



Glasswalls®

PORCH ENCLOSURES

SPECIFICATIONS, LAYOUT AND INSTALLATION GUIDE



Complete 3-lite Floor-to-Ceiling Window/Screen Wall Units.

Use Glasswalls to

- *Remodel a seldom used screen porch*
- *Enclose a patio, breezeway or deck*
- *Add a new room addition with a 'total' view of your outdoors*
- *Create a room for year-round enjoyment!*

SPECIFICATIONS

ARCHITECT SPECIFICATIONS **Scope:** Units shall be Glasswalls as manufactured by Mon-Ray, Inc., in sizes and types indicated by reference numbers on drawings.

Construction: Units shall be constructed by window manufacturer with wood frames. Frames shall be assembled with screws and all joints shall be weathertight. Lower subsill section shall be a hollow box type for easy installation and for housing electric wiring and heating equipment. All sash frames shall be extruded aluminum with accurately mitered corners and assembled to be weathertight.

Material: Window and screen sash shall be made from accurately extruded prime aluminum 6063-T6 alloy. Aluminum finishing shall be a 202R1 Clear Anodized Finish (Dark Bronze Anodized is optional.) All wood shall be clear and free of defects and preservative-treated to specifications for toxic, water-repellent preservatives. Wood jambs shall be 1-1/16" x 3-1/2" finished dimensions.

Glazing: Glasswalls shall be factory glazed with clear 1/8" tempered safety glass set in a wrap-around non-migrating vinyl glazing channel. Units shall be designed for factory glazing, but in case of replacement, sash may be dismantled and glass replaced on the premises without special tools. Storm panels for double glazing are optional and shall be mounted in same recess as screen. Glazing of storm panels shall be clear DSB glass.

Screens: Screens shall be one piece and cover the entire ventilating area. Screening shall be 18 x 14 mesh Charcoal Fiberglass installed at factory and held securely by a vinyl spline which removes to replace screen.

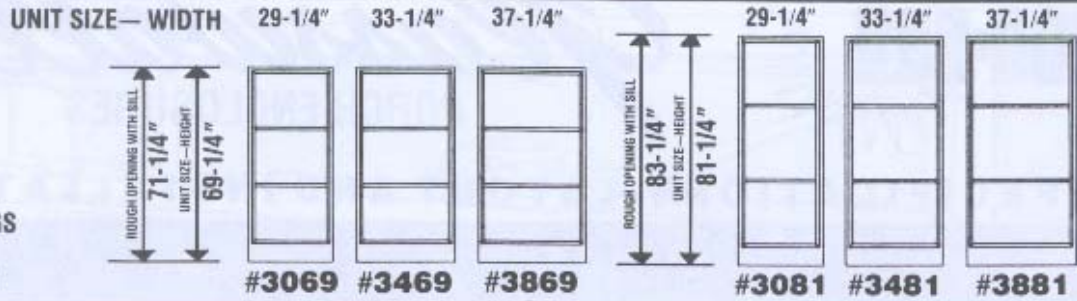
Hardware: All sash shall operate on tempered steel tension springs in zinc-alloy channels. Spring-loaded stainless steel pin-locks shall be bolt-and-plunger type. Continuous extruded sash lifts shall be provided on all sash units. All meeting rails shall be weatherstripped.

Installation: All windows shall be installed plumb and level, adjusted and weathertight. Caulking compound shall be used in critical areas and between concrete slabs (or floor) and sill.

Operation: All glass panels shall operate vertically in separate channels. All sash shall be equipped with pin-locks to hold glass panels closed and in predetermined open positions. All sash shall be removable from inside. Full length screens shall be completely removable.

STOCK UNIT SIZES

FOR MULTIPLE OPENINGS
ADD 1/2" TO OVERALL
TOTAL WIDTH OF UNITS



HOW TO LAY OUT

Before installing **GLASSWALLS** on an existing slab or deck, the information below should be established and recorded, preferably on a floor-plan with elevation drawings. These general rules will provide the most attractive floor plans.

