PITTSBURGH CORNING GLASS BLOCK

Pittsburgh Corning Corporation has been manufacturing Pittsburgh Corning Glass Block products since 1937 and today is the only domestic manufacturer in North America. The company recognizes its responsibility to provide a variety of products and to furnish accurate descriptive and technical information which will help the design professional select and specify Pittsburgh Corning Glass Block products.

The comprehensive variety of patterns, styles and sizes available have been designed to work together in your projects as a total system. Pittsburgh Corning stands behind all its glass block when used exclusively with Pittsburgh Corning accessory products by offering a limited five-year warranty.

www.pittsburghcorning.com features application photos, product information, specifications, installation details, literature, continuing education, case histories, and much more information on how to design with Pittsburgh Corning Glass Block products.

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“...we selected the glass block to create a visually stunning separation between the research and clinical pavilions. It enabled the transmission of natural daylight into the labs and treatment areas while still maintaining the appropriate degree of privacy. The use of glass block greatly contributed to the Hillman Cancer Center’s artful expression of both the functional and emotional needs of the clinical pavilion dedicated to healing, and the opportunity for interaction and flexibility of a research pavilion dedicated to finding a cure.”

– Mihai Marcu, AIA, President, IKM Inc.

“...We selected the glass block to create a visually stunning separation between the research and clinical pavilions. It enabled the transmission of natural daylight into the labs and treatment areas while still maintaining the appropriate degree of privacy. The use of glass block greatly contributed to the Hillman Cancer Center’s artful expression of both the functional and emotional needs of the clinical pavilion dedicated to healing, and the opportunity for interaction and flexibility of a research pavilion dedicated to finding a cure.”

– Mihai Marcu, AIA, President, IKM Inc.

Lloyd Hall, Philadelphia, PA // Architect: Armstrong Kaulbach Architects // VISTABRIK® Solid Glass Block, VUE® Pattern
This building is going to be used for everything from black tie parties to basketball games. So every inch of this place has to endure years of hard wear – and look great doing it. VISTABRIK® Glass Block has the perfect balance of durability, security and sheer beauty to make this place special.”

– Lisa Armstrong, AIA, Architect
Armstrong Kaulbach Architects

BEAUTY AND VERSATILITY

Extraordinarily versatile and available in many aesthetically pleasing sizes and styles, glass block offers virtually limitless design possibilities. Glass block walls, partitions and windows combine the delicate beauty and light transmission of glass with the strength of glass block.

Big opportunities generally mean big challenges. So when Armstrong Kaulbach Architects designed the first new building, Lloyd Hall (see photo on page 2), on Philadelphia’s Boathouse Row, they were looking at a once-a-century challenge. It had to be big without dwarfing its neighbors. A modern classic with 19th century charm and 21st century convenience. They achieved this with a skylit, peaked profile and a three-sided exposure of VISTABRIK® Glass Block.

LIGHT TRANSMISSION AND PRIVACY

Glass block has a dynamic relationship with light, both natural and artificial. As light changes, so does the material’s appearance and in turn the surrounding environment. Transmitting up to 80% of available light, glass block provides a great range of light and privacy, depending on the pattern and transparency of the unit used. It is also scratch-resistant, without any yellowing, clouding or weathering.

SECURITY

When top architects need to add security to their projects, Pittsburgh Corning answers with a range of solutions:

Premiere Series
Available in the widest range of sizes, shapes and patterns, these blocks offer enhanced resistance to impact, fire, sound transmission, graffiti and weather.

THICKSET® Series
These thicker-faced blocks offer all the performance features of our Premiere Series but with an extra reduction in sound transmission and increased fire resistance available in 60- or 90-minute ratings.

VISTABRIK® Glass Block
Three inches of solid glass block make this the top-performing product offering the highest ballistic ratings, resistance to impact and sound transmission while still transmitting 80% of available light.

IMPACT AND BALLISTIC RESISTANT

Pittsburgh Corning Glass Blocks are inherently stronger than conventional glass because of the thickness of the faces and the mortar that binds the blocks together. As a result the glass blocks are more difficult to break and therefore provide resistance and are a deterrent to forced entry. Our solid 3” VISTABRIK® Glass Block resists penetration from high-impact ballistics, including 9mm and .357 magnum bullets. VISTABRIK® glass blocks are UL® tested and component recognized for ballistic levels 1, 2, and 6.

SOUND TRANSMISSION

Three inches of solid glass makes VISTABRIK® a dense barrier to sounds from trains, traffic, crowds, sirens and machinery. The STC value of with a 53, makes the acoustical properties of VISTABRIK® comparable to insulated masonry walls. STC values for THICKSET® Series Glass Block range between 48 and 50, with Premiere Series Glass Block ranging from 35 to 40.
ENERGY CONSERVATION

Glass block can provide more than double the thermal resistance (R-Value) of single-glaze \(\frac{1}{8}\)" thick plate glass. The differences between the shading coefficient of glass block and flat sheet glass is also significant. Contributing to this is the louvering effect of glass block’s horizontal mortar joints, which helps reduce light transmission from the higher summer sun. The size and orientation of the block can greatly affect the amount of shading that can occur.

We started with the vertical elements of the garages — the elevator towers — and using the VUE® pattern, turned it into a virtual wayfinder system. Then, we continued that theme with small wayfinder devices — information pylons using ESSEX® AA — throughout the garages.” — Graham Davidson, Architect

GRAFFITI RESISTANT

Glass block resists damage and is easy to clean.

