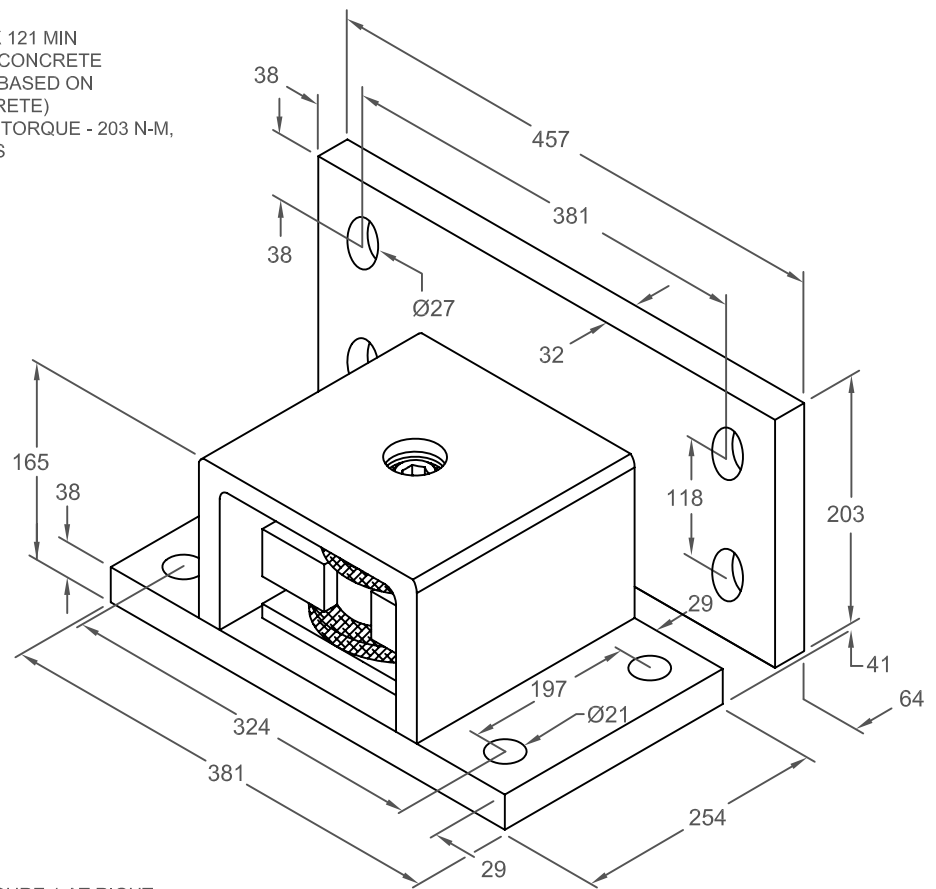


FMSE REQUIRES 19 X 121 MIN  
 EMBED ANCHORS IN CONCRETE  
 (ALLOWABLE LOADS BASED ON  
 20700 kPa MIN CONCRETE)  
 FMSE ANCHOR BOLT TORQUE - 203 N-M,  
 PULL TEST - 1646 KGS



## RESTRAINT CAPACITY ENVELOPE GENERATION

### RESTRAINT ONLY (NO SPRING ELEMENT)

- 1) READ THE ANCHORED (CONCRETE) OR BOLTED (STEEL) ENVELOPES DIRECTLY FROM FIGURE 1 AT RIGHT

### 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 3. IF ANCHORED (CONCRETE), REFER TO FIGURE 2.
- 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
- HOT DIPPED GALVANIZED
- HOUSINGS MAY BE USED FOR BLOCKING DURING EQUIPMENT ERECTION
- CAN BE USED WITH OR WITHOUT SPRING COIL

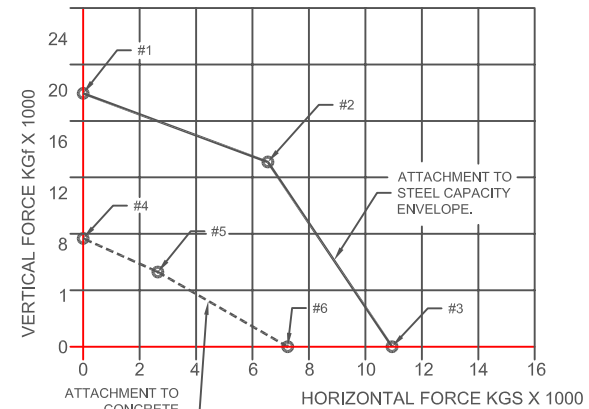
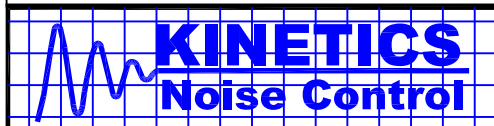


FIGURE 1  
 RESTRAINT CAPACITY ENVELOPE



KINETICS NOISE CONTROL, INC  
 6300 IRELAN PL,  
 DUBLIN, OH 43017 USA  
 Ph: 614 889-0480, Fax: 614 889-0540  
 www.kineticsnoise.com

Model:  
 FMSE  
 RESTRAINT

By: JMJ  
 Date: 08/26/03  
 Revised: /

Drawing No:  
 S-01-40.500(M)