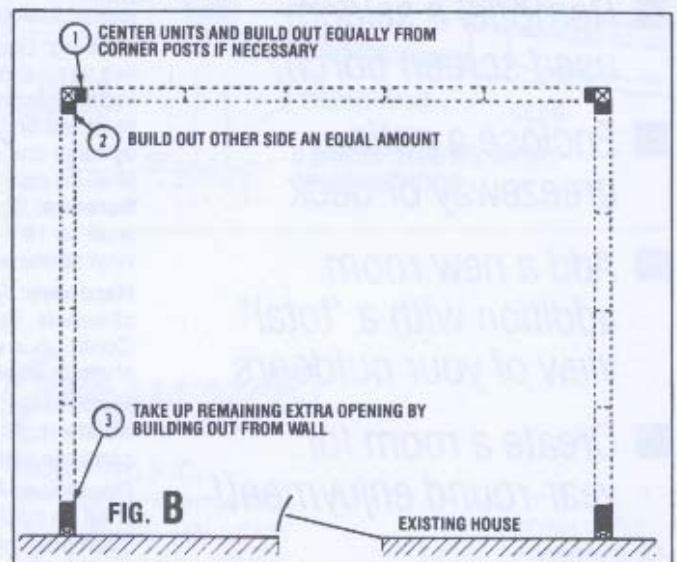
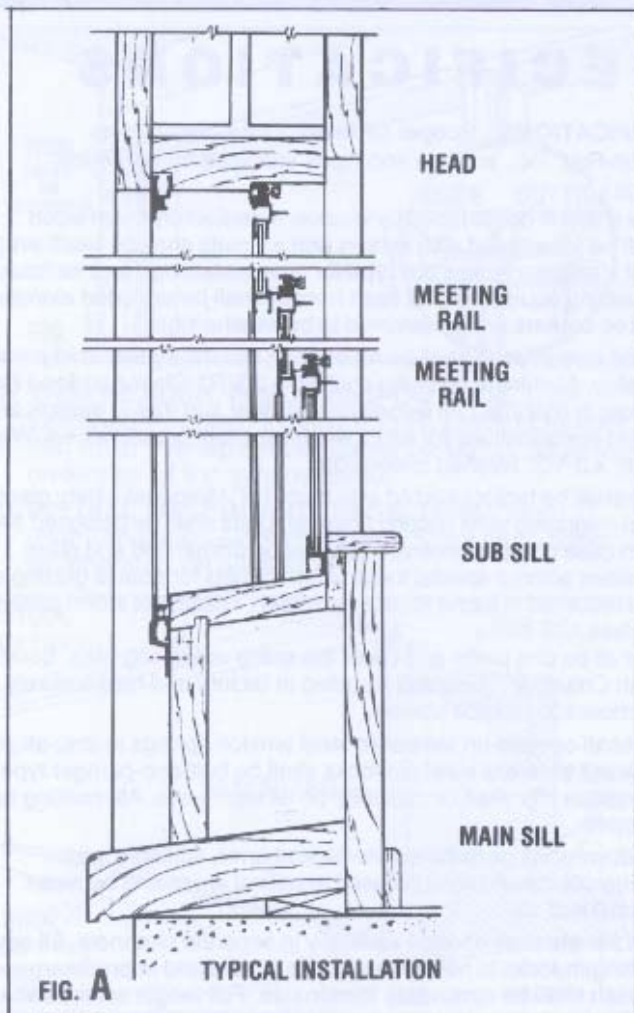
- 1. WINDOW SIZES AND LOCATIONS.** Use the largest window size which will go into a rough opening in exact multiples. If it is necessary to use units of different widths in one opening, locate the larger units in the middle and balance the smaller units on both sides. The difference between unit widths in the same opening should not exceed 2". Remember to allow an extra 1/2" on rough opening width when installing a group of units.

