 AU INDUSTRY (ANZSIC) REPORT C2223

Aluminium Door and Window Manufacturing in Australia

Out of the frame: Intensifying import competition has negatively affected industry revenue

Blair Li | June 2020

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About IBISWorld

IBISWorld specializes in industry research with coverage on thousands of global industries. Our comprehensive data and in-depth analysis help businesses of all types gain quick and actionable insights on industries around the world. Busy professionals can spend less time researching and preparing for meetings, and more time focused on making strategic business decisions that benefit you, your company and your clients. We offer research on industries in the US, Canada, Australia, New Zealand, Germany, the UK, Ireland, China and Mexico, as well as industries that are truly global in nature.

Covid-19

Coronavirus Impact Update

IBISWorld's analysts constantly monitor the industry impacts of current events in real-time – here is an update of how this industry is likely to be impacted as a result of the global COVID-19 pandemic:

- This subdivision is expected to be lightly affected by COVID-19. This industry has a low reliance on inputs from importers, and is therefore well equipped to maintain production amid faltering economic activity outside Australia.
- Industries in this subdivision typically face strong import competition from manufacturers in Asia. If COVID-19 were to curtail the output of Asian factories, some Australian producers may benefit from enhanced export opportunities as global markets seek out alternative suppliers. However, an escalation in manufacturing disruption due to COVID-19 would likely also lead to a slowdown in economic activity, hindering demand for fabricated metal products.
- Players in affected industries will be able to use various government stimulus measures, such as the accelerated depreciation allowances and the higher instant asset write-off threshold, to support their business.

Note: The content in this report is currently being updated to reflect the trends outlined above.

About This Industry

Industry Definition

Industry companies primarily manufacture architectural aluminium products, which include doors; railings; and aluminium-framed windows, doors and shower screens (complete with glass).

Major Players

JELD-WEN Australia Pty Limited

Main Activities

The primary activities of this industry:

Glazed aluminium-framed door manufacturing

Fabricated aluminium ceiling section manufacturing

Aluminium doors or door frame manufacturing

Aluminium railing manufacturing

Aluminium-framed shower screen manufacturing

Aluminium shutter manufacturing

Aluminium window frame manufacturing

The major products and services in this industry:

Windows

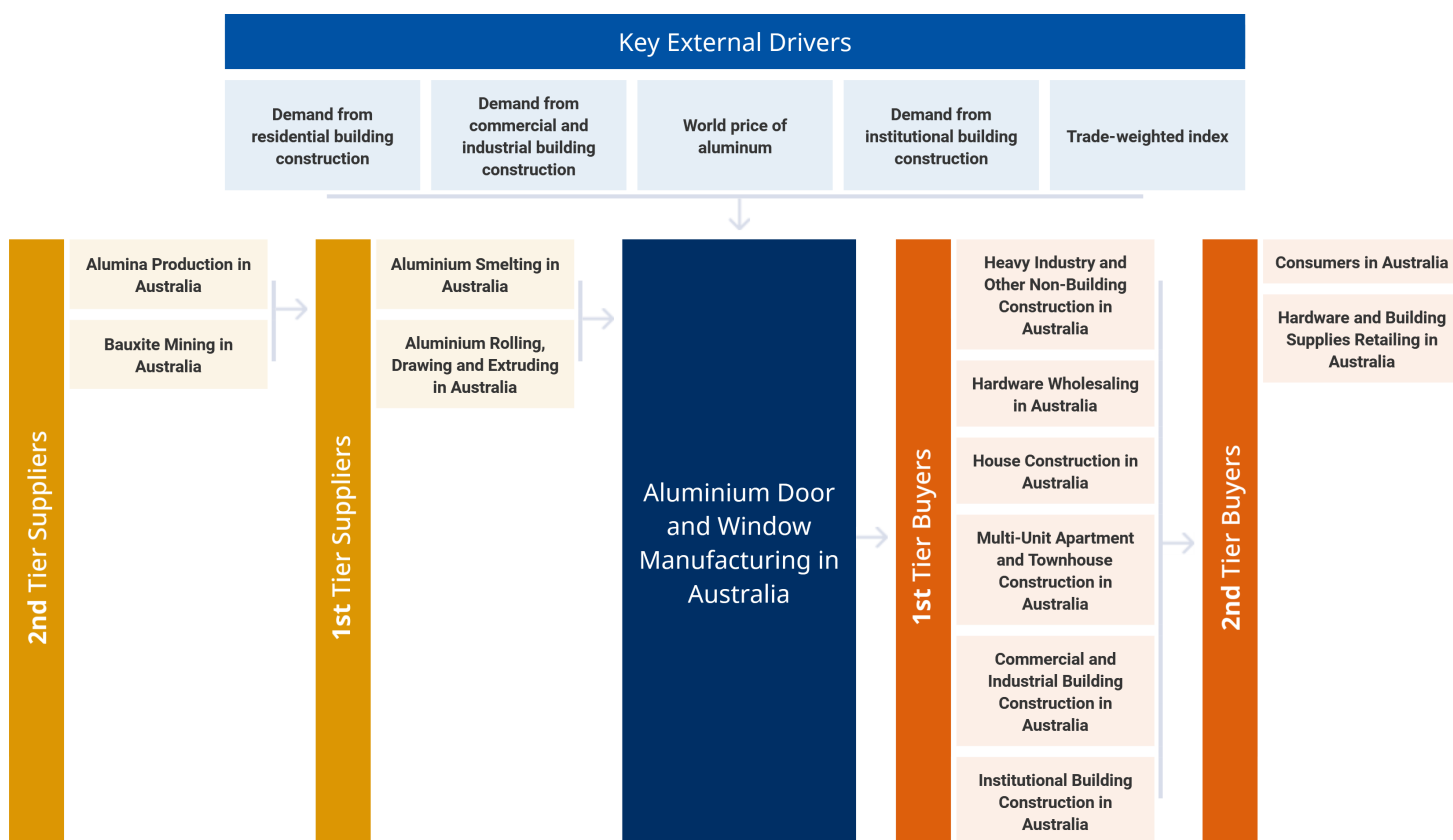
Doors

Garage doors and shutters

Shower screens

Other architectural aluminium products

Supply Chain



SIMILAR INDUSTRIES

Aluminium Rolling, Drawing and Extruding in Australia



Structural Metal Product Manufacturing in Australia



Fabricated Metal Product Manufacturing in Australia



Glazing Services in Australia



Metal Roof and Guttering Manufacturing in Australia



RELATED INTERNATIONAL INDUSTRIES

Sheet Metal, Window & Door Manufacturing in the US

Metal Door & Window Manufacturing in the UK


Sheet Metal, Window & Door Manufacturing in Canada

Architectural Aluminium Product Manufacturing in New Zealand

Structural Metal Product Manufacturing in Ireland

Industry at a Glance

Key Statistics

 **\$4.2bn**
Revenue

Annual Growth
2015-2020

-2.1%

Annual Growth
2020-2025

0.6%

Annual Growth
2015-2025



 **\$212.0m**
Profit

Annual Growth
2015-2020

5.1%

Annual Growth
2015-2025



 **5.1%**
Profit Margin

Annual Growth
2015-2020

-1.0%

Annual Growth
2015-2025



 **1,527**
Businesses

Annual Growth
2015-2020

0.1%

Annual Growth
2020-2025

0.7%

Annual Growth
2015-2025



 **15,609**
Employment

Annual Growth
2015-2020

-0.3%

Annual Growth
2020-2025

2.8%

Annual Growth
2015-2025



 **978.8m**
Wages

Annual Growth
2015-2020

-0.3%

Annual Growth
2020-2025

1.8%

Annual Growth
2015-2025



Key External Drivers

% = 2015-2020 Annual Growth

-1.3%

World price of aluminum

0.0%

Demand from residential building construction

6.2%

Demand from commercial and industrial building construction

5.4%

Demand from institutional building construction

-2.8%

Trade-weighted index

Industry Structure



POSITIVE IMPACT

Capital Intensity

Low

Concentration

Low

Regulation

Light

Technology Change

Low



MIXED IMPACT

Revenue Volatility

Medium

Globalization

Medium



NEGATIVE IMPACT

Life Cycle

Decline

Industry Assistance

Low

Barriers to Entry

Low

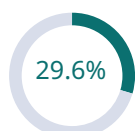
Competition

High

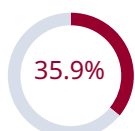
Key Trends

- Industry profit margins have contracted over the past five years due to increased import penetration
- The growing popularity of the NABERS rating system has boosted demand for industry products
- Industry employment has fallen as firms have increased automation to improve efficiencies
- Profit is forecast to decline further as a share of industry revenue due to import penetration
- Industry revenue will increasingly respond to recovery of demand from residential property developers
- Limited potential productivity gains and rising import penetration will increase price competition
- Trends favouring sustainability in commercial construction markets have benefited industry firms

Products & Services Segmentation



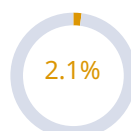
Windows



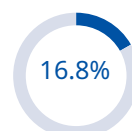
Doors



Garage doors and shutters



Shower screens

Other architectural
aluminium products

Aluminium Door and Window Manufacturing
Source: IBISWorld

Major Players

% = share of industry revenue



7.4% JELD-WEN Australia

92.6% Other

Aluminium Door and Window Manufacturing

Source: IBISWorld

SWOT

S STRENGTHS

Low Customer Class Concentration
Low Product/Service Concentration
Low Capital Requirements

W WEAKNESSES

Low & Steady Barriers to Entry
Low & Steady Level of Assistance
High Competition
Decline Life Cycle Stage
Medium Imports
Low Profit vs. Sector Average
Low Revenue per Employee

O OPPORTUNITIES

World price of aluminum

T THREATS

Very Low Revenue Growth (2005-2020)
Low Revenue Growth (2015-2020)
Low Revenue Growth (2020-2025)
Low Performance Drivers
Demand from residential building construction

Executive Summary

The Aluminium Door and Window Manufacturing industry produces architectural aluminium products used in both residential and non-residential properties.

Manufacturers rely on downstream demand from building construction developers as the industry's products are often installed in new buildings. Residential building construction has declined from a peak in 2017-18, contributing to declines in industry revenue over the past five years. Overall, industry revenue is expected to decline at an annualised 2.1% over the five years through 2019-20, to \$4.2 billion.

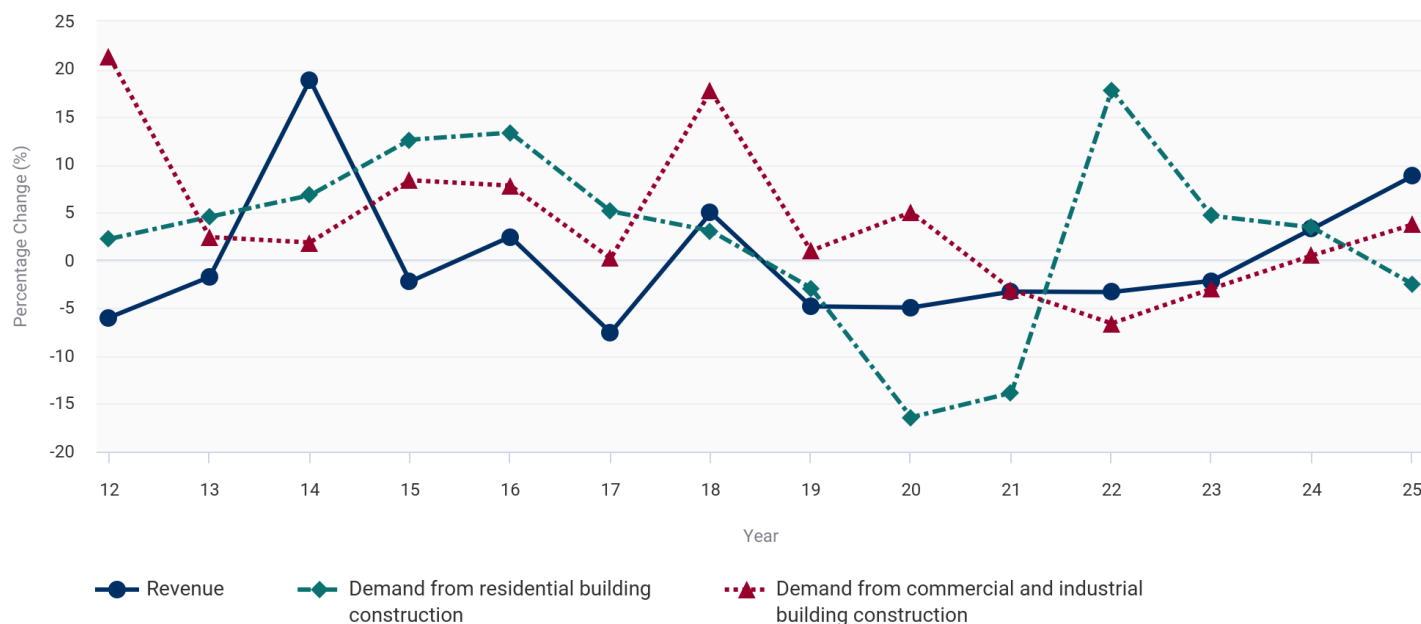
The industry benefited from growth in residential property construction over the three years through 2017-18, which supported demand for industry products commonly fitted in single-unit houses and multi-unit apartments. As aluminium has high-grade insulation properties and is easily recyclable, trends favouring sustainability in commercial construction markets has benefited industry firms. Commercial building developers have been increasingly aiming to achieve higher Green Star and National Australian Built Environment Rating System (NABERS) ratings to attract new tenants, driving demand for aluminium building materials from non-residential building construction markets. However, industry revenue is anticipated to decline by 4.9% in the current year, due to weaker demand from residential building markets and the effects of the COVID-19 outbreak.

