

| S-I UNITS (mm AND kg) | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------|-----|-----|-----|----|----|-----|----|----|----|-----|----|-----|----|-----|----|-----|----|----|----|
| TYPE | DIMENSION | | | | | | | | | | | | | | | | | | | |
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S | T | U | V |
| FMSF | 305 | 483 | 229 | 457 | 38 | 25 | 191 | 27 | 27 | 38 | 381 | 38 | 127 | 38 | 229 | 38 | 406 | 38 | 57 | 76 |

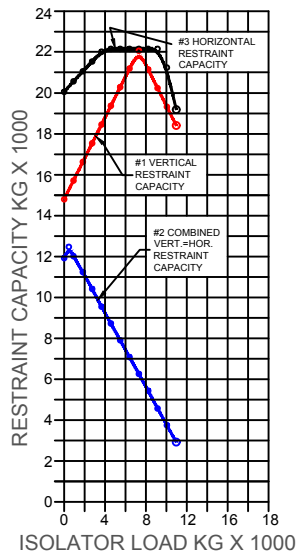


FIGURE 2
STEEL ATTACHMENT

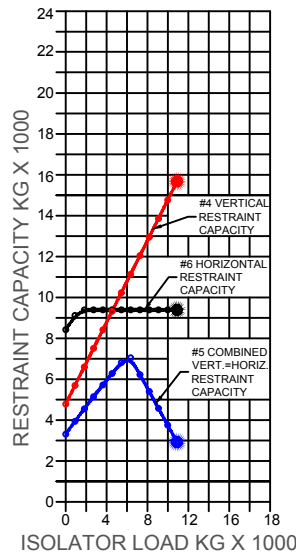


FIGURE 3
CONCRETE ATTACHMENT

FMSF REQUIRES 25 DIA X 152 MIN EMBED ANCHORS IN CONCRETE
(ALLOWABLE LOADS BASED ON 144 KPA MIN CONCRETE)
FMSF ANCHOR BOLT TORQUE - 271 NM, PULL TEST - 2414 KG

RESTRAINT CAPACITY ENVELOPE GENERATION

RESTRAINT ONLY (NO SPRING ELEMENT)

1) READ THE ANCHORED (CONCRETE) OR BOLTED (STEEL) ENVELOPES DIRECTLY FROM FIGURE 1.

RESTRAINT WITH SPRING SUPPORT ELEMENT (ISOLATOR/RESTRAINT)

- 1) DETERMINE THE MAXIMUM EQUIPMENT LOAD SUPPORTED BY THE ISOLATOR(S)
- 2) IF THROUGH-BOLTED (STEEL), REFER TO FIGURE 2. IF ANCHORED (CONCRETE), REFER TO FIGURE 3.
- 3) PLOT THE VERTICAL RESTRAINT CAPACITY FROM CURVE #1 (FIGURE 2) OR #4 (FIGURE 3) ON THE VERTICAL AXIS OF FIGURE 1.
- 4) PLOT THE HORIZONTAL RESTRAINT CAPACITY FROM CURVE #3 (FIGURE 2) OR #6 (FIGURE 3) ON THE HORIZONTAL AXIS OF FIGURE 1.
- 5) PLOT THE COMBINED RESTRAINT CAPACITY FROM CURVE #2 (FIGURE 2) OR #5 (FIGURE 3) AT THE POINT ON FIGURE 1 WHERE THE VERTICAL AND HORIZONTAL FORCES BOTH MATCH THIS VALUE.
- 6) CONNECTING THESE POINTS CREATES AN ENVELOPE THAT SHOWS THE RESTRAINT'S CAPACITY WHEN SUBJECTED TO EQUIPMENT SUPPORT AND SEISMIC LOADS SIMULTANEOUSLY.
- 7) FOR THE RESTRAINT TO BE ADEQUATE, ALL WORST CASE SEISMIC LOADS MUST FALL WITHIN THE ENVELOPE.

