

Gamcorp (Melbourne) Pty Ltd A.C.N 141 076 904 A.B.N 73 015 060 240
www.gamcorp.com.au Email: melbourne@gamcorp.com.au
35 Butler Street, Richmond VIC 3121 Tel: 03 9543 2211

Our Ref: 9981-03-01 (RE8726-01-01) /JD
4 July 2021

Tradezone Pty Ltd (Brand Name: Powerwave)
PO Box 3137, Helensvale
QLD 4212

PV Array Frame Engineering Certification

RE: AS/NZ 1170.2 Certification for Flush Mounted System on Lysaght Klip Lok 700 High strength (Concealed Fix Roof)

Gamcorp (Melbourne) Pty Ltd, being Structural Engineers within the meaning of Australian Building Regulations, have carried out a structural design check of Flush Mounted System on Lysaght Klip Lok 700 High strength (Concealed Fix Roof) within Australia. The design check is based on the information and test reports provided by Tradezone Pty Ltd.

For the indicative location of **full rib** in the roof sheeting, please see **Figure 1**.

This certificate is **only valid** for Flush Mounted System on Lysaght Klip Lok 700 High strength (Concealed Fix Roof) itself. The roof structure or the building structure and PV panels shall be assessed separately and accordingly.

This certificate is **only valid** when roof clamp fixing to the **full rib** of roof sheeting on the top of the purlins. If the fixing condition is different from those conditions, interface spacing shall be reviewed and validated.

This certificate is **only valid** as a whole. Any information extracted from this certificate is not valid if standing alone.

We find the Installation of Flush Mounted System on Lysaght Klip Lok 700 High strength (Concealed Fix Roof) for Australian use to be structurally sufficient based on the following conditions:

- Wind loads to AS/NZ1170.2:2011(R2016) Wind actions
- Wind region **A, B, C, D**
- Wind terrain category **2 & 3**
- Wind average recurrence interval of **200 years**
- Maximum building height **20m**
- The maximum assessed PV panel dimensions are **1670mm x 1000mm, 1970mm x 1000mm, 2100mm x 1050mm, 2200mm x 1200mm, 2400mm x 1200mm**
- Weight of the PV panel and array frame to be 15 kg/m²
- Rails to be **MA Rails**
- Roof clamp to be **Mibet Roof Clamp 700 Hi-strength**
- Material of Rails to be **AL6005-T5 UNO**
- Each PV panel to be installed using **2 rails** minimum in all circumstances
- Roof clamps to be fixed only to the **full rib** of roof sheeting on the top of the purlins (See **Figure 1**)

ISO 9001:2015 Registered Firm
Certificate No: AU1222

Gamcorp (Melbourne) Pty Ltd A.C.N 141 076 904 A.B.N 73 015 060 240
www.gamcorp.com.au Email: melbourne@gamcorp.com.au
35 Butler Street, Richmond VIC 3121 Tel: 03 9543 2211

- No PV panel to be installed within 2xs from edges and ridge. "s" is the maximum gap between the underside of the panel and the roof surface when installed on the roof ($50\text{mm} \leq s \leq 300\text{mm}$)
- Installation of PV panels to be done in accordance with the PV panels installation manual
- The certification **excludes** assessment of roof structure and PV panels

Refer to attached summary table for interface spacing (Unit: mm)

NOTES:

- **The recommended spacing nominated in this certification is based on the capacity of the array frame and the fixing of array frames to the roof, not the roof structure and PV panels. It is the responsibility of the installer to adopt the most critical spacing.**
- **If any of the above conditions cannot be met, the structural engineer must be notified immediately.**
- **The capacity of roof clamp was obtained from test report no. 8524-01/JD, dated 24th July 2020 and provided by Gamcorp (Melbourne) Pty Ltd.**
- **The spacing shown in the interface tables shall be adjusted based on the assessment and requirement of the roof structures.**

