

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.

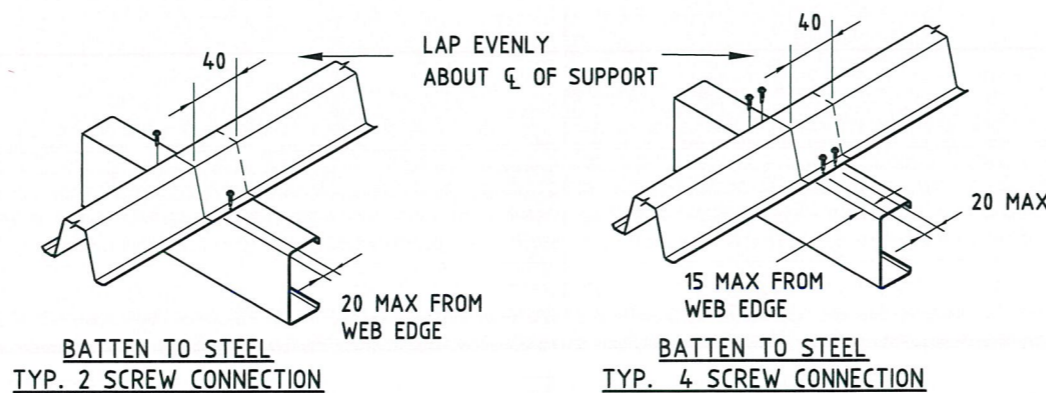
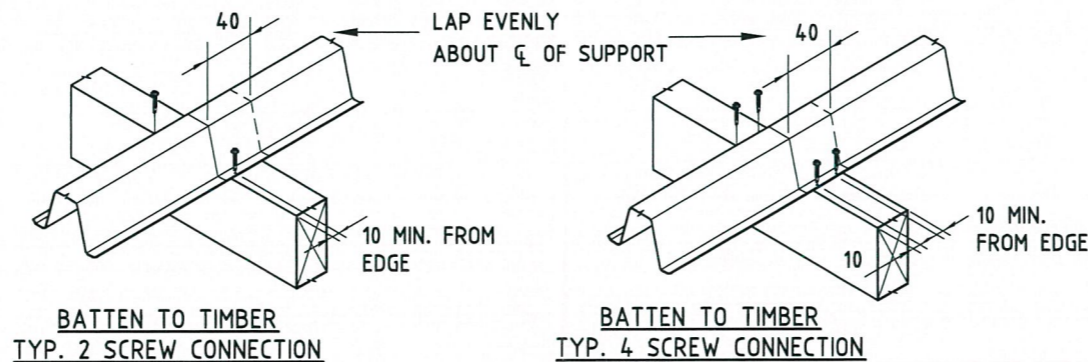
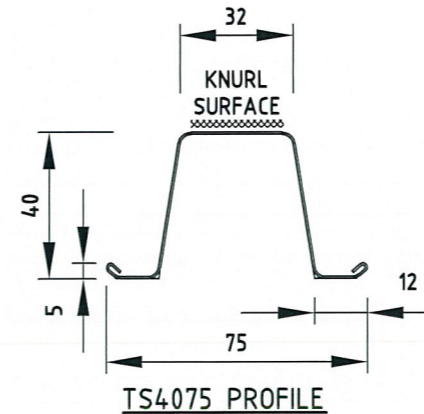
MAXIMUM BATTEN SPACING (mm)								
BUILDING HEIGHT	TERRAIN CATEGORY	K1	pz (kPa)	BATTEN SPAN (SUPPORT SPACING), mm				
				≤ 600	900	1200	1500	1800
UP TO 5M	1	1	4.57	1135	805	525	400	270
		1.5	5.86	885	625	410	310	210
		2	7.15	725	510	335	255	N/A
		3	9.72	535	375	245	N/A	N/A
	2	1	3.44	1510	1065	700	530	360
		1.5	4.40	1180	835	545	415	280
		2	5.37	965	685	445	340	230
		3	7.30	710	500	330	250	N/A
	2.5	1	3.49	1490	1050	690	520	355
		1.5	4.02	1295	915	595	455	310
		2	4.91	1060	745	490	370	250
		3	6.67	780	550	360	270	N/A
	3	1	2.86	1820	1285	840	635	435
		1.5	3.66	1420	1005	655	500	340
		2	4.47	1160	820	535	405	275
		3	6.07	855	605	395	300	205
4	1	2.33	2230	1575	1030	785	535	
	1.5	2.99	1740	1230	805	610	415	
	2	3.65	1425	1005	660	500	340	
	3	4.96	1045	740	485	365	250	
UP TO 10M	1	1	5.20	1000	705	470	350	240
		1.5	6.07	780	550	360	270	N/A
		2	8.13	640	450	295	225	N/A
		3	11.06	470	330	215	N/A	N/A
	2	1	4.15	1250	865	580	440	300
		1.5	5.32	975	690	450	340	230
		2	6.48	800	565	370	280	N/A
		3	8.82	690	415	270	205	N/A
	2.5	1	2.51	1480	1045	685	520	355
		1.5	4.50	1155	815	535	405	275
		2	5.49	945	670	435	330	225
		3	7.46	695	490	320	245	N/A
	3	1	2.86	1820	1285	840	635	435
		1.5	3.66	1420	1005	655	500	340
		2	4.47	1160	820	535	405	275
		3	6.07	855	605	395	300	205
4	1	2.33	2230	1575	1030	785	535	
	1.5	2.99	1740	1230	805	610	415	
	2	3.65	1425	1005	660	500	340	
	3	4.96	1045	740	485	365	250	

