

Appendix B

Sterling Roof System™ 24 gauge Drag Load Resistance (lbs) ^{1, 2, 3}

Sterling Roof System™ 24 gauge Drag Load Resistance

Fastener Type	Substrate	Capacity
#12 - 14 x 1" S.D.	16ga steel	234
1/4 - 14 x 7/8" S.D.	22ga steel	184
#14 x 1" Type A Milled Point	1/2" plywood	128
#14 x 1" Type A Milled Point	Hem-Fir Dimensional Lumber	50

Drag Load Resistance (lbs.)

Fastener Type	Number of Fasteners per Panel								
	2	3	4	5	6	7	8	9	10
#12 - 14 x 1" S.D.	468	702	936	1170	1404	1638	1872	2106	2340
1/4 - 14 x 7/8" S.D.	368	552	736	920	1104	1288	1472	1656	1840
#14 x 1" Type A Milled Point into 1/2" plywood	256	384	512	640	768	896	1024	1152	1280
#14 x 1" Type A Milled Point into Hem-Fir Dimensional	100	150	200	250	300	350	400	450	500

Notes:

- 1) #12-14 x 1" S.D. values are based on a 16 gauge minimum substrate.
- 2) 1/4 - 14 x 7/8" S.D. values are based on a 22 gauge minimum substrate.
- 3) #14 x 1" Type A Milled Point values are based on a minimum 1/2" C-D plywood or 1" nominal Hem-Fir.
- 4) Fasteners must be located a minimum of 1" from each other and from the end of the panel.

Example:

Sterling Roof System™ attaching to 1/2" plywood

4:12 slope

30 psf snow load

40 foot maximum sheet length

- a. From Appendix A, find the Drag Load per Lineal Foot of panels (4:12, 30 psf snow load = 13.44 plf.)
- b. Multiply the load by the length of the panel to obtain the total drag load on the sheet. (13.44 x 40 = 537.6 lbs. drag force per panel.)
- c. Find the drag load in Appendix B. The nearest value is 640 lbs. The number of fasteners required per panel is five (5).

Contact your ASC Building Products representative if you have any questions about the use of appendices A or B.