

SureBuilt Manufacturing

Installation Guide



RESIDENTIAL WINDOWS

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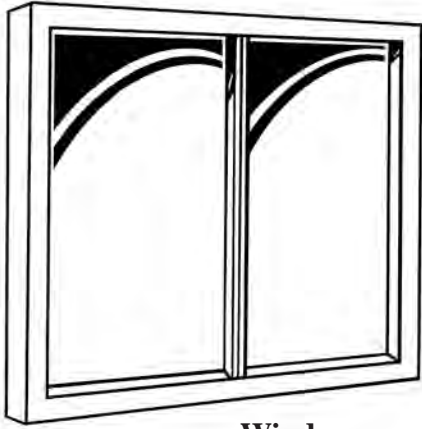
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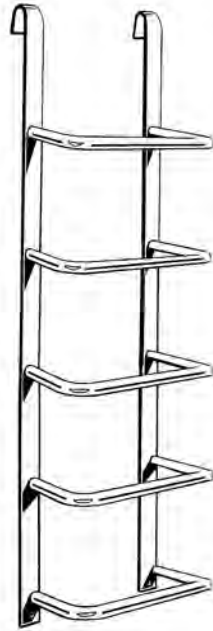
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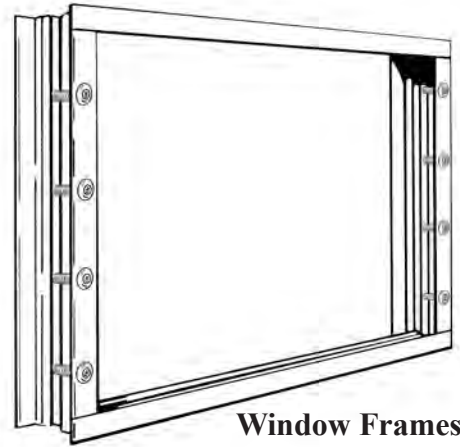
COMPLETE BELOW GRADE WINDOW SYSTEM PRODUCT LINE FROM SUREBUILT



Windows



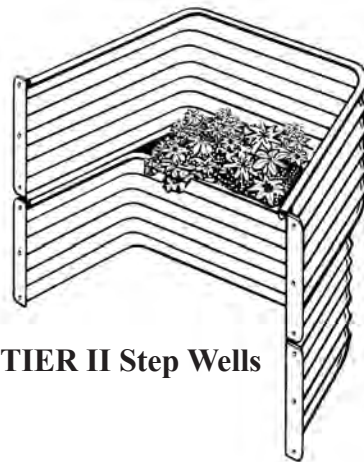
Ladders



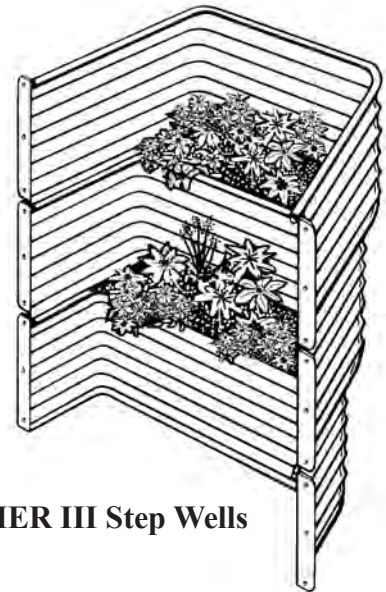
Window Frames



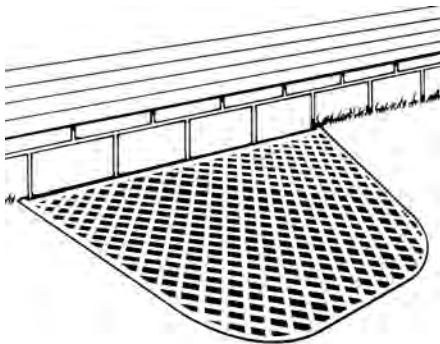
**Straight Back
Window Wells**



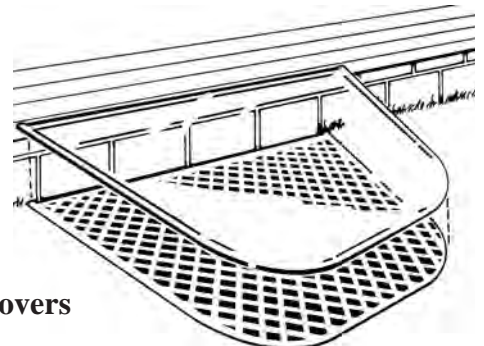
TIER II Step Wells



TIER III Step Wells



Metal Grates

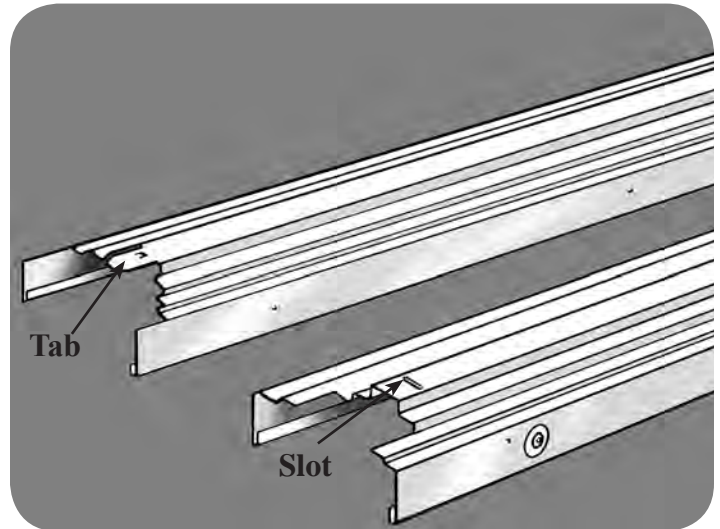


Plastic Covers

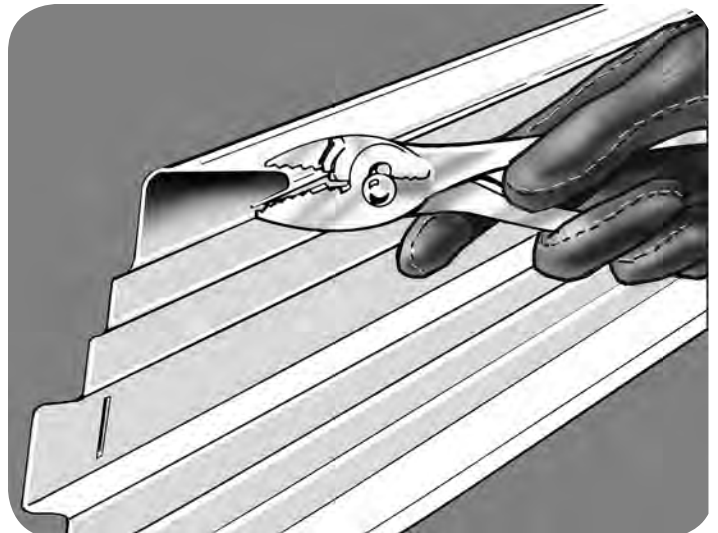
WINDOW FRAME ASSEMBLY - SERIES I

RECOMMENDATION: Frame parts may have sharp edges and/or points and it is recommended that the assembler wear gloves to prevent injury.

The frame head (top) and sill (bottom) are the same part. The left hand jamb (side) and the right hand jamb (side) have a profile identical to the head/sill. The jambs are notched differently on the ends and have 3 or more window mounting screws in one side of the jamb.



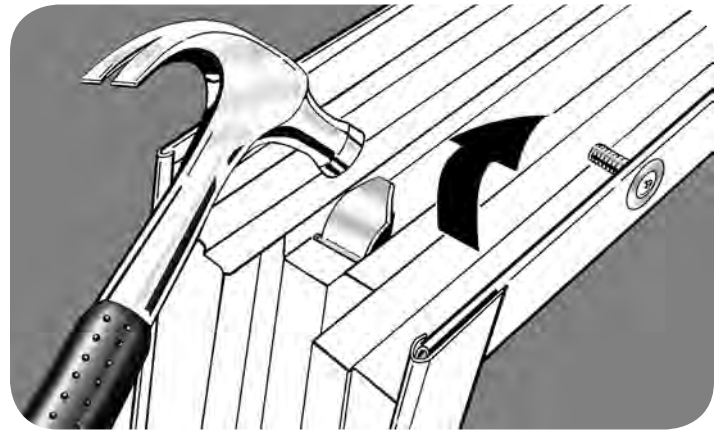
Place a jamb on the floor with the white side up. Note that a slot is located at each end of the center of the jamb. Take a head/sill and with the white side to the inside of the frame and tilt the piece at about a 45 degree angle. Insert the tab of the middle rib completely into the slot of the jamb. Pull the head/sill so that it is 90 degrees to the jamb. Take another head/sill and repeat the process on the other end of the jamb.



