PRODUCT BROCHURE

T-Deck Roofing & Cladding

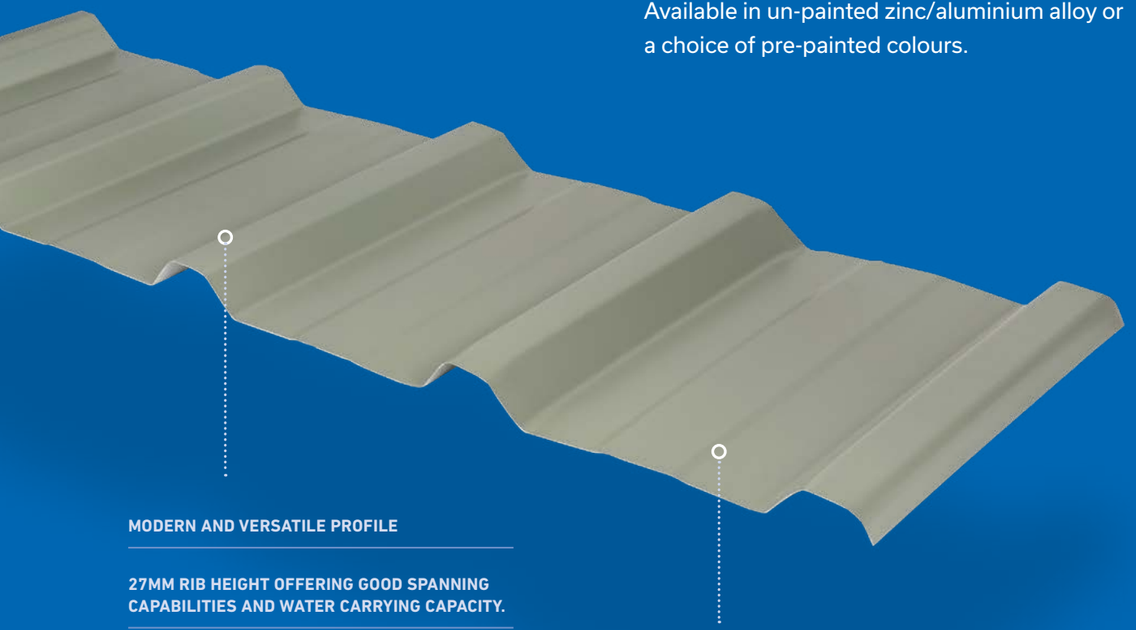
BETTER ROOFING STARTS HERE.

(08) 9399 8887
JTGROUPWA.COM.AU

A STRONG, YET LIGHTWEIGHT MULTIPURPOSE PROFILE

T-Deck is a modern and versatile trapezoidal shaped profile offering excellent strength and spanning capabilities.

Manufactured from high-tensile steel, T-Deck is suitable for both commercial, industrial and domestic Roofing and cladding applications. Available in un-painted zinc/aluminium alloy or a choice of pre-painted colours.



- MODERN AND VERSATILE PROFILE
- 27MM RIB HEIGHT OFFERING GOOD SPANNING CAPABILITIES AND WATER CARRYING CAPACITY.
- IDEAL FOR COMMERCIAL AND INDUSTRIAL APPLICATIONS.
- SUITABLE FOR BOTH ROOFING & CLADDING
- 762MM COVER
- AVAILABLE IN 0.42BMT OR 0.48BMT
- HIGH TENSILE STEEL
- 2° MINIMUM PITCH
- ANTI-CAPILLARY SIDE LAPS
- FAST INSTALLATION AND CONVENTIONAL EASY PIERCE FIXING
- CUSTOM LENGTHS
- WIDE RANGE OF COLOURS AVAILABLE

TECHNICAL SPECS

	0.42MM BMT	0.48MM BMT
GRADE	550MPA	550MPA
SHEETING MASS (KG/M²) ZINC-ALUMINIUM ALLOY	4.28	4.86
SHEETING MASS (KG/M²) COLOUR	4.35	4.93
MIN PITCH°	2°	2°
COVER (MM)	762	762

APPLICATIONS

A modern and versatile trapezoidal shaped profile, T-Deck roofing and cladding's strength, ease of installation, good spanning capabilities/water-carrying capacities and low economical roof pitch, makes it the ideal profile for both commercial buildings, industrial buildings, domestic buildings and sheds. T-Deck roofing and cladding is made from high tensile steel and is available in custom cut lengths.

MATERIALS

T-Deck roofing & cladding is manufactured from G550 zinc-aluminium alloy coated steel and/or colour coated steel. Zinc-aluminium alloy coated AZ150 conforms to AS1397.