Increased competition from imports has also contributed to declines in industry revenue over the past five years. Import penetration has risen over the period, with imported products satisfying a rising share of domestic demand. Foreign manufacturers in countries such as China have lower labour and operating costs, and can typically sell their goods at lower pricepoints, which increases their price competitiveness against locally manufactured goods.

The industry is projected to slowly return to growth over the next five years. Industry revenue is forecast to rise at an annualised 0.6% over the five years through 2024-25, to \$4.3 billion. Rising demand from residential construction markets is anticipated to drive industry revenue growth over the period. In addition, demand from commercial building developers is projected to support industry revenue over the next five years, as they increasingly tailor projects to meet growing sustainability expectations.

Industry Performance

Key External Drivers 2012–2025



Aluminium Door and Window Manufacturing
Source: IBISWorld

Key External Drivers

Demand from residential building construction

The market for residential building construction includes single-unit houses, multi-unit apartments and townhouses. The housing market represents the most significant source of demand for architectural aluminium products, as many residential properties are fitted with aluminium garage doors, windows, doorframes, ceiling sections and shower screens. Residential building construction activity is expected to decline sharply in 2019-20, threatening the industry's expansion.

Demand from commercial and industrial building construction

Demand from the commercial and industrial construction market helps drive sales of architectural aluminium products. Commercial construction firms have tried to achieve higher Green Star ratings over the past five years, which represents an opportunity for the industry to capitalise on the high-grade insulation properties and recyclability of aluminium. Demand from commercial and industrial construction is expected to increase in 2019-20.

World price of aluminum

As aluminium is the industry's main manufacturing expense, the world price of aluminium affects the industry's revenue and profitability. When prices rise, industry operators that are unable to pass on price increases to downstream markets risk reducing their profit margins. The world price of aluminium is expected to decline in 2019-20.

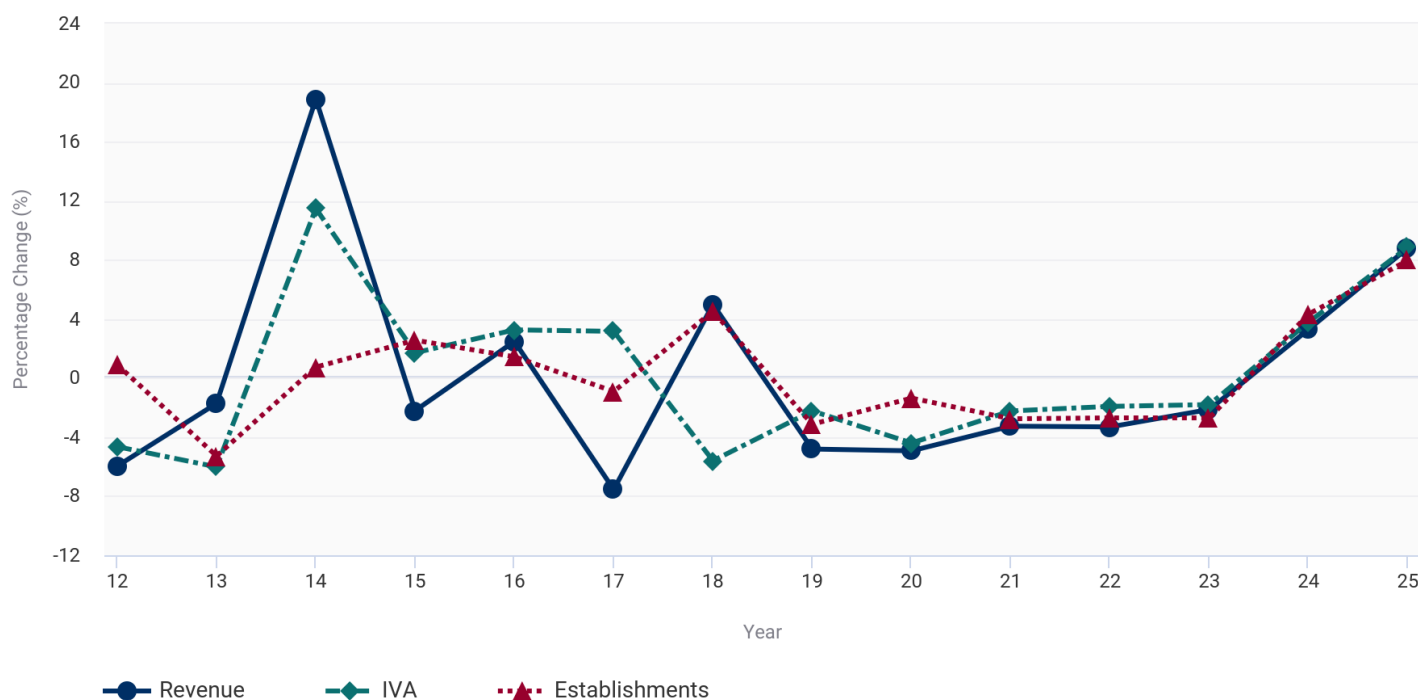
Demand from institutional building construction

Growth in demand from the institutional building construction market supports the industry, as this sector drives demand for architectural aluminium products, particularly window and door systems. This construction market largely depends on federal funding allocated to institutions such as schools, universities and hospitals. Demand from institutional building construction is expected to increase in 2019-20, fuelled by the government investing in hospitals and aged care facilities.

Trade-weighted index

The trade-weighted index represents the value of the Australian dollar compared with the currencies of Australia's main trading partners. A depreciating Australian dollar benefits the industry by making domestically produced architectural aluminium products cheaper relative to imported alternatives. This trend also boosts the price competitiveness of the industry's exports. The Australian dollar is expected to depreciate in 2019-20.

Industry Performance 2012-2025



Aluminium Door and Window Manufacturing
Source: IBISWorld

Current Performance

The Aluminium Door and Window Manufacturing industry has struggled with fluctuating industry revenue over the past five years, primarily due to volatile demand from downstream construction markets.

Industry operators manufacture a range of architectural aluminium products that are installed in residential and non-residential properties. These products include aluminium windows, doors, shower screens and garage doors. Industry players also manufacture custom-built products, such as shopfronts and architectural panels, for commercial buildings, largely using computer-aided drafting software.

As exports account for a minor share of industry revenue, manufacturers rely on domestic building construction markets. Industry revenue has been volatile over the past five years, largely due to movements in building construction activity. Overall, industry revenue is expected to decline at an annualised 2.1% over the five years through 2019-20, to \$4.2 billion. This includes an anticipated decline of 4.9% in the current year due to an anticipated fall in demand from the residential building construction market and the effects of the COVID-19 outbreak.

Profit and employment

Industry profit margins have contracted over the past five years, mainly due to intensifying import penetration.

This trend has caused industry operators to reduce prices to retain their market share. Operators unable to pass on rising input costs to downstream markets through higher prices have absorbed them, limiting profitability. Additionally, although world aluminium prices have fallen since 2017-18, they have generally risen over the past five years, placing additional downward pressure on profit margins. However, profit has generally risen for industry operators producing larger, customised products for industrial and commercial building projects over the period. This trend is largely because these custom products are less susceptible to import competition.

Rising import competition and falling profitability have significantly constrained growth in industry participation over the past five years. Faced with mounting competition from low-cost imports, industry operators have reduced costs to remain viable. Firms have attempted to boost productivity and operating efficiencies by investing in capital and replacing low-skilled labour with machines. This strategy has contributed to a decline in employment over the past five years.

Demand from building markets

As demand from domestic property developers drives sales of industry products, industry revenue movements are closely correlated with activity in Australia's building construction markets.

As a result, industry revenue is moderately volatile. Construction activity is anticipated to decline due to the COVID-19 outbreak in early 2020, driving a decline in industry revenue in the current year.

The growing popularity of Green Star and NABERS ratings as a way to differentiate commercial properties has positively influenced industry demand over the past five years. Green Star is an internationally recognised and voluntary environmental rating system that assesses a building's environmental design and energy efficiency. NABERS is a rating tool used to measure the environmental impact and sustainability of existing buildings. Many corporations, such as banks and

accounting firms, have been adopting environmental, social and governance principles to improve their public reputation for sustainability. As a result, many companies are increasingly considering a building's environmental qualifications when choosing an office space. As aluminium is recyclable and exhibits energy-efficient qualities, the industry's products are a common choice for commercial property developers actively pursuing higher Green Star and National Australian Built Environment Rating System (NABERS) ratings. These trends have encouraged increased industry participation over the past five years. However, the number of industry enterprises is anticipated to decrease in the current year, due to the effects of the COVID-19 outbreak.

Although the industry has benefited from building construction markets increasingly using sustainability measuring systems, other building trends have negatively affected industry revenue over the past five years. Sales of aluminium-framed shower screens have declined over the period due to the increasing popularity of frameless shower screens, which are regarded as a luxurious alternative to framed screens. In addition, sashless windows have become an increasingly popular alternative in the window market, negatively affecting the market share of aluminium windows.

International trade

| Industry exports account for a minimal share of industry revenue.

The bulky and fragile nature of industry products limits the revenue firms can generate through export markets. As a result, the depreciating Australian dollar has not significantly boosted the competitiveness of industry exports in overseas markets over the past five years. Exports are expected to account for only 0.6% of industry revenue in 2019-20.

Imported industry products have made significant inroads in to the domestic market, satisfying a rising share of domestic demand over the past five years. Imported architectural aluminium products are produced by manufacturers in nearby Asian countries. These manufacturers benefit from lower operating costs, which boosts the price competitiveness of their products.

Historical Performance Data

Year	Revenue	IVA	Estab.	Enterprises	Employment	Exports	Imports	Wages	Domestic Demand
	(\$m)	(\$m)	(Units)	(Units)	(Units)	(\$m)	(\$m)	(\$m)	(\$m)
2011-12	4,040	1,285	1,554	1,484	16,051	18.9	234	905	4,255
2012-13	3,971	1,207	1,472	1,402	15,078	24.8	258	877	4,204
2013-14	4,721	1,346	1,483	1,417	15,968	20.9	295	977	4,994
2014-15	4,617	1,369	1,521	1,447	15,866	21.7	407	994	5,002
2015-16	4,731	1,414	1,543	1,468	15,951	24.9	465	1,025	5,172
2016-17	4,374	1,459	1,529	1,436	16,473	21.8	436	1,032	4,788
2017-18	4,592	1,377	1,598	1,497	17,102	27.2	614	1,022	5,179
2018-19	4,372	1,346	1,548	1,463	16,740	24.6	577	1,012	4,925
2019-20	4,157	1,287	1,527	1,455	15,609	24.1	566	979	4,699

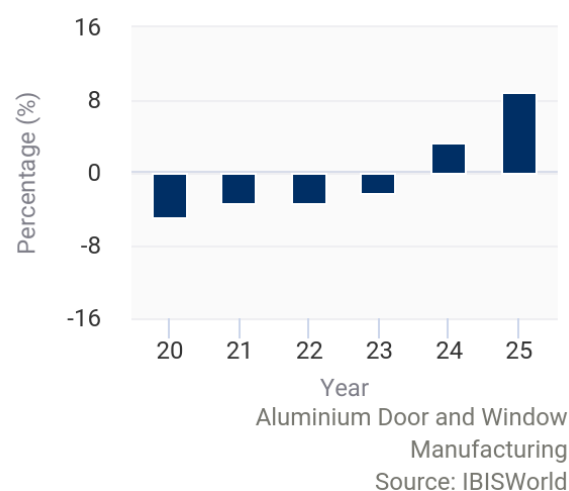
Industry Outlook

Outlook

The Aluminium Door and Window Manufacturing industry's performance is anticipated to improve over the next five years.

