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15th March, 2019

Sangeeta D'souza,
Assistant Director – Investigations Team 2,
Anti-Dumping Commission,
Department of Industry, Innovation and Science,
Level 35,
55 Collins St,
Melbourne VIC 3000

Dear Sangeeta,

Further to the submission by Vincent Buda, Steelforce Trading (Steelforce) queries the scope of goods subject to investigation and requests the Commission to confirm its understanding that the investigation is limited to Solid Base Angles (i.e. otherwise referred to as lintel angles or budabar). Steelforce does not import Solid Base Angles from China. Instead, it imports general purpose structural angles under its Galforce profiles range of products. The characteristics of our imported Galforce Angle products confirm that they are not Solid Base Angles. For example:

- A – Galintel® Solid Base Angles manufactured by Nepean Building and Infrastructure are engineered products that "have been designed to support brickwork over windows & doors. The brickwork, mortar and lintel work together to form a composite beam with exceptional strength and load carrying capacity." – refer website https:///www.galintel.com.au/solid-base-angles

"The ribbed Galintel® profile creates a superior bond with the mortar." – refer page 3 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website - https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx

Galforce Angles imported by Steelforce Trading are manufactured

They are not a "specialised range of lintels ... , all designed for optimum support of brickwork

above clear openings." – refer page 2 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website

- https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx
- B Galintel® Solid Base Angles are purpose designed for use in the construction of brick homes. They are an
 engineered designed product to be used above window and door openings to support a number of courses of bricks
 above the opening.

"The specialised range of lintels includes flats, angles, T-bars and Rendabar®, all designed for optimum support of brickwork above clear openings." — refer page 2 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website

- https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx



"Galintel® products rely on composite action. Therefore, to achieve ultimate performance, mortar must be present at all contact surfaces between bricks and lintel." – refer page 5 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website

- https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx

"Brick composite beam - Minimum 3 courses of bricks. Note: Mortar should be present at all contact surfaces between bricks and lintel" - refer page 5 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3 ProductSpecs.pdf from the Anti-Dumping Commission website

- https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx

"Products undergo CSIRO Building Products & Systems Appraisal and comply with the requirements of the Building Code of Australia. Engineering certification of structural adequacy is verified by independent testing at the University of NSW and

Sydney University." – refer page 2 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website

- https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx

"Galintels® are approved by housing authorities and local government bodies in all states." – refer page 2 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website - https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx

Galforce Angles imported by Steelforce Trading are not specialist products designed and tested to perform in this particular application nor are they "approved by housing authorities and local government bodies" for this application.

- C Galintel® Solid Base Angles have:
 - o a heavy Galvanised Coating (Hot Dip Galvanised) of 600 grams / m².
 - o a sharp internal angle which means that there is no need to mitre the back edge of brickwork
 - o one smooth side (the base) and one ribbed side.
 - o an R3 coating durability rating in accordance with AS/NZS 2699.3:2002 Built-in components for masonry construction Part 3: Lintels and shelf angles (durability requirements). "Durability requirements for lintels and shelf angles are specified in AS 3700, Masonry structures and NZS 4210, Code of practice for masonry construction: materials and workmanship, and NZS 4230, Code of practice for the design of masonry structures, which also includes specification and testing for impact resistance during storage, handling, transport and installation of organic and inorganic zinc-silicate coatings." "The objective of AS/NZS 2699.3:2002 is to provide manufacturers of lintels and shelf angles with specifications to achieve these durability requirements, and with methods for testing their corrosion resistance."

"All Galintel® products are hot-dip galvanised with a heavy zinc coating of 600 g/m2 which complies with an R3 durability rating. Durability is a function of the thickness of the zinc coating (black steel is classified as RO and stainless steel as R5). Galintels® can achieve an R4 durability rating when coated with a two-part epoxy coating..." — refer page 3 of Public Record document 501-001b_AppAtt_Non-

ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website

https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx

Sections 2 and 3 of AS/NZS 2699.3:2002 sets out "the specific requirements for the manufacture of lintels and shelf angles." Extracts from these sections are as follows:



2.4 DURABILITY

2.4.1 General

Materials for the manufacture of lintels shall be either inherently corrosion resistant or suitably treated to ensure sufficient durability to achieve design life.

2.4.3 Classification of materials

Lintels manufactured from any material shall be identified as durability classifications R0 to R5, by application of the acceptance criteria in Clause 2.4.4.

2.4.4 Durability criteria for lintels

Lintels shall not suffer loss of serviceability or performance over the design life of the structure (see Clause 2.2) when embedded in mortar and subjected to the following conditions:

- (a) Elevated temperatures with a maximum of 55°C, where the lintel is on the external leaf of the masonry, or 40°C, where the lintel is embedded into the internal leaf of the masonry.
- (b) A cyclic temperature variation of 40°C over any 24 h period.
- (c) The mortar bed having an initial alkalinity of pH up to 10, but carbonating over time to a pH of not less than 7.
- (d) Being wet and remaining wet for a total period of three months per year.
- (e) Exposure to UV radiation (global radiation of 20 MJ/m²) of up to four weeks (the construction period).
- (f) Aerosol penetration, with the highest level of airborne salt deposited at the exterior of the masonry, as follows:
 - (i) R0 nil g/m²/day.

 - (v) R4300 g/m²/day.
 - (vi) R5 See Note 2.