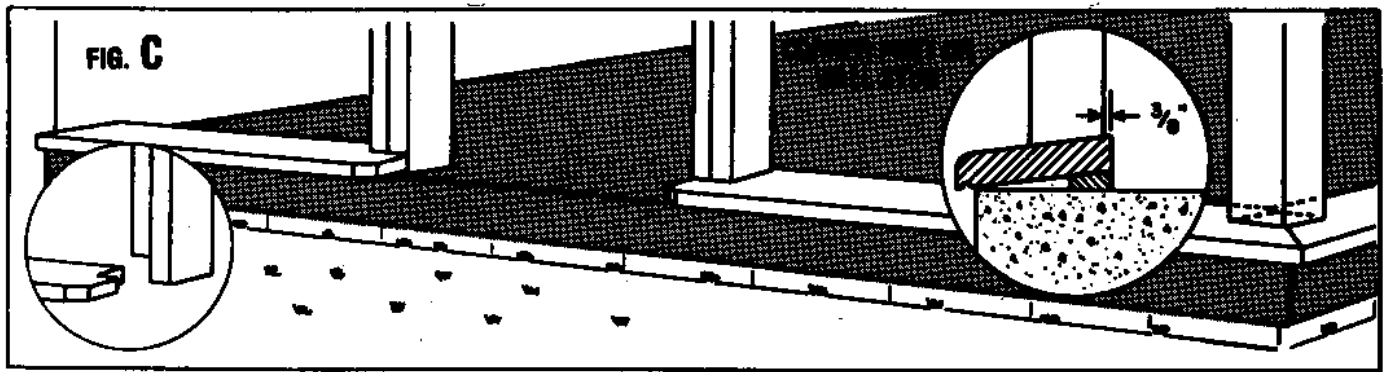
Glasswalls should be located as far outboard as possible to increase the room area. Normally the Glasswalls line is determined by either the header or

corner posts. Space for inside and outside header trim should be provided. Joints between fascia board and outside header trim must be watertight (Fig. A).

When aligning the inside edge of the units, be sure that the inside edge of the sill is 3/8" inside a plumb line dropped from the inside edge of the proposed header. The inside edge of the sill must also be located 3/8" inside a wall stud or corner post. The 3/8" is necessary to provide a baseboard trim nailing surface, to match the water seal lip on the unit subsill. See Fig. C.

- 2. BUILD-OUTS.** (See Fig. B.) If the width of the rough unit opening is larger than the total width of the units, build out from walls or corner posts. Space between Glasswalls only for structural support. If it is necessary to build out from one side of a corner post, build out the other side an equal amount.
- 3. REMOVE AND REPLACE POSTS AS NECESSARY.**
- 4. HEADER FILL-IN.** If it is necessary to reduce the height of a rough opening, build the header down rather than the sill up.
- 5. DETERMINE LOCATION, DIMENSIONS, SWING AND FRAMING OF DOORS.**
- 6. DETERMINE LOCATION, SIZE AND TYPE OF ALL ELECTRICAL OUTLETS AND WIRING.**
- 7. HEAT LOCATIONS.** Heating equipment, using warm air, finned tubing or electric radiation can be easily installed in the box sill beneath each window unit. Sill face fits standard baseboard heater.
- 8. PREPARE A MATERIALS LIST FOR SILL AND TRIM.** (Not furnished — obtain locally.) Main sill should be 2' x 8' treated lumber or Redwood to minimize potential damage from water penetration.





HOW TO INSTALL

Installation of **GLASSWALLS** is similar to the installation of a conventional wooden sash, except that the main sill is not a part of the window unit. The sill is installed separately: 1) to provide a continuous water seal; 2) so that its width can be varied for proper overhang; and 3) so that units can be leveled if the floor is not level.

- 1. INSTALL SILL (Fig. C)** Since the inside edge of the sill determines the unit line and how trim will be applied later, consult the floor plan carefully before installing sill. The inside edge of sill should extend $3/8$ " inside of 4 x 4 corner posts, door jambs and $3-1/2$ " wall studs. The outside edge of the sill should overhang outer wall or slab by at least 1".

