



Egress Window Spec

Adopted October 30, 2019, Updated June 25, 2025

- A completed Modification Request must be submitted to the Maintenance & Modification Committee for review. The committee will then provide a recommendation to the Board. The request will then be reviewed by the Board at the next regularly scheduled Board of Directors meeting.
- Your Modification Request must include the following items:
 - City permit acquired by the vendor
 - The contractor's Certificate of Insurance (COI)
 - Must have an architect or engineer evaluate the integrity of the foundation wall. If architect or engineer finds an issue during inspection, the co-owner is responsible for correcting the issue prior to installation. If issue is found, the issue must be corrected by the co-owner regardless if the co-owner decides to proceed with egress window installation.
 - Window opening should be enlarged no more than 12" in height from below original window opening base.
 - The window well must be made from a durable material—pressure treated lumber, galvanized steel, plastic or concrete.
 - Must be excavated to footer. The footer tiles must be tested and/or scoped to make sure they accept water. Any water running off roofs into window well must freely drain into footer tile. If replacement is needed, a plastic drain pipe in silt sock should be bedded in 6" pea pebble. If replacement is needed, the issue must be corrected by co-owner regardless if co-owner decides to proceed with egress window installation. A silt sock is a fabric sock placed over the vertical drain that facilitates water diffusion over an extended surface area. The excavation should be back-filled with crushed stone. Excavation should be done to MIOSHA and MITA safety standards.
 - A piece of perforated drain tile with sock & cap should be installed vertically from grade in window well footer tiles.
 - Steps must be taken to secure deck foundation and not undermine deck supports.
 - Gutters and downspouts must be installed at upper roof eaves to Village spec (full width, 6" brown aluminum.
 - Consent to alteration signed by both co-owner & Association. Association will register the consent with Washtenaw County Register of Deeds on behalf of the co-owner.
 - Co-owner is responsible for any issues that arise during installation and any future problems caused by egress window installation.
- Please review the City of Ann Arbor's requirements, and helpful information from Bilco regarding egress window assembly & installation instructions.



City of Ann Arbor

PLANNING & DEVELOPMENT SERVICES — CONSTRUCTION SERVICES

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 . 734.794.6263 734.994.8460 building@a2gov.org

WINDOWS

Replacement Windows

Rough inspections on replacement windows are only required when the size of the fenestration is changed to accommodate the new window. Existing required egress windows cannot be replaced with noncompliant windows. Compliance with existing emergency egress codes is only required when fenestrations are enlarged to accept the new window.

If the window fenestrations are not enlarged, the applicant is encouraged to select the largest window opening that can be accommodated by the existing structural configuration.

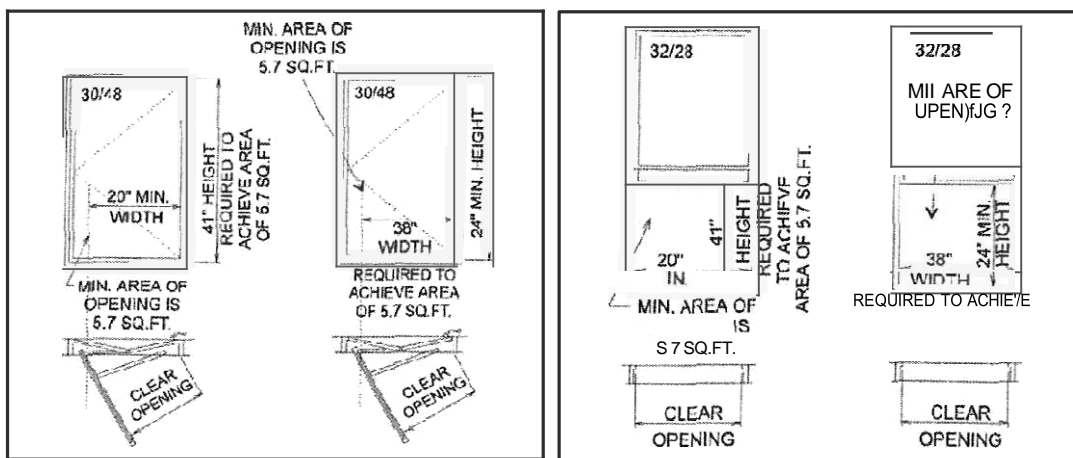
It is recommended that you consult a member of the Building Inspection Staff in the Planning and Development Services Unit for clarification on individual issues.