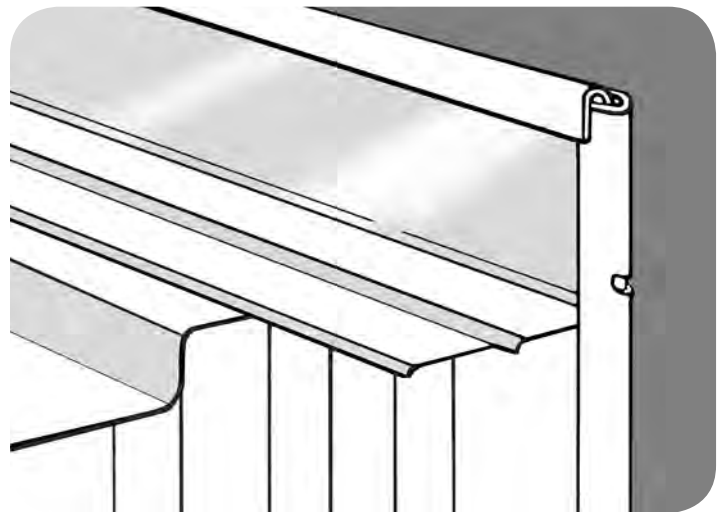
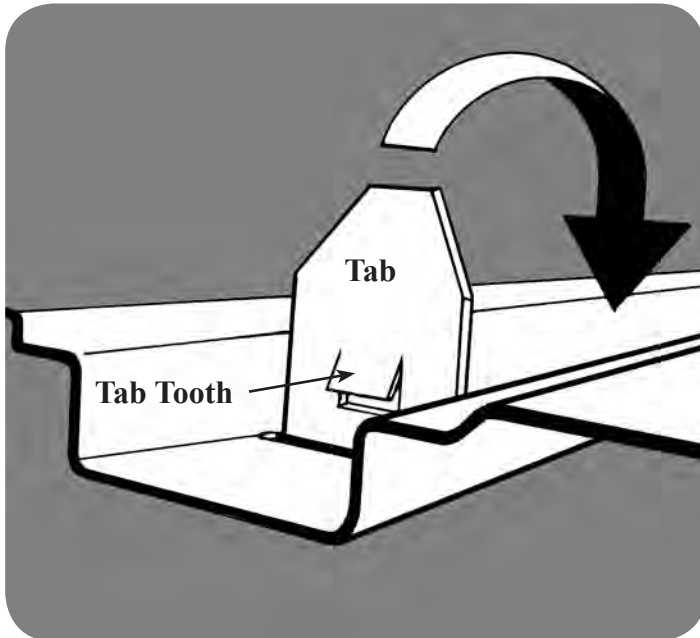
Prior to assembly, use pliers to bend the corners of the jamb inward slightly. This will allow the sill to overlap with a minimum of interference.

WINDOW FRAME ASSEMBLY - CONTINUE

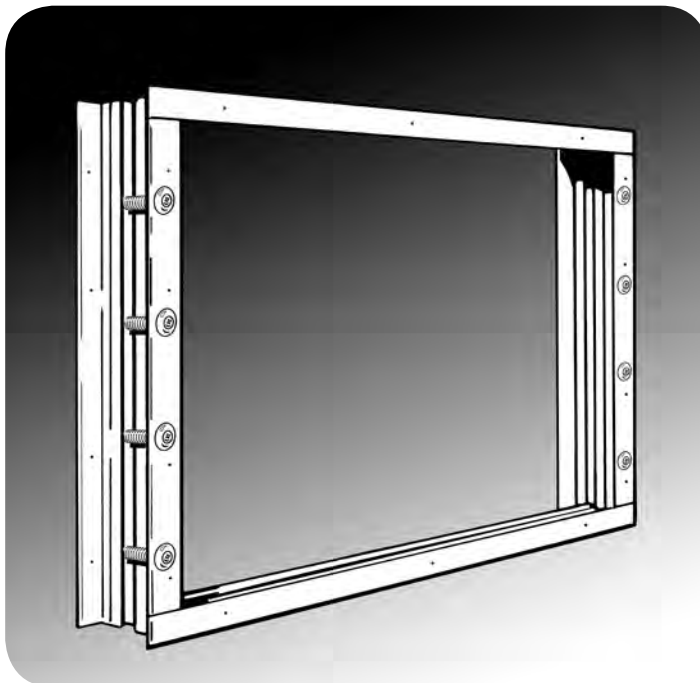
Take the remaining jamb and place it on top of the tabs of the head/sill. Make sure that the window well mounting screws for both jambs are on the same side of the frame. Use the end of the hammer handle to drive the jamb down onto the head/sill tab until it bottoms out. Take care not to damage the jamb.



Once the tab tooth has passed completely through the slot, the ends will lock together. Check that the head/sill corners overlap. The jamb corners and sill notches should now be engaged.

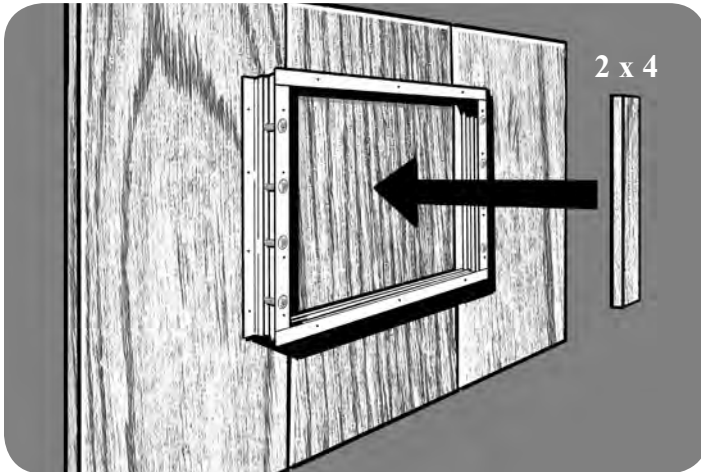


Bend the four tabs down flat against the jamb. Check to make sure that all four corners are properly assembled and the window well mounting screws of both jambs are on the same side.

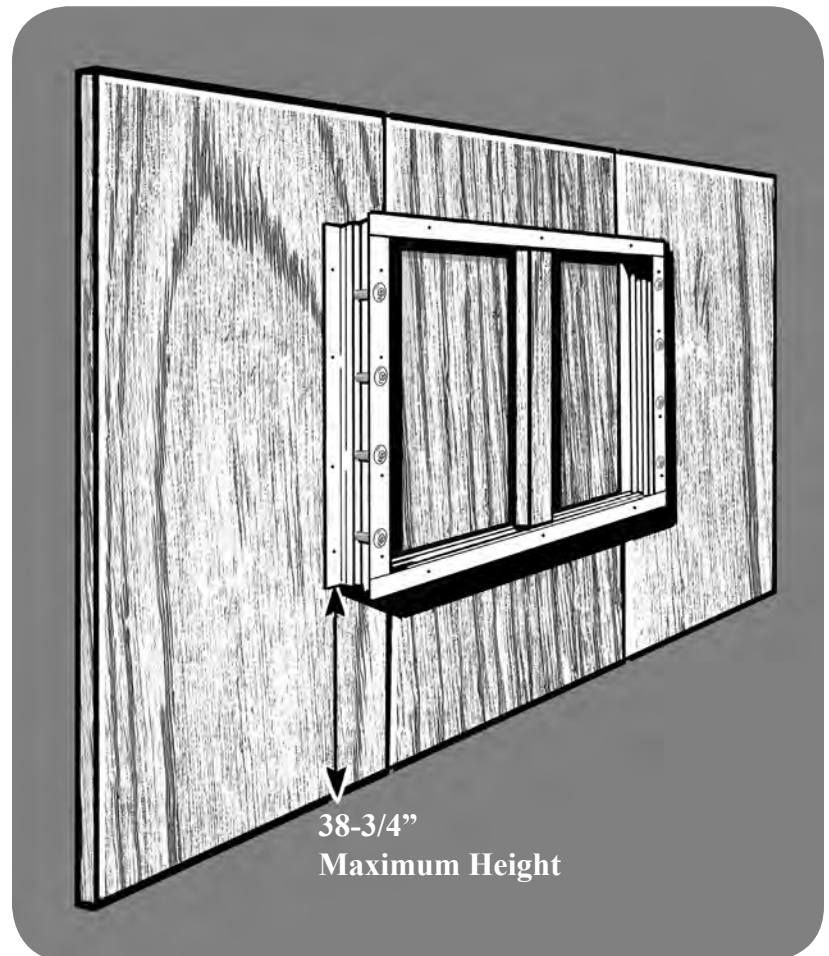


WINDOW FRAME INSTALLATION**WOOD FORMS**

Brace the frame vertically with a 2" x 4" board to prevent distortion during the concrete pour.



Locate the window center line position on form. Next, position the frame on the form with the bottom no more than 38-3/4" above the floor. The area wall mounting screws should face to the outside.



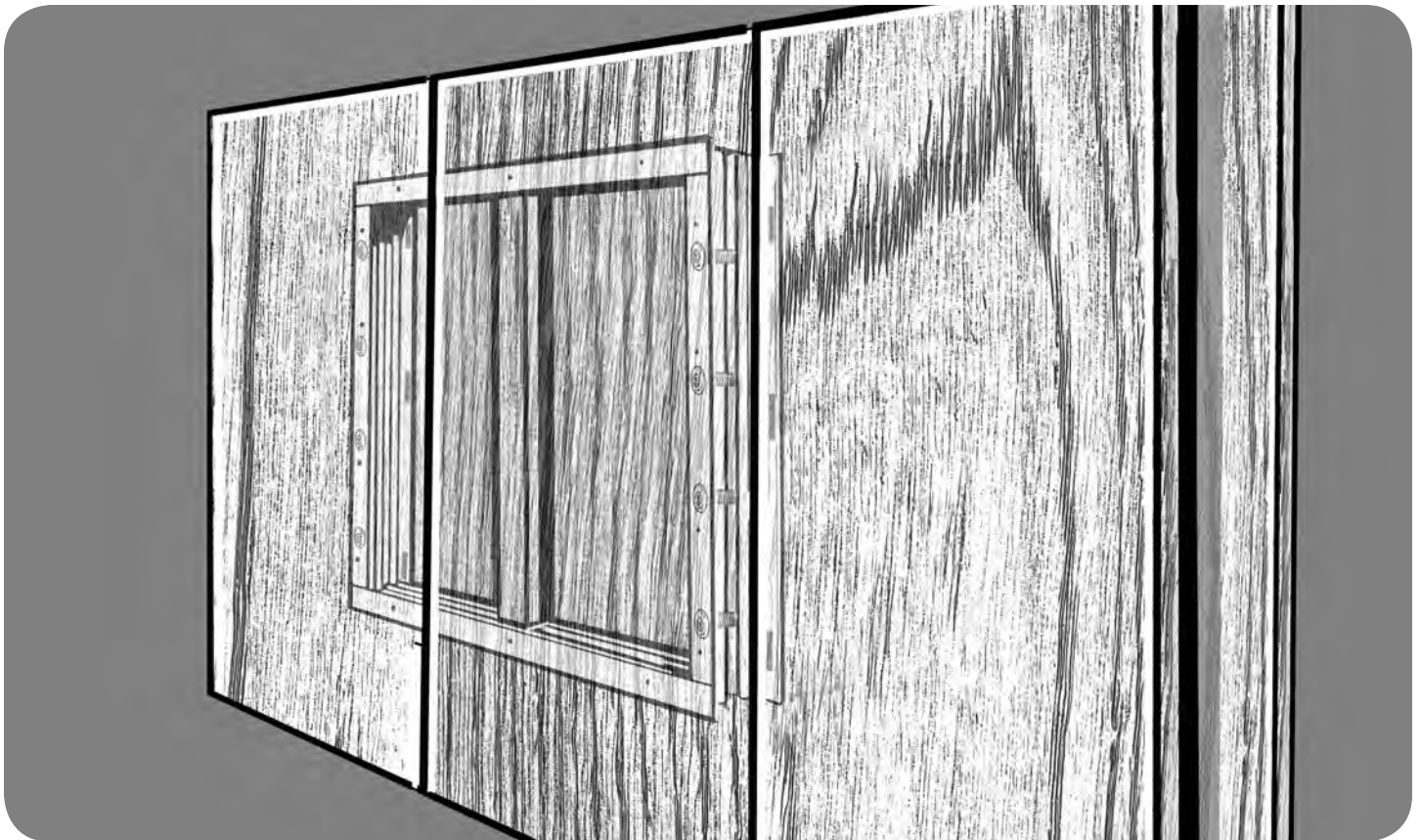
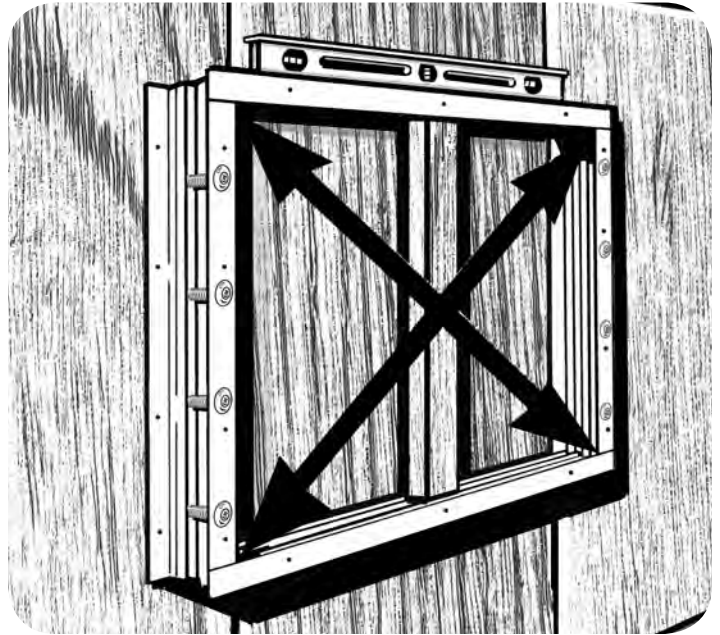
WINDOW FRAME INSTALLATION

