

Walls of Daylight



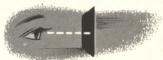
brought into the house in areas where ordinary windows would not be practical. Several different face designs are available—each with its own light-transmitting characteristics. All provide modern "walls of daylight."



INSULATION. Insulux Glass Block insulates as well as an eight-inch brick wall, more than twice as well as an ordinary window. Insulux panels help to reduce heating bills and to eliminate drafts and air leakage. You'll find they make home more comfortable.



PERMANENCE. Glass block panels last ... and last ... and last. Being glass, they do not rot, rust or corrode. They never need painting. Never fade or change color. When panels are installed properly, they remain strong and attractive for the life of the home.



PRIVACY. You don't have to live in a goldfish bowl to have plenty of daylight in your home, nor must you live in a cave to have privacy. Insulux Glass Block gives you both. Certain face designs give complete privacy, others partial privacy. All have high light-transmitting qualities.



INSULUX®

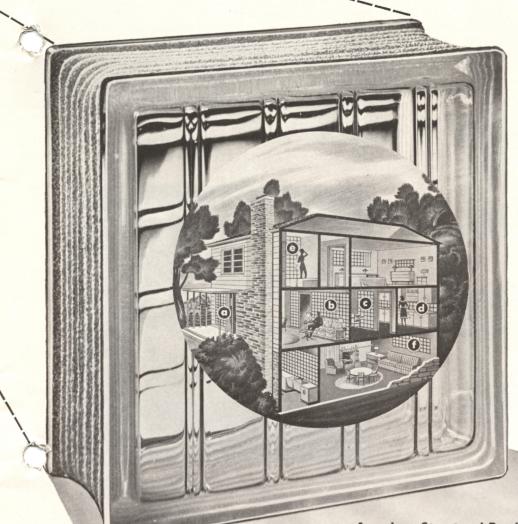
GLASS BLOCK

Insulux Glass Blocks are hollow masonry units which contain partial vacuums. They come in several different face designs and three sizes, nominally 6" x 6", 8" x 8" and 12" x 12". All are 3\%" thick. Special shapes are available for building curved panels and for turning corners. Complete descriptions and illustrations on pages 16 and 17.

Ito Easy to Install

Glass blocks are laid very much like ordinary bricks, with standard masonry tools and mortar. They are not load-bearing and panels require framed openings as for windows. Glass blocks set in mortar form permanent, weather-proof panels for either exterior or interior use. Complete instructions for laying glass block in mortar are shown on page 19.

Glass block panels for interiors may be erected by using prefabricated wood strips instead of mortar. Set-in-Wood partitions can be built, taken down and rebuilt in a new location without loss of material. See pages 14 and 15 for instructions.



Index

Insulux in:

Stairways Page 4

Page 4
Entrances

Pages 5, 15

D Living Rooms Pages 6, 15

O Dining Rooms
Pages 7, 15

d Kitchens Pages 8 and 9

Bathrooms
Pages 10 and 11
Closets
Page 10

Basements
Page 12
Garages
Page 13

Set-in-Wood Partitions

Pages 14 and 15 Designs, Sizes, Descriptions

Pages 16 and 17 Construction Details

Construction De Page 18

Accessories Page 17

Directions for Installing

Pages 19, 14

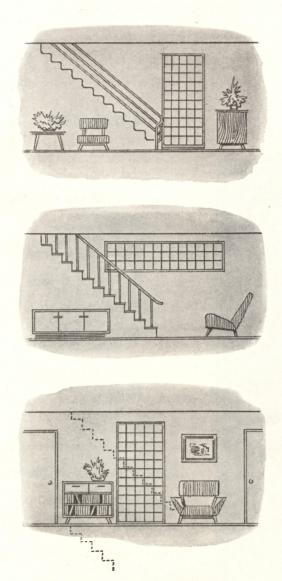
American Structural Products Company • Toledo 1, Ohio

