

Recommended Tools

- **3/8" Electric Drill**
- **Metal Bit: 1/4" x 4"**
- **3/16" x 4" Concrete Bit**
- **1/4" Driver for SDS Screws**
- **Roto-Zip rotory 30,000 rpm**
- **Roto-Zip 1/8" metal cutting router bit #XB-MCI**
- **Mini-Hacksaw**
- **Keyhole saw (small)**
- **Assorted Metal Files**
- **Flat blade screwdriver**
- **Phillip type screwdriver**
- **Black or Blue (non-permanent) fine tip marker pen**

Plus other normal cleanup cloths, solvents, personal tools.

Ground Floor Installation Instructions for Non-Insert *PestGuard WaterGate™

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STEP 1: Inspect the interior deck area of the enclosure to determine where and how many low spots there are. Usually low spots will have ponding water standing or stains from past ponding water that has dried up. Another sure way to tell is by using a level (at least 4 feet in length) to accurately determine where the **PestGuard WaterGate™** should be located.

STEP 2: Mark with erasable marker - locations on the exterior (screened side) of the enclosure where low spots in the deck were located in Step 1 above. This will be either a 1"x2" or 1"x3" extruded channel identified by having a built-in spline groove. (As a Special Note: For best results installing a **PestGuard WaterGate™** between every structural upright is highly recommended).

STEP 3: Start the installation from the outside (exterior) of the enclosure by marking cut-out using a template or by measuring at each low spot area and marking with an erasable type marker pen. The cutout on the exterior shall be 1/2"x4"

STEP 4: From the outside of screen enclosure (Spline groove side) begin by drilling a 1/4" size hole centered horizontally and vertically within the area marked as "cut out area" as in Step 3 above. Use a 1/4" x 5" metal drilling bit. While holding the power drill level & straight (up & down) as well as (side to side) drill through both the outside and inside vertical walls of the bottom extruded aluminum channel.

STEP 5: With a 30,000 rpm "Roto-Zip" power tool with "Roto-Zip" 1/8" router bit (Number XB-MCI) insert router bit into the pilot hole drilled in Step 4 above and Roto-Zip cut the aluminum base channel drain hole out - CAREFULLY - making sure to stay inside the boundaries of the cut-out markings and to - NOT - cut into the built-in spline groove or existing screening in any manner with the Roto-Zip tool as that will cause significant damage in the process.

STEP 6: With the pilot hole already drilled as called for in Step 4 as above - move to the inside of the screen room and measure and mark the base (vertical smooth side) aluminum channel, again as was done on the outside. Area to be cut-out to be 1/2"x4" and should be placed centered on the pilot hole (left & right) and even with the bottom of the aluminum channel where the channel makes contact with the deck.

STEP 7: With both inside and outside holes cut out of the aluminum base channel, place a **PestGuard WaterGate™** on the inside and the outside of the enclosure by centering it over the base channel cut-out and inserting two #8 self drilling color matched screws (included in the parts packet) one screw snug but not tight in the "pivot" hole (So as not to crack it), the other snug but not tight in the "slotted" locking hole (so as not to crack it).

STEP 8: Clean-up any debris created by the installation procedure, wipe down aluminum and in general tidy up all the work areas neatly to complete the job.

INSTALLATION TIPS:

Use hand held tools such as a mini-hacksaw; metal file; cleaning fluid; clean-up rags, etc. to make job easier and look better.

By placing a scrap piece of sheet aluminum; vinyl; wood shim; or other barrier under the aluminum base channel while Roto-Zip cutting the drain holes in the aluminum base channel, you will protect the router bit from hitting the deck floor and avoid dulling or breaking it.

Normally (2) **PestGuard WaterGate™** should be installed, one on each side of the aluminum base channel. This will better deter pests from entering the screened area. A variation option can be: not to install a **PestGuard WaterGate™** on the exterior base - but rather use the Roto-Zip tool with 1/8" router bit to cut a smooth & straight drain slot at the absolute bottom of the aluminum extrusion base channel of at least a minimum 9-0" length to drain the water away.

