

**BlazeFrame® RipTRAK™ to stud connection**
**RipTRAK with ProSTUD / Non-Structural Wall Assembly**

RipTRAK Thickness mils (ga)	Stud thickness mils (ga)	ASD Allowable Load (lbs)	Clip
33 mil (20ga)	15 mil (25ga EQ) 50ksi	15	NO CLIP
	18 mil (20ga EQ) 70ksi	15	
	30 mil (20ga DW) 33ksi	15	
	33 mil (20ga) 33ksi	15	
	15 mil (25ga EQ) 50ksi	25	RTC-33 33 mil (20ga) Clip
	18 mil (20ga EQ) 70ksi	40	
	30 mil (20ga DW) 33ksi	40	
	33 mil (20ga) 33ksi	45	

**RipTRAK with Structural Stud Wall Assembly**

RipTRAK Thickness mils (ga)	Stud thickness mils (ga)	ASD Allowable Load (lbs)	Clip
33 mil (20ga)	33 mil (20ga) 33ksi	20	NO CLIP
	43 mil (18ga) 33ksi	20	
	54 mil (16ga) 50ksi	20	
	68 mil (14ga) 50ksi	25	
	33 mil (20ga) 33ksi	50	RTC-54 54 mil (16ga) Clip
	43 mil (18ga) 33ksi	50	
	54 mil (16ga) 50ksi	50	
	68 mil (14ga) 50ksi	50	
43 mil (18ga)	33 mil (20ga) 33ksi	50	NO CLIP
	43 mil (18ga) 33ksi	55	
	54 mil (16ga) 50ksi	55	
	68 mil (14ga) 50ksi	55	
	33 mil (20ga) 33ksi	85	RTC-54 54 mil (16ga) Clip
	43 mil (18ga) 33ksi	125	
	54 mil (16ga) 50ksi	125	
	68 mil (14ga) 50ksi	125	
54 mil (16ga)	33 mil (20ga) 33ksi	90	NO CLIP
	43 mil (18ga) 33ksi	120	
	54 mil (16ga) 50ksi	120	
	68 mil (14ga) 50ksi	125	
	33 mil (20ga) 33ksi	95	RTC-54 54 mil (16ga) Clip
	43 mil (18ga) 33ksi	145	
	54 mil (16ga) 50ksi	155	
	68 mil (14ga) 50ksi	255	
68 mil (14ga)	33 mil (20ga) 33ksi	90	NO CLIP
	43 mil (18ga) 33ksi	155	
	54 mil (16ga) 50ksi	210	
	68 mil (14ga) 50ksi	210	
	33 mil (20ga) 33ksi	120	RTC-54 54 mil (16ga) Clip
	43 mil (18ga) 33ksi	170	
	54 mil (16ga) 50ksi	290	
	68 mil (14ga) 50ksi	410	

**Notes:**

- 1 Allowable loads are based on using 600S162 structural framing members or 600PDS125 nonstructural framing members spaced at 12" o.c. min.
- 2 Allowable loads are for RipTRAK systems using 6" deep studs and less.
- 3 A minimum of 2 fasteners spaced at 12" o.c. are required to secure the RipTRAK to the structure.
- 4 1/8" Deflection Service Load limit is not included in allowable load.
- 5 Gap between web of RipTRAK and end of stud is half of total deflection. (As shown in details)
- 6 For assemblies not using RipTRAK clips (RTC), lateral bracing is required within 12" of the top of the stud to prevent wall studs from rotating. If a knockout is not spaced 12" from the top of the stud, use strapping and blocking or request a custom knockout pattern.
- 7 Increasing the RipTRAK thickness does not always achieve higher wall capacities. Stud limiting height or web crippling may control.
- 8 Stud members must be analyzed independently of the RipTRAK system. Stud failure modes (shear, web crippling, etc.) must be checked separately.

**Calculating stud end reaction:**

Stud End Reaction = (lateral pressure PSF) x (stud spacing FT) x (stud span FT) / 2  
 Example: (5 PSF) X (1.33 FT) x (9.5 FT) / 2 = 31.7 lbs

**3" & 4" MAX. TOTAL DEFLECTION**

With or Without RipTRAK Clips for 1HR and 2HR Profiles

For 2-1/2", 3-5/8" and 6" width RipTRAK systems only

**3" Max. Total Deflection**

1-1/2" Extension + 1-1/2" Compression = 3" Max. Joint Width

**4" Max. Total Deflection**

2" Extension + 2" Compression = 4" Max. Joint Width