HURRICANE IMPACT GLASS BLOCK SYSTEM

Pittsburgh Corning’s THICKSET® 90 Glass Block with our KWiK’N EZ® Rigid Track Installation System is hurricane tested and code approved. The system has passed hurricane impact tests recognized by the International Building Code and Dade County in coastal areas. Which makes it the perfect solution if you want beauty and function that will weather most any storm.
An important feature of glass block, critical to safe building design, is the product’s inherent fire-resistance property. By varying the face thickness of the product and conforming to installation specifications, Pittsburgh Corning is able to offer a family of fire rated products approved and rated according to Underwriters Laboratory (UL®) standards. Glass block are available in 45-, 60- and 90-minute ratings for window assemblies. See pages 11 and 15 for additional technical information. Visit our website at [www.pittsburghcorning.com](http://www.pittsburghcorning.com) for electronic details.

**EARTHQUAKE RESISTANCE**

Pittsburgh Corning Glass Block met the requirements of Section 1630.2, (Vol. 2) of the 1994 Uniform Building Code which governed seismic design of nonstructural components supported by structures.

The Northridge, CA earthquake on January 17, 1994 was the largest earthquake in the United States to have its epicenter in an urban area. A detailed survey was made of the performance of structures containing Pittsburgh Corning glass block panel applications. In all sites visited, the glass block walls and panel systems that were designed and constructed in accordance with Pittsburgh Corning specifications and the provision of the Uniform Building Code resisted the seismic forces without failure.

Glass block panels inherently have attributes that make them very safe in earthquakes, including the fact that since glass block panels are isolated from the framing with expansion joints, the glass block are better able to resist the seismic forces independent of their surrounding frames. In summary, glass block panel design criteria currently specified in the UBC provides an excellent architectural product that performed very well during the Northridge earthquake.

**PREMIERE SERIES**

- Includes the largest selection of patterns and sizes for the utmost in design flexibility.
- All patterns are classified by UL®, for use in 45-minute rated window assemblies.
- All sizes available are rated except 12" x 12" and shapes.
- Nominal face thickness: 0.25"

**THICKSET® 60 Block**

- Classified by UL®, for use as 45- or 60-minute rated window assemblies.
- Nominal face thickness: 0.375"

**THICKSET® 90 Block**

- Classified by UL®, for use as 45-, 60- or 90-minute rated window assemblies.
- Nominal face thickness: 0.75"

**VISTABRIK® Solid Glass Block**

- The ultimate glass block solution, 3 solid inches of glass which resists bullets, fire, noise, and graffiti.
- Classified by UL®, for use as 45-, 60- or 90-minute rated window assemblies.
- Actual face thickness: 3.0"
HIGH PERFORMANCE LINE — Pittsburgh Corning’s High Performance Line of glass block products is comprised of products that offer the highest value, performance features and benefits related to improved safety, energy efficiency, aesthetics and decorative choices.

PITTSBURGH CORNING GLASS BLOCK PRODUCTS

THICKSET® Block
Cutaways show the greater face thickness of the THICKSET® Series Block. THICKSET® 60 Block on left vs. the THICKSET® 90 Block on right.

THICKSET® 90 Block DECORA® Pattern
THICKSET® 90 block provides a 90-minute fire rating. The DECORA® pattern provides maximum light transmission with subtle visual distortion. The non-directional faces make installation quick.

THICKSET® 90 Block ENDURA® Pattern
THICKSET® 90 block provides a 90-minute fire rating. The ENDURA® pattern’s narrow flutes provide moderate light transmission/maximum privacy.

THICKSET® 90 Block VUE® Pattern
THICKSET® 90 block provides a 90-minute fire rating. The VUE® pattern transmits maximum light and allows ultimate visibility. The non-directional faces make installation quick.

THICKSET® 60 Block DECORA® Pattern
THICKSET® 60 block provides a 60-minute fire rating. The DECORA® pattern provides maximum light transmission with subtle visual distortion. The non-directional faces make installation quick.

THICKSET® 60 Block VUE® Pattern
THICKSET® 60 block provides 60-minute fire rating. The VUE® pattern transmits maximum light and allows ultimate visibility.

DECORA® LX Pattern
Fibrous glass insert adds moderate thermal and light characteristics. Maximum privacy. Please note: The “LX” fibrous glass insert is available in other patterns and sizes by special order. Minimum order quantities apply.

HEDRON® LX Corner Block, DECORA® Pattern
Hexagonal corner unit allows you to form 90-degree corners resulting in a gently rounded continuous glass face.

VISTABRIK® Solid Glass Block
Solid 3” solid glass block. Clear visibility, durable, impact, vandal and bullet resistant, low maintenance and aesthetically attractive. Excellent light transmission. Available in 8” x 8”, 4” x 8” sizes, and in 3” x 8” special order.

VISTABRIK® STIPPLED Solid Glass Block
Solid 3” thickness of glass with a stippled finish to add privacy. Durable, impact, vandal and bullet resistant, low maintenance and aesthetically attractive. Good light transmission/medium privacy. Special Order.

VISTABRIK® Paver
One and a half inches of solid glass. Clear, durable, low maintenance. Excellent light transmission. Horizontal applications only.

PC® Custom Signature Block
Custom manufactured with your corporate logo or other design pressed into one or both inside surfaces of an eight inch square, standard unit. Special Order Only.

