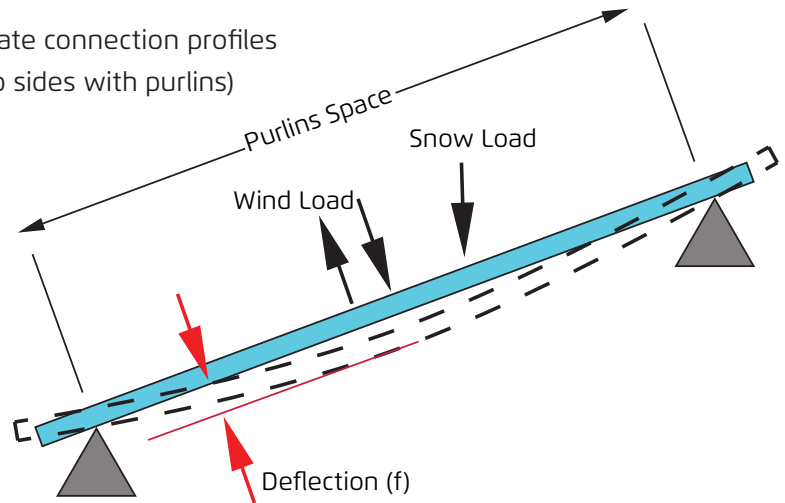


Appendixes

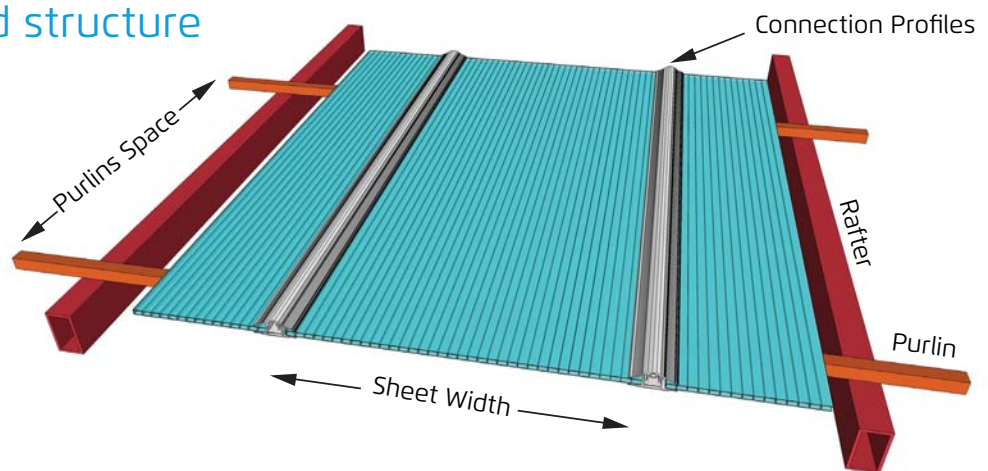
Appendix 1: Load bearing capacity – wind and snow load

In order to choose the suitable sheet to stand the wind and snow loads one should consider several factors:

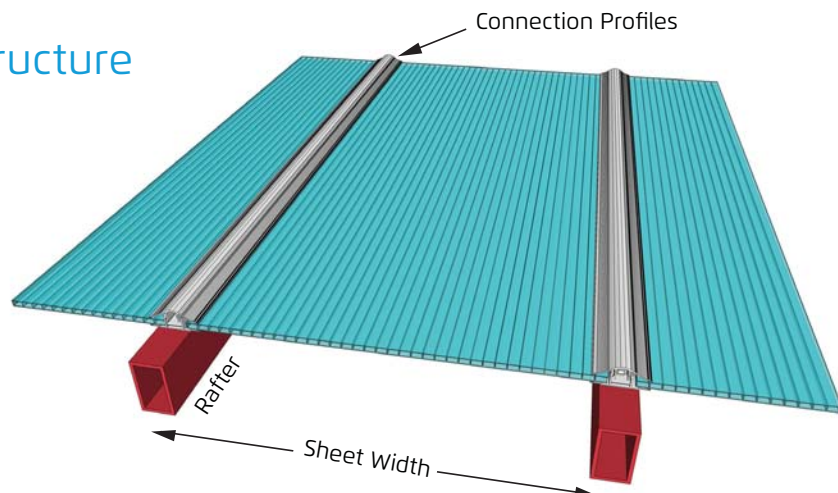
- The sheet type (e.g., structure and weight): 8mm twin wall 1500 gr/m² will deflect more than Titan sky 16mm 2500 gr/m².
- The sheet width: 600mm width will deflect less than 1200mm width under the same load.
- Distance between supports (purlins space) – obviously shorter distance between supports improves the resistance to positive loads.
- Type of connectors – aluminum or polycarbonate connection profiles
- Supports conditions (four sides, two sides, two sides with purlins)
- Flat or curve structure
- Positive or negative wind load
- Permitted deflection (f) – 50 mm in the middle point