EGRESS WINDOWS

Egress windows are windows with a defined set of specifications designed to accommodate occupant escape and rescue-worker entry during a residential fire. They are required in all bedrooms located in the first four stories of a residential structure and all new basements capable of being converted into habitable space. The only exception is habitable space with egress doors exiting directly out to a public street, public alley, yard or court.

The windows must be operable from the inside to provide a full clear opening without the use of keys or separate tools. Basements containing bedrooms are required to have an emergency egress window in each bedroom, but not in adjoining areas of the basement.

Here are some examples of typical egress windows:



Casement

Double Hung

Window Specifications

All emergency egress windows shall have a minimum net clear opening area of 5.7 square feet. The only exception to this rule is that grade floor openings must have a minimum net clear opening of five square feet. A "grade floor" window is generally defined as being a window that can be entered without utilizing a ladder. Egress windows must have a minimum net clear opening height dimension of 24 inches. The minimum net clear opening width must be 20 inches. The sill height cannot be more than 44 inches above the finished floor.

Window Wells

Window wells are required for escape egress windows located below grade. Wells must have a minimum horizontal area of nine square feet, and a minimum horizontal projection and width of 36 inches.

The area of the window well must allow the emergency escape and rescue window to be fully opened. No window well shall be deeper than 48 inches, unless ready access is made available by permanently affixed steps or a ladder. The ladder or steps shall be permitted to encroach a minimum of six inches into the dimensions of the window well. Ladders or rungs shall have a inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

SCAPEWEL™

Assembly and Installation Instructions

READ ALL INSTRUCTIONS BEFORE INSTALLATION

IMPORTANT. Check local building codes regarding window well egress standards & requirements.

STEP 1 Excavation

Prior to excavation: Document all underground utilities that may affect the installation of any window wells (e.g., gas, electric, sprinklers, etc.). Prior to bringing in machinery, verify equipment clearances.

Excavation: Excavate the area to allow adequate work space and clearance for the window well (2 feet minimum). Remove large rock and debris from the excavated area. Excavate below the window opening as required for proper sub-drainage (see following instructions regarding sub-drainage) and to provide clearance for window well side panels and vertical supports (see STEP 6). Verify local frost depth conditions to avoid heaving of the foundation.

Sub-Drainage: ScapeWEL is designed to drain directly into a free-draining rock bed established below the well. If a perimeter drainage system exists, it is best to tie the well drainage into this system by running a pipe extension up from the drain line to the base of the well. Once the window well has been installed, fill the bottom of the well with clean 3/4" free-draining rock. If a perimeter drain system does not exist, the area below the well should be excavated to the top of the footing and filled with clean 3/4" free-draining rock to obtain maximum drainage volume.

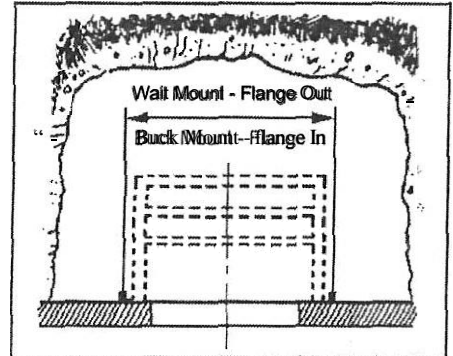


Figure 1

STEP 2 Foundation and Measurements

Foundation Preparation: Clean foundation substrate of dirt, debris, or excess concrete that would interfere with the Mounting Flange from having full contact with the foundation wall. Make sure that there is at least 4" of foundation material between fasteners and the window opening (see Figure 2).

Selecting the method of Wall Attachment: Each side panel is equipped with a universal mounting flange with pre-drilled keyholes for ease of installation. Those versatile aluminum mounting Ranges allow the window well to be attached directly to a foundation wall or metal window buck.

Wall Mount Flange Position: the mounting flanges are supplied from the factory in the position for direct anchoring to the concrete foundation wall (keyholes in flange are located to the outside of the window well).

Back Mount flange Position. In the Buck-mount position, mounting flanges are designed to accommodate manufactured metal window bucks with screw anchoring systems. To switch the flanges to the Buck-mount position (keyholes in Range are located to be inside of the window well), remove the screws that hold the keyhole angles to the panel channels, Inverse the right and left angles (ensuring that 'keyholes' are right-side up) and reattach them to the pre-punched holes in the channel with the keyhole legs to the inside. (note: the Buck-mount flange position can also be used for wall mounting in retrofit installations, eliminating the need for our channel angles.