Cut sill to proper length, to butt walls and miter around corner posts. Cut out recess for door jambs. Cut sill around heat ducts or risers.

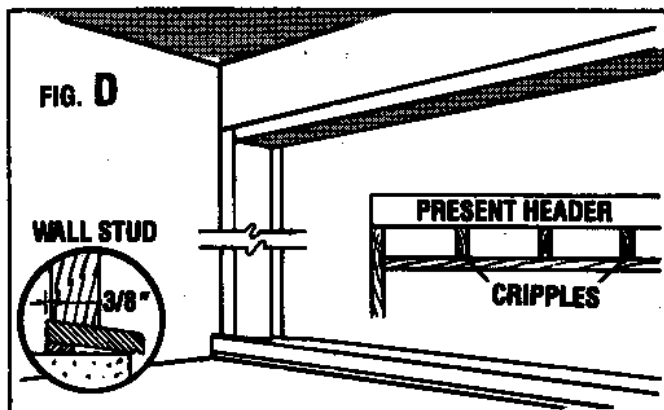
Sill should have 7° pitch to outside. Use strip filler under inner edge of sill to provide pitch angle.

If sill is laid on concrete without overhanging the outside edge of the slab, seal between sill and slab with asphalt cement or equal material.

Secure sill with preset bolts, lag screws with shields, or power actuated fastenings.

- 2. INSTALL DOOR JAMBS.** (Not furnished — obtain locally) (Fig. C) use two 2 x 4's for each jamb. Since the 2 x 4's serve as the jamb face, use good straight clear lumber.

Sill should extend inside door jambs by $3/8$ ". Door jambs extend from floor to header. One of the 2 x 4's for each door jamb should be cut $1-1/2$ " shorter so that it can be mounted on top of the sill and toenailed into the sill; the other should rest on the floor and be



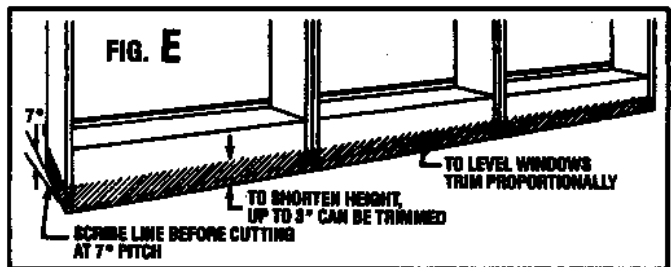
nalled into the end of the sill. Toenail door jambs into header.

- 3. INSTALL WALL STUDS.** (Fig. D) Wall studs may be required to plumb wall, build out wall to desired opening width, and/or provide working surface over masonry, stone or concrete.

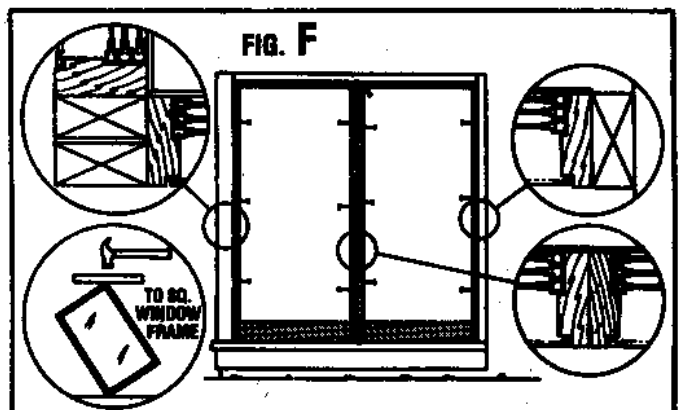
Usually a 2 x 4 is used for a wall stud, depending upon the width available. A stud must be $3-1/2$ " wide to match frame of window unit. Wall studs should be set out $3/8$ " from the inside edge of the sill. Wall studs must be plumb. Build out from stud to window jamb if necessary.

