

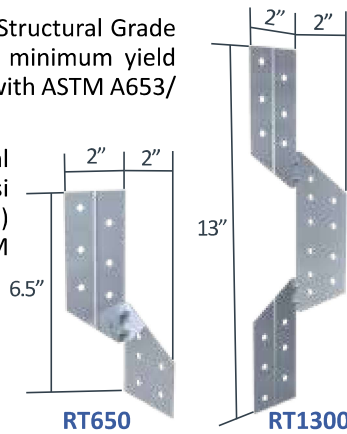
StiffClip® RT

Roof Tie

Material Composition

33 mil & 43 mil thicknesses: ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, with ASTM A653/A653M G60 (Z180) hot dipped galvanized coating.

54 mil thickness: ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, with ASTM A653/A653M G90 (Z275) hot dipped galvanized coating.



StiffClip RT Allowable Loads

StiffClip® RT, Recommended Allowable Load (lbs): F1 Load Direction						
Screw Patterns with #12 Screws	RT650-33 & RT1300-33		RT650-43 & RT1300-43		RT650-54 & RT1300-54	
	w/2 #12 Screws	w/4 #12 Screws	w/2 #12 Screws	w/4 #12 Screws	w/2 #12 Screws	w/4 #12 Screws
33mil (20ga), 33ksi Stud	93	165	93	177	93	177
33mil (20ga), 50ksi Stud	135	165	135	184	135	256
43mil (18ga), 33ksi Stud	124	165	124	184	124	248
43mil (18ga), 50ksi Stud	165	165	179	184	179	342
54mil (16ga), 33ksi Stud	153	165	156	184	156	312
54mil (16ga), 50ksi Stud	165	165	184	184	225	342
68mil (14ga), 50ksi Stud	165	165	184	184	284	342
97mil (12ga), 50ksi Stud	165	165	184	184	342	342
Max Allowable Clip Load	165		184		342	

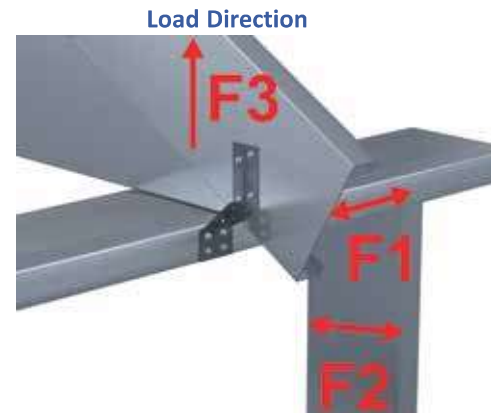
StiffClip® RT, Recommended Allowable Load (lbs): F2 Load Direction									
Screw Patterns with #12 Screws	RT650-33	RT650-33 & RT1300-33		RT650-43	RT650-43 & RT1300-43		RT650-54	RT650-54 & RT1300-54	
	5 Screws in Short Leg	2 Screws	4 Screws	5 Screws in Short Leg	2 Screws	4 Screws	5 Screws in Short Leg	2 Screws	4 Screws
33mil (20ga), 33ksi Stud	163	95	101	163	95	126	163	95	190
33mil (20ga), 50ksi Stud	236	101	101	236	126	126	236	138	276
43mil (18ga), 33ksi Stud	239	101	101	243	124	126	243	124	248
43mil (18ga), 50ksi Stud	239	101	101	329	126	126	351	179	327
54mil (16ga), 33ksi Stud	239	101	101	312	126	126	312	156	312
54mil (16ga), 50ksi Stud	239	101	101	329	126	126	450	225	327
68mil (14ga), 50ksi Stud	239	101	101	329	126	126	568	284	327
97mil (12ga), 50ksi Stud	239	101	101	329	126	126	614	327	327
Max Allowable Clip Load	239	101		329	126		614	327	

****StiffClip RT Allowable Load tables and important notes continued on next page.**

StiffClip® RT, Recommended Allowable Load (lbs): F3						
Screw Patterns with #12 Screws	RT650-33 & RT1300-33		RT650-43 & RT1300-43		RT650-54 & RT1300-54	
	2 Screws	4 Screws	2 Screws	4 Screws	2 Screws	4 Screws
33mil (20ga), 33ksi Stud	198	358	198	383	198	383
33mil (20ga), 50ksi Stud	286	358	286	386	286	554
43mil (18ga), 33ksi Stud	320	358	295	386	295	570
43mil (18ga), 50ksi Stud	358	358	386	386	426	809
54mil (16ga), 33ksi Stud	358	358	386	386	415	802
54mil (16ga), 50ksi Stud	358	358	386	386	599	809
68mil (14ga), 50ksi Stud	358	358	386	386	753	809
97mil (12ga), 50ksi Stud	358	358	386	386	753	809
Maximum Allowable Clip Load	358		386		809	

Notes:

- Design loads are for attachment of StiffClip RT to light gauge framing members only. Load tables reflect in plane of wall loads (F1), horizontal loads (F2) and vertical uplift loads (F3).
- Number of screws designated represent the amount of #12 screws required in each leg of clips.
- Loads listed reflect force in a single direction. When multiple loads react on the connection, it is the responsibility of the designer to check the interaction of forces.
- Torsional effects are considered on screw groups for F1, F2, and F3 allowable loads. It is assumed that half of the torsional moment is taken by the connection to the structure and half is taken by the connection to the stud.
- Allowable loads have not been increased for wind, seismic, or other factors.
- StiffClip RT650 is available in a Left version and Right version. Contact TSN for ordering assistance.
- For LRFD strengths contact TSN technical services.



Nomenclature

StiffClip RT650 is 6½” long, and may be used when wall studs do not align with roof framing member. The RT1300 is 13” long, and is used when wall studs align with roof framing member. Clips are designated by length, followed by thickness and number of screws used in each leg (determined by load requirements - refer to load tables).

Example: Stud aligns with roof framing member (see application image)

Designate: StiffClip® 1300

* StiffClip RT650 are packaged in pairs.

