

# FLOOR MOUNTING KIT, SEISMIC



# Figure # NEBs Approved Anchor Qty 2221280111 M12-50 4 2221280211 M12-25 4

	Figure #	HILTI Anchor	Qty
0	0046150110	HSLB M12-50	4
erin	0046150210	HSLB M12-25	4
Ord			

# Notes:

Ordering

- Base configuration shown is for a representative seismic unequal flange equipment rack; other rack bases may be different.
- Anchor brackets are bolted in place in fig. 0046xx and fig. 0047xx series racks prior to shipment. 2<sup>°</sup> Square flat washer (quantity 4) provided with fig. 0046xx and fig. 0047xx series racks.

# A. Application

- Used to secure seismic-rated equipment racks (or equivalent) to a concrete floor in a seismically active location (including Zone 4).
- 2. For use with all seismically rated equipment racks, four post frames or cabinets

### B. Tools (required or recommended):

- 1. Hammer (or rotary) drill (with depth gauge recommended)
- 2. 18 Mm masonry drill bit.
- 3. Blowout air bulb or vacuum with small diameter tube.
- 19 Mm socket (or equivalent) for hsl version;
   24 mm socket (or equivalent) for

### C. Installation procedure

- Using the rack base, or equivalent, as a template, mark the four (4) hole locations to be drilled. Holes should be as far apart as possible within each cutout (refer to the floor mounting details for the rack being installed).
- Using an 18 mm masonry bit, drill the four required holes to a minimum depth of 100 mm (appx. 4").
- Verify that the anchor's minimum embedment depth (80 mm/3"), as marked by a ring on the sleeve of the anchor, can be met.
- 4. Thoroughly clean the dust from each hole, using an air blowout or vacuum device.
- 5. To not degrade the anchor's installed performance, any unused anchor holes (or

other nearby holes) within 3<sup>°</sup> must be filled with an epoxy filler (pour stone) or equivalent. Filled holes must be fully cured before anchors are installed and torqued.

- 6. If not already in place, install the anchor brackets inside the rack base. Secure the anchor brackets (left hand and right hand respectively) to the rack's uprights using two (2) grade 5 or better 1/2"-13 x 1-1/2" cap screws, lock washers and hex nuts in each anchor bracket. Tighten each bolt to 65 ft-lbs, +10, -0 ft-lbs.
- 7. Place the rack over the predrilled holes and align as necessary.
- Side one 2<sup>"</sup> square washer onto the anchor being used. Ensure that the anchor's expansion shield is not expanded. Place the end of the anchor into the predrilled hole. Repeat for the other predrilled holes.
- 9. Align the edges of the 2" square washer parallel with the slots in the rack base to obtain the maximum material overlap. Once aligned, tap each anchor/washer assembly until it is seated in the hole and firmly against the 2" square washer.
- 10. Pre-tighten each anchor with a socket wrench or box-end wrench; do not use an open-end wrench (which could easily slip off and cause injury). Before final tightening, ensure that the rack is properly aligned (in the row and with any adjacent racks).
- 11. Torque each anchor to 60 ft-lbs. When using the break off type anchor, a torque wrench is

not required since the anchor's (red) torque cap shears off at a predetermined torque value (appx. 60 Ft-lbs.), Leaving a green seal on the bolt head, indicating proper tightening.

### D. Caution

 Anchor brackets must be properly installed (bolted to the rack upright with bolts properly torqued to 65 ft-lbs, +10, -0 ft-lbs) and the rack must be properly secured to the concrete floor using the appropriate seismic floor mounting kit . Installing the rack in any other manner may reduce the load and/ or seismic performance f the installation. Junctioning to adjacent racks (using fig. 004619 Or equivalent), securing the rack to overhead structure, etc. may also be added, but these do not replace proper installation of the seismic floor mounting kit.