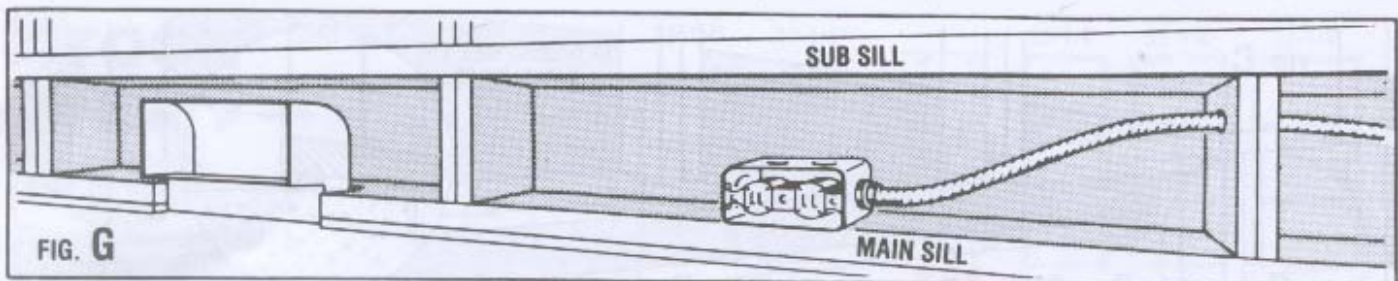
- 4. INSTALL HEADER PLATE.** (Fig. D) A header plate may be necessary to level header or drop header to desired window length. If it is necessary to build header down more than 6", install cripples.

Door headers should be installed after the outside header trim has been applied to keep door and Glasswalls height line same on top.

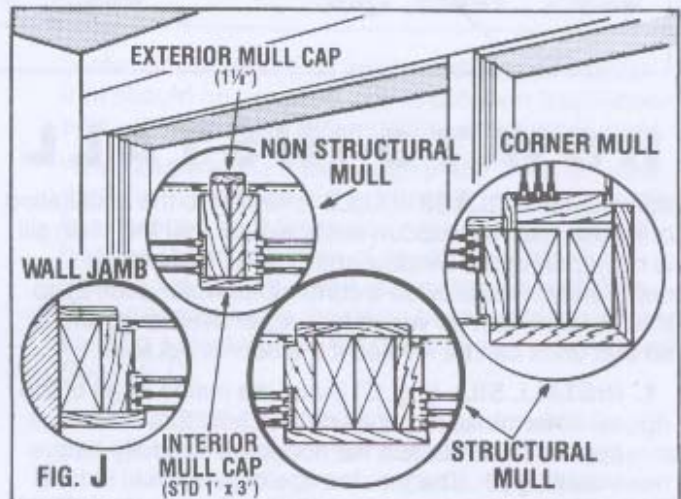


- 5. FIT GLASSWALL UNITS.** (Fig. E) If sill is not level, level windows by cutting off the base of window at proper slope and pitch (7°). At the same time, windows may be shortened if necessary to fit smaller height openings. The base of a Glasswalls unit may be shortened up to three inches if box sill space is not necessary to accommodate heating and electrical equipment.