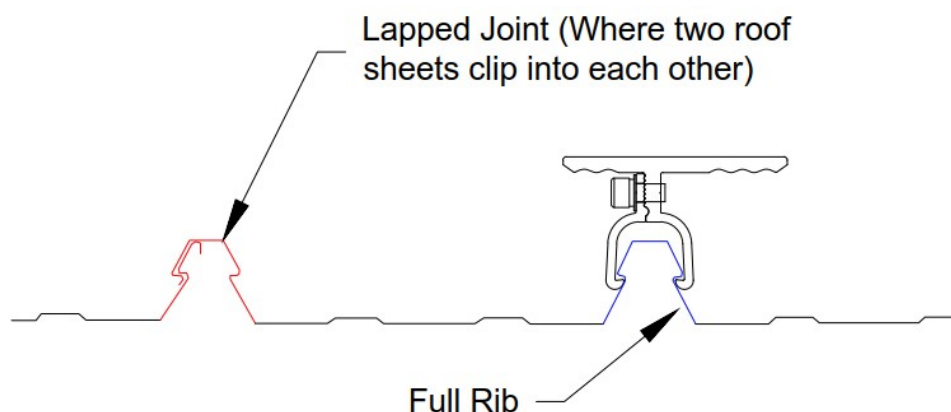


Figure 1 – Full Rib Location For Indicative



Relationships built on trust



Gamcorp (Melbourne) Pty Ltd A.C.N 141 076 904 A.B.N 73 015 060 240
www.gamcorp.com.au Email: melbourne@gamcorp.com.au
35 Butler Street, Richmond VIC 3121 Tel: 03 9543 2211

Construction is to be carried out strictly in accordance with the manufacturers instructions. This work was designed by **Jiewen Deng** in accordance with the provisions of Australian Building Regulations and in accordance with sound, widely accepted engineering principles. This certificate is only valid till 05/07/2023. Gamcorp should be contacted for future validation. Contact Gamcorp for customised system or if the site conditions are not covered by this assessment.

Yours faithfully,
Gamcorp (Melbourne) Pty Ltd

A handwritten signature in black ink, appearing to read 'L. Van Spaandonk'.

L. Van Spaandonk
Principal Engineer
FIEAust CPEng NER 5038980
NT Registration: 244137ES
QLD Registration: 18703
VIC Registration: EC 45972
TAS Registration: CC7366

Attachments:

- Summary table for interface spacing, Flush mount - Lysaght Klip Lok 700 High strength(Concealed Fix Roof)

*ISO 9001:2015 Registered Firm
Certificate No: AU1222*

Structural Design Documentation

Mibet Flush Array Frame System Spacing Table

According to AS/NZS 1170.2-2011 (R2016)
with MA Rail – Lysaght Klip-Lok 700 Hi-Strength
within Australia
Terrain Category 2 & 3

For: Tradezone Pty Ltd (Brand Name: Powerwave)
PO Box 3137, Helensvale
QLD 4212



Job Number: 9981-03-01
Date: 02/07/2021

COPYRIGHT: The concepts and information contained in this document are the property of Gamcorp (Melbourne) Pty Ltd. Use or copying of this document in whole or in part without the written permission of Gamcorp constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Gamcorp (Melbourne) Pty Ltd's Client, and is subject to and issued in connection with the provisions of the agreement between Gamcorp (Melbourne) Pty Ltd and its Client. Gamcorp (Melbourne) Pty Ltd accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.



Relationships built on trust

35 Butler Street
Richmond VIC 3121
Tel: 03 9543 2211
melbourne@gamcorp.com.au
www.gamcorp.com.au
ISO 9001:2015 Registered Firm
Certificate No: AU1222

Job No: 9981-03-01
Client: Tradezone Pty Ltd (Brand Name: Powerwave)
Project: Mibet Flush Array Frame System Spacing Table
with MA Rail – Lysaght Klip-Lok 700 Hi-Strength
Address: within Australia

Australian Standards

AS/NZS 1170.0:2002 – Structural design actions, Part 0: General principles
AS/NZS 1170.1:2002 (R2016) – Structural design actions, Part 1: Permanent, imposed and other actions
AS/NZS 1170.2:2011 (R2016) – Structural design actions, Part 2: Wind actions
AS/NZS 1664.1:1997 – Aluminium structures - Limit state design
AS 4100:2020 – Steel Structures
AS/NZS 4600:2018 – Cold-formed Steel Structures

Wind Terrain Category: WTC 2 & 3

Designed: JD
Checked: AA
Date: Jul-21

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 1.67mx1m
 Terrain category: 2

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal
A	835	1290	1620	1865	685	1050	1435	1755	615	945	1285	1700	585	895	1215	1665
B	560	855	1165	1805	460	700	950	1475	415	635	855	1325	--	595	805	1245
C	--	555	750	1155	--	455	615	940	--	410	555	850	--	--	525	800
D	--	--	480	735	--	--	--	605	--	--	--	545	--	--	--	515

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal
A	565	870	1185	1645	465	710	965	1500	415	640	865	1340	--	605	820	1265
B	--	585	785	1215	--	480	645	990	--	430	585	895	--	405	550	840
C	--	--	510	780	--	--	420	640	--	--	--	575	--	--	--	545
D	--	--	--	500	--	--	--	410	--	--	--	--	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.
 *Refer to Note 7- Figure 2 for roof zone definition.

