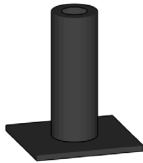




VertiBrace®

INSTALLATION GUIDE VERTIBRACE

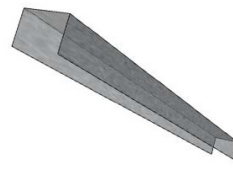
YOU WILL NEED



Vertibrace®
Barrel



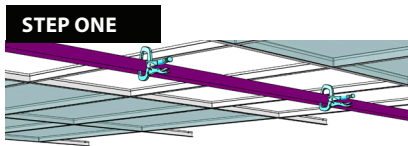
Brackets and STEM
(as per specification)



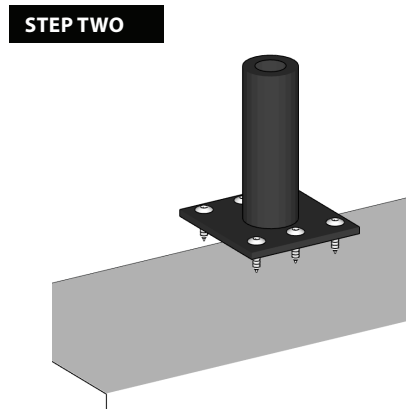
Steel Stud for Brace Arms
(as per specification)



Fixings
(10G Tek screws)



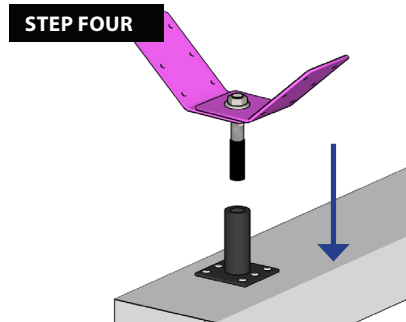
STEP ONE



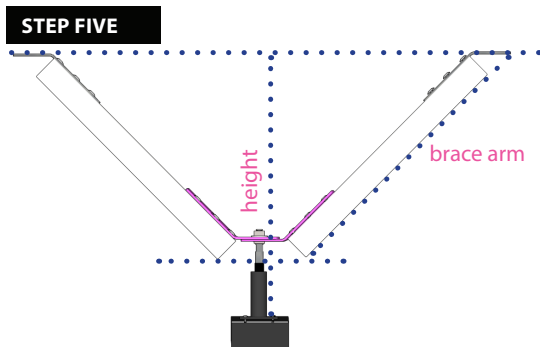
STEP TWO



STEP THREE



STEP FOUR



STEP FIVE

STEP ONE

Prepare wall:

For new partitions, set out headtrack below the ceiling grid as per the plans. (Ensure this includes any acoustic tape as applicable). Hold in place with screws or C-Clamps. These fixings are temporary for installation only. For all partitions, including existing retro-fits, identify the VertiBrace positions. Set out the VertiBrace barrel in the middle of the headtrack.

Please note: Partitions should be installed with headtracks of a minimum size, as shown in the design guide.

STEP TWO

Use 6 x 10g self-tapping screws to fix the barrel onto the headtrack.

To install the ceiling tile, drill a corresponding 70mm hole in the ceiling tile or cut the tile across the partition. Place into the grid.

STEP THREE

Assemble the stem of the VertiBrace

The brackets should be as per the specification.

STEP FOUR

Insert stem into the barrel. Push it down until it is stopped by the cable tie. There will be a 25mm gap between the half nut and the barrel.

STEP FIVE

Measure the required length of the 45 degree steel stud brace arms, and cut to length. For a 45° angle brace, cut your steel stud bracing material to length using the following formula.