SRT™ Block, Wavy and Clear Patterns — Brown Edge
Features a metal oxide coating on the inside surface of the block which greatly reflects solar energy while reducing the passage of sunlight.

Colored Glass Blocks
Add color for unlimited design options. Available in Blue, Bronze and Rosa (pink) in the Wave Pattern. Use alone or mix with clear, colorless Pittsburgh Corning Premiere Series glass block.

SIGNATURE LINE — Pittsburgh Corning’s Signature Line of glass block products is comprised of high quality Premiere and Thinline® Series products and the largest selection of patterns and shapes. This line has become the standard in the industry and provides the most design flexibility in the selection and use of glass block for walls, windows, partitions, and showers in residential and commercial applications.

PREMIERE SERIES GLASS BLOCK

ARGUS® Pattern
Rounded perpendicular flutes diffuse light while allowing maximum light transmission and a medium degree of privacy.

ARGUS® Parallel Fluted Pattern
Rounded parallel flutes on each face diffuse light while allowing maximum light transmission and a medium degree of privacy. Compliments the SPYRA® pattern.

DECORA® Pattern
The trademark wavy undulations of this pattern provides maximum light transmission with subtle visual distortion. The non-directional faces make installation quick.

ESSEX® AA Pattern
The fine grid design of the closely spaced ridges in this pattern offers moderate light transmission and a maximum degree of privacy.

IceScapes® Pattern
Non-directional pattern lets light in without sacrificing privacy. Maximum light transmission/medium to maximum privacy.

SPYRA® Pattern
SPYRA® Pattern gives you many options for decorative patterns, such as bold circles, rounded corners and the illusions of waves. Maximum light transmission and minimal privacy.

VUE® Pattern
Faces are smooth and undistorted to transmit the most light and allow ultimate visibility. This is your best choice for passive solar collection and visual clarity.

VISTABRIK® Pattern
One and a half inches of solid glass. Clear, durable, low maintenance. Excellent light transmission. Horizontal applications only.

ENDURA® Pattern
Maximum privacy. Maximum light transmission/medium to maximum privacy.

SPYRA® Pattern
SPYRA® Pattern gives you many options for decorative patterns, such as bold circles, rounded corners and the illusions of waves. Maximum light transmission and minimal privacy.

PC® Custom Signature Block
Custom manufactured with your corporate logo or other design pressed into one or both inside surfaces of an eight inch square, standard unit. Special Order Only.
**SIGNATURE LINE – PREMIERE SERIES GLASS BLOCK (continued)...**

### SeaScapes™ Pattern
The three dimensional circles appear to float within the glass block. The pattern lets in light and also provides a degree of privacy.

### FOCUS™ Pattern
This new circular pattern gives an exciting new way to bring more light and drama to any project.

### Corner Double Bevel Stipple™ Pattern
Maximum light transmission with medium privacy.

### Corner Double Bevel VUE® Pattern
Maximum light transmission.

### Corner Wide Bevel Stipple™ Pattern
Maximum light transmission with medium privacy.

### Corner Wide Bevel VUE® Pattern
Maximum light transmission.

### Diagonal Bevel Stipple™ Pattern
Maximum light transmission with medium privacy.

### Diagonal Bevel VUE® Pattern
Maximum light transmission.

### Double Bevel Stipple™ Pattern
Maximum light transmission with medium privacy.

### Double Bevel VUE® Pattern
Maximum light transmission.

### Stipple™ Pattern
Maximum light transmission with medium privacy.

### Wide Bevel Stipple™ Pattern
Maximum light transmission with medium privacy.

### Wide Bevel VUE® Pattern
Maximum light transmission.

### TRIDRON 45º Block® DECORA® and IceScapes® Patterns
The unique shape of this block lets you create everything from 45-degree angles to full circles.

### HEDRON® Corner Block DECORA® and IceScapes® Patterns
Hexagonal corner unit allows you to form 90-degree corners resulting in a gently rounded continuous glass face.

### EndBlock™ Finishing Unit DECORA® and IceScapes® Patterns 6” x 8”
The rounded, finished surface on one edge of these blocks makes them virtually disappear when used vertically or horizontally on the edges of panels, walls or dividers.

### ENCURVE® Block, DECORA® and IceScapes® Patterns
Arched, soft edges to round out your design options or finish panels. Use with 8” x 8” EndBlock™ Finishing Units for a stepped panel.

### ARQUE® Block
**DECORA® and IceScapes® Patterns**
ARQUE® Block is a brilliant way to create smooth, graceful curves and columns. ARQUE® Block forms a consistent, tight curve ideally suited for columns.

### EndBlock™ Finishing Unit DECORA® and IceScapes® Patterns 8” x 8”
The rounded, finished surface on one edge of these blocks makes them virtually disappear when used vertically or horizontally on the edges of panels, walls or dividers.

### ENCURVE® Block, DECORA® and IceScapes® Patterns
Arched, soft edges to round out your design options or finish panels. Use with 8” x 8” EndBlock™ Finishing Units for a stepped panel.