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 1.67mx1m
 Terrain category: 3

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal
A	1015	1555	1740	1990	1015	1555	1740	1990	875	1350	1650	1895	780	1205	1580	1830
B	675	1040	1420	1915	675	1040	1420	1915	585	895	1220	1830	525	800	1085	1695
C	440	670	910	1410	440	670	910	1410	--	580	785	1210	--	515	700	1075
D	--	435	585	895	--	435	585	895	--	--	505	770	--	--	450	685

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal	Corner	Edge	Interme diate	Internal
A	685	1055	1445	1760	685	1055	1445	1760	595	910	1240	1680	530	810	1105	1605
B	460	705	955	1480	460	705	955	1480	--	610	825	1275	--	545	735	1130
C	--	460	615	950	--	460	615	950	--	--	535	815	--	--	475	725
D	--	--	--	605	--	--	--	605	--	--	--	525	--	--	--	470

*For intermediate values of h/d ratios, linear interpolation shall be used.
 *Refer to Note 7- Figure 2 for roof zone definition.



Relationships built on trust

Client: **Tradezone Pty Ltd (Brand Name: Powerwave)**
 Project: **Solar Array Interface Spacing Table**
 Address: **within Australia**
 Designed: **JD**

Job: **9981-03-01**
 Date: **Jul-21**

Checked: **AA**

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 1.97mx1m
 Terrain category: 2

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	705	1095	1505	1790	580	890	1215	1680	520	800	1090	1610	495	755	1030	1575
B	475	725	990	1545	390	595	805	1250	350	535	725	1125	--	505	685	1055
C	--	470	635	980	--	385	520	800	--	350	470	720	--	--	445	680
D	--	--	410	625	--	--	--	510	--	--	--	460	--	--	--	435

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	480	735	1005	1555	300	605	815	1270	--	545	735	1135	--	515	695	1075
B	--	495	665	1030	--	405	545	840	--	365	495	755	--	345	465	710
C	--	--	430	660	--	--	355	540	--	--	--	490	--	--	--	460
D	--	--	--	425	--	--	--	350	--	--	--	--	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.

*Refer to Note 7- Figure 2 for roof zone definition.

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 1.97mx1m
 Terrain category: 3

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	860	1335	1655	1910	860	1335	1655	1910	740	1145	1565	1820	660	1020	1400	1755
B	575	880	1205	1840	575	880	1205	1840	495	760	1035	1620	445	675	920	1435
C	375	570	770	1195	375	570	770	1195	--	490	665	1025	--	440	590	910
D	--	365	495	755	--	365	495	755	--	--	425	655	--	--	380	580

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	580	895	1225	1680	580	895	1225	1680	500	770	1050	1590	450	685	935	1460
B	390	595	810	1255	390	595	810	1255	--	515	700	1080	--	460	620	960
C	--	390	525	805	--	390	525	805	--	--	450	690	--	--	405	615
D	--	--	--	515	--	--	--	515	--	--	--	445	--	--	--	395

*For intermediate values of h/d ratios, linear interpolation shall be used.

*Refer to Note 7- Figure 2 for roof zone definition.

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail MA Rail
 Type of Interface Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension 2.1mx1.05m
 Terrain category 2

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	660	1025	1410	1765	545	835	1140	1645	490	750	1025	1375	355	710	965	1515
B	445	680	925	1450	365	560	755	1175	205	505	680	1055	--	475	640	990
C	--	440	595	920	--	360	490	750	--	--	440	675	--	--	415	635
D	--	--	385	585	--	--	--	480	--	--	--	435	--	--	--	410

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	345	690	940	1475	--	565	765	1190	--	510	690	1065	--	475	650	1005
B	--	465	625	965	--	380	515	785	--	240	465	710	--	--	435	665
C	--	--	405	620	--	--	--	505	--	--	--	460	--	--	--	435
D	--	--	--	400	--	--	--	--	--	--	--	--	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.
 *Refer to Note 7- Figure 2 for roof zone definition.

