166     |
| EK9141  | 20.00 | 20.00  | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.300     |
| E71495  | 22.00 | 40.00  | 1.60  | 1.60  |       |       |       | 0.80  | 123 | 123 | 0.259     |
| EK9142  | 25.00 | 25.00  | 1.60  | 1.60  |       |       |       |       | 100 | 100 | 0.209     |
| EK9143  | 25.00 | 25.00  | 3.00  | 3.00  |       |       |       |       | 100 | 100 | 0.381     |
| E20194  | 25.00 | 40.00  | 1.60  | 1.60  |       |       |       |       | 130 | 130 | 0.273     |
| EU8129  | 25.40 | 38.10  | 1.58  | 1.58  |       |       |       |       | 127 | 127 | 0.264     |
| E20264  | 32.00 | 54.00  | 4.00  | 4.00  | 4.00  |       |       |       | 169 | 169 | 0.904     |
| EU6976  | 35.00 | 50.00  | 2.00  | 2.00  | 2.00  |       |       |       | 168 | 168 | 0.453     |
| EA2071  | 35.00 | 50.00  | 2.00  | 2.00  | 3.00  | 0.50  | 0.50  | 0.50  | 166 | 166 | 0.458     |
| EU9284  | 35.00 | 50.00  | 3.00  | 3.00  | 3.00  |       |       |       | 167 | 167 | 0.675     |
| EP3724  | 35.00 | 128.00 | 8.00  | 5.00  |       |       |       |       | 320 | 320 | 2.391     |
| E71996  | 38.00 | 63.00  | 4.00  | 8.00  | 3.00  | 2.00  | 2.00  | 4.00  | 198 | 198 | 1.663     |
| EH2926  | 38.10 | 38.10  | 3.18  | 3.18  |       |       |       |       | 152 | 152 | 0.627     |
| E20215  | 40.00 | 20.00  | 1.50  | 1.50  |       |       |       |       | 120 | 120 | 0.236     |
| EME9173 | 40.00 | 20.00  | 1.60  | 1.60  |       |       |       |       | 120 | 120 | 0.252     |
| E20197  | 40.00 | 25.00  | 2.50  | 2.50  |       |       |       |       | 130 | 130 | 0.421     |
| EL5287  | 40.00 | 40.00  | 1.60  | 1.60  |       |       |       |       | 160 | 100 | 0.339     |
| EK9144  | 40.00 | 40.00  | 3.00  | 3.00  |       |       |       |       | 160 | 160 | 0.624     |
| EK9145  | 40.00 | 40.00  | 4.00  | 4.00  |       |       |       |       | 160 | 160 | 0.821     |
| EU9187  | 40.00 | 40.00  | 4.00  | 4.00  | 3.75  |       |       |       | 156 | 156 | 0.837     |
| E20212  | 50.00 | 25.00  | 1.60  | 1.60  |       |       |       |       | 150 | 100 | 0.317     |
| EN5333  | 50.00 | 50.00  | 4.00  | 4.00  |       |       |       |       | 200 | 200 | 1.037     |
| E20219  | 50.00 | 50.00  | 4.00  | 4.00  | 4.00  | 0.50  | 0.50  | 0.50  | 195 | 195 | 1.054     |
| EU8517  | 50.00 | 50.00  | 4.00  |       |       |       |       |       | 197 | 197 | 1.055     |
| E20255  | 50.00 | 50.00  | 6.00  | 6.00  |       |       |       |       | 200 | 200 | 1.523     |
| E20205  | 50.00 | 50.00  | 6.00  | 6.00  | 5.00  |       |       |       | 196 | 196 | 1.552     |
| EU6368  | 50.00 | 60.00  | 6.00  | 4.00  | 4.00  |       |       |       | 216 | 216 | 1.412     |
| EN5331  | 50.00 | 70.00  | 8.00  | 4.00  | 4.00  |       |       |       | 236 | 236 | 1.768     |
| E20263  | 50.00 | 125.00 | 6.00  | 4.00  | 4.00  |       |       |       | 347 | 347 | 2.113     |
| EU8408  | 50.00 | 156.00 | 6.00  | 6.00  | 4.00  |       |       |       | 408 | 408 | 3.259     |
| EG6440  | 50.80 | 50.80  | 6.35  | 6.35  | 6.10  |       |       |       | 198 | 198 | 1.676     |
| E20257  | 60.00 | 60.00  | 6.00  | 6.00  | 4.00  |       |       |       | 236 | 236 | 1.863     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Tee Sections continued

| SECTION | A mm   | B mm   | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP   | PP   | MASS kg/m |
|---------|--------|--------|-------|-------|-------|-------|-------|-------|------|------|-----------|
| EP12565 | 60.00  | 80.00  | 6.00  | 6.00  |       |       |       |       | 279  | 279  | 2.170     |
| EN1460  | 63.00  | 40.00  | 3.00  | 3.00  |       |       |       |       | 206  | 206  | 0.810     |
| EP12758 | 70.00  | 100.00 | 6.00  | 6.00  | 3.00  |       |       |       | 336  | 336  | 2.666     |
| EP9148  | 70.00  | 140.00 | 10.00 | 6.00  | 4.00  | 1.00  | 1.00  | 1.00  | 414  | 414  | 4.011     |
| EAL6102 | 76.00  | 76.00  | 6.00  | 6.00  |       |       |       |       | 304  | 304  | 2.365     |
| E00801  | 76.20  | 76.20  | 6.35  | 6.35  | 7.60  |       |       |       | 297  | 297  | 2.570     |
| EG6437  | 76.20  | 76.20  | 9.53  | 9.53  | 7.62  |       |       |       | 298  | 298  | 3.743     |
| EU7545  | 80.00  | 139.00 | 8.00  | 5.00  | 10.00 |       |       |       | 429  | 429  | 3.612     |
| EN1950  | 80.00  | 156.00 | 6.00  | 6.00  | 5.00  |       |       |       | 468  | 468  | 3.756     |
| EN5218  | 80.00  | 163.00 | 8.00  | 5.00  | 10.00 |       |       |       | 477  | 477  | 3.937     |
| EU8406  | 80.00  | 208.00 | 8.00  | 6.00  | 6.00  |       |       |       | 571  | 571  | 5.009     |
| EU7074  | 100.00 | 45.00  | 8.00  | 5.00  | 4.00  |       |       |       | 286  | 286  | 2.233     |
| EU6367  | 100.00 | 180.00 | 10.00 | 6.00  | 4.00  |       |       |       | 557  | 557  | 5.473     |
| EP7911  | 100.00 | 180.00 | 10.00 | 6.00  | 5.00  | 1.00  | 1.00  | 1.00  | 553  | 553  | 5.478     |
| E27297  | 100.00 | 308.00 | 8.00  | 5.00  |       |       |       |       | 806  | 806  | 6.281     |
| E25760  | 120.00 | 370.00 | 10.00 | 6.00  | 8.00  | 1.00  | 1.00  | 1.00  | 971  | 971  | 9.143     |
| EP10656 | 120.00 | 402.00 | 12.00 | 6.00  | 8.00  | 1.00  | 1.00  | 1.00  | 1034 | 1034 | 10.277    |
| EP14442 | 150.00 | 200.00 | 10.00 | 10.00 | 10.00 |       |       |       | 689  | 689  | 9.292     |
| EP13044 | 250.00 | 110.00 | 6.00  | 6.00  | 6.00  |       |       |       | 714  | 471  | 5.776     |

## Tubes



| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EX2264    | 7.92  |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.068     |
| EX2004    | 9.52  |      | 1.27  |       |       |       |       |       | 100 | 100 | 0.089     |
| E40675    | 9.55  |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.083     |
| EX5001    | 10.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.090     |
| EX5098    | 10.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.113     |
| EX5002    | 12.00 |      | 1.00  |       |       |       |       |       | 100 | 100 | 0.093     |
| EX5003    | 12.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.110     |
| EX5004    | 12.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.141     |
| EX2018    | 12.70 |      | 0.81  |       |       |       |       |       | 100 | 100 | 0.082     |
| EX2020    | 12.70 |      | 1.42  |       |       |       |       |       | 100 | 100 | 0.135     |
| EX2021    | 12.70 |      | 1.83  |       |       |       |       |       | 100 | 100 | 0.169     |
| EX2240    | 13.08 |      | 2.79  |       |       |       |       |       | 100 | 100 | 0.244     |
| EALH12576 | 14.00 |      | 1.50  |       |       |       |       |       | 100 | 100 | 0.159     |
| EX5123    | 14.00 |      | 2.73  |       |       |       |       |       | 100 | 100 | 0.261     |
| EX2026    | 15.88 |      | 1.22  |       |       |       |       |       | 100 | 100 | 0.152     |
| EX2027    | 15.88 |      | 1.42  |       |       |       |       |       | 100 | 100 | 0.174     |
| EX2028    | 15.88 |      | 1.63  |       |       |       |       |       | 100 | 100 | 0.197     |
| E40717    | 15.90 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.194     |
| E40082    | 15.90 |      | 2.10  |       |       |       |       |       | 100 | 100 | 0.248     |
| EQ5731    | 16.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.151     |
| EX5005    | 16.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.151     |
| EP6935    | 16.00 |      | 1.40  |       |       |       |       |       | 100 | 100 | 0.173     |
| EX5006    | 16.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.195     |
| EX2256    | 17.78 |      | 1.83  |       |       |       |       |       | 100 | 100 | 0.248     |
| EX5036    | 18.00 |      | 1.65  |       |       |       |       |       | 100 | 100 | 0.229     |
| E40149    | 19.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.181     |
| E40201    | 19.00 |      | 3.20  |       |       |       |       |       | 100 | 100 | 0.425     |
| EX2284    | 19.04 |      | 1.00  |       |       |       |       |       | 100 | 100 | 0.153     |
| EX2195    | 19.04 |      | 1.65  |       |       |       |       |       | 100 | 100 | 0.243     |
| EX2033    | 19.04 |      | 2.41  |       |       |       |       |       | 100 | 100 | 0.340     |
| EME334    | 19.05 |      | 1.22  |       |       |       |       |       | 100 | 100 | 0.185     |
| EX5062    | 19.05 |      | 1.30  |       |       |       |       |       | 100 | 100 | 0.196     |
| EALH9075  | 19.05 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.237     |
| EALH9105  | 19.05 |      | 2.55  |       |       |       |       |       | 100 | 100 | 0.357     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Tubes continued

| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EALH0523  | 19.05 |      | 3.20  |       |       |       |       |       | 100 | 100 | 0.430     |
| EX2232    | 20.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.191     |
| E40512    | 20.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.191     |
| EALH21788 | 20.00 |      | 1.40  |       |       |       |       |       | 100 | 100 | 0.221     |
| EX5008    | 20.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.250     |
| EX5109    | 20.00 |      | 2.00  |       |       |       |       |       | 100 | 100 | 0.305     |
| EX5160    | 20.00 |      | 2.25  |       |       |       |       |       | 100 | 100 | 0.339     |
| EX5159    | 20.00 |      | 3.60  |       |       |       |       |       | 100 | 100 | 0.501     |
| EX2247    | 20.95 |      | 4.06  |       |       |       |       |       | 100 | 100 | 0.582     |
| EALH0029  | 20.96 |      | 5.70  |       |       |       |       |       | 100 | 100 | 0.738     |
| EX2265    | 21.08 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.264     |
| EX2230    | 21.59 |      | 1.12  |       |       |       |       |       | 100 | 100 | 0.194     |
| EL5483    | 22.00 |      | 1.50  |       |       |       |       |       | 100 | 100 | 0.261     |
| E40660    | 22.20 |      | 1.42  |       |       |       |       |       | 100 | 100 | 0.250     |
| EX5080    | 22.20 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.280     |
| EX9487    | 22.23 |      | 1.27  |       |       |       |       |       | 100 | 100 | 0.226     |
| EX2038    | 22.23 |      | 2.65  |       |       |       |       |       | 100 | 100 | 0.439     |
| EALH0164  | 22.23 |      | 3.80  |       |       |       |       |       | 100 | 100 | 0.588     |
| EX2040    | 22.23 |      | 5.99  |       |       |       |       |       | 100 | 100 | 0.825     |
| EX2309    | 25.00 |      | 1.00  |       |       |       |       |       | 100 | 100 | 0.204     |
| EX5009    | 25.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.242     |
| EX5010    | 25.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.318     |
| E40519    | 25.00 |      | 2.00  |       |       |       |       |       | 100 | 100 | 0.390     |
| EX5011    | 25.00 |      | 3.00  |       |       |       |       |       | 100 | 100 | 0.560     |
| EX2299    | 25.00 |      | 6.00  |       |       |       |       |       | 100 | 100 | 0.967     |
| EALH0018  | 25.02 |      | 5.01  |       |       |       |       |       | 100 | 100 | 0.848     |
| EL5482    | 25.40 |      | 1.22  |       |       |       |       |       | 100 | 100 | 0.250     |
| EX2046    | 25.40 |      | 1.22  |       |       |       |       |       | 100 | 100 | 0.250     |
| EX2047    | 25.40 |      | 1.63  |       |       |       |       |       | 100 | 100 | 0.329     |
| EX2048    | 25.40 |      | 3.18  |       |       |       |       |       | 100 | 100 | 0.598     |
| EX2307    | 27.00 |      | 4.60  |       |       |       |       |       | 100 | 100 | 0.874     |
| EX5076    | 28.00 |      | 1.20  |       |       |       |       |       | 100 | 100 | 0.273     |
| EX5012    | 28.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.358     |
| EX2302    | 28.00 |      | 3.00  |       |       |       |       |       | 100 | 100 | 0.638     |
| EX2005    | 28.65 |      | 1.63  |       |       |       |       |       | 100 | 100 | 0.374     |
| EX2054    | 30.15 |      | 6.53  |       |       |       |       |       | 100 | 100 | 1.308     |
| EALH0165  | 30.23 |      | 5.02  |       |       |       |       |       | 100 | 100 | 1.073     |
| EX2056    | 31.75 |      | 1.63  |       |       |       |       |       | 100 | 100 | 0.416     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Tubes continued



| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EX2057    | 31.75 |      | 1.91  |       |       |       |       |       | 100 | 100 | 0.483     |
| E40010    | 31.75 |      | 2.00  |       |       |       |       |       | 100 | 100 | 0.504     |
| EX2201    | 31.75 |      | 2.03  |       |       |       |       |       | 100 | 100 | 0.513     |
| EX2059    | 31.75 |      | 2.34  |       |       |       |       |       | 100 | 100 | 0.585     |
| EX5084    | 32.00 |      | 1.20  |       |       |       |       |       | 101 | 101 | 0.313     |
| EX5013    | 32.00 |      | 1.60  |       |       |       |       |       | 100 | 100 | 0.413     |
| EX5110    | 32.00 |      | 2.00  |       |       |       |       |       | 100 | 100 | 0.509     |
| EX5014    | 32.00 |      | 3.00  |       |       |       |       |       | 101 | 101 | 0.738     |
| EALH0117  | 33.32 |      | 6.93  |       |       |       |       |       | 105 | 105 | 1.554     |
| EALH0196  | 33.32 |      | 7.77  |       |       |       |       |       | 105 | 105 | 1.684     |
| EP14384   | 33.40 |      | 3.00  |       |       |       |       |       | 105 | 105 | 0.774     |
| EX2246    | 34.93 |      | 1.12  |       |       |       |       |       | 110 | 110 | 0.321     |
| E40233    | 35.00 |      | 4.00  |       |       |       |       |       | 110 | 110 | 1.052     |
| E40724    | 37.00 |      | 3.25  |       |       |       |       |       | 116 | 116 | 0.929     |
| EX5075    | 38.00 |      | 4.50  |       |       |       |       |       | 119 | 119 | 1.279     |
| EX2271    | 38.09 |      | 1.09  |       |       |       |       |       | 119 | 119 | 0.342     |
| EX2008    | 38.09 |      | 1.42  |       |       |       |       |       | 120 | 120 | 0.441     |
| EX2073    | 38.09 |      | 1.85  |       |       |       |       |       | 120 | 120 | 0.569     |
| EX2003    | 38.09 |      | 2.03  |       |       |       |       |       | 120 | 120 | 0.621     |
| EX2206    | 38.09 |      | 2.39  |       |       |       |       |       | 120 | 120 | 0.724     |
| EX2078    | 38.09 |      | 3.25  |       |       |       |       |       | 119 | 119 | 0.960     |
| E40015    | 38.10 |      | 2.00  |       |       |       |       |       | 120 | 120 | 0.612     |
| EALH12166 | 38.10 |      | 3.00  |       |       |       |       |       | 120 | 120 | 0.893     |
| E40016    | 38.10 |      | 3.25  |       |       |       |       |       | 120 | 120 | 0.961     |
| E40150    | 38.10 |      | 4.60  |       |       |       |       |       | 120 | 120 | 1.306     |
| EX5106    | 39.50 |      | 8.25  |       |       |       |       |       | 124 | 124 | 2.193     |
| EX2222    | 39.70 |      | 10.10 |       |       |       |       |       | 125 | 125 | 2.536     |
| EX5015    | 40.00 |      | 1.60  |       |       |       |       |       | 125 | 125 | 0.521     |
| EX5016    | 40.00 |      | 2.00  |       |       |       |       |       | 125 | 125 | 0.645     |
| EX5017    | 40.00 |      | 3.00  |       |       |       |       |       | 126 | 126 | 0.942     |
| EX5061    | 40.00 |      | 4.00  |       |       |       |       |       | 126 | 126 | 1.221     |
| E40539    | 40.00 |      | 6.00  |       |       |       |       |       | 126 | 126 | 1.731     |
| EALH0283  | 40.50 |      | 6.75  |       |       |       |       |       | 127 | 127 | 1.932     |
| EX2093    | 42.16 |      | 3.56  |       |       |       |       |       | 132 | 132 | 1.166     |
| EX2096    | 43.18 |      | 4.39  |       |       |       |       |       | 136 | 136 | 1.445     |
| EX2099    | 44.45 |      | 1.78  |       |       |       |       |       | 140 | 140 | 0.644     |
| EX2101    | 44.45 |      | 3.25  |       |       |       |       |       | 139 | 139 | 1.136     |
| EALH0417  | 44.50 |      | 3.20  |       |       |       |       |       | 140 | 140 | 1.121     |

Sizes are indicative only – refer to the drawings for accurate sizes



## Tubes continued

| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EALH0252  | 45.00 |      | 9.00  |       |       |       |       |       | 227 | 227 | 2.684     |
| E40700    | 46.00 |      | 3.50  |       |       |       |       |       | 141 | 141 | 1.261     |
| EME656    | 46.00 |      | 3.75  |       |       |       |       |       | 266 | 266 | 1.344     |
| EX2215    | 46.00 |      | 9.75  |       |       |       |       |       | 144 | 144 | 2.998     |
| EALH0189  | 46.02 |      | 8.80  |       |       |       |       |       | 145 | 145 | 2.785     |
| EX2252    | 46.99 |      | 1.09  |       |       |       |       |       | 147 | 147 | 0.424     |
| EALH23825 | 46.99 |      | 2.67  |       |       |       |       |       | 148 | 148 | 1.004     |
| E40704    | 47.60 |      | 3.50  |       |       |       |       |       | 150 | 150 | 1.309     |
| EX2210    | 47.63 |      | 3.25  |       |       |       |       |       | 150 | 150 | 1.223     |
| EX5112    | 48.00 |      | 3.00  |       |       |       |       |       | 151 | 151 | 1.145     |
| E40672    | 48.00 |      | 4.00  |       |       |       |       |       | 150 | 150 | 1.493     |
| EP13736   | 48.24 |      | 4.47  |       |       |       |       |       | 152 | 152 | 1.660     |
| E40718    | 48.30 |      | 3.25  |       |       |       |       |       | 152 | 152 | 1.242     |
| EP13737   | 48.40 |      | 2.60  |       |       |       |       |       | 152 | 152 | 1.010     |
| EU6703    | 48.40 |      | 3.25  |       |       |       |       |       | 152 | 152 | 1.245     |
| E40677    | 48.40 |      | 4.00  |       |       |       |       |       | 152 | 152 | 1.507     |
| E40699    | 48.40 |      | 4.50  |       |       |       |       |       | 152 | 152 | 1.677     |
| E06505    | 48.40 |      | 4.50  |       |       |       |       |       | 152 | 152 | 1.666     |
| EP1171    | 48.40 |      | 6.30  |       |       |       |       |       | 152 | 152 | 2.250     |
| EX2202    | 48.41 |      | 4.47  |       |       |       |       |       | 152 | 152 | 1.666     |
| EALH0222  | 49.99 |      | 10.50 |       |       |       |       |       | 157 | 157 | 3.518     |
| E40540    | 50.00 |      | 1.20  |       |       |       |       |       | 157 | 157 | 0.497     |
| EX5018    | 50.00 |      | 1.60  |       |       |       |       |       | 157 | 157 | 0.657     |
| EX5019    | 50.00 |      | 2.00  |       |       |       |       |       | 157 | 157 | 0.814     |
| EP11188   | 50.00 |      | 3.00  |       |       |       |       |       | 157 | 157 | 1.196     |
| EX5041    | 50.00 |      | 3.00  |       |       |       |       |       | 157 | 157 | 1.196     |
| EX5081    | 50.00 |      | 4.00  |       |       |       |       |       | 157 | 157 | 1.561     |
| EP7790    | 50.00 |      | 5.00  |       |       |       |       |       | 157 | 157 | 1.909     |
| E40545    | 50.00 |      | 6.00  |       |       |       |       |       | 157 | 157 | 2.238     |
| EX5049    | 50.55 |      | 2.41  |       |       |       |       |       | 158 | 158 | 0.984     |
| EX5090    | 50.55 |      | 2.64  |       |       |       |       |       | 159 | 159 | 1.073     |
| EX2193    | 50.80 |      | 1.24  |       |       |       |       |       | 159 | 159 | 0.521     |
| EX2111    | 50.80 |      | 1.42  |       |       |       |       |       | 160 | 160 | 0.595     |
| E40024    | 50.80 |      | 1.60  |       |       |       |       |       | 160 | 160 | 0.666     |
| EX2009    | 50.80 |      | 1.63  |       |       |       |       |       | 160 | 160 | 0.680     |
| EX2110    | 50.80 |      | 1.80  |       |       |       |       |       | 160 | 160 | 0.748     |
| EX2113    | 50.80 |      | 2.03  |       |       |       |       |       | 159 | 159 | 0.840     |
| EX2114    | 50.80 |      | 2.64  |       |       |       |       |       | 160 | 160 | 1.078     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Tubes continued



| SECTION  | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EME0369  | 50.80 |      | 6.35  |       |       |       |       |       | 160 | 160 | 2.394     |
| EALH0443 | 51.00 |      | 9.75  |       |       |       |       |       | 160 | 160 | 3.412     |
| EX2269   | 52.37 |      | 5.54  |       |       |       |       |       | 164 | 164 | 2.201     |
| EALH0290 | 54.00 |      | 9.40  |       |       |       |       |       | 170 | 170 | 3.541     |
| EALH0407 | 54.00 |      | 10.00 |       |       |       |       |       | 170 | 170 | 3.732     |
| EX2316   | 54.60 |      | 1.45  |       |       |       |       |       | 172 | 172 | 0.654     |
| EX5124   | 54.70 |      | 1.60  |       |       |       |       |       | 172 | 172 | 0.721     |
| EX5096   | 55.88 |      | 1.20  |       |       |       |       |       | 176 | 176 | 0.557     |
| EX2257   | 56.90 |      | 1.75  |       |       |       |       |       | 179 | 179 | 0.819     |
| EALH0438 | 57.00 |      | 6.40  |       |       |       |       |       | 180 | 180 | 2.736     |
| EB1025   | 57.15 |      | 3.18  |       |       |       |       |       | 180 | 180 | 1.456     |
| E40099   | 57.15 |      | 4.47  |       |       |       |       |       | 179 | 179 | 2.000     |
| EX2127   | 57.15 |      | 5.38  |       |       |       |       |       | 180 | 180 | 2.363     |
| EX2128   | 57.15 |      | 6.35  |       |       |       |       |       | 180 | 180 | 2.736     |
| EX2129   | 57.15 |      | 12.70 |       |       |       |       |       | 180 | 180 | 4.788     |
| EX5085   | 59.00 |      | 1.90  |       |       |       |       |       | 185 | 185 | 0.920     |
| E40546   | 60.00 |      | 1.20  |       |       |       |       |       | 188 | 188 | 0.599     |
| EX5021   | 60.00 |      | 2.00  |       |       |       |       |       | 188 | 188 | 0.984     |
| EX5022   | 60.00 |      | 3.00  |       |       |       |       |       | 188 | 188 | 1.450     |
| EX5071   | 60.00 |      | 5.00  |       |       |       |       |       | 188 | 188 | 2.333     |
| EX5074   | 60.00 |      | 6.00  |       |       |       |       |       | 188 | 188 | 2.748     |
| EX2132   | 60.33 |      | 3.91  |       |       |       |       |       | 190 | 190 | 1.871     |
| EP3283   | 61.40 |      | 8.00  |       |       |       |       |       | 193 | 193 | 3.624     |
| EX2006   | 63.50 |      | 1.22  |       |       |       |       |       | 199 | 199 | 0.644     |
| E40094   | 63.50 |      | 3.20  |       |       |       |       |       | 199 | 199 | 1.637     |
| EX2137   | 63.50 |      | 3.25  |       |       |       |       |       | 199 | 199 | 1.661     |
| E40098   | 63.50 |      | 3.95  |       |       |       |       |       | 199 | 199 | 1.995     |
| EX2204   | 63.50 |      | 4.75  |       |       |       |       |       | 200 | 200 | 2.367     |
| EX2138   | 63.50 |      | 6.35  |       |       |       |       |       | 199 | 199 | 3.078     |
| E40032   | 63.50 |      | 6.35  |       |       |       |       |       | 199 | 199 | 3.078     |
| EX2139   | 63.50 |      | 10.16 |       |       |       |       |       | 199 | 199 | 4.598     |
| EX2227   | 63.53 |      | 2.31  |       |       |       |       |       | 200 | 200 | 1.200     |
| EP14702  | 65.00 |      | 2.00  |       |       |       |       |       | 204 | 204 | 1.069     |
| E40637   | 66.00 |      | 1.40  |       |       |       |       |       | 406 | 406 | 0.767     |
| EX2308   | 66.14 |      | 1.62  |       |       |       |       |       | 207 | 207 | 0.887     |
| EX2142   | 69.85 |      | 1.52  |       |       |       |       |       | 219 | 219 | 0.881     |
| EX2241   | 69.85 |      | 2.67  |       |       |       |       |       | 219 | 219 | 1.521     |
| E40249   | 69.85 |      | 4.00  |       |       |       |       |       | 219 | 219 | 2.232     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Tubes continued

| SECTION   | A mm  | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|-----------|-------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EW5404    | 73.00 |      | 3.05  |       |       |       |       |       | 229 | 229 | 1.810     |
| EX2148    | 73.03 |      | 5.16  |       |       |       |       |       | 229 | 229 | 2.971     |
| E40691    | 75.00 |      | 1.20  |       |       |       |       |       | 236 | 236 | 0.751     |
| E40721    | 75.00 |      | 3.00  |       |       |       |       |       | 235 | 235 | 1.832     |
| E40650    | 75.00 |      | 7.00  |       |       |       |       |       | 235 | 235 | 4.038     |
| E40688    | 76.00 |      | 1.60  |       |       |       |       |       | 239 | 239 | 1.009     |
| EALH9146  | 76.00 |      | 3.80  |       |       |       |       |       | 238 | 238 | 2.327     |
| E40703    | 76.00 |      | 4.25  |       |       |       |       |       | 239 | 239 | 2.587     |
| EA2528    | 76.00 |      | 6.00  |       |       |       |       |       | 239 | 239 | 3.563     |
| EX2150    | 76.19 |      | 2.03  |       |       |       |       |       | 239 | 239 | 1.277     |
| EX2151    | 76.19 |      | 2.64  |       |       |       |       |       | 239 | 239 | 1.647     |
| EX2152    | 76.19 |      | 3.25  |       |       |       |       |       | 239 | 239 | 2.011     |
| EX2207    | 76.19 |      | 4.75  |       |       |       |       |       | 239 | 239 | 2.876     |
| EX2153    | 76.19 |      | 6.35  |       |       |       |       |       | 239 | 239 | 3.762     |
| EALH9170  | 76.20 |      | 1.25  |       |       |       |       |       | 239 | 239 | 0.794     |
| E40034    | 76.20 |      | 2.00  |       |       |       |       |       | 239 | 239 | 1.259     |
| EP13843   | 76.20 |      | 3.20  |       |       |       |       |       | 239 | 239 | 1.981     |
| EP8552    | 76.20 |      | 3.80  |       |       |       |       |       | 239 | 239 | 2.334     |
| EP9144    | 76.20 |      | 3.80  |       |       |       |       |       | 239 | 239 | 2.334     |
| EALH23505 | 76.20 |      | 4.35  |       |       |       |       |       | 239 | 239 | 2.651     |
| E40154    | 76.20 |      | 4.70  |       |       |       |       |       | 239 | 239 | 2.850     |
| EALH0245  | 76.20 |      | 6.40  |       |       |       |       |       | 239 | 239 | 3.790     |
| E40560    | 80.00 |      | 1.20  |       |       |       |       |       | 251 | 251 | 0.802     |
| EX5023    | 80.00 |      | 2.00  |       |       |       |       |       | 251 | 251 | 1.323     |
| EX5024    | 80.00 |      | 3.00  |       |       |       |       |       | 251 | 251 | 1.959     |
| EX5073    | 80.00 |      | 4.00  |       |       |       |       |       | 251 | 251 | 2.579     |
| EX5032    | 80.00 |      | 6.00  |       |       |       |       |       | 251 | 251 | 3.766     |
| E40172    | 82.50 |      | 12.70 |       |       |       |       |       | 259 | 259 | 7.520     |
| E40038    | 82.55 |      | 5.20  |       |       |       |       |       | 259 | 259 | 3.412     |
| EX5151    | 85.00 |      | 1.85  |       |       |       |       |       | 267 | 267 | 1.304     |
| E40205    | 88.90 |      | 1.60  |       |       |       |       |       | 279 | 279 | 1.184     |
| EX2160    | 88.90 |      | 3.25  |       |       |       |       |       | 279 | 279 | 2.361     |
| EX2161    | 88.90 |      | 5.33  |       |       |       |       |       | 279 | 279 | 3.778     |
| E40039    | 88.90 |      | 6.35  |       |       |       |       |       | 279 | 279 | 4.446     |
| EX2162    | 88.90 |      | 6.40  |       |       |       |       |       | 279 | 279 | 4.479     |
| EX5088    | 88.90 |      | 7.60  |       |       |       |       |       | 279 | 279 | 5.241     |
| EX5114    | 90.00 |      | 3.00  |       |       |       |       |       | 283 | 283 | 2.214     |
| EX5033    | 90.00 |      | 10.00 |       |       |       |       |       | 283 | 283 | 6.786     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Tubes continued



| SECTION  | A mm   | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|----------|--------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| EX2289   | 92.70  |      | 1.42  |       |       |       |       |       | 291 | 291 | 1.099     |
| EX2163   | 95.25  |      | 2.03  |       |       |       |       |       | 299 | 299 | 1.604     |
| E40576   | 100.00 |      | 1.60  |       |       |       |       |       | 314 | 314 | 1.335     |
| EP4050   | 100.00 |      | 1.60  |       |       |       |       |       | 314 | 314 | 1.335     |
| EX5025   | 100.00 |      | 2.00  |       |       |       |       |       | 314 | 314 | 1.663     |
| E40722   | 100.00 |      | 2.50  |       |       |       |       |       | 314 | 314 | 2.068     |
| EX5026   | 100.00 |      | 3.00  |       |       |       |       |       | 314 | 314 | 2.468     |
| EX5060   | 100.00 |      | 4.00  |       |       |       |       |       | 314 | 314 | 3.257     |
| EB1027   | 100.00 |      | 6.00  |       |       |       |       |       | 314 | 314 | 4.784     |
| EX5030   | 100.00 |      | 10.00 |       |       |       |       |       | 314 | 314 | 7.633     |
| EALH9031 | 100.40 |      | 2.30  |       |       |       |       |       | 314 | 314 | 1.914     |
| EP13844  | 101.00 |      | 6.25  |       |       |       |       |       | 317 | 317 | 5.023     |
| EX2214   | 101.60 |      | 1.60  |       |       |       |       |       | 319 | 319 | 1.357     |
| EQ7007   | 101.60 |      | 1.80  |       |       |       |       |       | 320 | 320 | 1.524     |
| E40042   | 101.60 |      | 3.20  |       |       |       |       |       | 319 | 319 | 2.671     |
| EX2168   | 101.60 |      | 3.25  |       |       |       |       |       | 319 | 319 | 2.719     |
| EX2170   | 101.60 |      | 6.35  |       |       |       |       |       | 319 | 319 | 5.130     |
| EX2173   | 101.60 |      | 12.70 |       |       |       |       |       | 319 | 319 | 9.577     |
| E40612   | 102.00 |      | 16.00 |       |       |       |       |       | 540 | 540 | 11.670    |
| EX5066   | 110.00 |      | 2.00  |       |       |       |       |       | 346 | 346 | 1.832     |
| EX5056   | 110.00 |      | 15.00 |       |       |       |       |       | 346 | 346 | 12.087    |
| E40166   | 114.30 |      | 2.20  |       |       |       |       |       | 359 | 359 | 2.092     |
| EX2180   | 114.30 |      | 6.35  |       |       |       |       |       | 359 | 359 | 5.814     |
| EP0214   | 125.00 |      | 2.00  |       |       |       |       |       | 393 | 393 | 2.087     |
| EALH9132 | 125.00 |      | 3.00  |       |       |       |       |       | 393 | 393 | 3.105     |
| EX5034   | 125.00 |      | 6.00  |       |       |       |       |       | 393 | 393 | 6.056     |
| EX5072   | 125.00 |      | 10.00 |       |       |       |       |       | 393 | 393 | 9.755     |
| E40670   | 127.00 |      | 1.60  |       |       |       |       |       | 399 | 399 | 1.701     |
| E40682   | 127.00 |      | 2.80  |       |       |       |       |       | 399 | 399 | 2.951     |
| E40644   | 127.00 |      | 3.00  |       |       |       |       |       | 399 | 399 | 3.155     |
| EX5070   | 127.00 |      | 3.20  |       |       |       |       |       | 399 | 399 | 3.360     |
| EX5099   | 127.00 |      | 4.30  |       |       |       |       |       | 399 | 399 | 4.477     |
| EX2190   | 127.00 |      | 19.04 |       |       |       |       |       | 399 | 399 | 17.437    |
| E40632   | 135.90 |      | 2.65  |       |       |       |       |       | 426 | 426 | 2.995     |
| EX5065   | 140.00 |      | 10.00 |       |       |       |       |       | 440 | 440 | 11.027    |
| EX5126   | 140.40 |      | 5.70  |       |       |       |       |       | 441 | 441 | 6.512     |
| E40649   | 141.00 |      | 8.00  |       |       |       |       |       | 442 | 442 | 9.023     |
| E40117   | 146.00 |      | 3.25  |       |       |       |       |       | 459 | 459 | 3.930     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Tubes continued