Purlins supported structure



Rafters supported structure



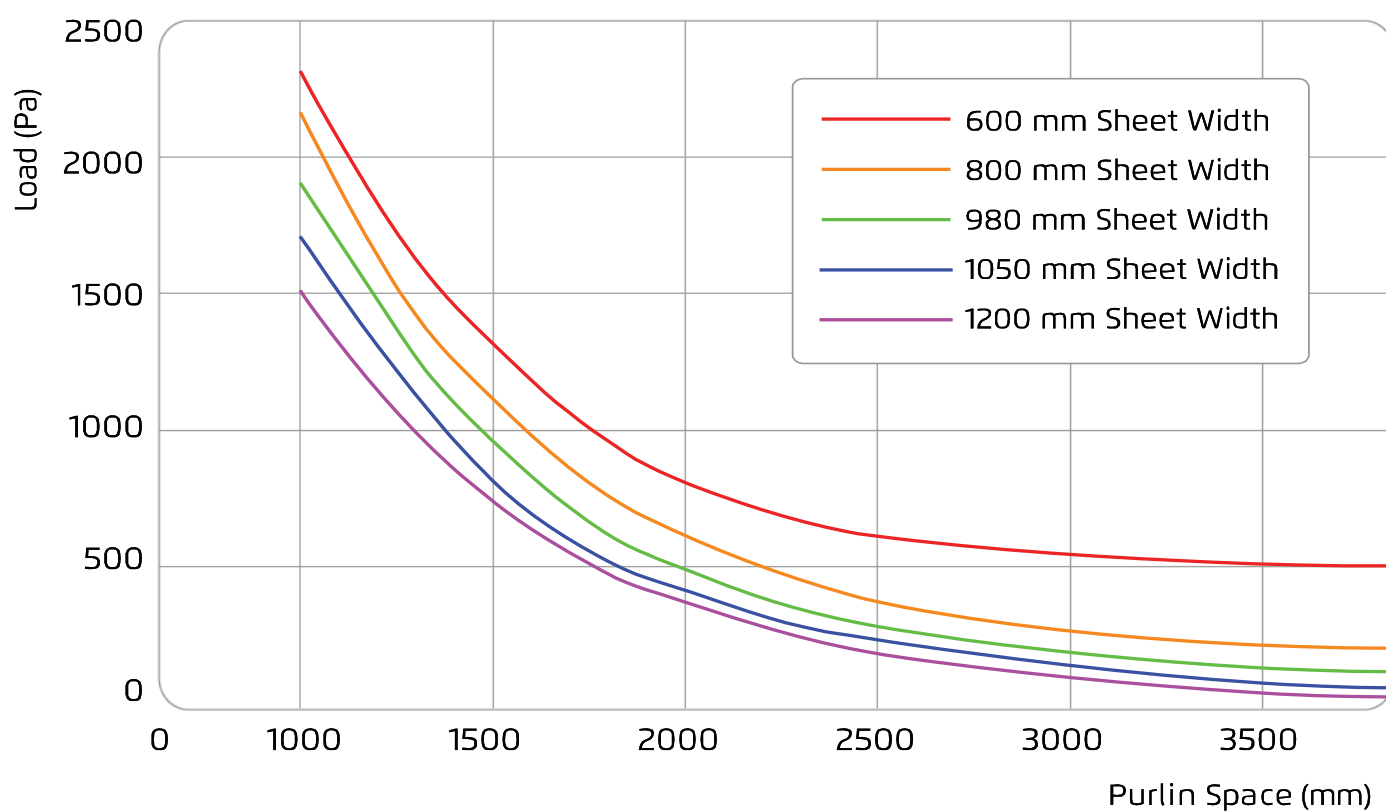
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Polygal Standard Sheet (PCSS) 6/1300 (Mb 30.6 Nm/m)

Purlin Space (mm)	Sheet Width (mm)				
	600	800	980	1050	1200
1000	2300	2150	1900	1700	1500
1250	1700	1500	1350	1200	1050
1500	1300	1100	950	800	730
1750	1000	800	650	550	500
2000	800	600	480	400	360
2400	630	400	300	250	200

Maximum negative (wind) Load

	500	200	96	75	48
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Load vs Purlin Space PCSS 6/1300