Subsidiary of Owens-Illinois Glass Company

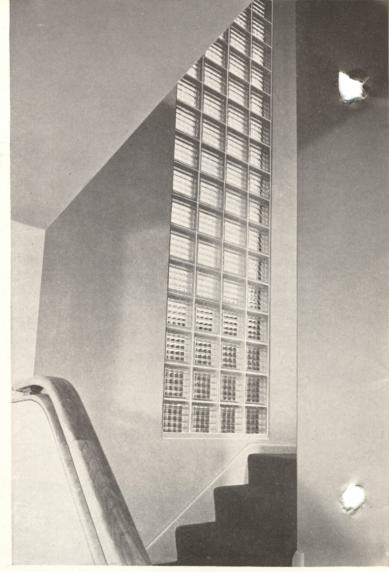
Stairs

One school of thought maintains that stairs are just something to climb and the less said about them the better. To that we say: "But do they have to be dark? Drab? Drafty?" We answer our own questions with an emphatic "no."

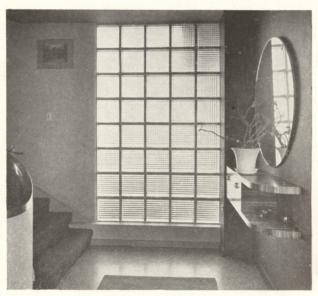
There are many, many ways Insulux Glass Block can be used to make stairways lighter, more comfortable and more attractive. A few suggestions are on this page. Maybe glass block is what you need to make you prouder of your stairway.



Three ways to light stairways with Insulux. In the bottom sketch light is "borrowed" from an adjoining room, yet because the blocks are not transparent, stairs remain hidden.



Here a graceful vertical panel brings daylight to a stairlanding . . . without the chilliness which sometimes comes with large glass areas. Insulux insulates.



This panel of twelve-inch glass blocks not only lights the approach to the stairs and the mirror, but it provides the perfect relief from the plainness of the walls and decoration.



House numbers affixed to the faces of glass blocks can easily be seen day or night. One manufacturer makes these illuminated house numbers under the trade name "Silhouette."



A door-high panel provides nice balance and a pleasant contrast to the front door. Unlike ordinary windows, glass block panels are hard to break. A burglar would find it nearly impossible to break through here.



Traditional or Modern



Entrances

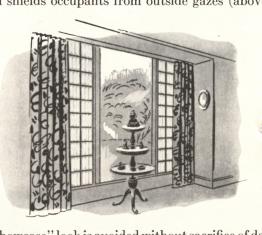
If you want a pleasant, daylighted entranceway, but you don't want snoopers peeking in near your front door, then glass block is your answer. Pick a block with a completely obscure face design, and you'll get plenty of light, and insulation, and privacy.



Living Rooms



(Left) Wall of Insulux floods living room with daylight . . . still shields occupants from outside gazes (above).



That "showcase" look is avoided without sacrifice of daylight by flanking picture windows with panels of Insulux.



What is colder than a cold fireplace? Light-giving Insulux panels add a warm, cheery feeling all of the time.

Dining Rooms

You don't have to wait for a new house to have panels like this. If windows don't give you the privacy you want in your present house, replace them with permanent, insulating glass block.



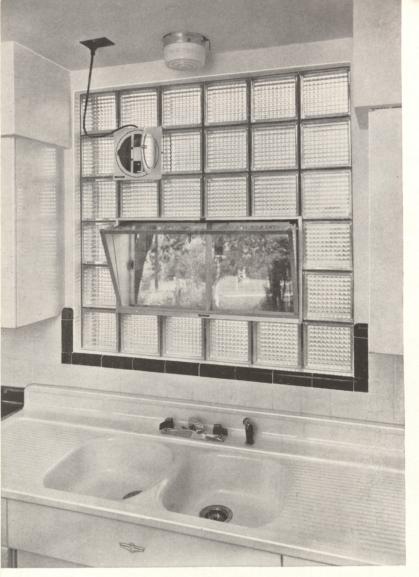
(Below) Shimmering glass blocks set off the rich, dark walls of this dining room, providing needed natural light.