(Again, be sure to protect the router bit from damage as suggested in the preceding paragraph above).

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Multi-Floor Installation Instructions

*PestGuard WaterGate™ Insert

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EXPLANATION:

This type installation can take place at the 1st floor level and up on both new and retro-fit balcony type screenwalls. When screen walls are built to the inside of balcony safety railings as required by many building code regulations and because the pickets of the safety railings prohibit workman access to the exterior of the screenwall to perform necessary installation steps - and - because danger naturally increases as the height of the building gets higher, it is required to install our Multi-Floor PestGuard WaterGate™ differently than the GroundFloor PestGuard™ version. (NOTE: At times the PestGuard WaterGate™ Insert will be chosen over non insert installation for ground floor screen rooms and pool cages. In these cases, the installation instructions explained here should be used instead of those shown on "Ground Floor Installation Instructions for Non-Insert PestGuard WaterGate™")

STEP 1: Determine the number needed and the location requirements of the Multi-Floor PestGuard WaterGate™ insert units to be installed in the balcony screen wall.

(Note: Installation of 1 PestGuard WaterGate™ insert between each structural upright is recommended).

STEP 2: Remove existing screen spline and lift existing screening out of the way from the panels of the screen wall where installation will take place. Be careful not to damage spline or screen if they are good enough to be re-installed as in #6.

STEP 3: Measure a 9-0" inch length of existing aluminum base channel to be removed - to allow the replacement of a the new 9-0" length of aluminum base channel insert with PestGuard WaterGate™ being installed in vacated area(s). Cut out and remove old section of base channel. (Note: Allowing 1/16" extra length added to the 9-0" piece being cut out of the existing base channel - will allow room for the new 9-0" insert to slide into place - yet still be snug).

STEP 4: Loosen pivot screw from PestGuard WaterGate™ and remove from new base channel insert until installation is complete.

STEP 5: Replace vacated 9-1/16" aluminum base channel that was removed in STEP 3 - with new 9-0" aluminum base channel insert fitted to the vacated opening. Install 1x2 or 1x3 splicing angles over both ends of new aluminum base, being careful that 1" of the 2" angle is installed over both old and new channel so that the WaterGate™ pivots smoothly and insert (4) 9/16"x 8 SDS to fasten insert piece into place. In some areas it is required that the insert be anchored by "Quick Set or "Tap-Con" fasteners. If so, drill one 3/16" hole centered through each end of the insert angle overlap of the 1"x2" or 1"x3" base channel. Drill down to concrete deck then keep drilling with a 3/16" masonry bit to a hole depth able to accept a minimum 3/16"x2-1/4" "Quick Set" or "Tap-Con" anchor screw. Structural code requires not exceeding more than 24" O.C. between hold down anchors and not more than 2" to the side of upright and base members meeting points.

STEP 6: Re-screen panels and screen spline that were loosened in STEP 2. Sometime the same screen and spline that was loosened can be re-used - however - in most cases new screen and screen spline is needed - if so - they are supplied by others and not in the PestGuard WaterGate™ price - cost should be added at first point of sale to customer.

STEP 7: After re screening, replace the PestGuard WaterGate™ using the pivot screw that was removed in STEP 4.

STEP 8: Seal with good grade of latex caulking (not included) - the 1x2 or 1x3 base aluminum deck channel on the inside of screen wall only at the point where it meets the balcony deck. Do Not Seal Exterior.....

INSTALLATION TIPS:

By placing a piece of scrap aluminum; vinyl sheet or wood shim under the aluminum channel between it and the balcony deck - you can avoid hitting the concrete (or other) deck surface area with your cutting tool thus preventing possible damage or dulling of its cutting edge.

Cleaning fluid, rags and various hand tools may help in installation process and allow you leaving the job-site clean & neat.

NOTE: If installation is done within 8" of a structural upright of the enclosure, one "Quickset" or "Tapcon" at each end of insert must be installed to preserve the structural integrity of the enclosure.

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