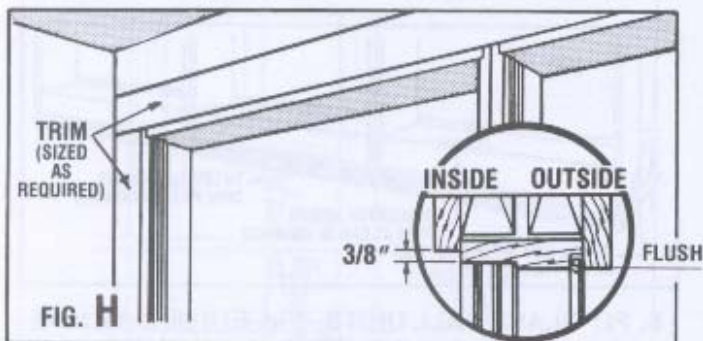




- 6. INSTALL GLASSWALLS ON SILL.** (Fig. F.) Units are installed, one at a time so that they can be toenailed into sill and header. Check to see that each unit is plumb and true before anchoring securely. Using coated nails or screws, face-nail units together at mullions and to wall studs. Use at least three nails on mulls.
- 7. CHECK EACH UNIT.** See that units are plumb. Install glass panels and see that their operation is smooth. See that pin-locks engage properly without binding. If the aluminum frames for the glass panes are not square, stand frame on corner and tap gently using wood blocks to prevent damage to frame (see Fig. F).
- 8. ROUGH IN WIRING AND HEAT.** (Fig. G) Normally electrical outlet boxes are secured directly to the sill, leaving clearances for the outlet cover plate when attached through baseboard trim. Conduit can be run in box sill under windows and through holes drilled in mullions between Glasswall units. Secure heat ducts, finned radiation units or other heating equipment to sill.

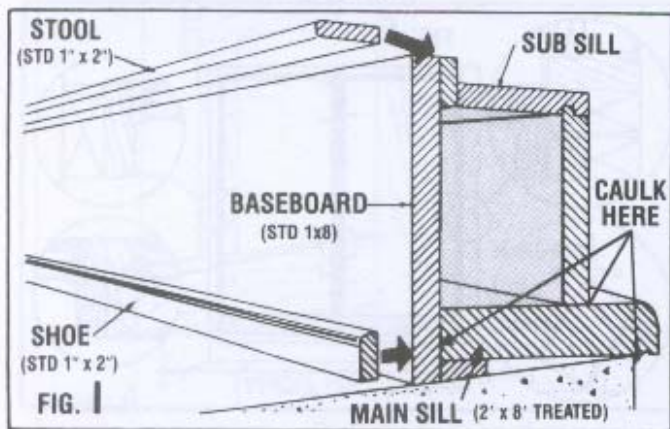


- 11. TRIM MULLIONS, INSIDE AND OUTSIDE.** (Fig. J) Cut all vertical trim members 1/16" long and snap into place to give snug fit. Inside mull should cover sash channels. If trim extends past the channels it will restrict the removability of the sash. (Trim not furnished — obtain locally.)



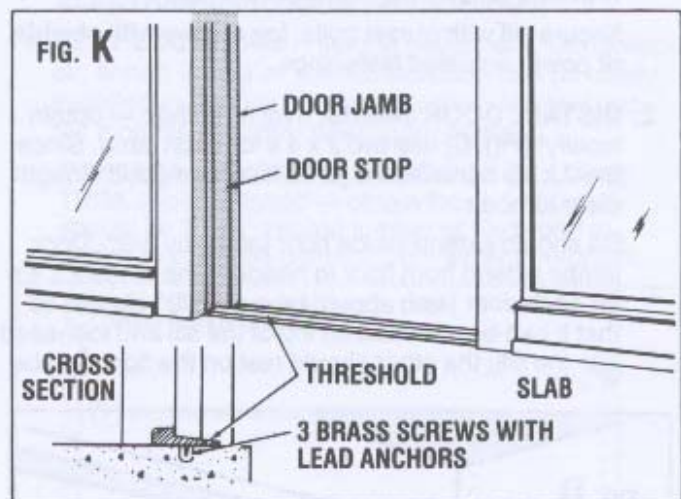
- 9. TRIM HEADER, INSIDE AND OUTSIDE.** (Not furnished — obtain locally) (Fig. H) Outside header trim must overlap screen frame by 1/2" or align with underside of top window jamb.

- 10. INSTALL BASEBOARD, BASE, TRIM.** (Fig. I) (Not furnished — obtain locally) Stool must cover weatherstrip on waterseal lip.



- 12. CAULK ALL JOINTS ON THE OUTSIDE.**

- 13. INSTALL DOOR(S).** Follow standard procedure for outside wood doors. (See detail for installing threshold plate, Fig. K.)



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