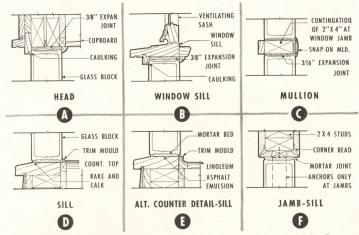
When your neighbor's house is too close . . .

. . . you can't move it—easily. If you don't want the people next door looking down your neck





If you're typical, Mrs. Housewife, you spend more time in the kitchen than in any other room of the house. Why not let Insulux Glass Block help make that time more pleasant? Panels of Insulux would flood your kitchen with daylight without danger of cold weather drafts and you could reduce your cleaning chores. Insulux is ideal around the sink or stove because it almost never steams up. Soil marks, even greasy ones, rub right off. Various types of ventilators, of which two are shown above, may be used in Insulux panels where needed.



Construction details show the builder how glass block can be built into kitchens, at the points indicated on sketch.

Kitchens

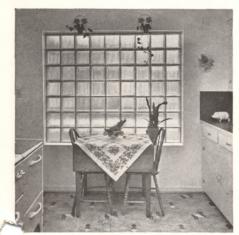


Shelves set on brackets sealed into the mortar joints of Insulux panels offer you a chance to display the bright new kichen utensils you are so proud of. Daylight from behind the glass block will make them sparkle... at the same time illuminate the whole room. Condensation, that old bugaboo around stoves, will not form on Insulux except during the coldest of days.





It's easy to see why panels over the sink are among the most popular uses for glass block in homes. Imagine having this soft light in your kitchen—right where it's needed most. Panels like this are good for the disposition. They not only add a little glamour to a normally drab area, but they make your clean-up job easier. Splash on them all you want. Soapy water won't affect them . . . Another clever trick is to put Insulux in the wall behind your cabinets. Then the inside is lighted from behind.



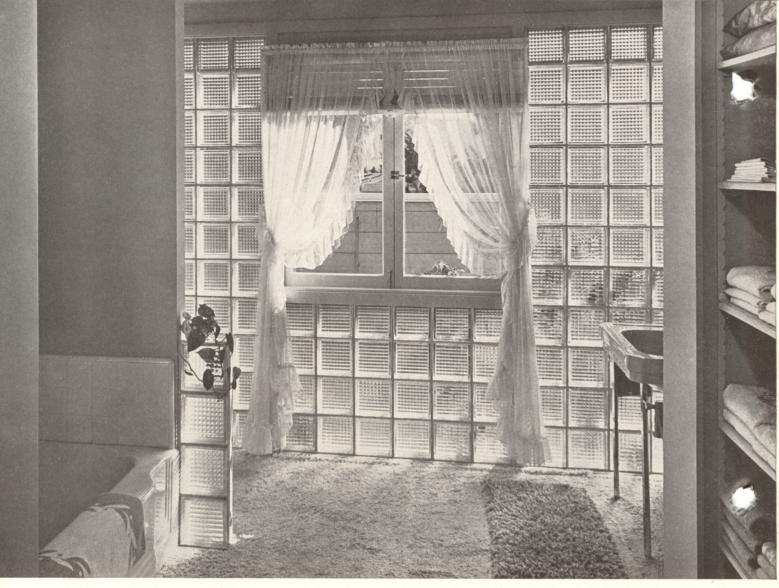
breakfast table. Softly diffused daylight through an Insulux panel would make you both feel more cheerful.



Another way of using the space above your stove is to allow for a sill in front of the glass block panel to hold salt, pepper, and so on.



To partition a part of the kitchen into a semi-private breakfast nook, without giving up light from either side, try a panel of Insulux.



"The best eye-opener you could ever imagine" is the way the owner of the bathroom shown here describes his floor-to-ceiling panel of Insulux Glass Block. In spite of the open feeling provided by the almost completely glass wall, privacy is obtained by simply pulling the shade on the window.



