

# Basement Egress Window and Egress Window Well

## General Installation Guidelines

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#### Overview

This Installation Guideline is intended to give the installer a general overview on how to correctly install a Basement Egress Window, and Basement Egress Window Well. This Installation Guideline is not intended to replace the Manufacturer's Installation Instructions, but to supplement and expand on them. An Installer must follow the Manufacturer's Installation Instructions when ever they vary from these Guidelines to keep the Manufacturers Warranty Enforce.

#### NOTE:

1. **It is the responsibility of the owner, architect, contractor and or builder to select products that comply with applicable, state and local building codes that is appropriate for the application and use. A Building Permit may be needed.**
2. **REDDCO Inc is not responsible for claims resulting from the failure of the contractor or homeowner to properly install or maintain the Egress Window, Window Well, and Cover.**
3. **Call your local diggers hotline before beginning excavation to avoid accidental contact with underground utility lines**
4. **Gutters, Down Spouts, Faucets on exterior walls, Sprinkler Heads and Sump Pump Outlets must be at least 6 to 10 feet away from the window well. All water must be directed away from the well to assure proper drainage.**
5. **Grading around the house must be sloped away from the Window Well at a slope of 1" per foot for proper drainage.**

#### Step 1: Mark a centerline and dig the hole



Mark a center line on the foundation wall above where the Basement Egress Window and Basement Egress Window Well are to be installed.

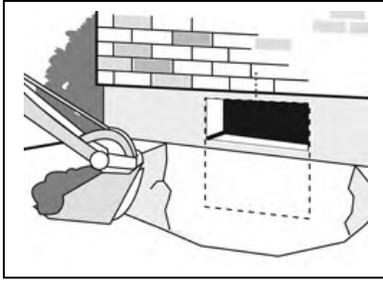
Use a Back Hoe to dig a hole large enough to accommodate the Basement Egress Window Well so it is centered across the planned Egress Window opening. Dig a hole 4 foot wider at the foundation wall, 1 foot wider than the projection and 19" greater in depth than the Window Well being installed.

Clean any excess dirt off the foundation wall. Measure from your centerline each way to mark the inside dimension of the Window Well then draw a line plumb and level on each side of the centerline.

Draw a level line at the top height of the Window Well. The Window Well should be 2 to 3 inches above final grade to allow for proper cover fit and drainage.

**Note: A lentil will have to be installed if; 1) the ceiling joists are running perpendicular to the wall the window is being installed into; 2) a window is being put into a Concrete Block Wall; 3) a 48" wide or greater Sliding Egress Window is being installed.**

## Step 2: Cut hole in foundation wall for Egress Window



Mark rough Egress Window opening on foundation wall with a grease pencil or chalk. Make the rough opening  $\frac{1}{2}$  inch larger in width and height than the outside dimensions of the window frame to allow for shimming the frame into square.

If the installation requires the use of a lenti (Wide Sliding Windows and when floor joists run perpendicular to the window) or a pressure-treated wood frame (Cement Block Walls); include these in the height and width measurements.

Cut the rough window opening with a Concrete Demolition Saw, starting on the outside of the foundation wall. A concrete saw is an unwieldy tool that creates a large cloud of dust, so go slow, wear full eye protection (goggles) and a tight fitting dust mask.

In poured concrete make the first pass  $\frac{1}{4}$  inch deep, in concrete block a 1 inch deep first pass can be made. Once a path is established for the saw blade you can start making deeper cuts. The last cut should be at least 3 inches or half the wall thickness deep.

When finished outside repeat the marking and cutting process on the inside foundation wall. Expect dust to be a problem, contain the dust by using plastic sheeting inside the basement.

After cutting the **Concrete Block Wall** on both sides start tapping the upper blocks with a 3 pound hammer until they either break loose whole or crumble into pieces. Clean up the rough opening by chiseling away any obstructing mortar. Go to Step 3:



After cutting the **Poured Concrete Wall** on both sides break-out with a 3-pound hammer, clean up cut surfaces if necessary using a cold chisel and 3-pound hammer. Go to Step 4:

## Step 3: Concrete Block Wall - Installing a Pressure-treated Wood Frame

- Build a Pressure-treated Wood Frame to fit the rough opening.
- Apply construction adhesive to all surfaces that will contact the Pressure-treated Wood Frame.
- Place the Wood Frame into the rough opening so that the outer edge of the Frame is flush with the outside of the Concrete Block Wall.
- Nail the bottom of the Frame to the (bottom of rough opening), then nail the sides and top of Frame with 2  $\frac{1}{2}$  inch harden concrete nails or a power-loaded driving tool. **Note:** Drive the nails into the mortar joints not the concrete blocks to avoid cracking the blocks.