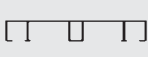
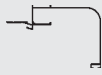
| SECTION | A mm   | B mm | T1 mm | T2 mm | R1 mm | R2 mm | R3 mm | R4 mm | AP  | PP  | MASS kg/m |
|---------|--------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----------|
| E40664  | 150.00 |      | 3.00  |       |       |       |       |       | 471 | 471 | 3.741     |
| EX5121  | 152.00 |      | 2.03  |       |       |       |       |       | 478 | 478 | 2.582     |
| EX5100  | 152.00 |      | 4.75  |       |       |       |       |       | 478 | 478 | 5.932     |
| E40176  | 152.00 |      | 22.22 |       |       |       |       |       | 478 | 478 | 24.259    |
| EX2194  | 152.40 |      | 2.64  |       |       |       |       |       | 479 | 479 | 3.354     |
| EX2007  | 152.40 |      | 3.25  |       |       |       |       |       | 479 | 479 | 4.112     |
| E40252  | 152.40 |      | 4.75  |       |       |       |       |       | 479 | 479 | 5.949     |
| E40200  | 152.40 |      | 5.20  |       |       |       |       |       | 479 | 479 | 6.493     |
| EX2196  | 152.40 |      | 9.52  |       |       |       |       |       | 479 | 479 | 11.538    |
| EX2197  | 152.40 |      | 22.23 |       |       |       |       |       | 479 | 479 | 24.546    |
| EX5079  | 153.60 |      | 12.70 |       |       |       |       |       | 483 | 483 | 15.179    |
| E40657  | 158.75 |      | 3.20  |       |       |       |       |       | 499 | 499 | 4.222     |
| EX5029  | 160.00 |      | 10.00 |       |       |       |       |       | 502 | 502 | 12.723    |
| EU8373  | 162.00 |      | 6.00  |       |       |       |       |       | 509 | 509 | 7.939     |
| EX5145  | 165.00 |      | 5.00  |       |       |       |       |       | 518 | 518 | 6.786     |
| EX2277  | 168.28 |      | 4.75  |       |       |       |       |       | 529 | 529 | 6.589     |
| EX5077  | 177.80 |      | 12.70 |       |       |       |       |       | 559 | 559 | 17.785    |
| EP8302  | 178.00 |      | 2.50  |       |       |       |       |       | 559 | 559 | 3.722     |
| EX5069  | 180.00 |      | 3.00  |       |       |       |       |       | 565 | 565 | 4.504     |
| E40604  | 180.00 |      | 6.00  |       |       |       |       |       | 565 | 565 | 8.856     |
| EX5064  | 200.00 |      | 12.00 |       |       |       |       |       | 628 | 628 | 19.136    |
| E40634  | 203.20 |      | 3.00  |       |       |       |       |       | 638 | 638 | 5.094     |
| EX5078  | 205.60 |      | 12.70 |       |       |       |       |       | 646 | 646 | 20.780    |
| E40203  | 212.14 |      | 4.47  |       |       |       |       |       | 666 | 666 | 7.873     |
| E40216  | 219.00 |      | 4.44  |       |       |       |       |       | 688 | 688 | 8.080     |
| E40215  | 219.10 |      | 8.20  |       |       |       |       |       | 688 | 688 | 14.669    |
| E40698  | 250.00 |      | 6.00  |       |       |       |       |       | 785 | 785 | 12.418    |

## Miscellaneous Extrusions

| PROFILE                                                                             | SECTION  | DESCRIPTION                              | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|------------------------------------------|-----|-----|-----------|
|    | EP14150  | 40mm Fixing Bracket 49 x 50 x 4          | 286 | 191 | 1.467     |
|    | EP15199  | 50mm Flagged Channel                     | 546 | 364 | 5.640     |
|    | EP13806  | Piano Hinge 50mm                         | 171 | 171 | 1.933     |
|    | EME7089  | Air Return Grille 21.2H x 28.85D         | 106 | 106 | 0.176     |
|   | EAL10996 | Angle 39.92 x 39.92 x 1.30 RAD           | 159 | 100 | 0.277     |
|  | EP9910   | Anodising Cathode Bar 150 x 12           | 439 | 439 | 3.885     |
|  | EP8211   | Anodising Splines C Shape Bremer 44 x 40 | 185 | 185 | 3.561     |
|  | EP7925   | Anodising Plant Splines 40 x 40          | 157 | 157 | 4.158     |
|  | EP8838   | Anodising Rack 63.5 x 37.4               | 176 | 176 | 4.390     |
|  | EP8029   | Anodising Splines Oval 50 x 25           | 129 | 129 | 3.011     |
|  | EP9942   | Anodising Spline 50 x 30                 | 154 | 154 | 2.769     |
|  | EP9943   | Anodising Spline 50 x 30                 | 144 | 144 | 2.669     |
|  | EP10150  | Anodising Spline Bremer 50 x 30          | 157 | 157 | 4.325     |
|  | EP8837   | Stack Track 43 x 12                      | 102 | 102 | 1.338     |
|  | EP8835   | Stack Rack 50 x 50                       | 223 | 223 | 5.819     |
|  | EP8836   | Stack Track 70 x 40                      | 214 | 214 | 2.903     |

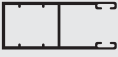
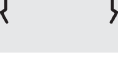
Sizes are indicative only – refer to die drawings for accurate sizes

## Miscellaneous Extrusions continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                              | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|------------------------------------------|-----|-----|-----------|
|    | EP7867   | Holland Blind Tube 40.3                  | 134 | 124 | 0.408     |
|    | EP8169   | Holland Blind Tube 40.3 x 1.1            | 135 | 124 | 0.402     |
|    | EN4839   | Vertical Blind Tilt Rod 6 x 6            | 100 | 100 | 0.059     |
|    | E73796   | Std V28 Track 35.2 x 31.9                | 224 | 100 | 0.356     |
|    | EP5435   | Blinds Roller 22mm                       | 122 | 100 | 0.265     |
|    | E53064   | Bottom Gate Track 100 x 25               | 277 | 277 | 1.598     |
|  | EW6154   | Brick Tray 280 x 40                      | 993 | 361 | 5.041     |
|  | EP15686  | Framing - Mesh Bus Stop 35 x 30          | 192 | 128 | 0.768     |
|  | EAL20037 | Caravans 97.5 x 85                       | 613 | 176 | 1.631     |
|  | EP6742   | Case Edge Channel 27 x 12.8 (Self Mates) | 130 | 100 | 0.230     |
|  | EP7234   | Unv Fixing Bracket 3mm Wall Beams        | 241 | 241 | 1.841     |
|  | EQ4427   | Corner Stake 50 x 50 to EQ3071           | 214 | 214 | 2.205     |
|  | E18630   | Corner Stake 55.1 x 54.8 x 7.9/7.7       | 264 | 264 | 1.616     |
|  | EQ6376   | Corner Stake Security 65.79 x 65.79      | 486 | 100 | 2.026     |
|  | EP2449   | Door Packing Plate 39.5 x 20.75          | 134 | 134 | 0.776     |
|  | EP2450   | Door Packing Plate 39.5 x 28.25          | 164 | 164 | 0.897     |
|  | EW3931   | Door Track                               | 202 | 202 | 0.530     |
|  | EAL2210  | French Door Adaptor 25.4 x 19.05 x 1.57  | 100 | 100 | 0.190     |

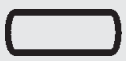
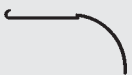
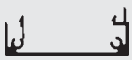
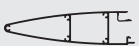
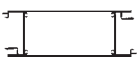
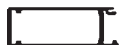
Sizes are indicative only – refer to die drawings for accurate sizes

## Miscellaneous Extrusions continued

| PROFILE                                                                             | SECTION | DESCRIPTION                              | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------------|-----|-----|-----------|
|    | EME9806 | Egg Crate 16.5 x 11                      | 100 | 100 | 0.147     |
|    | EW6169  | Enclosure/Electronic PC Boards           | 602 | 602 | 5.354     |
|    | E73424  | Roller Guide Section                     | 231 | 130 | 0.610     |
|    | EP7372  | F Bracket 35 x 15                        | 126 | 126 | 0.267     |
|    | E14699  | Coolroom F Section 60.35 x 47.65         | 264 | 110 | 0.531     |
|    | E36245  | Fence Rail 31.8 x 25.4                   | 183 | 100 | 0.453     |
|  | EL1594  | Pot Hoe Handle 30 x 3.89                 | 105 | 105 | 0.776     |
|  | EP13666 | Gate Track 80 x 20                       | 218 | 146 | 1.262     |
|  | EQ6210  | Gate Track 60 x 18                       | 147 | 100 | 1.035     |
|  | EP14082 | Gate Track 75 x 20                       | 211 | 211 | 1.043     |
|  | EP6658  | Gate Frame L 40 x 40 x 2                 | 159 | 159 | 0.820     |
|  | EP6659  | Gate Frame T 40 x 40                     | 158 | 158 | 1.036     |
|  | EP11881 | GRD Residential Frame 155 x 37.5         | 646 | 261 | 2.326     |
|  | EP7637  | Shade Cloth Single Base 42 x 16          | 137 | 100 | 0.262     |
|  | EP16071 | 50 x 14.19 Infill for RHS 150 x 50 x 3   | 157 | 100 | 0.282     |
|  | EP8573  | Lattice End Support Bracket 14.5 x 14.0  | 100 | 100 | 0.175     |
|  | EP8657  | Lattice End Support Rail 35 x 34.5 x 2.5 | 207 | 207 | 0.713     |
|  | EQ6895  | Lattice frame 35 x 25 x 1.2-19mm Gap     | 276 | 188 | 0.490     |

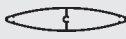
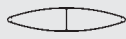
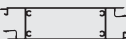
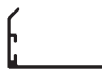
Sizes are indicative only – refer to die drawings for accurate sizes

## Miscellaneous Extrusions continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                 | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------------------|-----|-----|-----------|
|    | EQ7010   | Lattice Frame 40 x 25 x 1.6-20mm Gap        | 277 | 185 | 0.606     |
|    | EP8107   | Lattice Frame 50 x 30 x 1.6-20mm Gap        | 366 | 167 | 0.813     |
|    | EQ6890   | Lattice Slat 25 x 9.5 x 1.2                 | 100 | 100 | 0.194     |
|    | EQ6891   | Lattice Slat 34 x 9.5 x 1.2                 | 100 | 100 | 0.252     |
|    | EQ6896   | Lattice Slat 34 x 9.5 x 1.2 Triport         | 100 | 100 | 0.310     |
|    | EQ7015   | Lattice Slat 60 x 10 x 1.5 Triport          | 131 | 131 | 0.571     |
|  | EP8962   | Lattice Mid Vertical Support Cover 14 x 6.0 | 100 | 100 | 0.104     |
|  | EP8961   | Lattice Mid Vertical Support 45 x 80        | 117 | 117 | 0.378     |
|  | EAL10841 | Letter Box 45 x 23.5                        | 124 | 124 | 0.198     |
|  | EAL10839 | Letter Box 94.95 x 22                       | 352 | 135 | 0.586     |
|  | EME9379  | Lighting 113.1 x 14                         | 462 | 462 | 1.193     |
|  | EAL23409 | Lighting Cover 47 x 6.4                     | 117 | 100 | 0.196     |
|  | EP15127  | BL75 - Louvre End Snap 20 x 75mm            | 347 | 232 | 0.983     |
|  | EP8686   | Louvre                                      | 204 | 204 | 0.644     |
|  | EP13373  | BL40 - Louvre Bull Nose 150mm               | 481 | 321 | 2.052     |
|  | EP15125  | BL75 - Louvre Intermediate Box 200 x 75mm   | 855 | 570 | 4.934     |
|  | EP12035  | Louvre 200mm Adaptor                        | 726 | 310 | 2.563     |
|  | EP15126  | BL75 - Louvre End Box 220 x 75mm            | 744 | 496 | 5.125     |

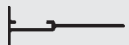
Sizes are indicative only – refer to die drawings for accurate sizes

## Miscellaneous Extrusions continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                      | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------------|-----|-----|-----------|
|    | EP15124  | BL75 - Louvre Bull Nose Blade 300 x 75mm         | 842 | 615 | 6.809     |
|    | EP13688  | Louvre L Blade 60 x 20                           | 163 | 163 | 0.401     |
|    | EP13678  | Louvre Elliptical 100 x 20 Blade                 | 209 | 209 | 1.111     |
|    | EP13764  | Louvre Blade 130 x 90 x 1.50                     | 436 | 436 | 0.904     |
|    | EP13684  | Louvre Elliptical Blade 150 x 30                 | 313 | 313 | 1.738     |
|    | EAL23923 | Louvre L – Blade 79 x 15                         | 161 | 161 | 0.377     |
|  | EP13264  | BL40 – Louvre End Snap 20mm                      | 268 | 179 | 0.579     |
|  | EP13265  | BL75 – Louvre End Snap 20mm                      | 338 | 226 | 0.946     |
|  | EP13263  | BL40 – Louvre Intermediate Box 150mm             | 647 | 432 | 2.341     |
|  | EME6811  | Louvre 45deg Blade 36H x 26D                     | 100 | 100 | 0.194     |
|  | EAL7018  | Louvre 45deg Z Blade 43H x 29D                   | 144 | 144 | 0.312     |
|  | EME5144  | Louvre 45deg ZZ Blade 114.96H x 88.9D            | 393 | 194 | 1.052     |
|  | EW6017   | Marquis Post 164 x 100                           | 697 | 697 | 6.022     |
|  | EA3189   | Mast – Lifting Aparatus 175 x 70                 | 726 | 484 | 5.821     |
|  | EAL5674  | Louvre Blade 28.5 x 13 (Mates EAL5673 & EAL7738) | 100 | 100 | 0.141     |
|  | EAL5907  | Louvre Register Mullion 40 x 6                   | 113 | 100 | 0.446     |
|  | EAL8379  | Louvre Egg Crate Outer Frame 40 x 25             | 143 | 100 | 0.271     |
|  | EAL5673  | Louvre Frame 40 x 25 (Mates EAL5674)             | 145 | 100 | 0.278     |

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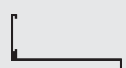
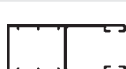
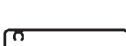
## Miscellaneous Extrusions continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                         | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------------------|-----|-----|-----------|
|    | EAL5672  | Louvre Egg Crate Frame 40 x 25                      | 169 | 100 | 0.330     |
|    | EME31695 | Louvre Blade 25 x 5                                 | 100 | 100 | 0.144     |
|    | EAL22040 | Louvre Blade 26 x 2.5                               | 100 | 100 | 0.181     |
|    | EAL3928  | Louvre Half Chevron Blade 26.97 x 21                | 100 | 100 | 0.178     |
|    | EAL3590  | Louvre Blade 48 x 38.1                              | 181 | 100 | 0.396     |
|    | EAL3591  | Louvre Blade 130.44 x 95                            | 429 | 194 | 1.193     |
|  | EAL3560  | Louvre Blade 26.67 x 21 (Mates EAL11858 & EAL11859) | 100 | 100 | 0.193     |
|  | EAL11858 | Louvre Inner Frame 31 x 15 (Mates EAL3560)          | 117 | 100 | 0.223     |
|  | EAL11859 | Louvre Outer Frame 31.34 x 19 (Mates EAL3560)       | 130 | 100 | 0.276     |
|  | EAL7175  | Louvre Egg Crate Frame 28.2 x 11.25                 | 100 | 100 | 0.147     |
|  | EME31047 | Louvre Diffuser Frame 27.65 x 12                    | 119 | 100 | 0.219     |
|  | EAL6632  | Louvre Frame 40.13 x 28.58                          | 178 | 178 | 0.373     |
|  | EAL5193  | Louvre Frame 102.5 x 45                             | 330 | 163 | 1.083     |
|  | EAL2426  | Louvre Channel 22.61 x 6.35 (Mates EAL2345)         | 100 | 100 | 0.092     |
|  | EAL12021 | Louvre Filter Frame 28.65 x 13.75                   | 123 | 100 | 0.213     |
|  | EAL2355  | Louvre Register Frame 58 x 25 (Mates EAL2345)       | 190 | 190 | 0.342     |
|  | EAL7784  | Louvre Tee Bar 55.5 x 19.05 (Mates EAL7738)         | 161 | 100 | 0.343     |
|  | EAL7738  | Louvre Tee Bar 55.5 x 28.58 (Mates EAL7784)         | 199 | 100 | 0.400     |

Sizes are indicative only – refer to die drawings for accurate sizes

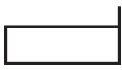


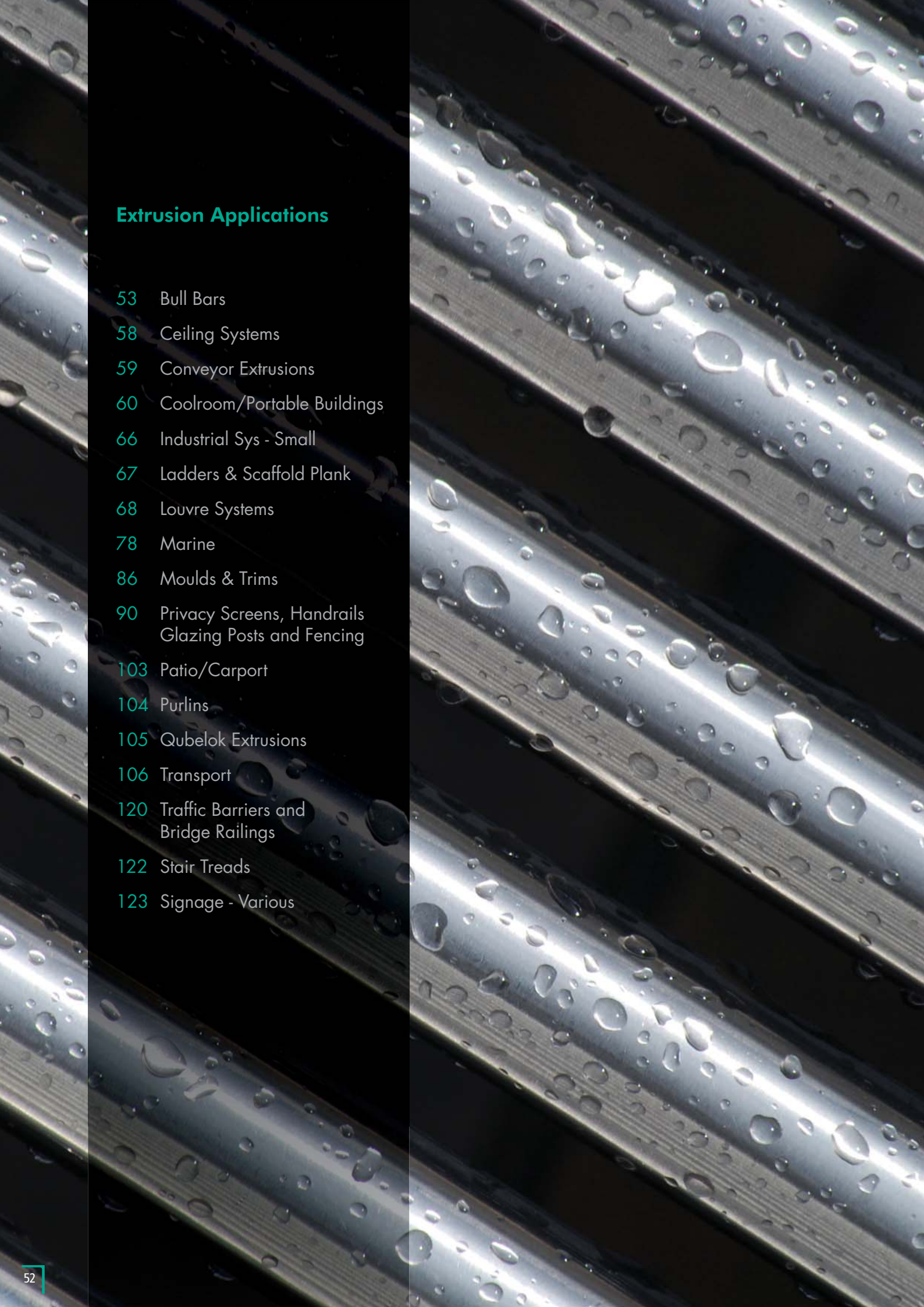
## Miscellaneous Extrusions continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                           | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------------|-----|-----|-----------|
|    | EL2489   | Mirror Surround 20.1 x 11.74 Gap 7.94 | 106 | 106 | 0.287     |
|    | EAL9568  | Louvre Frame 91 x 44                  | 316 | 143 | 0.750     |
|    | EME9410  | Louvre Frame 95.25 x 54               | 313 | 149 | 0.889     |
|    | EA4555   | Skip Spacer Bar 62 x 17               | 151 | 151 | 1.441     |
|    | EP10072  | Runout Roller 80.0 Dia                | 251 | 251 | 5.693     |
|    | EW5033   | Roller Shutter Section 28 x 15        | 142 | 100 | 0.227     |
|   | E33744   | Roller Shutter Track 45.6 x 18        | 168 | 106 | 0.522     |
|  | EME50197 | Roller Shutter Head 53.2 x 22         | 233 | 176 | 0.576     |
|  | EP7636   | Shade Cloth Fixing Clip 26.4 x 13.3   | 111 | 100 | 0.186     |
|  | EP7635   | Shade Cloth Double Base 78.9 x 16.39  | 257 | 129 | 0.621     |
|  | EB1406   | Glazing Adaptor 46 x 36.8             | 221 | 221 | 0.880     |
|  | EAL7681  | Lightweight Shopfront 101.6 x 25      | 369 | 369 | 0.837     |
|  | EQ6469   | Shower Screen Stile 19 x 11.4         | 100 | 100 | 0.166     |
|  | EME8341  | Shower Screen Top Rail 44 x 10.5      | 156 | 156 | 0.350     |
|  | EME30371 | Shutter Rail 28.7 x 22.73             | 107 | 107 | 0.323     |
|  | EP14292  | Screw Fluted Slat 65 x 16 x 1.4       | 157 | 157 | 0.661     |
|  | EP14430  | Lattice Slat 70 x 10 x 1.4            | 151 | 151 | 0.583     |
|  | EAL12212 | Spray Booth X316                      | 349 | 145 | 0.719     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Miscellaneous Extrusions continued

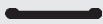
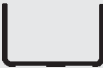
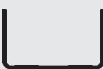
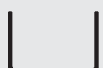
| PROFILE                                                                             | SECTION  | DESCRIPTION                           | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------------|-----|-----|-----------|
|    | EME31395 | Squeegee Broom 46 x 21                | 162 | 124 | 0.594     |
|    | EME31667 | Squeegee Broom 46 x 23                | 177 | 100 | 0.612     |
|    | EP15406  | Slat Holder - WA Press Run out Table  | 329 | 329 | 3.280     |
|    | E16623   | Bead 22.2 x 15.5                      | 125 | 100 | 0.178     |
|    | E14729   | Tri Post 34.9                         | 114 | 100 | 0.465     |
|    | EME3088  | Ruler 47.63 x 17                      | 141 | 141 | 0.719     |
|  | EQ4300   | Roof Panel Joiner 49.8 x 15.8 Gap 12  | 211 | 108 | 0.593     |
|  | EME458   | RHS with Leg 95.25 x 47.63 x 2.29     | 285 | 285 | 1.609     |
|  | EL8694   | Fascia Gutter Bracket Ext 130 x 98.75 | 196 | 196 | 1.806     |
|  | E25898   | Spreader Bar 170 x 120 x 5            | 747 | 380 | 4.982     |
|  | E22084   | ZED 22 x 19 x 19 x 3.0                | 114 | 114 | 0.437     |
|  | EP11945  | Solar Panel Bolt Track 69 x 20.7      | 301 | 301 | 1.337     |

The background of the page is a close-up, high-contrast photograph of several parallel metal extrusions. The surface of the metal is highly reflective, showing bright highlights and deep shadows. Numerous water droplets of various sizes are scattered across the surface, creating a textured, glistening effect. The lighting is dramatic, emphasizing the metallic sheen and the wet texture.

## Extrusion Applications

- 53 Bull Bars
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- 106 Transport
- 120 Traffic Barriers and  
Bridge Railings
- 122 Stair Treads
- 123 Signage - Various

## Bull Bars

| PROFILE                                                                             | SECTION  | DESCRIPTION                                | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------|-----|-----|-----------|
|    | E73211   | Bullbar Wrap 50 x 5.0                      | 107 | 100 | 0.570     |
|    | EME8949  | Bullbar Wrap 50 x 6.0                      | 109 | 109 | 0.546     |
|    | E73113   | Bullbar Wrap 80 x 6.0                      | 171 | 171 | 1.388     |
|    | EAL7697  | Bullbar Wrap 80 x 8.0                      | 171 | 171 | 1.367     |
|  | E32995   | Bullbar Spotlight Bracket 88 x 36          | 228 | 228 | 2.932     |
|  | EP15247  | Bullbar Channel 100 x 80 x 6.0 RAD         | 499 | 499 | 3.960     |
|  | E25424   | Bullbar Channel 127 x 75 RAD               | 527 | 527 | 3.916     |
|  | EAL12172 | Bullbar Channel 127 x 80 x 6.0             | 553 | 553 | 4.066     |
|  | EME6176  | Bullbar Channel 127.1 x 74.5 x 6.35 RAD    | 526 | 526 | 4.295     |
|  | E35781   | Bullbar Channel 128 x 75 x 6.0 RAD         | 527 | 268 | 3.969     |
|  | EQ1364   | Bullbar Channel 128 x 75 x 6.0 RAD         | 533 | 282 | 3.947     |
|  | E25804   | Bullbar Channel 145 x 80 x 6.0 RAD         | 585 | 585 | 4.509     |
|  | E26946   | Bullbar Channel 148 x 100 x 6.0 RAD        | 675 | 343 | 5.030     |
|  | EP4218   | Bullbar Channel 150 x 75 x 6.0 RAD         | 575 | 575 | 4.708     |
|  | EAL7643  | Bullbar Channel 125 x 100/70 x 6.0 RAD     | 567 | 567 | 4.334     |
|  | EAL7862  | Bullbar Channel 175 x 100/70 x 8.0/6.0 RAD | 688 | 688 | 5.187     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Bull Bars continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                     | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------|-----|-----|-----------|
|    | EL7540   | Channel 100 x 45 x 4.9 RAD      | 365 | 365 | 2.413     |
|    | E25411   | Channel 125 x 70 x 6.0 RAD      | 502 | 502 | 3.982     |
|    | EQ2556   | Channel 127 x 63.5 RAD          | 481 | 481 | 4.728     |
|    | E05804   | Channel 133.4 x 88.9 x 9.55     | 581 | 581 | 7.366     |
|    | EAL9623  | Channel 150 x 70 x 6.0 RAD      | 556 | 556 | 4.406     |
|    | EU5381   | Channel 152 x 63 x 6.0 RAD      | 528 | 528 | 4.177     |
|   | E06330   | Channel 152.4 x 76.2 x 9.55 RAD | 571 | 571 | 7.121     |
|  | E26561   | Channel 153 x 60 x 6.0 RAD      | 512 | 512 | 4.096     |
|  | EME8668  | Channel 170 x 100 x 5.0 RAD     | 512 | 512 | 4.096     |
|  | EAL12325 | Channel 180 x 80 x 5.5 RAD      | 654 | 331 | 4.780     |
|  | EU6362   | Channel 180 x 80 x 6.0 RAD      | 651 | 651 | 5.186     |
|  | EAL7833  | Channel 180 x 80 x 9.0 RAD      | 656 | 656 | 6.447     |
|  | EU6360   | Channel 180 x 80 RAD            | 651 | 651 | 6.386     |
|  | EN3529   | Channel 200 x 90 x 10 x 8 RAD   | 730 | 730 | 8.648     |
|  | E25446   | Channel 250 x 110 x 12.0        | 891 | 891 | 14.083    |
|  | EN5691   | Channel 250 x 110 x 12.0 RAD    | 891 | 891 | 14.083    |
|  | EU1691   | Channel 254 x 115 x 12.5 RAD    | 919 | 919 | 15.127    |
|  | EP10447  | Channel 304.8 x 101.6 x 8.9 RAD | 973 | 973 | 11.683    |

Sizes are indicative only – refer to the drawings for accurate sizes

## Bull Bars continued

| PROFILE                                                                             | SECTION | DESCRIPTION                             | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-----------------------------------------|------|------|-----------|
|    | E05721  | Channel 381 x 152.4 x 12.7 RAD          | 1324 | 1324 | 19.572    |
|    | EH8137  | Channel Lipped 97.79 x 76.2 RAD         | 541  | 541  | 3.985     |
|    | EU7710  | Channel Lipped 180 x 80 x 6.0 RAD       | 691  | 691  | 5.515     |
|    | E05852  | Channel Lipped 305 x 152.5 RAD          | 1172 | 782  | 15.663    |
|    | EP0372  | Channel Uneven 175 x 100/75 x 7.0 RAD   | 664  | 664  | 6.162     |
|    | EQ4183  | Channel Uneven 200 x 90/50 x 8.0/6.0    | 647  | 647  | 5.860     |
|  | E26927  | Channel Uneven 350 x 175/150 x 10.0 RAD | 1276 | 647  | 16.987    |
|  | EX4023  | Flat Bar 40 x 6.0                       | 100  | 100  | 0.648     |
|  | EX4031  | Flat Bar 40 x 10.0                      | 100  | 100  | 1.080     |
|  | EX4008  | Flat Bar 50 x 3.0                       | 106  | 106  | 0.405     |
|  | EX4032  | Flat Bar 50 x 10.0                      | 120  | 120  | 1.350     |
|  | EX4009  | Flat Bar 60 x 3.0                       | 126  | 126  | 0.486     |
|  | EX4070  | Flat Bar 60 x 10.0                      | 140  | 140  | 1.620     |
|  | EX4025  | Flat Bar 80 x 6.0                       | 172  | 172  | 1.296     |
|  | EX4072  | Flat Bar 80 x 8.0                       | 176  | 176  | 1.728     |
|  | EX4033  | Flat Bar 80 x 10.0                      | 180  | 180  | 2.160     |
|  | E20061  | Flat Bar 80 x 12.0                      | 184  | 184  | 2.592     |
|  | EX4011  | Flat Bar 100 x 3.0                      | 206  | 206  | 0.810     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Bull Bars continued

| PROFILE                                                                             | SECTION | DESCRIPTION              | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|--------------------------|-----|-----|-----------|
|    | EX4026  | Flat Bar 100 x 6.0       | 212 | 212 | 1.620     |
|    | EQ6144  | Flat Bar 125.0 x 6.0     | 261 | 261 | 2.025     |
|    | EX4027  | Flat Bar 160 x 6.0       | 330 | 330 | 2.590     |
|    | EX4035  | Flat Bar 160 x 10.0      | 340 | 340 | 4.320     |
|    | EX4024  | Flat Bar 50 x 6.0 RAD    | 110 | 110 | 0.808     |
|    | EK1150  | Flat Bar 50.8 x 3.96 RAD | 106 | 106 | 0.535     |
|  | EP9812  | Flat Bar 60 x 4.0 RAD    | 125 | 125 | 0.639     |
|  | EP9811  | Flat Bar 60 x 5.0 RAD    | 126 | 126 | 0.796     |
|  | EB1092  | Flat Bar 80 x 6.30 RAD   | 167 | 167 | 1.336     |
|  | EB1093  | Flat Bar 100 x 6.3 RAD   | 207 | 207 | 1.676     |
|  | EP7910  | Flat Bar 100 x 8.0 RAD   | 214 | 214 | 2.157     |
|  | E71996  | Tee 38 x 63 RAD          | 198 | 198 | 1.663     |
|  | E40016  | Tube 38.1 x 3.25         | 120 | 120 | 0.961     |
|  | E40150  | Tube 38.1 x 4.6          | 120 | 120 | 1.306     |
|  | EX5017  | Tube 40 x 3.0            | 126 | 126 | 0.942     |
|  | EX2101  | Tube 44.45 x 3.25        | 139 | 139 | 1.136     |
|  | E40704  | Tube 47.6 x 3.5          | 150 | 150 | 1.309     |
|  | EX5112  | Tube 48 x 3.0            | 151 | 151 | 1.145     |
|  | EU6703  | Tube 48.4 x 3.25         | 152 | 152 | 1.245     |
|  | E40677  | Tube 48.4 x 4.0          | 152 | 152 | 1.507     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Bull Bars continued

| PROFILE | SECTION | DESCRIPTION                       | AP  | PP  | MASS kg/m |
|---------|---------|-----------------------------------|-----|-----|-----------|
| ○       | EX2202  | Tube 48.41 x 4.47                 | 152 | 152 | 1.666     |
| ○       | EX5041  | Tube 50 x 3.0                     | 157 | 157 | 1.196     |
| ○       | EX5081  | Tube 50 x 4.0                     | 157 | 157 | 1.561     |
| ○       | EP7790  | Tube 50 x 5.0                     | 157 | 157 | 1.909     |
| ○       | EX5022  | Tube 60 x 3.0                     | 188 | 188 | 1.450     |
| ○       | EX5071  | Tube 60 x 5.0                     | 188 | 188 | 2.333     |
| ○       | EX2132  | Tube 60.33 x 3.91                 | 190 | 190 | 1.871     |
| ○       | E40094  | Tube 63.5 x 3.2                   | 199 | 199 | 1.637     |
| ○       | EX2137  | Tube 63.5 x 3.25                  | 199 | 199 | 1.661     |
| ○       | E40098  | Tube 63.5 x 3.95                  | 199 | 199 | 1.995     |
| ○       | EX2138  | Tube 63.5 x 6.35                  | 199 | 199 | 3.078     |
| ○       | E40032  | Tube 63.5 x 6.35                  | 199 | 199 | 3.078     |
| ○       | EX2152  | Tube 76.19 x 3.25                 | 239 | 239 | 2.011     |
| ○       | EX2207  | Tube 76.19 x 4.75                 | 239 | 239 | 2.876     |
| ○       | EX2153  | Tube 76.19 x 6.35                 | 239 | 239 | 3.762     |
| ○       | EP9144  | Tube 76.2 x 3.8 Special Tolerance | 239 | 239 | 2.334     |
| ○       | EP8552  | Tube 76.2 x 3.8                   | 239 | 239 | 2.334     |
| ○       | E40154  | Tube 76.2 x 4.7                   | 239 | 239 | 2.850     |
| ○       | EX2162  | Tube 88.9 x 6.4                   | 279 | 279 | 4.479     |
| ○       | EX2170  | Tube 101.6 x 6.35                 | 319 | 319 | 5.130     |

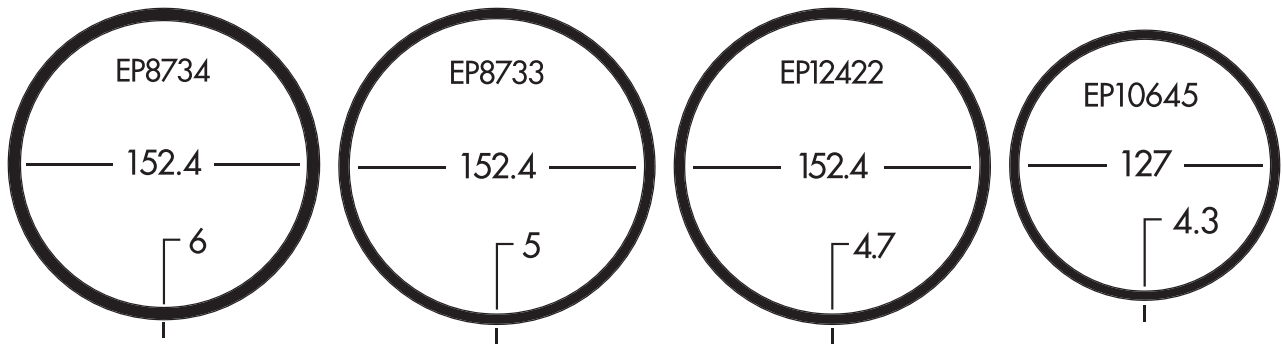
Sizes are indicative only – refer to die drawings for accurate sizes



## Ceiling Systems

| PROFILE                                                                             | SECTION | DESCRIPTION                         | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-------------------------------------|-----|-----|-----------|
|    | EG9858  | Tee Ceiling 25.4 x 43.81 x 1.57     | 138 | 138 | 0.297     |
|    | E05080  | Tee Ceiling 36.5 x 36.5 x 1.15      | 145 | 100 | 0.247     |
|    | EG3095  | Tee Ceiling 36.5 x 36.5 x 1.17      | 146 | 100 | 0.251     |
|    | E70786  | Tee Ceiling 47.6 x 76.2 x 1.5       | 246 | 246 | 0.528     |
|   | E71818  | Trim Ceiling 25 x 38 x 1.5          | 148 | 148 | 0.235     |
|  | E71826  | Trim W Ceiling 25 x 25 x 1.5        | 100 | 100 | 0.157     |
|  | EN1809  | Trim W Ceiling 25 x 25 x 1.38       | 100 | 100 | 0.181     |
|  | EME4383 | Trim W Ceiling 27.43 x 27.43 x 1.24 | 110 | 110 | 0.180     |

## Conveyor Extrusions



### Tolerances for Conveyor Rollers

Outside diameter ovality tolerances up to a maximum of 0.4mm

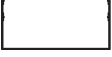
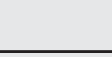
Maximum thickness variation through any cut cross section of tube up to a maximum of 0.2mm (for a typical 6" tube)

Not to scale - for detailed drawings please contact your account manager.