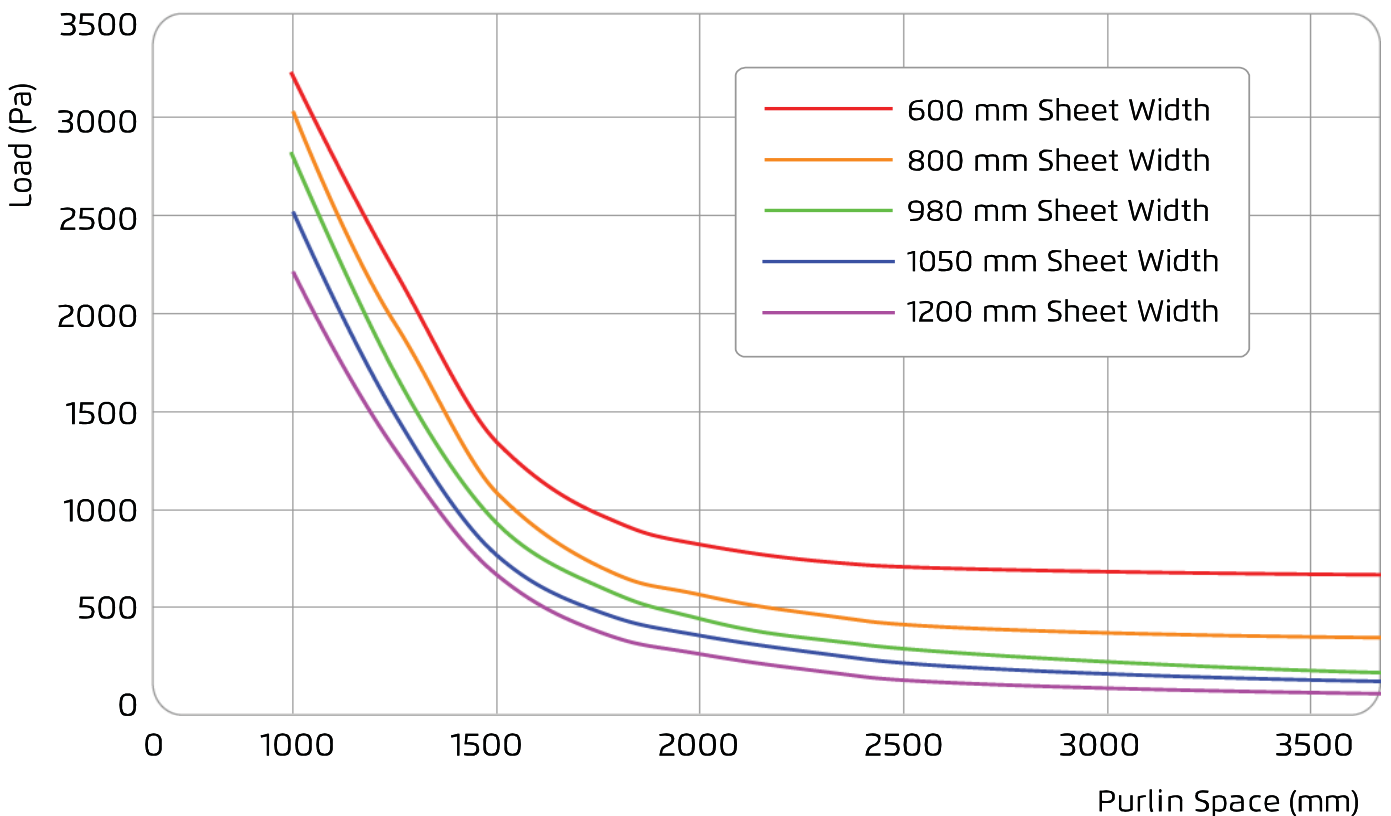
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Polygal Standard Sheet (PCSS) 8/1500 (Mb 30.96 Nm/m)

Purlin Space (mm)	Sheet Width (mm)				
	600	800	980	1050	1200
1000	3200	3000	2800	2500	2200
1250	2200	1950	1700	1500	1330
1500	1350	1100	950	800	700
1750	1000	750	650	520	420
2000	850	600	480	400	300
2400	750	470	350	280	200

Maximum negative (wind) Load

	700	385	200	160	100
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Load vs Purlin Space PCSS 8/1500



