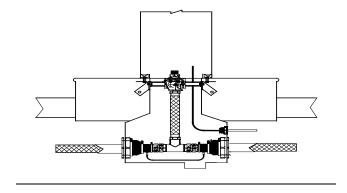


# Dispenser Mounting Assembly (DMA) INSTALLATION INSTRUCTIONS

<u>Please read this manual completely prior to installation</u>. These instructions do not supersede local laws and regulations. Always comply with local requirements.



The DMA is a simple design that incorporates either a fiberglass or a poly-composite leak containment sump, independent dispenser base anchor and safety valve mounting systems into one complete unit. The DMA is supplied with a containment sump unit, pre-installed mounting assemblies for emergency valves, and concrete mounting anchors for each dispenser anchor bolt (according to dispenser model #).

#### **OPTIONS:**

Additional options are the Splashguard rain and wash-down water shield, Installation Doors and the Retro-Fit Bracket System. Custom mounting plates or other devices available.

#### **DISPENSER BASE ANCHORS:**

The dispenser mount anchor is a 2" x  $^{1}/_{2}$ " threaded coupling with two 1" x  $^{1}/_{2}$ " bolts, and one 1" x 3" x 100 ml steel concrete anchor bar. This anchor assembly is mounted in the dispenser base mount position(s), based on dispenser make and model # on the flange of the DMA before pouring concrete. If not pre-installed from factory, install the 1"  $^{1}/_{2}$ " bolt and 1" x 3" anchor bar into one end of the coupling. Put the other 1" x  $^{1}/_{2}$ " bolt into the other end of the DMA box at the correct dispenser mount positions. When concrete is poured, this assembly will be anchored into the concrete. After the concrete has cured, remove the 1" x  $^{1}/_{2}$ " bolts from the top of the DMA flange and use them to mount the dispenser. The Retro-Fit dispenser base anchors are 4" X 1/2" "J" bolts placed in the DMA flange prior to positioning the DMA in the island form. The Retro Brackets become anchored during the concrete pour. The "J" bolts provide a 1/2" stud for dispenser mounting.

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## **SAFETY/IMPACT VALVE ANCHORS:**

The "Unistrut", channel mount, emergency valve mounting assembly for the DMA allows full 3-axis adjustment of the shear/safety valve. It will also allow the addition of extra shear valve brackets for future installations of different dispenser models using the same dispenser base configuration. The 3-axis channel mounting system is designed to be used with the "Boss" type safety valve mounts.

The lateral channel rails have mount bolts that extend through the side of the DMA. The concrete anchor/securing bars are attached to these bolts on the outside of the DMA (change from shipping positions if required, see drawing). The standard concrete anchor bars have holes for a piece of  $^{3}/_{8}$ " re-bar on each side of the DMA box, through the anchor bars, to be installed prior to concrete pour.

PLEASE NOTE: The safety/shear valve concrete anchor bars and dispenser base anchor tabs or bolts must be in the proper position and securely in place prior to pouring concrete. (See Drawing Details for Correct Positions)

#### STANDARD INSTALLATION AND ASSEMBLY:

Prior to installing the DMA in position in the island form, assemble the DMA unit including bolting in the dispenser base mount anchors; moving the safety valve "Boss" mount channel brackets to the correct position and brace. You may lay a piece of flat or angled stock metal, wood or re-bar underneath the DMA dispenser mounting flange to suspend the DMA between the island form framework. Support the bottom of the DMA with pea gravel or other suitable material. Plumb product piping and electrical conduit into DMA as required. Secure and/or tighten the valve bar and dispenser base assemblies to prevent any movement during your pour.

## **RETRO-FIT INSTALLATION AND ASSEMBLY:**

The Retro-Fit Bracket Assemblies are designed for use with the shallow DMA series. Saw cut a hole in the island surface one and one half inch (1 1/2") longer and one and one half inch (1 1/2") wider than the O.D. of the DMA flange. Example, a 11X 42 inch DMA has a approx. 1 1/2 inch flange making the DMA overall 14 X 45 inches. Your saw cut hole for this size DMA would be 15 1/2 X 46 1/2 inches. Be sure to measure the overall dimensions of the DMA before cutting island surface. Cut and stub off piping and conduit so that they are vertical and can be installed through the bottom of the DMA sump while allowing enough length to pass through penetrations and connect to any extensions required. Drill corresponding holes in DMA bottom and fit penetrations. Locate DMA in position and support with pea gravel or other suitable material to correct height. Install "J" bolts and safety valve anchor bars to DMA. Plumb product piping and conduits as required.

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#### **CONCRETE GUIDELINES:**

Pour concrete up to, but <u>DO NOT</u> cover, the dispenser mount flange on top of DMA.

# **DISPENSER MOUNTING AND HOOKUP:**

After concrete has fully cured, remove dispenser base mount bolts or "J" bolt hardware, caulk DMA flange with suitable material to prevent water intrusion, mount dispenser and connect piping/electrical system. Please review the enclosed details/drawings.