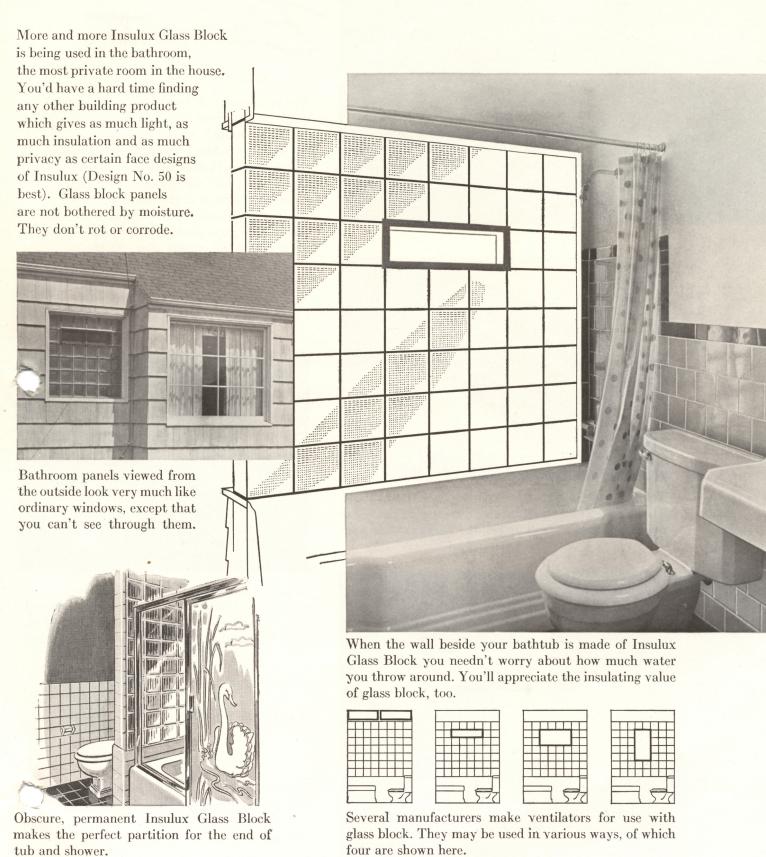


To make good use of daylight, or light from another room, install an Insulux panel at the back of closets.



The bather in this shower is bathed in light from all sides, yet his right of privacy is not infringed.

Bathrooms





This is an outside view of one of the panels shown above. The rains can rain and the snows can snow on these glass blocks and they'll stand up like the bricks at their sides.



Basements

The judicious use of Insulux Glass Block can make a basement look like something else. Daylight through panels of weather-resistant glass block brightens below grade rooms, making them appear to be above grade. Would you guess, for instance, that the hand-some paneled room at the left is actually a corner of a basement? The illusion is possible because the glass blocks welcome outside light, while hiding the outside view. At the same time they insulate as well as the cellar wall itself.



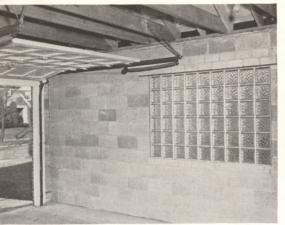
You don't have to have dark spots in your basement. Glass blocks, placed where light is needed most, solve that problem, permanently. Unaffected by the weather, they never have to be painted.



Suppose you want to build a game room in pary your basement and leave the rest of the basement as is. Insulux will screen off the unattractive sections without sacrificing their light.



Above) A typical garage installation. Selow) Inside view of garage panel.



Garages

Have you ever stopped to consider the total value of the things you store in your garage? The first thing a garage should do is to protect. When you daylight your garage with Insulux Glass Block, you get protection—from breakage, from weather, from fire and from prying eyes. It's permanent protection, too. Glass block does not deteriorate, even in the most rigorous climates.