### Thinline® SERIES GLASS BLOCK

<table>
<thead>
<tr>
<th>DECORA® Pattern</th>
<th>DELPHI® Pattern</th>
<th>IceScapes® Pattern</th>
<th>SeaScapes™ Pattern</th>
<th>EndBlock™ Finishing Unit, DECORA® Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>The trademark wavy undulations of this pattern provide maximum light transmission with subtle visual distortion. The non-directional faces make installation quick.</td>
<td>This raised diamond design lends a prismatic effect to the light it transmits. Moderate light transmission and maximum privacy. DELPHI® pattern available in Thinline® Series only.</td>
<td>Non-directional pattern lets light in without sacrificing privacy. Maximum light transmission/medium to maximum privacy.</td>
<td>The three dimensional circles appear to float within the glass block. The pattern lets in light and also provides a degree of privacy.</td>
<td>For finishing horizontal or vertical edges of panels. This 4” x 8” size available in Thinline® Series only.</td>
</tr>
</tbody>
</table>
## PHYSICAL & DESIGN DATA

### PITTSBURGH CORNING GLASS BLOCK PRODUCTS

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>SRT Clear</td>
<td>190 mm x 190 mm x 95 mm</td>
<td>20</td>
<td>0.58</td>
<td>1.72</td>
<td>38</td>
<td>0.65</td>
<td>48</td>
<td>.66-.68</td>
</tr>
<tr>
<td>SRT Wavy</td>
<td>190 mm x 190 mm x 95 mm</td>
<td>20</td>
<td>0.57</td>
<td>1.75</td>
<td>38</td>
<td>0.65</td>
<td>48</td>
<td>.66-.68</td>
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**THICKET® Block**—Nominal Thickness = 4"; Actual Thickness = 3¼" (98mm)

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<tbody>
<tr>
<td>8&quot; x 8&quot; (197mm)</td>
<td>25</td>
<td>0.51</td>
<td>1.96</td>
<td>VUE®=75 DECORA®=49</td>
<td>0.65</td>
<td>48</td>
<td>.66-.68</td>
<td></td>
</tr>
<tr>
<td>8&quot; x 8&quot; (197mm)</td>
<td>30</td>
<td>0.51</td>
<td>1.96</td>
<td>VUE®=70 DECORA®=38</td>
<td>0.65</td>
<td>50</td>
<td>.66-.68</td>
<td></td>
</tr>
</tbody>
</table>

**Glass Block with “LX” Fibrous Glass Inserts**—Nominal Thickness = 4"; Actual Thickness = 3¼" (98mm)

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<tbody>
<tr>
<td>6&quot; x 6&quot; (146mm)</td>
<td>20</td>
<td>0.48</td>
<td>2.06</td>
<td>50-55</td>
<td>0.45</td>
<td>.56</td>
<td>.66-.68</td>
<td></td>
</tr>
<tr>
<td>8&quot; x 8&quot; (197mm)</td>
<td>20</td>
<td>0.48</td>
<td>2.06</td>
<td>50-55</td>
<td>0.45</td>
<td>.56</td>
<td>.66-.68</td>
<td></td>
</tr>
<tr>
<td>12&quot; x 12&quot; (299mm)</td>
<td>20</td>
<td>0.48</td>
<td>2.06</td>
<td>50-55</td>
<td>0.45</td>
<td>.56</td>
<td>.66-.68</td>
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**STIPPLE Finish**—Nominal Thickness = 4 1/8" (105mm)

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<tbody>
<tr>
<td>8&quot; x 8&quot; x 3&quot; Nominal</td>
<td>40</td>
<td>0.87</td>
<td>1.15</td>
<td>80</td>
<td>53 (NRC=0.05)</td>
<td>.75-.78</td>
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</table>

### HIGH PERFORMANCE LINE

#### VISTABRIK® Solid Glass Block—See Nominal/Actual Sizes Listed

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<tbody>
<tr>
<td>ARQU®</td>
<td>6&quot; x 6&quot; (146mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>37</td>
<td>.66-.68</td>
</tr>
<tr>
<td>Bevel (All Patterns)</td>
<td>8&quot; x 8&quot; (197mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
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<tr>
<td>ESSEX® AA</td>
<td>8&quot; x 8&quot; (197mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
</tr>
<tr>
<td>FOCS®</td>
<td>8&quot; x 8&quot; (197mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
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<tr>
<td>SeaScapes®</td>
<td>8&quot; x 8&quot; (197mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
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<tr>
<td>SPYRA®</td>
<td>8&quot; x 8&quot; (197mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
</tr>
<tr>
<td>VUE®</td>
<td>6&quot; x 6&quot; (146mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
</tr>
<tr>
<td>12&quot; x 12&quot; (299mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
<td></td>
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<tr>
<td>4&quot; x 8&quot; (95 mm x 197 mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
<td></td>
</tr>
<tr>
<td>6&quot; x 8&quot; (146 mm x 197 mm)</td>
<td>20</td>
<td>0.51</td>
<td>1.96</td>
<td>75</td>
<td>0.65</td>
<td>39</td>
<td>.66-.68</td>
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### SIGNATURE LINE

#### Thinline® Series Block—Nominal Thickness = 3";Actual Thickness = 3/16" (79mm)

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</thead>
<tbody>
<tr>
<td>ARQU®</td>
<td>6&quot; x 6&quot; (146mm)</td>
<td>16</td>
<td>0.57</td>
<td>1.75</td>
<td>75</td>
<td>0.65</td>
<td>31</td>
<td>.66-.68</td>
</tr>
<tr>
<td>Bevel (All Patterns)</td>
<td>8&quot; x 8&quot; (197mm)</td>
<td>16</td>
<td>0.57</td>
<td>1.75</td>
<td>75</td>
<td>0.65</td>
<td>31</td>
<td>.66-.68</td>
</tr>
<tr>
<td>4&quot; x 8&quot; (95 mm x 197 mm)</td>
<td>16</td>
<td>0.57</td>
<td>1.75</td>
<td>75</td>
<td>0.65</td>
<td>31</td>
<td>.66-.68</td>
<td></td>
</tr>
<tr>
<td>6&quot; x 8&quot; (146 mm x 197 mm)</td>
<td>16</td>
<td>0.57</td>
<td>1.75</td>
<td>75</td>
<td>0.65</td>
<td>31</td>
<td>.66-.68</td>
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### 1/8" FLAT SHEET GLASS COMPARISON (3mm)

