172R-101068 REV.: 8 DESCRIPTION REV. DATE BY 3/4 DIA HOLE FOR MODEL MS-2D SEISMICALLY RESTRAINED VIBRATION ISOLATOR FOR 2" DEFLECTION ATTACHMENT TO CONCRETE (4 TYP) RATED SEISMIC RATED LOAD SPRING RATE DEFLECTION **COLOR CODE** MOUNT SIZE (LBS) (LBS/IN) (IN) MS-2D-75 75 2.40 31 WHITE 2 1/4 7 2 1/4 MS-2D-160 160 2.29 70 YELLOW 1 1/8 5 3/4 MS-2D-230 230 2.30 100 GREEN 7/8 MS-2D-355 355 2.15 165 DK BROWN 2 1/2 MS-2D-435 435 1.89 230 RED (BASE PLATE) MS-2D-600N 600 1.88 RED/ BLACK 319 3/4 3/4 DIA HOLE FOR ATTACHMENT TO 725 MS-2D-725 1.61 450 TAN 3/4 STEEL (2 TYP) 1/2-13 UNC (VIEW CUT AWAY FOR CLARITY) MS-2D-845 845 1.48 570 PINK TAPPED HOLE MS-2D-1000N 1000 1.69 659 PINK/BLACK (3 TYP) STEEL SHIM MS-2D-1320N 1320 1.54 927 PINK/GRAY (REMOVE AFTER 5/8 ADJUSTING NUT MS-2D-1435N 1435 1.54 1002 PINK/ GRAY/ ORANGE SPRING ADJUSTMENT) - (1/2) -3/8 GAP 1.54 MS-2D-1640N 1640 1067 PINK/ GRAY/ DK BROWN ELASTOMERIC SNUBBER (3) (5) (7)1/2 LIMIT STOP (NOT SHOWN 8 1/8 FREE & IN TOP VIEW **OPERATING** FOR CLARITY) HEIGHT ELASTOMERIC (4) 6 (8)

## NOTES

- 1. ALL DIMENSIONS ARE IN INCHES, INTERPRET PER ANSI Y14.
- 2. STANDARD FINISH: HOUSING POWDER COAT (COLOR:BLACK), SPRING POWDER COAT (COLOR: SEE TABLE), HARDWARE ZINC-ELECTROPLATE.
- 3. EQUIPMENT MUST BE BOLTED OR WELDED TO THE TOP PLATE TO MEET ALLOWABLE SEISMIC RATINGS.
- 4. ISOLATOR BASE PLATE MUST BE ANCHORED TO CONCRETE WITH (4) 11/16 DIA ANCHORS.
- 5. ALL SPRINGS ARE DESIGNED FOR 50% OVERLOAD CAPACITY.
- 6. REFER TO SHEET 2 OF 2 FOR INSTALLATION INSTRUCTIONS.
- 7. RATED DEFLECTIONS ARE WITHIN 25% OF NOMINAL. HIGHER DEFLECTIONS ARE ALLOWED IF THEY MEET SPECIFICATIONS.

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

NOTE: MATERIAL SHOWN IS FOR (1) SET.

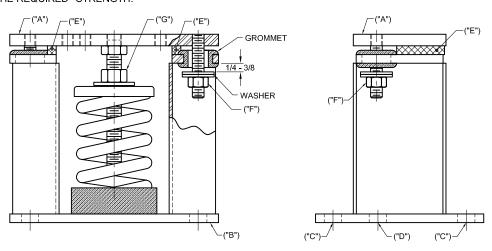
OTHER MATERIALS, COMPOUNDS, OR FINISHES WITH EQUAL OR SUPERIOR PROPERTIES MAY BE SUBSTITUTED AS THEY BECOME AVAILABLE.

CERTIFIED FOR:			SCALE : NONE	_
OB NAME:	MODEL MS-2D 75-1640 LBS. VIBRATION		SHEET:	Membe.
CUSTOMER:	ISOLATOR WITH INTEGRAL SEISMIC RESTRAINT AND INTERNAL ADJUSTMENT		1 OF 2	
CUSTOMER P.O.:	2 INCH DEFLECTION	THE VMC GROUP The Power of Together	DRAWING NO.:	REVISIO
SALES ORDER:	2 11/01/ 52/ 220/10/1	Bloomingdale, NJ 07403 Houston, TX 77041		