Industry operators are forecast to continue deriving an increasing share of their revenue from the non-residential building construction market over the period, as developers pursue higher Green Star and National Australian Built Environment Rating System (NABERS) ratings. Demand from institutional building construction is projected to decrease over the next five years, while demand from residential building construction is forecast to grow. Although domestic demand for architectural aluminium products is projected to rise over the period, import competition is also forecast to increase, with foreign manufacturers capturing an increasingly large share of domestic demand. The trend is anticipated to limit the industry's growth opportunities over the next five years. Overall, industry revenue is projected to rise at an annualised 0.6% over the five years through 2024-25, to \$4.3 billion.

Industry Outlook
2020-2025



Profit and wages

Industry profitability is forecast to contract further over the next five years.

Industry operators are anticipated to continue replacing low-skilled labour with machinery in an attempt to achieve greater productivity and reclaim lost margins. This trend is projected to raise the industry's capital intensity over the period. However, the industry's larger operators will have limited scope to replace manual labour with machinery, as the higher incidence of low-skilled labour is a by-product of large-scale operations. Smaller industry participants generally have minimal employee numbers, only hiring staff for essential core production functions. Most industry enterprises are either sole proprietorships or have fewer than 20 employees, most of which are highly skilled staff, such as architects and designers, who cannot be easily replaced with machinery.

Limited potential productivity gains, rising import penetration and an increase in the world price of aluminium are projected to increase industry price competition over the next five years, negatively affecting profitability. As a result, industry operators are anticipated to engage in increased merger and acquisition activity to improve profitability through economies of scale. This trend is expected to limit growth in industry participation over the period.

Demand from building markets

Industry revenue is projected to increasingly respond to changes in demand from residential property developers.

The share of industry revenue derived from products sold to residential property developers is anticipated to grow over the next five years, as demand for residential property construction recovers. However, the world price of aluminium is forecast to rise over the period. This trend will likely hinder growth in revenue derived from products sold to housing construction markets, as cheaper alternatives made from materials such as wood and steel become more price competitive. Demand from commercial construction is anticipated to decrease slightly over the next five years, but remain at a higher level compared with most of the past five years. Commercial property projects are often built or renovated to achieve higher Green Star and NABERS ratings. However, demand from institutional building construction is anticipated to decrease over the next five years.

International trade

Imports from low-cost manufacturers in nearby Asian countries are projected to capture an increasing share of domestic demand over the next five years, limiting industry revenue growth.

Foreign manufacturers of industry products are forecast to fare better than Australian producers over the next five years. In the face of rising aluminium prices, foreign manufacturers are anticipated to benefit from their lower labour costs and high production capacities, which will enable them to achieve greater economies of scale. As a result, foreign competitors will likely further undercut Australian producers on price over the next five years, capturing a greater share of domestic demand. Furthermore, productivity gains achieved by replacing low-skilled labour with machinery are forecast to plateau over the period. If domestic firms are unable to find other ways to boost productivity, import penetration will likely intensify. Although the Australian dollar is projected to remain weak over the next five years, a weak Australian dollar has been of minimal benefit to domestic producers facing strong price competition from imported products. However, manufacturers of larger products (such as commercial facades) are anticipated to face less competition from offshore producers due to the custom-built nature of their products.

Performance Outlook Data

Year	Revenue	IVA	Estab.	Enterprises	Employment	Exports	Imports	Wages	Domestic Demand
	(\$m)	(\$m)	(Units)	(Units)	(Units)	(\$m)	(\$m)	(\$m)	(\$m)
2020–21	4,021	1,258	1,485	1,414	16,312	24.8	573	966	4,569
2021–22	3,888	1,234	1,445	1,377	15,974	24.0	589	948	4,453
2022–23	3,805	1,212	1,406	1,353	15,714	24.0	602	933	4,384
2023–24	3,931	1,258	1,467	1,411	16,421	23.9	617	981	4,524
2024–25	4,278	1,370	1,584	1,538	17,925	24.4	633	1,072	4,886

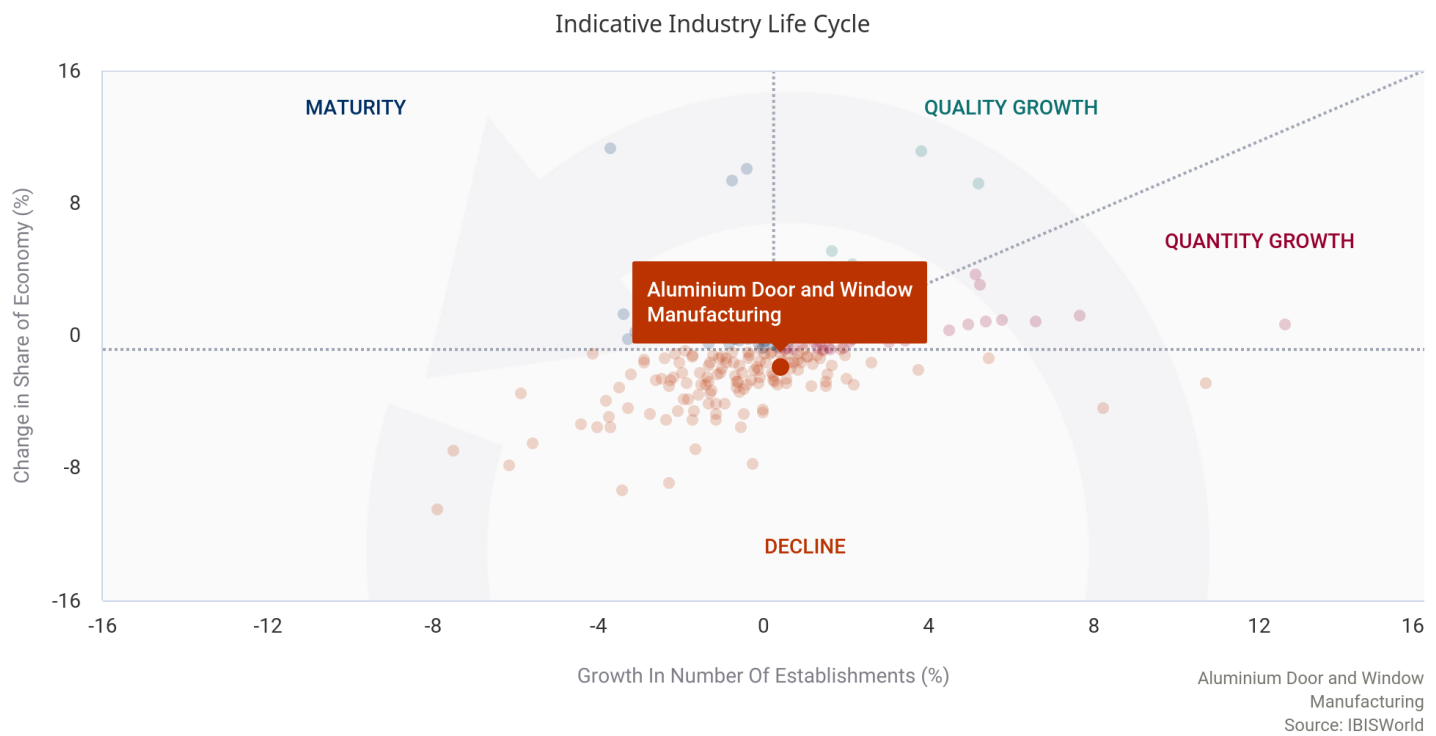
Industry Life Cycle **The life cycle stage of this industry is ⚠ Decline**

LIFE CYCLE REASONS

The industry's contribution to the economy is shrinking

Market concentration is increasing due to ongoing merger and acquisition activity

Businesses are focusing on improving operating efficiencies by increasing capital intensity to achieve higher productivity



The Aluminium Door and Window Manufacturing industry is in the decline phase of its life cycle. Industry value added (IVA), a measure of an industry's contribution to the wider economy, is anticipated to stay at an annualised 0.0% over the 10 years through 2024-25. This represents an underperformance in comparison to the overall economy, with Australian GDP forecast to rise at an annualised 2.0% over the same period. Declining IVA is indicative of an industry in the decline phase of its economic life cycle.

Over the past five years, industry players have increasingly sought to enhance their price competitiveness by adopting more capital-intensive production methods, reducing their dependence on manual labour. Firms unable to compete have been forced to either cease trading or merge with other industry players to remain competitive. Merger and acquisition activity in the industry is expected to continue as firms attempt to achieve greater economies of scale to boost their price-competitiveness, driving an expected decline in enterprise numbers over the 10 years through 2024-25.

The industry heavily relies on activity in downstream building construction markets, with industry revenue growth closely reflecting building construction activity. Domestic operators are also faced with increasing competition from foreign manufacturers that offer imported products at lower prices. In addition, the industry's products are stable and clearly segmented.

Products and Markets

Supply Chain

KEY BUYING INDUSTRIES

1st Tier

Heavy Industry and Other Non-Building Construction in Australia

Hardware Wholesaling in Australia

House Construction in Australia

Multi-Unit Apartment and Townhouse Construction in Australia

Commercial and Industrial Building Construction in Australia

Institutional Building Construction in Australia

2nd Tier

Consumers in Australia

Hardware and Building Supplies Retailing in Australia

KEY SELLING INDUSTRIES

1st Tier

Aluminium Smelting in Australia

Aluminium Rolling, Drawing and Extruding in Australia

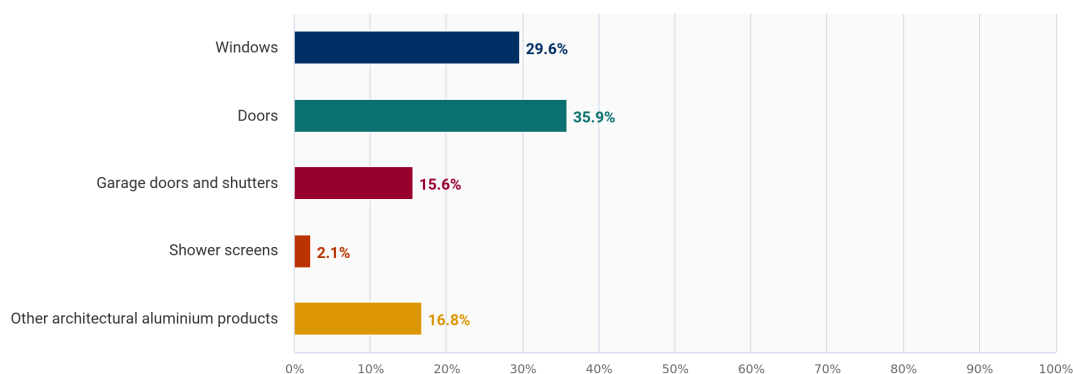
2nd Tier

Alumina Production in Australia

Bauxite Mining in Australia

Products and Services

Products and Services Segmentation



2020 INDUSTRY REVENUE

\$4.2bn

Aluminium Door and Window Manufacturing
Source: IBISWorld

Products produced by the Aluminium Door and Window Manufacturing industry include mass-produced consumer goods, such as aluminium window and door frames, shower screens and garage doors.

The industry's products also include custom-built goods for construction developments, such as commercial facades. Aluminium is light-weight and recyclable, which makes it a favourable for architectural purposes compared with alternatives made of steel, plastic or wood.

Doors

Aluminium door systems mainly consist of doors, door frames, flyscreens and combined door-window units, such as bi-fold doors and glass partitions.