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<tr>
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</thead>
<tbody>
<tr>
<td>ARQU®</td>
<td>1.04</td>
<td>0.96</td>
<td>90</td>
<td>1.00</td>
<td>28</td>
<td>.66-.68</td>
</tr>
</tbody>
</table>

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1. Size: Block are manufactured to ± ¼" (3mm) tolerance.
2. Heat Transmission: Nominal (NRT) = 3/16" (4.76 mm) tolerance.
3. Light Transmission: Values ±5%.
4. Light Transmission/Shading Coefficient: Estimated figures based on accumulated data.
5. Shading Coefficient: Based on 8° aw units, ratio of heat gain through glass block panels vs. that through a single light of double-strength sheet glass under specific conditions.
**INSTALLED PANEL WEIGHT**
Refer to Table on page 8 for weight of panels installed with mortar. Glass block panels installed with the KWIK’N EZ® Rigid Track Silicone System are up to 25% lighter per square foot than panels installed with mortar. Local building codes should be consulted for any limits on panel sizes or installation details.

**NON-LOAD BEARING**
Glass block panels are non-load bearing; adequate provisions must be made for support of construction above these panels. Panels are mortared at the sill, with jamb and head details designed to accommodate for building movement and lintel deflection. The compressive strength (for information purposes only) of all hollow glass block is 400 to 600 psi.; THICKSET® Series Glass Block is 2500 psi.; and VISTABRIK® Series is 80,000 psi.

**THERMAL EXPANSION COEFFICIENT**
The thermal expansion coefficient of glass block is 47 x 10⁻⁵ \(^°F⁻¹\).

**DETAILED DRAWINGS**
Structural members illustrated on page 14 and other “detail” pages indicate general principles of construction. Member sizes should be determined by structural analysis to avoid excessive deflections. Maximum deflection shall not exceed L/600.

**FINISHING UNITS**

<table>
<thead>
<tr>
<th>FINISHING UNITS</th>
<th>PREMIERE SERIES</th>
<th>Thinline® SERIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>EndBlock™ Finishing Units</td>
<td>HEDRON® Corner Unit</td>
<td>TRIDRON 45° Block® Unit</td>
</tr>
<tr>
<td>DECORA® &amp; IceScapes® Patterns 8&quot; High</td>
<td>DECORA® &amp; IceScapes® Patterns 8&quot; High</td>
<td>ENCURVE® Finishing Unit</td>
</tr>
<tr>
<td>Premiere Series</td>
<td>Premiere Series</td>
<td>ARQUE® Block Unit</td>
</tr>
<tr>
<td>DECORA® &amp; IceScapes® Patterns 8&quot; High</td>
<td>DECORA® &amp; IceScapes® Patterns 8&quot; High</td>
<td>EndBlock™ Finishing Unit</td>
</tr>
<tr>
<td>Premiere Series</td>
<td>Premiere Series</td>
<td>Thinline® Series Only</td>
</tr>
</tbody>
</table>

**GLASS BLOCK BETWEEN TRIDRON 45° BLOCK®**

<table>
<thead>
<tr>
<th>a (in.)</th>
<th>s (in.)</th>
<th>d (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.75</td>
<td>11.45</td>
<td>12.40</td>
</tr>
</tbody>
</table>

**MAXIMUM PANEL DIMENSIONS**

<table>
<thead>
<tr>
<th>A (Ft²)</th>
<th>H (Ft)</th>
<th>W (Ft)</th>
<th>A (Ft²)</th>
<th>H (Ft)</th>
<th>W (Ft)</th>
<th>A (Ft²)</th>
<th>H (Ft)</th>
<th>W (Ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTERIOR**</td>
<td>144</td>
<td>20</td>
<td>25</td>
<td>85</td>
<td>10</td>
<td>15</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>INTERIOR</td>
<td>250</td>
<td>20</td>
<td>25</td>
<td>150</td>
<td>10</td>
<td>15</td>
<td>150</td>
<td>10</td>
</tr>
</tbody>
</table>

* Uniform Building Code (UBC) limits exterior height and width to 25 feet.
** All exterior areas and dimensions are based on 20 psf design windload with 2.7 safety factor.

a = 0.415 s
b = 1.083 s

**MORTAR MIX AND ESTIMATING TABLES**
An optimum mortar mix for installing Pittsburgh Corning Glass Block is:

<table>
<thead>
<tr>
<th>Portland Cement</th>
<th>Lime</th>
<th>Sand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Part</td>
<td>½ Part</td>
<td>3.4 Parts</td>
</tr>
<tr>
<td>1.0 cubic foot</td>
<td>0.5 cubic foot</td>
<td>3.4 cubic feet</td>
</tr>
</tbody>
</table>

