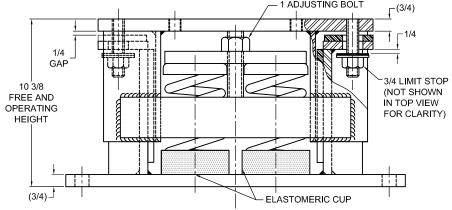
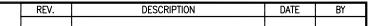
179R-101840 REV.: 6 13/16 DIA HOLE FOR 5/8-11 UNC TAPPED ATTACHMENT TO HOLE (4 TYP) CONCRETE (6 TYP) 2 1/2 6 1 3/4 \oplus 1 1/2 1 ADJUSTING BOLT -(3/4)



- 1. STANDARD ISOLATOR FINISH: CASTING AND WELDMENTS- ONE COAT BLACK PAINT, SPRINGS-POWDER COAT, HARDWARE-ZINC ELECTROPLATE.
- 2. ESTIMATED UNIT WEIGHT: 130 LBS.
- 3. STATIC LOAD RATINGS ON SHEET 2 OF 2 ARE FOR GUIDANCE ONLY. VALUES ARE BASED ON TESTS OR CALCULATIONS NOTE: MATERIAL SHOWN IS FOR (1) SET. WITH BASE PLATES BOLTED TO STEEL. FOR ATTACHMENT TO CONCRETE, CONSULT FACTORY.
- 4. RATED DEFLECTIONS ARE WITHIN 25% OF NOMINAL. HIGHER DEFLECTIONS ARE ALLOWED IF THEY MEET SPECIFICATIONS.

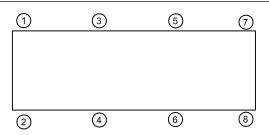


MODEL M2311-21 2-31 KING 3213MIC ISOLATORS FOR MOMINAL 2 DEFECTION				
MODEL	RATED LOAD (LBS)	RATED DEFLECTION (IN)	SPRING RATE (LB/IN)	SPRING COLOR CODE
M2SH-2F-300	300	2.00	150	BLUE
M2SH-2F-550	550	2.00	275	BLACK
M2SH-2F-850N ¹	850	2.00	425	BLACK/BLUE
M2SH-2F-1000	1000	2.00	500	RED
M2SH-2F-1300N ¹	1300	2.00	650	RED/BLUE
M2SH-2F-1550N ¹	1550	2.00	775	RED/BLACK
M2SH-2F-2000	2000	2.00	1000	GREEN
M2SH-2F-2300N1	2300	2.00	1150	GREEN/BLUE
M2SH-2F-2550N ¹	2550	2.00	1275	GREEN/BLACK
M2SH-2F-2800	2800	2.00	1400	GRAY
M2SH-2F-3000N ¹	3000	2.00	1500	GREEN/RED
M2SH-2F-3350N1	3350	2.00	1675	GRAY/BLACK
M2SH-2F-3800N ¹	3800	2.00	1900	GRAY/RED
M2SH-2F-4400N ¹	4400	2.00	2200	GRAY/GREEN

MODEL M2SH-2F 2- SPRING SEISMIC ISOLATORS FOR NOMINAL 2" DEFLECTION

NOTES:

TWO NESTED SPRINGS YIELD THIS LOAD. THE COLOR CODE INDICATED IS FOR OUTER SPRING/ INNER



ISOLATOR SELECTIONS			
LOC 1:	LOC 2:		
LOC 3:	LOC 4:		
LOC 5:	LOC 6:		
LOC 7:	LOC 8:		
CUSTOMER EQP'T. TAG:			

OTHER MATERIALS, COMPOUNDS, OR FINISHES WITH EQUAL OR SUPERIOR PROPERTIES MAY BE SUBSTITUTED AS THEY BECOME AVAILABLE.

CERTIFIED FOR: JOB NAME: CUSTOMER: __ CUSTOMER P.O. SALES ORDER:

MODEL M2SH-2F 300-4400 LBS. **VIBRATION ISOLATORS** SEISMIC RESTRAINT 2 INCH DEFLECTION

THE VMC GROU

The Power of Together Bloomingdale, NJ 07403 Houston, TX 77041

NONE SHEET:

J P DRAWING NO.:

REVISION

179R-101840 REV.: 6 REV. DESCRIPTION DATE BY INSTALLATION AND ADJUSTMENT INSTRUCTIONS 1. ISOLATORS ARE SHIPPED FULLY ASSEMBLED AND ARE TO BE SPACED AND LOCATED IN ACCORDANCE WITH INSTALLATION DRAWINGS OR AS OTHERWISE RECOMMENDED. 2. LOCATE ISOLATORS ON A LEVEL FLOOR OR SUB-BASE, ENSURING THAT ALL ISOLATOR CENTERLINES MATCH THE EQUIPMENT MOUNTING HOLES. SHIM OR GROUT AS REQUIRED TO LEVEL ALL ISOLATOR BASE PLATES. A 1/4" MAXIMUM DIFFERENCE IN ELEVATION CAN BE TOLERATED. 3. ANCHOR ALL ISOLATORS TO THE FLOOR OR SUB-BASE AS RECOMMENDED. 4. GENTLY PLACE MACHINE OR EQUIPMENT ONTO TOP PLATE OF ISOLATOR BOLT EQUIPMENT OR SUB BASE SECURELY TO ISOLATOR USING MINIMUM ASTM A325 (SAE GR. 5) HIGH STRENGTH BOLTS. BOLTS SHOULD NOT PROTRUDE MORE THAN 1/8" BELOW THE TOP PLATE. 5. THE EQUIPMENT WEIGHT WILL CAUSE THE SPRING AND THUS THE TOP PLATE TO DESCEND AND REST ON 12000 POUNDS THE UPPER BUMPER PADS. 6. BACK-OFF ON THE TWO (2) SIDE LIMIT STOP LOCKNUTS, SO THAT THEY DO NOT HAMPER THE ADJUSTMENT PROCESS. 7. ADJUST EACH AND EVERY ISOLATOR IN SEQUENCE, ONE FULL CLOCKWISE TURN AT A TIME. REPEAT THIS PROCEDURE UNTIL THE 1/4" OPERATING CLEARANCE IS OBTAINED. NOTE: BE SURE LIMIT STOP NUTS CONTINUE TO SHOW CLEARANCE. 8. CHECK EQUIPMENT LEVEL AND FINE ADJUST ISOLATORS AS NECESSARY TO OBTAIN EQUIPMENT LEVEL. 9. ADJUST ALL LIMIT STOP NUTS TO OBTAIN A 1/4" MAXIMUM CLEARANCE. 10. ADJUSTMENT IS COMPLETE. HORIZONTAL LOAD (THOUSAND POUNDS) 20000 FIGURE 1 19000 SEISMIC RATINGS (ATTACHMENT TO CONCRETE) 18000 17000 16000 RATED LOAD CURVES 15000 14000 1. TO USE THE RATED LOAD CURVES: 13000 A. CALCULATE VERTICAL AND HORIZONTAL FORCES ACTING ON MOUNTINGS, INCLUDING Q 12000 TRANSLATIONS AND OVERTURNING MOMENTS. 11000 B. THE INTERSECTION OF THE HORIZONTAL LOAD AND VERTICAL LOAD MUST FALL WITHIN THE CURVE 10000 FOR THE SPECIFIED PART. 9000 3. THE RATED LOAD CURVES ASSUME ONE OF THE FOLLOWING METHODS OF TIE-DOWN AT EACH BOLT 8000 7000 A. FOUR (4) 3/4" DIA. HILTI "KWIK-BOLT II" WEDGE ANCHORS, WITH MINIMUM 4 3/4" EMBEDMENT INTO 3000 PSI CONCRETE. MINIMUM EDGE DISTANCE IS 9 3/4". (NOTE: OTHER BRANDS OF ANCHOR BOLTS MAY BE USED. PROVIDED THEY ARE OF EQUAL STRENGTH AND HAVE A CURRENT ICBO 3000 TO ACHIEVE RATED LOAD, "SPECIAL INSPECTION" IS REQUIRED ON ALL CONCRETE ANCHOR 2000 INSTALLATIONS, AS DESCRIBED BELOW: 1000 a) 50% OR ALTERNATE BOLTS IN A GROUP SHALL BE TENSION TESTED TO 6200 LBS TENSION. b) TESTING SHOULD OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF ANCHORS. 5000 c) IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS UNTIL TWENTY (20) CONSECUTIVE ANCHORS HORIZONTAL LOAD PASS. THEN RESUME THE INITIAL TESTING FREQUENCY. FIGURE 2 B. FOUR (4) 3/4" DIA. BOLTS PER ASTM A307 OR BETTER. SEISMIC RATINGS 4. THE SUPPORT STRUCTURE (BY OTHERS) IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER (ATTACHMENT TO STEEL) OF RECORD AND SHALL BE DESIGNED TO ADEQUATELY SUPPORT THE WEIGHTS AND FORCES SHOWN. OTHER MATERIALS, COMPOUNDS, OR FINISHES WITH FOLIAL OR SUPERIOR PROPERTIES MAY BE SUBSTITUTED AS THEY BECOME AVAILABLE. **CERTIFIED FOR:** NONE MODEL M2SH-2F 300-4400 LBS. JOB NAME: SHEET **VIBRATION ISOLATORS** CUSTOMER: ___ SEISMIC RESTRAINT

2 INCH DEFLECTION

CUSTOMER P.O.

SALES ORDER:

THE VMC GROUP DRAWING NO.:

The Power of Together Bloomingdale, NJ 07403

Houston, TX 77041

REVISION