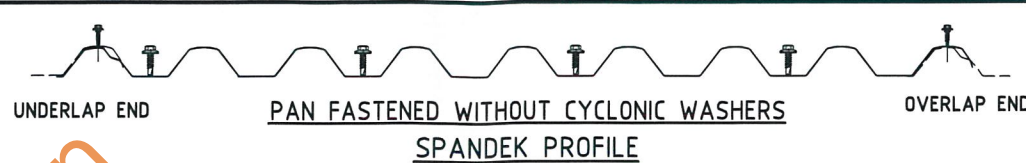
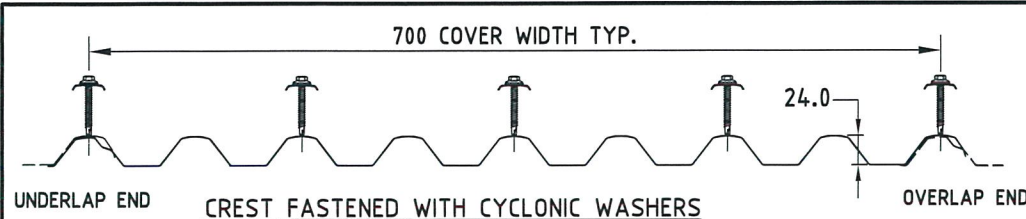
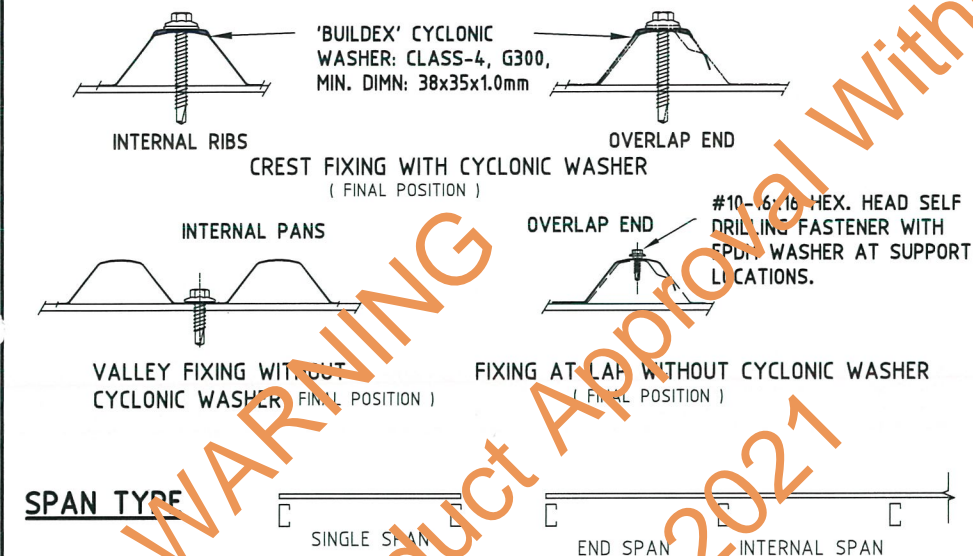


IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1) THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



MAXIMUM SPAN TABLES (mm)