WOOD FORMS

Drive one nail through the frame jamb nail hole. Level and square frame, then drive a second nail through the frame jamb nail hole on the opposite side.

Mount the frame to the form with the area wall mounting screws facing out.

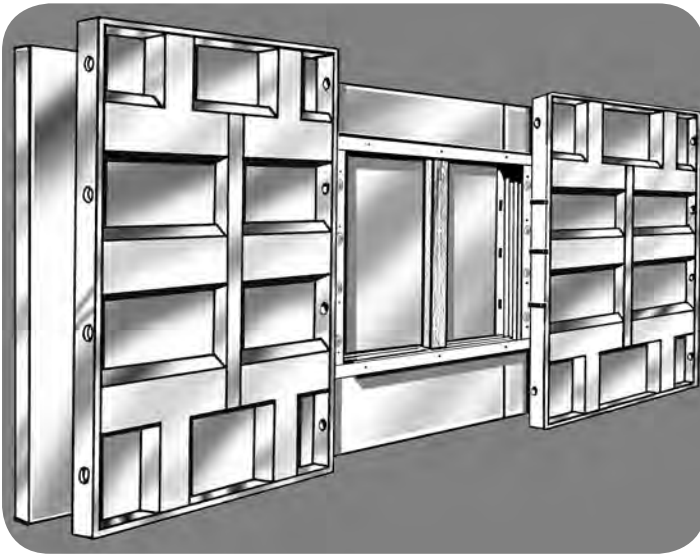
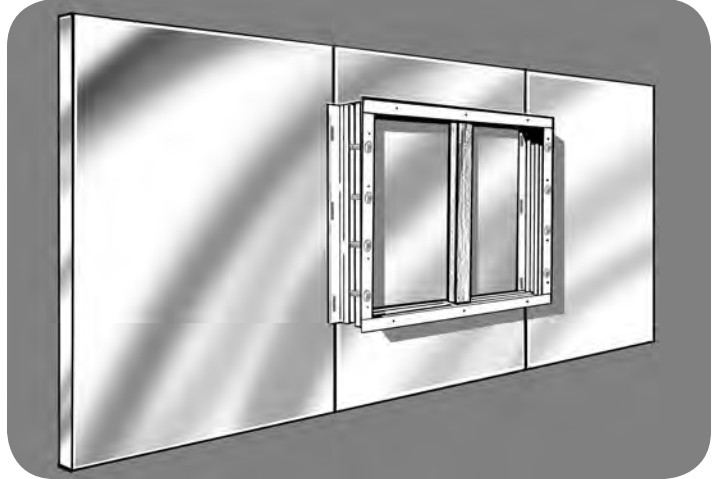
Check level and square, then secure to the form with a minimum of three nails on each side, top and bottom.



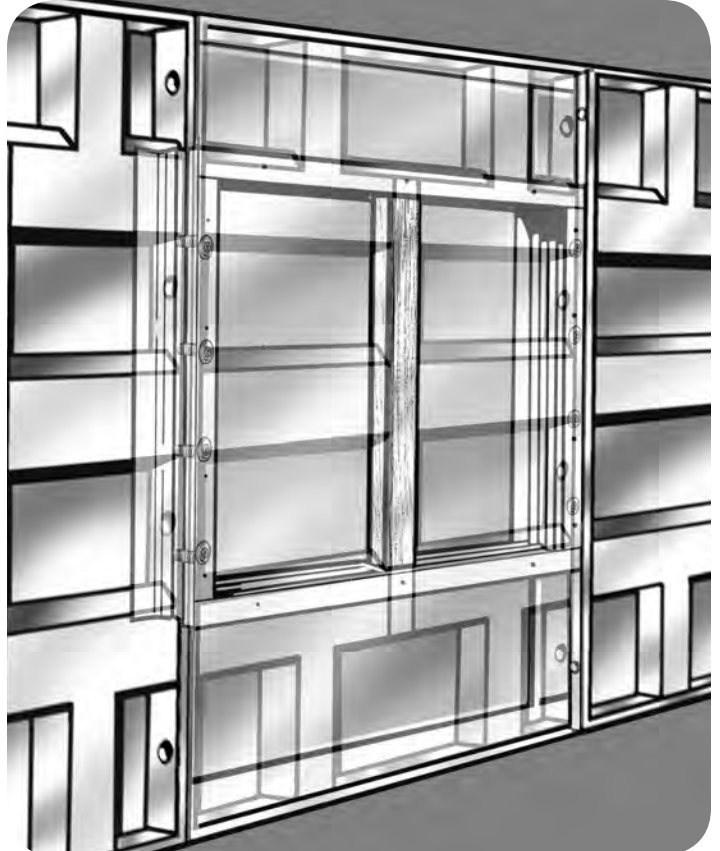
When the second form has been erected, nail the form to the frame to secure it in place.

WINDOW FRAME INSTALLATION**ALUMINUM FORMS**

Use an SureBuilt brace or 2" x 4" board to prevent distortion during the concrete pour. If an SureBuilt brace is not used then 36" and 18" filler panels will have to be used to hang the window frame.



Insert two ties through each jamb of the frame. Mount the frame to the outside form by threading the ties through the form slots and secure the ties with form wedges.

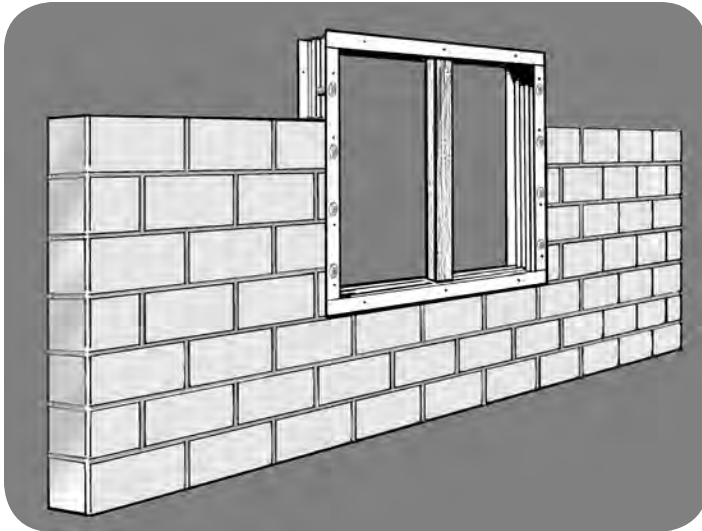
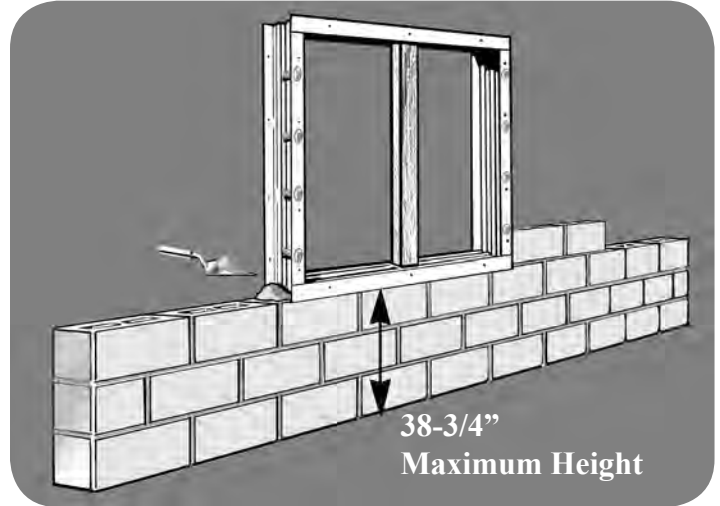