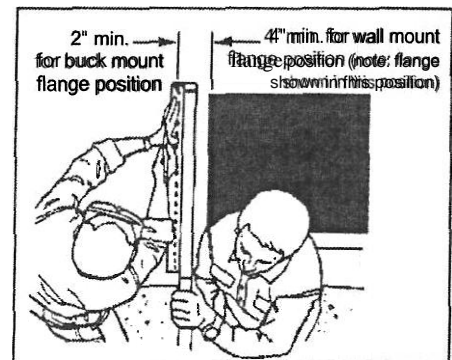


Figure 2

Measuring Anchor Hole Location for Attachment to the Foundation:

Horizontal Hole Measurements: The ScapeWEL window well should be centered on the window opening in the foundation. Measure and mark the center point of the window opening on the foundation. Using the table at right, find the dimension for the window well model and flange position that you are using. Center this dimension on the window opening center point and mark the end points on the foundation. Snap a plumb vertical line at these points with a chalk line.

Vertical Hole Location: Position top of well on the foundation at least four (4) inches above where m finished grade will be. In order for the window to open, the well must be positioned with the bottom of the cover notch in the side panels above the top of the opening window sash. If mounting the window well against an existing home in which the exterior siding is at or near grade, it may be necessary to build out from the foundation the width of the siding with treated lumber at least 5 1/2" wide (e.g., 1 x 6 or 2 x 6). The notch at the top of the side panels must be clear to allow for an optional cover (see STEP 3). It is essential that the anchor penetration be adjusted accordingly to ensure the required depth into the foundation.

Model Number	Horizontal anchor hole distance for foundation anchoring	
	Wall-Mount Flange Position	Buck-Mount Flange Position
4046-42	49-5/8"	40-1/8"
4048-54	61-5/6"	52-7/8"
4048-66	73-5/8"	64-7/6"
4862-42	49-5/8"	40-7/8"
4862-54	61-5/8"	52-7/8"
4662-66	73-5/8"	64-7/8"

Note: all measurements are to the "B" marked holes.

Anchor Hole Location for Attachment to a Window Buck: For direct attachment to a window buck with back-out screws, convert the mounting flange from the Buck-Mount position as described above in this section and use the corresponding holes listed below.

"M"™ holes in flanges are for Monarch brand window bucks

"B" holes in flanges are for Boman-Temp brand window bucks

Sides panels should be coached to foundation wall or window back before saapying on the step panels.

STEP 3 Side Panel Attachment

Wall or Buck Mount Configuration Mounted Directly to the Concrete: Keyholes marked "B" on the flanges will be used for both Wall-Mount range position (key holes to the outside of the window well) or Buck-Mount flange position (key holes to the inside of the window well). Use a minimum of six (6) fasteners per Mounting Flange (12 per well) with (2) at the top and (2) at the bottom. (NOTE: Fasteners are not supplied with the window well. Fasteners must be designed for, and appropriate to, the wall material to which attachment will occur. The Mounting Flange holes are designed to accept a 1/4" (.25a) diameter fastener. The method of attachment must be adequate to restrain earth loads imposed on the well.)

Embedment into the wall surface must be adequate to firmly secure the fastener but shall not be less than 1.5" penetration. Individual fasteners shall have an ultimate load tensile capacity (pullout) of at least 1,800 pounds, or a working load tensile capacity of 450 pounds. Ultimate load shear capacity (beriding) should be at least 1,700 pounds, or a working load shear capacity of 425 pounds (based on 3000 psi wall material). Wall materials less than 3000 psi may require deeper embedment to achieve required pullout and bending values. Seal/waterproof holes with an exterior grade structural adhesive when anchoring into hollow core masonry units. Attach a 12" horizontal brace under each side panel (see Figure 5). (Note: Brace not supplied with window well, use 2x4 or 2x6 member.)

Buck Mount Configuration Mounted to Metal Window Pouring Blocks with Back-Out Screws:

Use all back-out screws available on the buck. If the top and bottom holes extend above and below the buck use fasteners as indicated for mounting and secure the very top and the very bottom of the side panel flanges directly to the foundation wall. There must be a minimum of six (6) attachment points per flange including those provided on the window well.