Colour coated steels are in accordance with AS2728, with the substrate in accordance with AS1397

ADVERSE CONDITIONS

T-Deck sheeting has excellent durability for almost any location, however durability can be impacted dependent on the application, conditions and environment.

Such as unwashed areas, rainfall intensity, temperature, length of exposure and if the sheeting is intended to be used within 1km of marine, industrial, chemical or any other abnormally corrosive environments.

Design

(SPANS/PRESSURES)

DESIGN CRITERIA

a) ROOF PRESSURES ARE AS PER AS 1170.2-2011
b) WIND REGION A, IMPORTANCE LEVEL 2, PROBABILITY OF EXCEEDENCE = 1/500
c) BUILDING HEIGHT = 5m to 10m, ENCLOSED BUILDING WITH DOMINANT OPENING
d) V = 45m/s (ULTIMATE), 37m/s (SERVICEABILITY)
e) Ms = 1.0, Mt=1.0, Cdyn=1.0
f) Mz,cat=

Terrain Category			
Height (m)	1 & 2	2.5	3 & 4
for >= 5.0	1.05	0.87	0.83
for >= 10	1.12	0.92	0.83

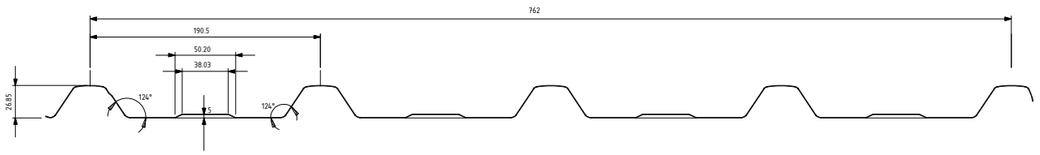
g) kce = kci = 0.9, ka = 1.0, kg = 1.0, Cpe = 0.9, Cpi = 0.3
h) DEAD LOAD DEFLECTIONS LIMITED TO SPAN/150.
i) ROOF CLADDING TO BE FIXED TO MANUFACTURER'S SPECIFICATIONS.
FLASHINGS AND GUTTERS TO BE FIXED TO BUILDER'S DETAILS
j) STEEL MATERIAL SHOULD HAVE MINIMUM YIELD STRENGTH OF 550 MPa FOR BOTH 0.42 AND 0.48 BMT.
k) TABLES DO NOT ALLOW FOR FOOT TRAFFIC. REFER TO SEPARATE DOCUMENTS FOR FOOT TRAFFIC LIMITED SPANS.
l) SINGLE = SINGLE SPANS
INTERNAL = CONTINUOUS CLADDING (MINIMUM 3 SPANS), WITH END SPANS AT LEAST 20% SHORTER THAN INTERMEDIATE SPANS.
END = CONTINUOUS CLADDING (MINIMUM 2 SPANS) ALL SPANS EQUAL.

VALUES ON THIS DRAWING ARE CALCULATED IN ACCORDANCE WITH AS 4600 "COLD FORMED STEEL STRUCTURES" AND WERE DERIVED FROM BEAM MOMENT AND DEFLECTION FORMULAS. DESIGN LOADED AS PER AS1562 PROCEDURE.

PROJECT: JT METAL ROOF SHEET SPAN TABLES
CLIENT: JT SHEETMETAL PTY LTD

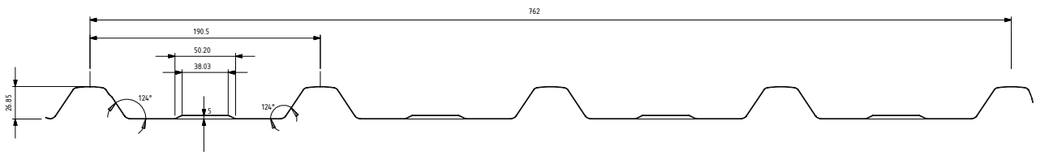
STRUCterre consulting
Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham Unit Trust trading as Structerre Consulting Engineers
1 ERINDALE ROAD, BALCATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4542 EMAIL perth@structerre.com.au

SCALE	NTS	SHEET	PROJECT No	APPROVED BY
DATE	01/05/19	3 of 4	D204154	Chevase Purich



MAXIMUM ALLOWABLE SPANS (mm) REGION "A"