SPECIFICATIONS:

- 3 AXIS RESTRAINT WITH REPLACEABLE NEOPRENE SNUBBING ELEMENTS.
- RESTRAINTS ARE POWDER COATED.
- HOUSINGS MAY BE USED FOR BLOCKING DURING EQUIPMENT ERECTION.
- CAN BE USED WITH OR WITHOUT SPRING COIL.

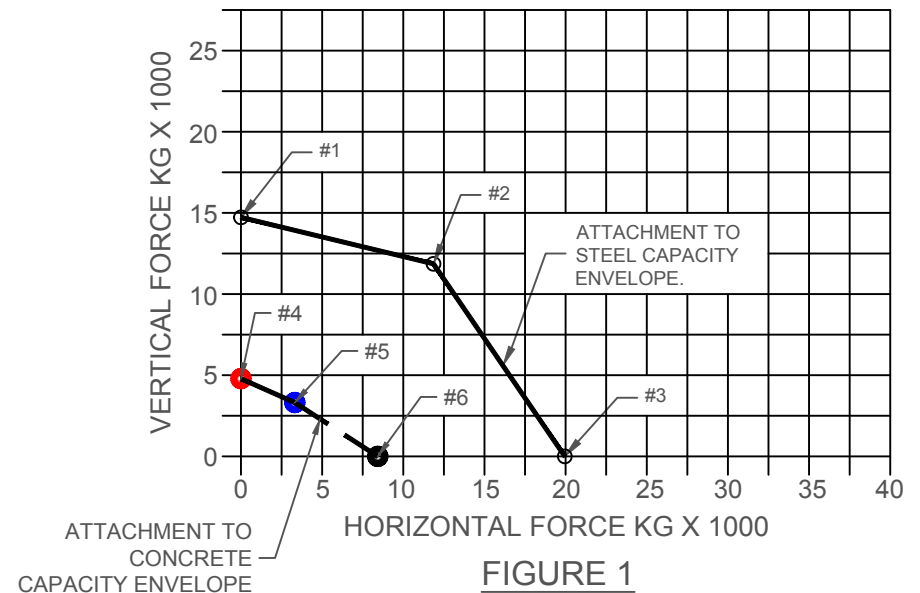
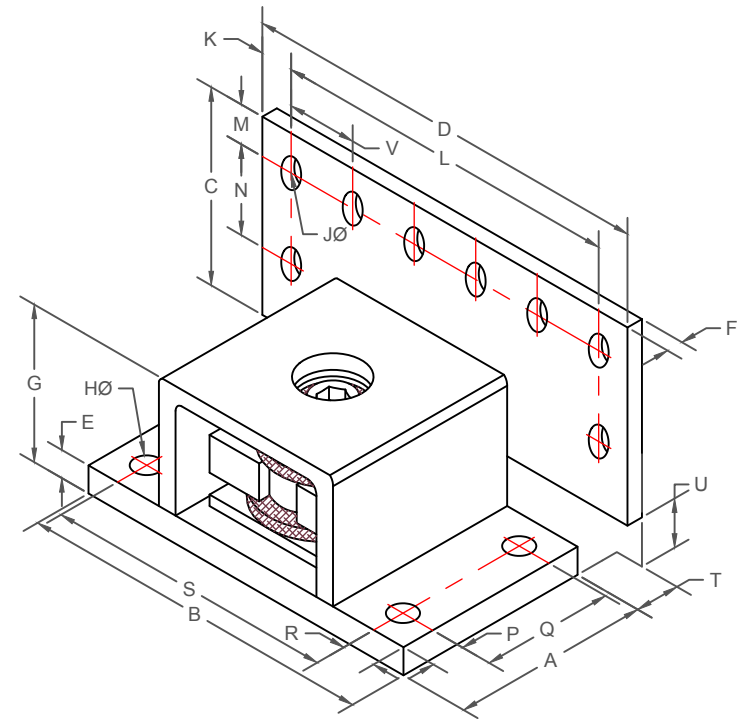


FIGURE 1
RESTRAINT CAPACITY ENVELOPE