This segment's share of industry revenue has remained stable over the past five years. Demand from residential and commercial building construction markets largely drive sales of aluminium door systems. These products face strong competition from timber, fibreglass and steel substitutes, but are considered to have superior heat- and rust-resistant properties. Additionally, the lightweight nature of these products makes them easy to transport and manipulate on sliding and bi-fold mechanisms.

Windows

Aluminium window systems consist of sliding, double-hung, bi-fold, transom and casement windows.

These products are mainly sold to residential and non-residential building construction markets. Aluminium windows are made from alloys that are weatherproof, corrosion resistant, immune to adverse effects from UV rays and can be easily shaped to meet varying design demands. A layer of aluminium siding is four times more effective than uninsulated wood siding at preserving heat. This segment has increased as a share of industry revenue over the past five years, due to commercial and institutional building developers aiming to achieve higher Green Star and National Australian Built Environment Rating System ratings.

Garage doors and shutters

Both residential and non-residential markets use aluminium garage doors and shutters, with demand chiefly derived from single-unit housing construction.

Residential garage doors and shutters serve a range of purposes, including improving a garage's security, aesthetics and ease of operation. Commercial garage doors and shutters are often installed in restaurants, and retail and grocery stores for security purposes.

Several trends have fuelled demand for aluminium garage doors and shutters over the past five years. These trends include the shift from timber towards steel, aluminium or fibreglass garage doors due to their greater strength, anti-corrosive properties and reduced susceptibility to damage from termites. Industry firms have also improved their aluminium garage door product offerings by introducing new technologies. Examples of these new technologies include lighter doors made from aluminium composites, stronger doors made from acrylic panel inserts with

aluminium frames and polycarbonate aluminium garage doors, which reduce heat transmission. As a result, this segment has grown as a share of industry revenue over the past five years.

Shower screens

Aluminium shower screens are principally sold to single-unit house and multi-unit apartment construction markets.

Shower screens also have applications in other building markets, such as hotels and fitness centres. Frameless shower screens have increased in popularity due to their aesthetic appeal over the past five years. This trend has had a negative effect on revenue generated from aluminium shower screens. Industry-produced shower screens have also faced increasing competition from solid-state shower units that encase the screen in fibreglass or PVC. As a result, this segment has fallen as a share of industry revenue over the past five years.

Other architectural aluminium products

The industry manufactures a range of other architectural aluminium products.

These products include aluminium ladders, balcony railings, gates, skylights, shop fronts, commercial facades and fascia. Most products in this segment have faced intensifying competition from timber and steel alternatives. Despite the threat of product substitution, this segment's share of industry revenue has remained stable over the past five years. These products are less susceptible to competition from overseas producers due to the difficulty in importing bulkier items, such as commercial facades. New products with custom design potential have also strengthened demand for products in this segment over the past five years.

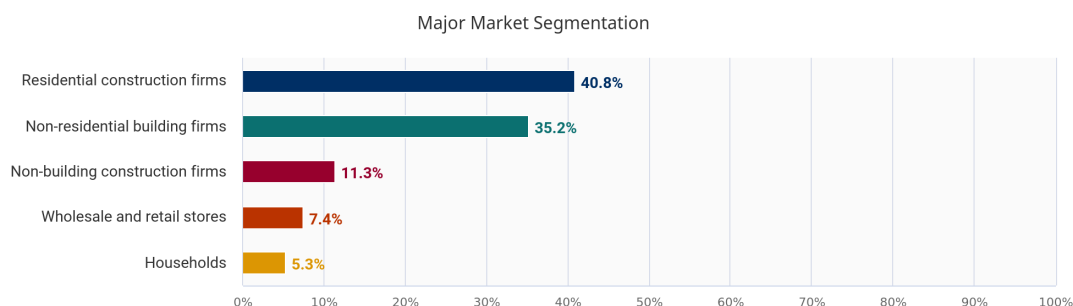
Demand Determinants

Aluminium door and window products are mainly used to construct and renovate both residential and non-residential buildings.

Consequently, industry operators heavily rely on private-sector residential, commercial and industrial property construction and renovation activity for a large portion of their revenue. Demand for industry products is sensitive to changes in building trends. Aluminium garage doors have grown increasingly popular among residential property developers, given their enhanced durability to termite damage and anti-corrosive properties when compared with timber doors. However, sales of aluminium shower screens have been declining due to the growing popularity of frameless shower screens.

Sustainability standards have emerged as a key criterion for major tenants in search of commercial real estate over the past five years. As a result, the growing popularity of buildings accredited by environmental ratings systems, such as Green Star, has influenced demand for industry products. As a result, aluminium products have become increasingly popular with commercial property builders, given its insulating properties and recyclability.

Major Markets



2020 INDUSTRY REVENUE

\$4.2bn

Aluminium Door and Window Manufacturing
Source: IBISWorld

The industry's primary customers for architectural aluminium products, particularly doors and windows, are downstream residential and non-residential building construction industries. To a lesser extent, maintenance and repair construction workers also use industry products to repair, renovate and maintain buildings. Most products made in the industry are subject to standard list prices. Wholesalers and retailers primarily market products. Occasionally, industry goods may be sold by tender or through individual negotiation.

Residential construction firms

The residential construction market is the primary source of demand for a range of industry products commonly fitted in houses and multi-unit apartments, such as window frames, doors and doorframes, garage doors, flyscreens, skylights, fascias, shutters and shower screens. This market also makes additions, alterations, renovations and repairs to existing properties. Firms in this market range from small-scale home builders to large-scale building contractors such as Henley, Mirvac, and Metricon Homes. These firms generally source their architectural aluminium products straight from manufacturers or wholesalers. The residential construction market has increased as a share of industry revenue over the past five years. This trend is largely due to manufacturers vertically integrating to incorporate their own sales operations, while also absorbing the profit margins usually generated by wholesalers and retail stores.

Non-residential building firms

The non-residential building construction market requires a range of industry products catered specifically towards commercial, industrial and institutional building construction. These products include window and door units, curtain walls, partitions, railings, shopfronts, balustrades, skylights and many other architectural aluminium products. This segment includes the largest construction contractors, such as LendLease, Laing O'Rourke and Multiplex.

Industry firms have also benefited from the growing trend of construction contractors tailoring their projects to achieve higher Green Star ratings and catering to tenants' desire for more environmentally friendly buildings. As architectural aluminium products are recyclable and energy-efficient, this trend has boosted demand for industry products. Overall, this market has increased as a share of revenue over the past five years.

Wholesale and retail stores

The industry derives a relatively small proportion of its revenue from the sale of products to downstream hardware and homeware wholesaling and retailing firms, including major chain stores such as Bunnings Warehouse. These stores specialise in retailing industry products to consumers and wholesaling products and components to special trade contractors. Wholesale and retail stores have declined as a share of revenue over the past five years. This decline is attributable to industry operators increasingly introducing their own sales operations, effectively reducing the customer bases of competing wholesale and retail stores.

Non-building construction firms

Sales of architectural aluminium products to the non-building construction market represent a minor share of industry revenue. Firms in this segment are primarily involved in heavy civil engineering, such as constructing mining projects, dams, railways, roads and oil refineries. A small selection of the industry's products, such as railings, partitions and shutters, are sold to this market. Investment in new mining-related projects has been wound back over the past five years, decreasing demand for industry products. As a result, this market's share of industry revenue has fallen over the period.

Households

Manufacturers often maintain a direct-to-public sales capacity for certain industry products. In particular, garage door and shutter manufacturers focus heavily on selling their products to households. Their services include extruding and cutting products to order, often on-site. The share of industry revenue derived from this market has increased over the past five years, as industry operators have begun to expand their reach to households after incorporating their own sales operations.

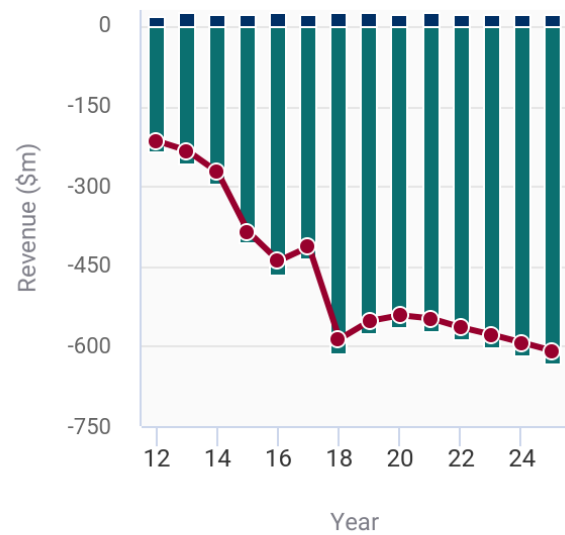
International Trade

Exports in this industry are  **Low** and Increasing

Imports in this industry are  **Medium** and Increasing

The Aluminium Door and Window Manufacturing industry engages in a moderate level of international trade. While certain properties of aluminium, such as its lightness and malleability, give industry products a competitive edge over substitute products, these characteristics also make transportation hazardous, with industry products at risk of being damaged. Furthermore, some industry products, such as commercial facades, are often bulky and fragile, which often makes sourcing from overseas difficult. Consequently, domestic firms predominately service the domestic market.

Industry Trade Balance



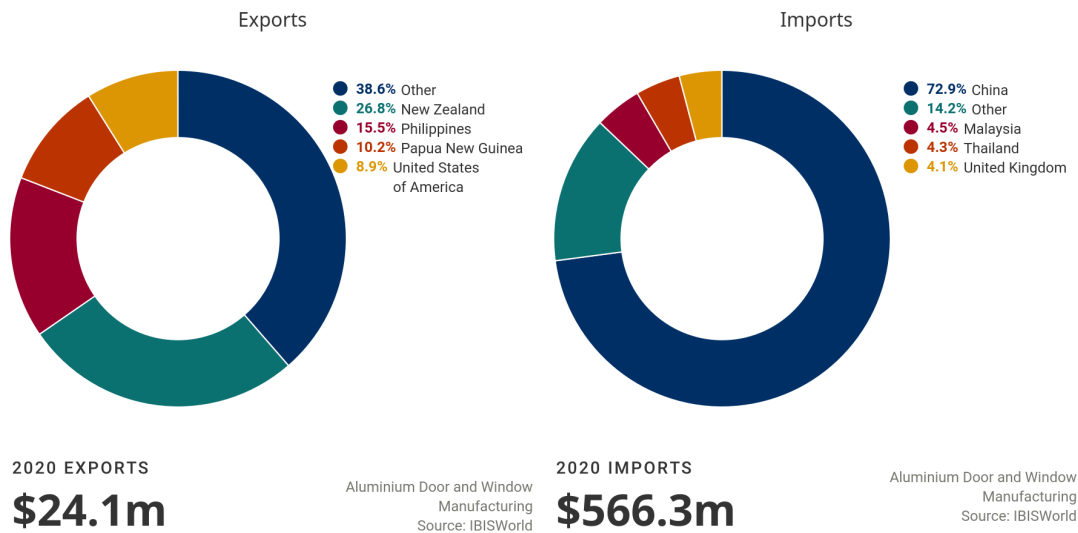
Exports

Industry export revenue is expected to rise at an annualised 2.1% over the five years through 2019-20, to \$24.1 million. Despite this strong growth, industry exports are only anticipated to account for 0.6% of industry revenue in the current year. The rise in industry export revenue is largely attributable to the depreciation of the Australian dollar over the past five years, which has increased the price competitiveness of locally manufactured products.