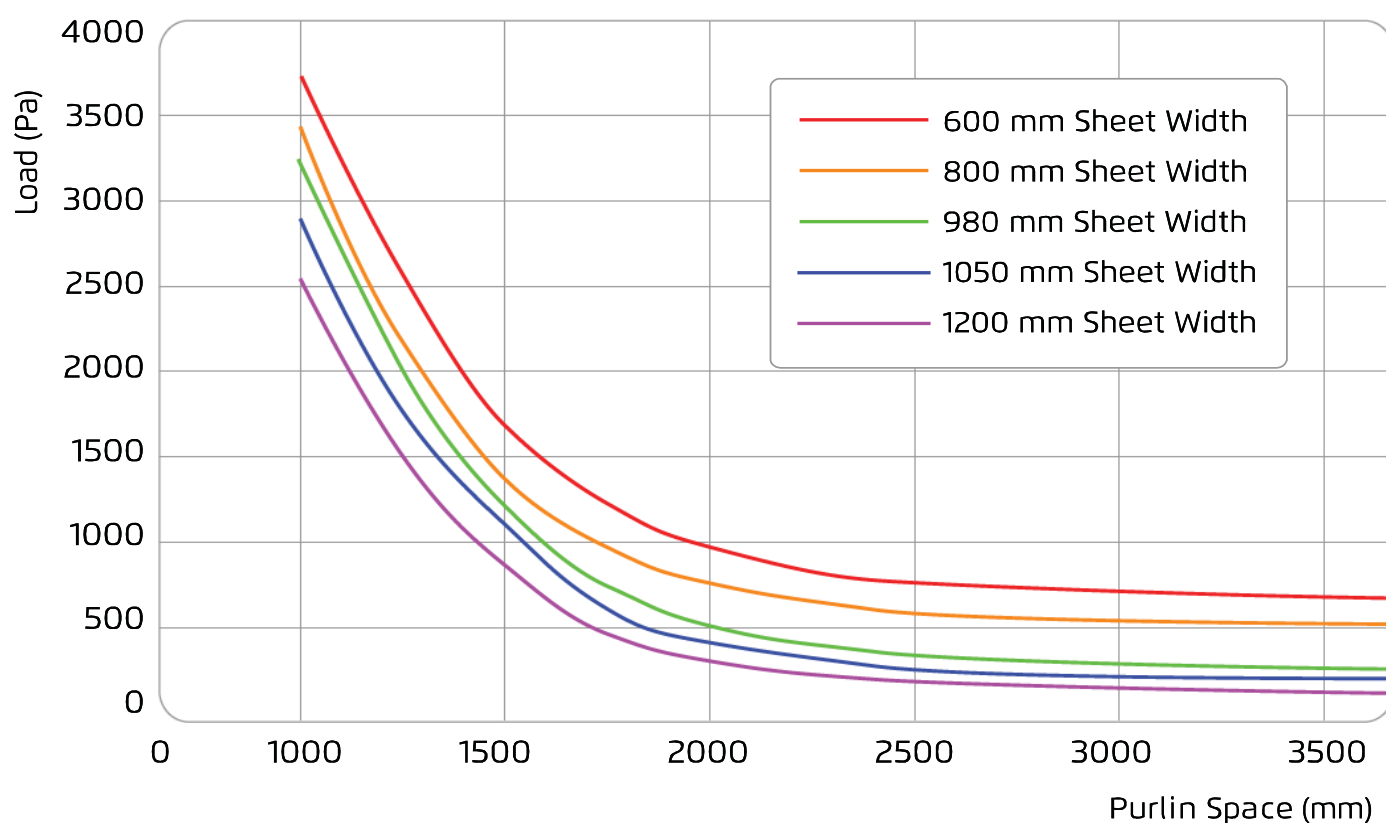
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Polygal Standard Sheet (PCSS) 10/1700 (Mb 42.3 Nm/m)

Purlin Space (mm)	Sheet Width (mm)				
	600	800	980	1050	1200
1000	3700	3400	3200	2900	2600
1250	2600	2200	2050	1800	1550
1500	1700	1400	1250	1150	900
1750	1250	1000	780	650	500
2000	1000	800	550	450	350
2400	800	650	400	320	250

Maximum negative (wind) Load

	700	550	300	240	160
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Load vs Purlin Space PCSS 10/1700



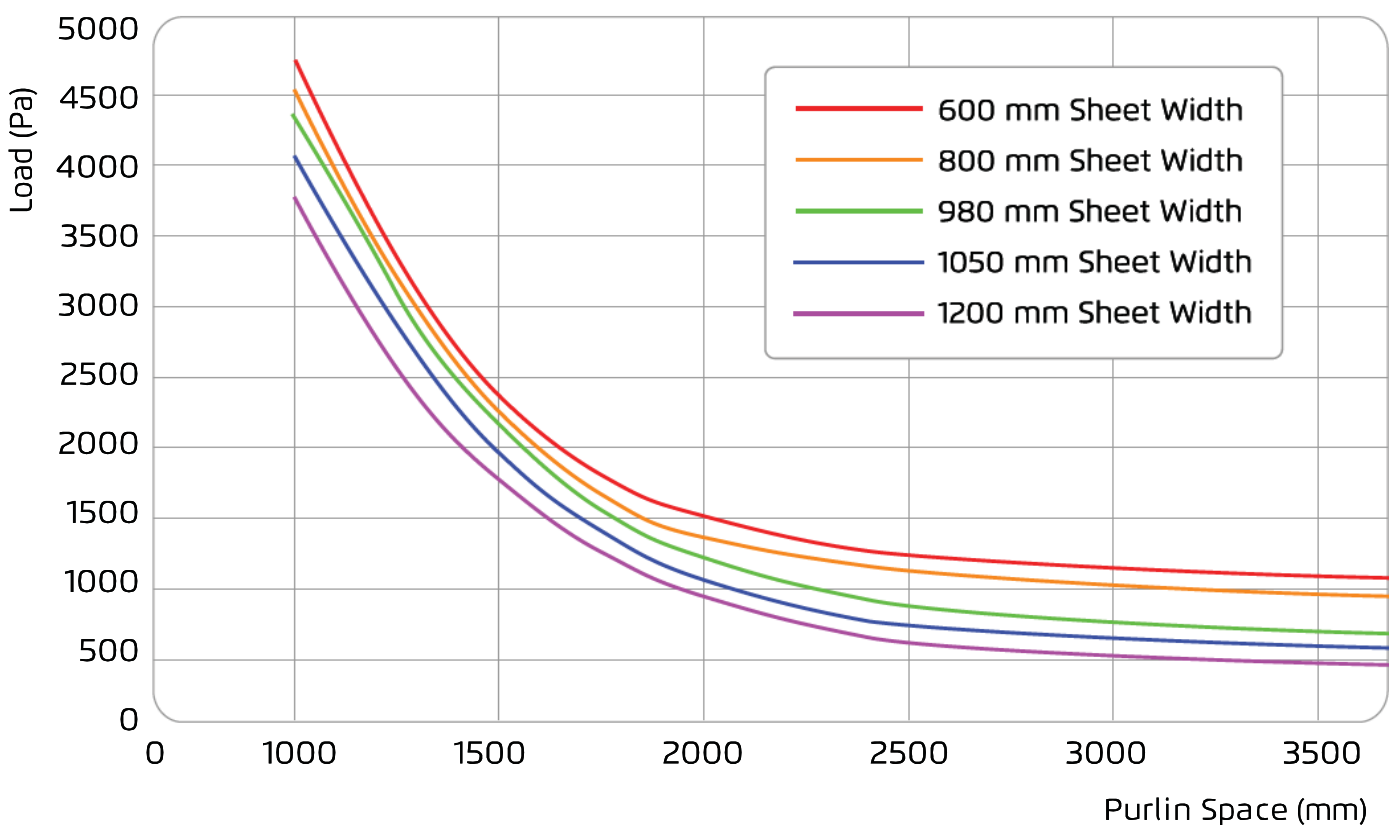
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Polygal Standard Sheet PCSS 16/2700 (Mb 69.75 Nm/m)