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail MA Rail
 Type of Interface Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension 2.1mx1.05m
 Terrain category 3

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	805	1255	1620	1880	805	1255	1620	1880	695	1075	1475	1790	620	955	1310	1725
B	540	825	1130	1785	540	825	1130	1785	465	715	970	1520	415	635	865	1345
C	350	535	725	1120	350	535	725	1120	--	460	620	960	--	410	555	855
D	--	340	465	710	--	340	465	710	--	--	400	615	--	--	355	545

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	545	840	1145	1645	545	840	1145	1645	370	720	985	1545	235	645	875	1365
B	365	560	760	1180	365	560	760	1180	--	485	655	1010	--	430	585	900
C	--	365	490	755	--	365	490	755	--	--	425	650	--	--	380	575
D	--	--	--	480	--	--	--	480	--	--	--	415	--	--	--	370

*For intermediate values of h/d ratios, linear interpolation shall be used.
 *Refer to Note 7- Figure 2 for roof zone definition.

Client: **Tradezone Pty Ltd (Brand Name: Powerwave)**
 Project: **Solar Array Interface Spacing Table**
 Address: **within Australia**
 Designed: **JD**

Job: **9981-03-01**
 Date: **Jul-21**

Checked: **AA**

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 2.2mx1.2m
 Terrain category: **2**

h/d ≤ 0.5* - Refer to notes for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	--	845	1345	1745	--	640	1090	1615	--	595	845	1535	--	500	725	1445
B	--	650	885	1385	--	530	720	1120	--	305	650	1005	--	235	610	945
C	--	--	570	875	--	--	320	715	--	--	--	645	--	--	--	605
D	--	--	--	560	--	--	--	460	--	--	--	350	--	--	--	275

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	--	425	710	1405	--	--	595	1135	--	--	425	1015	--	--	--	785
B	--	--	595	920	--	--	355	750	--	--	--	675	--	--	--	635
C	--	--	--	590	--	--	--	370	--	--	--	235	--	--	--	--
D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.

*Refer to Note 7- Figure 2 for roof zone definition.

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 2.2mx1.2m
 Terrain category: **3**

h/d ≤ 0.5* - Refer to notes for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	620	1195	1595	1855	620	1195	1595	1855	460	1025	1410	1770	--	725	1250	1705
B	395	790	1080	1705	395	790	1080	1705	--	680	925	1455	--	605	825	1285
C	--	510	690	1070	--	510	690	1070	--	--	595	915	--	--	525	815
D	--	--	440	680	--	--	440	680	--	--	260	585	--	--	--	520

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	--	640	1095	1620	--	640	1095	1620	--	505	755	1475	--	--	665	1305
B	--	535	725	1125	--	535	725	1125	--	260	625	965	--	--	555	860
C	--	--	345	720	--	--	345	720	--	--	--	620	--	--	--	550
D	--	--	--	460	--	--	--	460	--	--	--	275	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.

*Refer to Note 7- Figure 2 for roof zone definition.

Client: **Tradezone Pty Ltd (Brand Name: Powerwave)**
 Project: **Solar Array Interface Spacing Table**
 Address: **within Australia**
 Designed: **JD**

Job: **9981-03-01**
 Date: **Jul-21**

Checked: **AA**

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 2.4mx1.2m
 Terrain category: 2

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	--	710	1235	1700	--	600	995	1570	--	425	715	1405	--	--	675	1325
B	--	595	810	1270	--	355	660	1025	--	--	595	925	--	--	560	865
C	--	--	520	805	--	--	--	655	--	--	--	590	--	--	--	555
D	--	--	--	510	--	--	--	415	--	--	--	--	--	--	--	--

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	--	--	655	1290	--	--	485	1040	--	--	--	745	--	--	--	700
B	--	--	545	845	--	--	235	690	--	--	--	620	--	--	--	585
C	--	--	--	540	--	--	--	260	--	--	--	--	--	--	--	--
D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.

*Refer to Note 7- Figure 2 for roof zone definition.

**Flush Array Frame System Spacing Table for
 LYSAGHT Klip-Lok 700 High Strength roof sheeting – mm**

Type of Roof: LYSAGHT Klip-Lok 700 High Strength roof sheeting
 Type of Rail: MA Rail
 Type of Interface: Mibet Roof Clamp 700 High Strength
 Solar Panel Dimension: 2.4mx1.2m
 Terrain category: 3

h/d ≤ 0.5* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	555	1095	1520	1815	555	1095	1520	1815	--	760	1295	1730	--	665	1145	1655
B	285	725	990	1560	285	725	990	1560	--	625	850	1330	--	555	755	1180
C	--	345	635	980	--	345	635	980	--	--	545	840	--	--	370	745
D	--	--	290	620	--	--	290	620	--	--	--	535	--	--	--	475

h/d ≥ 1* - Refer to Note 5 for definition of h and d.