This was a garage once, until the owner decided he needed an extra room. Now the large Insulux panel bathes the new room in natural light, while screening its occupants from outside view. Glass block is ideal for remodeling because of its flexibility.

More, for example, when the garage s converted to living quarters, three rows of blocks were added without disturbing the original panel.



Set-in-Wood Partitions





Panels of Insulux Glass Block which are not exposed to weather may be built by an amazingly simple method using prefabricated wood strips instead of mortar. Building a Sét-in-Wood partition is not much harder than building with toy blocks, yet the result gives lasting satisfaction.

There are many advantages to Set-in-Wood partitions. They may be dismantled and used again in another location without loss of material. Joints are always of even thickness, and for unusual decorative effects, the wood strips may be painted in whatever colors suit your tastes. They do not have the high sound reduction or the fire resistance of mortar-set panels, however.

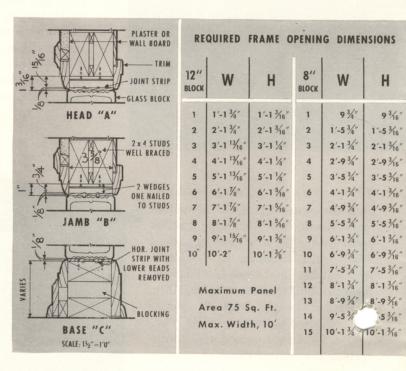
STEP-BY-STEP INSTRUCTIONS

Preparing the Opening. Determine dimensions of opening from table below. Build frame, strong and true, using double 2 x 4's. Then . . .

- 1. Nail grooveless wedges at top and sides of frame with 2 two-penny nails each. Locate wedges in center of each row of block on either 8" or 12" centers. Thin edge of wedge should be up.
- 2. Plane off beads on one side of a horizontal joint strip; cut to full width of opening and lay on base with remaining beads up.
- 3. Nail bottom strip to base.
- 4. Lay course of block, inserting vertical strips between blocks and end of block and wedges.
- 5. Insert grooved half of wedges at ends of course. Be sure that grooves in wedges are on beads of vertical strips. Drive wedges snug, giving same pressure from both ends.
- 6. When wedges are tight, tap top of each vertical joint strip—se that notches fit over beads of horizontal strip below.
- 7. Place next horizontal strip. Thereafter, repeat steps 4, 5, 6 and 7 for each course. Be sure vertical joints are plumb and true. Wedge panel evenly from each end all the way up.

After last horizontal strip is in place, wedge panel at top, just tight enough for a rigid wall.

Last, nail on trim as shown on details. Lap trim over half the end joints. Strips and trim may be finished as desired.











Pictures on this page illustrate the versatility of the Set-in-Wood method, and of Insulux Glass Block itself. (Upper left) Insulux fills an opening left when an old house was divided into apartments. (Center, left) A semi-partition separates living room from dining room. (Left) Light-borrowing glass block provides the right compromise between "too open" and "too confined." (Above) Insulux shields dining area from front hallway, (Below, left and right) Two views of interior partition show how glass block obscures and illuminates at the same time.





pesign No. 7. An easily-cleaned, smooth-face block with parallel convex ribs on both interior faces. Gives high light transmission, limited privacy. No matching corner. Use corners 216-C, 316-C, Radial 316-R. Lay exterior ribs vertical to match corners and radials.

No. 207	No. 307	No. 407		
53/4" x 53/4"	73/4" × 73/4"	113/4" × 113/4"		



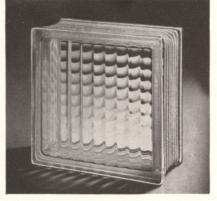
DESIGN NO. 17. A highly decorative, smooth-face block with concave flutes running vertically one face, horizontally on the other. Gives high light transmission with very limited privacy. Lay exterior ribs vertical to match corner. No. 217-C, 317-C and radial 317-R.