#### **SINGLE WALL TESTING:**

After concrete has cured and all penetrations have been sealed, you may test the integrity of the sump by filling the sump with water 2" above the highest product penetration. Always follow all local regulations and restrictions.

#### **DOUBLE WALL TESTING:**

After completion of the integrity test, you may test the sump under pressure, vacuum or liquid. For pressure, apply up to 2 psi to the test port(s) installed within the sump body interstitial space. Under vacuum, the sump may be tested to a minimum of 15" and a maximum of full vacuum at 29.95". Always follow all local regulations and restrictions.

PLEASE NOTE: U. L. Listed DMA sumps require a listed, approved, electronic monitor/alarm system to be installed for operator notification in the event of product leakage into sump area.

# ADDITIONAL TESTING REQUIREMENTS - STATE OF FLORIDA ONLY:

### Leak Test Requirement:

- 1) a. Fill entire sump within 4 to 6 inches of top.
  - b. Observe water level for a minimum of 3 hours.
  - c. Water level shall not decrease more than allowable for normal evaporation.
- 2) a. Fill interstitial space of sump within 4 to 6 inches of top.
  - b. Observe water level.
  - c. Water level shall not decrease more than allowable for normal evaporation.

Interstitial space shall be tested by vacuum (5 bars) or pressure (2 psi) for a minimum of 10 minutes.

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#### **MAINTENANCE AND INSPECTION:**

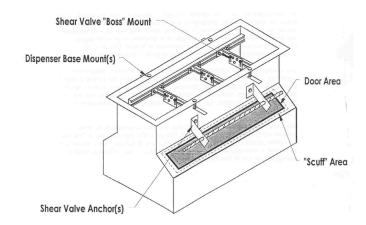
Fiberglass containment sumps require periodic inspections to check for damage that can occur during operation or from natural causes. Any shatters, tears or cracks must to be repaired so as to bring the damaged area equal in strength to the original section. Any above ground exposure must be covered by UV protection either in original construction or with gel coats or pigments.

Poly-Composite containment sumps require periodic inspections to check for damage that may occur either in operation or from natural causes. Any shatters, tears or cracks cannot be repaired as in fiberglass containment sumps. Poly-Composite containment sumps have no UV protection and are for below ground use only.

Periodically inspect the DMA base mounting and safety/impact valve anchor bracket systems. Check these for tightness and any visual damage, cracks or corrosion.

Containment sumps and their bracket, seal and mounting anchors can be inspected during the normal maintenance and service procedures done on the dispenser filters, submersible pumps and other equipment that is installed within the sumps (see manufacturer's equipment maintenance instructions).

# DMA DOOR INSTALLATION INSTRUCTIONS



# PLEASE NOTE: Return tools to acetone between use to prevent bonding materials from drying on them.

1). <u>Pre-Bonding Surface Preparation</u>: Use medium to heavy grit sand paper, scuff up all seam areas a minimum of 2" each side of the door/box. It is very important that

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this be done fully, as the bonding materials will not adhere to any surface that has not been sanded. BE SURE TO WEAR A DUST MASK!!

2). Seam Laminations: ALWAYS WEAR GLOVES WHEN HANDLING FIBERGLASS BONDING MATERIALS! Lay out and tear/cut fiberglass material at each seam to be bonded (two per seam). Mix one (1) pint resin and one half pint (1/2) putty material per door in a large bucket at a time, for ease of handling. Hardener ratio at 70 degrees F. & 30% humidity is two (2) ounces per gallon for resin and one (1) ounce for putty. This will vary with temperature and direct sunlight. If used in direct sunlight or in temperatures above 80 degrees, reduce hardener as per instructions from supervisor or Western Fiberglass, Inc. personnel. Mix thoroughly, scraping the sides of the buckets with the stir stick.

Use squeegee or brush, and apply putty liberally to area of first seam, being sure to completely cover all fasteners, if used and fill all gaps. The putty will provide a smooth transition for the fiberglass material to cover. The fiberglass material does not like to make 90 degree turns, this is why we use the putty to create a smooth surface with no sharp turns for the fiberglass. Lay first piece of fiberglass material across seam area evenly.

Wet-out or soak, with brush, liquid resin over fiberglass cloth material completely, material will go clear when fully saturated. Use pig bristle type roller tool to "rollout" air bubbles gently, so as not to displace putty. Remove all bubbles. Apply second layer of material in same manner. Your laminate should appear clear, with no air bubbles or pockets in view and all fasteners covered.

If additional resin is required, use only resin from Western Fiberglass, Inc. The resin used in construction of all Western Fiberglass, Inc. components is corrosion resistant resin, made for use in fuel and chemical applications.

3). <u>Test Procedures</u>: After the door bond is completed, you may test the integrity of your seal. This is important to ensure that the door will not allow any contained fluid to leak. Check with local regulations for required testing procedures. A common test procedure is to fill the sump with water after the door bond has completely cured, usually overnight, and observe bond seam for any leaks.

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