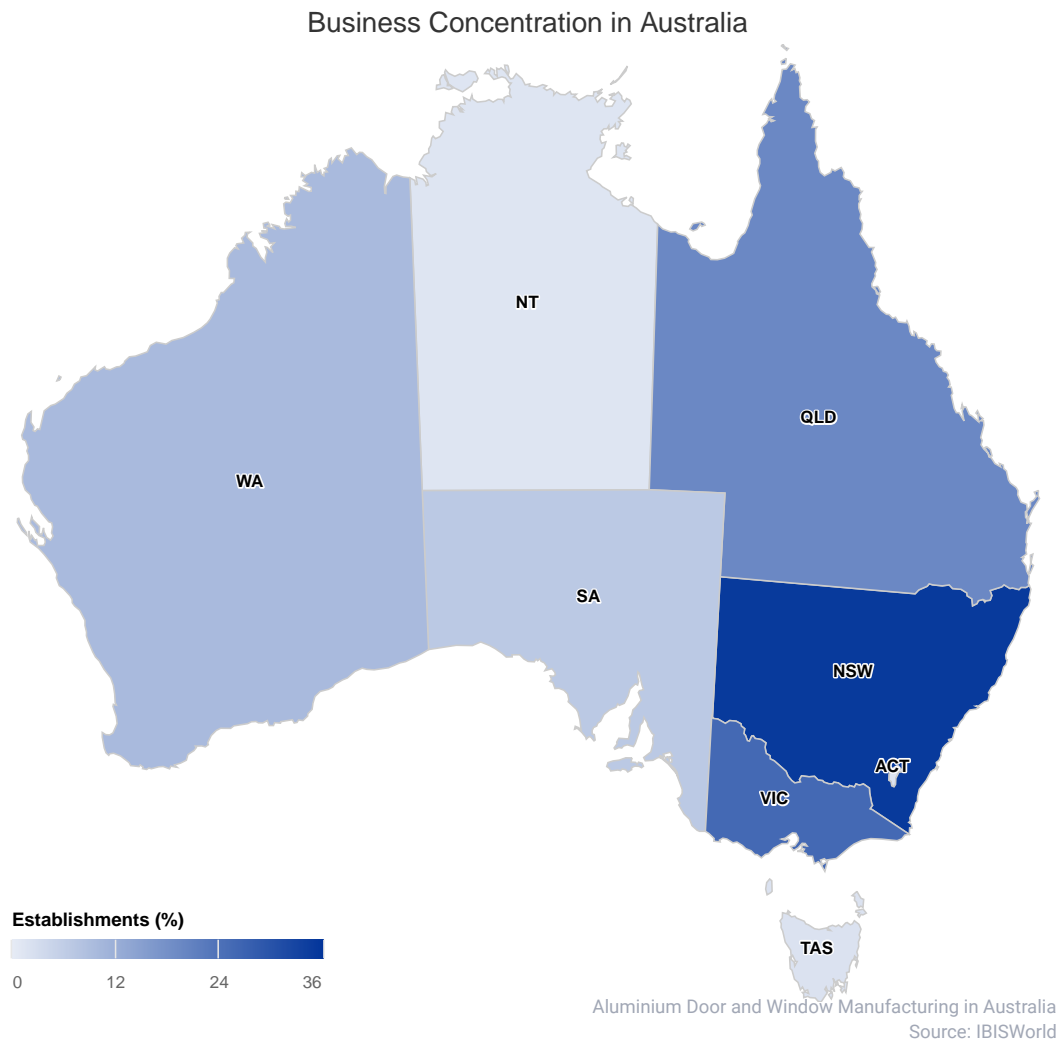
Imports

The value of industry imports is anticipated to rise at an annualised 6.8% over the five years through 2019-20, to \$566.3 million. Industry imports are expected to account for 11.9% of domestic demand in the current year, rising from 8.1% in 2014-15. This strong growth in the total value of imports can be attributed lower operating costs for manufacturers in nearby Asian countries. Imports are forecast to account for a larger share of domestic demand over the next five years due to intensifying price competition, primarily from China.

Aluminium Door and Window
Manufacturing in Australia
Source: IBISWorld



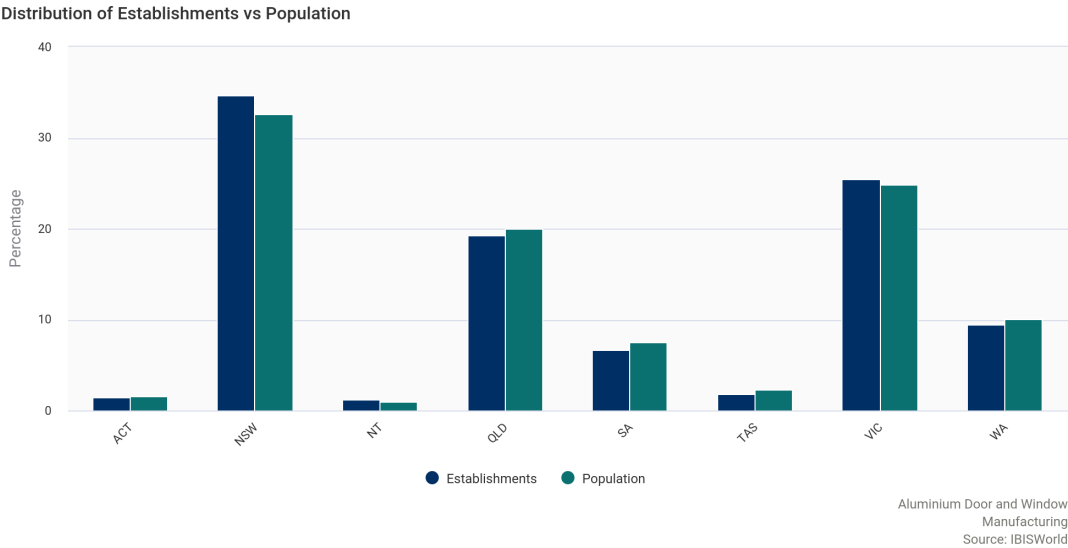
Business Locations



The geographical spread of industry operators is largely aligned with the distribution of both the Australian population and economic activity. This

distribution reflects how the geographic spread of industry enterprises is influenced by patterns in construction activity, as demand for architectural aluminium products is primarily determined by demand from the construction sector. Given the bulky and fragile nature of the industry's products, industry firms typically choose to remain close to their respective downstream markets. One exception to this distribution of industry firms is Western Australia, where industry firms balance their desire to be close to customers with access to raw materials and other inputs.

The number of Australian aluminium smelters has fallen from five to four over the past five years, following the Point Henry smelter's closure in 2014. The Tomago aluminium smelter in New South Wales and Portland aluminium smelter in Victoria account for over a third of domestic aluminium production, and serve as the primary sources of aluminium for industry manufacturers in both states. Queensland-based manufacturers generally obtain their supply of aluminium through Gladstone-based Boyne Smelters Limited, the largest aluminium smelter in the country.

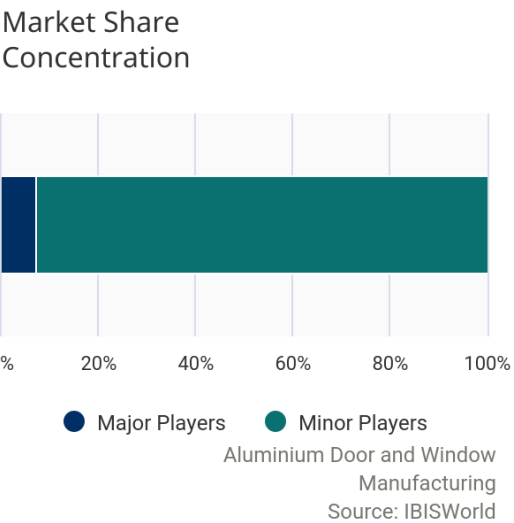


Competitive Landscape

Market Share Concentration

Concentration in this industry is ✔ Low

The Aluminium Door and Window Manufacturing industry displays low market share concentration. The market is dominated by small establishments, with the top four players expected to account for less than 15% of industry revenue in 2019-20. The industry's low concentration primarily stems from the basic technology required for production. According to the ABS, over 90% of industry firms are either non-employing or employ fewer than 20 staff. In addition, less than 23% of operators generated more than \$2 million in revenue. The homogenous nature of industry products and low barriers to entry also work to limit the industry's market share concentration.



However, market share concentration has been increased over the past five years as greater import penetration has caused some operators to exit the industry or merge with other players to remain competitive. The market shares of the industry's larger, more established players have increased as a result of acquisitions, such as JELD-WEN Australia's acquisition of Aneeta Windows Systems in 2015. Rising demand from commercial building construction has also helped increase market share concentration over the past five years as only the industry's larger players typically have the capacity to design and manufacture customised commercial property fittings.

Key Success Factors

IBISWorld identifies 250 Key Success Factors for a business. The most important for this industry are:

Availability of resource: Industry firms need to be able to source reliable and cost-effective aluminium inputs for their products to remain competitive from both a quality and price perspective.

Having a high profile in the market: Firms with a major presence in particular market segments are more likely to achieve consistent sales. This factor can also enhance product differentiation, which is increasingly important due to the prevalence of cheaper imported alternatives.

Ability to pass on cost increases: Increases in aluminium input costs significantly affect industry profitability. As all industry products require aluminium for production, industry firms that can pass on price rises to customers are better positioned to maintain their profit margins.

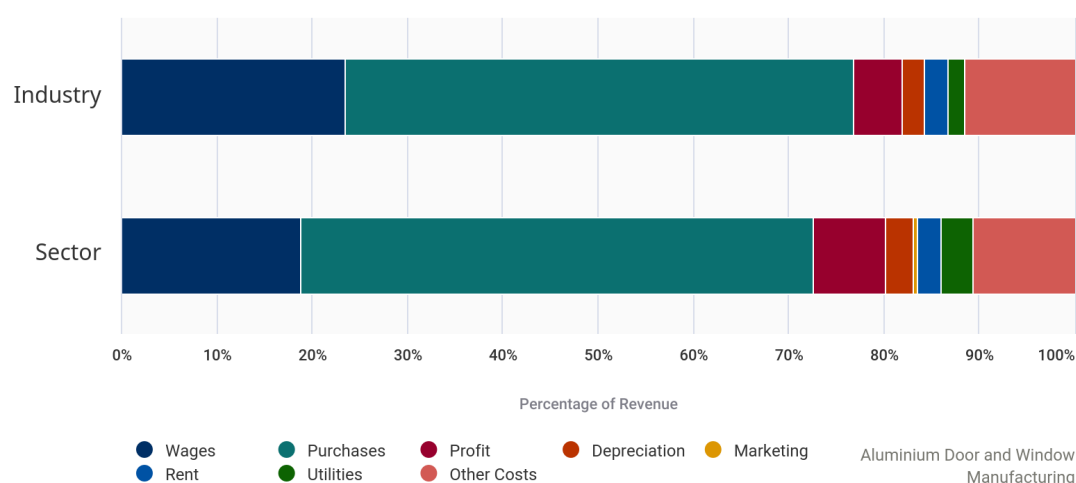
Proximity to key markets: Industry operators located in areas with high rates of building construction activity can reduce their transport costs and lower the risk of damaging their products.

Having contacts within key markets: Industry operators that can establish business relationships with large construction companies can position themselves as prime suppliers of aluminium doors and windows, which can assist in gaining new customers.

Provision of a related range of goods/services ("one stop shop"): Industry firms that can manufacture a range of architectural aluminium products are better able to expand their customer bases by offering downstream markets the convenience of bulk-buying all their required products.

Cost Structure Benchmarks

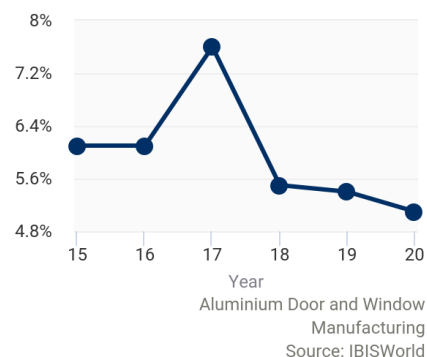
Cost Structure 2020



Profit

Industry profit has declined over the past five years, largely due to rising import penetration. Manufacturers in nearby Asian countries generally operate with lower production costs, allowing them to offer products for lower prices. However, industry operators that produce large custom-made products, such as facades for commercial buildings, have boosted their profitability over the past five years. The large, bulky nature of these products makes importing from overseas difficult. In addition, these operators have benefitted from strong and rising demand from commercial and industrial building construction over the past five years.

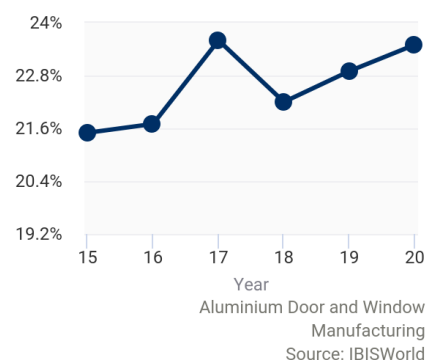
Profit as a Share of Revenue 2015-2020



Wages

While total industry wage costs have fallen over the past five years, they have risen as a share of industry revenue. Declining interest rates have provided industry players with greater scope to replace low-skilled labour jobs with machinery over the period, reducing the industry's reliance on manual labour. However, this trend has marginally boosted the industry's average wage over the past five years, as operators have increasingly hired highly skilled employees to operate productivity-enhancing technology. This trend reflects industry firms' attempts to boost labour productivity and remain competitive through greater investment in capital, particularly as import competition has intensified price competition over the period.