No. 217	No. 317	No. 417	
53/4" x 53/4"	73/4" x 73/4"	113/4" × 113/4"	



DESIGN NO. 40. A ribbed face block offering a very high degree of privacy. Face ribs are shallow for easy cleaning. All four faces have parallel ribs. Both interior faces have stippled surfaces. Lay with ribs vertical to match corner blocks No. 240-C and 340-C.

No. 240	No. 340	No. 440		
53/4" x 53/4"	73/4" x 73/4"	11 ³ / ₄ " x 11 ³ / ₄ "		



DESIGN NO. 16. A smooth-face block with convex interior ribs running vertically one face, horizontally on the other. For decorative and lighting effects. Gives a fair degree of privacy. Lay exterior ribs vertical to match corners No. 216-C, 316-C and radial No. 316-R.

No. 216	No. 316	No. 416	
53/4" x 53/4"	73/4" x 73/4	113/4" x 113/4"	



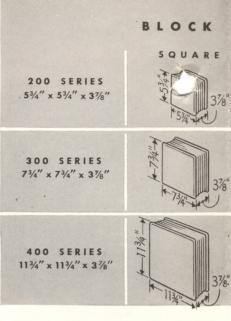
DESIGN NO. 30. A smooth-face, highly decorative pattern with high light transmission but a low degree of privacy. Distinctive design permits laying without regard to pattern. Has matching corner blocks, No. 230-C and 330-C.

No. 230	No. 330	No. 430	
53/4" x 53/4"	73/4" x 73/4"	11¾" x 11¾"	



DESIGN NO. 370. Both interior and exterior faces are smooth to permit a limited degree of vision thru the block. May be inset in other patterns for general vision to the outside, but must be shaded when used on sun exposures. In one size, $7\frac{3}{4}$ " x $7\frac{3}{4}$ " x $7\frac{3}{8}$ " only.

I	No. 370				
ľ	73/4" x 73/4"				





corner blocks. Designs to match standard block patterns listed below. Made in 5¾" and 7¾" heights only. All ribs are vertical on exterior faces. Use two 5¾" high blocks with the 11¾" x 11¾" blocks.

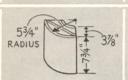
11/4 DIOCKS	•	
200 Series 53/4" x 53/4"	300 Series 73/4" x 73/4"	400 Series 11 ³ / ₄ " x 11 ³ / ₄ "
216-C	316-C	Use Two
217-C	317-C	200 Series
230-C	330-C	Corner
240-C	340-C	Blocks
	350-C	

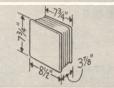


DIMENSIONS



RADIAL





Use Two 200 Series Corner Blocks

Designo, Sizeo, Descriptions

INSULUX GLASS BLOCK



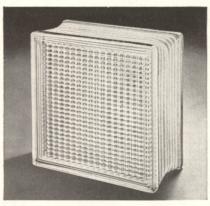
RADIAL BLOCKS. Designs to match standard block patterns listed below. For use with 734" standard blocks only. Minimum radius 2'-5". Ribs vertical on long face. May be combined with standard blocks on long radii to reduce cost.

200 Series 53/4" x 53/4"	300 Series 73/4" x 73/4"	400 Series 11 ³ / ₄ " x 11 ³ / ₄ "
Not	316-R	Not
M'fd.	317-R	M'fd.
	330-R	
	340-R	1
	350-R	



DESIGN NO. 350. Ribbed-face—designed primarily for severe sun exposures. Complete privacy. Use alone or combine with No. 351. Lay with exterior ribs vertical. One size: $7\frac{3}{4}$ " x $7\frac{3}{4}$ " x $3\frac{7}{6}$ ". Matching corner No. 350-C, radial 350-R. Diffusing qualities for decorative or artificial illumination effects.

DESIGN NO. 354. Similar in appearance to Nos. 350 and 351. For use on north exposures where 350 and 351 used on sun exposures.



DESIGN NO. 351. A functional block designed to direct light above the horizontal, to the ceiling for reflection deep into room (see photograph below). Use above eye-level. Has vertical ribs on exterior faces. Lay only as marked. Made in one size only: $7\frac{3}{4}$ " x $7\frac{3}{4}$ " x $3\frac{7}{8}$ ".