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- 1. READ INSTRUCTIONS IN THEIR ENTIRETY BEFORE BEGINNING INSTALLATION.
- 2. ISOLATORS ARE SHIPPED FULLY ASSEMBLED AND ARE TO BE POSITIONED IN ACCORDANCE WITH THE SUBMITTAL DRAWINGS OR AS OTHERWISE RECOMMENDED.
- 3. SET ISOLATORS ON FLOOR, HOUSEKEEPING PAD, OR SUB-BASE, ENSURING THAT ALL ISOLATOR CENTERLINES MATCH THE EQUIPMENT MOUNTING HOLES. THE VMC GROUP RECOMMENDS THAT THE ISOLATOR BASE PLATES ("B") BE INSTALLED ON A LEVEL SURFACE. SHIM OR GROUT AS REQUIRED, LEVELING ALL ISOLATOR BASE PLATES AT THE SAME ELEVATION (1/4-INCH MAXIMUM DIFFERENCE CAN BE TOLERATED).
- 4. ANCHOR ALL ISOLATORS TO THE FLOOR, HOUSEKEEPING PAD, OR SUB-BASE USING THRU HOLES ("C") FOR CONCRETE OR ("D") FOR STEEL AS REQUIRED. USE ANCHORS MEETING THE DESIGN REQUIREMENTS SPECIFIED ON SHEET 1 OF 2. WELDING TO STEEL IS PERMITTED PROVIDING THE WELD ACHIEVES THE REQUIRED STRENGTH.
- 5. ISOLATORS ARE SHIPPED TO THE JOBSITE WITH (2) REMOVABLE SPACER SHIMS ("E") BETWEEN THE TOP PLATE AND THE HOUSING. THESE SHIMS **MUST** BE IN PLACE WHEN THE EQUIPMENT IS POSITIONED OVER THE ISOLATORS.
- 6. WITH ALL SHIMS ("E") IN PLACE, PLACE THE MACHINE OR EQUIPMENT ONTO TOP PLATE ("A") OF THE ISOLATORS. BOLT EQUIPMENT SECURELY TO THE ISOLATORS USING MINIMUM ASTM A325 SAE GR. 5) HIGH-STRENGTH BOLTS, MEETING THE REQUIREMENTS (IF ANY) SPECIFIED ON SHEET 1 OF 2. WELDING IS PERMITTED PROVIDING THE WELD ACHIEVES THE REQUIRED. STRENGTH.

- 7. THE ADJUSTMENT PROCESS CAN ONLY BEGIN AFTER THE EQUIPMENT OR MACHINE IS AT ITS FULL OPERATING WEIGHT.
- 8. BACK OFF EACH OF THE (2) OR (4) LIMIT STOP LOCKNUTS ("F") PER ISOLATOR 1/4- TO 3/8-INCH.
- 9. ADJUST EACH ISOLATOR IN SEQUENCE BY TURNING ADJUSTING NUT(S) "G" ONE FULL CLOCKWISE TURN AT A TIME. REPEAT THIS PROCEDURE ON ALL ISOLATORS, ONE AT A TIME. CHECK THE LIMIT STOP LOCKNUTS ("F") PERIODICALLY TO ENSURE THAT CLEARANCE BETWEEN THE WASHER AND RUBBER GROMMET IS MAINTAINED. STOP ADJUSTMENT OF AN ISOLATOR ONLY WHEN THE TOP PLATE ("A") HAS RISEN JUST ABOVE THE SHIM ("E").
- 10. REMOVE ALL SPACER SHIMS ("E").
- 11. FINE ADJUST ISOLATORS TO LEVEL EQUIPMENT.
- 12. ADJUST ALL LIMIT STOP LOCKNUTS ("F") PER ISOLATOR TO OBTAIN 3/8-INCH GAP. THE LIMIT STOP NUTS MUST BE KEPT AT THIS 3/8-INCH GAP TO ENSURE UNIFORM BOLT LOADING DURING UPLIFT (AS IN THE CASE WHEN A COOLING TOWER IS DRAINED).
- 13. INSTALLATION IS COMPLETE.



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.:
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MODEL MS-2D 75-1640 LBS. VIBRATION ISOLATOR WITH INTEGRAL SEISMIC RESTRAINT AND INTERNAL ADJUSTMENT 2 INCH DEFLECTION

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THE VMC GROUP	Ī
The Power of Together	l
Bloomingdale, NJ 07403	l
Houston, TX 77041	l

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