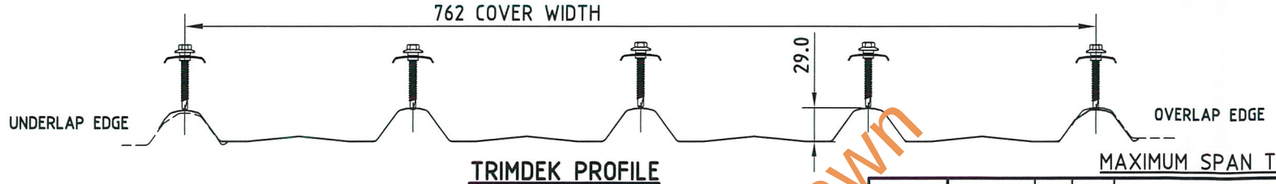
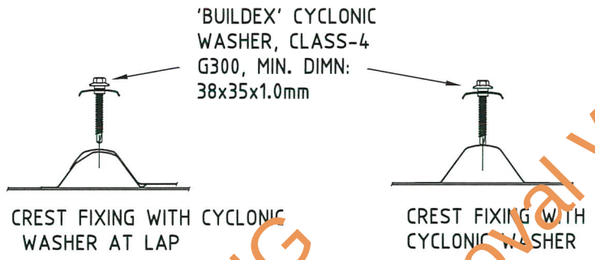
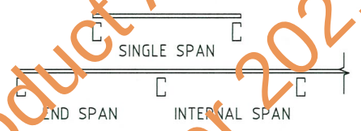
IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1) THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



TRIMDEK PROFILE



SPAN TYPE



ROOF DESIGN CAPACITY TABLES

CLADDING CREST FASTENED WITH CYCLONIC WASHERS
- ULTIMATE LIMIT STATE PRESSURE (kPa)

SPAN (mm)	0.42mm BMT			0.48mm BMT		
	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL
450	N/A	N/A	N/A	11.06	11.06	11.06
600	10.80	10.80	10.80	10.80	10.80	10.80
900	7.03	7.23	8.02	7.88	7.65	8.61
1200	4.15	4.43	5.70	5.47	5.15	6.69
1500	2.14	2.40	3.83	3.56	3.29	5.05
1800	1.02	1.15	2.43	2.16	2.09	3.68
2100	0.77	0.68	1.49	1.25	1.85	2.58
2400	N/A	N/A	N/A	0.86	1.62	1.76

MAXIMUM SUPPORT SPACING (mm)

SPAN TYPE	0.42 BMT	0.48 BMT
SINGLE	1100	1600
END	1300	1850
INTERNAL	1900	2600
EAVE UNSTIFFENED	150	200
OVERHANG STIFFENED	300	350

THE MAXIMUM SUPPORT SPACING CONSIDERS LIGHT ROOF TRAFFIC FROM INCIDENTAL MAINTENANCE.

MAXIMUM SPAN TABLES (mm)

BUILDING HEIGHT	TERRAIN CATEGORY	Kl	pz (kPa)	CREST FASTENED WITH CYCLONIC WASHERS, 0.42BMT			CREST FASTENED WITH CYCLONIC WASHERS, 0.48BMT		
				SINGLE	END	INTERNAL	SINGLE	END	INTERNAL
UP TO 5M	1	1	4.57	1150	1180	1380	1340	1290	1600
		1.5	5.86	1020	1040	1170	1150	1110	1350
		2	7.15	890	900	1010	990	950	1120
		3	9.72	680	690	710	710	700	740
	2	1	3.44	1300	1340	1580	1520	1470	1860
		1.5	4.40	1170	1200	1400	1360	1320	1640
		2	5.37	1070	1090	1250	1210	1170	1440
		3	7.30	870	890	990	970	940	1100
	2.5	1	3.49	1290	1330	1570	1510	1460	1850
		1.5	4.02	1210	1260	1470	1420	1380	1720
		2	4.91	1120	1140	1320	1280	1230	1530
		3	6.67	930	950	1070	1050	1010	1200
	3	1	2.86	1390	1430	1700	1640	1600	2020
		1.5	3.66	1270	1310	1530	1480	1440	1800
		2	4.47	1160	1190	1390	1350	1300	1620
		3	6.07	1000	1020	1150	1120	1080	1310
	4	1	2.33	1470	1510	1830	1760	1730	2190
		1.5	2.99	1370	1410	1680	1620	1570	1980
		2	3.65	1270	1310	1530	1480	1440	1800
		3	4.96	1110	1140	1310	1280	1230	1510
UP TO 10M	1	1	5.2	1090	1110	1280	1240	1190	1470
		1.5	6.67	930	950	1070	1050	1010	1200
		2	8.13	810	820	880	870	850	970
		3	11.06	450	450	450	450	450	450
	2	1	4.15	1190	1240	1440	1400	1360	1690
		1.5	5.32	1070	1100	1260	1220	1170	1450
		2	6.48	950	980	1090	1070	1040	1230
		3	8.82	750	760	810	800	780	870
	2.5	1	3.51	1290	1330	1560	1510	1460	1840
		1.5	4.5	1160	1190	1390	1350	1300	1620
		2	5.49	1060	1080	1230	1190	1150	1410
		3	7.46	860	880	970	950	920	1070
	3	1	2.86	1390	1430	1700	1640	1600	2020
		1.5	3.66	1270	1310	1530	1480	1440	1800
		2	4.47	1160	1190	1390	1350	1300	1620
		3	6.07	1000	1020	1150	1120	1080	1310
	4	1	2.33	1470	1510	1830	1760	1730	2190
		1.5	2.99	1370	1410	1680	1620	1570	1980
		2	3.65	1270	1310	1530	1480	1440	1800
		3	4.96	1110	1140	1310	1280	1230	1510