## Step 4: Installing the Egress Window

- Begin the new window installation by test-fitting the Egress Window into the opening, resting the window on the sill; align it squarely with the opening, then tip it forward and into place.
- Use tapered wood shims to level and plumb the window in the rough opening. **Note:** Make sure the Egress Window remains square as you shim; too tight a fit will keep the window from moving freely later. If installing a **Hinged In-swing Window** make sure you insert shims directly under the hinged area to allow for proper window support when the Window is hinged open. If installing in a **Concrete Block Wall** go to step 4-c; If installing in a **Poured Concrete Wall** go to step 4-d.
- Concrete Block Wall** - Once the window is square and plumb, fasten window into a pressure-treated wood frame with 1  $\frac{1}{2}$  inch long galvanized or stainless steel screws driven through the tapered wood shims. **Note:** Pilot holes should be drilled through the vinyl window frame and shims to prevent cracking of the vinyl frame and shims. Move to step e).



- d) **Poured Concrete Wall** - Use 1 ½ – 2 inch long Concrete Anchor's for a Poured Concrete Wall, also driven through the tapered shims. **Note:** Pilot holes should be drilled through the vinyl window frame, shims and into the Poured Concrete Wall to prevent cracking of the vinyl frame and shims, and to facilitate the installation of the Concrete Anchors.
- e) Make sure the window moves free and smooth.
- f) Seal the gap between the window and the rough opening by stuffing insulation around the perimeter of the window.
- g) Trim the window inside and out as required.
- h) Caulk with a quality water proof caulk.

**NOTE: Make sure you don't caulk the weep holes closed!!**

### Step 5: Drain Pipe Installation

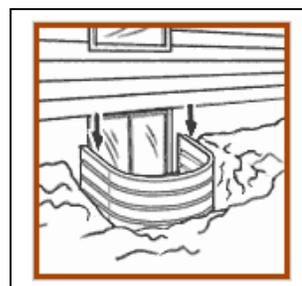
If the house has a foundation drainage system it is strongly recommended that a 6 inch minimum diameter drainage pipe and drain cover be tied into the system, to assure adequate drainage during heavy rains.

### Step 6: Hole Bottom Preparation

- a) Determine the final mounting location of the Window Well; it should be installed so it sits 3 to 4 inches above final ground level and 8 to 10 inches below the window sill.
- b) Mark the top of the Window Well on the wall.
- c) A 12 inch layer of ½ inch Coarse Stone is then spread in the hole.
- d) Extend the 12 inch layer of ½ inch Coarse Stone 12 inches beyond the exterior dimensions on all sides of the Egress Well being installed

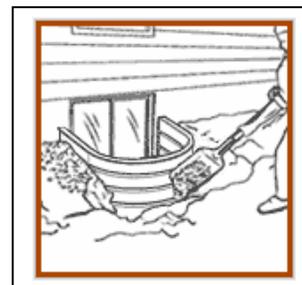
### Step 7: Setting the Window Well

- a) Center the Window Well over the window and level the Well.
- b) Do not distort the window well during this process or the well cover may not fit properly.
- c) Drill mounting holes through the Window Well flanges to accommodate the diameter of the fasteners if necessary.
- d) Drill mounting holes into the foundation wall to accommodate the fasteners being used if necessary.
- e) Clean the flange surfaces that will butt up against the foundation wall.
- f) Apply a quality polyurethane caulk sealant to the flanges.
- g) Check the Window Wells inside dimension before fastening to wall to make sure the well is not distorted, adjust if necessary.
- h) Fasten the well to the foundation wall.
- i) Add approximately 3 inches of additional ½ inch Coarse Stone in the bottom of the well by the foundation wall
- j) Slope the additional ½ inches of Coarse Stone away from the foundation wall at a rate of 1 inch per foot. The stone should be no higher than 3 to 4 inches from the bottom of the window sill.



### Step 8: Backfilling the Window Well.

- a) Use knee braces to support Window Well while back filling.
- b) Back fill the outside of the Window Well by hand with a 12 inch wide layer of 1/2 inch Coarse Stone up to a level of about 8 to 10 inches from ground level, fill the remaining 8 to 10 inches with top soil to allow for vegetation growth.
- c) Final grade level around Window Well should slope away at a rate of 1 inch per foot and be no higher than 3 to 4 inches from the top of the Window Well.



**Note: Do Not Use Frozen Dirt or Large Rocks to Back Fill the Well**

### Step 9: Attach Well Cover, or Grid and or Optional Ladder