

ASTM Structural Testing Summary



Test Panels Design:

- 2 – 10 ft wide x 20 ft tall panels, fabricated from 2"x 6" x 16 gauge HTT Studs and Track
- Erected in Steel Test Chamber, studs welded to steel base angle and to top & bottom flanges of 8" spandrel beam. Bottom of Spandrel Beam is 18'-4" above bottom of panel.

Equivalent Miles per Hour	Pounds per Square Foot	STRUCTURAL UNIFORM PROOF LOADING by STATIC PRESSURE ASTM E330-02						
		TEST PANEL #1 ** Vertical Tab Stud S-T1V			TEST PANEL #2 ** 90 Degree Vertical and Horizontal Stud S-2VH90 w/			Allowable Deflection in Inches
DESIGN LOADS **		Net Inches Deflection			Net Inches Deflection			
EMPH	PPSF	Ind 1	Ind 2	Ind 3	Ind 1	Ind 2	Ind 3	
108.0	30.0	0.19	0.22	0.24	0.02	0.17	0.23	1.16
(108.0)	(30.0)	(0.18)	(0.21)	(0.22)	(0.04)	(0.04)	(0.21)	(1.16)
132.0	45.0	0.25	0.32	0.33	0.34	0.30	0.34	1.16
(132.0)	(45.0)	(0.24)	(0.30)	(0.30)	(0.36)	(0.34)	(0.32)	(1.16)
153.0	60.0	0.35	0.41	0.45	0.50	0.39	0.48	1.16
(153.0)	(60.0)	(0.30)	(0.38)	(0.40)	(0.54)	(0.52)	(0.42)	(1.16)
187.0	90.0	0.41	0.52	0.76	0.73	0.56	0.82	1.16
(187.0)	(90.0)	(0.66)	(0.81)	(0.68)	(0.48)	(0.78)	(0.74)	(1.16)

** Design Loads & Results Colors are direction of force on panels: Black = positive, Red = Negative

Ultimate Loading Procedures:

- 150% Design Load of **135.0 PPSF or 230 MPH** was applied to each set of Test Panels with no visible damage
- This 135.0 PSF Load was held for a duration of 10 seconds, then PSF Loads were increased until ultimate failure
- Ultimate Panel Failures
 - Test Panel #1 – **175.0 PPSF or 261 MPH**
 - Test Panel #2 – **165.0 PPSF or 254 MPH**

Test Results are Available upon Request at www.hi-techtilt.com.