RECOMMENDED ROOF FASTENERS FOR STEEL SUPPORTS

ONLY FASTENERS NOTED CAN BE USED IN THIS DTCM SHEET.

SCREW NOTATION CODE:	STEEL THICKNESS	CLASS 4 : SELF DRILLING & TAPPING HEX HEAD SCREW WITH EPDM SEAL
HH DENOTED - HEX. HEAD T17 " - TYPE 17 HG " - HIGH GRIP TG " - TOP GRIP	SINGLE: 1.0mm UP TO 3.0mm bmt	#14 - 10 x 50 HH (CREST FIX)
	SINGLE/LAPPED: 0.75mm UP TO 1.0mm bmt (total 2.0mm)	M6.5 (#14) - 12 x 55 CYCLONIC ZIP SCREW (CREST FIX)
	LAPPED: 1.0mm UP TO 1.9mm bmt (total 3.8mm)	#14 - 10 x 50 HH (CREST FIX)

RECOMMENDED ROOF FASTENERS FOR TIMBER SUPPORTS

STRENGTH GROUP	CLASS 4 : SELF DRILLING HEX HEAD SCREW WITH EPDM SEAL
HARDWOOD J1-J3	#12 - 11 x 65 T17 HG/TG HH (CREST FIX)
SOFTWOOD J4	M6 - 11 x 65 ROOFZIPS (CREST FIX) #14 - 10 x 65 T17 HH (CREST FIX)

Notes covering basis of DTCM sheet (Relevant test reports etc)

1. TRIMDEK 0.42 + 0.48 BMT CYCLONIC ROOF & WALL PRESSURE TESTS. PROJECT #501855. JUNE 2008. BLUESCOPE STEEL LYSAGHT No 7 FERNGROVE PLACE, CHESTER HILL 2162 NSW - AUSTRALIA.
2. STATIC & CYCLIC FATIGUE WITHDRAWAL CAPACITIES OF SELF DRILLING SCREWS IN TIMBER SUPPORTS. REPORT: 5.1.2-REPORT 05. DECEMBER 2010. LYSAGHT No 27 STERLING RD, MINCHINBURY 2770 NSW - AUSTRALIA.
3. CYCLIC PULLOUT CAPACITIES OF BUILDEX M6.5-12X55 CYCLONIC ZIP SCREWS. REPORT: 5.1.3 - REPORT 05. JUNE 2010. BLUESCOPE LYSAGHT No 27 STERLING RD, MINCHINBURY 2770 NSW - AUSTRALIA.
4. SCREW PULLOUT CAPACITIES TO BUILDING CODES OF AUSTRALIA'S LOW-HIGH-LOW CYCLONIC TEST REGIME. REPORT: 5.1.2 - REPORT 02. SEPTEMBER 2009. LYSAGHT No 27 STERLING RD, MINCHINBURY 2770 NSW - AUSTRALIA.

**Checking Engineers Certification

Name: KAVITHA MYSORE
Rego. Number: MIE AUST. 2089547
Date: 05/09/2016
Signature: M.K.Kavitha

**registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: STEPHEN HEALEY
NT Rego. Number: 34856ES
Date: 27.September.2016
Signature:

**registered as a structural engineer in Northern Territory

Product Name

TRIMDEK - ROOFING FOR CYCLONIC REGIONS

Product Description

TRIMDEK ROOFING IS MANUFACTURED FROM 0.42mm & 0.48mm BMT G550, AM125 ZINCALUME, AM100 COLORBOND/COLORBOND METALLIC, AM150 COLORBOND ULTRA. Z450 GALVASPAN MATERIAL IS AVAILABLE IN SOME LOCATIONS.

Manufacturer's Name

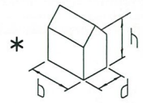
LYSAGHT
BlueScope Steel Limited
A.B.N. 16 000 011 058
Trading as Lysaght

Design Criteria

THE FOLLOWING CRITERIA FROM AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTIONS (INCORPORATING AMENDMENT No. 1,2&3) HAVE BEEN USED TO GENERATE THE TABLES.

1. IMPORTANCE LEVEL 2 WITH RETURN PERIOD OF 500 YEARS
2. VR = 66xFc = 66x1.05 = 69.3 m/sec
3. Ms = Mt = Md = 1.0
4. Cpe = -0.9; Cpi = +0.7 Kce & Kci = 0.9
5. HEIGHT MULTIPLIERS FROM TABLE 4.1 OF AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTIONS (INCORPORATING AMENDMENT No. 1,2&3) HAVE BEEN USED TO GENERATE THE TABLES.