**NUMBER OF BLOCK FOR 100 SQ. FT. PANEL**

<table>
<thead>
<tr>
<th>Block Sizes (Nominal)</th>
<th>6&quot;</th>
<th>8&quot;</th>
<th>12&quot;</th>
<th>4&quot; x 8&quot;</th>
<th>6&quot; x 8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Block</td>
<td>400</td>
<td>225</td>
<td>100</td>
<td>450</td>
<td>300</td>
</tr>
</tbody>
</table>
**INSIDE RADIUS MINIMUMS FOR CURVED PANEL CONSTRUCTION**

<table>
<thead>
<tr>
<th>Block Size</th>
<th>Inside Radius</th>
<th>Number of Blocks in 90° Arc</th>
<th>Vertical Joint Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot; x 8&quot;</td>
<td>32</td>
<td>13</td>
<td>1/8</td>
</tr>
<tr>
<td>6&quot; x 6&quot;</td>
<td>48½</td>
<td>13</td>
<td>1/8</td>
</tr>
<tr>
<td>8&quot; x 8&quot;</td>
<td>65</td>
<td>13</td>
<td>1/8</td>
</tr>
<tr>
<td>12&quot; x 12&quot;</td>
<td>98½</td>
<td>13</td>
<td>1/8</td>
</tr>
</tbody>
</table>

**NOTES:**
1. It is suggested that curved areas be separated from flat areas by intermediate expansion joints and supports, as indicated in these drawings.
2. When straight, ladder-type reinforcing is used on curved walls, the innermost parallel wire may be cut periodically and/or bent to accommodate the curvature of the wall.

---

**WIND LOAD RESISTANCE – MORTAR SYSTEM**

(Based on Standard Nominal 4" Thick Premiere Series Glass Block. Installed with mortar. Based on 2.7 Safety Factor)

<table>
<thead>
<tr>
<th>Load, psi</th>
<th>Wind Speed, mph</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>88</td>
</tr>
<tr>
<td>40</td>
<td>125</td>
</tr>
<tr>
<td>60</td>
<td>153</td>
</tr>
<tr>
<td>80</td>
<td>177</td>
</tr>
<tr>
<td>100</td>
<td>198</td>
</tr>
<tr>
<td>120</td>
<td>217</td>
</tr>
<tr>
<td>140</td>
<td>234</td>
</tr>
<tr>
<td>160</td>
<td>250</td>
</tr>
</tbody>
</table>

\[ P = 0.000256V^2 \]

**RESISTANCE TO SURFACE CONDENSATION**

Example: At a relative humidity of 40%, an outside temperature of approximately -3°F will cause condensation on Premiere Series Glass Block or approximately 3°F above zero on Thinline® Series block. Under the same conditions, condensation will form on a single-glazed flat glass window at 34°F above zero.

---

ARQUE® Block used along with other Pittsburgh Corning Block sizes, allows you to form consistent curves of various radii. Radii shown are to inside face of curve.

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PHYSICAL & DESIGN DATA

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KWiK’N EZ® Glass Block Installed with KWiK’N EZ® Silicone System. Based on 2.0 Safety Factor.
FIRE RATINGS AND CODE INFORMATION

All sizes (exceptions listed below) of Premiere Series and Thinline® Series glass blocks have at least a 45 minute fire rating when used as a window assembly within a one hour fire-rated wall assembly. All THICKSET®90 (thick-faced) and solid glass blocks have fire ratings of up to 90 minutes, and the THICKSET®60 and ESSEX® AA Pattern glass blocks have fire ratings of up to 60 minutes, when used as window assemblies and where permitted by code.

Pittsburgh Corning Glass Block units that are not fire-rated:

• All 12" x 12" sizes
• All DELPHI® pattern block
• All HEDRON® Corner block, TRIDRON 45° Block® units, EndBlock®, ENCURVE® and ARQUE® finishing units
• All paver units
• VISTABRIK® Corner Block

PANEL SIZES AND DIMENSION LIMITATIONS

Pittsburgh Corning Glass Block listed above have been tested and classified by Underwriters Laboratories® (UL®) for use as fire-rated window assemblies to panel sizes and dimension limitations listed below:

• With the exception of all 12" x 12" sizes, finishing blocks, corner blocks and the DELPHI® pattern block, all Premiere Series and Thinline® Series glass blocks in panels up to 120 square feet in masonry walls or 94 square feet in non-masonry walls are classified by Underwriters Laboratories, for use as 45-minute rated window assemblies.
• The Uniform Building Code (U.B.C.) limits the area of 45-minute rated window assemblies to 84 square feet, if double-studded construction with gypsum board wall assemblies.
• Twice the typical thickness (½") total of expansion material is required at head and jamb locations.

45- AND 60-MINUTE RATED CONSTRUCTION

All 45- and 60-minute rated Pittsburgh Corning Glass Block may be used in both masonry and non-masonry (steel or wood stud framing with gypsum board) walls.

• These rated glass block windows may be framed and anchored with either PC® Panel Anchor construction or channel-type restraints.
• The use of a fire retardant type sealant for head and jamb locations is required.
• Specifications and construction details for such panels are as per Pittsburgh Corning Corporation recommendations.
• Non-masonry, fire-rated steel stud with gypsum board wall assemblies must conform to UL® listed wall assembly #U465.

Framing and support of the rated glass block window assembly shall be provided with double-studding at the jamb locations with height of supporting wall limited to no more than 3 feet.

90-MINUTE RATED CONSTRUCTION

Where permitted by building codes, all 90-minute rated Pittsburgh Corning Glass Block may be used in masonry walls only.