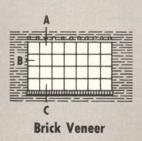


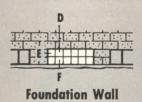
Accessory Materials for Installing Insulux Glass Block

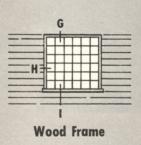
To install Insulux Glass Block correctly, as described elsewhere in this book, certain basic materials are needed in addition to the blocks themselves. All can be purchased from your Insulux dealer, who will estimate the quantities requed. Accessories for installing set-in-mortar panels are: Insulux Asphalt Emulsion for coating the sill, Insulux

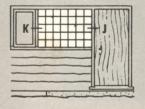
Calking Compound for sealing the edges of panels, Insulux Wall Ties for strengthening panels, Insulux Expansion Strips for cushioning sides and top of exterior panels, and Insulux Panel Anchors for fastening panels to wall when chases are not used. Accessories for Set-in-Wood partition are: horizontal strips, vertical strips and wedges.

Key Elevations









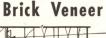
Wood Frame

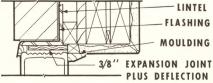


Stucco

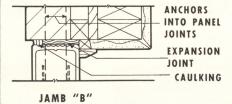
Typical Details





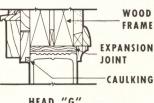


HEAD "A"

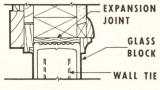


GLASS BLOCK ASPHALT EMULSION ON SILL FLASHING SILL "C"

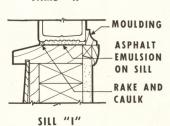
Wood Frame



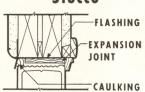
HEAD "G"



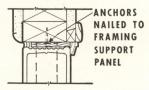
JAMB "H"



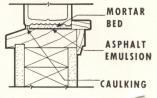
*Stucco



HEAD "L"

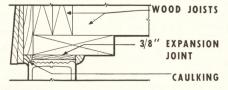


JAMB "M"

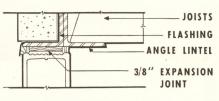


SILL "N"

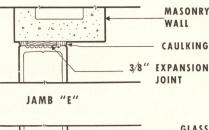
Foundation Wall

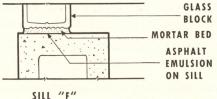


ALTERNATE HEAD "D"

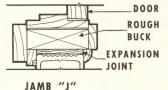


HEAD "D"

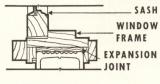




Door Detail

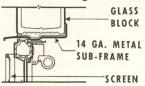


Window Detail

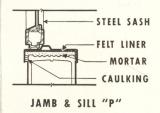


JAMB "K"

Ventilating Sash



HEAD "O"



*Alter where weather conditions require sheathing.

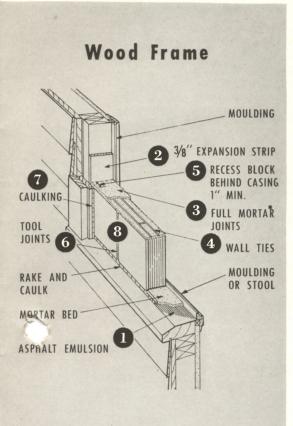
Typical Details

Details above have been developed particularly for residential construction. They are simple and if followed with reasonable care should provide very satisfactory installations. In preparing the details, every attempt has been made to select those which apply to the design ideas for use of glass block shown in this book. If still other construction information is desired, see your local Insulux Distributor or write American Structural Products Company.