Terrain Category	Local Pressure Factor(kl)	BUILDING HEIGHT UP TO 5m									BUILDING HEIGHT UP TO 10m								
		PRESSURE		SPAN							PRESSURE		SPAN						
		SERVICE	ULTIMATE	BMT 0.42mm			BMT 0.48mm				SERVICE	ULTIMATE	BMT 0.42mm			BMT 0.48mm			
		(kPa)	(kPa)	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL		(kPa)	(kPa)	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL	
1 & 2	1	0.98	1.45	1800	2000	2200	1900	2100	2300		1.11	1.65	1600	1800	1900	1750	1950	2150	
	1.5	1.34	1.99	1600	1800	1900	1650	1850	2000		1.53	2.26	1500	1650	1850	1600	1800	1950	
	2	1.71	2.53	1400	1600	1800	1500	1700	1900		1.95	2.88	1350	1550	1700	1400	1600	1800	
	3	2.45	3.62	1250	1400	1550	1300	1500	1650		2.78	4.12	1150	1350	1500	1250	1450	1600	
2.5	1	0.67	0.99	2100	2300	2600	2200	2500	2800		0.75	1.11	1900	2100	2300	2100	2400	2650	
	1.5	0.92	1.37	1800	2000	2200	1900	2100	2300		1.03	1.53	1800	2000	2200	1800	2000	2200	
	2	1.18	1.74	1600	1800	1900	1750	1950	2150		1.31	1.94	1600	1800	1900	1650	1850	2000	
	3	1.68	2.48	1400	1600	1800	1500	1700	1900		1.88	2.78	1350	1550	1700	1400	1600	1800	
3 & 4	1	0.61	0.90	2100	2300	2600	2200	2500	2800		0.61	0.90	2100	2300	2600	2200	2500	2800	
	1.5	0.84	1.24	1900	2100	2300	1900	2100	2300		0.84	1.24	1900	2100	2300	1900	2100	2300	
	2	1.07	1.58	1700	1900	2100	1800	2000	2200		1.07	1.58	1700	1900	2100	1800	2000	2200	
	3	1.53	2.26	1500	1650	1850	1600	1800	1950		1.53	2.26	1500	1650	1850	1600	1800	1950	



MAXIMUM ALLOWABLE SPANS (mm) REGION "B"

Terrain Category	Local Pressure Factor(kl)	BUILDING HEIGHT UP TO 5m									BUILDING HEIGHT UP TO 10m								
		PRESSURE		SPAN							PRESSURE		SPAN						
		SERVICE	ULTIMATE	BMT 0.42mm			BMT 0.48mm				SERVICE	ULTIMATE	BMT 0.42mm			BMT 0.48mm			
		(kPa)	(kPa)	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL		(kPa)	(kPa)	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL	
1 & 2	1	1.09	2.32	1600	1800	2000	1800	2000	2200		1.24	2.64	1600	1800	2000	1700	1900	2100	
	1.5	1.49	3.19	1400	1600	1800	1600	1750	1950		1.70	3.63	1300	1500	1700	1500	1700	1900	
	2	1.90	4.06	1200	1400	1600	1400	1600	1700		2.16	4.62	1100	1300	1500	1300	1500	1600	
	3	2.72	5.80	1100	1200	1300	1200	1300	1500		3.09	6.60	900	1100	1200	1100	1200	1400	
2.5	1	0.75	1.59	2000	2250	2500	2100	2400	2600		0.83	1.78	1900	2100	2400	1800	2000	2200	
	1.5	1.03	2.19	1600	1800	2000	1800	2000	2200		1.15	2.45	1600	1800	2000	1700	1900	2100	
	2	1.31	2.79	1600	1800	1900	1650	1850	2050		1.46	3.12	1400	1600	1800	1600	1750	1950	
	3	1.87	3.98	1200	1400	1600	1400	1600	1700		2.09	4.45	1100	1300	1500	1300	1500	1600	
3 & 4	1	0.68	1.45	2000	2250	2500	2100	2400	2600		0.68	1.45	1900	2100	2300	2100	2400	2600	
	1.5	0.93	1.99	1600	1800	2000	1800	2000	2200		0.93	1.99	1600	1800	2000	1800	2000	2200	
	2	1.19	2.54	1600	1800	2000	1700	1900	2100		1.19	2.54	1600	1800	2000	1700	1900	2100	
	3	1.70	3.63	1300	1500	1700	1500	1700	1900		1.70	3.63	1300	1500	1700	1500	1700	1900	

THERMAL EXPANSION

Thermal expansion, where there is a temperature difference between the sheeting and the structure, will cause all metal roof sheeting to expand and contract.

Careful thought to thermal expansion should be taken at design stages, especially with long sheet runs and where high temperature variances occur.