TERRAIN CATEGORY	K1	pz (kPa)	PAN FASTENED WITHOUT CYCLONIC WASHERS, 0.42BMT			CREST FASTENED WITH CYCLONIC WASHERS, 0.42BMT			PAN FASTENED WITHOUT CYCLONIC WASHERS, 0.48BMT			CREST FASTENED WITH CYCLONIC WASHERS, 0.48BMT			
			SINGLE	END	INTERNAL	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL	
UP TO 5M	1	1	3.86	970	650	920	1350	1380	1610	1130	1110	1300	1530	1380	1830
		1.5	4.79	870	N/A	670	1210	1220	1410	1040	880	1090	1360	1230	1620
		2	5.72	790	N/A	N/A	1100	1110	1240	950	690	910	1200	1110	1420
	2	3	7.58	640	N/A	N/A	890	890	970	810	N/A	620	960	890	1090
		1	2.90	1090	940	1250	1510	1560	1890	1360	1370	1670	1750	1630	2100
		1.5	3.60	1000	730	1010	1390	1420	1670	1150	1170	1370	1590	1420	1900
	2.5	2	4.30	920	N/A	800	1280	1300	1500	1090	1000	1190	1440	1310	1730
		3	5.69	800	N/A	N/A	1100	1110	1250	960	700	920	1210	1110	1430
		1	2.65	1120	1030	1350	1570	1620	2000	1560	1450	1880	1820	1780	2180
	3	1.5	3.29	1040	810	1110	1440	1470	1750	1180	1260	1450	1660	1470	1990
		2	3.93	960	630	900	1340	1360	1590	1120	1090	1280	1510	1370	1810
		3	5.20	840	N/A	N/A	1160	1170	1330	1000	800	1010	1290	1170	1530
4	1	2.41	1150	1120	1450	1630	1690	2100	1760	1520	2090	1910	1920	2270	
	1.5	2.99	1080	900	1210	1490	1530	1850	1290	1340	1590	1730	1580	2070	
	2	3.57	1010	730	1020	1400	1420	1680	1150	1180	1370	1590	1420	1910	
UP TO 10M	1	3	4.73	880	N/A	690	1220	1230	1420	1050	900	1100	1370	1240	1630
		1	1.97	1260	1310	1690	1740	1830	2100	2110	1690	2400	2080	2190	2400
		1.5	2.44	1140	1110	1440	1620	1680	2090	1730	1510	2060	1900	1910	2260
	2	2	2.92	1090	930	1240	1500	1550	1880	1340	1370	1650	1750	1620	2090
		3	3.87	970	650	920	1350	1370	1600	1120	1100	1300	1520	1380	1830
		1	4.39	910	N/A	780	1270	1290	1480	1080	980	1170	1430	1290	1710
	2.5	1.5	5.45	820	N/A	N/A	1130	1140	1290	980	750	960	1250	1140	1470
		2	6.51	730	N/A	N/A	1010	1010	1120	890	N/A	790	1100	1020	1270
		3	8.62	N/A	N/A	N/A	790	790	840	740	N/A	N/A	830	800	910
	3	1	3.50	1020	750	1040	1410	1430	1700	1160	1190	1390	1610	1440	1930
		1.5	4.34	920	N/A	N/A	1280	1300	1490	1080	990	1180	1440	1300	1720
		2	5.19	840	N/A	N/A	1160	1170	1340	1000	800	1010	1290	1170	1530
4	3	6.87	700	N/A	N/A	960	970	1070	860	N/A	730	1050	980	1200	
	1	2.96	1080	910	1220	1490	1540	1860	1310	1350	1620	1740	1600	2080	
	1.5	3.68	990	700	980	1380	1410	1650	1140	1150	1350	1570	1410	1880	
3	2	4.39	910	N/A	780	1270	1290	1480	1080	980	1170	1430	1290	1710	
	3	5.82	790	N/A	N/A	1080	1100	1220	950	670	890	1190	1100	1400	
	1	2.41	1150	1120	1450	1630	1690	2100	1760	1520	2090	1910	1920	2270	
4	1.5	2.99	1080	900	1210	1490	1530	1850	1290	1340	1590	1730	1580	2070	
	2	3.57	1010	730	1020	1400	1420	1680	1150	1180	1370	1590	1420	1910	
	3	4.73	880	N/A	690	1220	1230	1420	1050	900	1100	1370	1240	1630	



WALL DESIGN CAPACITY TABLES
ULTIMATE LIMIT STATE PRESSURE (kPa)

