



Certified to  
NSF/ANSI/CAN 50  
ANSI/APSP/ICC-16 2017



## VGBA 2017 R18MFNFXXX DRAIN INSTRUCTIONS:

### INSTALLING ONTO RETROFIT AND DAMAGED MUD FRAMES

FOR MODEL: R18MFNFxxx - (xxx = COLOR SUFFIX), MEETS OR EXCEEDS ANSI/APSP/ICC-16 2017

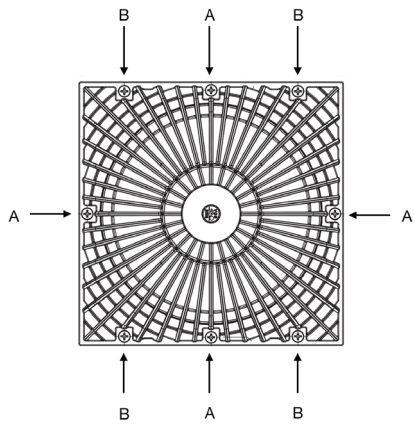
#### IMPORTANT SAFETY INSTRUCTIONS READ, FOLLOW, AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS

**Structural Integrity Notice:** AquaStar Pool Products, Inc. requires contractors to verify the vacuum-load capacity of pre-existing structures. Be aware that standard visual inspections might miss certain structural deficiencies. AquaStar cannot be held liable for complications arising from insufficient structural support.

#### FASTENERS REQUIRED FOR SQUARE RETROFIT DRAIN COVERS

AquaStar's 2 x 2 grid 18" x 18" SOFA, using four 9" x 9" retrofit covers, requires four screws per each cover. Installers need to determine the necessary screw holes based on the existing mud-frame. Suitable configurations are: four screws with one at each side's center [A], two screws on opposite sides [B], or a screw near each corner [C]. [A] and [B] configurations can be rotated 90-degrees, [C] can be mirrored. Refer to Figure 1 for a representation of the configurations.

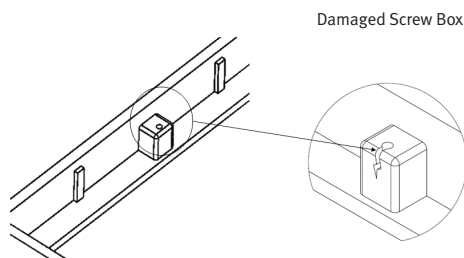
Figure 1 - Alternative Configurations



#### EVALUATING AND SELECTING SCREW BOSSES

If the screw boss appears damaged, select an alternative screw hole pattern for use. Refer to Figure 2 as an example of a damaged screwbox.

Figure 2 - Broken Screw Box



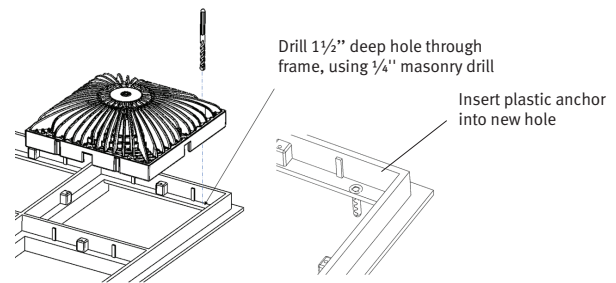
#### REPLACING DAMAGED OUTER EDGE SCREWS

If your chosen new screw hole location falls on the outside edge of the mud frame that is over concrete, follow these steps:

Utilize the drain cover as a guide to mark the location for the new screw hole. Using a 1/4" masonry drill, drill a new hole through the frame that is 1 1/2" deep. Press the included plastic screw anchor into the newly created hole.

Refer to Figure 3 for an illustration of the process.

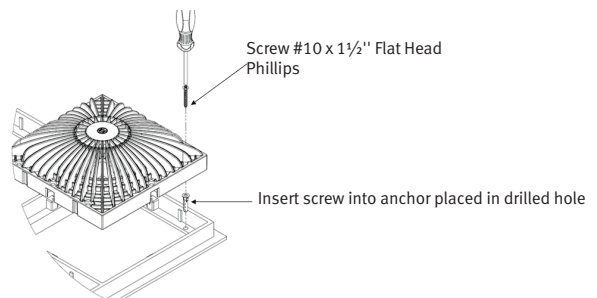
Figure 3 - Drilling New Hole



#### PREPARING HOLES FOR OUTER EDGE SCREWS

With a hand screwdriver only, insert a #10 x 1 1/2" Flat Head Phillips screw through the drain cover opening and into the plastic anchor. As you tighten the screw, the plastic anchor will expand, securing the screw in place. Refer to Figure 4 for an illustration.