STEP 4 Attaching the Step Sections

Step sections have open slots at each end which slip onto the protruding tabs located on the side panel. Push the step into the notch between the tabs (both sides at the same time), and force the step slots over the panel tabs until the step "snags" into place (see Figure 3). Use (2) 2-1/2" long paleo deck screws (four per step panel) fasten the steps to the side panels at each step/step panel connection (see Figure 4) (Note: Screws not supplied. Refer to local building code for cross pinning. If all ensure that the step will not detach during backfilling.)

STEP 5 Assembly Bracing:

In addition to the foundation side bracing mentioned in STEP 3, vertical bracing must be provided to prevent the well from pulling away from the foundation during backfilling. Use (2) wood T-braces measured to fit vertically from firm soil at the bottom of the excavated opening to the back of the step attachment on the side panels (see figure 5).

In order for the optional cover to fit, the ScapeWEL window well must be installed within a one inch (1") overall clearance. Proper casing prior to backfilling will ensure that the well will be square. Using a 2x4 as a guide, add both diagonal measurements and divide by two to obtain the desired diagonal brace length. Attach the first diagonal brace and place the second step, recheck the second diagonal for length before cutting. The two 2x4 braces must be the same length. Place the second diagonal brace on top of the first (see Figure 5) (NOTE: Braces not supplied with window well, use 2x4 or 2

STEP 6 Backfilling:

If sandy soil exists, line the opening with a permanent barrier (such as house wrap) to restrict sand from washing into sock. **FAILURE TO PROPERLY BACKFILL WIG VOID WARRANTY**

OUTSIDE of Well: Backfill evenly by hand on all sides as the hole is filled in; Do not do one side at a time. Sways use 1/4" bean free-airing rock or A6 stone completely around the well at least 12" in width to isolate the well from the earth. Fill area to within 4" of top step panel. This will keep window well movement to a minimum during cold weather freeze/thaw conditions and shifting soil. Do not use expansive soils, frozen soils, material that has debris, or organic material.

INSIDE of Well: Place a free-draining rock in the bottom of the well to within 1" of the window sill as described in Step 1 (Sub-drainage). Make sure the free draining rock fills the space directly under the side panel to the bottom of the excavation to provide additional support. Do not settle material around the well with water. Proper planning soil or free draining rock between steps by hand. Note: Sides and steps are protected with a slight covering that may straighten after backfilling which is normal and acceptable.

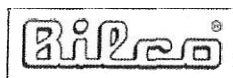
General Care and Maintenance:

The exposed surfaces can be cleaned with a mild nonabrasive cleaner and potable water. Follow manufacturer's limitations not on the dealer's make sure that polyethylene is an appropriate surface. ScapeWEL window well are finished with a powder and must be protected from damage during the remaining construction process. All construction equipment must be kept 2 feet away from the well during

Window Well Model

Model	No. of Sides	Inside Height*	Projection From Foundation	Height of Side Panels		Extension Code No.	Maximum Width of Opening		
				Standard	With Extension		Wall Mount	Buck Mount	Dome
404842	2	42"	41"	48"	X	X	42"	38"	4042C
4048-Rd	2	54"	41"	48"	X	X	54"	50"	4054C
4048-66	2	66"	41"	48"	X	X	66"	62"	4066C
4862#2	3	42"	49"	62"	81"	301g-42	42"	38"	4842C
4862a	3	54"	49"	62"	81"	30jg-md	54"	50"	4854C
4862-66	3	66"	49"	62"	81"	3019-66	66"	6T	4866C

* Side panels must extend 4" above grade level and 3-1/2" below ground level



The Bilco Company
P.O. Box 1203
New Haven, CT 06505

Installation
Questions?

Call 1-800-854-9724
Monday - Friday 8:15 A.M. - 5:00 P.M. est
or log-on to www.bilco.com

SNAP

Figure 3

SCREW

Figure 4

CROSS BRACE LENGTH

VERTICAL T-BRACE
HORIZONTAL SIDE BRACE

Figure 5



Selecting the Proper Size ScapeWEL™ Egress Window Well

STEP 1:

Measure and calculate dimension A as shown in the detail on the right based on the site's grade conditions and foundation height.