SPAN mm	0.42 BMT			0.48 BMT			0.42 BMT			0.48 BMT		
	PAN FASTENED WITHOUT CYCLONIC WASHERS	CREST FASTENED WITH CYCLONIC WASHERS	PAN FASTENED WITHOUT CYCLONIC WASHERS	CREST FASTENED WITH CYCLONIC WASHERS	PAN FASTENED WITHOUT CYCLONIC WASHERS	CREST FASTENED WITH CYCLONIC WASHERS	PAN FASTENED WITHOUT CYCLONIC WASHERS	CREST FASTENED WITH CYCLONIC WASHERS	PAN FASTENED WITHOUT CYCLONIC WASHERS	CREST FASTENED WITH CYCLONIC WASHERS	PAN FASTENED WITHOUT CYCLONIC WASHERS	CREST FASTENED WITH CYCLONIC WASHERS
	SGL.	END	INT.	SGL.	END	INT.	SGL.	END	INT.	SGL.	END	INT.
600	8.10	4.05	5.07	10.80	10.80	10.80	10.8	6.21	7.76	10.80	10.8	10.8
900	4.51	3.01	3.95	7.48	7.52	8.14	6.37	4.74	5.81	8.04	7.56	8.74
1200	2.03	2.20	3.03	4.86	4.97	5.98	3.11	3.49	4.26	5.77	5.00	6.92
1500	1.76	1.62	2.30	2.95	3.13	4.30	2.73	2.48	3.11	3.99	3.13	5.34
1800	1.50	1.26	1.78	1.74	2.02	3.12	2.36	1.71	2.75	2.71	2.63	4.00
2100	1.24	1.13	1.45	1.24	1.62	2.43	1.99	1.16	2.40	1.92	2.12	2.91
2400	N/A	N/A	N/A	N/A	N/A	N/A	1.62	0.86	2.05	1.62	1.62	2.05

SGL. = SINGLE SPAN, END = END SPAN, INT. = INTERNAL SPAN

RECOMMENDED FASTENERS

STEEL SUPPORTS - CLASS 4 : SELF DRILLING & SELF TAPPING HEX HEAD SCREW WITH EPDM SEAL

TIMBER SUPPORTS - CLASS 4 : TYPE 17 SELF DRILLING HEX HEAD SCREW WITH EPDM SEAL

FASTENER NOTATION

LOCATION ON CLADDING	SINGLE & LAPPED THICKNESS 0.75mm UP TO 1.0mm bmt.	SINGLE THICKNESS ≥ 1.0mm UP TO 3.0mm bmt.	LAPPED THICKNESS > 1.0mm UP TO 1.9mm bmt. (3.8mm TOTAL)	LOCATION ON CLADDING	HARDWOOD (STRENGTH GROUP J1-J3)	SOFTWOOD (STRENGTH GROUP J4)
CREST	M6.5 (#14)-12x55 CYCLONIC ROOFZIPS	#14 - 10 x 50 HH	#14 - 10 x 50 HH	CREST	#12 - 11 x 65 T17 HH HG/TG	#14 - 10 x 65 T17 HH M6 -11 x 65 ROOFZIPS
PAN	M6.5 (#14)-12x30 CYCLONIC ROOFZIPS	#14 - 10 x 25 HH	#14 - 10 x 25 HH	PAN	#12 - 11 x 25 T17 HH	#14 - 10 x 50 T17 HH

HH - HEX. HEAD
HG - HIGH GRIP
TG - TOP GRIP
T17 - TYPE 17

Product Name
SPANDEK - WALLING FOR CYCLONIC REGIONS

Product Description
SPANDEK WALLING IS MANUFACTURED FROM 0.42mm & 0.48mm BMT G550, AM125 ZINCALUME, AM100 COLORBOND/COLORBOND METALLIC, AM150 COLORBOND ULTRA. Z450 GALVSPAN MATERIAL IS AVAILABLE IN SOME LOCATIONS.