#### BATTEN SPACING NOTES:

1. MAXIMUM SPACING COULD BE GOVERNED BY CAPACITY OF BATTENS AND THEIR CONNECTIONS TO SUPPORTING RAFTERS/TRUSSES AS WELL AS PULL-OUT CAPACITIES OF FASTENERS CONNECTING LYSAGHT CLADDINGS TO BATTEN.
2. SPACING OF BATTENS SHALL NOT EXCEED MAXIMUM SPACING OF CLADDING AS GIVEN IN THE RELEVANT DTCM ROOFING DRAWINGS.
3. FASTENER REQUIREMENTS FOR FIXING BATTEN TO SUPPORTS IN BATTEN SPACING TABLE:  
STEEL SUPPORTS:
  - 1.00mm BMT: 2x #14(M6.5)-12X30 CYCLONIC ROOF ZIPS®
  - 1.20~1.9mm BMT: 2x #14~1X25 HEX. HEAD SELF DRILLING SELF TAPPING TEKS®
  - 'BUILDEX' M6.5-12X30 CYCLONIC ROOF ZIPS = #14-12X30 CYCLONIC ROOF ZIPSTIMBER SUPPORTS:
  - ALL TIMBER SUPPORTS: 2x 'BUILDEX' #12(M5.5)-11x40 BATTENZIPS
4. METAL ROOFING FASTENER: REFER TO THE RELEVANT DTCM ROOFING DRAWINGS FOR ROOFING FASTENER FIXING REQUIREMENTS.

#### DESIGN CAPACITY TABLE NOTES:

1. STEEL SUPPORT FASTENER SPECIFICATION:
  - 1.00mm BMT: #14(M6.5)-12X30 CYCLONIC ROOF ZIPS®
  - 1.20~1.9mm BMT: #14~10X25 HEX. HEAD SELF DRILLING SELF TAPPING TEKS®
  - 'BUILDEX' M6.5-12X30 CYCLONIC ROOF ZIPS = #14-12X30 CYCLONIC ROOF ZIPS
2. TIMBER SUPPORT FASTENER SPECIFICATION: 'BUILDEX' #12(M5.5)-11x40 BATTENZIPS
3. DESIGN CAPACITY TABLE CAN BE USED TO DESIGN TS6175 & TS6110 WITH TIMBER SUPPORTS:
  - 2 FASTENER CONNECTION: SOFTWOOD TIMBER = 1.5mm bmt STEEL SUPPORT, HARDWOOD TIMBER = 1.9mm bmt STEEL SUPPORT.
  - 1 FASTENER CONNECTION: HARDWOOD/SOFTWOOD TIMBER SUPPORT = 1.9bmt STEEL SUPPORT.
4. OUTWARD CAPACITY SHALL BE LIMITED BY THE MINIMUM VALUE BETWEEN MEMBER STRENGTH AND FASTENERS CAPACITY.
5. \* BATTEN SHALL BE CONTINUOUS OVER AT LEAST 2 SPANS, LAPPED 40mm MINIMUM AT THE SUPPORT (TRUSS OR RAFTER) LOCATIONS.