WINDOW FRAME INSTALLATION

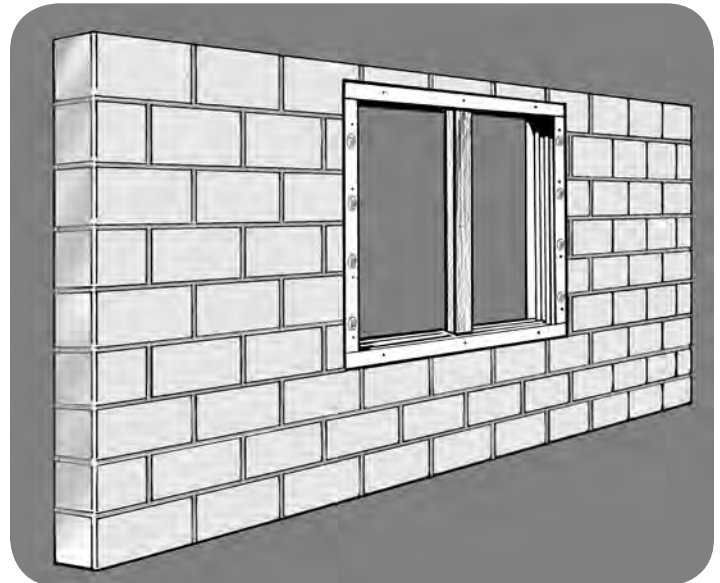
CEMENT BLOCK WALL

Brace frame vertically with a 2" x 4" board before placing frame in wall.* To meet egress requirements the bottom of the frame must be no more than 38-3/4" inches from floor.

Build a nest of mortar along entire length of the base where the frame will rest. Seat frame into mortar making sure the frame is square and level with the window well mounting bolts facing to the exterior side of the wall.



As the block wall is built, pack the void between the inside of the frame and the block end completely with mortar.



Fill the top of the frame completely with mortar.



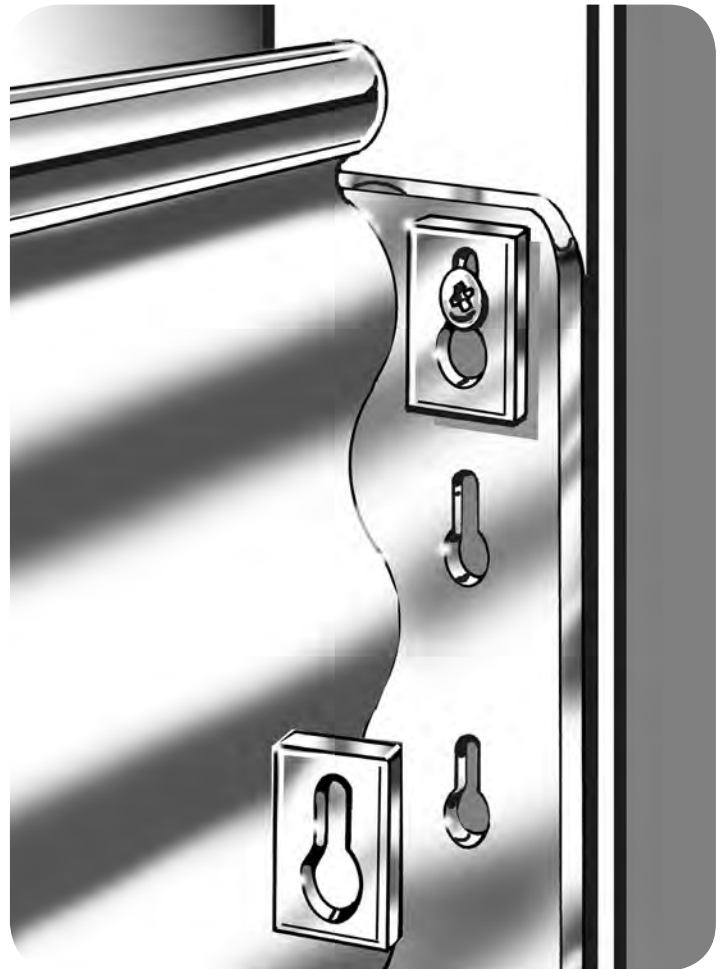
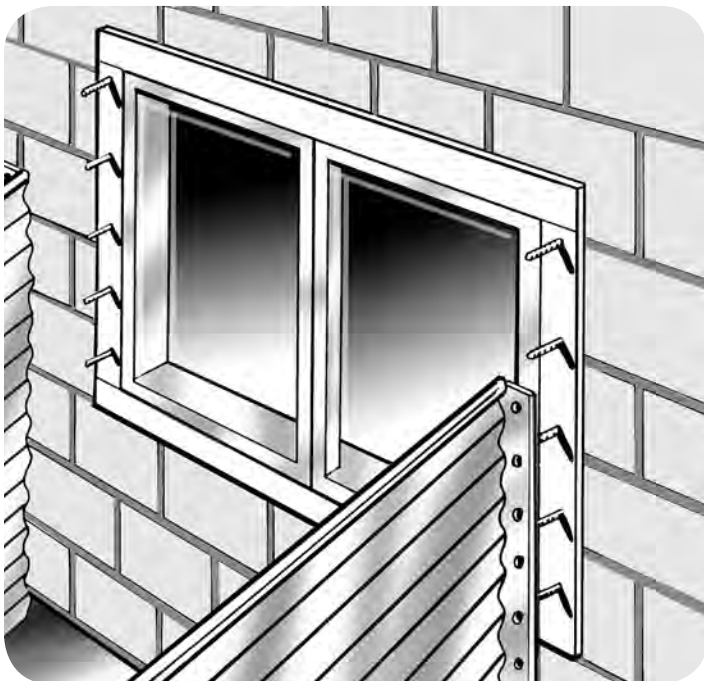
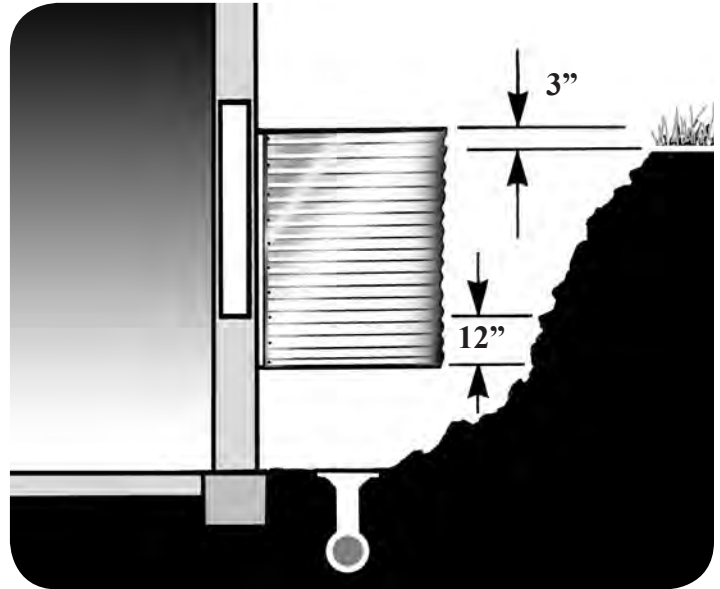
*Window braces available upon request.

WINDOW WELL INSTALLATION

FRAME MOUNT

The top of the window well should be at least 3" higher than grade. This may result in the top of the well being either higher or lower than the top of the frame. The bottom of the window well should be a minimum of 12" below the bottom of the window frame to insure proper drainage.

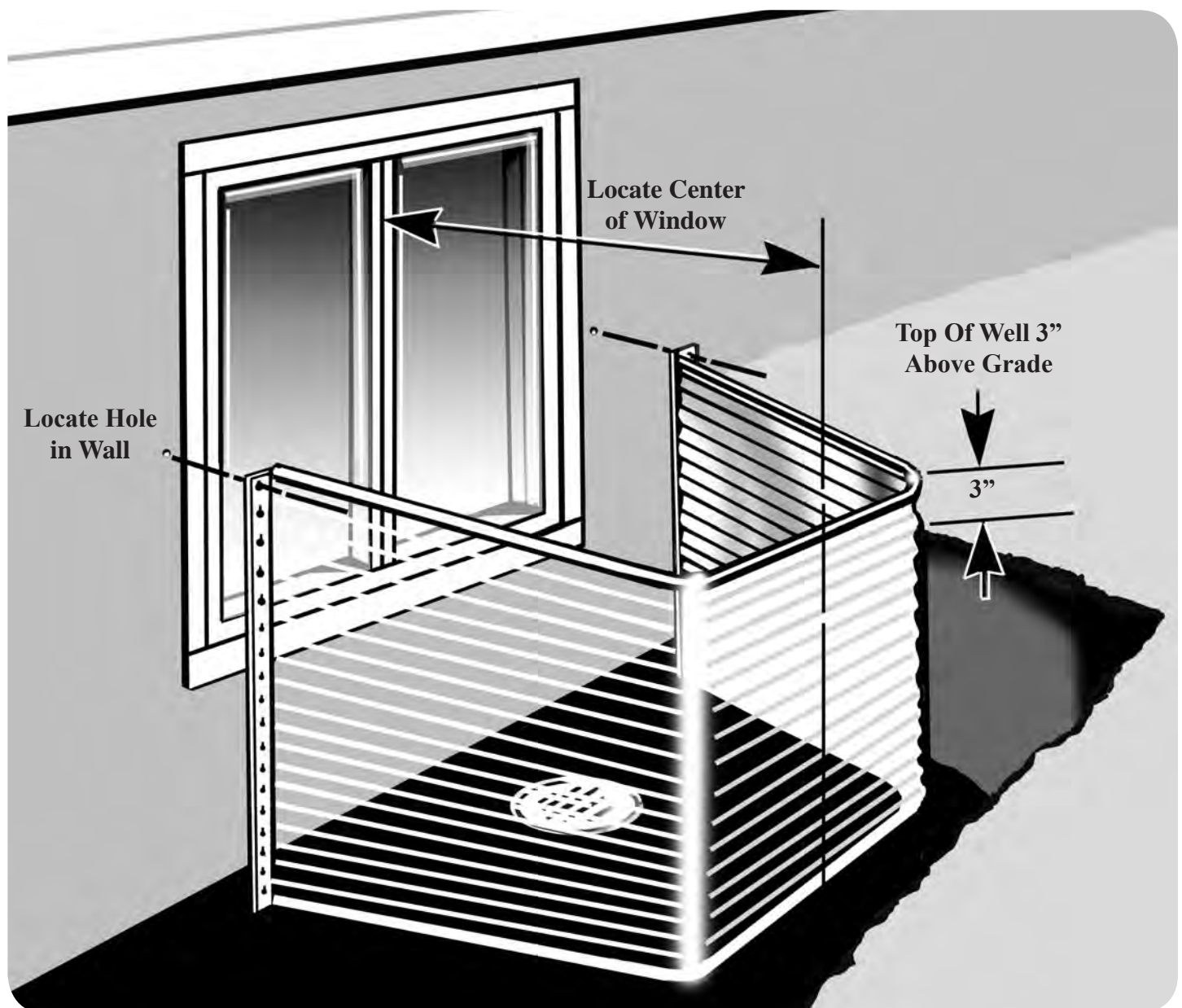
First, back out the window well mounting screws in the frame. Hang the window well on the mounting screws. For maximum holding strength it is recommended that window well washers be placed between the screw or bolt heads and the window well flange. Both top and bottom corners of the window well must be secured with either mounting screws or expansion bolts. The window well should be bolted to either the frame or the wall every 10" to securely hold the well in place during backfilling.