NOTES:

- 1 The extent of aerosol salt penetration depends largely on the distance from the coast; however, in practice, microclimatic effects may distort otherwise normal climatic patterns by many kilometres and should always be considered. The atmospheric salt deposition on the exterior face of the wall is double that normally experienced on the inner face. The values used in Appendix A reflect this situation.
- 2 The R5 durability classification refers to specific corrosive environments outside the above criteria. Where industrial fall-out, bacteria, chemicals or other environmental conditions exist, it is necessary for the manufacturer to test all unique coatings and materials to confirm their resistance to the particular environment for the expected life of the structure. Because such an environment cannot be specified in this document, suitable coating systems cannot be recommended.



It is evident from the above that products used as lintels must comply with strict requirements. In fact, the following clauses from Section 2 and 3 are relevant:

2.4.5 Test methods

Lintels produced from materials not meeting the deemed-to-comply provisions (see Section 3) shall be tested and assessed for compliance in accordance with—

- (a) Appendix A, for bare lintels or lintels with a metallic coating; or
- (b) Appendix B, for steel lintels with organic, inorganic zinc silicate or duplex coating.

3.1 DURABILITY

Lintels are deemed to meet the durability criteria of Clause 2.4.4, if they comply with the requirements of—

- (a) Table 1, for stainless steel or galvanized steel lintels;
- (b) Table 2, for lintels with organic or inorganic zinc-silicate coating; or
- (c) Table 3, for steel lintels with a duplex coating.

TABLE 1

DURABILITY CLASSIFICATION FOR STAINLESS STEEL
AND GALVANIZED STEEL LINTELS

Durability classification	Material or protective coating specification
R0, R1, R2	Steel lintels hot-dip galvanized shall comply with AS/NZS 4680 or AS/NZS 4791, except that the minimum coating mass shall be 300 g/m ²
R3	Steel lintels hot-dip galvanized to comply with AS/NZS 4680, with a minimum coating mass of 600 g/m ²
R4	 (a) For galvanized (duplex-coated) lintels, see Table 3 (b) Stainless steel Grade AS 1449/316 or AS 1449/316L (UNS S31600 or S31603 respectively)

NOTES:

- 1 The coating manufacturer should be contacted for advice on the compatibility of any applied paint system with both the lintel material and cement mortar.
- 2 A chemical procedure for identifying Grade AS 1449/316 or AS 1449/316L stainless steel is described in Appendix C.
- 3 For lintels of durability classification R5, see Clause 2.4.4. Note 2.

3.2 IMPACT RESISTANCE OF COATINGS ON LINTELS

Galvanized steel and stainless steel lintels complying with Table 1 are deemed to comply with the impact requirements of Clause 2.5.

NOTE: Reference should be made to Clause 2.5 for the impact resistance of organic and zincsilicate coatings, and the organic component of duplex coatings applied to lintels.



The National Construction Code (NCC) states that all masonry construction within Australia has to conform to the requirements of *AS 3700*. *AS 3700* provides the "minimum requirements for the design and construction of unreinforced, reinforced and prestressed masonry, including built-in components." Lintels are regarded as built in components.

AS3700 does provide that where "the requirements of Section 2 are met, this Standard shall not be interpreted in a way that prevents the use of alternative materials or methods of design or construction not specifically referred to herein.

NOTE: Where the intended use is subject to the control of a building authority, approval for the use of alternative materials or methods will need to be obtained from the relevant authority."

Before Galforce Angles imported by Steelforce Trading could be used in structures designed in accordance with *AS3700* that are approved by a "building authority", it is our understanding that the approval of that authority would be required, however, this approval would not be forthcoming without satisfactory testing results as outlined in Appendix A of *AS3700*.

This table specifies a durability classification of R1 through to R5 depending on the exposure environment classification.

a load capability determined in accordance with AS/NZS 1170.1:2002 - Structural design actions Part 1:
 Permanent, imposed and other actions (Reconfirmed 2016). "The objective of this Standard is to provide designers of structures with values representing the permanent actions, likely actions imposed due to use and occupancy, and other actions appropriate to the type of structure for use in structural design."

Galforce Angles imported by Steelforce Trading have:

- o an electroplated zinc covering on each side. They are not hot dip galvanized.
- o a curved internal angle
- two smooth sides. There is no ribbing on one side of the angle. The ribbed side on the Galintel® Solid Base Angles is intended to ensure that there is a "superior bond with the mortar." refer page 3 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx. This is not possible with the Galforce Angles.
- o no coating durability rating in accordance with AS/NZS 2699.3:2002 Built-in components for masonry construction Part 3: Lintels and shelf angles (durability requirements).
- o no load capability determined in accordance with AS/NZS 1170.1:2002 Structural design actions Part 1: Permanent, imposed and other actions (Reconfirmed 2016).
- D It is evident from the Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website
 - https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx
 that Galintel® Solid Base Angles are a specialist product for use in particular applications. This is evidenced by the fact that there are only two sizes available, 100x100x6 and 150x100x6, and they come with the following warranty: "All Galintel® products are guaranteed against defects in materials and workmanship. NEPEAN Building & Infrastructure further warrants that its Galintel® products will suffer no loss of function nor will they adversely affect the masonry within 25 years from the date of installation...." refer page 3 of Public Record document 501-001b_AppAtt_Non-ConfidentialAttachmentA3.3_ProductSpecs.pdf from the Anti-Dumping Commission website
 - https://www.adcommission.gov.au/cases/Pages/CurrentCases/501.aspx.



Galforce Angles imported by Steelforce Trading are supplied in a range of sizes

— this is not the intended use. It is important to note that Galforce Angles are manufactured to

Finally, it is noted that the application by Galintel focuses entirely on imports of lintel angles in its market, injury and causation analysis, which further supports the view that the goods subject of the application are limited to lintel angles (Solid Base Angles).

Urgent clarification from the Commission on the scope of goods is requested.