### Conveyor Tubes

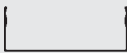
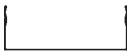
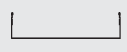
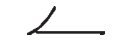
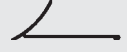
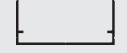
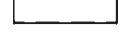
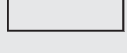
| PROFILE                                                                             | SECTION | DESCRIPTION                 | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-----------------------------|-----|-----|-----------|
|  | EP10645 | Tube 127.0 x 4.3 (Conveyor) | 399 | 399 | 4.475     |
|  | EP12422 | Tube 152.4 x 4.7 (Conveyor) | 479 | 479 | 5.888     |
|  | EP8733  | Tube 152.4 x 5.0 (Conveyor) | 479 | 479 | 6.251     |
|  | EP8734  | Tube 152.4 x 6.0 (Conveyor) | 479 | 479 | 7.451     |

## Coolroom/Portable Buildings

| PROFILE                                                                             | SECTION  | DESCRIPTION                                   | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------------|-----|-----|-----------|
|    | E73421   | Internal Angle 40 x 40 x RAD Ends 2.0 x 1.5   | 160 | 100 | 0.318     |
|    | EAL22080 | Coolroom Angle 40 x 40 x 1.5 RAD              | 160 | 160 | 0.314     |
|    | EK7476   | Coolroom Angle 69.85 x 38.1                   | 216 | 216 | 0.590     |
|    | EN8889   | Coolroom Angle 70 x 38                        | 218 | 218 | 0.551     |
|   | EP4061   | Coolroom Angle 70 x 40 x 1.6                  | 220 | 115 | 0.467     |
|  | EAL22079 | Coolroom Angle 70 x 40 x 1.5                  | 219 | 219 | 0.437     |
|  | EAL12290 | Coolroom Doorjamb 54 x 31                     | 204 | 117 | 0.409     |
|  | E32928   | Coolroom Corner Joiner 80 x 65                | 446 | 175 | 0.896     |
|  | EME8026  | Coolroom Channel 55.8 x 30 x 1.5 Anti Vermin  | 229 | 121 | 0.505     |
|  | EN2987   | Coolroom Channel 55.8 x 30 x 1.5 Anti Vermin  | 229 | 121 | 0.505     |
|  | EN8887   | Coolroom Channel 80 x 38 x 1.5 Anti Vermin    | 309 | 161 | 0.675     |
|  | EQ3076   | Coolroom Channel 80.3 x 38 x 1.5 Anti Vermin  | 310 | 100 | 0.670     |
|  | ED7675   | Coolroom Channel 81 x 36 x 1.5 Anti Vermin    | 303 | 154 | 0.681     |
|  | EAL23820 | Coolroom Channel 81 x 38 x 1.5 Anti Vermin    | 311 | 156 | 0.668     |
|  | EL8339   | Coolroom Channel 81 x 38 x 1.5 Anti Vermin    | 317 | 100 | 0.685     |
|  | EQ3077   | Coolroom Channel 105.3 x 38 x 1.5 Anti Vermin | 360 | 100 | 0.771     |

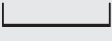
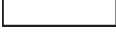
Sizes are indicative only – refer to die drawings for accurate sizes

## Coolrooms/Portable Buildings continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                  | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|----------------------------------------------|-----|-----|-----------|
|    | EAL11871 | Coolroom Channel 106 x 38 x 1.5 Anti Vermin  | 361 | 181 | 0.773     |
|    | EAL22075 | Coolroom Channel 106 x 38 x 1.5 Anti Vermin  | 362 | 189 | 0.769     |
|    | EP5139   | Coolroom Channel 156 x 38.5 Anti Vermin      | 463 | 239 | 1.249     |
|    | EL8529   | Coolroom Channel 55.8 x 30 x 1.5 Anti Vermin | 229 | 121 | 0.505     |
|    | E32045   | Coolroom Channel 81 x 38 x 1.5 Anti Vermin   | 311 | 162 | 0.670     |
|    | ET7490   | Coolroom Arrowhead Trim 50.6 x 25.4          | 143 | 100 | 0.298     |
|  | EAL3265  | Coolroom Arrowhead Trim 50.8 x 19.05         | 147 | 100 | 0.308     |
|  | EAL12702 | Coolroom Bump Rail 149 x 69.5 x 1.8          | 526 | 262 | 1.267     |
|                                                                                     | E52865   | Rope Track 28 x 12.7                         | 100 | 100 | 0.234     |
|  | EAL12431 | Coolroom Channel 50.7 x 25.4                 | 206 | 106 | 0.354     |
|  | E20825   | Coolroom Channel 53.4 x 25 x 1.2             | 203 | 108 | 0.325     |
|  | ET5513   | Coolroom Channel 53.96 x 25.4                | 206 | 108 | 0.355     |
|  | EAL12213 | Coolroom Channel 54 x 32                     | 243 | 119 | 0.482     |
|  | EME8077  | Coolroom Channel 78 x 38                     | 304 | 158 | 0.647     |
|  | E51877   | Channel 78.2 x 38 x 1.6                      | 304 | 155 | 0.648     |
|  | ED7672   | Coolroom Channel 92 x 25 RAD                 | 278 | 145 | 0.761     |
|  | EME8076  | Coolroom Channel 103 x 38                    | 354 | 182 | 0.755     |
|  | EQ3002   | Coolroom Channel 103.2 x 38 x 1.6 RAD        | 354 | 182 | 0.756     |

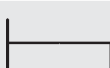
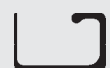
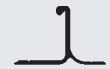
Sizes are indicative only – refer to die drawings for accurate sizes

## Coolrooms/Portable Buildings continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                            | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|----------------------------------------|-----|-----|-----------|
|    | E51852   | Coolroom Channel 103.2 x 38 x 1.6 RAD  | 354 | 181 | 0.756     |
|    | ED7673   | Coolroom Channel 117 x 25 RAD          | 327 | 170 | 0.945     |
|    | ET4834   | Coolroom Channel 117.47 x 25.4 RAD     | 328 | 172 | 1.188     |
|    | EAL22077 | Coolroom Channel 117.6 x 25.4 RAD      | 328 | 169 | 1.194     |
|    | EP13224  | Coolroom Channel 130.6 x 38 x 1.8 RAD  | 410 | 273 | 1.032     |
|    | ET4833   | Coolroom Channel 168.27 x 25.4 RAD     | 429 | 222 | 1.622     |
|  | EAL23181 | Coolroom 37.2 x 30                     | 159 | 100 | 0.424     |
|  | EME9287  | Coolroom Corner Joiner 76.6 x 50 x 1.6 | 352 | 131 | 0.753     |
|  | EP5134   | Coolroom Door Track 150 x 40           | 470 | 320 | 2.935     |
|  | EQ4034   | Coolroom Coving 35.0                   | 121 | 100 | 0.205     |
|  | EAL22076 | Coolroom Channel 92.1 x 25.4 RAD       | 277 | 146 | 0.974     |
|  | EAL22078 | Coolroom Channel 168.3 x 25.4 RAD      | 430 | 219 | 1.632     |
|  | EAL22073 | Coolroom Coving 32.0                   | 133 | 133 | 0.268     |
|  | EAL12293 | Coolroom Coving 35.0                   | 118 | 100 | 0.388     |
|  | EL8530   | Coolroom Coving 35.0                   | 119 | 119 | 0.358     |
|  | EQ4559   | Coolroom Coving 35.0                   | 120 | 100 | 0.197     |
|  | EME9209  | Coolroom Coving 35.0                   | 124 | 124 | 0.257     |
|  | EAL12220 | Coolroom Coving 50.0                   | 183 | 100 | 0.433     |

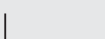
Sizes are indicative only – refer to die drawings for accurate sizes

## Coolrooms/Portable Buildings continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                               | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------------|-----|-----|-----------|
|    | EAL5661  | Coolroom Coving 50.0                      | 196 | 100 | 0.473     |
|    | EL8340   | Coolroom Coving 50.0                      | 181 | 100 | 0.474     |
|    | E18699   | Coolroom Coving 50.0                      | 204 | 102 | 0.467     |
|    | E73136   | Coolroom Coving 50.0                      | 118 | 100 | 0.386     |
|    | EU6648   | Coolroom Coving 75.0                      | 271 | 133 | 0.766     |
|    | EAL12219 | Coolroom Coving 77.43                     | 261 | 124 | 0.798     |
|   | EN8888   | Coolroom Door Frame Channel 54 x 30.7 RAD | 203 | 113 | 0.378     |
|  | EAL9504  | Coolroom Door Frame Channel 53 x 38       | 220 | 220 | 0.440     |
|  | EAL10264 | Coolroom Door Jamb 53.5 x 37 x 1.6        | 251 | 251 | 0.538     |
|  | EQ4712   | Coolroom Door Track 71.5 x 30             | 285 | 285 | 1.332     |
|  | EME8926  | Coolroom Door Track 80 x 50               | 388 | 388 | 2.435     |
|  | E31964   | Coolroom Door Track 90 x 50               | 291 | 291 | 1.615     |
|  | EAL7112  | Coolroom Door Track 90 x 50               | 291 | 291 | 1.615     |
|  | EN2664   | Coolroom Door Track 90 x 56               | 302 | 302 | 1.698     |
|  | EAL12443 | Coolroom Door Track 90 x 56               | 303 | 303 | 1.615     |
|  | EME31637 | Coolroom Door Track 94 x 70               | 385 | 104 | 1.791     |
|  | EQ4713   | Coolroom Door Track 139 x 40              | 432 | 390 | 2.692     |
|  | E36063   | Coolroom Top Track 148 x 40               | 469 | 469 | 2.912     |

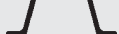
Sizes are indicative only – refer to die drawings for accurate sizes

## Coolrooms/Portable Buildings continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                              | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|------------------------------------------|-----|-----|-----------|
|    | EQ3069   | Coolroom Corner Joiner 90 x 80.2 x 2.0   | 464 | 188 | 1.241     |
|    | E51432   | Coolroom Corner Joiner 90 x 80.2 x 2.0   | 463 | 130 | 1.242     |
|    | EP10727  | Coolroom Corner Joiner 115 x 105.2 x 2.0 | 582 | 222 | 1.561     |
|    | EME10031 | Coolroom F Section 58 x 45 x 1.8 RAD     | 248 | 107 | 0.603     |
|    | E73435   | Coolroom F Section 60 x 47 x 1.8         | 256 | 110 | 0.623     |
|    | EAL12414 | Coolroom F Section 60.5 x 48 x 1.8       | 265 | 180 | 0.638     |
|  | EQ7044   | Freezer Plank 386.6 x 27                 | 822 | 822 | 10.951    |
|  | EAL12231 | Coolroom Corner Joiner 77.6 x 77.6 x 1.4 | 462 | 462 | 0.863     |
|  | EAL12509 | Coolroom Corner Joiner 80.6 x 50.8 x 1.4 | 468 | 133 | 0.873     |
|  | E51261   | I Beam 54 x 48 x 1.5                     | 297 | 102 | 0.595     |
|  | E61129   | I Beam 54 x 50.8 x 1.6                   | 305 | 305 | 0.659     |
|  | EL8528   | I Beam 54 x 50.8 x 1.6                   | 305 | 109 | 0.656     |
|  | ET4837   | Coolroom Channel 92.07 x 25.4            | 277 | 149 | 0.971     |
|  | E30278   | Rope Track 2 Throat 27.5 x 12.2          | 129 | 100 | 0.272     |
|  | EAL3648  | Rope Track 27.57 x 11.1                  | 100 | 100 | 0.220     |
|  | EME2870  | Rope Track 27.6 x 12.67                  | 100 | 100 | 0.215     |
|  | EAL12197 | Rope Track 27.7 x 12.4                   | 100 | 100 | 0.228     |
|  | E70628   | Rope Track 28.15 x 13.2                  | 100 | 100 | 0.231     |

Sizes are indicative only – refer to the drawings for accurate sizes

## Coolrooms/Portable Buildings continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                        | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|------------------------------------|-----|-----|-----------|
|    | EH7644   | Rope Track 28.17 x 12.53           | 100 | 100 | 0.230     |
|    | EL3317   | Rope Track Double Flange 43.4 x 10 | 129 | 100 | 0.284     |
|    | EAL12426 | Rope Track Double Flange 45 x 11.5 | 131 | 100 | 0.296     |
|    | EME6746  | Rope Track Double Flange 45 x 9.5  | 133 | 100 | 0.296     |
|    | EB3199   | 444 Hinge Style 70 x 45            | 326 | 137 | 1.519     |
|    | EB3200   | 444 Lock Stile 70 x 45             | 336 | 152 | 1.504     |
|  | E09628   | Tophat 106.2 x 76.2 RAD            | 493 | 493 | 3.090     |
|  | E03320   | Tophat 50.8 x 15.9 x 1.65          | 152 | 152 | 0.332     |
|  | E16234   | Tophat 66.4 x 25.4 x 3.0           | 202 | 202 | 0.813     |
|  | E14698   | Wallboard H Section 34.5 x 9       | 138 | 100 | 0.194     |

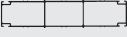


# Industrial Sys – Small

| PROFILE                                                                           | SECTION  | DESCRIPTION             | AP  | PP  | MASS kg/m |
|-----------------------------------------------------------------------------------|----------|-------------------------|-----|-----|-----------|
|  | EAL20188 | Curtain Track 75 x 50.3 | 435 | 435 | 2.072     |
|  | EAL0927  | Edging                  | 100 | 100 | 0.289     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Ladders & Scaffold Plank

| PROFILE                                                                             | SECTION  | DIM A mm | DIM B mm | DIM T mm | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|----------|----------|----------|-----|-----|-----------|
|    | EH8401   | 25.15    |          | 2.79     | 100 | 100 | 0.352     |
|    | EW3241   | 29.98    |          |          | 106 | 106 | 0.467     |
|    | EALH0472 | 30.50    |          | 1.60     | 109 | 109 | 0.458     |
|    | EP9108   | 56.30    | 36.30    | 2.00     | 177 | 177 | 0.925     |
|  | EME31611 | 76.05    | 30.00    |          | 287 | 161 | 0.595     |
|  | E14010   | 76.45    | 38.10    |          | 289 | 289 | 0.772     |
|  | EAL6325  | 76.46    | 38.10    |          | 288 | 288 | 0.747     |
|  | EP7278   | 94.45    | 35.36    |          | 294 | 294 | 0.791     |
|  | EU3221   | 110.00   | 62.00    |          | 572 | 572 | 1.909     |
|  | EP10428  | 130.00   | 25.00    | 2.50     | 372 | 372 | 1.269     |
|  | EL7344   | 227.6    | 49.80    | 1.90     | 643 | 643 | 3.519     |

## Louvre Systems

- 69 Extruded Louvres
- 70 Straight Blades
- 71 Throated Blades
- 72 Elliptical Blades
- 72 Louvre Brackets
- 73 Box Louvres
- 74 Product Range

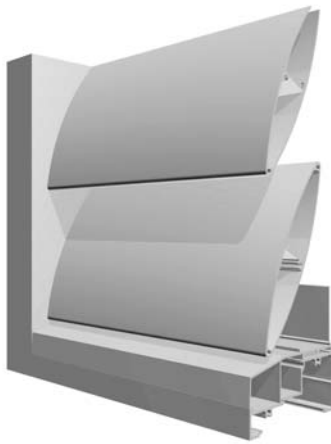
## Extruded Louvres

Capral's range of extruded louvre blades cater for a variety of ventilation, shading and aesthetic requirements.

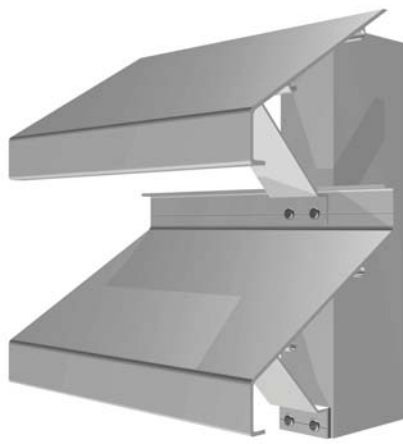
Supported by a variety of different frame and bracket options, Capral's extruded louvre range can either be built into walls, similar to glazed systems, or alternatively fixed to the outside of the building structure.

### Features and Benefits

- Available in a large range of straight, throated, boxed and elliptical louvres profiles
- Can be retrofitted into Capral's framing systems and door suites to further extend potential uses
- Can provide weather screening depending on blade pitch and assembly technique
- Possible uses include:
  - Architectural screening of mechanical plant
  - Screening and fencing elements
  - Mechanical heating/cooling ventilation systems.



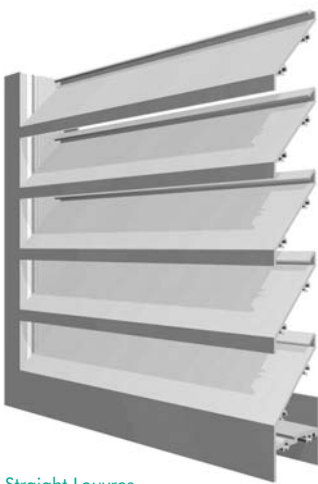
Elliptical Louvres



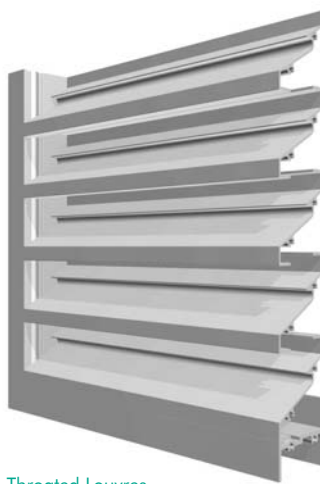
Bracket Fixed Straight Louvres



Boxed louvres

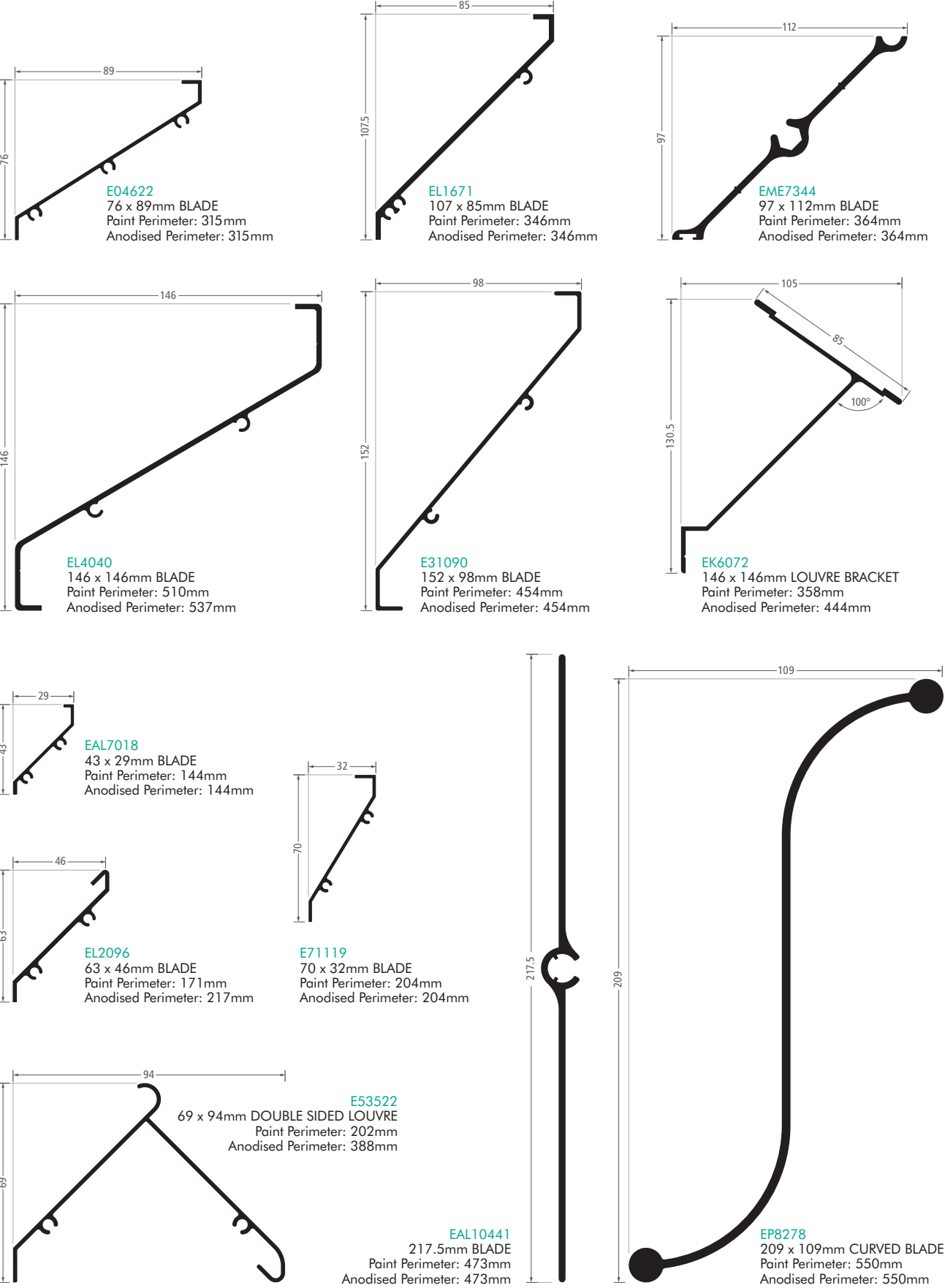


Straight Louvres

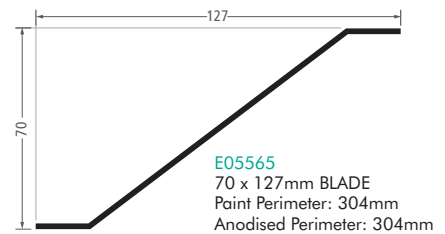
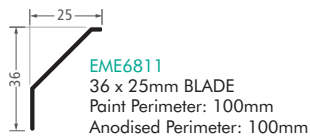
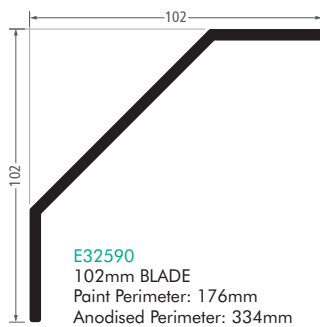
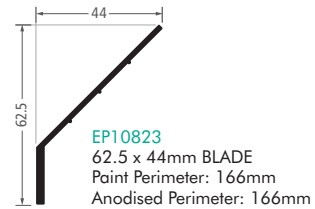
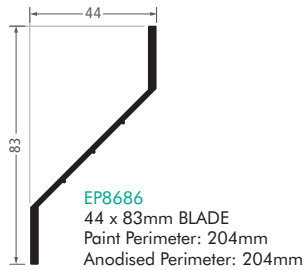
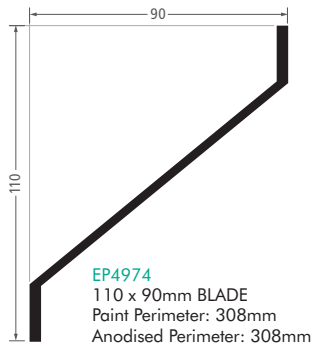


Throated Louvres

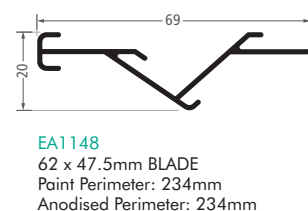
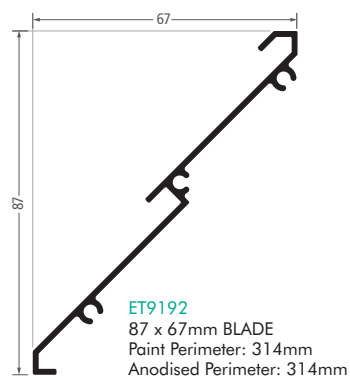
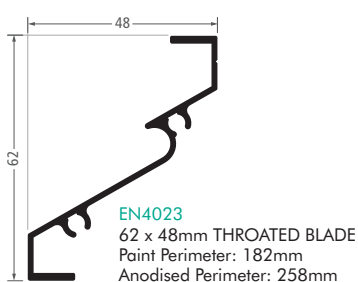
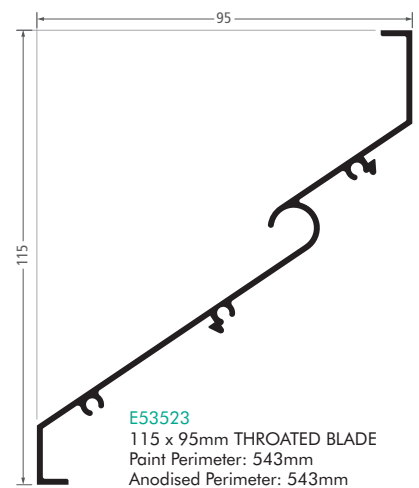
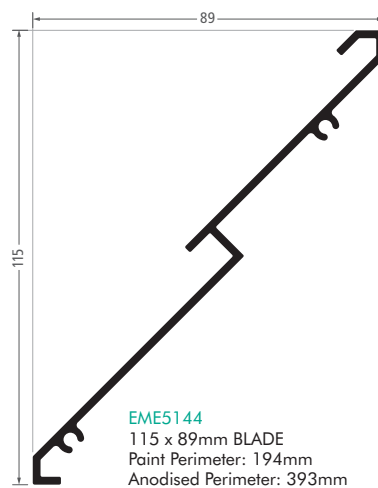
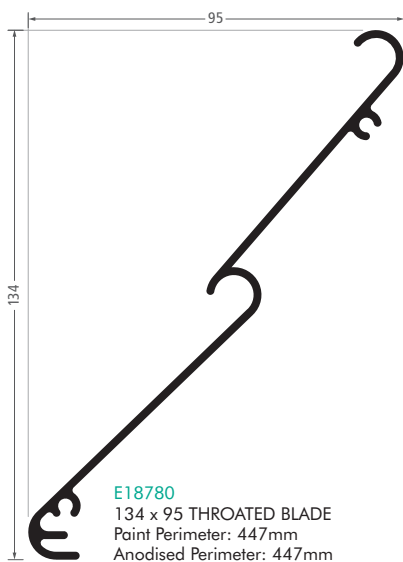
Straight Blades



## Straight Blades (cont)



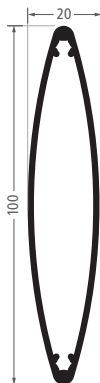
## Throated Blades



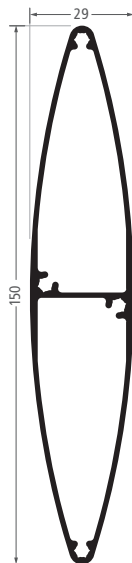
# Elliptical Blades



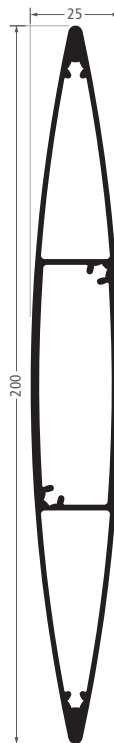
**EPD0262**  
 67mm ELLIPTICAL BLADE  
 Paint Perimeter: 144mm  
 Anodised Perimeter: 144mm



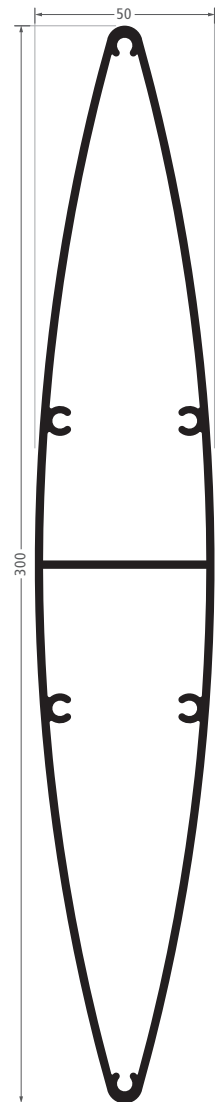
**EP7682**  
 100mm ELLIPTICAL BLADE  
 Paint Perimeter: 210mm  
 Anodised Perimeter: 210mm



**EP9282**  
 150mm ELLIPTICAL BLADE  
 Paint Perimeter: 312mm  
 Anodised Perimeter: 312mm

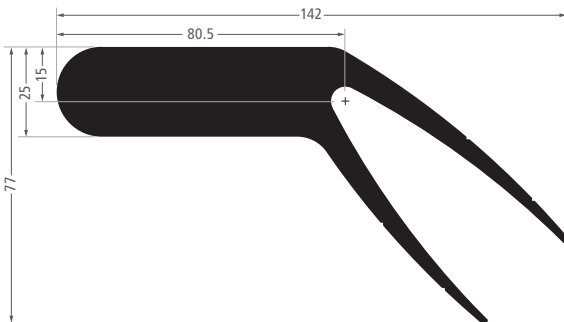


**EP9732**  
 200mm ELLIPTICAL BLADE  
 Paint Perimeter: 408mm  
 Anodised Perimeter: 408mm

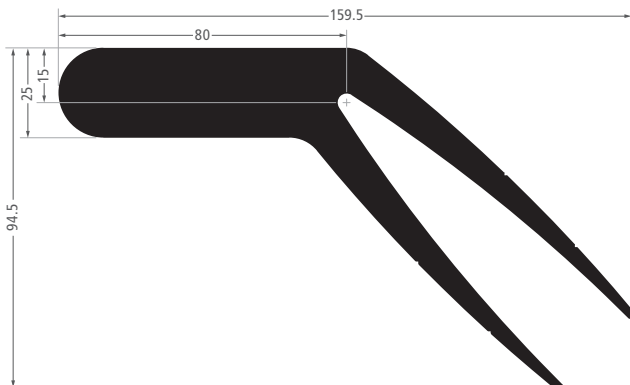


**EP11641**  
 300mm ELLIPTICAL BLADE  
 Paint Perimeter: 619mm  
 Anodised Perimeter: 619mm

# Louvre Brackets

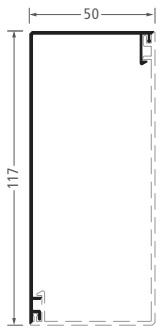


**EP9799**  
 150mm LOUVRE BRACKET  
 Paint Perimeter: 323mm  
 Anodised Perimeter: 480mm  
 TO SUIT EP9282

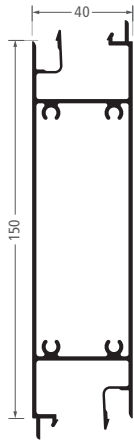


**EP9771**  
 200mm LOUVRE BRACKET  
 Paint Perimeter: 378mm  
 Anodised Perimeter: 583mm  
 TO SUIT EP9732

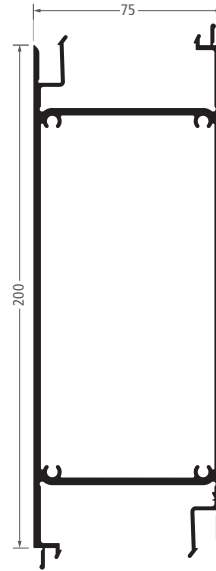
## Box Louvres



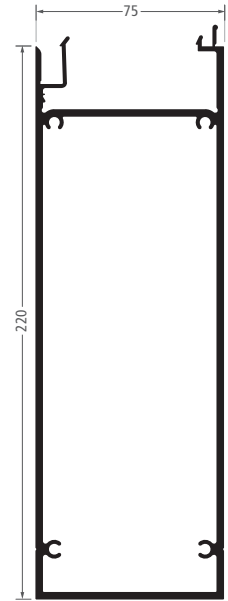
**EQ7013**  
117 x 50mm S/M  
BOX LOUVRE  
Paint Perimeter: 165mm  
Anodised Perimeter: 381mm