The colour will also affect the amount of thermal expansion and if the sheeting is flat or curved.

T-Deck sheet lengths should not exceed the maximum lengths shown below.

THERMAL EXPANSION (MAXIMUM SHEETING LENGTH)

ROOF COLOUR	LIGHT	DARK
Flat	Up to 25m	Up to 17m
Spring-Curved	Up to 20m	Up to 17m

FIXING & FASTENER RECOMMENDATIONS

T-Deck sheeting should be laid with the side laps facing away from the prevailing wind and sitting neatly on the preceding roof sheet. All screws must have a neoprene washer for a weather tight seal for both roofing and cladding and must conform to AS3566.

It is recommended side lap fasteners are used for roof spans exceeding 900mm and wall spans exceeding 1200mm, stich the side laps at midspan using either an 8 x 12mm self-drilling and threading screw or a 3.2mm diameter sealed aluminium pop rivet to prevent water penetration.

The roof sheet pans should be turned up at the upper roof edge and turn down the pan at the lower edge, using a turn up/turn down tool.

It is important that the underlap of one sheet does not protrude beyond the overlap of the next.

If this is unavoidable, the underlap must be trimmed on site or water drawback may occur.

FIXING AND FASTENER GUIDE

	CREST FIXING*	VALLEY FIXING*
Fixing to Timber Supports	M6-11 x 65	M6-11 x 25
Fixing to metal (0.42mm up to 1.50mm)	M6 - 11 x 50	M6-11 x 25
Side laps (Screws)	No.8 x 12mm self-drilling and threading screws	No.8 x 12mm self-drilling and threading screws
Sie Laps (Pop Rivets)	3.2mm diameter sealed aluminium pop rivets	3.2mm diameter sealed aluminium pop rivets

* These figures are suitable for non-cyclonic conditions

WALKING ON T-DECK

Extra caution should be taken when walking on any roof. When walking on T-Deck wear flat rubber soled shoes and place feet only in the pans, taking care to avoid the last pan, or the ribs at purlin supports.

HANDLING & STORAGE

Care should be taken when handling sheeting to preserve the quality of the finish. For safety, wear cut resistant gloves. Keep packs of sheeting dry and stored clear of the ground level.

Protect packs from rain and moisture. If sheets do become wet, they should be separated, wiped and placed in the open to dry.

CUTTING & CLEANING UP

T-Deck can easily be cut using a power saw with a steel cutting blade, a power nibbler or with tin snips for smaller localised cutting. Avoid using abrasive discs as they can cause burred edges and coating damage. Material should be cut on the ground where possible.

Always clean off any swarf and metal fillings during installation, dispose of all off-cuts carefully, remove all swarf created by drilling or cutting and all other debris, including screws and rivets from the work area and roof surface.

ORDERING

T-Deck sheeting is available custom cut and can be ordered directly or supplied and fixed through a roofing contractor. Self-drilling screws are also available including a complete range of accessories and flashings.

We can also provide professional and experienced advice on your specific sheeting and flashing requirements.

GOOD PRACTICE

It is recommended that good trade practice be followed when using this product, such as that found in Australian Standards Handbook HB39.

MAINTENANCE

Simple maintenance of the finished product by regular washing with clean water will enhance the service life and maintain the appearance of the product. Areas not naturally washed by rainfall

INCOMPATIBLE METALS

Always check compatibility with adjacent materials, including direct contact between materials and where water runs from one material to another to avoid corrosion due to material incompatibility.

Zinc-aluminium coated, colour coated and galvanized steel roofs should not be used with copper, lead, green or treated timber, stainless steel, uncoated/bare metals, concrete or mortar.

Galvanized steel roofs should not receive water runs from aluminium or other inert materials such as plastic, glass, glazed tiles, zinc-aluminium or colour coated materials. Fasteners and rivets should also be checked for compatibility with sheeting material.

("Unwashed Areas"), are areas on buildings where condensation can be absorbed by the dust and dirt that build up on these areas allowing sufficient moisture to initiate corrosion.

Washing of "Unwashed Areas", should be done at six monthly intervals as a minimum, or every three months in coastal areas where salt spray is prevalent and/or in areas where high levels of industrial fallout occur.

WARRANTIES

Pre-painted products are made for the tough and demanding Australian conditions conforming to AS2728 standards. Comparable warranties to the market leader, for peace of mind, are available on request.

PLEASE CONTACT JT GROUP WA'S FRIENDLY SALES REPRESENTATIVES FOR FURTHER INFORMATION.

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