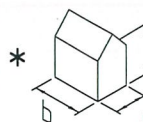
Manufacturer's Name
LYSAGHT
BlueScope Limited
A.B.N. 16 000 011 058
Trading as Lysaght



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 = +0.7 / -0.65; Cpi = -0.65 / +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

- THE DATA IN THIS SHEET SHALL BE APPLICABLE TO SPANDEK WALLING ONLY. PROFILE DIMENSIONS OF SPANDEK AS SUPPLIED FOR INSTALLATION SHALL COMPLY WITH SPANDEK PRODUCT DRAWINGS AS DEVELOPED BY LYSAGHT.
- WALL 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.
- INSTALLATION SHALL BE IN ACCORDANCE WITH LYSAGHT CYCLONIC AREA DESIGN MANUAL AND SPANDEK MANUAL.
- MAXIMUM SPAN TABLES ARE BASED ON MAXIMUM ROOF HEIGHT = 10M.
- MAXIMUM OVERHANG SHALL BE DETAILED ACCORDING TO CURRENT LYSAGHT ROOFING & WALLING INSTALLATION MANUAL.
- 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. *
- NO PRE-BORED HOLES PERMITTED.
- SPANDEK 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)
- SERVICEABILITY LIMIT STATE PRESSURES CAN BE OBTAINED BY MULTIPLYING WALL DESIGN CAPACITY TABLES BY A FACTOR 0.46.
- INCREASE SCREW LENGTH IF FIXING OVER INSULATION TO MAINTAIN A MIN. OF 3 SCREW THREADS PROTRUDING ON THE FAR SIDE STEEL SUPPORT.
- FOR STRENGTH GROUPS OF TIMBER, REFER TO AS 1720.2: 2006 TIMBER STRUCTURES PART 2: TIMBER PROPERTIES (INCORPORATING AMENDMENT No. 1).
- DESIGN TABLES ARE BASED ON TEST RESULTS COMPATIBLE TO AS 4040.3 - 1992 METHODS OF TESTING SHEET ROOF AND WALL CLADDING METHOD 3: RESISTANCE TO WIND PRESSURES FOR CYCLONE REGIONS.
- 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

DCM REF: M/307/01

Chairman's Signature:

Peter Russell
Peter Russell

Chairman's Name:

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

Notes covering basis of DTCM sheet (relevant test reports etc).
1. SPANDEK 0.42 & 0.48 BMT CYCLONIC ROOF & WALL PRESSURE TEST. PROJECT 501588, JUNE 2008. BLUESCOPE STEEL LYSAGHT. No 7 FERGROVE PLACE, CHESTER HILL 2162 NSW - AUSTRALIA.
2. STATIC & CYCLIC FATIGUE WITHDRAWAL CAPACITIES OF THE SELF DRILLING SCREWS IN TIMBER SUPPORTS: REPORT 5.1.2 - REPORT No 05. DECEMBER 2010. LYSAGHT No 27 STERLING RD. MINCHINBURY 2770 NSW AUSTRALIA.
3. CYCLIC PULL OUT CAPACITIES OF BUILDIX #14 - 12 X 55 CYCLONIC ROOFZIPS SCREWS. REPORT, 5.1.3 - REPORT 05 JUNE 2010. BLUESCOPE LYSAGHT No 27 STERLING RD. MINCHINBURY 2770 NSW AUSTRALIA.
4. SCREW PULL OUT CAPACITIES TO BUILDING CODE OF AUSTRALIA LOW-HI-LOW CYCLONIC TEST REGIME: REPORT: 5.1.2 - REPORT 02. SEPTEMBER 2009. LYSAGHT No 27 STERLING RD. MINCHINBURY 2770 NSW AUSTRALIA.

**Checking Engineers Certification
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Rego Number: MIE Aust. 2089547
Date: 26/9/2016
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: *Stephen Healey*
**registered as a structural engineer in Northern Territory