WINDOW WELL INSTALLATION**WALL MOUNT**

The top of the well should be at least 3" above the grade line at the basement wall. The bottom of the well preferably should be at least 12" below the frame with a 6" minimum required for proper drainage.

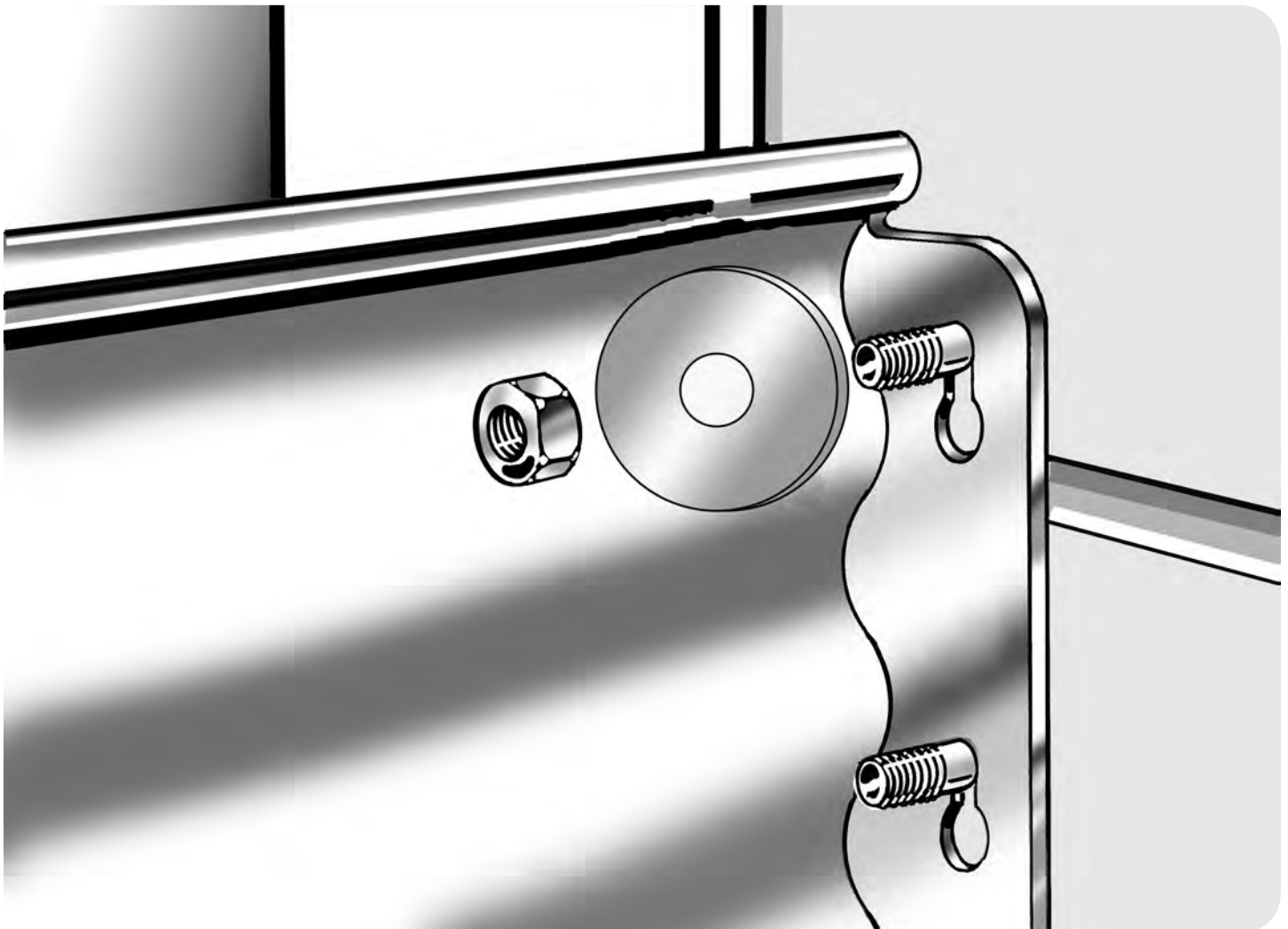
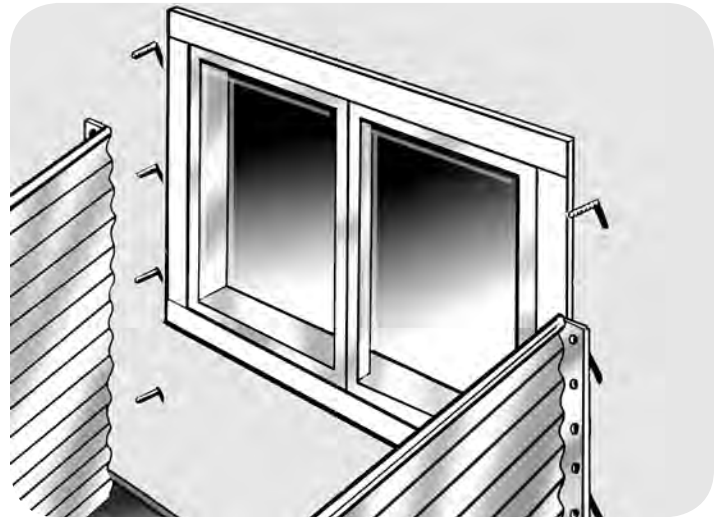
Line up the area well with the center of the frame, level the well and mark the position of one of the top mounting holes on the wall. Install an anchor bolt into the wall. Hang the area well on the anchor bolt and level the area wall using a level. Mark the remaining holes on the wall. Remove well and install anchor bolts .



WINDOW WELL INSTALLATION**WALL MOUNT CONTINUE**

Mount well to wall using mechanical wedge anchors or R-insert with 7/16" square head bolt and washer. Recommended spacing is 25" maximum between anchors.

The bottom of the area well must be secured against either the frame or the wall to prevent problems during backfilling.

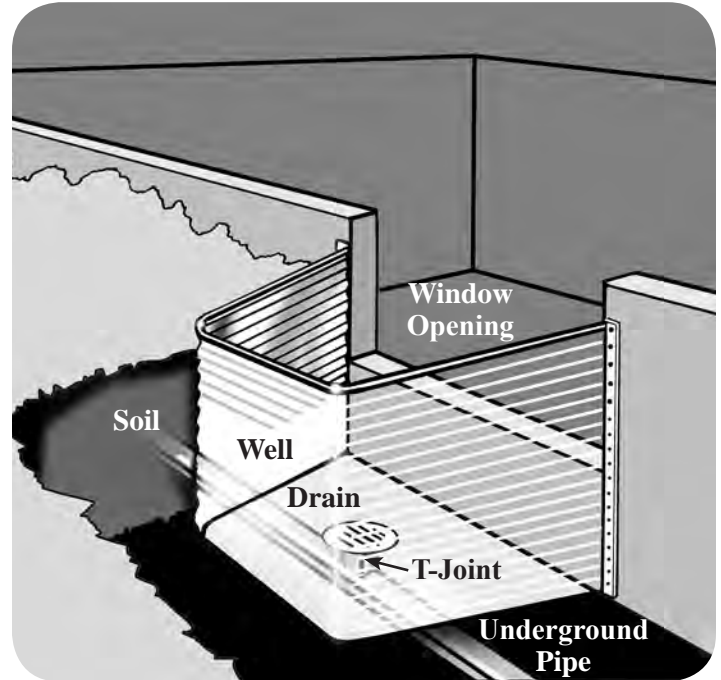


DRAIN INSTALLATION

FOOTING DRAIN

Have a T-joint installed in the foundation drain tile at the center of window well location. Connect a drain pipe to the T-joint so that the drain will be 4-6" below the bottom of the window frame.

Backfill the interior of the area well with suitable material, pea gravel, crushed rock, etc. to the level of the drain covering.



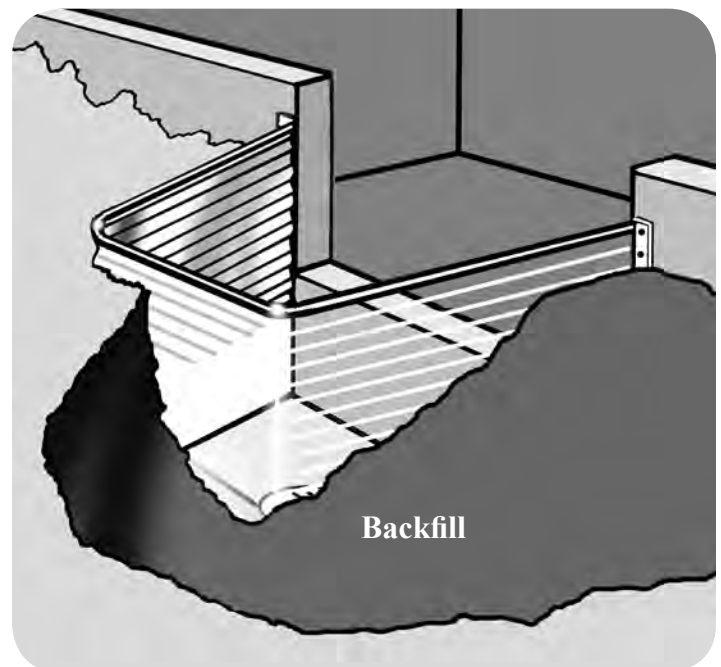
BACKFILLING

Although window wells are structurally sound, reasonable care must be taken during the backfilling operation to prevent damage. Avoid the use of large clumps or rocks.