• Where permitted by building codes, all 90-minute rated glass block window assemblies must be framed and anchored with ½" thick steel (not aluminum) channel-type restraints or masonry chases. The use of panel anchor construction is not permitted.
• The use of a fire retardant type sealant for head and jamb locations is required.
• Specifications and construction details of such panels are as per Pittsburgh Corning Corporation recommendations.
• Twice the typical thickness (¾") total of expansion material is required at head and jamb locations.

45-MINUTE RATED CURVED CONSTRUCTION

The glass blocks noted under 90-minute rating and those 8" x 8" x 4" sized glass block noted under 45-minute rating are classified for use in masonry walls as curved window assemblies, provided that the radius of the assembly is at least twice the opening width (i.e. chord length).

CODE COMPLIANCE

All of our fire-rated glass block products are listed in the Underwriters Laboratories current issue of the Fire Resistance Directory – Volume 3. A listing of our products can also be viewed on the Underwriters Laboratories Website at www.ul.com.

BUILDING CODE AND NATIONAL STANDARDS REFERENCES:

• The BOCA National Building Code (N.B.C.)
• The Standard Building Code (SCBC)
• The Uniform Building Code (U.B.C.)
• International Building Code (IBC)
• Canadian Standards Association (CSA) A371-94 “Masonry Construction for Buildings”
• Canadian Standards Association (CSA) S304.1-94 “Masonry Design for Buildings”
• ACI 530/ASCE 5/TMS 402 “Building Code Requirements for Masonry Structures”

FIRE RATINGS — GLASS BLOCK ASSEMBLIES

Premiere Series Glass Blocks, THICKSET® 60 Blocks, THICKSET® 90 Blocks and 3" thick VISTABRIK® Solid Glass Block units have been tested and classified by Underwriters Laboratories (UL®) for use in fire-rated window assemblies to panel sizes and dimension limitations as listed.

<table>
<thead>
<tr>
<th>Product</th>
<th>Masonry Wall Construction</th>
<th>Non-Masonry Wall Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Panel Limitations</td>
<td>Fire Rating</td>
</tr>
<tr>
<td></td>
<td>Max. Area/Panel</td>
<td>Max Ht. or Width</td>
</tr>
<tr>
<td>Thinline® Series</td>
<td>120</td>
<td>12</td>
</tr>
<tr>
<td>Premiere Series</td>
<td>120</td>
<td>12</td>
</tr>
<tr>
<td>THICKSET® 60</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>THICKSET® 90</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>VISTABRIK®</td>
<td>100</td>
<td>10</td>
</tr>
</tbody>
</table>

*½" steel channel.  ⅝" thick expansion material at head and jamb, and fire retardant sealant are required.
The one-piece, all plastic VeriTru® Spacer speeds construction, assures uniform placement and helps keep panel flush. Can now be used in fire-rated panels. Special spacers are available for the VISTABRIK® and ARQUE® Block.

PC® Panel Reinforcing (top) — in panels — is embedded horizontally in the mortar joints between every other course. PC® Panel Anchors (middle) are used to tie Pittsburgh Corning Glass Block panels into the surrounding framework when channels are not used. PC® Expansion Strips (bottom), made of white polyethylene, are inserted at the head and jambs. The strips replace mortar at these locations to cushion the glass block and allow the panel to expand and contract freely.

OTHER ACCESSORIES

Additional materials — such as mortar, channels or framing, packing, sealants and asphalt emulsion are available from other manufacturers.

Unlike previous systems using sealant and spacers, the new ProVantage® Installation System for use with Premiere Series glass blocks, can turn corners, make radius walls, build showers and is suitable for interior or exterior applications. The system utilizes spacers to align and hold the blocks in place for easy assembly. Sealant is used to bond the spacer and blocks together. The consistent, even-spaced joints are then finished with a special tile grout resulting in a clean, smooth professional look. For smaller straight wall panels, with 3-side support, sealant can be used in the joints to provide an all-glass look.

**NEW! ProVantage® INSTALLATION SYSTEM**

Please go to [www.pittsburghcorning.com](http://www.pittsburghcorning.com) for fully downloadable specifications.
TYPICAL HEAD DETAILS (Exterior Openings)

(PCD 031) Head – Glass Block in Steel Stud Wall with Synthetic Plaster Finish

(PCD 032) Jamb – Glass Block in Steel Stud Wall with Synthetic Plaster Finish

TYPICAL SILL DETAILS (Exterior Openings)

(PCD 063) Sill – Glass Block in Steel Stud Wall with Brick Veneer

(PCD 033) Sill – Glass Block in Steel Stud Wall with Synthetic Plaster Finish

Please go to www.pittsburghcorning.com/architects/specdetails.asp for fully downloadable specifications.
TYPICAL STIFFENER DETAILS
Continuous Panels ≤ 144 Sq. Ft. Each

(PCD 132B) Intermediate Support in Multiple Horizontal Panels

* Stiffener should mount to sill. Allow 3/8" clearance for stiffener and channel. Use for design concept only.

NOTE: Expansion material and panel anchors to be provided on both sides of the steel plate.

NOTE: Panels with an expansion joint stiffener incorporating a vertical hidden plate should be limited to a maximum 10' in height.