HEIGHT (m)	TERRAIN / HEIGHT MULTIPLIER (Mz,cat)				
	1	2	2.5	3	4
<=5	1.05	0.91	0.87	0.83	0.75
<=10	1.12	1.00	0.92	0.83	0.75



Limitations

1. THE DATA IN THIS SHEET SHALL BE APPLICABLE TO TRIMDEK ROOFING ONLY. PROFILE DIMENSIONS OF TRIMDEK AS SUPPLIED FOR INSTALLATION SHALL COMPLY WITH TRIMDEK PRODUCT DRAWINGS AS DEVELOPED BY LYSAGHT.
2. **ROOF DESIGN CAPACITY TABLES & MAXIMUM SPAN TABLES HAVE BEEN DEVELOPED FOR TIMBER SUPPORTS & STEEL SUPPORTS 1.5mm BMT OR THICKER. FOR STEEL SUPPORT LESS THAN 1.50mm BMT, REFER TO APPROPRIATE DTCM SHEET FOR MAXIMUM BATTEN SPACING.**
3. INSTALLATION SHALL BE IN ACCORDANCE WITH LYSAGHT CYCLONIC AREA DESIGN MANUAL AND TRIMDEK MANUAL.
4. MAXIMUM SPAN TABLES ARE BASED ON MAXIMUM ROOF HEIGHT = 10M.
5. MAXIMUM OVERHANG SHALL BE DETAILED ACCORDING TO CURRENT LYSAGHT ROOFING & WALLING INSTALLATION MANUAL.
6. Pz (PRESSURE) IN THE TABLES SHALL BE INCREASED ACCORDING TO AS/NZS 1170.2:2011, STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTIONS (INCORPORATING AMENDMENT. No 1,2 & 3) AS/NZS 1170.2: 2011 CLAUSE 5.4.1 IN THE CASE OF: ELEVATED BUILDING ALLOWING FOR AIR FLOW UNDER: - h/b > 1, - h/d > 1. *
7. NO PRE-BORED HOLES PERMITTED.
8. TRIMDEK COMPLIES WITH AUSTRALIAN STANDARDS FOR THE FOLLOWING REQUIREMENTS:
   A. SERVICEABILITY: AS/NZS 1170.0: 2002 STRUCTURAL DESIGN ACTIONS PART 0: GENERAL PRINCIPLES (INCORPORATING AMENDMENT 1,2,3,4&5)
   B. WIND LOADING: AS/NZS 1170.2: 2011 STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTION (INCORPORATING AMENDMENT No. 1,2&3)
   C. CONCENTRATED LOAD AT MAXIMUM SPAN: AS 4040.0-1992: METHODS OF TESTING SHEET ROOF AND WALL CLADDING - INTRODUCTION, LIST OF METHODS AND GENERAL REQUIREMENTS; AS 4040.1-1992: METHODS OF TESTING SHEET ROOF AND WALL CLADDING - RESISTANCE TO CONCENTRATED LOADS
9. SERVICEABILITY LIMIT STATE PRESSURES CAN BE OBTAINED BY MULTIPLYING ROOF DESIGN CAPACITY TABLES BY A FACTOR 0.46.
10. ALWAYS WALK OVER SUPPORTS IF POSSIBLE. GENERALLY KEEP YOUR WEIGHT DISTRIBUTED EVENLY OVER THE SOLES OF YOUR SHOES.
11. MAX. TRIMDEK ROOF LENGTHS AS RELATED TO ROOF CARRYING CAPACITY & ROOF PITCH SHALL BE DETERMINED USING THE TRIMDEK DESIGN & INSTALLATION GUIDE.
12. INCREASE SCREW LENGTH IF FIXING OVER INSULATION TO MAINTAIN A MIN. OF 3 SCREW THREADS PROTRUDING ON THE FAR SIDE STEEL SUPPORT.
13. FOR STRENGTH GROUPS OF TIMBER, REFER TO AS 1720.2: 2006 TIMBER STRUCTURES PART 2: TIMBER PROPERTIES (INCORPORATING AMENDMENT No. 1).
14. DESIGN TABLES ARE BASED ON TEST RESULTS IN ACCORDANCE TO BCA REQUIREMENTS FOR "LHL" CYCLONIC TEST FOR METAL ROOFS.
15. PRODUCT METALLIC COATING COMPLIES WITH AS 1397-2011 : CONTINUOUS HOT-DIP METALLIC COATED STEEL SHEET AND STRIP - COATINGS OF ZINC AND ZINC ALLOYED WITH ALUMINIUM AND MAGNESIUM & AS/NZS 2728: 2013 PREFINISHED/PREPAINTED SHEET METAL PRODUCTS FOR INTERIOR/EXTERIOR BUILDING APPLICATIONS - PERFORMANCE REQUIREMENTS

Accepted for Inclusion

DTCM ref: M/313/01

Chairman's Signature: P Russell

Chairman's Name: Peter Russell

Date of Approval: 03/10/2016 Expiry Date: 02/10/2021