#### DESIGN CAPACITY TABLE - OUTWARD, CONTINUOUS SPAN\*

ULTIMATE LIMIT STATE LOAD (kN/m)									
SPAN (mm)	MEMBER STRENGTH kN/m	2 FASTENER CAPACITY (kN/m) SUPPORT THICKNESS (mm/bmt)				4 FASTENER CAPACITY (kN/m) SUPPORT THICKNESS (mm/bmt)			
		#14(M6.5)-12x30		#14-10x25		#14(M6.5)-12x30		#14-10x25	
		1.0mm	1.2mm	1.5mm	1.9mm	1.0mm	1.2mm	1.5mm	1.9mm
≤ 600	7.98	5.51	7.19	8.99	11.93	7.75	10.41	13.09	15.69
900	4.72	3.68	4.79	5.99	7.95	5.16	6.94	8.73	10.46
1200	2.41	2.76	3.59	4.49	5.96	3.87	5.21	6.54	7.84
1500	1.83	2.21	2.88	3.60	4.77	3.10	4.16	5.24	6.27
1800	1.25	1.84	2.40	3.00	3.98	2.58	3.47	4.36	5.23

#### NOTES COVERING BASIS OF DTCM SHEET (RELEVANT TEST REPORTS ETC)

1. 'FULL SCALE TOPSPAN 4075,6175,6110 ROOFING BATTENS TESTING TO BUILDING CODES OF AUSTRALIA'S LOW-HIGH-LOW CYCLONIC TEST', REGIME. INDEX No. 5.1.2 - REPORT 04, AUGUST 2010, BLUESCOPE LYSAGHT No. 27 STERLING RD, MINCHINBURY 2770 AUSTRALIA.
2. 'WITHDRAWAL CAPACITIES OF TOPSPAN BATTEN TO TIMBER SUPPORT CONNECTIONS USING BUILDEX BATTENZIPS M5.5 - 11 x 40 FASTENERS', INDEX No. 5.1.2 - REPORT 06, DECEMBER 2010, BLUESCOPE LYSAGHT No. 27 STERLING RD, MINCHINBURY 2770 AUSTRALIA.
3. 'PULLOUT CAPACITIES OF SCREW FASTENED CONNECTIONS THROUGH LYSAGHT TOPSPAN BATTENS TO STEEL PURLINS', INDEX No. 5.4.3 - REPORT 01, NOVEMBER 2010, BLUESCOPE LYSAGHT No. 27 STERLING RD, MINCHINBURY 2770 AUSTRALIA.

#### \*\*Checking Engineers Certification

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Signature:

\*\*registered as a structural engineer in Australia

#### \*\*Certifying Engineers Certification

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Date: 13/12/2018  
Signature:

\*\*registered as a structural engineer in Northern Territory

Product Name  
TOPSPAN 4075 - ROOFING BATTEN FOR CYCLONIC REGIONS

Product Description  
TOPSPAN 4075 (TS4075) IS MANUFACTURED FROM 0.75mm BMT G550, AM125 TRUECORE STEEL

Manufacturer's Name

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

LYSAGHT

#### Design Criteria

TOPSPAN 40 COMPLIES WITH AUSTRALIAN STANDARDS FOR THE FOLLOWING REQUIREMENTS:

