



PRIMEALUX

DURABLE AFFORDABLE GREEN

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SLAT LOAD TEST

NOVEMBER 9, 2024

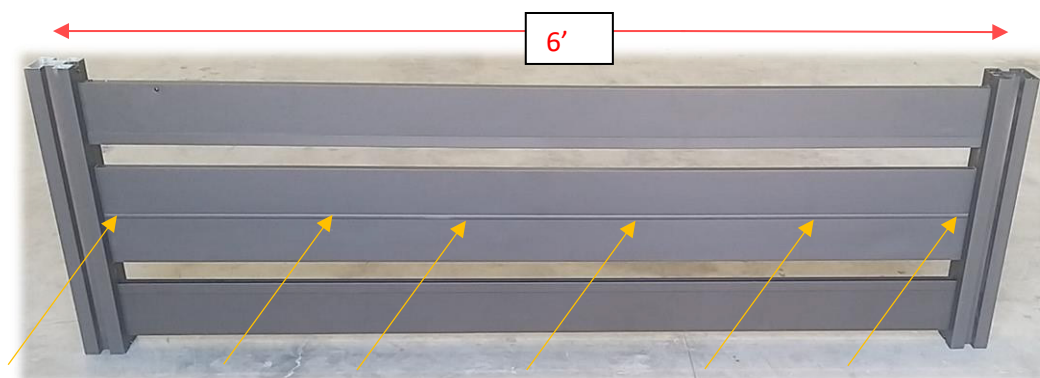
INOVATIVE ALUMINUM SYSTEMS

Horizontal and Vertical Load Test:

The test aim to find maximum load for two slats **[horizontally & vertically]**, Slat size 4"x0.8" [100x20 mm], and supported with reinforcement rail (H+), along (6', 5', and 4'), then apply the test **[Only Horizontally load]** for the other slats sizes 3.2"x0.8" [80x20 mm], and 1.6"x0.8" [40x20 mm] along Panel (6', 5', and 4').

1. Horizontally Load:

The test will discuss the case for load effect **Horizontally** on 2 slats with Reinforcement rail (H +) Profile between them, the load applied on the two slats in normal distribution.



Horizontal Load Effect on Slats with Reinforcement Rail (H+) Profile.

Test Results:

HORIZONTAL LOAD TEST – SLAT 4"x0.8" [100x20 mm]		
#	Panel Width (ft)	Maximum distributed load on two Horizontal Slats along the Panel (lbs)
1	6'	220
2	5'	319
3	4'	363

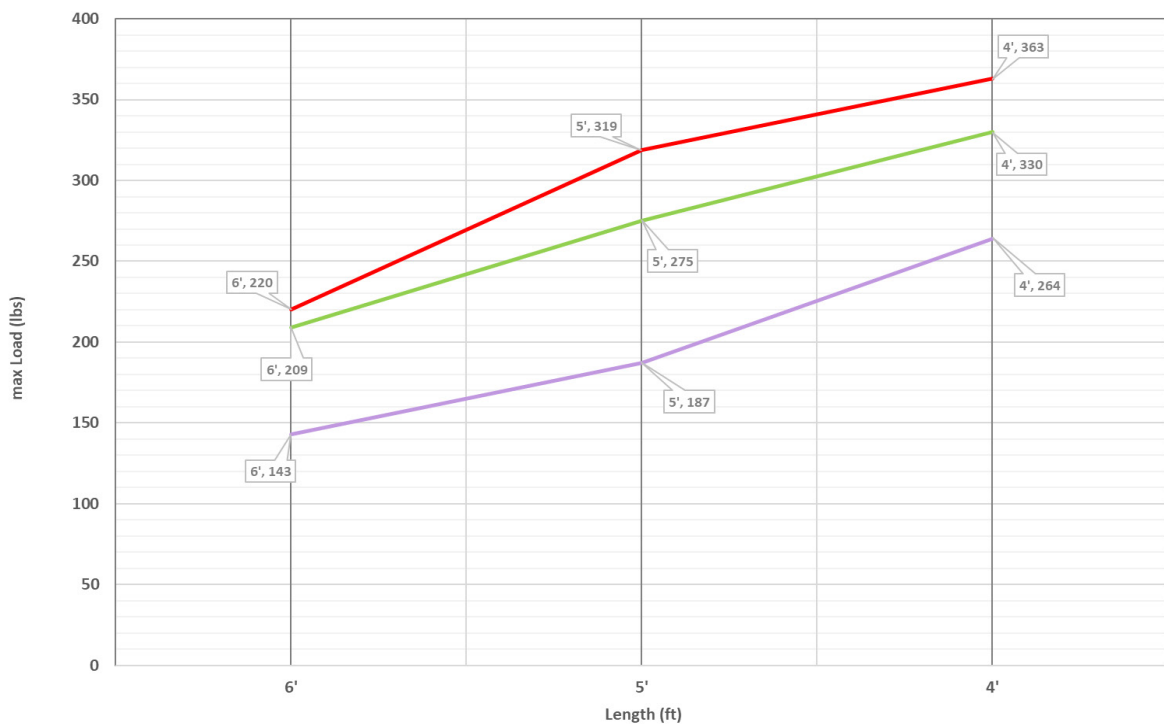
HORIZONTAL LOAD TEST – SLAT 3.2"x0.8" [80x20 mm]

#	Panel Width (ft)	Maximum distributed load on two Horizontal Slats along the Panel (lbs)
1	6'	209
2	5'	275
3	4'	330

HORIZONTAL LOAD TEST – SLAT 1.6"x0.8" [40x20 mm]

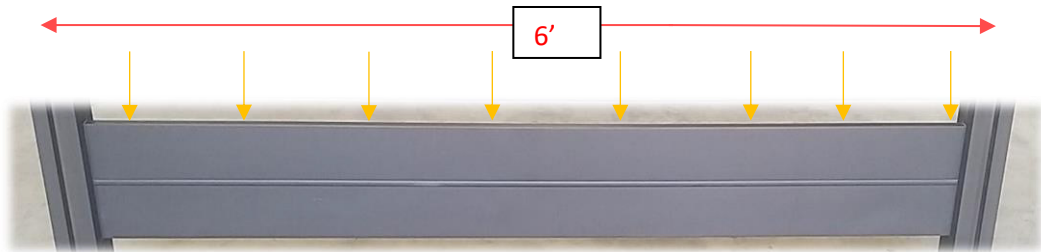
#	Panel Width (ft)	Maximum distributed load on two Horizontal Slats along the Panel (lbs)
4	6'	143
5	5'	187
6	4'	264

HORIZONTAL LOAD TEST – VARIABLE SLATS' (LENGTH & SIZE)



2. Vertically Load:

The test will discuss the case for load effect **Vertically** on 2 slats with Reinforcement rail (H+) Profile between them.



Vertical Load Effect on Slats with Reinforcement rail (H+) profile.

Test Results:

VERTICAL LOAD TEST – SLAT 4"x0.8" [100x20 mm]		
#	Panel Width (ft)	Maximum load distributed on two Vertical Slats along the Panel (lbs)
1	6'	370
2	5'	504
3	4'	745

