Seismic B Anti-Tip Rail

Spacesaver’s Seismic B Anti-Tip (BAT) Rail assembly provides all the benefits of standard BAT Rail, as well as the structural strength and support mobile systems require during a seismic event.

**BENEFITS**

1. Strong structural C-channel provides durability that stands up to wear and tear of heavy usage.
2. 1045 Alloy steel rails welded to the structural C-channel design provide a solid foundation for any mobile system.
3. Anti-tip flanges combined with the carriage’s in-rail anti-tip brackets provide built-in system stability during seismic events.
4. Interlocking braces and splice joints maintain the structural integrity of the rail system along its entire length.
5. Fully welded seismic anchor plate construction insures superior performance and strength during a seismic event.
6. Various anchor plate thicknesses (1/4”, 3/8”, and 1/2”), anchor plate spacing (6”, 9”, 12”, 18”, and 24”), and anchor hole sizes (1/4”, 3/8”, and 1/2”) to accommodate different seismic requirements.

**INSTALLATION**

1045 bar stock steel welded into the center of a C-channel steel base ensures that the rail will not separate from the base. The C-channel assembly is welded to a steel rail spacer and seismic anchor plate. The steel rail spacer thickness options are designed to provide required clearance for floor decking, floor covering, and anchors. The seismic anchor base plate is designed to provide the structural connection with the floor. The seismic anchor plate design focuses on the plate thickness, anchor size, and distance (plate spacing) between consecutive plates along the length of the rail.

Rail assembly lengths are connected by interlocking braces and bolted plates that splice the sections together. This provides permanent horizontal and vertical alignment. BAT Rails are aligned on the floor and can be top-mounted and finished with a plywood ramp and decking, or recessed in concrete.

Once positioned on the floor, rails are leveled using leveling screws for precise installation and infinite adjustability. The leveled rails are then secured with permanent structural concrete anchors for firm, solid attachment to the subfloor.

To minimize rail deflection and help disburse wheel point loads, rail installation is completed with non-shrink continuous grout under the entire rail and seismic plates. That step ensures that all gaps and voids are filled, thus providing total rail support. Carriages with in-rail anti-tip hooks designed to work with BAT rail are then installed on the seismic rail assemblies.
APPLICATION
Seismic BAT Rail is compatible with all Spacesaver powered, mechanical assist, and manual carriages utilizing dual flanged guidance systems and dual flanged in-rail anti-tip brackets.

NOTE: All Spacesaver mobile storage installations requiring seismic certification need calculations from a structural engineer licensed in the jurisdiction where the installation will be located.

TECHNICAL SPECIFICATIONS

RAIL:
Rail system shall be 5/8" x 5/8" (16 mm x 16 mm) 1045 alloy steel bar interlocked and welded into a powder coat finished base channel minimum 11 ga. 3-7/16" (37 mm) wide with 3/4" (19 mm) return anti-tip flanges. Rail assembly shall have welded leveling/anchor plates and splices with leveling screw adjustability and be permanently anchored to the floor. Standard anchor plate spacer thicknesses of 1/8", 1/4", 1/2", 3/4", or 1.0" (3.18 mm, 6.35 mm, 12.70 mm, 19.05 mm, or 25.4 mm) are available. Standard seismic anchor plate thicknesses of 1/4", 3/8", or 1/2" (6.35 mm, 9.53 mm, or 12.7 mm) are available. Seismic anchor plates shall accommodate 1/4", 3/8", or 1/2" (6.35 mm, 9.53 mm, or 12.7 mm) diameter structural concrete anchors. All rail splice joints shall have interlocking braces and splice plates which provide permanent horizontal and vertical rail alignment. Rail guidance gaps shall be maximum 5/8" (16 mm). All rail assemblies shall be fully grouted with a non-shrink hydraulic cement type grout with 8,000 lbs p.s.i. (562 kg/cm²) strength after curing.

*Specifications subject to change.