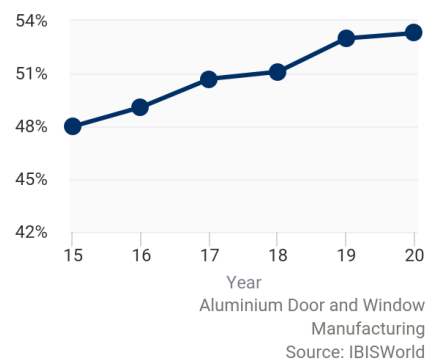
Wages as a Share of Revenue 2015-2020



Purchases

Purchases represent the industry's largest expense. As with most manufacturing industries, commodity prices heavily influence purchase costs. The world price of aluminium has increased over the past five years, driving up purchase costs as a share of industry revenue. Strong price competition makes it hard for most operators to pass increased purchase costs on to customers.

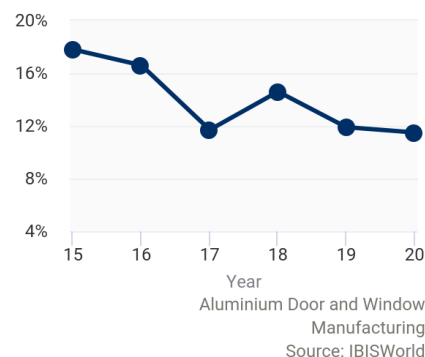
Purchases as a Share of Revenue 2015-2020



Other Costs

Depreciation expenses have increased as a share of industry revenue over the past five years, as operators have increasingly replaced low-skilled labour with machines. Depreciation costs have also risen as companies have invested more in energy-efficient and environmentally friendly technology in anticipation of stricter emission regulations. Rent and utility costs have fallen as shares of industry revenue over the past five years, as greater productivity has enabled industry firms to extract more value out of their manufacturing facilities. Expenditure on marketing has grown marginally as a share of industry revenue over the period, as greater vertical integration among many industry firms has enabled them to sell products directly to downstream markets. Overall, other expenses have declined as a proportion of industry revenue over the past five years.

Other Costs as a Share of Revenue 2015-2020



Basis of Competition

Competition in this industry is **⚠ High and Increasing**

The Aluminium Door and Window Manufacturing industry is highly competitive, and competition has increased over the past five years.

Operators compete with each other on price and product attributes, and face external competition from import penetration and substitution by non-aluminium door and window products.

Internal competition

Given the homogenous nature of industry products, firms primarily compete on price, although other characteristics, such as quality, specification accuracy and timeliness, are also important.

Industry firms compete to establish a good reputation among installation dealers, retailers and wholesalers. Major companies with the technological capability to tailor their products to client specifications are better positioned to compete for market share. The extent of competition also varies across different products. Competition is highest for products such as aluminium doors and windows for residential properties, which are produced by nearly all of the industry's enterprises. However, competition is less fierce for products requiring a more capital-intensive approach, such as custom-built commercial facades, which only larger operators have the capacity to undertake. The industry's market share concentration has increased over the past five years following a series of mergers and acquisitions,

and firms have increasingly sought productivity gains through economies of scale to remain competitive.

External competition

Manufacturers of architectural aluminium products also compete against manufacturers of architectural products made from alternative materials such as timber, steel, PVC or plastic.

Certain architectural trends have affected the industry over the past five years, diminishing the industry's market share in certain products. Products such as sashless windows and frameless shower screens have eroded revenue generated from aluminium window frames and aluminium-framed shower screens. The industry is also under pressure from rising import penetration, as foreign manufacturers capture an increasing share of the domestic market.

Barriers to Entry

Barriers to entry in this industry are **⚠ Low and Steady**

The Aluminium Door and Window Manufacturing industry exhibits low barriers to entry, a trend which has remained steady over the past five years. Most industry products are undifferentiated and only require basic technology to manufacture. Consequently, entry into the market does not require a large capital outlay. The most significant hurdle that new entrants face is having to establish a brand and a customer base.

Construction companies tend to have pre-existing relationships with product suppliers, which can make it difficult for new companies to generate demand from downstream markets. Aside from the need to foster relationships with customers, the industry's low market share concentration bodes well for prospective new enterprises as no dominant players exist for most industry products, which allows small-scale operations to be competitive.

Barriers to entry checklist

Competition	High	⚠
Concentration	Low	✓
Life Cycle Stage	Decline	⚠
Technology Change	Low	✓
Regulation & Policy	Light	✓
Industry Assistance	Low	⚠

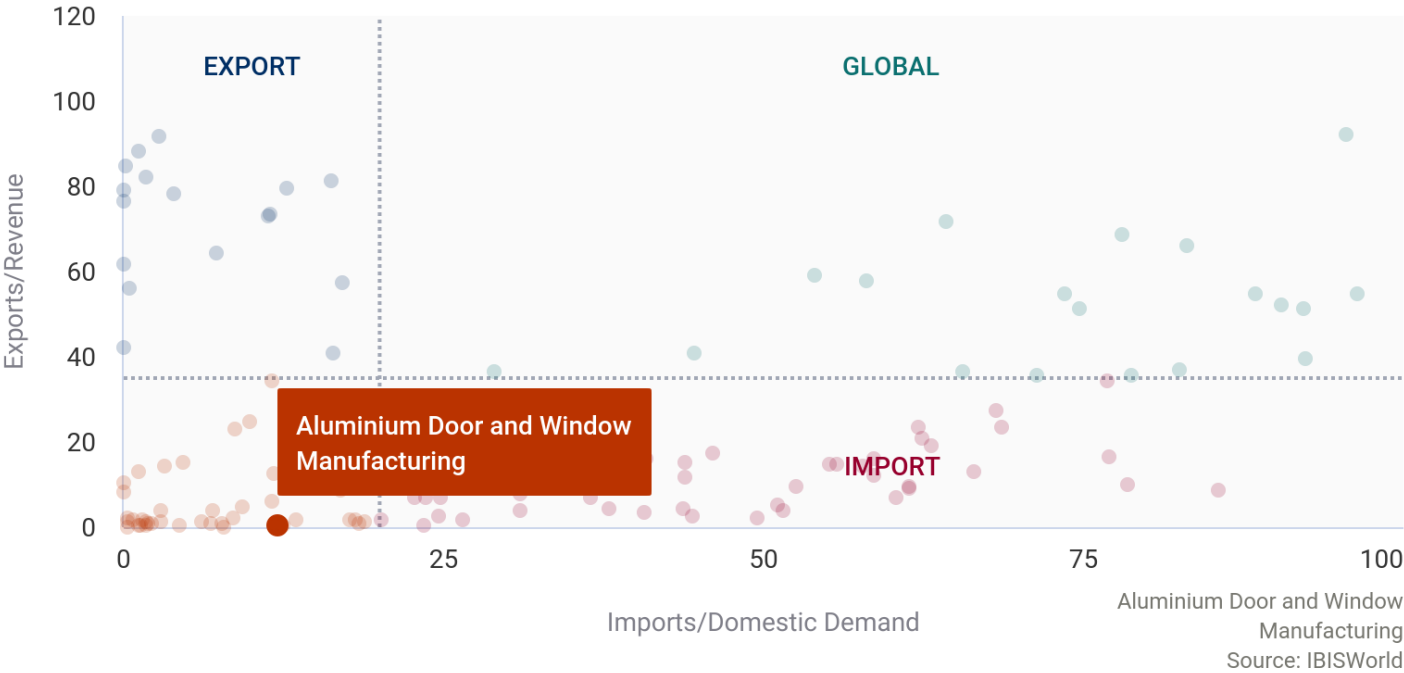
Industry Globalization

Globalization in this industry **⊖ Medium and Increasing**

The industry exhibits moderate globalisation. While industry operators are predominately domestically owned, the industry's only major player, JELD-WEN Australia, is a wholly-owned subsidiary of the US-based company JELD-WEN Holdings Inc. With regards to international trade, exports are expected to account for a minimal share of industry revenue in 2019-20. The industry's low exports indicate that local manufacturers primarily focus on selling their products to the Australian market. However, the industry has been increasingly affected by import

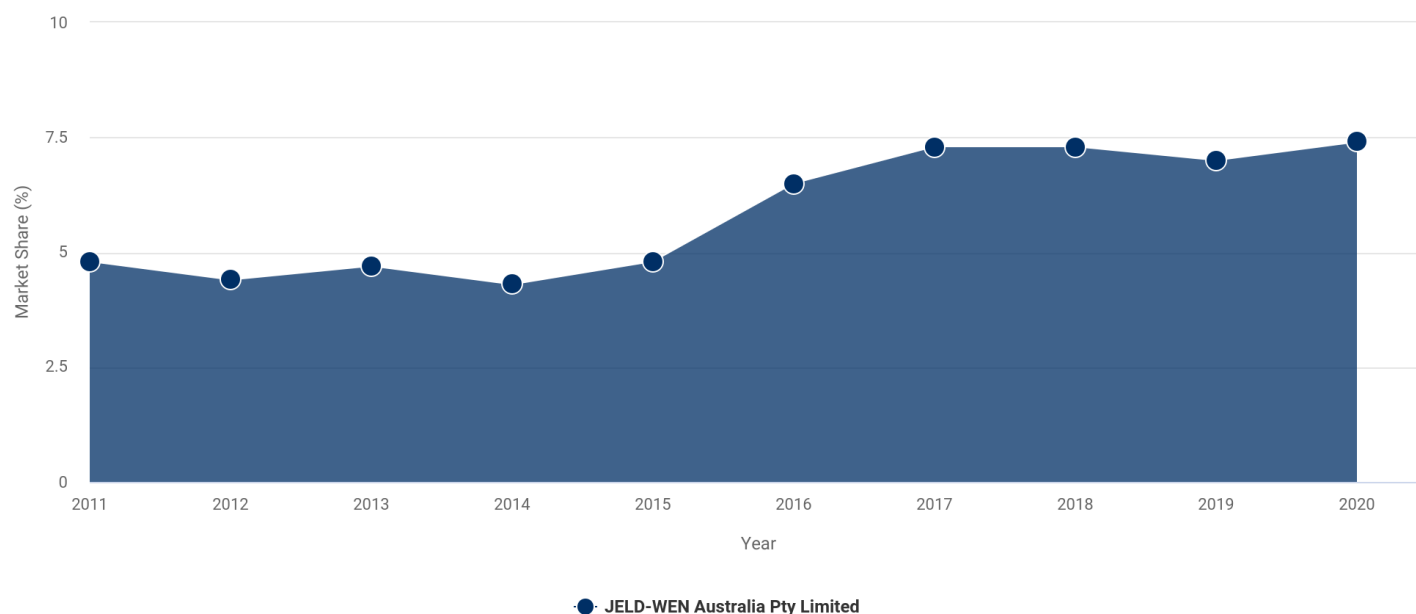
competition, particularly over the past five years, with imports satisfying an increasing share of domestic demand.

Trade Globalization 2020



Major Companies

Major Players and Their Market Share 2011–2020



Aluminium Door and Window Manufacturing in Australia
Source: IBISWorld

Major Players

JELD-WEN AUSTRALIA PTY LIMITED

Market Share: 7.4%

JELD-WEN Australia Pty Limited is a wholly owned subsidiary of the US-based company JELD-WEN Holdings Inc. JELD-WEN Australia manufactures shower screens, wardrobes, timber and aluminium doors, and moulded door skins. JELD-WEN Australia operates as a vertically integrated firm with multiple businesses that cater to the Australian housing market, including brands such as Airlite, Stegbar, Corinthian Doors, JELD-WEN Glass, Regency Windows, and William Russell Doors. The company is based in Macquarie Park, Sydney.