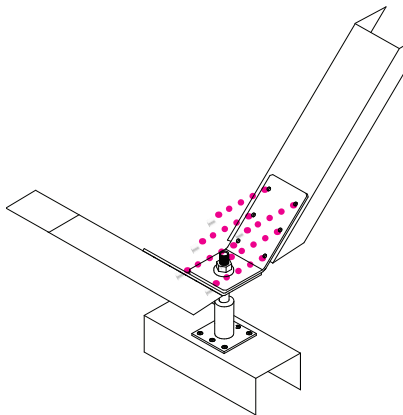
Length of bracing arm = 1.41 times the height
(vertical distance of bracket to structure).



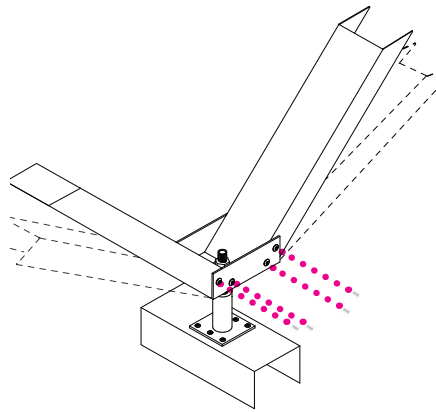
STEP SIX



STEP SEVEN

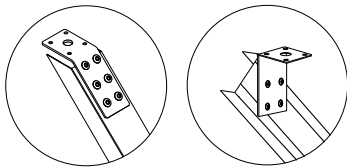


45° Brackets



U - Channel Bracket

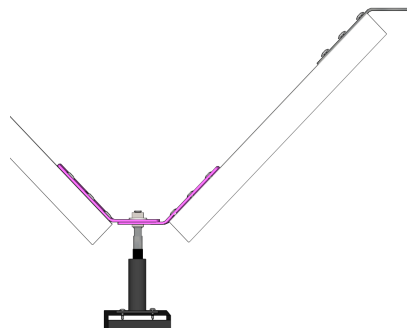
STEP EIGHT



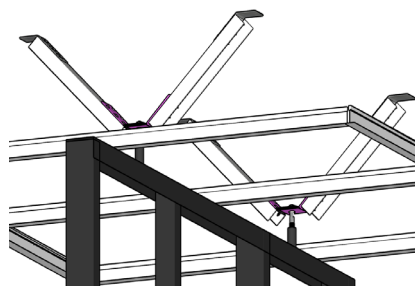
45° Brackets

90° Brackets for variable brace

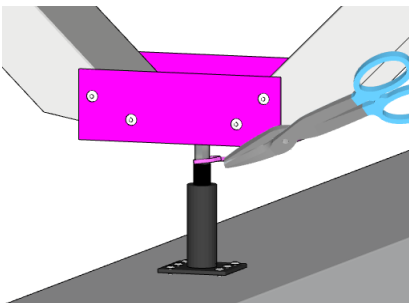
STEP NINE



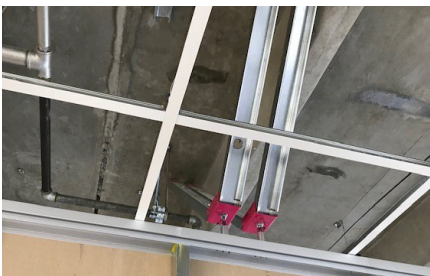
STEP TWELVE



STEP TEN



STEP THIRTEEN



STEP SIX

U Channel bracket only

When using the U Channel bracket, one end needs to be trimmed as shown to fit snugly around the nuts of the stem.

STEP SEVEN

Using 10g tek screws in the pre-drilled holes, fix the steel stud brace arms to the Vertibrace bracket. The angle brackets should sit perpendicular to the headtrack but can be rotated if required to avoid service clashes. (Check with an engineer to confirm deviation limits).

STEP EIGHT

Attach Top Plate connectors to the stud arms as shown. Use 45° for 45 degree brackets and use 90° if the bracing arms are at variable angles (as shown).

STEP NINE

Fix 45 degree brackets to structure in the required locations using fixings specified in the table. If bridging is required, refer to the table in the notes.

STEP TEN

Cut the cable tie and remove it from the Vertibrace stem. The Vertibrace is now free to move under vertical deflection loads.