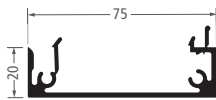
**EP13263**  
40mm INTERMEDIATE  
BOX LOUVRE  
Paint Perimeter: 432mm  
Anodised Perimeter: 647mm



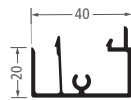
**EP15125**  
75mm INTERMEDIATE  
BOX LOUVRE  
Paint Perimeter: 570mm  
Anodised Perimeter: 855mm



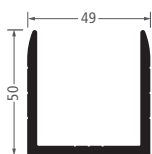
**EP15126**  
75mm BOX LOUVRE END  
Paint Perimeter: 496mm  
Anodised Perimeter: 744mm



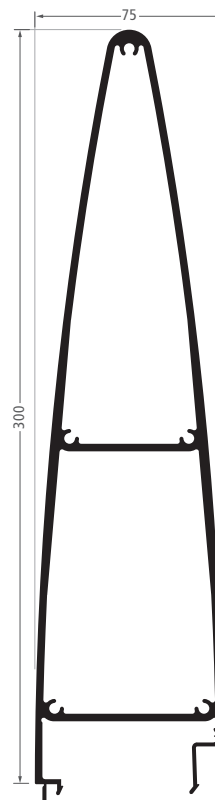
**EP15127**  
75mm BOX LOUVRE END SNAP  
Paint Perimeter: 232mm  
Anodised Perimeter: 347mm



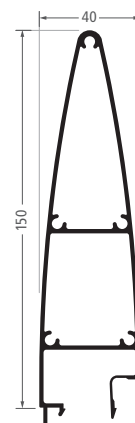
**EP13264**  
40mm BOX LOUVRE END SNAP  
Paint Perimeter: 179mm  
Anodised Perimeter: 268mm



**EP14150**  
40mm BOX LOUVRE CHANNEL  
Paint Perimeter: 191mm  
Anodised Perimeter: 286mm



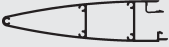
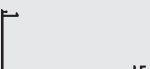
**EP15124**  
75mm BOX LOUVRE  
BULLNOSE  
Paint Perimeter: 615mm  
Anodised Perimeter: 842mm



**EP13373**  
40mm BOX LOUVRE  
BULLNOSE  
Paint Perimeter: 321mm  
Anodised Perimeter: 481mm

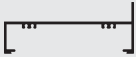
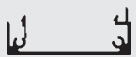
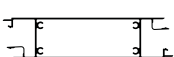
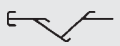
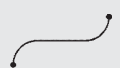
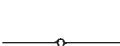


## Louvre Blades and Frames

| PROFILE                                                                             | SECTION | DESCRIPTION                               | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-------------------------------------------|-----|-----|-----------|
|    | EP9282  | Louvre Elliptical Blade 150 x 29          | 312 | 312 | 1.560     |
|    | EP9732  | Louvre Elliptical Blade 200 x 25          | 408 | 408 | 2.371     |
|    | EP15199 | 50mm Flagged Channel                      | 546 | 364 | 5.640     |
|    | EME7089 | Air Return Grille 21.2H x 28.85D          | 106 | 106 | 0.176     |
|    | EP9281  | Channel Louvre Frame 51 x 50 Mates EQ6860 | 297 | 297 | 0.855     |
|  | EME9077 | Air Control 62 x 47.5                     | 255 | 121 | 0.521     |
|  | EP13373 | BL40 – Louvre Bull Nose 150mm             | 481 | 321 | 2.052     |
|  | E52946  | Louvre 60mm                               | 162 | 162 | 0.390     |
|  | E71119  | Louvre Z Blade 70H x 32D                  | 204 | 204 | 0.448     |
|  | EP11641 | Louvre Elliptical Blade 300 x 50          | 619 | 619 | 4.737     |
|  | EQ7013  | Louvre Box 117 x 50 Self Mating           | 381 | 165 | 0.747     |
|  | EP7682  | Louvre Elliptical Blade 100 x 20          | 210 | 210 | 1.034     |
|  | EPD0262 | Louvre Sun Control Blade 67 x 15          | 144 | 144 | 0.545     |
|  | EQ6861  | Louvre Elliptical Blade 90.8 x 15.8       | 190 | 190 | 0.935     |
|  | EP9983  | Louvre Elliptical Blade 95x13             | 194 | 194 | 0.857     |
|  | EP8707  | Louvre Curved Blade 112.4 x 20            | 250 | 250 | 1.117     |
|  | EP7919  | Louvre Curved Blade 162.4 x 25            | 351 | 351 | 1.550     |
|  | E53524  | Louvre Frame 75.5 x 54.6 x 1.6 to E53423  | 299 | 155 | 0.640     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Louvre Blades and Frames continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                  | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|----------------------------------------------|-----|-----|-----------|
|    | E52812   | Louvre Frame 101 x 25                        | 398 | 195 | 0.902     |
|    | EP13264  | BL40 – Louvre End Snap 20mm                  | 268 | 179 | 0.579     |
|    | EP13265  | BL75 – Louvre End Snap 20mm                  | 338 | 226 | 0.946     |
|    | EP13263  | BL40 – Louvre Intermediate Box 150mm         | 647 | 432 | 2.341     |
|    | EQ5999   | Louvre Surround 51mm                         | 197 | 126 | 0.421     |
|    | E52616   | Louvre Vertical Blade 94.2 x 69              | 388 | 200 | 0.796     |
|   | E52637   | Louvre ZZ Blade 63H x 48D                    | 254 | 254 | 0.575     |
|  | EME6811  | Louvre 45 deg Blade 36H x 26D                | 100 | 100 | 0.194     |
|  | EA1148   | Louvre Blade 69 x 20                         | 234 | 234 | 0.421     |
|  | E32590   | Louvre Blade 102 x 102 x 4                   | 334 | 176 | 1.769     |
|  | EP8278   | Louvre Ombre Blade 209 x 109                 | 550 | 550 | 2.560     |
|  | EAL10441 | Louvre Air Control Blade 217.42 x 15         | 473 | 473 | 1.540     |
|  | EP10823  | Louvre L - Blade 58.22 x 20                  | 166 | 166 | 0.489     |
|  | E53522   | Louvre Vertical Blade 94.2 x 69              | 388 | 202 | 0.770     |
|  | EAL7018  | Louvre 45 deg Z Blade 43H x 29D              | 144 | 144 | 0.312     |
|  | EL2096   | Louvre Z Blade 63H x 46D                     | 217 | 171 | 0.608     |
|  | EB1580   | Louvre Z Blade 63H x 46D                     | 212 | 212 | 0.568     |
|  | E04622   | Louvre 32.37 deg Z Blade 76.2H x 88.9D       | 315 | 315 | 0.775     |
|  | EL1926   | Louvre 33 deg Z Blade 76.2H x 88.9D          | 302 | 277 | 0.709     |
|  | EL1671   | Louvre Type L - 45 deg Z Blade 107.43H x 85D | 346 | 311 | 1.138     |

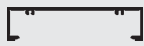
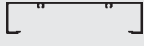
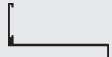
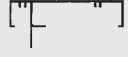
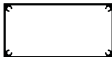
Sizes are indicative only – refer to die drawings for accurate sizes

## Louvre Blades and Frames continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                         | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------------------|-----|-----|-----------|
|    | EP4974   | Louvre Z Blade 110H x 90D                           | 308 | 308 | 1.326     |
|    | E31090   | Louvre 50 deg Z Blade 152H x 98D                    | 454 | 454 | 1.237     |
|    | EN4023   | Louvre ZZ Blade 62H x 48D                           | 258 | 182 | 0.586     |
|    | EME5144  | Louvre 45 deg ZZ Blade 114.96H x 88.9D              | 393 | 194 | 1.052     |
|    | EME7061  | Louvre 45 deg ZZ Blade 122.13H x 75.6D              | 444 | 216 | 1.038     |
|    | E18780   | Louvre ZZ Blade 134H x 95D                          | 447 | 447 | 1.265     |
|   | E53523   | Louvre ZZ Blade 115H x 95D                          | 435 | 435 | 0.918     |
|  | EK6072   | Louvre Type K Bracket 125 x 85.2 to EL4040          | 444 | 358 | 1.274     |
|  | EL4040   | Louvre Type K - Z Blade 146H x 146D to EK6072       | 537 | 510 | 1.806     |
|  | EAL5674  | Louvre Blade 28.5 x 13 (Mates EAL5673 & EAL7738)    | 100 | 100 | 0.141     |
|  | EME31695 | Louvre Blade 25 x 5                                 | 100 | 100 | 0.144     |
|  | EAL22040 | Louvre Blade 26 x 2.5                               | 100 | 100 | 0.181     |
|  | EAL3928  | Louvre Half Chevron Blade 26.97 x 21                | 100 | 100 | 0.178     |
|  | EAL3590  | Louvre Blade 48 x 38.1                              | 181 | 100 | 0.396     |
|  | EAL3591  | Louvre Blade 130.44 x 95                            | 429 | 194 | 1.193     |
|  | EAL3560  | Louvre Blade 26.67 x 21 (Mates EAL11858 & EAL11859) | 100 | 100 | 0.193     |
|  | EAL5193  | Louvre Frame 102.5 x 45                             | 330 | 163 | 1.083     |
|  | EP9799   | 150mm Elliptical Louvre Mount to EP9282             | 480 | 323 | 7.107     |
|  | EP9771   | 200mm Elliptical Louvre Mount to EP9732             | 583 | 378 | 9.081     |
|  | EW4398   | Baluster Oval 70 x 30                               | 161 | 161 | 0.837     |

Sizes are indicative only – refer to the drawings for accurate sizes

## Louvre Blades and Frames continued

| PROFILE                                                                             | SECTION | DESCRIPTION                                           | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-------------------------------------------------------|-----|-----|-----------|
|    | E52620  | Plain Frame 100 x 25 to E14695                        | 353 | 163 | 0.795     |
|    | E32173  | Plain Frame Filler 70 x 7.5                           | 171 | 100 | 0.373     |
|    | EP7683  | Plain Frame 76 x 25 to E32173                         | 304 | 132 | 0.813     |
|    | EB1389  | Plain Frame 101.6 x 25.4                              | 357 | 164 | 1.128     |
|    | EME8749 | Plain Frame 152.4 x 35                                | 529 | 248 | 1.308     |
|    | EAL9568 | Louvre Frame 91 x 44                                  | 316 | 143 | 0.750     |
|   | EME9410 | Louvre Frame 95.25 x 54                               | 313 | 149 | 0.889     |
|  | E52503  | Louvre Frame Infill 105 x 10.15 to E52502             | 286 | 106 | 0.635     |
|  | E52502  | Louvre Frame 105 x 41.4 to E52503                     | 453 | 153 | 0.982     |
|  | EQ6858  | Louvre Frame Filler 37.4 x 14.5 Mates EQ6859 & EQ6857 | 128 | 100 | 0.271     |
|  | EQ6856  | Louvre Infill Hole Plate 42 x 9 Mates EQ6860          | 114 | 100 | 0.263     |
|  | EQ6859  | Louvre Frame Rail 61.2 x 42 Mates EQ6858              | 237 | 168 | 1.047     |
|  | EQ6860  | Louvre Frame Stile 64 x 45 Mates EQ6856               | 268 | 171 | 1.458     |
|  | EQ6857  | Louvre Frame Rail 90 x 42 Mates EQ6858                | 294 | 226 | 1.334     |
|  | EP9981  | Louvre Frame 75 x 33.8 to EP9982                      | 346 | 100 | 0.851     |
|  | EP9982  | Louvre Frame 75 x 40 to EP9981                        | 363 | 156 | 0.963     |
|  | EP9992  | Louvre Frame 80 x 50                                  | 259 | 259 | 1.487     |
|  | EK7485  | Plain Frame 100 x 25 to EK5846                        | 392 | 167 | 1.050     |
|  | EK5846  | Plain Frame Filler 82.55 x to EK7485                  | 207 | 100 | 0.675     |
|  | EP16524 | Louvre Blade 100 x 50                                 | 299 | 299 | 1.781     |

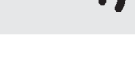
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## Marine

79 Marine Sections

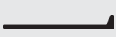
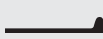
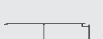
85 Yacht Masts

## Marine Sections

| PROFILE                                                                             | SECTION  | DESCRIPTION                         | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------|-----|-----|-----------|
|    | EQ3462   | Marine Internal Coaming 90 x 16     | 260 | 114 | 1.096     |
|    | EAL10553 | Gunwhale 38 x 35 x 3                | 235 | 235 | 0.985     |
|    | EU9824   | Gunwhale 39 x 25                    | 144 | 100 | 0.617     |
|    | EU4552   | Gunwhale 40 x 25                    | 196 | 196 | 0.842     |
|   | EB4549   | Gunwhale 43 x 41                    | 236 | 236 | 0.878     |
|  | EQ3279   | Gunwhale 47 x 32                    | 205 | 107 | 0.831     |
|  | E53192   | Gunwhale 50 x 25                    | 220 | 109 | 0.960     |
|  | EL9125   | Gunwhale 50 x 34.6                  | 225 | 225 | 0.972     |
|  | EU3862   | Gunwhale 56 x 36                    | 270 | 150 | 1.234     |
|  | EA2995   | Gunwhale 60 x 30 x 5.5              | 180 | 180 | 1.269     |
|  | EAL3504  | Gunwhale Toe Rail 60.33 x 41.28     | 200 | 200 | 1.400     |
|  | EP2543   | Gunwhale 100 x 10                   | 220 | 220 | 2.847     |
|  | EP13765  | Boat Facia 50 x 16                  | 149 | 100 | 0.583     |
|  | EP13685  | Boat Facia 90 x 16                  | 259 | 259 | 1.017     |
|  | EW6164   | Marine Windscreen Socket 17.25 x 27 | 148 | 148 | 0.402     |
|  | EU4601   | Chine 26.75 x 21.44                 | 124 | 124 | 0.686     |
|  | EB4659   | Chine 28 x 25                       | 130 | 130 | 0.621     |
|  | EL6422   | Chine 30 x 22                       | 127 | 127 | 0.826     |

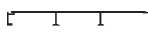
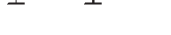
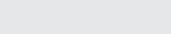
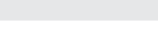
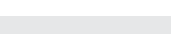
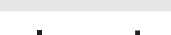
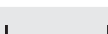
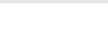
Sizes are indicative only – refer to die drawings for accurate sizes

## Marine Sections continued

| PROFILE                                                                             | SECTION | DESCRIPTION                        | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------|-----|-----|-----------|
|    | EP13683 | Chine 35 x 24                      | 144 | 144 | 0.990     |
|    | EL6077  | Chine 35 x 30                      | 158 | 158 | 1.065     |
|    | EL6421  | Keel Tmr 35 x 30                   | 166 | 166 | 1.067     |
|    | EL6052  | Keel Tmr 58 x 30                   | 212 | 212 | 1.381     |
|    | EL6051  | Keel Tmr 61 x 36                   | 271 | 271 | 2.294     |
|    | EP6100  | Marine Rider Bar 80 x 8.0          | 174 | 174 | 1.360     |
|    | EP8933  | Marine Rowlock 70 x 31             | 173 | 173 | 2.911     |
|  | EP8932  | MarineTow Eye 115 x 50.01          | 286 | 286 | 8.486     |
|  | EW3539  | Bulb Flat 150 x 19 x 6.0 RAD       | 330 | 330 | 2.685     |
|  | EL9067  | Bulb Flat 50 x 14 x 4.5            | 122 | 122 | 0.732     |
|  | EP4481  | Bulb Flat 60.0 x 19.05 x 5.38      | 149 | 149 | 1.155     |
|  | EH9987  | Bulb Flat 76.2 x 19.05 x 5.38      | 182 | 182 | 1.392     |
|  | EL6940  | Bulb Flat 98.7 x 19.05 x 5.38      | 227 | 227 | 1.719     |
|  | EP4178  | Bulb Flat 115 x 25 x 7.0           | 269 | 269 | 2.650     |
|  | EP16214 | Bulb Flat 127 x 19 x 6.0 RAD       | 284 | 284 | 2.417     |
|  | EP2522  | Bulb Flat 150 x 19 x 6.0           | 328 | 328 | 2.742     |
|  | EP12538 | Marine Deck Joiner                 | 394 | 394 | 1.103     |
|  | E25467  | Flooring Plank Marine 224.5 x 32.5 | 603 | 200 | 1.764     |
|  | E25248  | Flooring Plank Marine 242 x 45     | 701 | 701 | 2.512     |
|  | EN8093  | Flooring Plank Marine 267.73 x 37  | 771 | 771 | 2.107     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Marine Sections continued

| PROFILE                                                                             | SECTION | DESCRIPTION                                | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|--------------------------------------------|------|------|-----------|
|    | EP8361  | Flooring Plank Ferries 325.5 x 37          | 746  | 746  | 6.667     |
|    | EP7758  | Flooring Plank Marine 331 x 32.5           | 929  | 929  | 2.457     |
|    | EP8360  | Flooring Plank Ferries 353.78 x 61.20      | 958  | 958  | 11.521    |
|    | EP2953  | Flooring Plank Ferries 360 x 41.2          | 920  | 920  | 6.277     |
|    | EP5202  | Flooring Plank Ferries 360 x 51.2          | 966  | 966  | 6.970     |
|    | EN6328  | Flooring Plank Marine 373.12 x 37          | 1008 | 1008 | 4.112     |
|   | EP11942 | Flooring Plank Marine 376.75 x 32.8 x 3.15 | 1048 | 1048 | 4.504     |
|  | E27149  | Flooring Plank Marine 415 x 40             | 1089 | 399  | 4.184     |
|  | EP5813  | Flooring Joiner 150 x 97                   | 525  | 525  | 7.498     |
|  | EP5438  | Flooring Joiner 230 x 119                  | 712  | 712  | 13.596    |
|  | EL9436  | Flooring Plank Oyster Punt 228 x 50        | 555  | 555  | 3.437     |
|  | EP5271  | Ship Side Panel 320 x 85                   | 998  | 998  | 5.499     |
|  | EP5118  | Ship Side Panel GI 366 x 60                | 1097 | 1097 | 4.854     |
|  | EU8404  | I Beam 220 x 100 x 5.0 x 10.0 RAD          | 823  | 823  | 8.137     |
|  | EU8405  | I Beam 316 x 150 x 6.0 x 8.0 RAD           | 1209 | 1209 | 11.423    |
|  | EP3724  | Tee 35 x 128 x 8/5 RAD                     | 320  | 320  | 2.391     |
|  | E35475  | Tee 40 x 60 RAD                            | 183  | 183  | 1.279     |
|  | E35473  | Tee 40 x 80 RAD                            | 223  | 223  | 1.665     |
|  | E27297  | Tee 100 x 308 x 8/5 RAD                    | 806  | 806  | 6.281     |
|  | EP10656 | Tee 120 x 402 x 12/6 Marine RAD            | 1034 | 1034 | 10.277    |

Sizes are indicative only – refer to die drawings for accurate sizes

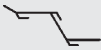
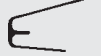


## Marine Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                         | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------|-----|-----|-----------|
|    | EW3616   | Tube 50.85 x 2.64                   | 160 | 160 | 1.080     |
|    | EW5406   | Gunwhale 200 x 80                   | 617 | 617 | 2.483     |
|    | EP5270   | Marine Hatch 118 x 70               | 372 | 372 | 2.892     |
|    | EW5409   | Keel Channel 50 x 25 x 3            | 186 | 186 | 0.735     |
|    | EME31046 | Ladder 76.46 x 35.78                | 281 | 281 | 1.168     |
|    | EA2071   | Tee 50 x 35 x 2 RAD                 | 166 | 166 | 0.458     |
|   | EA3052   | 50mm x 30mm Half Round              | 176 | 176 | 0.777     |
|  | EP12661  | Tee 50 x 100 x 5.5 Marine RAD       | 279 | 279 | 2.415     |
|  | EP12660  | Tee 40 x 70 x 4 Marine RAD          | 202 | 202 | 1.466     |
|  | EP13855  | Coaming Fascia 89.87 x 16           | 263 | 263 | 1.156     |
|  | EP13453  | Marine Rub Rail 76.2 x 38.1 x 3.05  | 239 | 239 | 0.941     |
|  | EP13454  | Marine Rub Rail 101.6 x 50.8 x 3.05 | 319 | 319 | 1.270     |
|  | EP13455  | Marine Rub Rail 101.6 x 50.8 x 6.02 | 316 | 316 | 2.435     |
|  | EP12662  | Tee 50 x 120 x 6.5 Marine RAD       | 318 | 318 | 3.099     |
|  | EP12881  | Bulb Flat 156 x 33 x 5.0            | 366 | 366 | 2.891     |
|  | EA3053   | Half Round 39.0 x 3.0mm             | 142 | 142 | 0.531     |
|  | EP5746   | Marine Hinge 55 x 50                | 187 | 187 | 5.673     |
|  | EP13724  | Marine Box Rib 38 x 33.2            | 139 | 139 | 1.096     |
|  | EP6101   | Marine Rider Bar 50 x 8.0           | 114 | 114 | 0.874     |
|  | E36974   | Spray Chine Rail Marine             | 419 | 419 | 3.767     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Marine Sections continued

| PROFILE                                                                             | SECTION | DESCRIPTION                              | AP   | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------------|------|-----|-----------|
|    | EP12542 | Marine Louvre 83.5 x 36                  | 272  | 272 | 0.512     |
|    | EP12543 | Marine Transport-Louvre Spacer           | 245  | 245 | 1.864     |
|    | EP4034  | Flooring Plank Marine 360x25 Double Skin | 929  | 929 | 4.520     |
|    | E36378  | Pontoon Handrail 75 x 65 x 2.5 RAD       | 275  | 217 | 1.764     |
|    | E36376  | Pontoon Stringer 100 x 93 x 2.5          | 372  | 372 | 2.279     |
|    | EQ6427  | Pontoon Stringer 101 x 100 x 2.3         | 441  | 441 | 2.410     |
|    | EE4204  | Sailtrack 22.23 x 8.71 x 2.37            | 100  | 100 | 0.264     |
|  | EE4200  | Sailtrack 31.75 x 11.89 x 3.18           | 119  | 100 | 0.484     |
|  | EAL3459 | Sail Track 50.8 x 3.18                   | 202  | 202 | 0.926     |
|  | EH3879  | Sail Track 52.2 x 21.47                  | 178  | 178 | 0.718     |
|  | EW5405  | 52.5 x 52.5 x 3.0mm V Chine              | 209  | 209 | 0.827     |
|  | E25487  | Sponson 187 x 120 x 7.6                  | 725  | 725 | 7.412     |
|  | E26674  | Sponson 250 x 165.2                      | 1026 | 481 | 10.011    |
|  | EP12541 | Marine Sponson Cap                       | 298  | 298 | 4.173     |
|  | EP12187 | Boat Building Stiffener 50 x 8.0         | 114  | 114 | 0.885     |
|  | EP12186 | Boat Building Stiffener 80 x 8.0         | 174  | 174 | 1.371     |
|  | EQ1633  | Top Hat 63.5 x 31.75                     | 238  | 122 | 0.948     |
|  | EB1763  | Top Hat 65.13 x 28.58 x 2.36             | 226  | 226 | 0.707     |
|  | EB1759  | Top Hat 69.86 x 31.76 x 3.18             | 248  | 248 | 1.042     |
|  | EP12663 | Tee 40 x 60 x 3.5 Marine RAD             | 180  | 180 | 1.328     |

Sizes are indicative only – refer to die drawings for accurate sizes

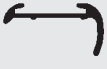
## Marine Sections continued

| PROFILE                                                                             | SECTION | DESCRIPTION                                    | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------------------|-----|-----|-----------|
|    | EP12665 | Tee 40 x 80 x 4.5 Marine RAD                   | 222 | 222 | 1.621     |
|    | EP12664 | Tee 50 x 140 x 7.5 Marine RAD                  | 358 | 358 | 3.878     |
|    | EP12666 | Tunnel Section 320 x 50                        | 685 | 685 | 4.647     |
|    | EP12667 | Tunnel Section 320 x 70                        | 723 | 723 | 6.277     |
|    | EP12539 | Trapezoidal Section                            | 358 | 358 | 6.783     |
|    | E35577  | Marine Window Mullion 100 x 80                 | 320 | 320 | 3.794     |
|   | ET2760  | Marine Windscreen Channel 12.7 x 10.31 RAD     | 100 | 100 | 0.192     |
|  | EQ6363  | Marine Windscreen Frame 25 x 14.3              | 116 | 100 | 0.555     |
|  | EQ6802  | Marine Windscreen Surround Corner 25.4 x 18.03 | 128 | 100 | 0.462     |
|  | EQ4010  | Marine Windscreen Surround 25.4 Dia            | 138 | 138 | 0.535     |
|  | EA2215  | Marine Door Frame 32.5 x 32                    | 189 | 160 | 0.659     |
|  | EP6099  | Marine Partition 91 x 91                       | 452 | 137 | 1.259     |
|  | EA2214  | Marine Door Stile 90 x 25.6                    | 249 | 246 | 1.342     |

## Yacht Masts

| PROFILE                                                                             | SECTION | DESCRIPTION                     | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|---------------------------------|-----|-----|-----------|
|    | EL2600  | Yacht Mast 38.1                 | 157 | 100 | 0.708     |
|    | EK8863  | Yacht Mast 47.5 x 19.05 x 2.03  | 108 | 108 | 0.559     |
|    | E11466  | Yacht Mast 66.7 x 50.8          | 276 | 276 | 0.922     |
|    | EK4621  | Yacht Mast 67.14 x 51.26 x 1.75 | 277 | 277 | 1.072     |
|   | EL1902  | Yacht Mast 105mm                | 386 | 386 | 1.659     |
|  | E07650  | Yacht Mast 104.8 x 73.65 x 1.9  | 387 | 387 | 1.677     |
|  | E25405  | Yatch Mast 152.5 x 114.5 x 3.2  | 460 | 460 | 3.826     |
|  | E40267  | Tube 165 x 3                    | 518 | 518 | 4.122     |
|  | E40643  | Tube 101.6 x 2.5                | 319 | 319 | 2.101     |
|  | E40263  | Tube 152.4 x 2.4                | 479 | 479 | 3.053     |

## Moulds & Trims

| PROFILE                                                                             | SECTION  | DESCRIPTION                                | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------|-----|-----|-----------|
|    | EG6459   | Angle 25.4 x 25.4 x 1.57 Fluted            | 106 | 106 | 0.232     |
|    | E14046   | Cabinet Drawer Trim 39.95 x 21             | 144 | 144 | 0.331     |
|    | EG1082   | Wall Board Double Channel 13.92 x 9.58 RAD | 100 | 100 | 0.106     |
|    | EAL12766 | Drip Mould 24.1 x 12.5                     | 100 | 100 | 0.148     |
|  | EL9126   | Marine Trim 13.5 x 7.24                    | 100 | 100 | 0.070     |
|  | EME8754  | Colonial Bar (External) 16 x 4             | 100 | 100 | 0.111     |
|  | E08059   | Marine Cover 38.1 x 12.7                   | 103 | 100 | 0.394     |
|  | EP5158   | Marine Table Edge 38.4 x 8                 | 100 | 100 | 0.274     |
|  | ET6847   | Caravan Trim 31.75 x 16.25                 | 110 | 100 | 0.219     |
|  | E06348   | Windscreen Surround 17.45 x 11.1 Gap 3.2   | 100 | 100 | 0.258     |
|  | EAL10512 | Caravan Trim 17.5 x 12.65                  | 100 | 100 | 0.110     |
|  | EME4251  | Ticket Strip 19.3 x 5.16                   | 100 | 100 | 0.132     |
|  | EAL1553  | Ticket Strip 31.75 x 4.83                  | 100 | 100 | 0.178     |
|  | ET2436   | Ticket Strip 31.75 x 4.94 x 1.52           | 100 | 100 | 0.178     |
|  | EME3766  | Ticket Strip 34.93 x 5.05                  | 100 | 100 | 0.193     |
|  | EME3782  | Ticket Strip 34.93 x 30                    | 143 | 118 | 0.354     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Moulds &amp; Trims continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------|-----|-----|-----------|
|    | EAL10993 | Ticket Strip 37.01 x 24                    | 122 | 122 | 0.252     |
|    | EH3038   | Wallboard Edge 26.97 x 6.43 Gap 3.96       | 100 | 100 | 0.114     |
|    | EG6444   | Crescent Mould 15.88 x 4.75 RAD            | 100 | 100 | 0.122     |
|    | EK1231   | Crescent Mould 18.8 x 2.92                 | 100 | 100 | 0.073     |
|    | E00142   | Crescent Mould 19 x 4.75                   | 100 | 100 | 0.143     |
|    | EG6449   | Crescent Mould 25.4 x 4.75 RAD             | 100 | 100 | 0.187     |
|  | EG6448   | Crescent Mould 31.75 x 4.75 RAD            | 100 | 100 | 0.246     |
|  | EH2989   | Crescent Mould 38.1 x 4.75 RAD             | 100 | 100 | 0.297     |
|  | EAL12525 | Crescent Mould 38.1 x 6.35                 | 100 | 100 | 0.337     |
|  | EG6454   | J-Trim 23.8 x 12.7                         | 100 | 100 | 0.154     |
|  | E00146   | J-Trim Drip Mould 23.8 x 12.7              | 100 | 100 | 0.156     |
|  | EQ1957   | Toilet Partition Channel 24 x 38 to EQ1958 | 195 | 100 | 0.564     |
|  | EQ1958   | Toilet Partition Infill 27 x 24 to EQ1957  | 168 | 168 | 0.289     |
|  | EP12113  | Toilet Partition Infill 13mm 20.6 x 18.67  | 106 | 106 | 0.210     |
|  | EP12112  | Toilet Partition Infill 18mm 25.55x19.90   | 118 | 118 | 0.239     |
|  | EP12116  | Toilet Partition Channel 13mm 30 x 20.6    | 165 | 165 | 0.561     |
|  | EP12115  | Toilet Partition Channel 18mm 40 x 25.6    | 217 | 217 | 0.764     |
|  | EP12114  | Toilet Partition Post 13/18mm 50 Dia       | 245 | 245 | 1.209     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Moulds & Trims continued

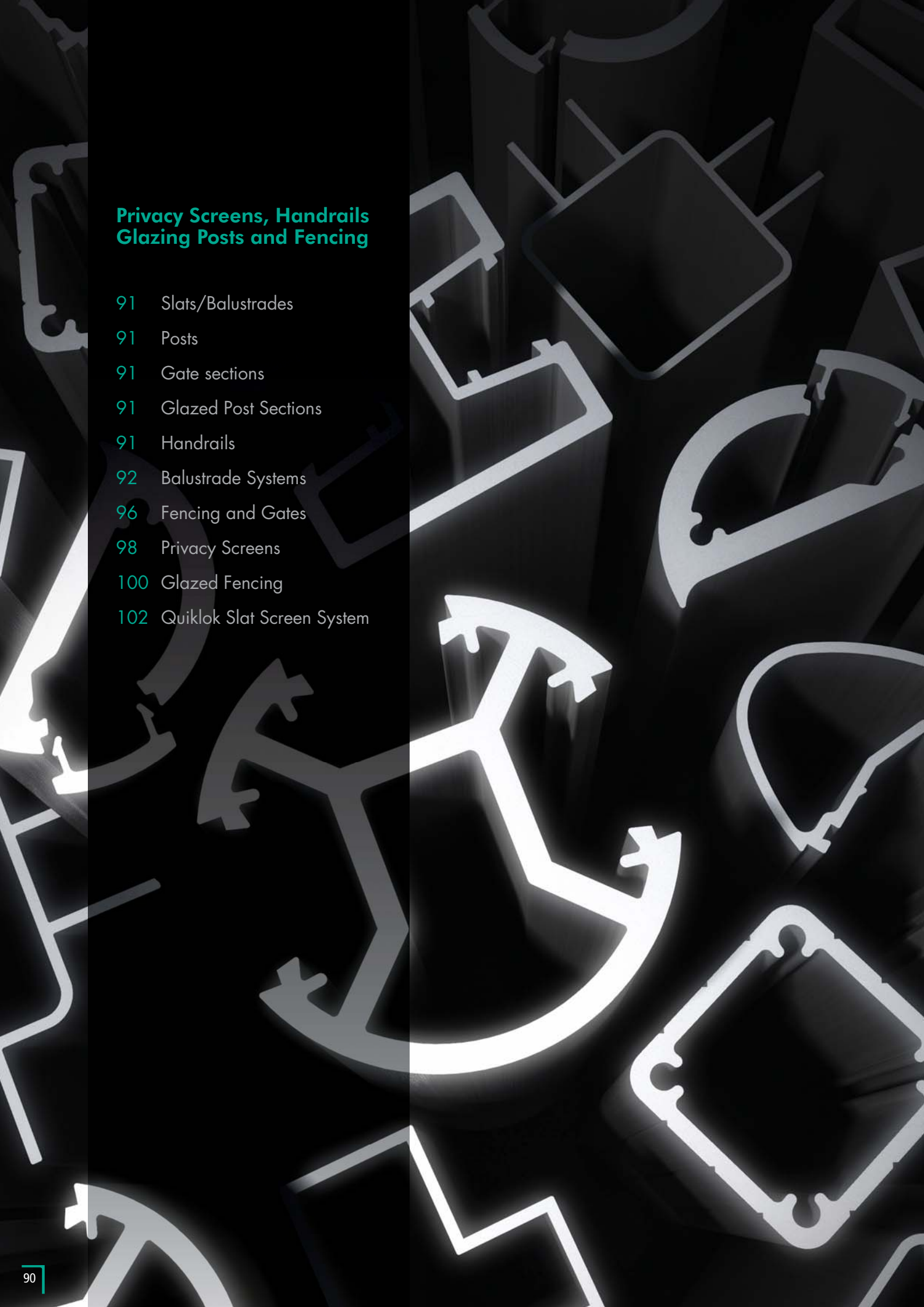
| PROFILE                                                                             | SECTION  | DESCRIPTION                             | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------|-----|-----|-----------|
|    | EQ6354   | Pine Board Channel 25 x 20.5 Gap 16.5   | 140 | 100 | 0.332     |
|    | EQ6347   | Pine Board Channel 25 x 23 Gap 19       | 145 | 100 | 0.353     |
|    | EQ6355   | Pineboard H Section 25 x 20.5 Gap 16.5  | 142 | 100 | 0.324     |
|    | EQ6346   | Pine Board H Section 25 x 22.2 Gap 19   | 146 | 100 | 0.281     |
|    | EME31156 | Slat Wall 28 x 13.5                     | 136 | 100 | 0.184     |
|    | EN8354   | Slat Wall 28 x 13.7                     | 128 | 100 | 0.201     |
|  | EAL9638  | Sun Slade Edge 17.4 x 12                | 100 | 100 | 0.278     |
|  | EAL12327 | Table Edging 25 x 7.92                  | 100 | 100 | 0.290     |
|  | EH2351   | Table Edge 20.62 x 6.73 RAD             | 100 | 100 | 0.100     |
|  | EME31733 | Table Edging 20.62 x 6.73               | 100 | 100 | 0.100     |
|  | EE3388   | Table Edge 27.7 x 12.7 RAD              | 100 | 100 | 0.309     |
|  | E06255   | Table Edge 27.75 x 11.95 RAD            | 100 | 100 | 0.255     |
|  | EG2500   | Table Edge 29.36 x 5.92                 | 100 | 100 | 0.131     |
|  | EAL12811 | Table Edge 29.4 x 5.4                   | 100 | 100 | 0.139     |
|  | E04776   | Table Edge 29.4 x 6                     | 100 | 100 | 0.124     |
|  | E36850   | Ticket Strip 37 x 24                    | 122 | 100 | 0.251     |
|  | EH1600   | Moulding Windscreen U Fin 19.06 x 10.88 | 100 | 100 | 0.266     |
|  | EAL12297 | Mouldings & Edgings 10.2 x 9            | 134 | 100 | 0.204     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Moulds & Trims continued

