

## Vertical Railings Hardware to Specify

Cable No.	For top rail, specify Threaded Stud Part No.	For bottom rail adjusting hardware, specify <b>Invisiware® Receiver and Stud</b> , according to railing material used as follows:			
		1-1/4" Std. Pipe or 1-1/2" Tube	1-1/2" Std. Pipe	2" Std. Pipe	2" Std. Tube
1/8"	S-4	R-6-12 Receiver and S-4 Stud	R-6-22 Receiver and S-4 Stud	R-6-42 Receiver and S-4 Stud	R-6-32 Receiver and S-4 Stud
3/16"	S-6	R-6-12 Receiver and S-6 Stud	R-6-22 Receiver and S-6 Stud	R-6-42 Receiver and S-6 Stud	R-6-32 Receiver and S-6 Stud

## Vertical Railings Other Construction Notes

### Railing Material

Use minimum schedule 80 steel or stainless steel pipe, or square or rectangular tubing with a minimum 1/4" wall thickness. For exterior applications, specify stainless steel to prevent problem with rust in the frame.

### Rail Braces

Rail Braces should be used in place of a cable at least every eighth cable, to support the top and bottom rails under tension. Specify .625" diameter x .120" wall thickness type 4130 Chrom./Moly tubing or .625" diameter x .120" wall thickness seamless stainless steel tubing.

### The factory can supply the following vertical railing components:

**Top and bottom rails** ready to accept hardware in sections up to 20 feet in 1-1/4", 1-1/2" and 2" standard schedule 80 pipe and 2" x 2" x .250" steel tubing. Material is mill finish carbon steel or stainless. We can also drill and tap or counterbore customer's material as required.

**Rail Braces**, to the above specifications, coped to fit into pre-drilled top and bottom rail holes, where they can be welded into the frame.

**Cables** cut to specified length with Invisiware® Threaded Studs swaged on both ends, ready for fast field installation.