Check to make sure that the window well is secured on all four corners, either to the window frame or to the basement wall before starting the backfilling operation.

Fill the void around the window well uniformly working up from the bottom gradually. Avoid over compacting any given area to prevent distortion.

If backfilling conditions are less than desirable it may be necessary to brace the inside of the window well against the basement wall



WINDOW INSTALLATION

Inspect the window frame and clean as necessary – the area where the window sits and seals against must be clean and free of concrete.

Check and install window bottom inside trim piece if not factory installed. Remove screen and glass slider to ease installation.

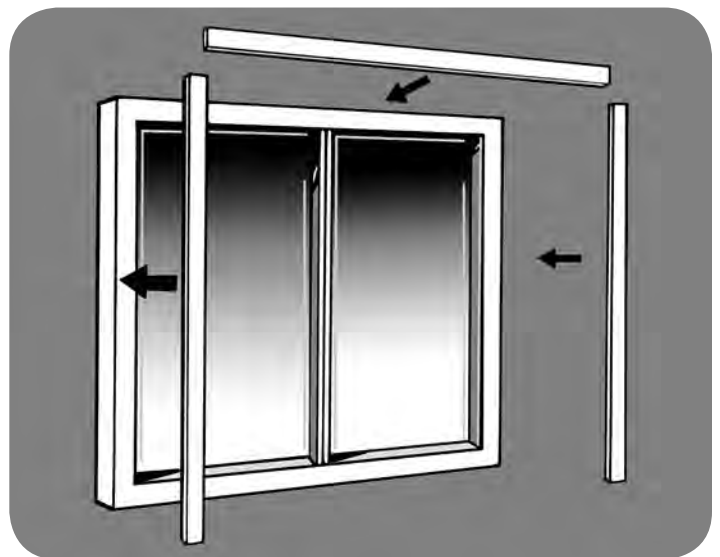
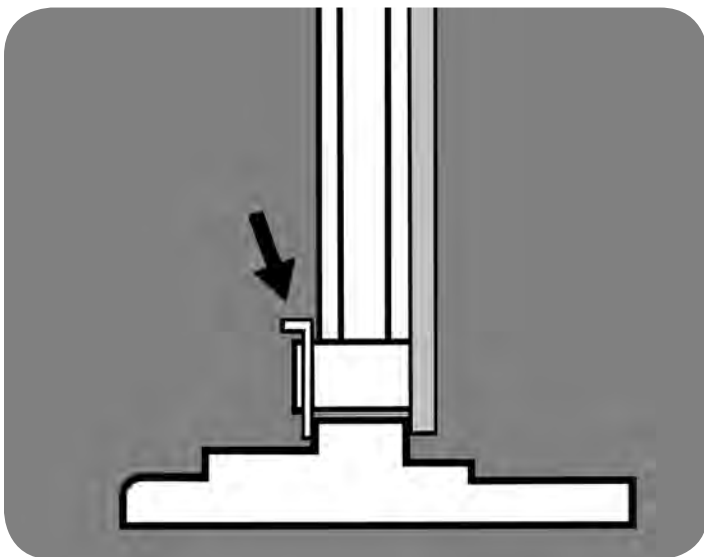
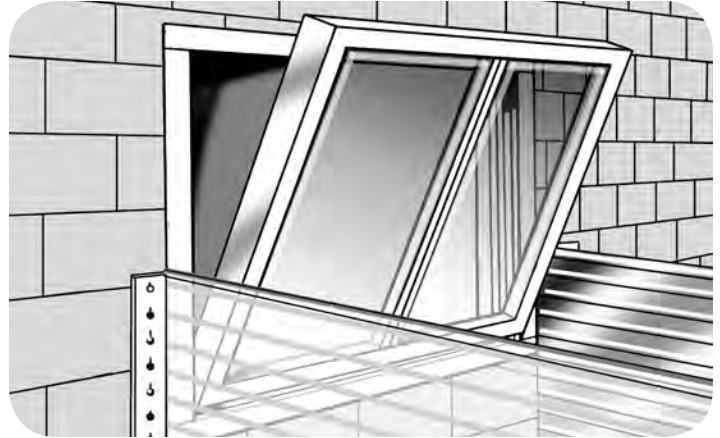
From the outside, tilt the bottom of the window over the frame sill with the fin against the outside sill and the trim piece over the sill.

Tilt the window in until the outside fin contacts the sides and the top of the frame.

Lock the window in place with three bayonet locks – (2) on the inside top and (1) on each inside jamb.

Install the (2) inside jamb trim pieces and the top inside trim piece into the groove at the outside edge of the window frame. The best method is to start at the bottom of the jambs and snap the trim piece into the groove. Use a soft hammer and install the top piece.

Install the screen and slider removed for the window installation.

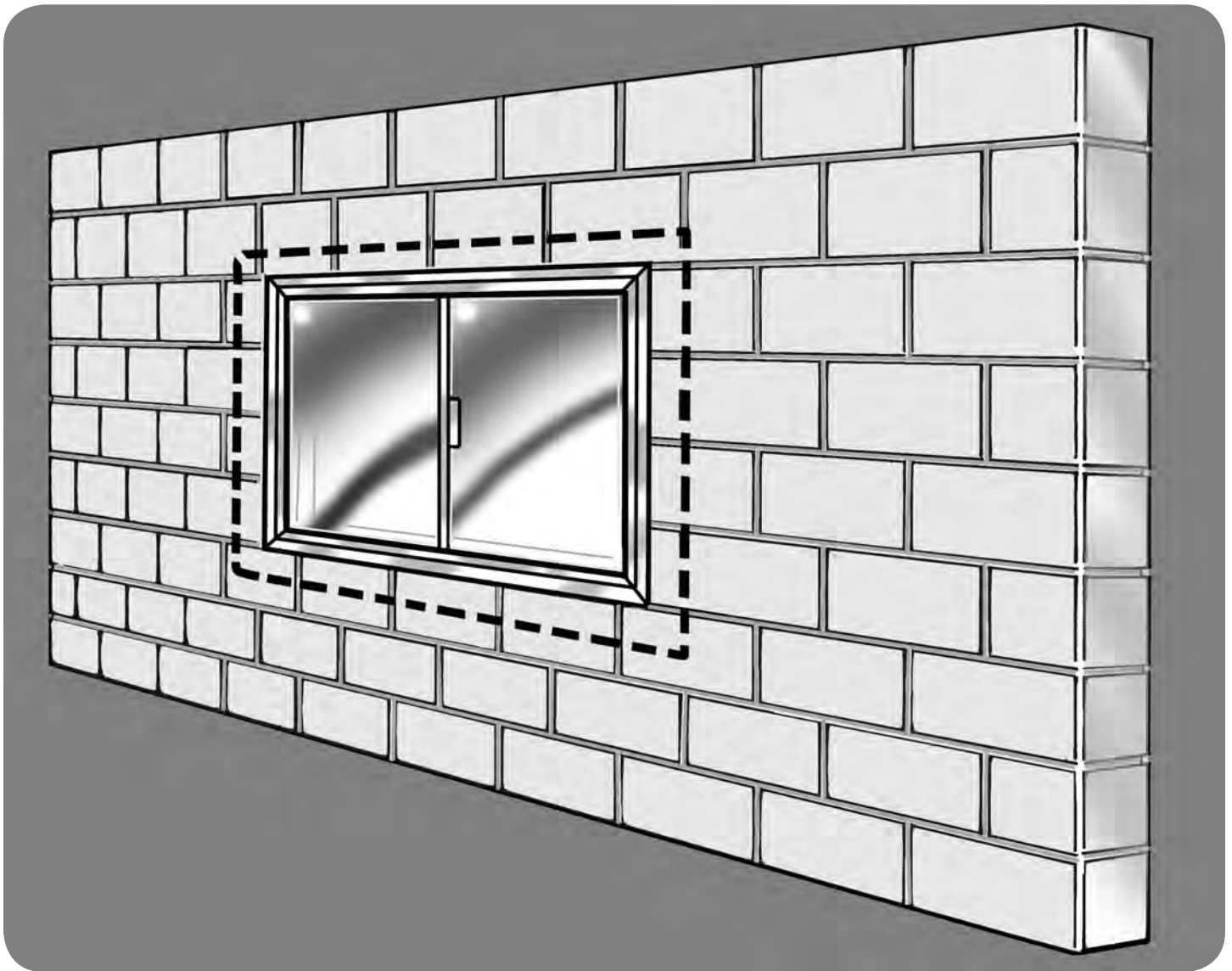


EGRESS WINDOW INSTALLATION

INTO EXISTING WALLS

Select the area for the installation of the egress window in accordance with code requirements.