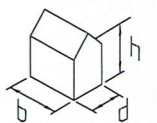
- A. WIND LOADING: AS/NZS 1170.2: 2011 STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTION (INCORPORATING AMENDMENT No. 1, 2 & 3)  
WIND LOAD DESIGN CRITERIA:  
1. IMPORTANCE LEVEL 2 WITH RETURN PERIOD OF 500 YEARS  
2. WIND REGION 'C', VR = 66xFc = 66x1.05 = 69.3 m/sec  
3. Ms = Mt = Md = 1.0  
4. Cpe = -0.9; 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

- B. CONCENTRATED LOAD: AS/NZS 1170.1: 2002 STRUCTURAL DESIGN ACTIONS PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS (INCORPORATING AMENDMENT 1 & 2)  
C. SERVICEABILITY: AS/NZS 1170.0: 2002 STRUCTURAL DESIGN ACTIONS PART 0: GENERAL PRINCIPLES (INCORPORATING AMENDMENT 1, 2, 3, 4 & 5)  
D. TIMBER STRENGTH GROUPS: AS 1720.2: 2006 TIMBER STRUCTURES PART 2: TIMBER PROPERTIES (INCORPORATING AMENDMENT No. 1).  
E. PRODUCT METALLIC COATING: AS 1397-2011: CONTINUOUS HOT-DIP METALLIC COATED STEEL SHEET AND STRIP - COATINGS OF ZINC AND ZINC ALLOYED WITH ALUMINIUM AND MAGNESIUM.  
F. INTERPOLATION OF CAPACITY AND SPACING VALUES IS PERMITTED.  
G. DESIGN TABLES ARE BASED ON THE TEST RESULTS IN ACCORDANCE WITH NCC 2016 BUILDING CODE OF AUSTRALIA - VOLUME 2 PART 3.10.1 (F) REQUIREMENTS FOR "LHL" CYCLONIC TEST FOR METAL ROOFS AND RELEVANT CLAUSES OF AS/NZS 4600: 2005 COLD-FORMED STEEL STRUCTURES.

#### LIMITATIONS

1. BATTEN DESIGN CAPACITY TABLES HAVE BEEN DEVELOPED FOR TIMBER SUPPORTS & MINIMUM 1.0mm BMT G550 STEEL SUPPORT.
2. ONLY FASTENERS NOTED CAN BE USED IN THIS DTCM SHEET. ALL FASTENERS ARE TO BE CLASS 4 IN ACCORDANCE TO AS 3566.2-2002 SELF-DRILLING SCREWS FOR THE BUILDING AND CONSTRUCTION INDUSTRIES PART 2: CORROSION RESISTANCE REQUIREMENTS.
3. THE DATA IN THIS SHEET SHALL BE APPLICABLE TO TOPSPAN 40 BATTENS ONLY. PROFILE DIMENSIONS OF TOPSPAN 40 AS SUPPLIED FOR INSTALLATION SHALL COMPLY WITH TOPSPAN 40 PRODUCT DRAWINGS AS DEVELOPED BY LYSAGHT.
4. STEEL SUPPORT MEMBERS IN THIS DTCM SHEET SHALL BE: 1.0mm BMT G550, 1.2mm BMT G500, 1.5mm & 1.9mm BMT G450.
5. INSTALLATION SHALL BE IN ACCORDANCE WITH LYSAGHT CYCLONIC AREA DESIGN MANUAL AND TOPSPAN DESIGN & INSTALLATION GUIDE.
6. MAXIMUM BATTEN SPACING TABLES ARE BASED ON MAXIMUM ROOF HEIGHT (h) = 10M.
7. INCREASE FASTENER LENGTH IF FIXING OVER INSULATION TO MAINTAIN A MINIMUM OF 3 FASTENERS THREADS PROTRUDING THE FAR SIDE OF THE STEEL SUPPORTING MEMBER.
8. Pz (PRESSURE) IN THE TABLES SHALL BE INCREASED ACCORDING TO 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.



Accepted for Inclusion

DTCM ref: M/573/01

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-01-2019 Expiry Date: 25-01-2024