JELD-WEN Australia Pty Limited



JELD-WEN Australia operates in the Aluminium Door and Window Manufacturing industry through its Airlite, Trend, Regency Windows and Stegbar brands. Airlite manufactures a range of timber and aluminium windows and doors, and operates showrooms nationwide. Regency Windows specialises in manufacturing aluminium doors and windows. Stegbar is a major architectural aluminium product manufacturer that also offers an extensive range of wooden window and door products. As a conglomerate, JELD-WEN has been expanding its operations in

Australia with multiple acquisitions, including Melbourne-based Aneeta Windows Systems in September 2015, Trend Windows and Doors Pty Ltd in February 2016, and the Kolder Group in 2017.

Financial performance

JELD-WEN Australia's industry-related revenue is expected to increase at an annualised 8.6% over the five years through December 2020, strongly outperforming the overall industry. Continuous acquisitions have been a key driver of the company's industry-specific revenue over the past five years, as JELD-WEN has acquired numerous specialist manufacturing firms. Despite the world price of aluminium rising over the past five years, JELD-WEN's established market position and global brand recognition have resulted in the company having greater scope to pass on higher input costs. As a result, the company has maintained above-average profit margins over the period.

JELD-WEN Australia Pty Limited - industry segment performance*		
Year**	Revenue (\$m)	Growth (% change)
2010	204.6	14.5
2011	185.6	-9.3
2012	160.7	-13.4
2013	170.5	6.1
2014	186.6	9.4
2015	202.6	8.6
2016	278.1	37.3
2017	299.3	7.6
2018	301.2	0.6
2019	298.7	-0.8
2020	306.1	2.5

Source: IBISWorld

Note: *Estimate **Year end December

Other Players

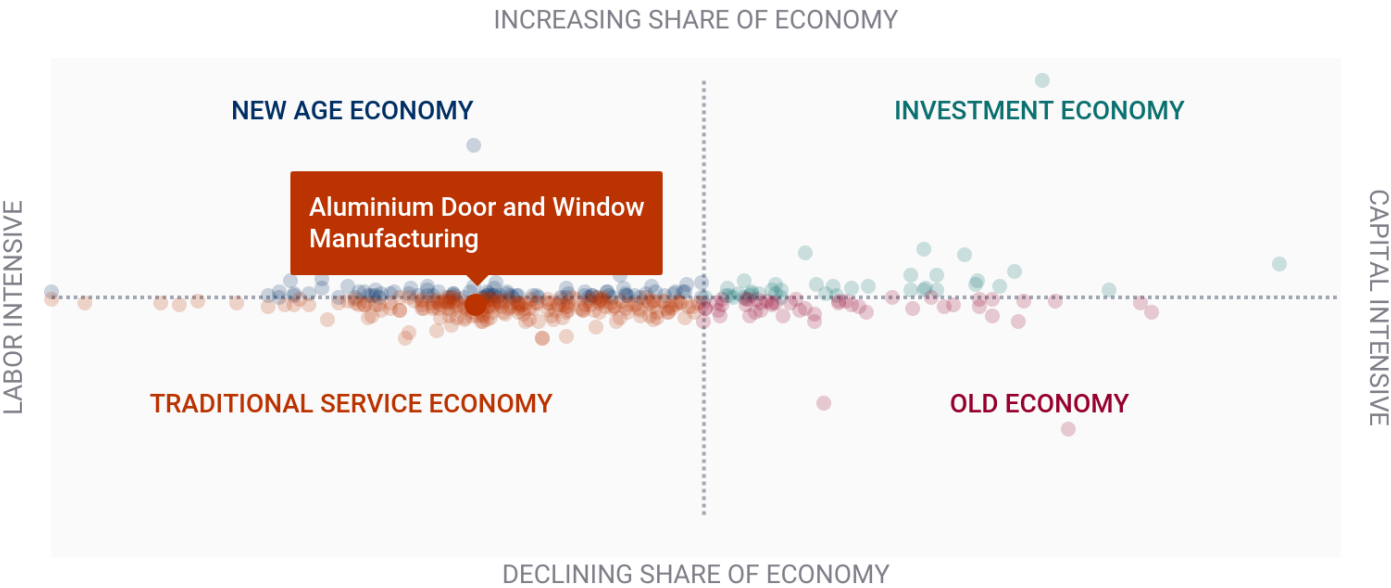
According to the ABS, over 90% of enterprises in the Aluminium Door and Window Manufacturing industry employ fewer than 20 people. In addition, less than 23% of industry enterprises generate more than \$2.0 million in revenue annually. These trends indicate that the Aluminium Door and Window Manufacturing industry has a highly-fragmented structure.

G JAMES AUSTRALIA PTY LTD

G James Australia Pty Ltd, trading as G James Glass & Aluminium, is a vertically integrated producer of glass, furniture and architectural aluminium products. The company is based in Eagle Farm, Brisbane. The company's industry-related operations include manufacturing aluminium doors and windows for installation in residential and commercial properties, and manufacturing aluminium building facades. G James Australia commenced its aluminium extrusion division in 1981 and now operates four aluminium extrusion presses. The company also has a network of fabricating branches in Queensland, South Australia, New South Wales and the Northern Territory.

Operating Conditions

Costs of Growth: Targeting Capital vs. Labor



Aluminium Door and Window Manufacturing in Australia
Source: IBISWorld

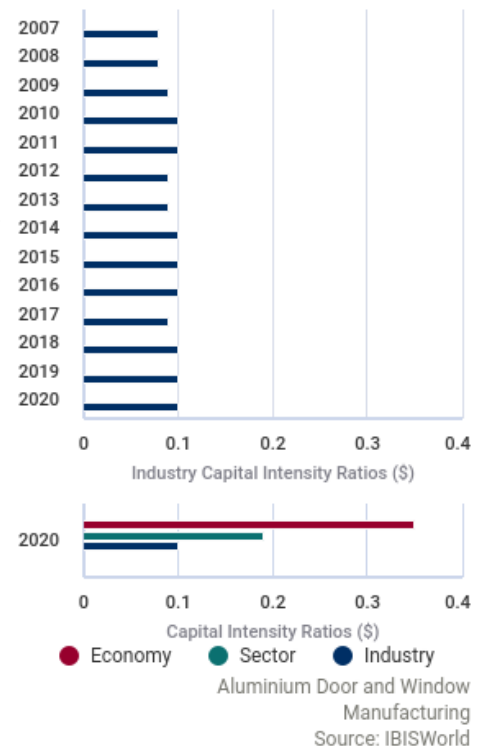
Capital Intensity

The level of capital intensity is ✔ Low

The Aluminium Door and Window Manufacturing industry displays low capital intensity. For every dollar industry operators invest in capital in 2019-20, they spend an estimated \$10.22 on wages. Compared with other metals manufacturing industries, the Aluminium Door and Window Manufacturing industry's labour costs represent a larger share of industry revenue. These higher labour costs demonstrate the labour-intensive nature of small-scale fabricating businesses, which make up the bulk of industry enterprises.

Capital intensity can vary among industry operators, largely dependent on their size. Capital intensity is typically greater for large-scale industry manufacturers, as their mass production and custom-building of aluminium structures requires investment in expensive manufacturing plants and equipment. While industry operators have increasingly invested in capital technology aimed at reducing their reliance on manual labour, the industry's capital intensity has decreased over the past five years. In addition, industry firms have required staff with specialised skills to operate these new technologies, driving up the industry's average wage over the period.


Capital Intensity Ratios



Technology And Systems

Potential Disruptive Innovation: Factors Driving Threat of Change

Level	Factor	Disruption	Description
⚠ High	Rate of Innovation	Likely	A ranked measure for the number of patents assigned to an industry. A faster rate of new patent additions to the industry increases the likelihood of a disruptive innovation occurring.
⊖ Moderate	Ease of Entry	Potential	A qualitative measure of barriers to entry. Fewer barriers to entry increases the likelihood that new entrants can disrupt incumbents by putting new technologies to use.
✔ Low	Innovation Concentration	Unlikely	A measure for the mix of patent classes assigned to the industry. A greater concentration of patents in one area increases the likelihood of technological disruption of incumbent operators.
✔ Low	Rate of Entry	Unlikely	Annualized growth in the number of enterprises in the industry, ranked against all other industries. A greater intensity of companies entering an industry increases the pool of potential disruptors.

Level	Factor	Disruption	Description
 Low	Market Concentration	Unlikely	A ranked measure of the largest core market for the industry. Concentrated core markets present a low-end market or new market entry point for disruptive technologies to capture market share.

The industry has a high rate of new patent technologies but limited concentration. This higher rate of new technologies creates a greater pool of potential disruptors. The range of patenting technologies is broad, which limits the threat of disruptions niche areas. A lack of concentration in patent types creates an environment where incumbent companies are more likely to have sustaining innovations in more areas.

Industry operators are exposed to a low rate of new entrants and a moderate level of entry barriers. This combination of factors creates an environment where entry trends are not a key threat of disruption.

Major market segments for industry operators are relatively diversified. The spread of market segments suggests that there are limited entry points other than those already served by incumbent operators.

Technology disruption has had a moderate effect on the Aluminium Door and Window Manufacturing industry over the past decade.

Advancements in glass technology have given designers and engineers more creative scope in producing windows and other glass products. The increasing popularity of sashless windows and frameless shower screens, which do not require aluminium, have eroded industry revenue over the past five years.

The level of technology change is  Low

The key machinery assets used by firms in the Aluminium Door and Window Manufacturing industry include extrusion presses, and powder coating and anodising facilities.

Most of the industry's products are simple to manufacture, with fairly low technological requirements. The industry's inputs mainly require being cut to size, and aluminium extrusions require jointing and glazing. Aluminium windows and doors are generally produced in standard sizes and do not require extensive manufacturing infrastructure to fabricate. Glazing is done through either anodising or powder coating. Anodising enhances a product's metallic aesthetic through an electrochemical process. Powder coating involves using an electrostatic process whereby electrically charged paint particles in the form of a powder are sprayed onto a pre-treated aluminium surface.

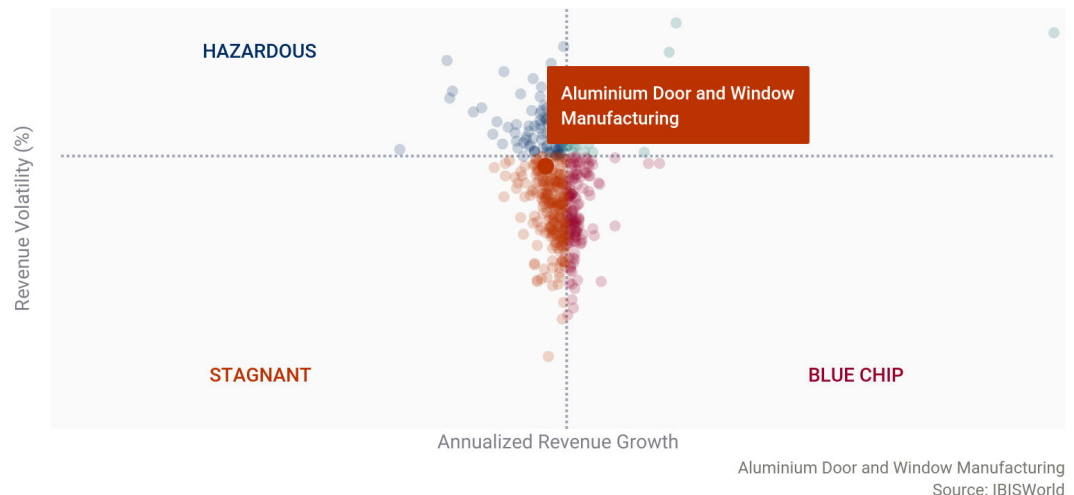
Only larger manufacturers tend to possess the technology and machinery capable of assembling larger and customised products. The industry's larger companies, such as G James Australia, have in-house design and drafting offices with multi-faceted CAD systems. These companies also have their own testing and research facilities, enabling them to provide clients with fully customised solutions to meet

varying project specifications. Major players also source CNC (computerised numerical control) processing equipment directly from European manufacturers to aid facade fabrication. This equipment allows firms to produce high volumes of aluminium componentry.

Revenue Volatility

The level of volatility is ⊖ Medium

Volatility vs. Growth



Note: Revenue growth and decline reflective of 5-year annualized trend. Y-axis is in logarithmic scale. Y-axis crosses at long-run GDP. X-axis crosses at high volatility threshold.