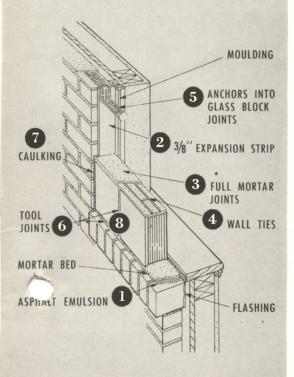
H

Basic Installation Method

(for mortar set panels)



Brick Veneer



Insulux Glass Block panels may be installed in either masonry or frame houses. They are erected with standard tools and masonry mortar. Not load-bearing, glass block require openings framed as for windows. Rough opening dimensions are shown in table below. Procedure for installing Insulux panels is as follows:

- Apply a coat of Insulux Asphalt Emulsion to the sill.
- 2 Install Insulux Expansion Strips at jambs and heads of openings.
- 3 Lay glass block, using full mortar joints. Mortar mix: 1 part Portland cement, 1 part hydrated lime and 4 parts sand. Use stiff consistency.
- 4 Install Insulux Wall Ties in horizontal joints as follows: 6" block, every 4th course; 8" block, every 3rd course; 12" block, every course.
- **5** Anchor panels at jambs by setting into rebates formed by casing (Detail H, page 18), or use Insulux Anchors on 2' centers. (Detail B, page 18).
- 6 Tool joints and give blocks preliminary cleaning before mortar reaches final set.
- 7 Calk perimeter of panel with Insulux Calking Compound. Where wood sills are used, sill joint should be raked and calked. Head should be flashed wherever head joint is exposed.
- 8 Give panel final cleaning.

Minimum Required Opening Sizes

This table shows the minimum size openings needed for panels of various numbers of blocks, allowing for $\frac{1}{4}$ " mortar joints. Example: a panel of $7\frac{3}{4}$ " x $7\frac{3}{4}$ " blocks, 5 blocks high and 7 blocks wide requires an opening $3' 4\frac{3}{8}$ " by $4' 8\frac{1}{2}$ ".

NUMBER	BLOCK SIZE 53/4" x 53/4"		BLOCK SIZE 73/4" x 73/4"		BLOCK SIZE 113/4" x 113/4"	
OF BLOCKS	Height	Width	Height	Width	Height	Width
1	63/8"	61/2"	83/8"	81/2"	1'-03/8"	1'-01/2"
2	1'-03/8"	1'-01/2"	1'-43/8"	1'-41/2"	2'-03/8"	2'-01/2"
3	1'-63/8"	1'-61/2"	2'-03/8"	2'-01/2"	3'-03/8"	3'-01/2"
4	2'-03/8"	2'-01/2"	2'-83/8"	2'-81/2"	4'-03/8"	4'-01/2"
5	2'-63/8"	2'-61/2"	3'-43/8"	3'-41/2"	5'-03/8"	5'-01/2"
6	3'-03/8"	3'-01/2"	4'-03/8"	4'-01/2"	6'-03/8"	6'-01/2"
7	3'-63/8"	3'-61/2"	4'-83/8"	4'-81/2"	7'-03/8"	7'-01/2"
8	4'-03/8"	4'-01/2"	5'-43/8"	5'-41/2"	8'-03/8"	8'-01/2"
9	4'-63/8"	4'-61/2"	6'-03/8"	6'-01/2"	9'-03/8"	9'-01/2"
10	5'-03/8"	5'-01/2"	6'-83/8"	6'-81/2"	10'-03/8"	10'-01/2"

Assimple as

Start with a framed opening of proper dimensions for the glass block panel you plan.



B

Line jambs and head of opening with Insulux Expansion Strips and coat sill with Insulux Asphalt Emulsion.



C

Lay blocks with full mortar joints, using Insulux Wall Ties for reinforcing at prescribed intervals, and calk perimeter of panel.

Result: A handsome, functional "wall of daylight" which will lend distinction to any home.



See your dealer today about



MANUFACTURED BY

American Structural Products Company

TOLEDO 1, OHIO . Subsidiary of Owens-Illinois Glass Company

PADDOCK GLASS COMPANY
MARKET ST. AT RUTTER AVE.
KINGSTON, PA. * PHONE 7-4583

