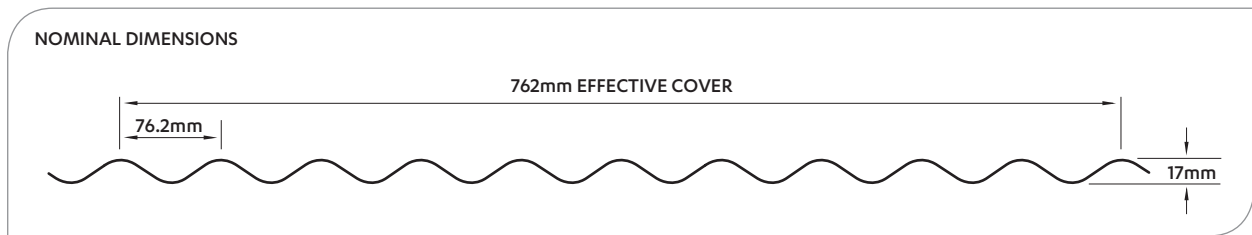


PRODUCT TECHNICAL STATEMENT

CUSTOM ORB

✦ Profiled Metal Roofing and Cladding



DESCRIPTION

Custom Orb is a premium quality corrugated profile manufactured under licence to BHP.

APPLICATIONS

- Residential Roofing & Cladding
- Industrial/Commercial Roofing & Cladding
- Curving
- Specialty Cladding
- Ceilings and Linings

FEATURES

Corrugated steel is a timeless classic. **Custom Orb** is manufactured to controlled tolerances, allowing it to be used with confidence in a great variety of applications.

Custom Orb can be roll curved (bullnosed) to 400mm radius, or spring curved to radii greater than 9 metres depending on grade, thickness and material used (see *Spring Curved Custom Orb Design Guide* for details). It is also popular in perforated patterns for decorative or sound control situations. Matching translucent sheeting is available in G.R.P. (fibreglass) and Polycarbonate.

MATERIALS

Available in metallic coated and pre-painted steel in .40mm and .55mm B.M.T. (base metal thickness), aluminium plain and prepainted in .70mm and .90mm, and other non-ferrous metals.

FASTENERS

Typically: Steelfix 12g x 45mm, Timberfix 12g x 55mm, Class 4 minimum, of material compatible with that being fastened and durability no less than the sheet material. Class 5 or non-ferrous fasteners are recommended for severe or very severe marine environments.

DURABILITY

All material selections must be compatible with prevailing environmental conditions and adjacent materials, see *Roofing Solutions Product Guide* or *Specifiers Guide* for details. Areas not exposed to rain washing will require programmed maintenance.

WARRANTY PLUS

Steel & Tube **WarrantyPlus** is the most comprehensive warranty available in the industry. **WarrantyPlus** covers an extended range of performance criteria, is supported back-to-back by our suppliers, includes site-specific maintenance requirements and is transferable to subsequent owners.

PERFORMANCE DATA

MASS (KG/M²)

.40mm B.M.T.	4.08	.55mm B.M.T.	5.54
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MAXIMUM SPANS

Base Metal Thickness (mm)	Maximum Spans (mm)	
	Roof	Walls
0.40	1200	1800
0.55	1600	2400

FASTENING REQUIREMENTS

Base Metal Thickness (mm)	Fixings per sheet per support	Roof Span (mm)		
		900	1200	1500
0.40	3	•	•	N/R
	4	•	•	N/R
	5	•	•	N/R
0.55	3	••	•	•
	4	••	•	•
	5	••	•	•

* Suitable for Controlled Traffic ** Suitable for Heavy Traffic N/R Not Recommended

Wind Zone	High	Very High	Extra High	SED
Design Wind Speed (m/s)	<44m/s	<50 m/s	<55 m/s	<60m/s
Load ULS (kPa)	2.32	3.00	3.63	4.32

Notes:

- End spans should be not more than 2/3 of maximum internal spans.
- Sheet ends should be fastened through every second crest.
- To correlate Wind Zone figures to kPa a local pressure factor of 2 has been applied to the entire roof. Specific design is required for roofs designed in accordance with NZS1170 where a local pressure factor of 3 occurs over areas greater than one sheet width or end purlin spacing.
- The above tables are governed by serviceability load factors applicable to normal buildings (importance level 2) for all geographic areas.

MINIMUM PITCH

In accordance with Acceptable Solution E2, the minimum pitch for **Custom Orb** for roofing dwellings is 8°. Roof runs in excess of 12 metres should be checked for water runoff capacity.

FOOT TRAFFIC

Foot traffic up the roof must take place with load spread equally across two crests, or over purlin lines. Traffic across the roof must take place along purlin lines.

SPECIFICATIONS

Recommended specifications are available in the branded sections of MasterSpec *BASIC* or MasterSpec *STANDARD*, or from your local Steel & Tube branch or visit www.steelandtube.co.nz.

DESIGN DETAILS

Design details covering many applications are available on our website in CAD and PDF under each product section. Visit www.steelandtube.co.nz.

Note:

Trademarks apply to the following products presented in this publication: MasterSpec *BASIC* and MasterSpec *STANDARD*.

IMPORTANT PUBLICATIONS

For your installation to perform to its potential, it is essential that it is designed, installed and maintained in accordance with good trade practice. Please refer to:

- Steel & Tube: Roofing Solutions Product Guide
- Steel & Tube Roofing Products: Spring Curved Custom Orb Design Guide
- New Zealand Steel: Installation Guide
- New Zealand Steel: Builders and Specifiers Guide
- BRANZ: Good Profiled Metal Roofing Practice
- MRM: New Zealand Metal Roofing and Wall Cladding Code of Practice
- E2/AS1

INSTALLERS

A list of local installers for your area and contract type is available from your local Steel & Tube branch or visit www.steelandtube.co.nz.