The Aluminium Door and Window Manufacturing industry has displayed moderate revenue volatility over the past five years.

Industry revenue relies on demand trends in downstream construction markets, along with the world price of aluminium. Fluctuations in demand from both residential building construction and institutional building construction have contributed to the industry's moderate revenue volatility over the past five years. In addition, fluctuations in world aluminium prices over the period have also amplified the industry's revenue volatility.

Regulation & Policy

The level of regulation is ✔ Light and is Increasing

The Aluminium Door and Window Manufacturing industry faces minimal regulatory requirements, a trend which has remained relatively stable over the past five years.

Certain industry products, such as aluminium windows and doors, have to comply with Australian building standards. Aluminium window and door manufacturers are

required to abide by the Building Code of Australia (BCA), and must display a performance label as confirmation. Manufacturers of aluminium garage doors are subject to guidelines set by Standards Australia, which dictate the requirements for design, construction, performance and installation of garage doors in Australia.

While the regulations and policies that govern downstream markets do not directly affect the industry, they have influenced the competitive landscapes in which industry firms operate in. The Green Star is an internationally recognised sustainability system launched by the Green Building Council of Australia (GBCA) in 2003. The excellent insulation properties and recyclability of aluminium have allowed the industry to take advantage of the growing trend towards building construction firms using energy efficient products to attain higher Green Star ratings.

Modern Slavery Act

The Commonwealth Modern Slavery Act 2018 came into force on 1 January 2019 and introduced a new reporting requirement for larger Australian businesses.

Companies that generate an annual consolidated revenue of at least \$100.0 million will have to report on how they act to mitigate the risks of modern slavery in their operations and supply chains. The first reports will relate to 2018-19, with most reports being released in 2020. The NSW Government is also considering its own state-based version of the report, which would make businesses with consolidated annual revenue of at least \$50.0 million have to report. The NSW Modern Slavery Act 2018 was due to come into force on 1 July 2019, but was delayed for further consultation.

The act is expected to have a limited effect on the industry. Less than 23% of industry enterprises earn more than \$2.0 million in revenue and therefore do not meet the mandatory reporting threshold. However, the act will likely have a moderate effect on industry players that meet the reporting requirements, as these firms will need to monitor their supply chains to mitigate any risk of modern slavery. Compliance costs for industry operators that meet the requirements are expected to increase over the next five years.

Industry Assistance

The level of industry assistance is  **Low** and is Steady

The industry receives a low level of assistance, a trend which has remained steady over the past five years.

Government assistance is limited to the 5.0% tariff rate applicable to imports of architectural aluminium products. These tariffs are only applicable to products from countries which have not signed a free trade agreement with Australia. These tariffs have proven to be of little benefit to the industry, as imported products have captured an increasing share of domestic demand over the past five years. However, the industry has benefited from government assistance to the housing and institutional construction markets. Government assistance programs such as

First Home Buyer Grants and public funding for school, university and hospital improvement works have helped boost building construction over the past 10 years. As a result, these programs have been instrumental in driving sales for the industry's products.

The Australian Window Association (AWA) represents manufacturers of aluminium windows and other window makers. The organisation sets benchmark standards for windows throughout Australia. The AWA assists industry manufacturers by providing product information and promoting the energy-efficient qualities of their products.

Key Statistics

Industry Data

Year	Revenue	IVA	Estab.	Enterprises	Employment	Exports	Imports	Wages	Domestic Demand
	(\$m)	(\$m)	(Units)	(Units)	(Units)	(\$m)	(\$m)	(\$m)	(\$m)
2011–12	4,040	1,285	1,554	1,484	16,051	18.9	234	905	4,255
2012–13	3,971	1,207	1,472	1,402	15,078	24.8	258	877	4,204
2013–14	4,721	1,346	1,483	1,417	15,968	20.9	295	977	4,994
2014–15	4,617	1,369	1,521	1,447	15,866	21.7	407	994	5,002
2015–16	4,731	1,414	1,543	1,468	15,951	24.9	465	1,025	5,172
2016–17	4,374	1,459	1,529	1,436	16,473	21.8	436	1,032	4,788
2017–18	4,592	1,377	1,598	1,497	17,102	27.2	614	1,022	5,179
2018–19	4,372	1,346	1,548	1,463	16,740	24.6	577	1,012	4,925
2019–20	4,157	1,287	1,527	1,455	15,609	24.1	566	979	4,699
2020–21	4,021	1,258	1,485	1,414	16,312	24.8	573	966	4,569
2021–22	3,888	1,234	1,445	1,377	15,974	24.0	589	948	4,453
2022–23	3,805	1,212	1,406	1,353	15,714	24.0	602	933	4,384
2023–24	3,931	1,258	1,467	1,411	16,421	23.9	617	981	4,524
2024–25	4,278	1,370	1,584	1,538	17,925	24.4	633	1,072	4,886

Annual Change

Year	Revenue	IVA	Estab.	Enterprises	Employment	Exports	Imports	Wages	Domestic Demand
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
2011–12	-5.96	-4.65	1	1	-5	21.2	10.0	-2.59	-5.30
2012–13	-1.72	-6.02	-5	-6	-6	31.2	10.2	-3.16	-1.20
2013–14	18.9	11.5	1	1	6	-15.7	14.1	11.4	18.8
2014–15	-2.21	1.71	3	2	-1	3.82	38.2	1.74	0.15
2015–16	2.48	3.26	1	1	1	14.7	14.2	3.18	3.39
2016–17	-7.55	3.16	-1	-2	3	-12.4	-6.37	0.63	-7.42
2017–18	4.99	-5.60	5	4	4	24.8	41.0	-0.99	8.17
2018–19	-4.81	-2.23	-3	-2	-2	-9.56	-5.97	-0.96	-4.91
2019–20	-4.93	-4.40	-1	-1	-7	-2.04	-1.93	-3.26	-4.58
2020–21	-3.26	-2.23	-3	-3	5	2.90	1.16	-1.29	-2.76
2021–22	-3.31	-1.92	-3	-3	-2	-3.23	2.81	-1.87	-2.54
2022–23	-2.13	-1.80	-3	-2	-2	0.00	2.29	-1.60	-1.56
2023–24	3.30	3.79	4	4	4	-0.42	2.45	5.15	3.20
2024–25	8.81	8.86	8	9	9	2.09	2.57	9.20	8.00

Key Ratios

Year	IVA/Revenue	Imports/Demand	Exports/Revenue	Revenue per Employee	Wages/Revenue	Employees per estab.	Average Wage
	(%)	(%)	(%)	(\$'000)	(%)		
2011–12	31.8	5.51	0.47	252	22.4	10.3	56,401
2012–13	30.4	6.14	0.62	263	22.1	10.2	58,144
2013–14	28.5	5.90	0.44	296	20.7	10.8	61,160
2014–15	29.7	8.14	0.47	291	21.5	10.4	62,624
2015–16	29.9	9.00	0.53	297	21.7	10.3	64,272
2016–17	33.3	9.10	0.50	266	23.6	10.8	62,630
2017–18	30.0	11.9	0.59	269	22.2	10.7	59,730
2018–19	30.8	11.7	0.56	261	23.1	10.8	60,436
2019–20	31.0	12.1	0.58	266	23.5	10.2	62,707
2020–21	31.3	12.5	0.62	247	24.0	11.0	59,232
2021–22	31.7	13.2	0.62	243	24.4	11.1	59,359
2022–23	31.9	13.7	0.63	242	24.5	11.2	59,380
2023–24	32.0	13.6	0.61	239	25.0	11.2	59,753
2024–25	32.0	13.0	0.57	239	25.0	11.3	59,777

Additional Resources

Additional Resources

Australian Aluminium Council

<http://aluminium.org.au>

International Aluminium Institute

<http://www.world-aluminium.org>

Australian Window Association

<http://www.awa.org.au>

Industry Jargon

ALUMINIUM EXTRUSION

Extrusion refers to the process used to create complex objects from metals through pushing or drawing the metal through a die or mould of the desired shape or form.

ANODISING

An electrolytic process used to increase the thickness of the natural oxide layer on the surface of metal parts.

FASCIA

Any horizontal surface that spans across the top of columns or across the top of a wall.

Glossary Terms

BARRIERS TO ENTRY

High barriers to entry mean that new companies struggle to enter an industry, while low barriers mean it is easy for new companies to enter an industry.

CAPITAL INTENSITY

Compares the amount of money spent on capital (plant, machinery and equipment) with that spent on labour. IBISWorld uses the ratio of depreciation to wages as a proxy for capital intensity. High capital intensity is more than \$0.333 of capital to \$1 of labour; medium is \$0.125 to \$0.333 of capital to \$1 of labour; low is less than \$0.125 of capital for every \$1 of labour.

CONSTANT PRICES

The dollar figures in the Key Statistics table, including forecasts, are adjusted for inflation using the current year (i.e. year published) as the base year. This removes the impact of changes in the purchasing power of the dollar, leaving only the 'real' growth or decline in industry metrics. The inflation adjustments in IBISWorld's reports are made using the Australian Bureau of Statistics' implicit GDP price deflator.

DOMESTIC DEMAND

Spending on industry goods and services within Australia, regardless of their country of origin. It is derived by adding imports to industry revenue, and then subtracting exports.

EMPLOYMENT

The number of permanent, part-time, temporary and casual employees, working proprietors, partners, managers and executives within the industry.

ENTERPRISE

A division that is separately managed and keeps management accounts. Each enterprise consists of one or more establishments that are under common ownership or control.

ESTABLISHMENT

The smallest type of accounting unit within an enterprise, an establishment is a single physical location where business is conducted or where services or industrial operations are performed. Multiple establishments under common control make up an enterprise.

EXPORTS

Total value of industry goods and services sold by Australian companies to customers abroad.

IMPORTS

Total value of industry goods and services brought in from foreign countries to be sold in Australia.

INDUSTRY CONCENTRATION

An indicator of the dominance of the top four players in an industry. Concentration is considered high if the top players account for more than 70% of industry revenue. Medium is 40% to 70% of industry revenue. Low is less than 40%.

INDUSTRY REVENUE

The total sales of industry goods and services (exclusive of excise and sales tax); subsidies on production; all other operating income from outside the firm (such as commission income, repair and service income, and rent, leasing and hiring income); and capital work done by rental or lease. Receipts from interest royalties, dividends and the sale of fixed tangible assets are excluded.

INDUSTRY VALUE ADDED (IVA)

The market value of goods and services produced by the industry minus the cost of goods and services used in production. IVA is also described as the industry's contribution to GDP, or profit plus wages and depreciation.

INTERNATIONAL TRADE

The level of international trade is determined by ratios of exports to revenue and imports to domestic demand. For exports/revenue: low is less than 5%; medium is 5% to 20%; and high is more than 20%. Imports/domestic demand: low is less than 5%; medium is 5% to 35%; and high is more than 35%.

LIFE CYCLE

All industries go through periods of growth, maturity and decline. IBISWorld determines an industry's life cycle by considering its growth rate (measured by IVA) compared with GDP; the growth rate of the number of establishments; the amount of change the industry's products are undergoing; the rate of technological change; and the level of customer acceptance of industry products and services.

NONEMPLOYING ESTABLISHMENT

Businesses with no paid employment or payroll, also known as nonemployers. These are mostly set up by self-employed individuals.

PROFIT

IBISWorld uses earnings before interest and tax (EBIT) as an indicator of a company's profitability. It is calculated as revenue minus expenses, excluding interest and tax.

VOLATILITY

The level of volatility is determined by averaging the absolute change in revenue in each of the past five years. Volatility levels: very high is more than $\pm 20\%$; high volatility is $\pm 10\%$ to $\pm 20\%$; moderate volatility is $\pm 3\%$ to $\pm 10\%$; and low volatility is less than $\pm 3\%$.

WAGES

The gross total wages and salaries of all employees in the industry. Benefits and on-costs are included in this figure.

IBISWorld helps you find the industry information you need – fast

With our trusted research covering thousands of global industries, you'll get a quick and intelligent overview of any industry so you can get up to speed in minutes. In every report, you'll find actionable insights, comprehensive data and in-depth analysis to help you make smarter, faster business decisions. If you're not yet a member of IBISWorld, contact us at +61-3-9655-3800 or info@IBISWorld.com to learn more.

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