STEP ELEVEN

Repeat for all Vertibrace positions along the partition.

STEP TWELVE

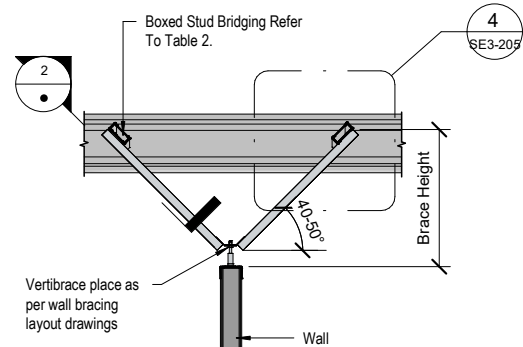
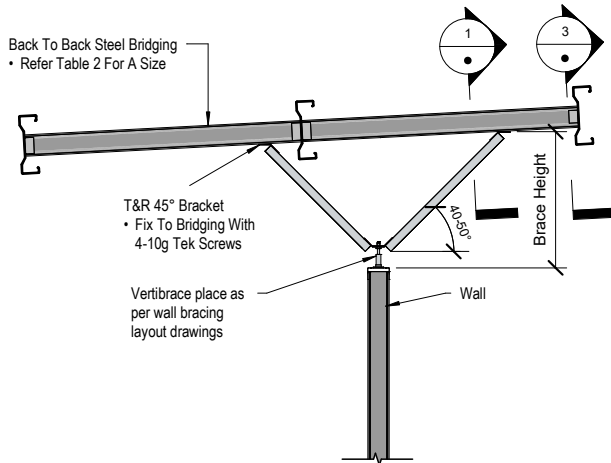
Fix the bottom track to the floor and set out the framing studs as per the specification. Fix framing together. (Please see Notes)

STEP THIRTEEN

Remove the screws and C-Clamps (the partition is now secure) and install the remainder of the partition as per manufacturer's specification.

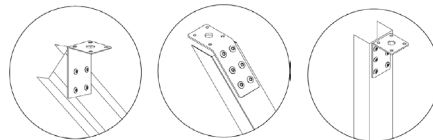


BRACE HEIGHT TABLE



VERTIBRACE ELEVATION - BACK TO BACK BRIDGING

VERTIBRACE ELEVATION - BOXED BRIDGING



BRACE ARM STUD SIZE	MAXIMUM BRACE HEIGHT (mm)	
	2.39 kN LOAD & 2.00 kN LOAD	1.48 kN DESIGN LOAD (GLAZED PARTITIONS)
64mm 0.50 BMT lipped stud	1300	1300
64mm 0.75 BMT lipped stud	1500	1500
92mm 0.55 BMT lipped stud	1500	1500
64mm 0.50 BMT boxed stud	2500	2750
92mm 0.75 BMT boxed stud	2750	2750

FIXINGS

SUBSTRATE	REQUIRED FASTENERS	MINIMUM INSTALLATION REQUIREMENTS
Steel	1x M10 Grade 4.6	Fix to the web of purlins
	4x 12g tek screws	Fix to the web of purlins, 10mm minimum edge spacing
Stud Bridging	4x 10g tek screws	10mm minimum edge spacing
Timber	Min 12mm Coach Screw	65mm embedment, 50mm edge distance
	1x M10 Grade 4.6 bolt	35 x 35 x 3 washer to be used, 40mm edge distance
	Hilti HUS-3 H10	85mm embedment
	Hilti HST3-10	80mm embedment

NOTES:

- Brace arm sizes above are to be installed at 40-50 degrees from horizontal.
- All brace arms to be continuous lengths of steel stud. Capacity of spliced steel stud has not been verified.
- Maximum brace heights have been determined using the compressive capacity of steel studs calculated with AS/NZS 4600:2018. It has been assumed that each brace arm carries half of the total load. Testing has been carried out to verify stud capacity.