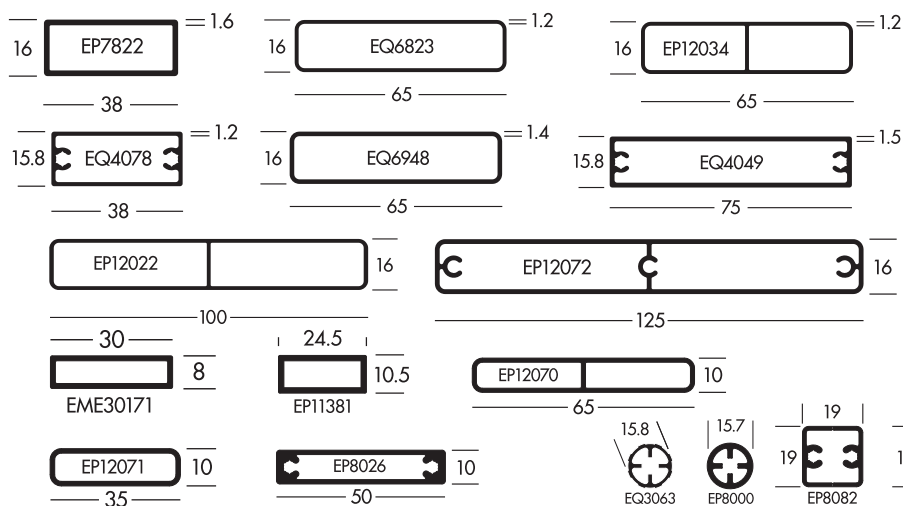
| PROFILE                                                                             | SECTION  | DESCRIPTION                             | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------|-----|-----|-----------|
|    | ET4836   | H-Trim 34.79 x 9.50                     | 138 | 100 | 0.200     |
|    | EH2919   | Wallboard Edge 21.29 x 8 5.5 Gap        | 100 | 100 | 0.092     |
|    | ET2894   | H-Trim 38.1 x 12.7 Gap                  | 140 | 140 | 0.230     |
|    | EH3041   | Trim Wallboard Edge 21.29 x 6.43        | 100 | 100 | 0.087     |
|    | EAL12492 | Whiteboard Frame 19.5 x 17              | 117 | 117 | 0.221     |
|    | EL5470   | White Board Frame 23.5 x 17.0           | 135 | 100 | 0.274     |
|  | EP7420   | White Board Frame 36.5 x 25.4 to EP7419 | 187 | 100 | 0.419     |
|  | EP7419   | White Board Tray 90.3 x 23.1 to EP7420  | 260 | 187 | 0.529     |





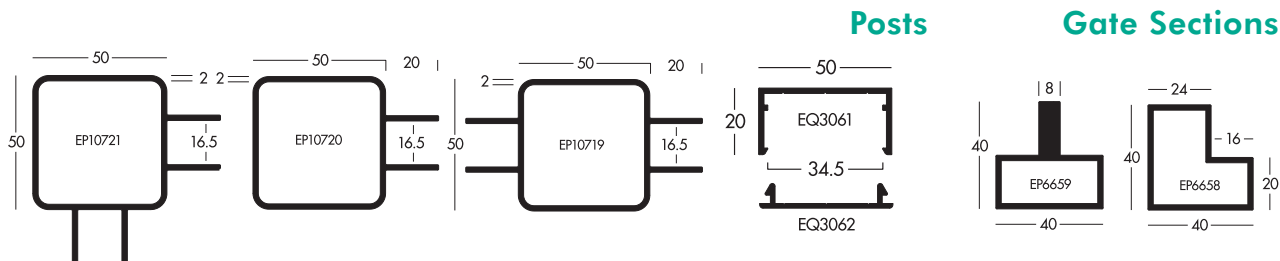
## Privacy Screens, Handrails Glazing Posts and Fencing

- 91 Slats/Balustrades
- 91 Posts
- 91 Gate sections
- 91 Glazed Post Sections
- 91 Handrails
- 92 Balustrade Systems
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- 98 Privacy Screens
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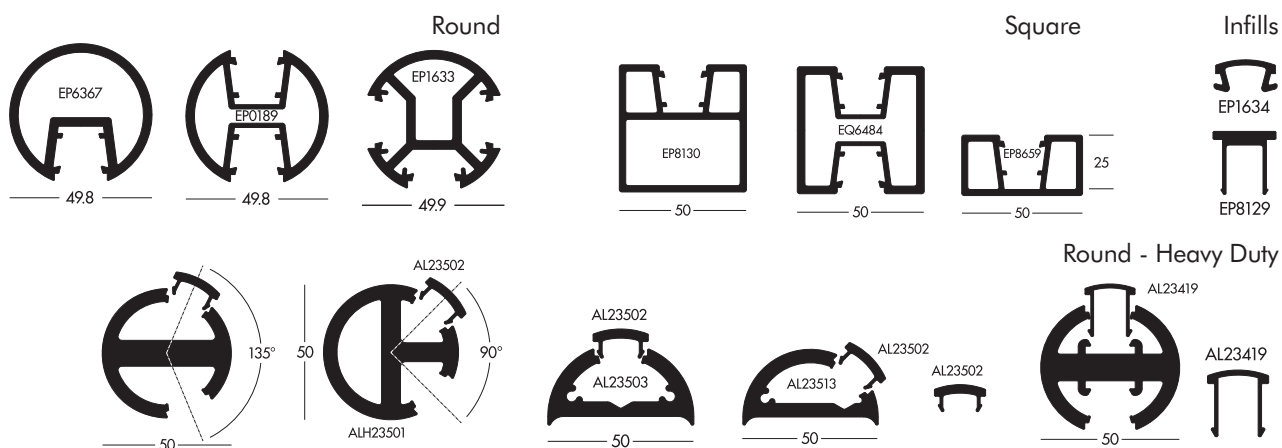
## Slats/Balustrades

This is a list of our most commonly used slats - many others are available. Please refer to your account manager if you cannot see your requirement here.



## Posts

## Gate Sections

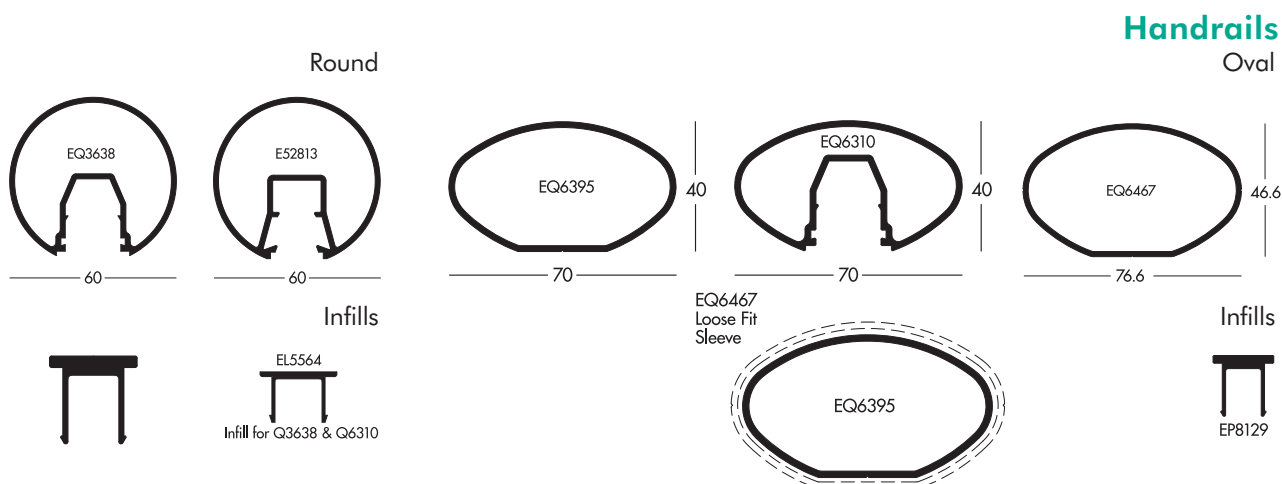


## Glazed Post Sections

### Square

### Infills

### Round - Heavy Duty



## Handrails

### Oval

### Round

### Infills

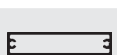
### Infills

## Balustrade Systems

| PROFILE                                                                             | SECTION   | DESCRIPTION                                       | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|-----------|---------------------------------------------------|-----|-----|-----------|
|    | EP8659    | Glazed Slimline Post 1 Way 50 x 25 (Mates P8129)  | 205 | 100 | 1.086     |
|    | EP8130    | Glazed Square Post 1 Way 50 x 50 (Mates P8129)    | 248 | 181 | 1.690     |
|    | EQ4078    | Baluster 38 x 15.8 Horizon                        | 106 | 106 | 0.410     |
|    | EQ4521    | Post - Internal Screw Flutes 50.8 x 50.8          | 192 | 192 | 2.095     |
|    | EX5148    | Tube 50 x 5                                       | 157 | 157 | 1.909     |
|    | EQ4528    | Baluster Square 19.04 x 19.04                     | 100 | 100 | 0.324     |
|   | EQ6000    | Baluster Oval 35 x 16                             | 100 | 100 | 0.406     |
|  | EQ6310    | Handrail Glazed Oval 70 x 40 (Mates EL5564)       | 232 | 150 | 1.082     |
|  | EQ6395    | Handrail Oval 70 x 40 (Mates EQ6467)              | 176 | 176 | 0.830     |
|  | EAL23504  | Glazed Round Post HD 2 Way 50 Dia (Mates AL23502) | 291 | 117 | 2.527     |
|  | EAL23503  | Glazed Half Round Post HD 1 Way 50 x 23           | 212 | 100 | 1.317     |
|  | EAL23502  | Infill Round 18 x 9.5                             | 100 | 100 | 0.178     |
|  | E52813    | Handrail Glazed 60mm Dia (Mates E10328)           | 268 | 169 | 1.207     |
|  | EALH11587 | Baluster Oval 35 x 18                             | 100 | 100 | 0.429     |
|  | EALH23501 | Glazed Round Post HD 2 Way 50 Dia (Mates AL23502) | 223 | 120 | 2.520     |
|  | EQ3064    | Post 34 x 34                                      | 134 | 134 | 0.910     |
|  | EQ3063    | Baluster Round Fluted 15.8 Dia                    | 100 | 100 | 0.239     |
|  | EQ3061    | Channel Top/Bottom Rail 40 x 20 (Mates Q3062)     | 164 | 100 | 0.348     |
|  | EP13743   | Glazed Square Post 1 Way 50 x 50                  | 257 | 171 | 1.849     |
|  | EP13744   | Glazed Square Post 2 Way/180deg 50 x 50           | 323 | 216 | 2.111     |
|  | EK6869    | Balustrade 50.8 x 35                              | 284 | 136 | 1.173     |
|  | EP0189    | Glazed Round Post 3 Way 50 Dia (Mates P0191)      | 257 | 119 | 1.453     |

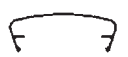
Sizes are indicative only – refer to the drawings for accurate sizes

## Balustrade Systems continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                       | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------------------------|-----|-----|-----------|
|    | EP0142   | Channel Top/Bottom Rail 38.1 x 25.4 (Mates N6559) | 265 | 100 | 0.555     |
|    | EP0190   | Glazed Round Post 1 Way 60.5 Dia (Mates P0191)    | 241 | 172 | 1.220     |
|    | EAL12108 | Ladies Waist Handrail Cap                         | 386 | 165 | 0.891     |
|    | E52962   | Baluster Round 16 Dia                             | 100 | 100 | 0.267     |
|    | EAL11880 | Balustrade Handrail Cap Round 63.5 x 57           | 378 | 157 | 0.892     |
|    | EAL11590 | Balustrade Handrail Cap Round 57 Dia              | 302 | 136 | 0.731     |
|    | EAL22898 | Post Split 45 x 25.5                              | 192 | 100 | 0.874     |
|    | EAL10246 | Balustrade Infill Flat 35.5 x 5                   | 100 | 100 | 0.175     |
|   | EQ4094   | Baluster 75 x 15.8 Horizon                        | 180 | 180 | 0.788     |
|  | EQ4522   | Glazed Square Post 2 Way 50.8 - Mates Q4523       | 344 | 111 | 1.801     |
|  | EQ4529   | Handrail Cap 80 x 43 - Mates Q4623                | 323 | 155 | 0.645     |
|  | EQ4537   | Handrail Cap Round 71.5 Dia - Mates Q4623         | 348 | 164 | 0.832     |
|  | EQ4635   | Handrail Cap 66 x 50 - Mates Q4623                | 327 | 160 | 0.852     |
|  | EQ5738   | Handrail Cap Colonial 64 x 55 Horizon             | 387 | 180 | 0.810     |
|  | E31306   | Channel Top/Bottom Rail 38 x 25                   | 179 | 179 | 0.362     |
|  | EQ1814   | Glazing Adaptor 32 x 16.5 (Mates EQ1815)          | 146 | 100 | 0.292     |
|  | EP16277  | Handrail Glazed Flat Top 70 x 30 x 2 RAD          | 276 | 184 | 1.258     |
|  | EQ4525   | Glazing Adaptor 54 x 29 Mates Q4530,Q4623         | 261 | 100 | 0.626     |
|  | EP15277  | Handrail Glazed Flat Top 70 x 30 x 2              | 278 | 186 | 1.272     |
|  | EN9883   | Handrail Cap Round 50 x 40 (Mates EN6460)         | 229 | 120 | 0.446     |
|  | EP2979   | Top/Bottom Channel 46.5 x 25.4 Horizon            | 206 | 100 | 0.442     |
|  | EQ1812   | Infill Flat 35 x 6 (Mates Q1811)                  | 100 | 100 | 0.179     |
|  | EP7597   | Post 40 x 40 Horizon                              | 159 | 159 | 1.391     |
|  | EP2977   | Square Hollow 40 x 40 x 3.55                      | 159 | 159 | 1.397     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Balustrade Systems continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                          | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|------------------------------------------------------|-----|-----|-----------|
|    | EQ4523   | Glazed Square Post Bead 30 x 28 - Mates Q4522        | 178 | 100 | 0.543     |
|    | EQ4527   | Handrail Glazed 60 Dia - Mates Q4530                 | 278 | 165 | 1.193     |
|    | EQ4623   | Channel Top/Bottom Rail - Mates Q4525, (6) (9) Q4537 | 247 | 122 | 0.651     |
|    | EQ5108   | Handrail Glazed Oval 70 x 29 - Mates Q4530           | 249 | 138 | 1.065     |
|    | EQ4530   | Infill Flat - Mates Q4522 (5) (7), Q5108             | 100 | 100 | 0.167     |
|    | EQ4526   | Infill Flat 54.1 x 5.9 - Mates Q4623                 | 131 | 100 | 0.251     |
|    | EN6559   | Handrail Cap 50 x 33.5 (Mates P0142, N6460)          | 208 | 110 | 0.502     |
|    | EP2980   | Handrail Cap Round 60 x 50 (Mates with) Horizon      | 315 | 142 | 0.716     |
|   | EQ1815   | Glazing Bead 9.3 x 15 (Mates EQ1814)                 | 100 | 100 | 0.123     |
|  | EP1633   | Glazed Round Post 3 Way 50 Dia (Mates P1634)         | 314 | 100 | 1.598     |
|  | EP1634   | Infill Curved 18.53 x 9.33 (Mates P1633)             | 100 | 100 | 0.160     |
|  | EP13700  | Handrail Glazed Oval 70 x 30 x 1.8                   | 256 | 171 | 1.028     |
|  | EP13681  | Handrail Oval 70 x 30 x 1.8                          | 163 | 163 | 0.768     |
|  | EA3569   | Glazed Rect Post 65 x 42                             | 301 | 200 | 2.665     |
|  | EP8082   | Baluster Square 19 x 19 x 1.2 Horizon                | 100 | 100 | 0.327     |
|  | EP2976   | Baluster Square 16 x 16 x 1.5 Horizon                | 100 | 100 | 0.226     |
|  | EAL10245 | Balustrade Channel Top/Bottom Rail 38 x 25           | 184 | 184 | 0.369     |
|  | EP2978   | Infill 43.35 x 4.35 Horizon                          | 104 | 100 | 0.173     |
|  | EP2981   | Glazing Channel 46.5 x 25.4 (Mates with) Horizon     | 284 | 100 | 0.597     |
|  | EP2982   | Glazing Adaptor 43.9 x 25.4 (Mates P1285) Horizon    | 212 | 100 | 0.400     |
|  | EP2984   | Handrail Cap 57 x 34 Horizon                         | 234 | 118 | 0.504     |
|  | EP2985   | Bead 15.33 x 15 (Mates P2982) Horizon                | 102 | 100 | 0.147     |
|  | EP2986   | Welded Channel 46.5 x 25.4 (Mates with) Horizon      | 238 | 100 | 0.502     |
|  | E12005   | Handrail Cap 71.4 x 25.4 (Mates E16663)              | 250 | 142 | 0.562     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Balustrade Systems continued

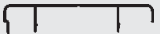
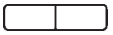
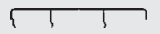
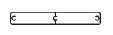
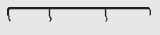
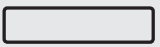
| PROFILE                                                                             | SECTION | DESCRIPTION                                           | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-------------------------------------------------------|-----|-----|-----------|
|    | EP3177  | Handrail Cap 62.45 x 39.3                             | 300 | 139 | 0.661     |
|    | EP3371  | RHS 46.5 x 25.4 RAD                                   | 142 | 142 | 0.593     |
|    | EN9548  | Handrail Cap 69 x 50.5 (Mates N9524, N9549)           | 363 | 174 | 0.731     |
|    | EP8129  | Infill Flat 18.4 x 18.45                              | 101 | 100 | 0.254     |
|    | E12002  | Baluster Square 12.7 x 12.7 x 1.6                     | 100 | 100 | 0.231     |
|    | EQ3638  | Handrail Glazed 60 Dia (Mates L5564)                  | 246 | 161 | 1.134     |
|    | EA1636  | Handrail 55 x 32                                      | 396 | 396 | 1.006     |
|   | EP0202  | Handrail Cap Colonial 61 x 50                         | 314 | 176 | 1.054     |
|  | EN9077  | Handrail Colonial 74 x 60                             | 255 | 255 | 1.207     |
|  | EU9102  | Handrail Sleeve 76 x 60 (Mates EU9103)                | 267 | 267 | 1.265     |
|  | EU9103  | Handrail Colonial 82 x 66 (Mates EU9102)              | 286 | 286 | 1.326     |
|  | EP6367  | Glazed Round Post 1 Way 50 Dia (Mates P1634)          | 206 | 136 | 1.492     |
|  | EQ1808  | Handrail Cap Round 63.5 x 57 (Mates Q1811, Q1813)     | 379 | 162 | 0.888     |
|  | EQ6467  | Handrail Sleeve 76.6 x 46.6 (Mates EQ6395)            | 198 | 198 | 0.930     |
|  | EQ1813  | Channel Glazing 38.1 x 25.4 (Mates Q1808)             | 248 | 100 | 0.534     |
|  | EQ1811  | Channel Top/Bottom Rail 38.1 x 25.4                   | 183 | 100 | 0.385     |
|  | EW4398  | Baluster Oval 70 x 30                                 | 161 | 161 | 0.837     |
|  | EP8026  | Baluster 50 x 10 Horizon                              | 118 | 118 | 0.529     |
|  | EP8000  | Baluster 16 Dia Horizon                               | 100 | 100 | 0.262     |
|  | EP7986  | Handrail Elliptical Cap 77 x 34 (Horizon)             | 296 | 142 | 0.618     |
|  | EQ6484  | Glazed Square Post 2 Way/180deg 50 x 50 (Mates P8129) | 298 | 160 | 1.816     |
|  | E16946  | Post Recessed 50 x 50                                 | 228 | 228 | 1.347     |

## Fencing and Gates

| PROFILE                                                                             | SECTION | DESCRIPTION                                          | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------------------------|-----|-----|-----------|
|    | EQ3063  | Baluster Round Fluted 15.8 Dia                       | 100 | 100 | 0.239     |
|    | EQ3064  | Post 34 x 34                                         | 134 | 134 | 0.910     |
|    | EQ3062  | Rail Infill /889 Exc Infill                          | 109 | 100 | 0.210     |
|    | EQ3061  | Channel Top/Bottom Rail 40 x 20 (Mates Q3062)        | 164 | 100 | 0.348     |
|    | EQ6395  | Handrail Oval 70 x 40 (Mates EQ6467)                 | 176 | 176 | 0.830     |
|  | EQ4635  | Handrail Cap 66 x 50 - Mates Q4623                   | 327 | 160 | 0.852     |
|  | EQ4537  | Handrail Cap Round 71.5 Dia - Mates Q4623            | 348 | 164 | 0.832     |
|  | EQ4529  | Handrail Cap 80 x 43 - Mates Q4623                   | 323 | 155 | 0.645     |
|  | EQ4623  | Channel Top/Bottom Rail - Mates Q4525, (6) (9) Q4537 | 247 | 122 | 0.651     |
|  | EQ4526  | Infill Flat 54.1 x 5.9 - Mates Q4623                 | 131 | 100 | 0.251     |
|  | E53064  | Bottom Gate Track 100 x 25                           | 277 | 277 | 1.598     |
|  | EP8082  | Baluster Square 19 x 19 x 1.2 Horizon                | 100 | 100 | 0.327     |
|  | EP2976  | Baluster Square 16 x 16 x 1.5 Horizon                | 100 | 100 | 0.226     |
|  | E36245  | Fence Rail 31.8 x 25.4                               | 183 | 100 | 0.453     |
|  | EQ6210  | Gate Track 60 x 18                                   | 147 | 100 | 1.035     |
|  | EP6658  | Gate Frame L 40 x 40 x 2                             | 159 | 159 | 0.820     |
|  | EP6659  | Gate Frame T 40 x 40                                 | 158 | 158 | 1.036     |
|  | EP12070 | RHS 65 x 10 x 1.2 RAD Partitioned                    | 145 | 145 | 0.482     |

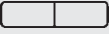
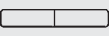
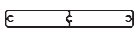
Sizes are indicative only – refer to the drawings for accurate sizes

## Fencing and Gates continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------|-----|-----|-----------|
|    | EP13245  | RHS 65 x 16 RAD Two Part Self Mating       | 209 | 100 | 0.334     |
|    | EP12034  | RHS 65 x 16 x 1.20 RAD Partitioned         | 157 | 157 | 0.540     |
|    | EP12951  | RHS 65 x 16 x 1.40 RAD Partitioned         | 157 | 157 | 0.625     |
|    | EP12952  | RHS 90 x 16 x 1.40 RAD Partitioned         | 207 | 207 | 0.814     |
|    | EP13246  | RHS 100 x 16 RAD Two Part Self Mating      | 291 | 116 | 0.514     |
|    | EP12072  | Baluster Slat 125 x 16.00 RAD              | 277 | 277 | 1.211     |
|   | EP14489  | RHS 150 x 16 RAD Two Part Self Mating Slat | 383 | 255 | 1.021     |
|  | EP11381  | RHS 24.5 x 10.5 x 1.5                      | 100 | 100 | 0.259     |
|  | EME30171 | RHS 30 x 8 x 1.2                           | 100 | 100 | 0.230     |
|  | EP12071  | RHS 35 x 10 x 1.2 RAD                      | 100 | 100 | 0.263     |
|  | EP7822   | RHS 38 x 16 x 1.6 RAD                      | 106 | 106 | 0.437     |
|  | EP12950  | RHS 40 x 16 x 1.4 RAD                      | 107 | 107 | 0.387     |
|  | EQ6823   | RHS 65 x 16 x 1.2 RAD                      | 157 | 157 | 0.496     |
|  | EG8354   | Square Hollow 19.02 x 1.57 x 1.57 RAD      | 100 | 100 | 0.290     |
|  | EQ6467   | Handrail Sleeve 76.6 x 46.6 (Mates EQ6395) | 198 | 198 | 0.930     |
|  | EME50386 | Lamp Post Fluted 50 x 1.3                  | 155 | 155 | 0.531     |
|  | EQ6948   | RHS 65 x 16 x 1.4 RAD                      | 156 | 156 | 0.576     |
|  | EP8000   | Baluster 16 Dia Horizon                    | 100 | 100 | 0.262     |

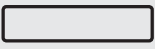


## Privacy Screens

| PROFILE                                                                             | SECTION  | DESCRIPTION                                   | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------------|-----|-----|-----------|
|    | EQ4078   | Baluster 38 x 15.8 Horizon                    | 106 | 106 | 0.410     |
|    | EQ3061   | Channel Top/Bottom Rail 40 x 20 (Mates Q3062) | 164 | 100 | 0.348     |
|    | EQ4094   | Baluster 75 x 15.8 Horizon                    | 180 | 180 | 0.788     |
|    | EP2976   | Baluster Square 16 x 16 x 1.5 Horizon         | 100 | 100 | 0.226     |
|    | EP12070  | RHS 65 x 10 x 1.2 RAD Partitioned             | 145 | 145 | 0.482     |
|  | EP13245  | RHS 65 x 16 RAD Two Part Self Mating          | 209 | 100 | 0.334     |
|  | EP12034  | RHS 65 x 16 x 1.20 RAD Partitioned            | 157 | 157 | 0.540     |
|  | EP12951  | RHS 65 x 16 x 1.40 RAD Partitioned            | 157 | 157 | 0.625     |
|  | EP12952  | RHS 90 x 16 x 1.40 RAD Partitioned            | 207 | 207 | 0.814     |
|  | EP13246  | RHS 100 x 16 RAD Two Part Self Mating         | 291 | 116 | 0.514     |
|  | EP12022  | RHS 100 x 16 x 1.20/1.40 RAD Partitioned      | 227 | 227 | 0.780     |
|  | EP12072  | Baluster Slot 125 x 16 RAD                    | 277 | 277 | 1.211     |
|  | EP14489  | RHS 150 x 16 RAD Two Part Self Mating Slot    | 383 | 255 | 1.021     |
|  | EP11381  | RHS 24.5 x 10.5 x 1.5                         | 100 | 100 | 0.259     |
|  | EME30171 | RHS 30.0 x 8.0 x 1.2                          | 100 | 100 | 0.230     |
|  | EP12071  | RHS 35 x 10 x 1.20 RAD                        | 100 | 100 | 0.263     |
|  | EP7822   | RHS 38 x 16 x 1.6 RAD                         | 106 | 106 | 0.437     |
|  | EP12950  | RHS 40 x 16 x 1.40 RAD                        | 107 | 107 | 0.387     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Privacy Screens continued

| PROFILE                                                                             | SECTION | DESCRIPTION                                        | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|----------------------------------------------------|-----|-----|-----------|
|    | EQ6823  | RHS 65 x 16 x 1.2 RAD                              | 157 | 157 | 0.496     |
|    | EP8573  | Lattice End Support Bracket 14.5 x 14.0            | 100 | 100 | 0.175     |
|    | EP8657  | Lattice End Support Rail 35 x 34.5 x 2.5           | 207 | 207 | 0.713     |
|    | EQ6895  | Lattice Frame 35 x 25 x 1.2 – 19mm Gap             | 276 | 188 | 0.490     |
|    | EQ7010  | Lattice Frame 40 x 25 x 1.6 – 20mm Gap             | 277 | 185 | 0.606     |
|    | EP8107  | Lattice Frame 50 x 30 x 1.6 – 20mm Gap             | 366 | 167 | 0.813     |
|   | EQ6890  | Lattice Slat 25 x 9.5 x 1.2                        | 100 | 100 | 0.194     |
|  | EQ6891  | Lattice Slat 34 x 9.5 x 1.2                        | 100 | 100 | 0.252     |
|  | EQ6896  | Lattice Slat 34 x 9.5 x 1.2 Triport                | 100 | 100 | 0.310     |
|  | EQ7015  | Lattice Slat 60 x 10 x 1.5 Triport                 | 131 | 131 | 0.571     |
|  | EP8962  | Lattice Mid Vertical Support Cover 14 x 6.0        | 100 | 100 | 0.104     |
|  | EP8961  | Lattice Mid Vertical Support 45 x 8.0              | 117 | 117 | 0.378     |
|  | EP10719 | 50mm 2 way Post 180 Deg 90 x 50 x 2.0 Gap 16.5     | 347 | 347 | 1.422     |
|  | EP10720 | 50mm 1 way Post 70 x 50 x 2.0 Gap 16.5             | 268 | 268 | 1.206     |
|  | EP10721 | 50mm 2 way Corner Post 90 Deg 70 x 70 x 2 Gap 16.5 | 347 | 347 | 1.422     |
|  | EP8026  | Baluster 50x10 Horizon                             | 118 | 118 | 0.529     |
|  | EQ6948  | RHS 65 x 16 x 1.4 RAD                              | 156 | 156 | 0.576     |
|  | EP8000  | Baluster 16 Dia Horizon                            | 100 | 100 | 0.262     |
|  | EP14430 | Lattice Slat 70 x 10 x 1.4                         | 151 | 151 | 0.583     |

## Glazed Fencing

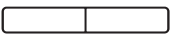
| PROFILE                                                                             | SECTION   | DESCRIPTION                                       | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|-----------|---------------------------------------------------|-----|-----|-----------|
|    | EP8659    | Glazed Slimline Post 1 Way 50 x 25 (Mates P8129)  | 205 | 100 | 1.086     |
|    | EP8130    | Glazed Square Post 1 Way 50 x 50 (Mates P8129)    | 248 | 181 | 1.690     |
|    | EQ4521    | Post - Internal Screw Flutes 50.8 x 50.8          | 192 | 192 | 2.095     |
|    | EQ4528    | Baluster Square 19.04 x 19.04                     | 100 | 100 | 0.324     |
|    | EAL23502  | Infill Round 18 x 9.5                             | 100 | 100 | 0.178     |
|  | EAL23419  | Balustrade Insert clip 19.65 x 18.0               | 107 | 100 | 0.187     |
|  | EP0189    | Glazed Round Post 3 Way 50 Dia (Mates P0191)      | 257 | 119 | 1.453     |
|  | EAL23503  | Glazed Half Round Post HD 1 Way 50x23             | 212 | 100 | 1.317     |
|  | EAL23504  | Glazed Round Post HD 2 Way 50 Dia (Mates AL23502) | 291 | 117 | 2.527     |
|  | EALH23501 | Glazed Round Post HD 2 Way 50 Dia (Mates AL23502) | 223 | 120 | 2.520     |
|  | E52813    | Handrail Glazed 60mm Dia (Mates E10328)           | 268 | 169 | 1.207     |
|  | EQ6310    | Handrail Glazed Oval 70 x 40 (Mates EL5564)       | 232 | 150 | 1.082     |
|  | EQ6395    | Handrail Oval 70 x 40 (Mates EQ6467)              | 176 | 176 | 0.830     |
|  | EQ4522    | Glazed Square Post 2 Way 50.8 - Mates Q4523       | 344 | 111 | 1.801     |
|  | EQ4635    | Handrail Cap 66 x 50 - Mates Q4623                | 327 | 160 | 0.852     |
|  | EQ4537    | Handrail Cap Round 71.5 Dia - Mates Q4623         | 348 | 164 | 0.832     |
|  | EQ4529    | Handrail Cap 80 x 43 - Mates Q4623                | 323 | 155 | 0.645     |
|  | EQ4525    | Glazing Adaptor 54 x 29 Mates Q4530, Q4623        | 261 | 100 | 0.626     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Glazed Fencing continued

| PROFILE                                                                             | SECTION | DESCRIPTION                                           | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|-------------------------------------------------------|-----|-----|-----------|
|    | EQ4523  | Glazed Square Post Bead 30 x 28 - Mates Q4522         | 178 | 100 | 0543      |
|    | EQ4623  | Channel Top/Bottom Rail - Mates Q4525, (6) (9) Q4537  | 247 | 122 | 0651      |
|    | EQ4527  | Handrail Glazed 60 Dia - Mates Q4530                  | 278 | 165 | 1.193     |
|    | EQ5108  | Handrail Glazed Oval 70 x 29 - Mates Q4530            | 249 | 138 | 1.065     |
|    | EQ4530  | Infill Flat - Mates Q4522 (5) (7), Q5108              | 100 | 100 | 0.167     |
|    | EQ4526  | Infill Flat 54.1 x 5.9 - Mates Q4623                  | 131 | 100 | 0.251     |
|   | EP1634  | Infill Curved 18.53 x 9.33 (Mates P1633)              | 100 | 100 | 0.160     |
|  | EP1633  | Glazed Round Post 3 Way 50 Dia (Mates P1634)          | 314 | 100 | 1.598     |
|  | EP8129  | Infill Flat 18.4 x 18.45                              | 101 | 100 | 0.254     |
|  | EQ3638  | Handrail Glazed 60 Dia (Mates L5564)                  | 246 | 161 | 1.134     |
|  | EP6367  | Glazed Round Post 1 Way 50 Dia (Mates P1634)          | 206 | 136 | 1.492     |
|  | EW4398  | Baluster Oval 70 x 30                                 | 161 | 161 | 0.837     |
|  | EL5564  | Flat Infill                                           | 116 | 100 | 0.235     |
|  | EQ6484  | Glazed Square Post 2 Way/180deg 50 x 50 (Mates P8129) | 298 | 160 | 1.816     |