Purlin Space (mm)	Sheet Width (mm)				
	600	800	980	1050	1200
1000	4700	4500	4300	4000	3700
1250	3300	3100	3100	2800	2500
1500	2300	2200	2100	1900	1700
1750	1750	1600	1500	1350	1200
2000	1450	1300	1150	1000	900
2400	1200	1080	850	700	600

Maximum negative (wind) Load

	1000	870	600	500	390
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Load vs Purlin Space PCSS 16/2700



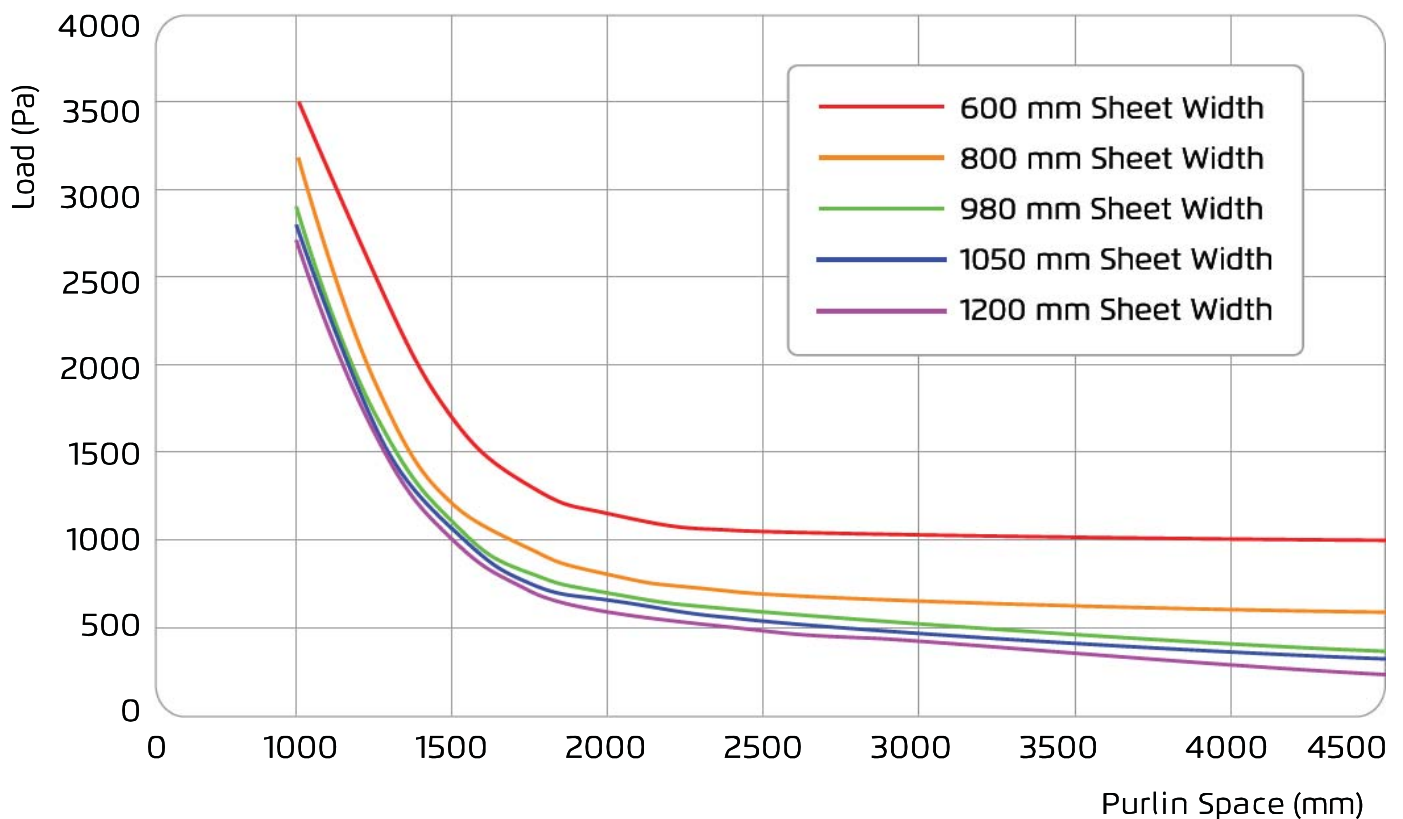
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
Titan Sky (TSK) 16/2500 (Mb 48.37 Nm/m)

