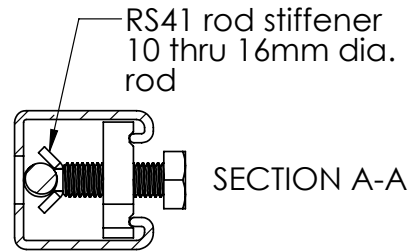
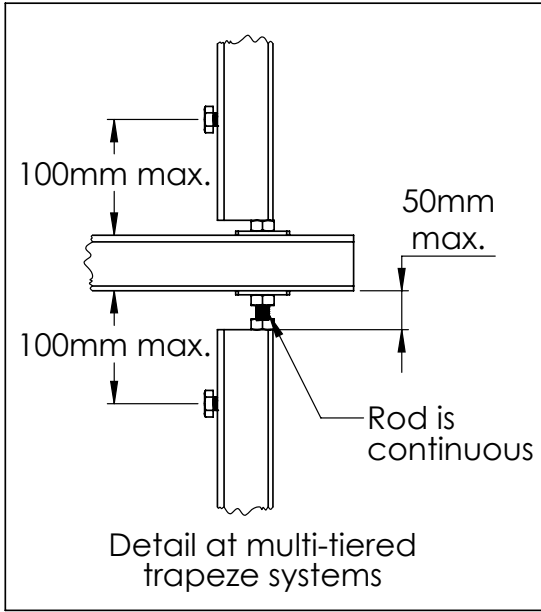
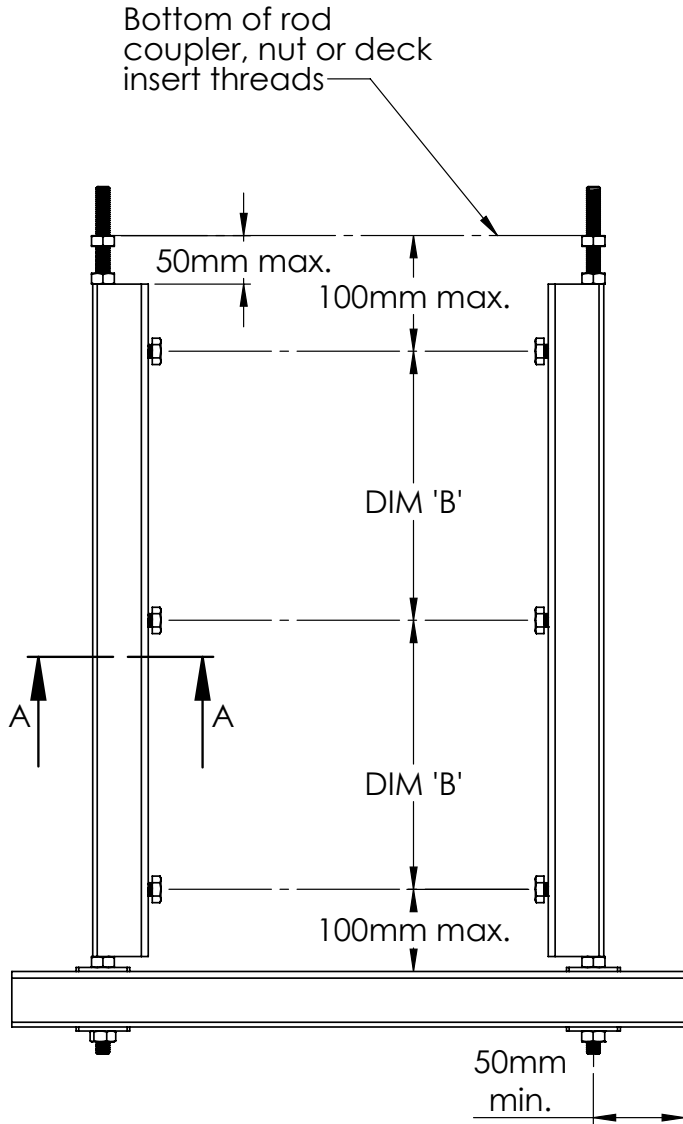


Why Rod Stiffeners are needed to meet AS1170.4-2007 Section 8 and NZS4219-2009

1. Seismic forces act in all directions. Threaded rods are sized for gravity loads, making it necessary to add additional rod stiffening to prevent buckling of the rods.
2. Threaded rod has limited compression strength and uplift forces can easily exceed the dead load on the rod - resulting in compressive forces. If not stiffened, the rod can buckle and fail, which in turn can severely impact adjacent services and systems.
3. Rod stiffening essentially creates a compression post around the rod (or 'a leg in plaster' effect) that prevents buckling.
4. Rod stiffeners are only needed to be used on vertical hanger rods to which the seismic restraints are connected to, unless specifically noted otherwise.
5. Threaded rod is an integral part of any seismic restraint system and rod stiffening requirements should be included within any seismic design.

TO BE VERIFIED BY PROJECT SEISMIC ENGINEER



Notes:
 Tighten stiffener nut to finger tight plus 2 full turns of the nut
 Rod stiffening required only for rods to which seismic bracing has been installed.
 Refer to Vaico when rods are larger than 16mm.
 Rod stiffeners may be eliminated where two rigid braces are attached to the same rod and are 180 degrees opposed to one another.



Registered Design
 Patented No. 2021107288
 Other Patents Pending

Rod Stiffener Chart		
Threaded Rod Diameter (mm)	Dim. A Max. Rod Length Without Stiffener (mm)	Dim. B Max. Spacing Between Rod Stiffeners (mm)
8	400	500
10	500	600
12	600	700
16	800	900



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GR1 Rod stiffening requirements	Drawing No. GR1
	Revision B