Figure 4 - Securing Outer Edge Screws



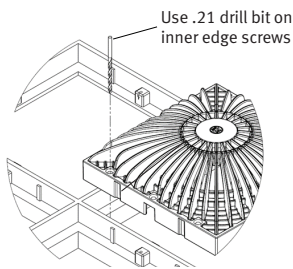
## REPLACING DAMAGED INNER EDGE SCREWS

If your chosen new screw hole location falls on the mud frame crossbars, follow these steps:

For all Alternate Screw holes that are NOT on the outer edge of the frame use a no. 21 drill bit (.159) to drill new screw mounting holes. Refer to Figure 5 for an illustration.

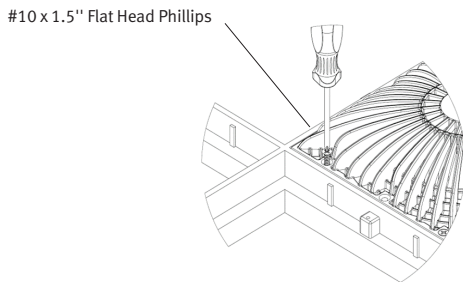
**NOTICE:** Follow the RUPCxxx Instructions to select the correct screw to use. Hayward and Waterway mud frames use different screws sizes and types.

Figure 5 - Preparing Inner Edge Screws



Screw in the #10 x 1 1/2" Flat Head Phillips into the frame. See Figure 6 for an illustration.

Figure 6 - Securing Inner Edge Screws



## INSTALLATION OF R18MFNFXXX INTO WATERWAY®\* AND HAYWARD®\* FRAMES

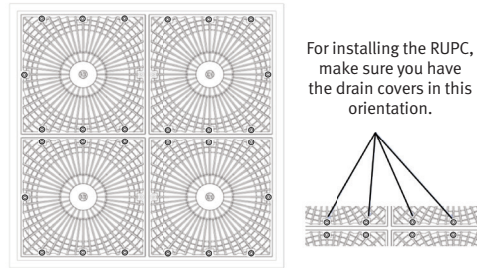
To ensure a proper installation of the RUPC into both Waterway and Hayward frames, follow the steps outlined below:

### ORIENTATION OF DRAIN COVERS

Ensure that the drain covers are oriented correctly before starting the installation process.

Refer to Figure 7 for the correct orientation of the drain covers

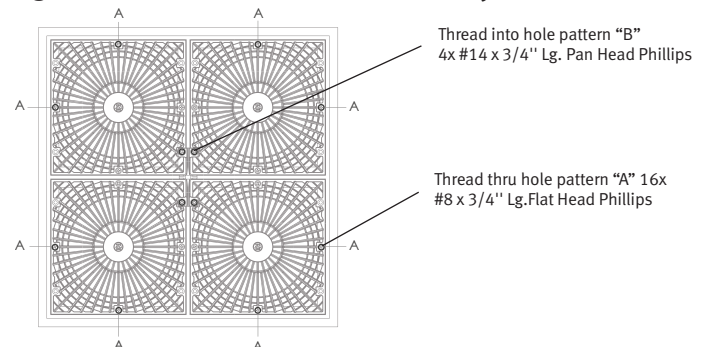
Figure 7 - RUPC Drain Cover Orientation



### INSTALLATION INTO A WATERWAY FRAME

To install the RUPC into a Waterway frame, insert a #14 x 3/4" Pan Phillips screw through both the RUPC and the drain cover, then screw it into the frame. Refer to Figure 8 for an illustration of this process.

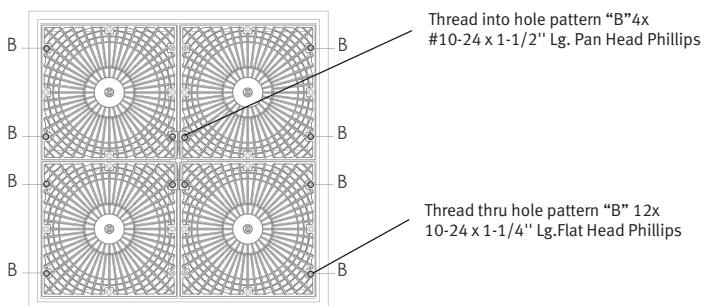
Figure 8 - Installation into a Waterway Frame



### INSTALLATION INTO A HAYWARD FRAME

To install the RUPC into a Hayward frame, insert a 10-24 x 1 1/2" Pan Phillips screw through both the RUPC and the drain cover, then screw it into the frame. Refer to Figure 9 for an illustration of this process.

Figure 9 - Installation into a Hayward Frame



### VERIFYING INSTALLATION

To ensure that the drain cover is secure: Firmly grip the drain cover and give it a hard tug. If the cover remains in place and doesn't show any sign of loosening, it is securely installed.