Purlin Space (mm)	Sheet Width (mm)				
	600	800	980	1050	1200
1000	3500	3200	2900	2800	2700
1250	2500	1900	1700	1650	1600
1500	1700	1200	1100	1050	1000
1750	1300	950	800	750	700
2000	1150	800	700	650	600
2400	1050	700	600	550	500

Maximum negative (wind) Load

	1000	600	400	350	270
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Load vs Purlin Space Titan Sky (TSK) 16/2500



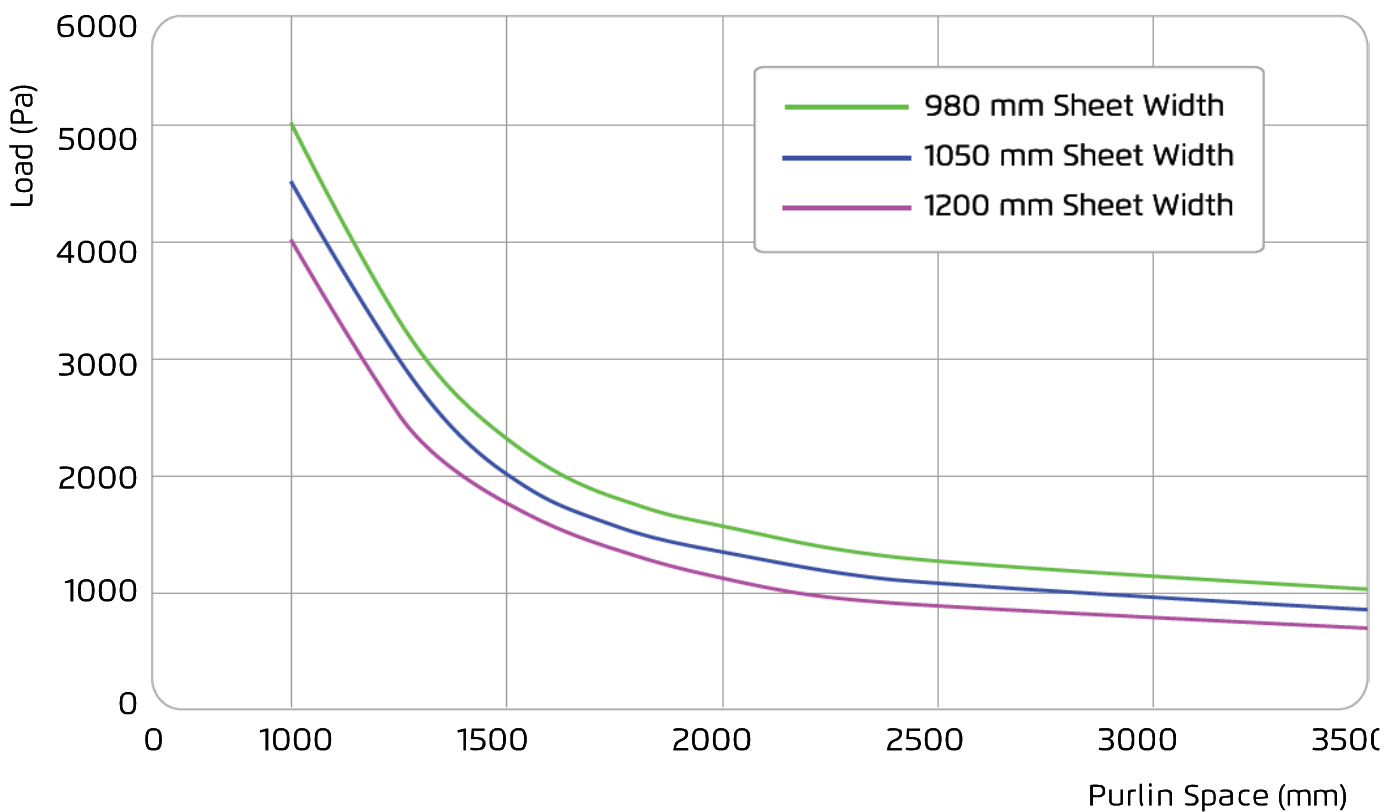
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Selectogal (RFX) 16/3000