## Quiklok Slat Screen System

| PROFILE                                                                             | SECTION | DESCRIPTION                              | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------------|-----|-----|-----------|
|    | EP15692 | Quiklok Fencing/Screen Adaptor 30 x 35   | 220 | 147 | 0.583     |
|    | EP12022 | RHS 100 x 16 x 1.20/1.40 RAD Partitioned | 227 | 227 | 0.780     |
|    | EP7822  | RHS 38 x 16 x 1.6 RAD                    | 106 | 106 | 0.437     |
|    | EQ6823  | RHS 65 x 16 x 1.2 RAD                    | 157 | 157 | 0.496     |
|   | EP12031 | Square Hollow 50 x 2 RAD                 | 190 | 190 | 0.990     |
|  | EPD0262 | Louvre Sun Control Blade 67 x 15         | 144 | 144 | 0.545     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Patio/Carport

| PROFILE                                                                             | SECTION | DESCRIPTION                                    | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|------------------------------------------------|-----|-----|-----------|
|    | EL5367  | Patio Beam Connect 50.8 x 50 (987-211)         | 305 | 305 | 2.756     |
|    | EL9025  | Patio Gutter 135 x 102                         | 739 | 365 | 1.847     |
|    | E19351  | Patio Screen Frame 62.5 x 44                   | 241 | 241 | 0.979     |
|    | E16593  | Post Spigot 46 x 45                            | 259 | 259 | 1.486     |
|   | EP2623  | Patio Reinforcing Plate 62.5 x 25.5            | 223 | 115 | 0.821     |
|  | EP0145  | Post Spigot / Beam Connector 44.3 x 44.3       | 248 | 248 | 1.889     |
|  | E73243  | Patio H Section 50 x 38                        | 266 | 100 | 0.702     |
|  | EL6731  | Patex Rail 44.45 x 22.23                       | 253 | 109 | 0.506     |
|  | EN1724  | Patex Top Channel 44.45 x 40 (562-110)         | 277 | 127 | 0.440     |
|  | EP4900  | Screen Enclosure Wall & Bottom Channel 50 x 25 | 247 | 108 | 0.497     |

## Purlins

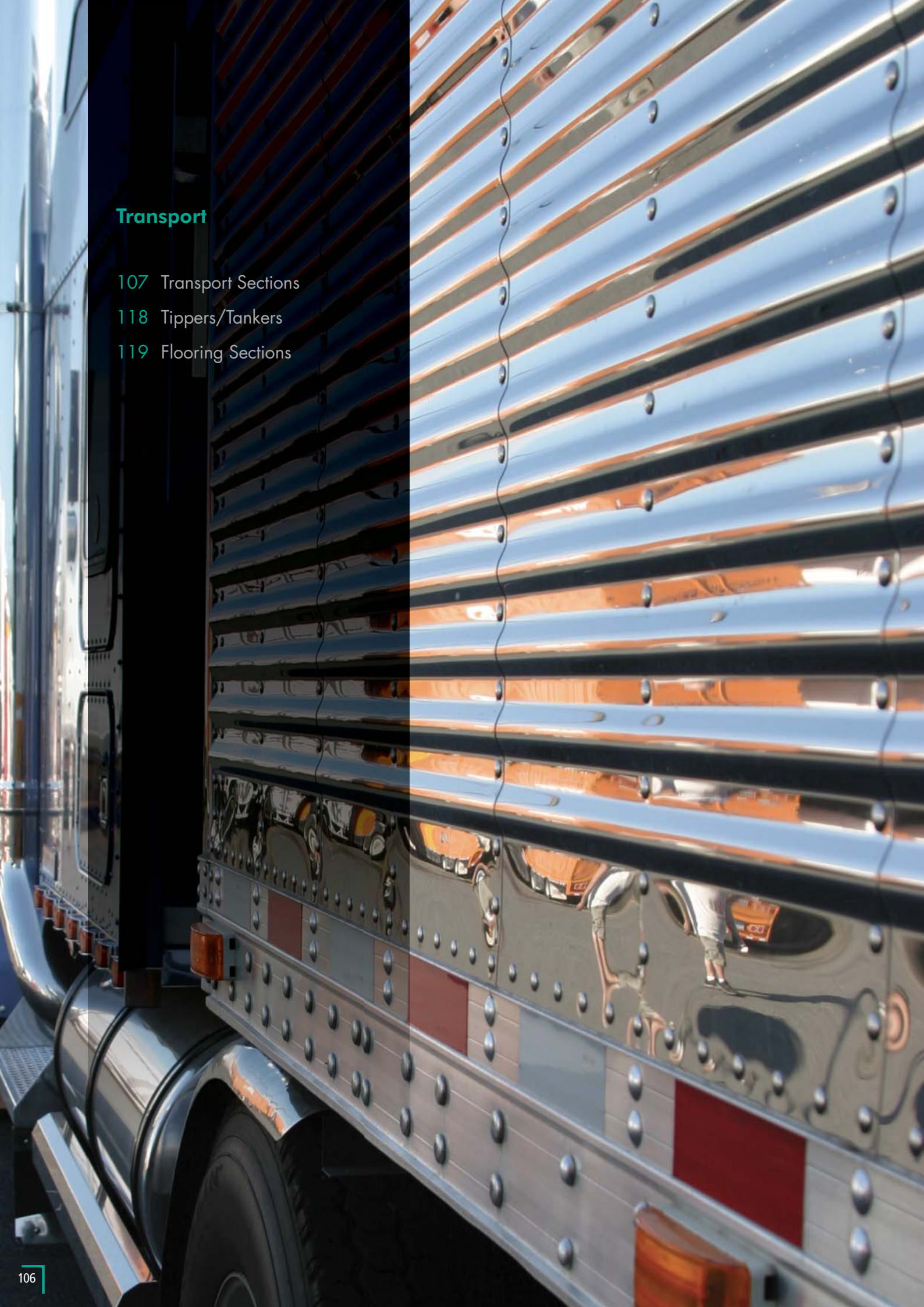
| PROFILE                                                                             | SECTION | DESCRIPTION                           | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|---------------------------------------|------|------|-----------|
|    | EQ1559  | Purlin C10030 100 x 50 x 3 RAD        | 453  | 453  | 1.835     |
|    | EG6980  | Purlin C15025 152.4 x 38.1 x 2.36 RAD | 541  | 280  | 1.820     |
|    | EN2207  | Purlin C20025 200 x 80 x 2.5 RAD      | 796  | 796  | 2.688     |
|    | EN2370  | Purlin C25025 250 x 80 x 2.5 RAD      | 896  | 896  | 3.026     |
|    | EP13502 | Purlin Channel 250 x 90 x 3 RAD       | 953  | 953  | 3.860     |
|   | EN2371  | Purlin C25030 250 x 90 x 3.5 RAD      | 951  | 951  | 4.087     |
|  | EN2372  | Purlin C30035 300 x 100 x 3.5 RAD     | 1110 | 1110 | 5.243     |
|  | EN2907  | Purlin C30040 300 x 106 x 4 RAD       | 1127 | 1127 | 6.051     |
|  | EP11734 | Purlin C30035DL 332 x 100 x 3.5 RAD   | 1109 | 1109 | 5.240     |
|  | EP11736 | Purlin C30040DL 332 x 100 x 4 RAD     | 1127 | 1127 | 6.051     |
|  | EP8699  | Purlin Fascia F22080 242 x 80         | 986  | 986  | 3.974     |
|  | EN2373  | Purlin Z15020 150 x 70 x 2 RAD        | 669  | 669  | 1.808     |
|  | EQ1560  | Purlin Z17540 174 x 70 x 30 x 4 RAD   | 723  | 723  | 3.918     |
|  | EN2421  | Purlin Z17525 175 x 75 x 70 x 2.5 RAD | 718  | 718  | 2.425     |
|  | EN2374  | Purlin Z20025 200 x 86 x 2.5 RAD      | 828  | 828  | 2.797     |
|  | EN2375  | Purlin Z25030 200 x 90 x 3 RAD        | 987  | 987  | 3.917     |
|  | E25813  | Purlin Z25530 255 x 100/91 x 3 RAD    | 963  | 963  | 3.880     |
|  | EL7570  | Purlin Z29055 287.5 x 95 RAD          | 937  | 937  | 7.909     |
|  | E25811  | Purlin Z35098 350 x 98 x 89 x 3.5 RAD | 1148 | 1148 | 5.401     |
|  | EP9903  | Purlin Z30040 334 x 186 x 34.5 RAD    | 1058 | 1058 | 5.679     |
|  | EP9902  | Purlin Z30040 334 x 196 x 32.5 RAD    | 1074 | 1074 | 5.765     |

Sizes are indicative only – refer to the drawings for accurate sizes

## Qubelok Extrusion

| PROFILE                                                                           | SECTION | A mm  | B mm | T1 mm | AP  | PP  | MASS kg/m |
|-----------------------------------------------------------------------------------|---------|-------|------|-------|-----|-----|-----------|
|  | EN9673  | 25.40 |      | 1.22  | 143 | 114 | 0.392     |
|  | ET7200  | 25.40 |      | 1.22  | 114 | 114 | 0.346     |
|  | EH4487  | 25.40 |      | 1.22  | 100 | 100 | 0.317     |
|  | EL6492  | 25.40 |      | 1.22  | 126 | 126 | 0.371     |





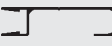
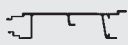
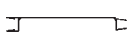
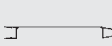
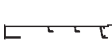
## Transport

107 Transport Sections

118 Tippers/Tankers

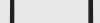
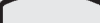
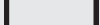
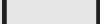
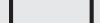
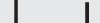
119 Flooring Sections

## Transport Sections

| PROFILE                                                                             | SECTION  | DESCRIPTION                       | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------|------|------|-----------|
|    | EP8105   | Flooring Airflow 255 x 43         | 1113 | 1113 | 3.858     |
|    | E36174   | Running Board 150 x 98            | 627  | 100  | 2.316     |
|    | EB1225   | Headboard F Section 100 x 35      | 328  | 328  | 1.812     |
|    | EK6775   | Headboard F Section 101.6 x 33.32 | 320  | 320  | 1.917     |
|   | E16054   | Headboard F Section 160 x 44      | 448  | 448  | 2.114     |
|  | E25558   | Headboard 254 x 30                | 844  | 142  | 2.419     |
|  | EH6179   | Drop Side Cap 24.89 x 24.89       | 145  | 145  | 0.527     |
|  | EQ2027   | Drop Side Infill 47.34 x 25.34    | 190  | 190  | 0.527     |
|  | EAL22938 | Drop Side Extension 100.1 x 25    | 368  | 145  | 1.149     |
|  | EH8101   | Drop Side Extension 101.6 x 24.89 | 374  | 374  | 1.242     |
|  | E17811   | Drop Side Extension 121.9 x 28    | 456  | 456  | 1.326     |
|  | EAL22952 | Drop Side 223.43 x 25             | 617  | 445  | 1.788     |
|  | EB1706   | Drop Side 223.74 x 24.9           | 621  | 621  | 1.811     |
|  | EAL10711 | Drop Side 225 x 25                | 624  | 624  | 1.864     |
|  | EB1729   | Drop Side 225 x 25                | 625  | 625  | 1.857     |
|  | E25158   | Drop Side 235 x 30                | 677  | 677  | 2.371     |

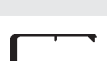
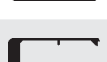
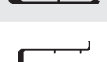
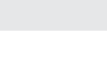
Sizes are indicative only – refer to die drawings for accurate sizes

## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------|-----|-----|-----------|
|    | EH6157   | Drop Side 225.55 x 24.89                   | 627 | 627 | 1.906     |
|    | EAL22932 | Drop Side 250 x 30                         | 768 | 384 | 2.613     |
|    | EL7934   | Drop Side 250 x 30                         | 762 | 762 | 2.598     |
|    | E73211   | Bullbar Wrap 50 x 5.0                      | 107 | 100 | 0.570     |
|    | EME8949  | Bullbar Wrap 50 x 6.0                      | 109 | 109 | 0.546     |
|    | E73113   | Bullbar Wrap 80 x 6.0                      | 171 | 171 | 1.388     |
|    | EAL7697  | Bullbar Wrap 80 x 8.0                      | 171 | 171 | 1.367     |
|  | E32995   | Bullbar Spotlight Bracket 88 x 36          | 228 | 228 | 2.932     |
|  | EP15247  | Bullbar Channel 100 x 80 x 6 RAD           | 499 | 499 | 3.960     |
|  | E25424   | Bullbar Channel 127 x 75 RAD               | 527 | 527 | 3.916     |
|  | EP13667  | Bullbar Channel 126.5 x 60.5 x 5.6 RAD     | 435 | 290 | 3.081     |
|  | EAL12172 | Bullbar Channel 127 x 80 x 6.0             | 553 | 553 | 4.066     |
|  | EME6176  | Bullbar Channel 127.1 x 74.5 x 6.35 RAD    | 526 | 526 | 4.295     |
|  | E35781   | Bullbar Channel 128 x 75 x 6.0 RAD         | 527 | 268 | 3.969     |
|  | EQ1364   | Bullbar Channel 128 x 75 x 6.0 RAD         | 533 | 282 | 3.947     |
|  | E25804   | Bullbar Channel 145 x 80 x 6.0 RAD         | 585 | 585 | 4.509     |
|  | E26946   | Bullbar Channel 148 x 100 x 6.0 RAD        | 675 | 343 | 5.030     |
|  | EP4218   | Bullbar Channel 150 x 75 x 6.0 RAD         | 575 | 575 | 4.708     |
|  | EAL7643  | Bullbar Channel 125 x 100/70 x 6.0 RAD     | 567 | 567 | 4.334     |
|  | EAL7862  | Bullbar Channel 175 x 100/70 x 8.0/6.0 RAD | 688 | 688 | 5.187     |

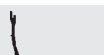
Sizes are indicative only – refer to die drawings for accurate sizes

## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                                 | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------------------|------|------|-----------|
|    | E05852   | Channel Lipped 305 x 152.5 RAD              | 1172 | 782  | 15.663    |
|    | EQ5926   | TLD Bus Window Sill 57.8 x 34.2             | 272  | 105  | 0.505     |
|    | EH9689   | Caravan Trim 17.45 x 11.1                   | 100  | 100  | 0.117     |
|    | EU8730   | Caravan Trim 31.75 x 6.35                   | 100  | 100  | 0.174     |
|    | EAL10513 | Caravan Edging 32 x 16.2                    | 111  | 100  | 0.207     |
|    | EP8303   | Caravan Roof Corner 83.86 x 83.86           | 333  | 329  | 1.155     |
|    | EP11891  | Flooring - Centre Board 92 x 34.5 x 3       | 398  | 398  | 1.911     |
|  | E05578   | Chassis Runner 152.4 x 152.4                | 882  | 882  | 8.529     |
|  | EP1651   | Chassis Runner 230 x 160                    | 764  | 764  | 15.579    |
|  | EP10497  | Chassis Runner 232.6 x 152.4                | 804  | 603  | 13.881    |
|  | EN5991   | Chassis Runner Extension 165 x 130 A Type   | 909  | 909  | 8.155     |
|  | EN5992   | Chassis Runner Top 200 x 60 A Type          | 683  | 683  | 7.284     |
|  | EN5993   | Chassis Runner 200 x 110 A Type             | 961  | 961  | 11.678    |
|  | E25251   | Chassis Runner Extension 181 x 101.6 B Type | 943  | 445  | 9.190     |
|  | E25541   | Chassis Runner Extension 192 x 101.6 B Type | 970  | 970  | 12.190    |
|  | E05569   | Chassis Runner 232.6 x 152.4 B Type         | 1245 | 1245 | 11.902    |
|  | EK7146   | Chassis Runner Top 203.2 x 57.15 C Type     | 670  | 670  | 7.000     |
|  | EK7148   | Chassis Runner 203.2 x 111.76 C Type        | 982  | 982  | 11.648    |
|  | EN3154   | Chassis Runner Base 100 x 41.5 D Type       | 295  | 295  | 7.328     |
|  | EN3153   | Chassis Runner Side 384 x 75.8 D Type       | 1049 | 1049 | 8.309     |

Sizes are indicative only – refer to die drawings for accurate sizes

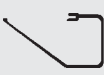
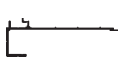
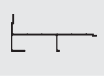
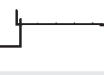
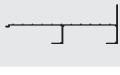
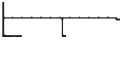
## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                               | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------------|-----|-----|-----------|
|    | EP11583  | Transport Coaming 216 x 114 x 100.4 x 100 | 908 | 368 | 7.332     |
|    | EP10531  | Coaming Bottom 273 x 178                  | 821 | 112 | 8.605     |
|    | EN9375   | Coaming Bottom 294 x 230                  | 976 | 976 | 10.448    |
|    | EAL22943 | Coaming Rear Flush 69 x 39                | 273 | 100 | 1.115     |
|    | EAL10707 | Coaming Rear 79.2 x 38                    | 275 | 275 | 1.282     |
|    | EW2156   | Coaming Rear Raised 79.2 x 38             | 276 | 276 | 1.280     |
|    | EAL22935 | Coaming Rear 1-2 Tonne 80 x 40            | 291 | 100 | 1.240     |
|   | EAL22948 | Coaming Rear 4 Tonne 101 x 39             | 337 | 118 | 1.548     |
|  | EL9366   | Coaming Rear TLD 102 x 39.6               | 343 | 343 | 1.615     |
|  | EP16036  | Coaming Side 57.5 x 32                    | 247 | 165 | 0.924     |
|  | E31782   | Coaming Side TLD 70 x 30                  | 263 | 263 | 1.123     |
|  | EAL10706 | Coaming Side 79.2 x 31                    | 281 | 281 | 1.209     |
|  | EQ2093   | Coaming Side 80 x 30.1                    | 282 | 100 | 1.208     |
|  | EL7578   | Coaming Side 80 x 31.6                    | 289 | 289 | 1.485     |
|  | EAL22936 | Coaming Side 80 x 32                      | 291 | 100 | 1.232     |
|  | E17065   | Coaming Side 93 x 32.5                    | 320 | 320 | 1.514     |
|  | EAL22939 | Coaming Side 4 Tonne 101 x 31.25          | 327 | 123 | 1.605     |
|  | EL9367   | Coaming Side TLD 102 x 31.6               | 334 | 334 | 1.610     |
|  | EAL22941 | Coaming Side 16 Tonne 138.6 x 37          | 414 | 155 | 2.497     |
|  | E05507   | Coaming Side 152.4 x 54                   | 519 | 519 | 2.755     |

Sizes are indicative only – refer to die drawings for accurate sizes



## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                             | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-----------------------------------------|------|------|-----------|
|    | EW6163   | Coaming Side Ute 65 x 42                | 273  | 273  | 1.293     |
|    | EL6404   | Coaming Top 142 x 82 Mates EL6405       | 553  | 553  | 4.693     |
|    | EL6405   | Coaming Top 169 x 83 Mates EL6404       | 613  | 613  | 5.273     |
|    | EN5987   | Coaming Top 192 x 180                   | 687  | 687  | 10.155    |
|    | E05591   | Coaming Top Tailgate 215.9 x 114.3      | 897  | 897  | 6.902     |
|    | E05550   | Coaming Top Tailgate 216 x 114          | 933  | 933  | 7.524     |
|    | EP11585  | Coaming Top 232 x 140                   | 1043 | 112  | 10.608    |
|  | EP1650   | Coaming Top Tailgate 191 x 107          | 854  | 854  | 6.737     |
|  | EW5566   | Coaming Rail                            | 1005 | 1005 | 8.508     |
|  | EP10679  | Customer Exclusive                      | 231  | 231  | 1.185     |
|  | EP11892  | Flooring - Finisher 65 x 54.5 x 3       | 223  | 223  | 0.929     |
|  | E25638   | Flooring Airflow 255 x 40               | 1066 | 1066 | 3.415     |
|  | EAL22950 | Flooring Plank Front 1 Tonne 83 x 45.1  | 308  | 111  | 0.871     |
|  | EW2155   | Flooring Plank End 90.1x63.7            | 368  | 368  | 1.067     |
|  | EB1209   | Flooring Plank End 90.1 x 63.7          | 368  | 368  | 1.067     |
|  | EME30496 | Flooring Plank Front 125 x 43           | 400  | 156  | 1.261     |
|  | EB1207   | Flooring Plank End 145.9 x 63.7         | 532  | 532  | 1.510     |
|  | E19950   | Flooring Plank End 150 x 51.5           | 420  | 420  | 1.304     |
|  | EAL22934 | Flooring Plank Front 1-2 Tonne 151 x 51 | 514  | 185  | 1.428     |
|  | EAL10708 | Flooring Plank Front 157.4 x 45.1       | 513  | 513  | 1.346     |

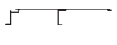
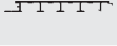
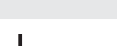
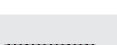
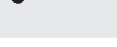
Sizes are indicative only – refer to die drawings for accurate sizes

## Transport Sections continued

| PROFILE | SECTION  | DESCRIPTION                               | AP  | PP  | MASS kg/m |
|---------|----------|-------------------------------------------|-----|-----|-----------|
|         | EAL22944 | Flooring Plank Front 4 Tonne 154.5 x 70.8 | 604 | 193 | 1.796     |
|         | EL9365   | Flooring Plank Front TLD 155 x 41         | 580 | 580 | 1.742     |
|         | EN5317   | Flooring Plank 150 x 41                   | 578 | 578 | 1.701     |
|         | EAL22940 | Flooring Plank 176.34 x 41                | 578 | 164 | 1.703     |
|         | EAL10712 | Flooring Plank 2 Tonne 181.4 x 25.4       | 550 | 550 | 1.520     |
|         | E37096   | Flooring Plank 181.4 x 32.8               | 449 | 145 | 1.231     |
|         | E31781   | Flooring Plank 184 x 32.5                 | 536 | 150 | 1.529     |
|         | EB1765   | Flooring Plank 184.4 x 30                 | 555 | 555 | 1.603     |
|         | EAL22949 | Flooring Plank 186.8 x 25.4               | 456 | 167 | 1.275     |
|         | EAL22931 | Flooring Plank 1-2 Tonne 188 x 25.5       | 498 | 160 | 1.393     |
|         | EAL10710 | Flooring Plank 190 x 25.4                 | 510 | 510 | 1.447     |
|         | EP11523  | Flooring Plank 190.16 x 25.4              | 551 | 551 | 1.595     |
|         | EP13687  | Flooring Plank 191.35 x 40.4              | 605 | 404 | 1.807     |
|         | EAL22942 | Flooring Plank 168.41 x 73                | 751 | 160 | 2.975     |
|         | EAL22933 | Flooring Plank 192.85 x 40                | 632 | 166 | 1.939     |
|         | EL7582   | Flooring Plank 195.67 x 25.4              | 551 | 551 | 1.597     |
|         | EL8524   | Flooring Plank 199.3 x 23                 | 686 | 686 | 2.506     |
|         | E26804   | Flooring Plank 207.3 x 66.85              | 624 | 202 | 2.741     |
|         | EAL8744  | Flooring Plank 208.7 x 29.5               | 567 | 185 | 1.416     |
|         | EAL11563 | Flooring Plank 208.7 x 29.5               | 596 | 185 | 1.547     |

Sizes are indicative only – refer to the drawings for accurate sizes

## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                            | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|----------------------------------------|------|------|-----------|
|    | E05784   | Flooring Plank 217.05 x 66.85          | 700  | 700  | 2.681     |
|    | EN5815   | Flooring Plank 224.5 x 32.5            | 603  | 603  | 1.763     |
|    | E05378   | Flooring Plank 225.42 x 22.22          | 708  | 708  | 2.496     |
|    | E05785   | Flooring Plank 226.45 x 66.85          | 849  | 849  | 3.752     |
|    | EL8523   | Flooring Plank 231.5 x 23.2            | 788  | 788  | 2.698     |
|    | E05723   | Flooring Plank 237.4 x 33.3            | 676  | 676  | 2.048     |
|   | E25157   | Flooring Plank 240 x 33.3              | 645  | 210  | 1.847     |
|  | E25027   | Flooring Plank 250 x 75                | 1147 | 1147 | 4.067     |
|  | E05675   | Flooring Plank 257.2 x 38.1            | 1008 | 1008 | 3.868     |
|  | EAL22951 | Floor Rear 1 Tonne 117.15 x 53.8       | 441  | 100  | 1.451     |
|  | E31785   | Flooring Plank Rear TLD 144 x 62.6     | 555  | 194  | 1.914     |
|  | E30472   | Flooring Plank Rear 145 x 93           | 676  | 676  | 2.724     |
|  | EP13761  | Flooring Plank 191.35 x 41             | 607  | 405  | 1.830     |
|  | EP14384  | Tube 33.4 x 3                          | 105  | 105  | 0.774     |
|  | EG2739   | Headboard 228.6 x 22.23                | 678  | 678  | 2.133     |
|  | E17445   | Hinge Section 48.3 x 20                | 145  | 145  | 0.926     |
|  | E17446   | Hinge Section 114 x 10                 | 274  | 274  | 1.963     |
|  | EP11890  | Flooring - Main Board 219.2 x 34.5 x 3 | 862  | 862  | 4.119     |
|  | E01686   | Drip Mould 25 x 23.45                  | 102  | 102  | 0.351     |
|  | EE3311   | Drip Mould 30 x 15                     | 103  | 103  | 0.355     |

Sizes are indicative only – refer to die drawings for accurate sizes

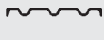
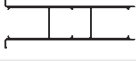
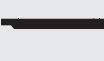


## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                          | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------|-----|-----|-----------|
|    | EG1431   | Drip Mould 30.15 x 25.58             | 120 | 120 | 0.419     |
|    | EQ5709   | Floor Trap Mould 45 x 19.83          | 168 | 100 | 0.539     |
|    | EP1056   | Rear Post 140 x 70                   | 663 | 663 | 5.969     |
|    | EP10530  | Rear Post 143 x 75                   | 428 | 428 | 8.790     |
|    | EL7667   | Rope Rail Bracket 75 x 34.5          | 272 | 272 | 1.897     |
|    | E19919   | Rope Rail Bracket 75 x 55            | 340 | 340 | 2.643     |
|   | EK8779   | Rope Rail Bracket 79.73 x 53.98      | 327 | 327 | 2.660     |
|  | EN9376   | Rope Rail Bracket 85 x 55            | 341 | 341 | 2.535     |
|  | E17067   | Rope Rail Bracket 95 x 33 RAD        | 267 | 267 | 1.615     |
|  | EN1595   | Rope Rail Bracket 114.3 x 30.6       | 392 | 392 | 2.479     |
|  | EB1216   | Rope Rail Bracket 122 x 34           | 340 | 340 | 2.431     |
|  | EK1811   | Rope Rail Bracket 146 x 50.8         | 475 | 475 | 4.220     |
|  | ET2633   | Rub Rail Single 74.59 x 23.79 x 1.57 | 214 | 214 | 0.450     |
|  | EAL2361  | Rub Rail Single 74.6 x 23.8          | 215 | 215 | 0.456     |
|  | EAL22954 | Rub Rail 76.2 x 12.7                 | 179 | 100 | 1.148     |
|  | EAL22953 | Rub Rail 101.6 x 13                  | 227 | 119 | 1.166     |
|  | EAL12312 | Rub Rail Double 109.5 x 19 x 1.5     | 310 | 310 | 0.623     |
|  | E00841   | Rub Rail Double 109.5 x 19 x 1.6     | 325 | 325 | 0.693     |
|  | EE4099   | Rub Rail Double 109.5 x 19.05        | 318 | 318 | 0.693     |
|  | EME4626  | Rub Rail Double 109.52 x 19.05       | 317 | 158 | 0.691     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Transport Sections continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                     | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|---------------------------------|------|------|-----------|
|    | EP10839  | Seating Slat 59.7 x 25          | 168  | 168  | 0.975     |
|    | EP8616   | Axle Block 56mm                 | 217  | 217  | 3.487     |
|    | EN5990   | Splash Guard 137 x 107          | 420  | 420  | 1.844     |
|    | EP1007   | Splash Guard 141.86 x 112       | 475  | 475  | 2.117     |
|    | EAL10163 | Stair Step 250 x 38             | 1008 | 1008 | 2.752     |
|    | EP10681  | Customer Exclusive              | 296  | 296  | 0.818     |
|    | EN3827   | Stock Crate Siding 90 x 11      | 225  | 225  | 0.780     |
|  | EN3828   | Stock Crate Siding 150 x 11     | 360  | 360  | 1.212     |
|  | E31635   | Stock Crate Siding 170 x 11     | 416  | 416  | 1.387     |
|  | EN4046   | Stock Crate Siding 170 x 11     | 414  | 414  | 1.396     |
|  | EN9602   | Stock Crate Siding 170 x 11     | 437  | 437  | 1.894     |
|  | EP13061  | Large Main Runner Beam Open End | 1612 | 1612 | 16.217    |
|  | EN5989   | Tailgate 95 x 40                | 281  | 281  | 3.226     |
|  | EN5988   | Tailgate Stiffener 150.96 x 70  | 471  | 471  | 2.803     |
|  | EN4828   | Tailgate 160 x 13               | 346  | 346  | 5.391     |
|  | E25687   | Tailgate 180 x 110              | 572  | 572  | 5.956     |
|  | EN4826   | Tailgate Aon Plate 210 x 50     | 503  | 503  | 5.765     |
|  | E27010   | Tailgate Bottom 105 x 85.5      | 372  | 248  | 5.260     |
|  | EW5567   | Top Rail                        | 683  | 683  | 8.556     |
|  | EP13660  | Transport Fluted Tube 32 x 3    | 112  | 112  | 0.667     |

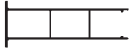
Sizes are indicative only – refer to die drawings for accurate sizes

## Transport Sections continued

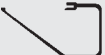
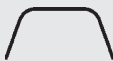
| PROFILE                                                                             | SECTION  | DESCRIPTION                                | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|--------------------------------------------|-----|-----|-----------|
|    | EW2161   | Ute Tray 40 x 25 Return Lip Channel        | 186 | 186 | 0.613     |
|    | EW4163   | COA Coach Trim                             | 185 | 100 | 0.559     |
|    | EP13723  | Transport Curtain Tarp Tube 53 x 3.8       | 190 | 165 | 1.750     |
|    | EQ2029   | Transport V Groove Angle 76 x 55 x 5.0 RAD | 260 | 260 | 1.687     |
|    | EW2153   | Ute Tray 30mm Side Coaming                 | 282 | 282 | 1.206     |
|    | EP11643  | Transport 92.11 x 45.7 x 7.8               | 272 | 272 | 2.693     |
|    | EW2165   | Ute Tray Headboard Outer Corner            | 327 | 327 | 1.812     |
|   | EP13659  | Transport Transom 100 x 40 x 3             | 416 | 416 | 1.709     |
|  | EP14340  | Transport Coaming 112.3 x 45               | 385 | 257 | 2.603     |
|  | EW2160   | Ute Tray 25mm Rope Rail Bracket            | 340 | 340 | 2.433     |
|  | EAL23905 | 141mm Front Floor Plank                    | 529 | 191 | 1.540     |
|  | EN7806   | Transport 150 x 150                        | 537 | 537 | 12.536    |
|  | EP15638  | Coaming Inner 167 x 147                    | 845 | 563 | 7.151     |
|  | EW2152   | Ute Tray 151mm Floor Plank                 | 555 | 555 | 1.604     |
|  | EW2151   | Ute Tray 177mm Floor Plank                 | 565 | 565 | 1.547     |
|  | EP13721  | Transport Light Bar 289 x 76               | 781 | 781 | 9.408     |
|  | EP11642  | Transport Main Runner 160 x 150            | 621 | 621 | 10.317    |
|  | EP13722  | Mudguard 251 x 157                         | 686 | 686 | 4.620     |
|  | EP10680  | Customer Exclusive                         | 293 | 293 | 0.975     |
|  | EA2519   | Transport Door Track 196 x 128             | 793 | 793 | 4.588     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Transport Sections continued

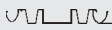
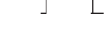
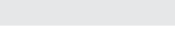
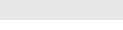
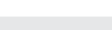
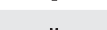
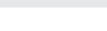
| PROFILE                                                                             | SECTION  | DESCRIPTION                   | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------|------|------|-----------|
|    | EQ2094   | TLD Rear Coaming              | 291  | 291  | 1.412     |
|    | EP12677  | Large Main Runner Beam        | 1320 | 1005 | 18.012    |
|    | EP15723  | Tipper Beam 180 x 150         | 655  | 655  | 11.415    |
|    | EA2824   | Drop Side 250mm x 40mm        | 756  | 389  | 2.113     |
|    | EAL5764  | Van Window Frame 38.0 x 34.98 | 247  | 100  | 0.611     |
|    | EAL7527  | Van Body Corner 93 x 75 RAD   | 327  | 327  | 1.259     |
|   | EAL12675 | Van Body Corner 100 x 100 x 4 | 392  | 197  | 1.760     |
|  | EW5565   | Walk Plank                    | 952  | 952  | 10.311    |