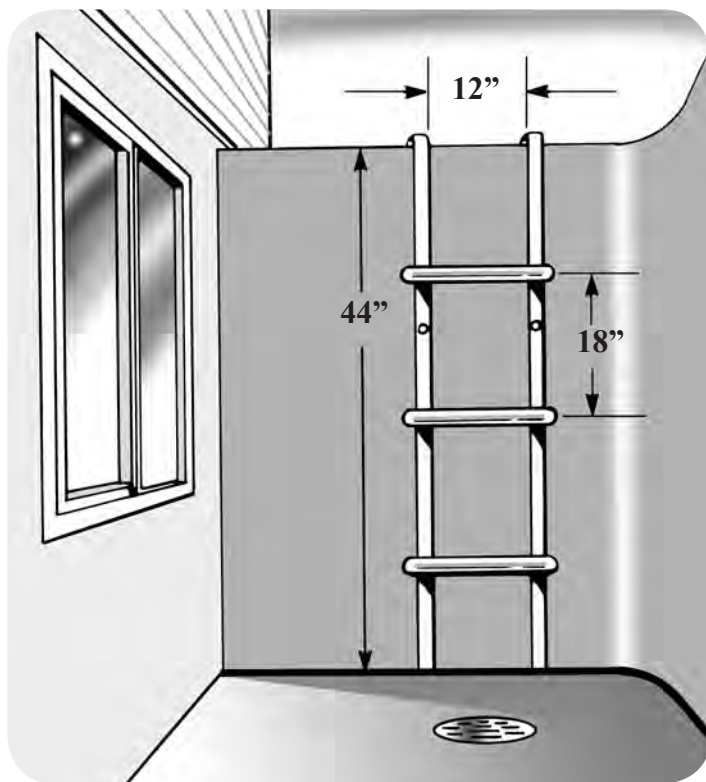
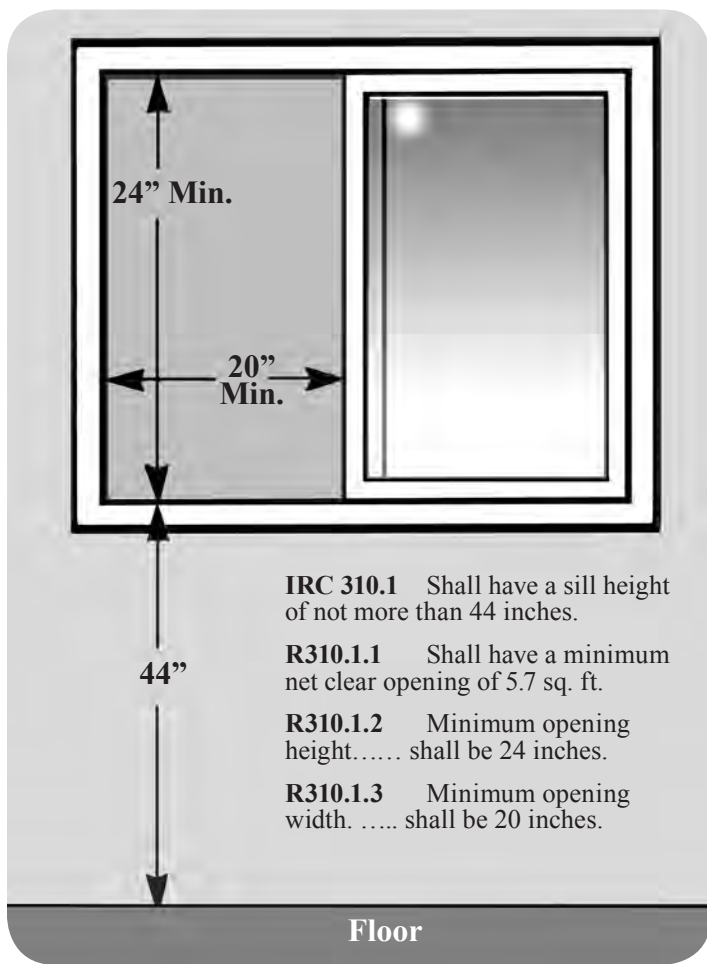
Mark an outline of the window on the wall. Allowing for window frame requirements, draw an outline on the wall where the hole shall be cut. Excavate a hole on the grade side of the wall large enough for the window well installation



Cut wall, remove wall section and install window frame. Install window well and window.

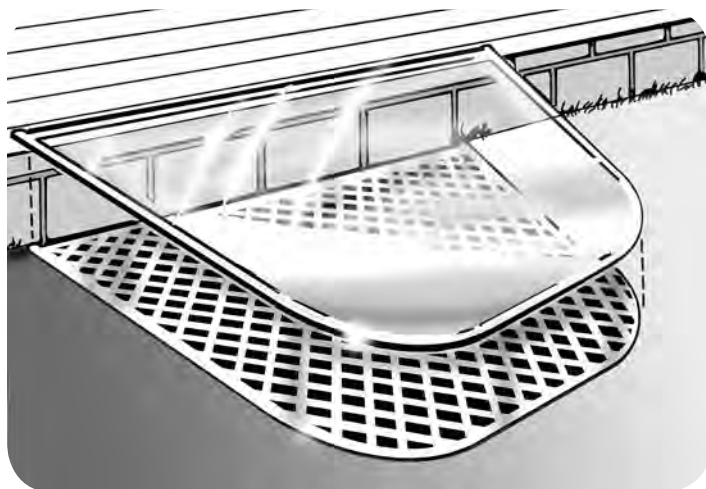
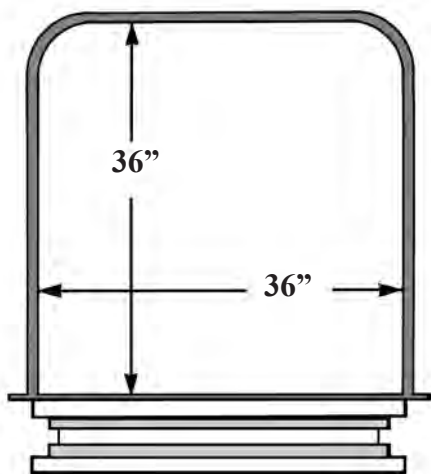
LADDER, GRATE & COVER INSTALLATIONS

CODE REQUIREMENT ILLUSTRATIONS



R310.2.1 Ladder and steps.....vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder.

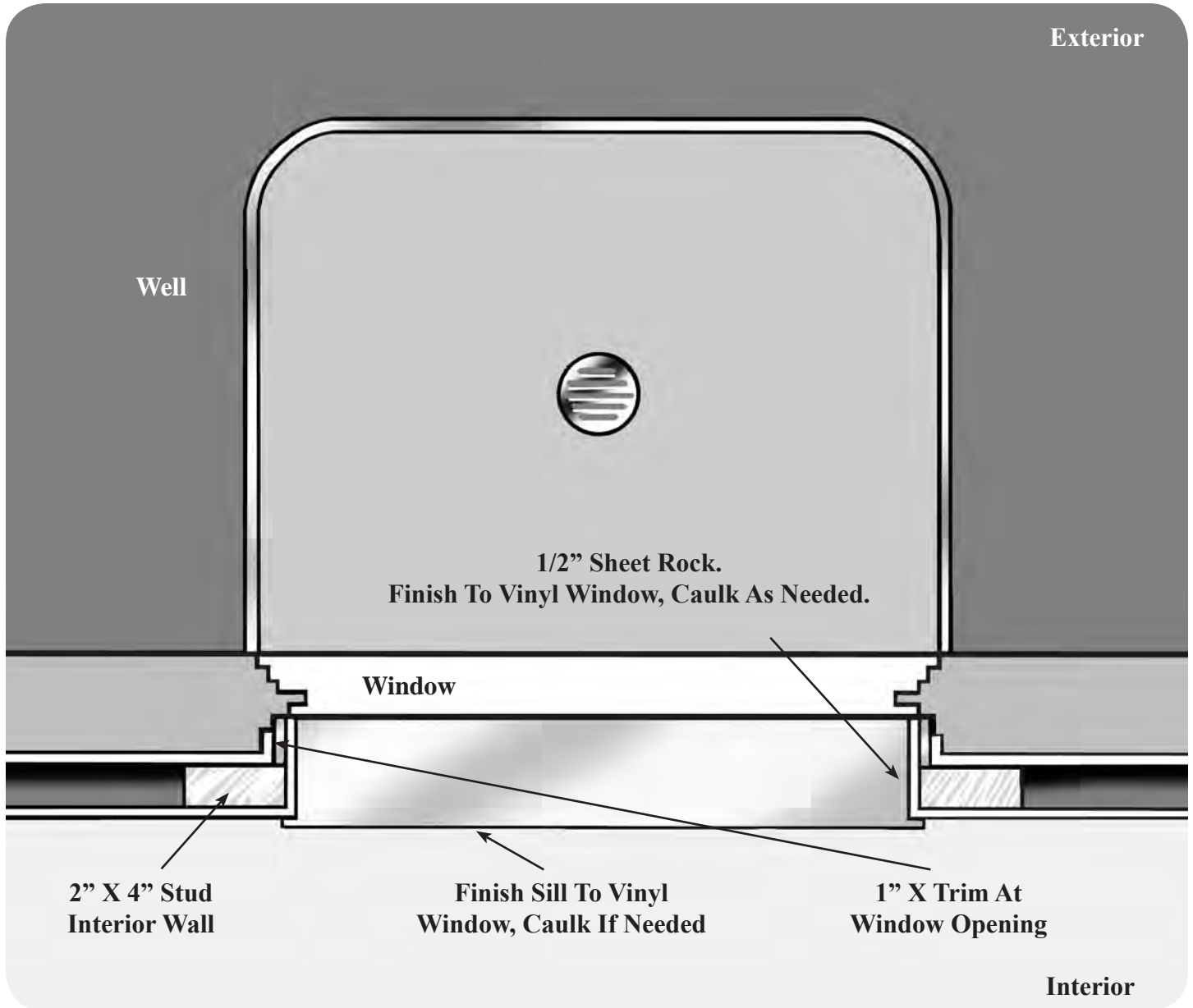
Ladders or rungs shall have an inside width of at least 12 inches....project at least 3 inches.....spaced not more than 18 inches.



R310.2 Window wells. The minimum horizontal area of the window well shall be 9 square feet (0.9 sq. m.), with a minimum horizontal projection and width of 36 inches.

SureBuilt recommends that each window well be provided with an expanded metal grate or Lexan™ cover.

SUGGESTED INTERIOR WALL FINISH



2006 IRC 310 CODE REQUIREMENTS**2006 IRC 310**

R310.1 Emergency escape and rescue required. Basements and every sleeping room shall have at least one operable emergency and rescue opening. Such opening shall open directly into a public street, public alley, yard or court. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section 310.2. Emergency escape and rescue openings shall open directly in to a public way, or to a yard or court that opens to a public way.

Exception: *Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 sq m).*

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 sq. ft.(0.530 sq.m.).

Exception: *Grade floor openings shall have a minimum clear opening of 5 sq. ft.(0.465 sq. m).*

R310.1.2 Minimum opening height. The minimum net clear opening height shall be 24 inches (610 mm).