Purlin Space (mm)	Sheet Width (mm)		
	980	1050	1200
1000	5000	4500	4000
1250	3300	2950	2500
1500	2300	2000	1760
1750	1800	1560	1350
2000	1550	1350	1120
2400	1300	1100	900

Maximum negative (wind) Load

	900	750	600
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Load vs Purlin Space Selectogal (RFX) STW 16/3000



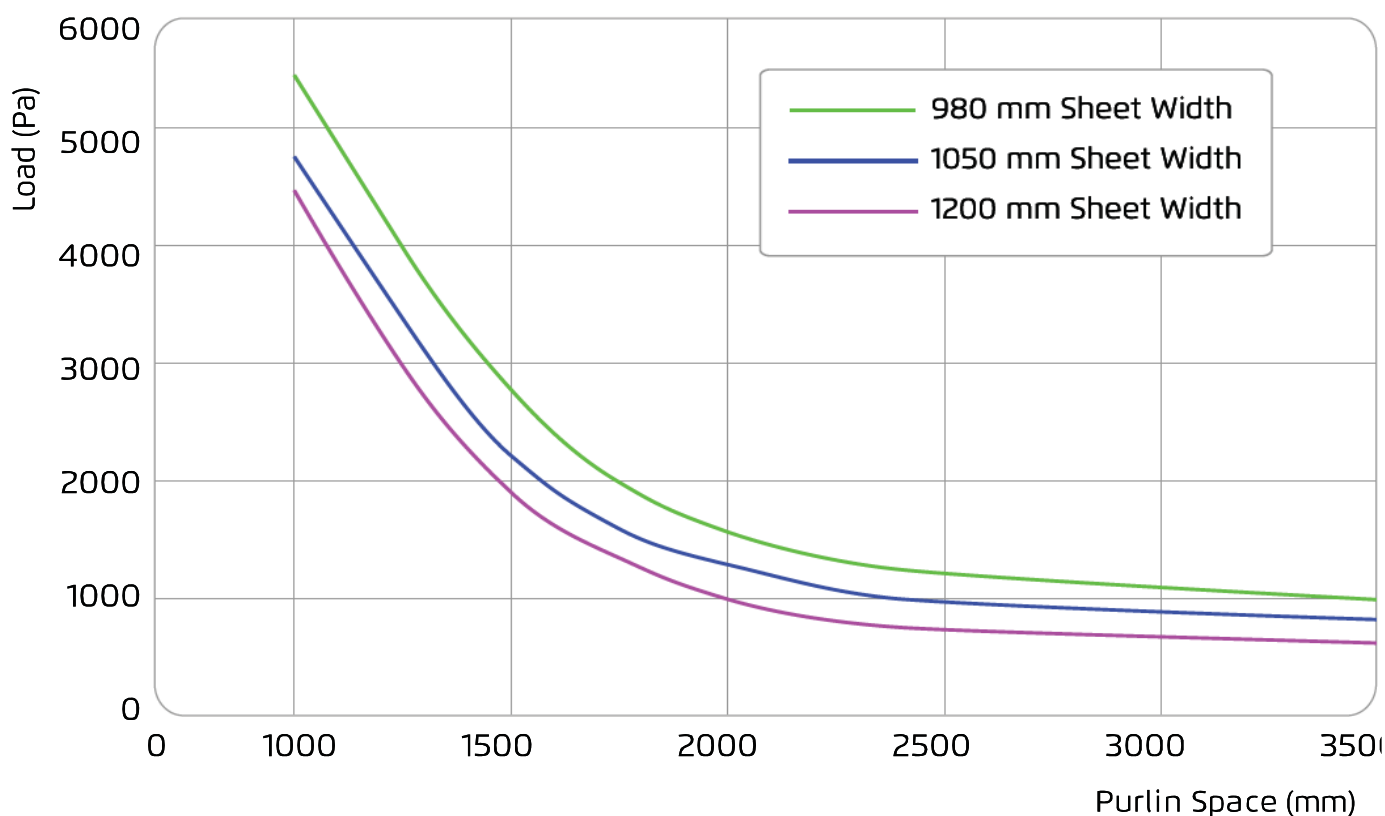
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Thermogal (TRM) 25/3500 (Mb 105.51 Nm/m)

Purlin Space (mm)	Sheet Width (mm)		
	980	1050	1200
1000	5500	4800	4500
1250	4000	3400	3000
1500	2800	2200	1900
1750	2000	1600	1350
2000	1600	1300	1000
2400	1250	1000	750