## Tippers/Tankers

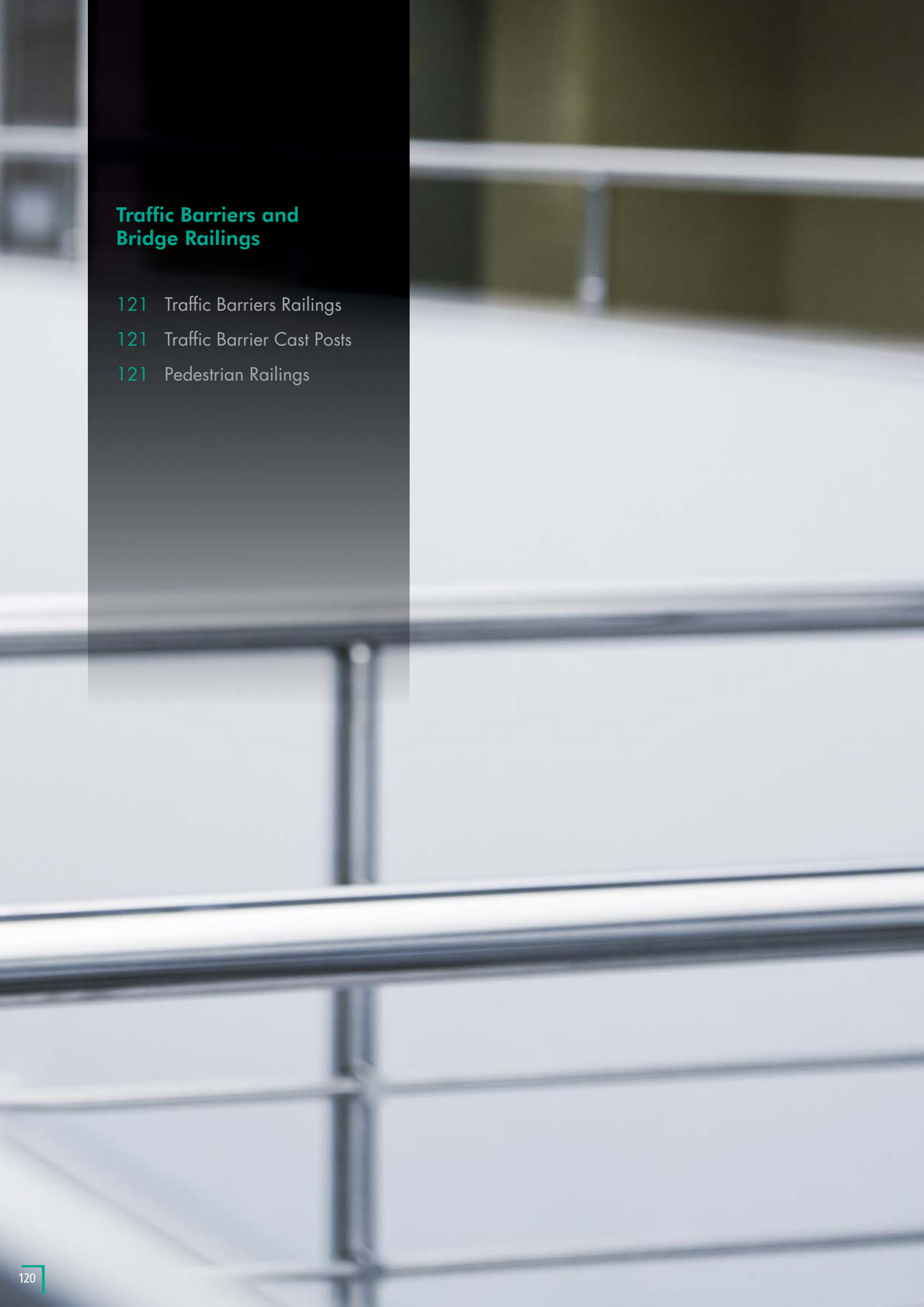
| PROFILE                                                                             | SECTION | DESCRIPTION                            | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|----------------------------------------|-----|-----|-----------|
|    | EL6405  | Coaming Top 169 x 83 Mates EL6404      | 613 | 613 | 5.273     |
|    | EN5987  | Coaming Top 192 x 180                  | 687 | 687 | 10.155    |
|    | E05591  | Coaming Top Tailgate 215.9 x 114.3     | 897 | 897 | 6.902     |
|    | E05550  | Coaming Top Tailgate 216 x 114         | 933 | 933 | 7.524     |
|   | EU1691  | Channel 254 x 115 x 12.5 RAD           | 919 | 919 | 15.127    |
|  | EH8137  | Channel Lipped 97.79 x 76.2 RAD        | 541 | 541 | 3.985     |
|  | E10174  | Channel Lipped 101.6 x 76.2 x 6.35 RAD | 563 | 305 | 4.808     |
|  | EP1056  | Rear Post 140 x 70                     | 663 | 663 | 5.969     |
|  | EP10530 | Rear Post 143 x 75                     | 428 | 428 | 8.790     |
|  | EN5990  | Splash Guard 137 x 107                 | 420 | 420 | 1.844     |
|  | EP1007  | Splash Guard 141.86 x 112              | 475 | 475 | 2.117     |
|  | EN5989  | Tailgate 95 x 40                       | 281 | 281 | 3.226     |
|  | EN5988  | Tailgate Stiffener 150.96 x 70         | 471 | 471 | 2.803     |
|  | EN4828  | Tailgate 160 x 13                      | 346 | 346 | 5.391     |
|  | E25687  | Tailgate 180 x 110                     | 572 | 572 | 5.956     |
|  | EN4826  | Tailgate Aon Plate 210 x 50            | 503 | 503 | 5.765     |
|  | E09628  | Tophat 106.2 x 76.2 RAD                | 493 | 493 | 3.090     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Flooring Sections

| PROFILE                                                                             | SECTION | DESCRIPTION                                | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|--------------------------------------------|------|------|-----------|
|    | E05979  | Flooring Airflow 293 x 40                  | 1224 | 1224 | 5.467     |
|    | EB1717  | Flooring Plank 176.02 x 19.05              | 464  | 464  | 1.522     |
|    | E25467  | Flooring Plank Marine 224.5 x 32.5         | 603  | 200  | 1.764     |
|    | E25248  | Flooring Plank Marine 242 x 45             | 701  | 701  | 2.512     |
|    | EN8093  | Flooring Plank Marine 267.73 x 37          | 771  | 771  | 2.107     |
|  | E26912  | Flooring Plank Marine 319.7 x 92           | 1092 | 1092 | 8.467     |
|  | EP8361  | Flooring Plank Ferries 325.5 x 37          | 746  | 746  | 6.667     |
|  | EP7758  | Flooring Plank Marine 331 x 32.5           | 929  | 929  | 2.457     |
|  | EP8360  | Flooring Plank Ferries 353.78 x 61.20      | 958  | 958  | 11.521    |
|  | EP2953  | Flooring Plank Ferries 360 x 41.2          | 920  | 920  | 6.277     |
|  | EP5202  | Flooring Plank Ferries 360 x 51.2          | 966  | 966  | 6.970     |
|  | EN6328  | Flooring Plank Marine 373.12 x 37          | 1008 | 1008 | 4.112     |
|  | EP11942 | Flooring Plank Marine 376.75 x 32.8 x 3.15 | 1048 | 1048 | 4.504     |
|  | E27149  | Flooring Plank Marine 415 x 40             | 1089 | 399  | 4.184     |
|  | EP5872  | Flooring Joinder 78 x 55                   | 360  | 360  | 3.537     |
|  | EP5813  | Flooring Joinder 150 x 97                  | 525  | 525  | 7.498     |
|  | EP5438  | Flooring Joinder 230 x 119                 | 712  | 712  | 13.596    |
|  | EL9436  | Flooring Plank Oyster Punt 228 x 50        | 555  | 555  | 3.437     |

Sizes are indicative only – refer to die drawings for accurate sizes

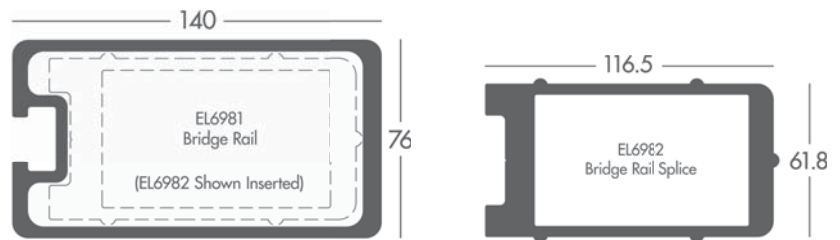
The background of the page is a blurred photograph of a bridge railing, showing horizontal bars and vertical posts. A dark, semi-transparent rectangular box is positioned on the left side of the page, containing the text.

## **Traffic Barriers and Bridge Railings**

- 121** Traffic Barriers Railings
- 121** Traffic Barrier Cast Posts
- 121** Pedestrian Railings

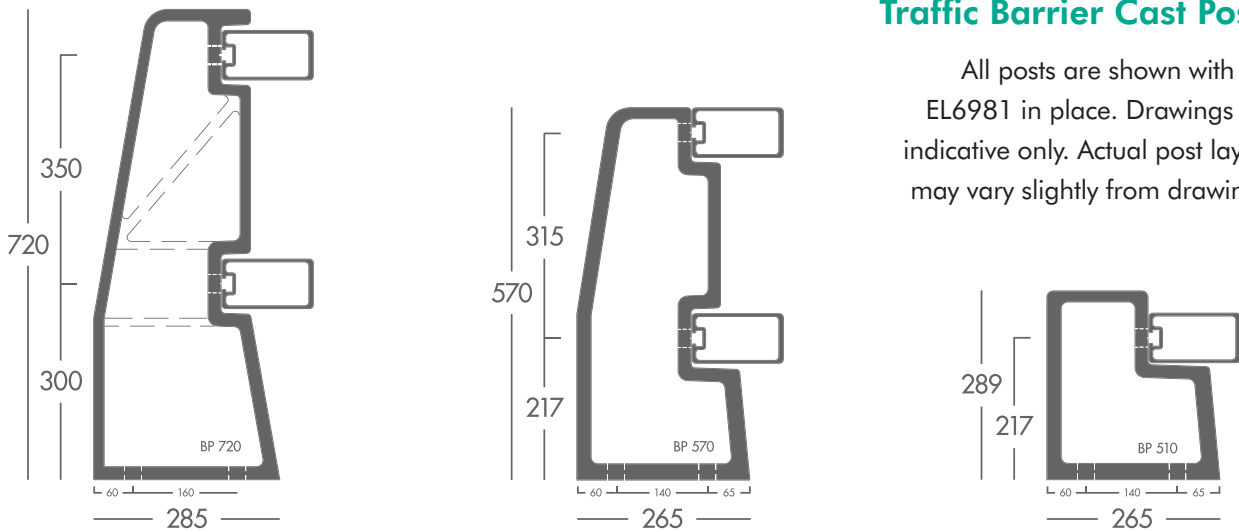


## Traffic Barrier Railings

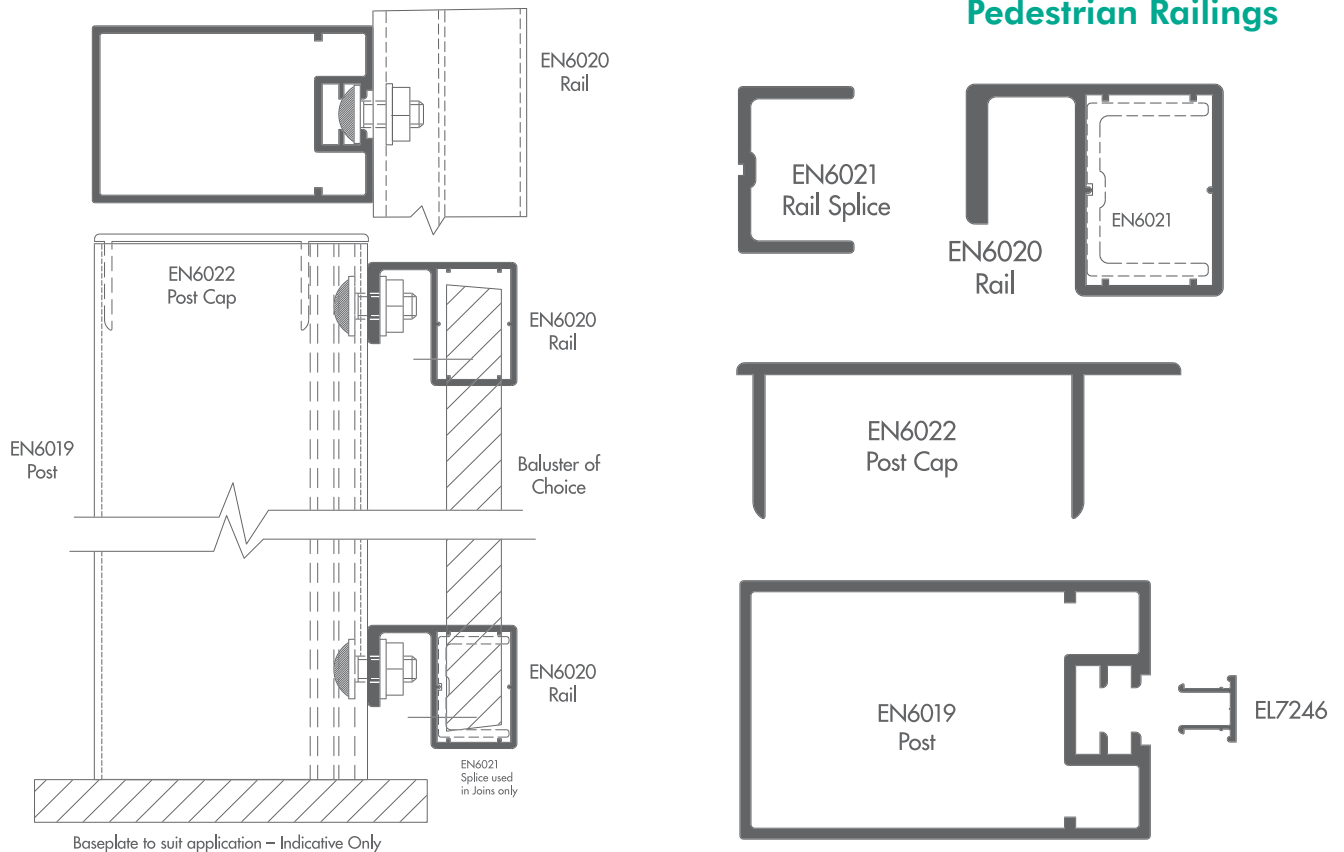


## Traffic Barrier Cast Posts

All posts are shown with rail EL6981 in place. Drawings are indicative only. Actual post layout may vary slightly from drawings.



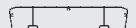
## Pedestrian Railings



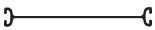
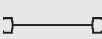
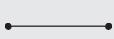
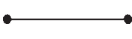
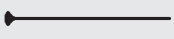
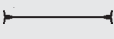
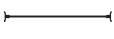
Not to scale - for detailed drawings please contact your account manager



## Stair Treads

| PROFILE                                                                             | SECTION  | DESCRIPTION                         | AP   | PP   | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------|------|------|-----------|
|    | EQ1781   | Stair Tread 250 x 36.5              | 1069 | 1069 | 2.962     |
|    | E25493   | Stair Tread 250 x 38                | 1014 | 350  | 2.796     |
|    | EP13182  | Stair Tread 250 x 50                | 1107 | 738  | 3.063     |
|    | E00161   | Stair Tread Edge 38.1 x 4           | 100  | 100  | 0.325     |
|   | EAL12232 | Stair Tread 46 x 15                 | 123  | 100  | 0.418     |
|  | EME1548  | Stair Tread 46 x 15.06              | 125  | 125  | 0.401     |
|  | EAL12222 | Stair Tread 80 x 4.0                | 191  | 111  | 0.660     |
|  | E00470   | Stair Tread Bull Nose 46 x 15.1     | 122  | 100  | 0.433     |
|  | EE2611   | Stair Tread Bull Nose 46.02 x 15.06 | 123  | 123  | 0.420     |
|  | E53450   | Bus Stair Tread 51 x 35             | 178  | 100  | 0.443     |

## Signage – Various

| PROFILE                                                                             | SECTION | DESCRIPTION                            | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|---------|----------------------------------------|-----|-----|-----------|
|    | EP9871  | Sign Frame 28.50 x 25.50               | 186 | 186 | 0.632     |
|    | E32953  | Signs Blade 200mm                      | 535 | 430 | 1.631     |
|    | EK8891  | Sign Brace Rail 28.5 x 25.5 WA Type A  | 186 | 100 | 0.694     |
|    | E73601  | Sign Brace Rail 40 x 42 WA Type B      | 201 | 201 | 1.229     |
|   | E53477  | Sign Brace Rail 44 x 40 WA Type A      | 202 | 102 | 1.315     |
|  | EP10260 | Sign Brace Rail 44 x 40                | 294 | 104 | 1.358     |
|  | E73605  | Sign Brace Rail 47.5 x 25.5 WA Type A1 | 265 | 265 | 1.072     |
|  | E53261  | Sign Brace Rail 76.5 x 51              | 301 | 301 | 1.511     |
|  | EL6514  | Road Barrier Board 190 x 30            | 569 | 569 | 1.817     |
|  | E35973  | Sign Blade Bulb Edge 152.4 x 12.7      | 329 | 329 | 1.372     |
|  | E33481  | Sign Blade Bulb Edge 200 x 12.7        | 424 | 424 | 1.769     |
|  | EP13745 | Sign Blade Bulb Edge 200.03 x 12.7     | 424 | 424 | 1.764     |
|  | EP14635 | Sign Blade Anti Vandal 202.8 x 17.5    | 426 | 426 | 2.177     |
|  | EH2884  | Sign Blade Bulb Edge 203.2 x 15.88     | 436 | 436 | 2.545     |
|  | EN4285  | Sign Blade Tee Edge 149 x 18           | 352 | 352 | 1.326     |
|  | EN4403  | Sign Blade Tee Edge 199 x 20           | 459 | 459 | 1.685     |

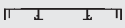
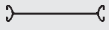
Sizes are indicative only – refer to die drawings for accurate sizes

## Signage – Various continued

| PROFILE | SECTION  | DESCRIPTION                         | AP  | PP  | MASS kg/m |
|---------|----------|-------------------------------------|-----|-----|-----------|
|         | EQ3712   | Sign Blade Tee Edge 149.45 x 19.05  | 348 | 348 | 1.663     |
|         | EME6379  | Sign Blade Tee Edge 149.45 x 19.05  | 348 | 348 | 1.669     |
|         | E33394   | Sign Blade Tee Edge 152 x 18        | 357 | 203 | 1.324     |
|         | EAL7645  | Sign Blade Tee Edge 153 x 18.25     | 352 | 352 | 1.306     |
|         | EME7651  | Sign Blade Tee Edge 153 x 18.25     | 359 | 359 | 1.384     |
|         | E33395   | Sign Blade Tee Edge 199 x 19        | 454 | 254 | 1.770     |
|         | EME6505  | Sign Blade Tee Edge 199.45 x 19.05  | 448 | 448 | 1.966     |
|         | EQ3713   | Sign Blade Tee Edge 199.45 x 19.05  | 448 | 448 | 1.960     |
|         | EP8720   | Sign Blade Grooved Edge 150 x 22.75 | 432 | 347 | 1.174     |
|         | E53091   | Sign 140mm Sign Box                 | 591 | 142 | 1.244     |
|         | EL8955   | Sign Box Frame 147.5 x 23.2         | 517 | 517 | 1.457     |
|         | EME8889  | Sign Box Frame 148 x 19             | 516 | 100 | 1.276     |
|         | EAL10669 | Sign Box Frame 150 x 20             | 527 | 527 | 1.415     |
|         | E33484   | Sign Box Frame 177.8 x 19           | 492 | 230 | 1.497     |
|         | EME2579  | Sign Box Frame 177.8 x 19.05        | 479 | 479 | 1.486     |
|         | ET5005   | Sign Box Frame 177.8 x 19.05        | 491 | 491 | 1.539     |
|         | EME8261  | Sign Box Frame 177.8 x 19.05        | 492 | 492 | 1.541     |
|         | E32175   | Sign Box Frame 195 x 27             | 655 | 249 | 2.268     |
|         | EME30739 | Sign Box Frame 195 x 27             | 652 | 250 | 2.300     |
|         | EAL12417 | Sign Box Frame 200 x 20.5           | 612 | 249 | 2.024     |

Sizes are indicative only – refer to die drawings for accurate sizes

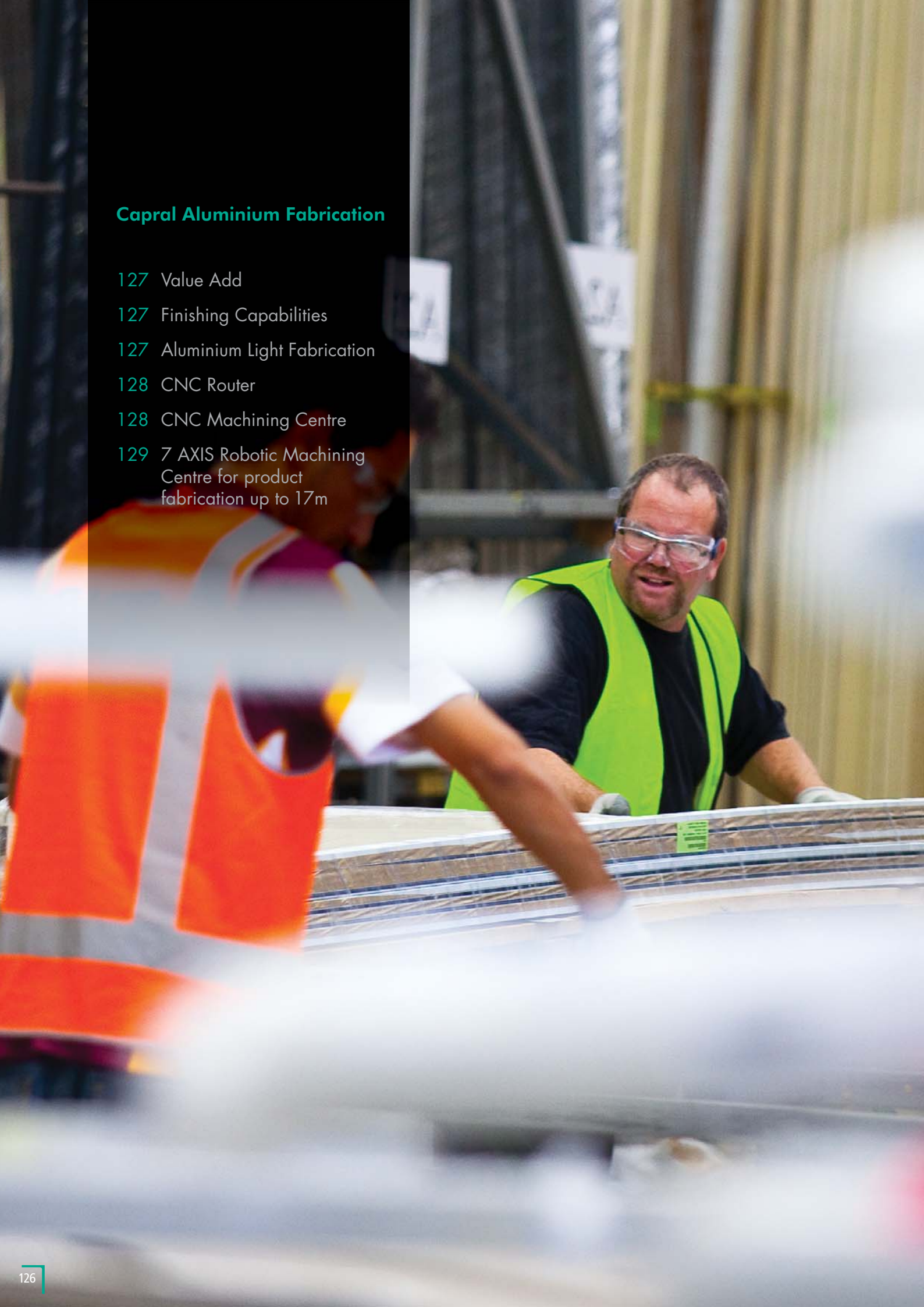
## Signage – Various continued

| PROFILE                                                                             | SECTION  | DESCRIPTION                               | AP  | PP  | MASS kg/m |
|-------------------------------------------------------------------------------------|----------|-------------------------------------------|-----|-----|-----------|
|    | EAL10670 | Sign Box Frame 200 x 21                   | 672 | 672 | 2.367     |
|    | E53084   | Sign Frame Strengthenener                 | 264 | 105 | 0.588     |
|    | E53086   | Sign 200mm Surround                       | 162 | 100 | 0.432     |
|    | E34852   | Sign 200mm Sign Box                       | 672 | 150 | 1.906     |
|    | E53092   | Sign 150mm Surround                       | 109 | 100 | 0.210     |
|    | EP15244  | Sign C Strutt Joiner                      | 377 | 377 | 1.744     |
|   | E33479   | Sign Post Bracket TD1 78 x 69 ID 61       | 246 | 246 | 3.495     |
|  | E33973   | Sign Post Bracket TD2 87 x 69 ID 61       | 289 | 289 | 4.031     |
|  | EB1466   | Sign Post Bracket 92.5 x 42.75 Gap 8.3    | 333 | 333 | 2.248     |
|  | EME8946  | Sign Post Bracket 98.8 x 40 Gap 8.6       | 346 | 346 | 1.872     |
|  | E52822   | Sign Post Bracket 104.8 x 33.25 to E52823 | 272 | 140 | 1.116     |
|  | E52823   | Sign Post Bracket 107.2 x 38.35 to E52822 | 294 | 140 | 1.172     |
|  | EME5768  | Sign Post Bracket 105.35 to EME5769       | 406 | 271 | 1.740     |
|  | EME5769  | Sign Post Bracket 107.91 to EME5768       | 428 | 428 | 1.796     |
|  | EH7680   | Sign Post Bracket 105 x 33.23 to EH7681   | 273 | 138 | 1.135     |
|  | EH7681   | Sign Post Bracket 108 x 33.23 to EH7680   | 294 | 152 | 1.190     |
|  | EME5457  | Sign Post Bracket 105 x 33 to EME5458     | 273 | 273 | 1.074     |
|  | EME5458  | Sign Post Bracket 107.25 x 33 to EME5457  | 294 | 294 | 1.132     |
|  | E34347   | 150mm Street Sign                         | 423 | 346 | 1.433     |
|  | E26860   | Sign 210mm Street Sign                    | 543 | 466 | 1.838     |

Sizes are indicative only – refer to die drawings for accurate sizes

## Capral Aluminium Fabrication

- 127 Value Add
- 127 Finishing Capabilities
- 127 Aluminium Light Fabrication
- 128 CNC Router
- 128 CNC Machining Centre
- 129 7 AXIS Robotic Machining  
Centre for product  
fabrication up to 17m



## Value Add

Capral Aluminium has focused on the requirements of our customers and made a significant investment in our processing and fabrication facilities.

Fabrication facilities include:

- Automatic fine tolerance cut to length saw
- 7 AXIS Robotic Machining Centre for product fabrication up to 17m
- CNC Machining:
  - 4 AXIS CNC machining product centre up to h=170mm, w=400mm, l=14000mm
  - 3 AXIS CNC machining product centre h=180mm, w=200mm, l=7000mm
  - CNC extrusion and plate router h=200mm, w=2500mm, l=12,500mm, maximum cut depth = 25mm
- **Drawn products:** Precision ovality, work-hardened tubing, outer diameter 40mm to 130mm, wall thickness 1.8mm to 10mm
- **Knurling:** Application of non-slip surface to extrusions
- Product edge de-burring
- **Anodising:** Controlled oxidation of the aluminium surface by immersion into a dilute sulphuric acid. The oxide film is an integral part of the aluminium surface and is not an applied coating
- **Powdercoating:** Paint powder applied electro-statically and then cured under heat to allow it to flow and form a surface coating
- **Drilling:** A cutting process that uses a drill bit to cut or enlarge a hole
- **Cut Back:** An off line saw used to recut the extrusion to less than a standard length
- **Slotting & Punching:** Toolage used to “punch” a hole in typically a window or door extrusion
- **Weather Pile Installation:** Mechanically install weather pile to an extrusion
- **Precision Cutting:** Cut back to less than standard extrusion tolerances
- **Flashings:** Supplied from sheet and able to be guillotined or bent
- **Mitre Saw Cut:** Saw used to make accurate cross cuts.

## Finishing Capabilities

A range of finishing options ensures your extrusions can be easily matched to your project.

Powder coatings, supplied by Interpon Powder Coatings are available in an extensive range of colours, gloss levels, textures and metallic shades for complete colour freedom. Interpon’s entire architectural range qualifies for several Green Star credits ensuring a sustainable finish for your project, with durability for up to 7, 10 and 15 years on colour and film integrity. For details and to view the full colour range options, visit [www.interpon.com.au](http://www.interpon.com.au)

Anodising treatment can provide excellent corrosion resistance and a wide range of colour options up to 25um. Such finishes are widely used for both interior and exterior applications.

## Aluminium Light Fabrication

With its state of the art machining equipment Capral Aluminium has the capability to supply semi-fabricated and finished rolled and extruded products. Components can be supplied “just-in-time” to reduce stock inventory, warehouse space and manufacturing time.





### CNC Router

Capral Aluminium has the facility to supply semi-fabricated rolled and extruded products. Capral Aluminium has not ignored the on-going demands of both designers and manufacturers, making further investments to meet the future demands of many like businesses. The newly instated CNC Router Machines for both extruded and flat rolled products, complements core investments of state-of-the-art industrial presses and world-class extrusion/finishing facilities.

Components can be supplied individually or in kit-form as JIT, to reduce stock inventory, warehouse space and manufacturing time. Accurate nesting of components can also reduce waste, with potentially costly errors eliminated in the process.

This CNC technology is fast replacing traditional manufacturing techniques of using templates, band saws, hand routers, drills and hacksaws. This in-house capability further enhances Capral Aluminium's ability to manage customers' total projects from start to finish and deliver projects on time and on budget.

#### Machine Details:

Bed Size: Cutting area: 12.5m x 2.5m. Cutting thicknesses up to 25mm.

#### Drawing Requirements:

Simple shapes can be accommodated, or for more complex shapes and drawings;

- All parts should be nested into sheet/plate sizes as per Capral Aluminium's stock availability
- All parts to be closed polylines (no splines or small entities)
- All parts should be exported in .dxf -format

- No entry or exit marks required
- All layers to be associated by colour
- All parts should have 15mm buffers
- Mark lines and text available as pen or scribe.

### CNC Machining Centre

Capral Aluminium has invested in state-of-the-art CNC machining technology to further add value to the aluminium supply solutions for customers. Located at our industrial extrusion plant in Campbellfield, Victoria, our CNC machine offers the ability to provide semi-finished aluminium extrusions into your business ready for further assembly. Reduce your inventory, workspace and manufacturing time, whilst reducing waste and eliminating potential costly errors in the process.

CNC machine is suited to rigid profiles that can be clamped without movement. Smaller profiles can be machined depending on their rigidity for clamping. Samples will be required for testing prior to quote.

#### Drawing Requirements

- 2D .dxf drawing for each profile
- 2D .dxf drawing of each side to be machined.
- Scaled at 1:1
- All lines to be Polylined
- All contours must have a radius or a defined diameter
- All dimensions clearly presentable
- Rectangular and triangular cut-outs must include a radius which will determine the size of the mill tool.



### 7-axis Robotic Machining Centre for product fabrication up to 17m

We have continued to work closely with our major customers to understand their fabrication requirements and develop an enhanced machining capability for the transport, marine and general engineering markets. In 2016, we introduced a new state-of-the-art 7-axis robotic machining centre to compliment and expand on our extensive value add capabilities. We can machine transport top and bottom rails, marquee beams, light poles, bus cant rails and main beams to name just a few.

This robotic machining centre is a milling robot, mounted on carriage that moves along a 19.5m track. It is designed to machine aluminium profiles of lengths up to 17m, with the clamping aperture accommodating profile sections of 450mm (W) by 350mm (H). A 10+1 position tool changer is carried at the rear of the robot, moving up and down the

track as the system itself moves. A second carriage is mounted on the robot bed containing a cut-off saw that can cut profiles perpendicular to the bed into sections. This carries the clamp movement peripherals and is the physical clamp repositioning device. The saw carriage also has a read head onboard for locating clamps on the track prior to movement.

#### Major components of the machine are:

- Clamping bed
- Robot track and two robot carriages
- Cut-off saw
- Robotic manipulator
- Milling Head
- Offline programming control panel for CAD/CAM design
- Online robotic control pendant.



## Alloy, Temper and Mechanical Specifications

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- 138 Alloy Characteristics and Uses
- 139 Alloys - Tempers - Uses
- 140 Temper Definitions
- 141 Temper Designation Systems

## Introduction

The following provides designers and specifiers with basic information and guidelines on the use of aluminium in structural applications. It is intended to supplement the design criteria set out in the Standards Australia Aluminium Structures code AS/NZS 1664 and Welding Code AS 1665.

Further information on the structural use of aluminium can be found in AAC (Australian Aluminium Council) publication - *"Aluminium Standards Data and Design, Wrought products"*.

A range of extruded aluminium standard shapes, available from Capral Aluminium, are listed, together with their extrusion numbers for ready identification.

### Why design in aluminium?

The advantage of using aluminium in structural applications has long been recognised by the aircraft industry. Design engineers should seriously consider using aluminium for down-to-earth structures, which often can be designed and built in aluminium with a lower total cost (including maintenance and replacement costs) than is possible using other common materials.

Design in aluminium because:

- The relatively high strength-to-weight ratio of aluminium results in a structure having a lower mass than when most other structural materials are used. Weight savings of 50 per cent are common with aluminium compared with equivalent structures in steel. In long span structures, where the dead weight constitutes a large portion of the load, even greater weight savings may be achieved.
- The natural corrosion resistance of aluminium usually obviates the need for elaborate and costly protective coatings which are required for other materials in many applications, particularly in "wet" environments. Such treatments, where used, require regular maintenance, which is eliminated when unpainted aluminium will do the job. The resulting savings in maintenance costs are often the deciding factor in making aluminium the most economical material for a given structure.
- The light weight of aluminium can result in economies because of smaller foundations, and lower installation and erection costs. For example, a single or a lighter crane may be adequate, and fewer men may be needed to handle the items.
- Efficient one-piece extruded shapes that cannot be produced by any other method are obtained in aluminium. Thus, custom-designed shapes can be produced to achieve maximum design efficiency as well as reductions in material usage and fabrication costs.

- Aluminium can be easily joined by the conventional processes of bolting, riveting, welding and adhesive bonding.
- Aluminium is easily worked by the normal metal working processes, with faster cutting and drilling times than for steel.
- Aluminium is non-magnetic, which can be advantageous around certain electrical installations.

For the maximum benefit to be obtained from using aluminium in structural applications, both design and construction must be based on a sound knowledge of the material and should not be unduly influenced by previous conceptions of similar steel structures.