R310.1.3 Minimum opening width. The minimum net clear opening width shall be 20 inches (508 mm).

R310.1.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys, tools, or special knowledge.

R310.2 Window wells. The minimum horizontal area of the window well shall be 9 square feet (0.9 sq. m.), with a minimum horizontal projection and width of 36 inches (914 mm). The area of the window well shall allow the emergency escape and rescue opening to be fully opened.

Exception: *The ladder or steps required by Section R310.2.1 shall be permitted to encroach a maximum of 6 inches (152 mm) in the required dimensions of the window well.*

(2006 IRC 310 CONTINUED)

2006 IRC 310 CODE REQUIREMENTS**2006 IRC 310 - CONTINUE**

R310.2.1 Ladder and steps. Window wells with a vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply sections R311.5 and R311.6. Ladders or rungs shall have an inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457mm) on center vertically for the full height of the window well.

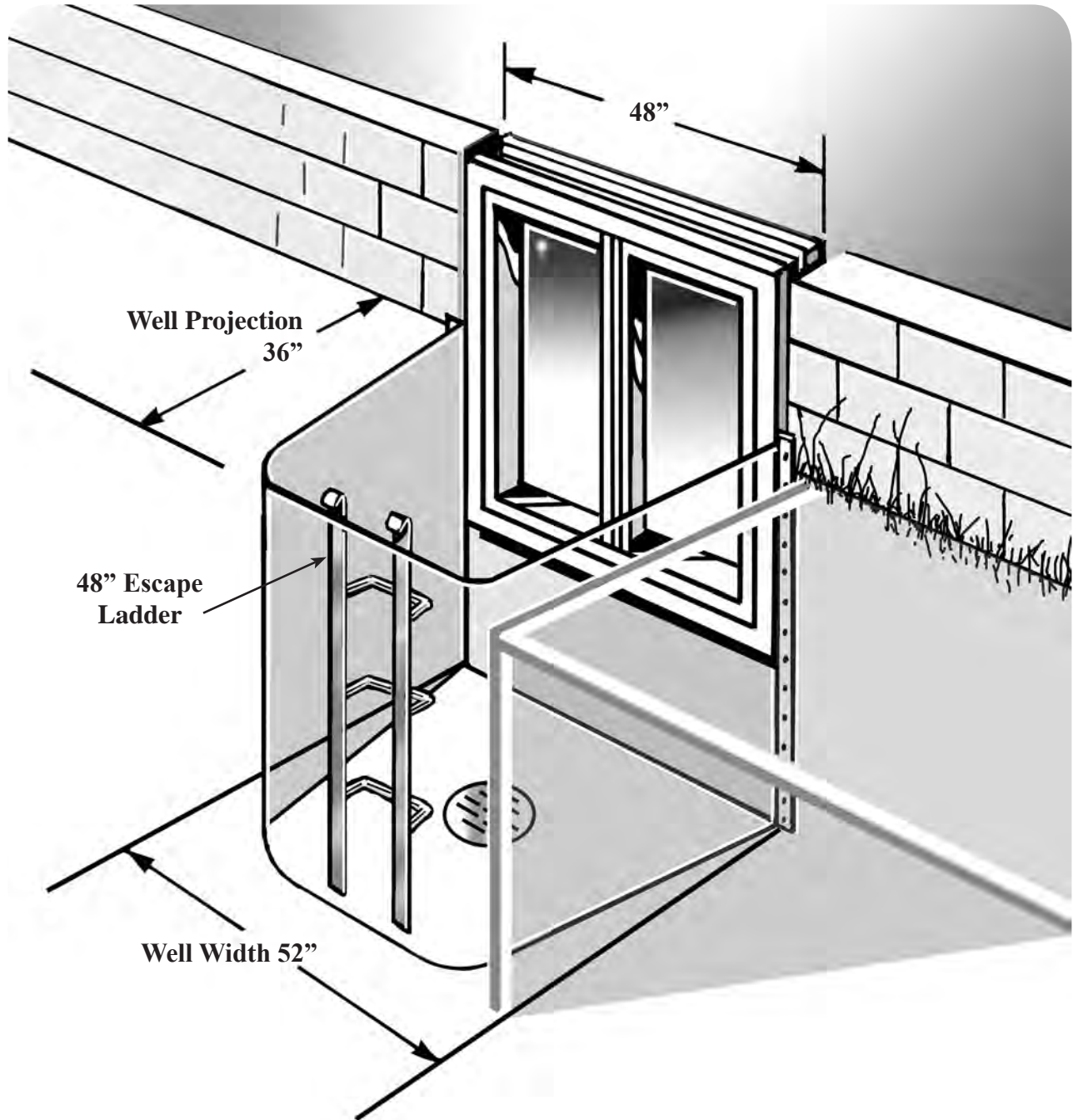
R310.3 Bulkhead enclosures. Bulkhead enclosures shall provide direct access to the basement. The bulkhead enclosure with the door panels in the fully open position shall provide the minimum net clear opening required by Section R310.1.1. Bulkhead enclosures shall also comply with Section R311.5.8.2.

R310.4 Bars, grilles, covers and screens. Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures or window wells that serve such openings, provided the minimum net clear opening size complies with Section R310.1.1 to R310.1.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening.

R310.5 Emergency escape windows under decks and porches. Emergency escape windows are allowed to be installed under decks and porches provided the location of the deck allows the emergency escape window to be fully opened and provides a path not less than 36 inches (914 mm) in height to a yard or court.

**IRC 2006 COMPLIANT EGRESS
BASEMENT WINDOW INSTALLATION EXAMPLE**

SERIES 1 DOUBLE INSULATED VINYL WINDOW



Grate and Lexan™ Cover Not Shown.

LIMITED WARRANTY

SureBuilt Manufacturing (hereafter known as Supplier) warrants that the Supplier of concrete accessory products sold to Purchaser will be free from defects in materials and workmanship for a period of six (6) months from the date of delivery, and the Supplier will repair, or in its sole discretion, replace, any Product or part thereof found to be defective at the time of delivery if such Product or part is returned (at Purchaser's expense and risk) and received by the Supplier within ten (10) days after the applicable warranty period. Descriptions, representations and other information concerning the Supplier contained in the Supplier's catalogs, advertisements or other promotional materials or statements or representations made by the Supplier's sales agents or representatives shall not be binding upon the Supplier and shall not be part of this limited warranty unless expressly identified in writing as PRODUCT SPECIFICATIONS.

This limited warranty does not cover normal maintenance, or items consumed during installation or normal operations, normal wear and tear, use under circumstances exceeding specifications, use for purposes other than the use for which the Products were intended, abuse, unauthorized repair or alteration, improper installation, failure to follow the Supplier's printed instructions, guidelines and recommendations for installation and use, lack of proper maintenance or damage caused by natural causes such as fire, storm, or flood. Purchaser shall determine the suitability of the Product for his intended use and Purchaser assumes all liabilities and risks whatsoever in connection therewith.

This limited warranty is Purchaser's exclusive remedy. It shall not be deemed to have failed of its essential purpose so long as the Supplier is willing and able to repair or replace defective products or parts thereof in the manner specified. No allowance will be made or repairs made by Purchaser.

Except as herein provided, the Supplier shall not be liable to Purchaser in any manner with respect to the Products. In no event shall the Supplier liability to Purchaser ever exceed the purchase price of the allegedly defective Product. Except as herein provided, the Supplier shall not be liable for transportation, labor or other charges for adjustments, repairs, replacements of parts, installation, or other work, which may be done upon or in connection with the Products sold.

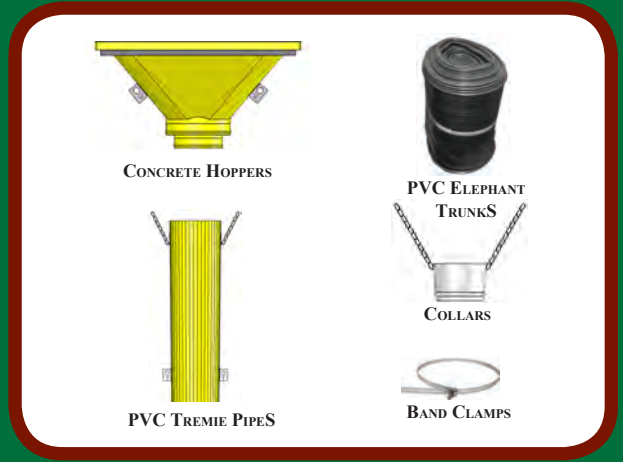
THE SUPPLIER SHALL NOT IN ANY EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING LOST PROFITS, whether arising from any defect in the Products, any use of the Products, from Purchaser's inability to use the Products, or otherwise. This limited warranty applies to only products made by the Supplier.

NO OTHER EXPRESS AND NO IMPLIED WARRANTIES OF ANY TYPE, WHETHER FOR MERCHANTABILITY, FITNESS FOR A PARTICULAR USE, OR OTHERWISE, OTHER THAN THOSE EXPRESSLY SET FORTH ABOVE (WHICH ARE MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES) SHALL APPLY TO THE PRODUCTS.

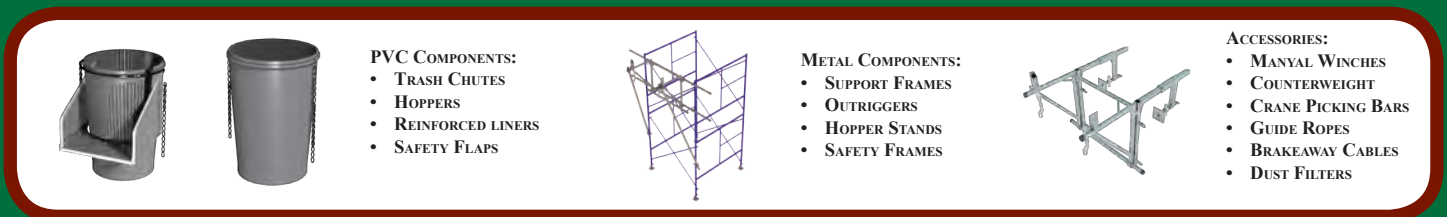
Product Lines



Window Well System



Concrete Accessories



Trash Chutes



Contractor Equipment

SureBuilt Manufacturing

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