Wind Region	Building Height – H (m)															
	H ≤ 5				5 < H ≤ 10				10 < H ≤ 15				15 < H ≤ 20			
	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal	Corner	Edge	Intermedate	Internal
A	--	605	1005	1575	--	605	1005	1575	--	--	690	1350	--	--	620	1195
B	--	355	665	1030	--	355	665	1030	--	--	575	885	--	--	395	785
C	--	--	--	660	--	--	--	660	--	--	--	565	--	--	--	495
D	--	--	--	415	--	--	--	415	--	--	--	--	--	--	--	--

*For intermediate values of h/d ratios, linear interpolation shall be used.

*Refer to Note 7- Figure 2 for roof zone definition.

General Notes

Note 1 Following components are satisfied to use according to AS/NZS 1170.2-2011(R2016)

Components	Part number	Comments
Inter Clamp Kit (MA)	Inter Clamp Kit (MA)	as per drawing provided by client
End Clamp Kit (MA)	End Clamp Kit (MA)	as per drawing provided by client
Roof Clamp	Roof Clamp 700 Hi-strength	as per drawing provided by client
MA Rail	MA Rail	as per drawing provided by client

Note 2 Maximum uplift wind pressure is limited to 5 kPa. -- states more uplift pressure.

Note 3 Deflection is limited to Minimum of L/120 and 15mm

Note 4 Terrain Category 2 (TC2) refers to open terrain, including grassland, with well-scattered obstructions having heights generally from 1.5 m to 5 m, with no more than two obstructions per hectare, e.g. farmland and cleared subdivisions with isolated trees and uncut grass.
 Terrain Category 3 (TC3) refers to terrain with numerous closely spaced obstructions having heights generally from 3 m to 10 m. The minimum density of obstructions shall be at least the equivalent of 10 house-size obstructions per hectare, e.g. suburban housing, light industrial estates or dense forests.

Note 5 Refer to Figure 1 for definition of h and d.

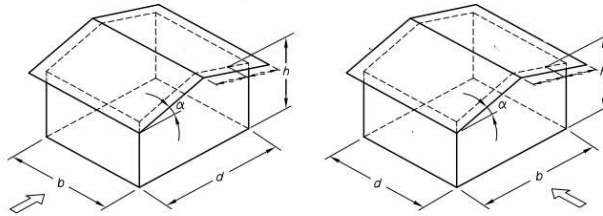
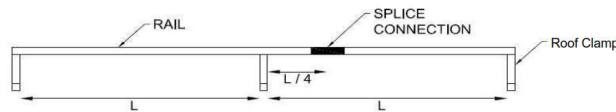


Figure 1 - h and d definition

Note 6 The optimised location of rail splice connection is at quarter length of the spacing of the interface. No Splice connection should be placed at the centre of spacing or over the interface.



Note 7 Refer Figure 2 for definition of roof zones.

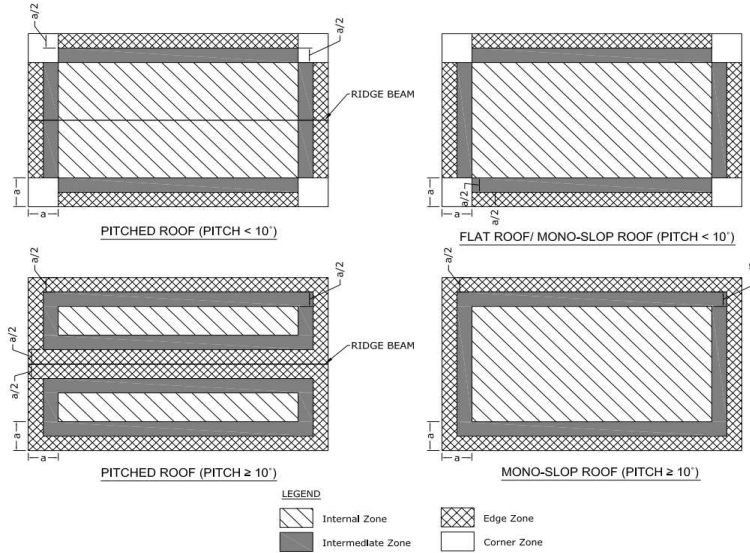


Figure 2 - Roof Zones Definition

In Figure 2, the value of dimension "a" is the minimum of 0.2b, 0.2d and h. (b & d are building dimensions and h is its height)