### Aluminium alloys and selection

Commercially pure aluminium has a comparatively low tensile strength of about 90MPa, which limits its usefulness as a structural material. Large increases in strength can be obtained by alloying aluminium with small percentages of one or more elements such as manganese, silicon, copper, magnesium or zinc, with strength improvements being made by cold working or heat treatment. This is why alloys of aluminium are used for all structural purposes.

The Australian Aluminium Council has adopted a system for designating wrought aluminium alloys based on four digits. The first digit of the designation serves to indicate the alloy group. The second digit indicates modifications of the original alloy or impurity limits. The last two digits identify the aluminium alloy or indicate the aluminium purity. In general, AAC alloys are similar to, if not, the same as Aluminium Association (USA) or British Standard alloys having the same number designation. Alloys and alloy designation systems are covered to a greater depth in a book entitled *"Standards, Data and Design for Wrought Products"*, published by the Australian Aluminium Council. The selection of the proper alloy for a specific application depends on the requirements of strength,

durability and cost, the proposed fabrication method and, finally, by the availability of the products.

AS/NZS 1664 gives tables of minimum mechanical properties and maximum permissible stresses for a number of aluminium alloys in various tempers. Designers are reminded that lower permissible stresses apply in zones adjacent to welding.

The most commonly used aluminium alloy for structural and semi-structural extrusions are alloys 6060 and 6063 in T5 temper. These are medium strength alloys favoured for architectural shapes because of lower cost, good resistance to corrosion, excellent extrudability and response to decorative and protective anodic surface treatments.

Where additional strength is required, alloys such as 6061/T6 or 6082/T5 or T6 are recommended because of higher yield strengths. These alloys are marginally more costly than alloy 6060 but are permitted significantly higher maximum stresses by AS/NZS 1664.

Series 5000 alloys are the normal choice for sheet and plate used in structural applications. Alloys 5052, 5251 and 5454 have sufficient strength for general structural purposes and have the benefit of excellent corrosion resistance. Alloys 5086 and 5083 are used predominantly in applications in combination with alloy 6061 extrusions, and where welding is the means of jointing. For corrosion resistance, alloys 5052, 5251 and 5454 are marginally superior to alloys 5083 and 5086 in the hard tempers.

### Corrosion resistance

Good design principles can maximise aluminium's natural corrosion resistance. Where adequate and simple precautions are not allowed for at the design stage problems can eventuate:

- Galvanic corrosion can occur when aluminium is in contact with another metal in the presence of an electrolyte. Mild environments such as rural atmospheres and fresh water seldom present problems, but aggressive environments such as marine atmosphere and sea water can produce severe cases of galvanic corrosion. Under such conditions aluminium should be insulated from all other metals. A minimum practice is to coat both surfaces with a zinc chromate pigmented paint and allow the paint to dry before fitting the parts together.
- Crevice corrosion can be eliminated by avoiding crevices, which may trap dirt or moisture, or by

filling the joint with an inhibiting jointing compound (of bitumen, polysulphide or butyl rubber) to prevent the entry of moisture.

- Poulitice corrosion occurs when materials such as cloth, cork, paper, accumulations of dirt, etc. can become moist whilst remaining in contact with aluminium.

Aluminium which is to be placed in contact with damp concrete or damp wood should be given a coat of alkali-resistant bituminous paint, or the contact should be broken by an impervious, non-aggressive membrane. It is recommended that wherever practicable aluminium structures be bolted to concrete bases, with the aluminium being treated as above, rather than coating the aluminium and embedding it in concrete.

### Aluminium in the ground

Aluminium generally can be buried in the ground where the resistivity of the soil is no less than 1,000 ohm cm, and the pH of the soil falls within the range 4.5 to 9.0. Outside this range the corrosion resistance of bare aluminium is uncertain. Dissimilar metals should not be bonded to the buried aluminium. With silts having a high organic content, test panels are recommended prior to deciding on aluminium. If the above conditions are not fulfilled the aluminium should be covered with a suitable protective coating. A heavy coat of a bituminous paint usually will be satisfactory. Aluminium buried in the ground must not be used as a normal electrical earth.

### Australian standards

Two Australian Standards are of particular interest to designers wanting to design structures or structural components in aluminium.

These standards are AS/NZS 1664, SAA Aluminium Structures Code, and AS 1665, SAA Aluminium Welding Code.

AS/NZS 1664, SAA Aluminium Structures Code applies to the design and fabrication of aluminium structures.

AS 1665, SAA Aluminium Welding Code is concerned with the fusion welding of aluminium, for structural purposes, by inert-gas arc welding processes. This code has been prepared for use in conjunction with AS/NZS 1664.

Should there be any apparent conflict between any statement in this catalogue and either of the above codes, the designer shall follow the ruling of the codes.

**Deflection**

The elastic modulus of aluminium, at around 69,000 MPa, is about one-third that of structural steel, and is virtually the same for all alloys. Hence, where dead weight of the structure represents only a small portion of the total load, an aluminium member with the same dimensions as the steel member will deflect about three times as much as the steel member. Such deflections are not usually acceptable in structures and to overcome this the depth of the aluminium members must be increased so as to increase stiffness. Notwithstanding the increased depth of an aluminium member, it will generally still be of lighter mass than the equivalent structure in steel. The versatility of the extrusion process can result in an even greater mass differential between a given aluminium and a given steel structure.

The low elastic modulus of aluminium results in lower stresses from impact and strain than for structural steel.

**Temperature effects**

The coefficient of linear thermal expansion of aluminium alloys is about twice that of structural steel. Because the elastic modulus of aluminium is only about one-third that of steel, stresses in an aluminium structure resulting from temperature changes will be

only about 70 percent of those in a comparable steel structure.

As the temperature increases, both the strength and elastic modulus of aluminium alloys decrease. Allowance is not usually made for this strength decrease for temperatures below 100°C. Above 100°C aluminium alloys begin to lose strength, however, hot spots are not likely to occur with aluminium because its excellent thermal conductivity will flatten the temperature gradient. Correspondingly, reductions in temperature have the effect of improving the mechanical properties of aluminium alloys without any of the brittleness that occurs in many steels. For this reason most aluminium alloys are especially suitable for cryogenic and other low temperature applications.

Creep may become a factor in applications where high stresses are prolonged at operating temperatures in excess of 100°C and in these conditions consideration should be given to reducing the allowable design stresses. The following table lists average expansions for aluminium and a number of common construction materials. It should be remembered that allowances may have to be made for the contraction of aluminium members as well as their expansion relative to adjacent materials.

**Average free expansion or contraction in mm per metre of length**

| MATERIAL         | TEMPERATURE DIFFERENTIAL (FOR GENERAL STRUCTURAL USE WITH TEMPERATURES NOT EXCEEDING 100°C) |       |       |       |       |       |       |
|------------------|---------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|
|                  | 10°C                                                                                        | 20°C  | 30°C  | 40°C  | 50°C  | 60°C  | 70°C  |
| ALUMINIUM ALLOYS |                                                                                             |       |       |       |       |       |       |
| 6061             | 0.236                                                                                       | 0.472 | 0.708 | 0.944 | 1.180 | 1.416 | 1.652 |
| 6063             | 0.234                                                                                       | 0.468 | 0.702 | 0.936 | 1.170 | 1.404 | 1.638 |
| 5083             | 0.238                                                                                       | 0.476 | 0.714 | 0.952 | 1.190 | 1.428 | 1.666 |
| 6351             | 0.230                                                                                       | 0.460 | 0.690 | 0.920 | 1.150 | 1.380 | 1.610 |
| OTHER MATERIALS  |                                                                                             |       |       |       |       |       |       |
| Structural Steel | 0.121                                                                                       | 0.242 | 0.363 | 0.484 | 0.605 | 0.726 | 0.847 |
| Stainless Steel  | 0.178                                                                                       | 0.356 | 0.534 | 0.712 | 0.890 | 1.068 | 1.246 |
| Brass            | 0.188                                                                                       | 0.375 | 0.563 | 0.750 | 0.938 | 1.125 | 1.313 |
| Lead             | 0.510                                                                                       | 1.020 | 1.530 | 2.040 | 2.550 | 3.060 | 3.570 |
| Concrete         | 0.142                                                                                       | 0.284 | 0.426 | 0.568 | 0.710 | 0.852 | 0.994 |
| Brickwork        | 0.056                                                                                       | 0.112 | 0.168 | 0.224 | 0.280 | 0.336 | 0.392 |



## Fabrication of aluminium alloy structures

### Marking

Ink or grease pencils should be used to mark aluminium for fabrication. Centre-punch marks and scribed lines must be avoided where such marks could remain on the fabricated material as they can be the cause of notch failure. Because of the high thermal coefficient of expansion of aluminium it is best marked out in a shop kept at an even temperature and shaded from the radiant heat of the sun so that there will be no errors caused by the lower thermal expansion of steel measuring tools.

### Cutting

Oxy-gas flame cutting is not used with aluminium, cut edges shall be smooth and free of notches, excessive burrs or ragged edges. Arc cut edges should be planed to remove edge cracks. For sawing, high blade speeds are desirable with the liberal use of a lubricant

based on kerosene-thinned mineral oil. For circular saws, blades should have 1.5 to 2 teeth per circular cm alternately set. Angle of cut is approximately  $70^\circ$  to the aluminium section.

### Forming

Ordinary types of presses, brakes and rolls are suitable for forming operations on correctly chosen alloys and tempers. The tool surfaces which contact the aluminium alloys must be smooth and free from tool marks, dents or rough edges which will tend to tear or score the metal.

In forming bends that approach the minimum radius, the surfaces and edges of the metal to be bent should be smooth. Springback is proportional to yield strength/elastic modulus and with the harder tempers of aluminium alloys is greater than with steel.

## Bending Characteristics

The main criteria governing the bending of aluminium are:

Alloy, temper, metal thickness and/or configuration, bend radius, and equipment available. The most common problem is the determination of a minimum radius at which a bend can be formed without developing cracks or excessive "orange peel" along the external bend radius. A closely related problem is the amount of overbending necessary to compensate for elastic recovery (springback), both of these conditions vary with alloy, temper and thickness.

Severe bending may require annealed material, whereas moderate bending with generous radii allows for the use of harder tempers.

The radius of bend for extruded profiles is governed to a large extent by the amount of distortion which can be tolerated from an aesthetic point of view.



Angles, channels, Z-sections, top hat sections and I-sections all require closely fitting tools and formers to hold distortion to a minimum. Extruded sections can be bent more easily over small radii in the T4 temper. If required, the properties can be subsequently increased to T5 or T6 temper by artificially ageing.

Additional recommendations are given in the AAC publication, "Aluminium Standards Data and Design Wrought Products".

### **Punching, reaming and drilling**

Bolt or rivet holes in primary-load-carrying members should be drilled, or subpunched and reamed. Both single and multiple type punches as used on structural steel are suitable for aluminium alloys. If the metal thickness is greater than the diameter of the hole, the hole should be formed by drilling and not punching. Reamers should be of the high-speed, spiral-fluted type. Reaming operations on aluminium alloys are about twice as fast as the same work in steel.

Twist drills used on aluminium alloys should be kept sharp and constantly lubricated with a soluble oil. Drill speeds can be increased about 50 percent above those used for steel. Special drills with more than the normal numbers of twists per cm can be used to advantage where a large amount of work is to be done. A double-fluted twist drill with a spiral angle of 47° gives good results on aluminium alloys.

### **Riveting**

Aluminium alloy rivets are recommended for the fabrication of aluminium alloy structures. In any riveting operation, it is desirable that the clearance of the rivet in the hole should be a minimum. Where possible squeeze type riveters should be used on aluminium rivets. Pneumatic hammers and back-up tools should be heavier than those used for hot steel rivets of the same size. Hammers should be a heavy, long stroke, slow action type. Minimum distance of rivet centres shall be three times the nominal rivet diameter. (See AS/NZS 1664). The edge distance from the centre of the rivet to the edge of the sheet or shape towards which the pressure is directed shall be twice the nominal diameter of the rivet (see AS/NZS 1664).

### **Welding**

The most suitable processes for making structural quality welds in aluminium are MIG (Metal Inert Gas) and TIG (Tungsten inert Gas) welding. These fluxless processes use an electric arc shrouded by inert argon gas, which prevents the formation of aluminium oxide on the weld pool and helps minimise porosity in the weld.

The MIG process is suitable for welding aluminium 2mm thick and upwards; there is no practical upper limit restricting its use. The TIG process is suitable for joining aluminium from 1mm to 10mm thick. Refer to AS/NZS 1664 for maximum allowable stresses for welded members, and AS/ 1665, SAA Aluminium Welding Code for details of welded connections.

For marking welded connections in aluminium, AS/NZS 1664 specifies aluminium filler alloys for general purpose welding. If extrusions in alloys 6061 or 6063 are welded to any of the plate alloys 5052, 5083, 5086, 5251 or 5454, then alloy 5356 is used as the filler. The same filler is used for welds between the plate alloys.

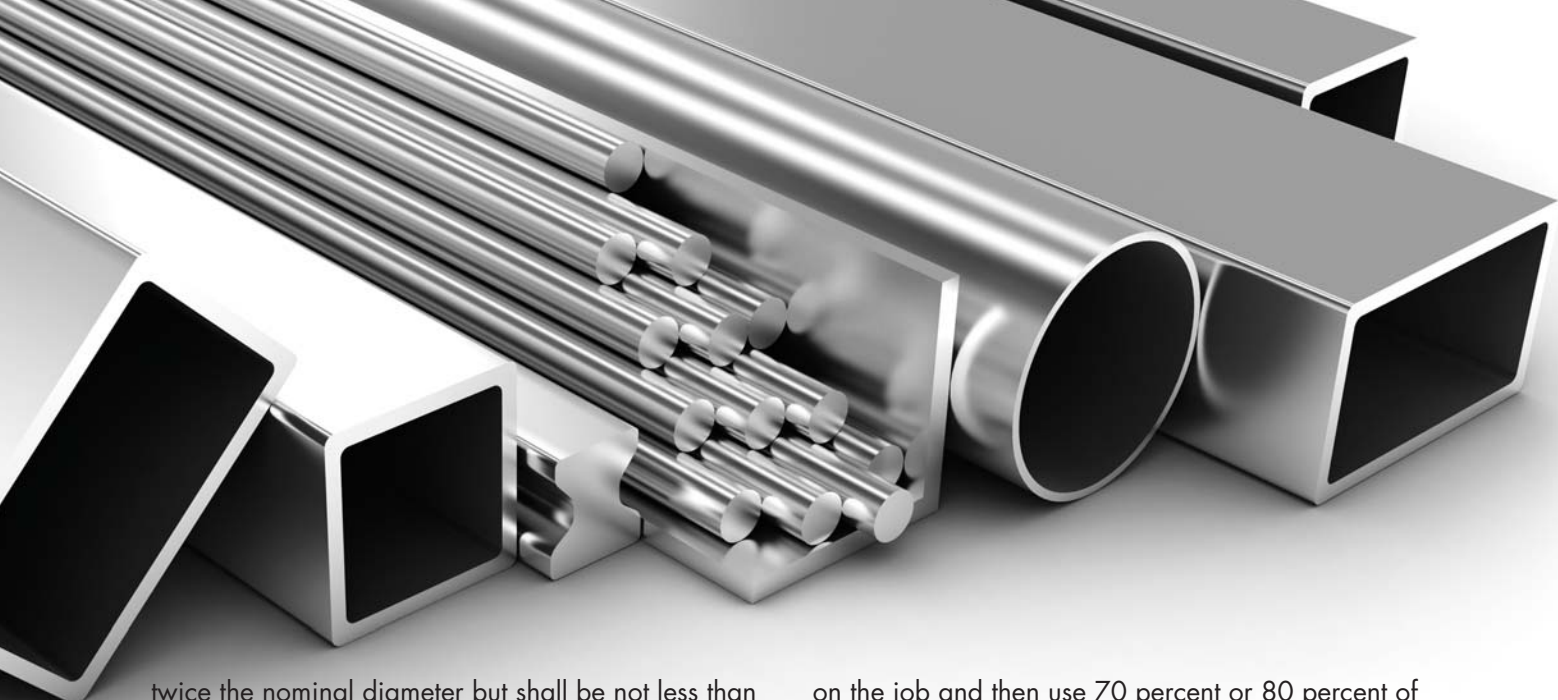
Where the extrusion alloys 6061 and 6063 form both parts of the welded connection, alloy 4043 is usually used as the filler.

### **Bolting**

Bolting is a suitable means of making connections between aluminium alloy components. For best results bolts should be fitted tightly in the holes, preferably with a slight interference. Where this is not practicable, bolts may be used with whatever hole clearance seems appropriate to the class of work under consideration. It is recommended that the finished diameter of the holes should not be more than 2mm larger than the nominal diameter of the bolts. If elongated bolt holes are necessary for expansion reasons or construction tolerances, then the 2mm recommendation applies to the width of the elongated hole.

Where bolts are not tightly fitted it is sound practice to use less than the full strength of the bolt in calculating the number of bolts required. It is suggested that two-thirds of the full bolt strength be used when bolts are installed with more than a nominal clearance. If any holes must be enlarged to admit bolts they should be reamed. Holes should not be drifted in such a manner as to distort the metal.

It is important that a flat washer be used between the aluminium member and the bolt head as well as the nut. The distance between the centres of bolts should not be less than 2.5 times the nominal diameter of the bolts. The distance from the centre of a bolt to a sheared, sawn, rolled, or planed edge is normally



twice the nominal diameter but shall be not less than 1.5 times the diameter. See AS/NZS 1664 for reduction in bearing stresses for shorter than normal edge distances. The distance from the edge of a plate to the nearest bolt line should not exceed six times the thickness of the plate.

#### **Choice of bolt material**

Bolts of stainless steel (300 series), hot dipped galvanised steel, cadmium plated steel and aluminium alloy are suitable for making connections between aluminium alloy components or connecting aluminium components to other materials.

In general, in dry operating conditions where black steel bolts would be the normal choice for a steel structure, cadmium plated steel bolts are suitable for aluminium structures. Where the structure is exposed to the weather, hot dipped galvanised steel bolts are a minimum requirement for an aluminium structure. In aggressive environments and where conditions of high humidity prevail, stainless steel or 6000 series aluminium alloy bolts are recommended.

#### **Stainless steel bolts**

Where stainless steel bolts are required for aluminium structural members only the 300 series stainless steels should be used. The first preference is for 316 stainless steel which has high resistance to pitting in chemical applications, high tensile strength at high temperatures, high creep strength and good machining characteristics. A second preference would be for 304 stainless steel. The stainless steels generally are referred to as non-magnetic stainless steels and are known metallurgically as "austenitic" stainless steels.

#### **Tightening of aluminium bolts**

Bolts function best when properly tightened. One recommendation for determining the torque wrench settings for tightening aluminium alloy bolts is as follows: using a torque wrench, tighten several bolts of a given size and type to the breaking point under the same condition of lubrication as will be encountered

on the job and then use 70 percent or 80 percent of the lowest torque obtained in these tests for tightening all bolts of this size and type on the job.

The 70 percent value should be used for "temporary" bolts, or those which may be removed occasionally, whilst the 80 percent value applies to "permanent" bolts. The use of a good lubricant, such as molybdenum disulphide or lanoline, on the threads and all bearing surfaces is recommended.

#### **Standard shapes and special extrusions (material availability)**

A wide range of standard extruded shapes is listed in this manual. However, because of the extent of the range not all the shapes are held in stock at any one time by Capral Aluminium Centres. For small and medium sized structures designers can minimise supply delays by checking the availability of standard extruded shapes and alloys.

For larger structures the time schedule and material quantity usually will allow for production of the most efficient extrusion shape chosen from the range listed in this catalogue.

Depending on the size and/or complexity of a structure it can be economical to design special sections. The extrusion process is capable of producing special shapes that otherwise might have to be built by joining together two or more standard shapes. The ability of the extrusion process to provide local thickening or reinforcing ribs to counter zones of specific stress will result in less metal being used than would otherwise be the case if standard sections are used. Additionally, features such as attachment flanges and prepared edges for welding can be incorporated into the extrusion.

The development costs for such special shapes are roughly proportional to the diameter of the circle circumscribing the shape in question. Tooling development charges for special designs can be obtained through Capral Aluminium Sales Offices.

## Structural Design Data

The tables listed in the pages of this catalogue show most of the properties of shapes necessary to basic calculations to determine the integrity of an aluminium product or structure.

Capral Aluminium's Computer Aided Design (CAD) equipment enables section properties of any shape to be automatically determined.

The section properties readily determined by our CAD are:

- Perimeter
- Area
- Mass
- First Moments or Modulus
- Second Moments of Inertia
- Radii of Gyration
- Principal Axes
- Circle Size
- Centre of Shape

## Engineering General Information

Aluminium is eminently suitable for many engineered structures, particularly where weight saving and corrosion resistance are requirements.

Purlins and girts for cladding, walkways and stairs, scaffolding, mining skips, oil and gas platforms,

Much more Structural Design Data, such as formulae and different alloy strengths, is given in the Aluminium Development Council's Engineers' Handbook for Aluminium, with close cross reference to AS1664 - the Aluminium Structures Code and AS1665 - The Aluminium Welding Code.

The similarities of designing structures with aluminium to those using steel or timber, means engineers will find adapting to the few differences in the material properties very easy. The main point is that all materials and alloys of materials are different, and knowledge of those differences is needed to do comparative designing. This knowledge is readily available from Capral Aluminium or industry manuals.

highway barrier railings, electrical conductors, etc., are only a few of the never-ending range of structures that can benefit from this weight saving (a third that of steel), strong (up to 350 MPa) and corrosion-resistant material.

## Aluminium Extrusions and Competing Materials

Aluminium extrusions really perform!

Products made from aluminium extrusions deliver high performance. Light, strong, attractive, economical... aluminium extrusions offer the designer and manufacturer choices and combinations of useful characteristics unmatched by any other material. In fact, they have dozens of advantages. Some are well-known; others may be less familiar but are important, and even vital, in applications that require them.

Shown at right, are the major advantages that make aluminium extrusions such versatile and desirable products. For convenience and clarity they are grouped under two broad headings.

The advantages of aluminium extrusions can be selected and mixed almost, without limit. The designer or manufacturer need not trade-away most advantages to gain a few, as is often the case with other materials. He or she can tailor the product, with aluminium extrusions, to suit the needs and tastes of company and customer in a single material and process.

| PHYSICAL/CHEMICAL ADVANTAGES<br><i>Characteristic of aluminium itself</i> | PRODUCT ADVANTAGES<br><i>Characteristic of extruded aluminium products</i> |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Lightweight                                                               | Attractive appearance                                                      |
| Strong                                                                    | Wide range of finishes                                                     |
| High strength/weight ratio                                                | Virtually seamless                                                         |
| Resilient                                                                 | Easy to fabricate                                                          |
| Corrosion-resistant                                                       | Joinable in many ways                                                      |
| Heat-conducting                                                           | Easy-assembly designs                                                      |
| Non-toxic                                                                 | Complex, integral shapes                                                   |
| Reflective                                                                | Precise, close tolerances                                                  |
| Electrically conducting                                                   | Assured, uniform quality                                                   |
| Non-sparking                                                              | Recyclable                                                                 |
| Non-magnetic                                                              | Cost-effective                                                             |
| Non-combustible                                                           | Design freedom                                                             |
| Cold strength                                                             |                                                                            |



## Alloy Characteristics and Uses

| ALLOYS               | CHARACTERISTICS                                                                                                                    | TYPICAL USES                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 1200                 | Commercially pure aluminium.<br>High formability - low strength.<br>High corrosion resistance.                                     | Used in a variety of applications where strength is not a priority. Easily formed or bent and can be polished and anodised. |
|                      | <b>ELECTRICAL CONDUCTOR ALLOYS</b>                                                                                                 |                                                                                                                             |
| 1350                 | Easily formed low strength.                                                                                                        | Busbar, electrical conductors and fittings.                                                                                 |
| 6101                 | Higher strength conductors.                                                                                                        |                                                                                                                             |
|                      | <b>MACHINING ALLOYS</b>                                                                                                            |                                                                                                                             |
| 2011                 | Commercial machining alloy.                                                                                                        | Feed stock for machined products.                                                                                           |
| 6262                 | Machining alloy for anodising                                                                                                      | Combines machinability features and enables anodised finishes to be applied.                                                |
| 3003                 | Good corrosion resistance, formability and weldability.                                                                            | Condensers, heat exchangers, pressure vessels, chemical equipment and furniture.                                            |
| 5083                 | Designed for welded structures requiring maximum joint strength and good corrosion resistance.                                     | Welded structures subject to vibration and fatigue, marine and cryogenic applications.                                      |
|                      | <b>ARCHITECTURAL ALLOYS</b>                                                                                                        |                                                                                                                             |
|                      | Heat treatable for strength, corrosion resistant, good surface finish for anodising and paint coatings.                            |                                                                                                                             |
| 6060                 | Most commonly used alloy.                                                                                                          | Windows, doors, shopfronts and general use.                                                                                 |
| 6063                 | Similar medium strength to 6060.                                                                                                   | Specific temper applications.                                                                                               |
| 6106                 | Higher strength - intricate shapes.                                                                                                | Stronger curtain wall members, medium duty road transport, ladders and planks and light duty structures.                    |
| 6463A                | Designed for extrusions requiring polished and decorative finishes.                                                                | All trim-shapes requiring high quality chemical or mechanical brightening; e.g. picture frames, auto trim.                  |
|                      | <b>STRUCTURAL ALLOYS</b>                                                                                                           |                                                                                                                             |
|                      | High strength, corrosion resistant, higher welded properties to architectural range.                                               | All road and rail transport and structural applications. Will take considerable forming in T4 condition.                    |
| 6005A                | Most suitable structural alloy. Achieves strength with less heat treatment distortion.                                             |                                                                                                                             |
| 6061<br>6082<br>6351 | Other commonly used structural alloys with slightly varying initial strengths. All four 6000 series have the same welded strength. | Large and complex extrusion; e.g., load bearing members for road and rail vehicles.                                         |
| 7005                 | Higher initial and welded strength to 6000 structural alloys.                                                                      |                                                                                                                             |
| 2014                 | High strength.                                                                                                                     |                                                                                                                             |
|                      |                                                                                                                                    | Aircraft alloy - heavy duty structures.                                                                                     |

## Alloys - Tempers - Uses

### Alloy Designation System

In designing and ordering a product, it is important to select a material that will provide the desired properties consistently in production volumes. Aluminium extrusion offers a wide range of material properties through the appropriate selection of alloy and temper.

Commercially-pure aluminium is used for some applications; more often, however, aluminium is mixed (alloyed) with other metals such as copper, manganese, silicon, magnesium and zinc in various proportions. Product performance is determined in part by alloy

composition and in part by production method; and the production method, in turn, is strongly influenced by the temper given to the alloy through various types of mechanical and thermal treatment. Structural and certain physical properties can also be influenced significantly by the choice of alloy and temper.

### Alloys

Alloying elements are usually added to aluminium in amounts ranging from 0.2 to 7.0 percent. Aluminium alloys are grouped by the major alloying elements:

| WROUGHT ALLOY DESIGNATION | MAJOR ALLOYING ELEMENTS | ALLOY CHARACTERISTICS                                                                                                                                                             |
|---------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1000 Series               | Minimum 99% aluminium   | High corrosion resistance<br>Excellent finishability<br>Easily joined by all methods<br>Low strength, poor machinability<br>Excellent Workability<br>High electrical conductivity |
| 2000 Series               | Copper                  | Low to medium strength<br>Good corrosion resistance<br>Poor machinability<br>Good workability                                                                                     |
| 3000 Series               | Manganese               | Low to medium strength<br>Good corrosion resistance<br>Poor machinability<br>Good workability                                                                                     |
| 4000 Series               | Silicon                 | Not available as extruded products                                                                                                                                                |
| 5000 Series               | Magnesium               | Low to moderate strength<br>Excellent marine corrosion resistance<br>Very good weldability                                                                                        |
| 6000 Series               | Magnesium and Silicon   | Most popular extrusion alloy class<br>Good strength<br>Good corrosion resistance<br>Good machinability<br>Good weldability<br>Good formability<br>Heat treatable                  |
| 7000 Series               | Zinc                    | Very high strength<br>Poor corrosion resistance<br>Good machinability<br>Heat treatable.                                                                                          |

## Temper Definitions

|         |                                                                                                                                                                                                                                                                    |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F       | As fabricated; i.e., there is no special control over the temper of such material and it is normally in the as extruded condition. No mechanical property limits are specified.                                                                                    |
| T1      | Air-cooled from the extrusion temperature and naturally aged to a substantially stable condition.                                                                                                                                                                  |
| T3      | Solution heat-treated and cold worked to improve strength.                                                                                                                                                                                                         |
| T4      | Solution heat-treated and naturally aged to a substantially stable condition. These products are normally water quenched at the press or separately solution heat-treated in a salt bath.                                                                          |
| T5      | Air-cooled from the extrusion temperature and artificially aged to improve mechanical properties.                                                                                                                                                                  |
| T591    | A variation of the T5 temper designed to combine good bending properties with strength intermediate between T1 and T5.                                                                                                                                             |
| T593    | The air quenched and aged temper for Alloy 7005.                                                                                                                                                                                                                   |
| T595    | A forming quality temper of 6060, capable of being flared, flattened or bent, yet giving a reasonable level of typical Mechanical Properties.                                                                                                                      |
| T6      | Solution heat-treated, artificially aged and then cold drawn.                                                                                                                                                                                                      |
| T61-T64 | Variations of the T6 temper giving controlled combinations of mechanical properties and electrical conductivity in Alloy 6101.                                                                                                                                     |
| T8      | Solution heat-treated, cold drawn and artificially aged.                                                                                                                                                                                                           |
| T81-T84 | Solution heat-treated, cold drawn and artificially aged; the amount of cold work and therefore the strength of the product increasing through T81 and T84. Special purpose variations of these tempers e.g. T891, T893 etc. are available for some drawn products. |
| T9      | Solution heat-treated, artificially aged and then cold drawn                                                                                                                                                                                                       |
| O       | Annealed. The softest condition for the alloy.                                                                                                                                                                                                                     |
| H111    | Applies to products which have been given a small amount of cold work (usually stretching) but less than that required for a controlled H11 temper.                                                                                                                |
| H112    | Applies to products which have acquired some cold work incidental to extrusion but virtually in the as-extruded condition. Mechanical properties are guaranteed, for this temper.                                                                                  |
| H12-H18 | Strain hardened or cold drawn from the annealed condition. The value of the last digit indicates the degree of strain hardening and the increasing strength of the product (e.g., H14 represents the half hard condition; H18 the fully hard condition).           |

## Temper Designation Systems

### Tempers

The temper designation system is based on the sequences of basic treatments applied to produce the various tempers.

### Basic Temper Designations

|   |                                                                                                                      |
|---|----------------------------------------------------------------------------------------------------------------------|
| F | <b>As Extruded:</b><br>No special control over thermal conditions or strain-hardening; no mechanical property limits |
| O | <b>Annealed:</b><br>Thermally treated to obtain the lowest strength temper                                           |
| H | <b>Strain-Hardened:</b><br>Strain-hardening is used to increase strength                                             |
| T | <b>Thermally Treated:</b><br>Thermally treated to produce stable tempers other than F, O, or H                       |

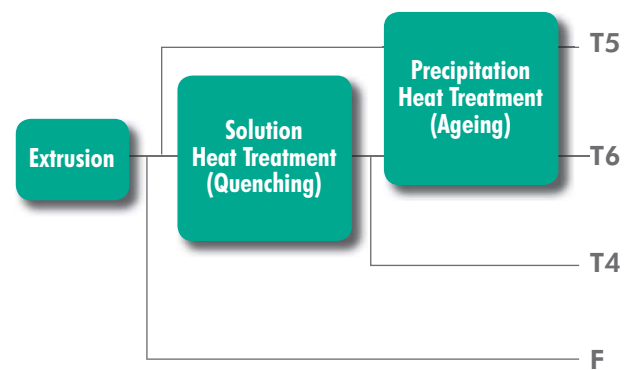
### Temper Numbering System

To produce the desired temper, numerous steps are followed; this sequence of operations is identified by a concise numbering system which follows the letter-designation of the basic temper. The first numeral indicates the basic sequence; additional numerals may appear, indicating specific variations of the temper.

Thus, a complete alloy-temper designation looks, like this: **"6061-T6"** This designation indicates a particular alloy of the 6000 series which is thermally treated ('T'): specifically, heat treated and artificially aged (6").

### Typical Tempers for Extrusions

|      |                                                           |
|------|-----------------------------------------------------------|
| 0    | Fully annealed                                            |
| H112 | Strain-hardened                                           |
| T1   | Cooled from an elevated temperature and naturally aged    |
| T4   | Solution heat treated and naturally aged                  |
| T5   | Cooled from an elevated temperature and artificially aged |
| T6   | Solution heat treated and artificially aged               |



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*Responsibility for legislation/code compliance remains with the user. Capral Aluminium takes no responsibility for any loss/damage whatsoever arising from errors/omissions in this document.*





**1800 ALUMINIUM (258 646)**  
[www.capral.com.au](http://www.capral.com.au)

### Manufacturing Plant Capabilities

Capral Aluminium is Australia's largest manufacturer of aluminium extrusions and has an extensive network of added value facilities designed to meet the needs of our customers. These facilities not only provide aluminium extrusions but provide our customers with a more streamlined means to a final product and are supported by experienced trained staff.

- |                                                    |                                       |                             |
|----------------------------------------------------|---------------------------------------|-----------------------------|
| • 7-axis state-of-the-art robotic machining centre | • Small cut pieces                    | • Punching                  |
| • 3 and 4 axis CNC machine                         | • Cut back saw                        | • Drilling                  |
| • CNC extrusion and plate router                   | • Mitre saw for straight & angle cuts | • Guillotine flashings      |
| • Flat sheet router                                | • Punching                            | • Bend flashings            |
| • Routing                                          | • Knurling                            | • Punching die              |
| • Precision cutting for less than standard lengths | • De-burring                          | • Drawing (cold working)    |
|                                                    | • Slotting                            | • Weather Pile Installation |

### Manufacturing Facilities and Mill Sales

#### QLD

71 Ashburn Rd  
 Bundamba, QLD 4304

#### NSW/ACT

2115 Castlereagh Rd  
 Penrith, NSW 2750

#### SA/NT

Stockwell & Crennis Mines Rds  
 Angaston, SA 5353

#### WA

45-55 Baile Rd  
 Canning Vale, WA 6155

#### VIC/TAS

151 Barry Rd  
 Campbellfield, VIC 3061