Maximum negative (wind) Load

	880	770	550
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Load vs Purlin Space Thermogal (TRM) 25/3500



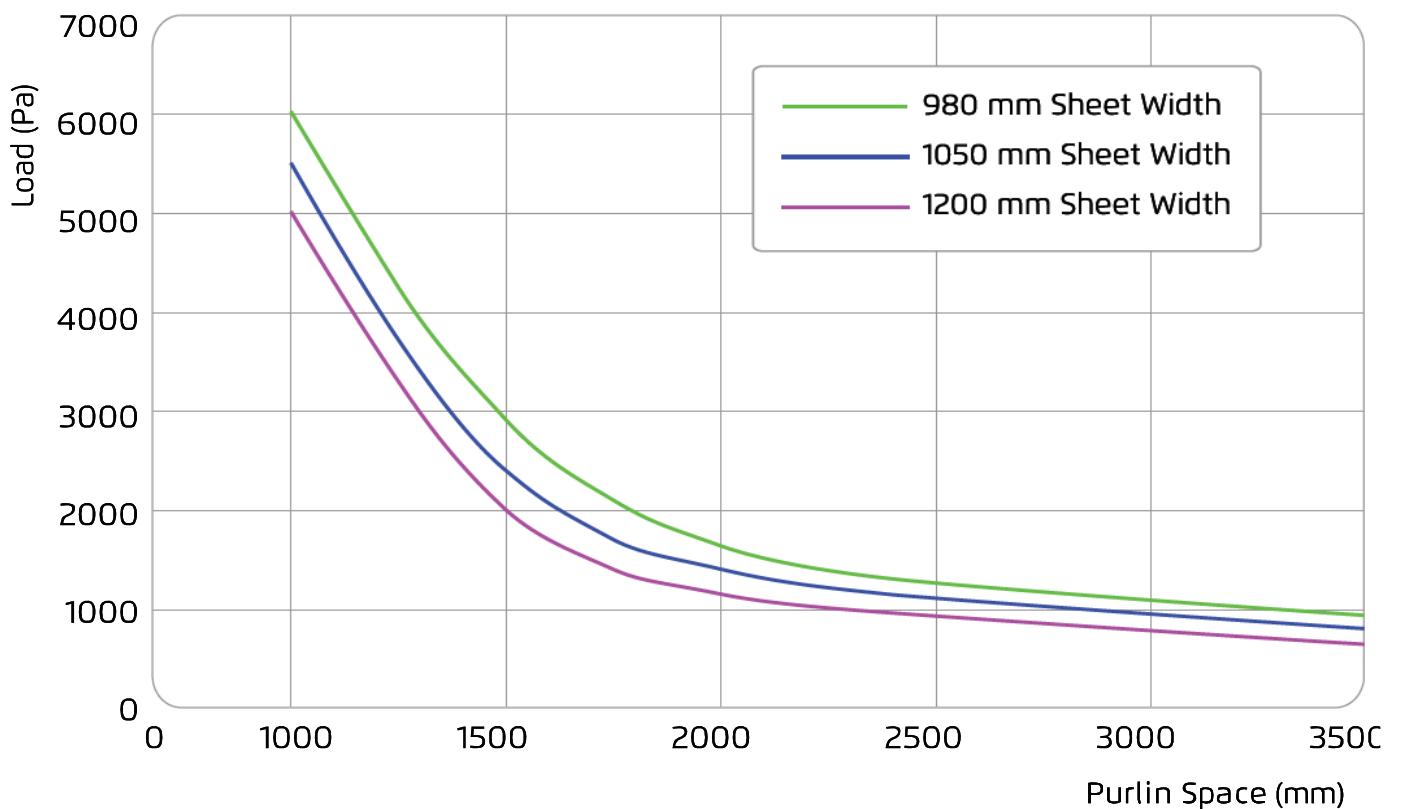
Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Thermogal (TRM) 32/3800 (Mb 93.44 Nm/m)

Purlin Space (mm)	Sheet Width (mm)		
	980	1050	1200
1000	6000	5500	5000
1250	4250	3700	3300
1500	2900	2400	2000
1750	2100	1700	1400
2000	1650	1400	1150
2400	1300	1140	950

Maximum negative (wind) Load

	780	680	520
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Load vs Purlin Space Thermogal (TRM) 32/3800



Positive Load (Pa) vs Purlin Space for various widths (f max=50 mm)
 Thermogal Super (TRMS) 32/3800 (Mb 78.98 Nm/m)

Purlin Space (mm)	Sheet Width (mm)				
	600	800	980	1050	1200
1000	4750	4500	4250	4200	4200
1250	3250	2700	2500	2450	2200
1500	2250	1700	1550	1475	1400
1750	1950	1350	1200	1100	1000
2000	1850	1200	1000	875	750
2400	1800	1125	870	750	600

Maximum negative (wind) Load

	1750	990	660	570	440
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Load vs Purlin Space Thermogal Super (TRMS) 32/3800