STEP 2:

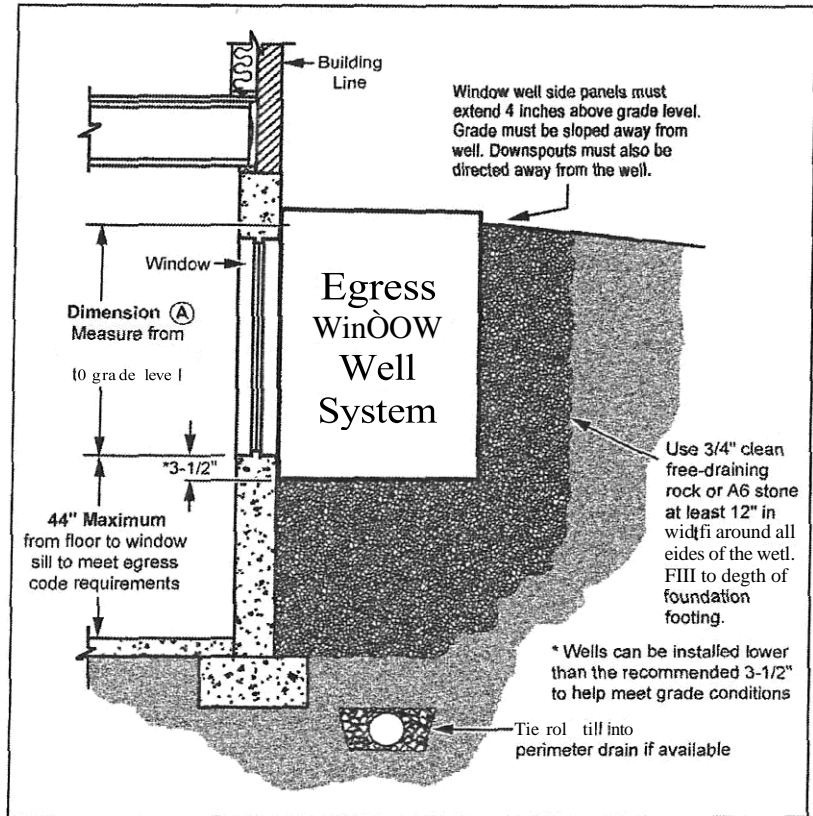
Determine the required window well side panel height by performing this simple calculation:

$$\text{Required Side Panel Height} - \text{Dimension A} + 7\text{-}1/2\text{'}$$

From the first column in the table below, select the closest side panel height that will meet the site conditions.

STEP 3:

Once the side panel height has been determined, read across and select desired window width. With the window size selected, read across to select the proper window well and cover.



ScapeWEL™ STANDARD SIZES AND MODEL NUMBERS

Well Model Number	Number of Tier Steps	Inside Width	Minimum Foundation	Side Panel Height			Maximum Window Width		Optional Dome Cover
				Depth	With Extension*		Wall Mount	Buck Mount	
					Height	Model Number			
4048-42	2	42"	41"	48"	X	X	42"	38"	4042C
4048-54	2	54"	41"	48"	X	X	54"	50"	4054C
4048-66	2	66"	41"	48"	X	X	66"	62"	4066C
4862-42	3	42"	49"	62"	81"	3019-42	42"	38"	4842C
4862-54	3	54"	49"	62"	81"	3019-54	54"	50"	4854C
4862-66	3	66"	49"	62"	81"	301a-66	66"	62"	4866C

*Extensions are only available for 3-tier window well models

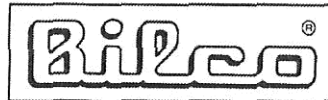
Note: The distance from the outside of the foundation wall to the inside face of the first step is 30"

BILCO Egress Window Wells satisfy International Building Code requirements for Emergency Escape and Rescue Openings per section R310.

Your Assurance of Quality

ScapeWEL[^]/StakWEL[^] Window Well

Every BILCO prOduct is designed to Operate to the customer's satisfaction and to provide years of trouble-free service. Should a part fail to function in normal use within a periOd of five (5) years from the date of purchase, a new part will be furnished at no charge.



Cut here (retain top half for your records)

WARRANTY REGISTRATION FORM ScapeWEL[^]/StakWEL[^] Egress Window Well



Homeowner (Door Location)

Installation:

Name: _____

Date of installation: _____

Address: _____

Self Installed

City: _____ ST: _____

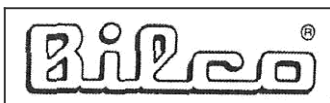
Contractor Installed

Zip: _____ Tel: (_____) _____

Contractor name: _____

Product Serial # _____

Phone Number: _____



Please mail, fax, or e-mail completed form to:
The Bilco Company, 3400 Jim Granger Road, Sandusville, OH 44870
Fax: (740)455-3400, E-mail: residential@bilco.com