TYPICAL SHELF ANGLE DETAILS
Continuous Panels ≤ 144 Sq. Ft. Each

(PCD 128) Intermediate Horizontal Support in Multiple Vertical Panels

HOLLOW METAL DOOR FRAME DETAILS

(PCD 153) Head – Hollow Metal Door Frame at Glass Block

(PCD 154) Jamb – Hollow Metal Door Frame at Glass Block

Please go to www.pittsburghcorning.com for fully downloadable specifications.
TYPICAL SHELF ANGLE DETAILS – FOR VISTABRIK® PANELS
Continuous Panels ≤ 100 Sq. Ft. Each

(PCD 130) Intermediate Horizontal Support in Multiple Vertical Panels

(PCD 160) Jamb – 45 & 60 Minute Fire Rated Glass Block Panel

Details for Fire Rated Construction

(PCD 004) Head – 90 Minute Fire Rated Glass Block in CMU Wall

(PCD 005) Jamb – 90 Minute Fire Rated Glass Block in CMU Wall

(PCD 006) Sill – 90 Minute Fire Rated Glass Block in CMU Wall

(PCD 159) Head – 45 & 60 Minute Fire Rated Glass Block Panel

(PCD 160) Jamb – 45 & 60 Minute Fire Rated Glass Block Panel

(PCD 161) Sill – 45 & 60 Minute Fire Rated Glass Block Panel

Please go to www.pittsburghcorning.com for fully downloadable specifications.
VISTABRIK® SOLID GLASS BLOCK DETAILS

(PCD 037) Head – Solid Glass Block in CMU Wall

(PCD 038) Jamb – Solid Glass Block in CMU Wall

(PCD 039) Sill – Solid Glass Block in CMU Wall

(PCD 040) Head – Solid Glass Block in Brick Masonry Cavity Wall

(PCD 041) Jamb – Solid Glass Block in Brick Masonry Cavity Wall

(PCD 042) Sill – Solid Glass Block in Brick Masonry Cavity Wall

(PCD 043) Head – Solid Glass Block in Steel Stud Wall with Brick Veneer

(PCD 044) Jamb – Solid Glass Block in Steel Stud Wall with Brick Veneer

Please go to www.pittsburghcorning.com for fully downloadable specifications.
**TYPICAL CONSTRUCTION DETAILS**

**PREMIERE SERIES FINISHING UNITS DETAILS**

1. **Glass Block at Corner**
   - Use with ENCURVE® Finishing Block or EndBlock™ or TRIDRON 45º Block® Unit.
   - MORTAR 37/8" 7/8" 73/4" 4" 1/4"
   - Note: Glass Block units are classified for a 1/2-hour fire exposure according to ASTM 2010, Underwriters Laboratories of Canada CAN 4-S106-M80, UL® 9, or NFPA 257 “Fire Tests of Window Assemblies.”

2. **EndBlock™ or ENCURVE® Finishing Block**
   - MORTAR 37/8" 73/4" 4" 1/4"
   - Note: Glass Block units are classified for a 1/2-hour fire exposure according to ASTM 2010, Underwriters Laboratories of Canada CAN 4-S106-M80, UL® 9, or NFPA 257 “Fire Tests of Window Assemblies.”

3. **TRIDRON 45º Block® Unit**
   - Periodically cut the innermost parallel wire and bend the reinforcing to accommodate the curvature of the wall.

4. **ARQUE® Block Unit**
   - Note: Glass Block units are classified for a 1/2-hour fire exposure according to ASTM 2010, Underwriters Laboratories of Canada CAN 4-S106-M80, UL® 9, or NFPA 257 “Fire Tests of Window Assemblies.”

**STANDARD SPECIFICATIONS**

**DIVISION 4 – MASONRY, SECTION 04270 GLASS UNIT**

**MASONRY**

**PART 1 – GENERAL**

1.01 **Summary**
   - This specification has been prepared by Pittsburgh Corning Corporation using generally accepted and appropriate technical information but is not intended to be solely relied upon for the specification design or technical applications. Having no control over the elements of design, installation, workaround or site conditions, Pittsburgh Corning assumes that the actual design choices and installation will be made by persons trained and qualified in the appropriate disciplines. Therefore, Pittsburgh Corning disclaims all liability potentially arising from the use or misuse of this specification.

1.02 **Section Includes**
   - A. Glass Block Units, hollow or solid
   - B. Integral Joint Reinforcement
   - C. Mortar

1.03 **Related Sections**
   - A. Steel Channels
   - B. Sills, lintels, jambs
   - C. Sealant (caulk)
   - D. Packing Material

1.04 **References**
   - A. ASTM A82—Spec. for Cold Drawn Steel Wire
   - B. ASTM A153—Class B-2, Spec. Zinc Coating (Hot dip) on Iron and Steel Hardware (Canada same)
   - C. ASTM A167, Spec. for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
   - D. ASTM A580, Spec. for Stainless Steel Wire
   - E. ASTM C144, Spec. for Aggregate for Masonry (Canada – A179-94)
   - F. ASTM C150, Spec. for Portland Cement (Canada – CAN/CSA-A3-93)
   - G. ASTM E2010 and NFPA 257, Fire Test of Window Assemblies (equivalent to UL® 9 and CAN 4-S106-M80)
   - H. ASTM C207, Spec. for Hydrated Lime for Masonry Purposes (Canada same)
   - I. ASTM C270, Spec. for Mortar for Unit Masonry (Canada – A179-94)
   - J. ASTM D1187, Type II—Spec. for Asphalt-Base Emulsions (For Metal Surfaces)
   - K. ASTM D1227, Type III—Spec. for Glass Block

1.05 **System Description**
   - Knowledge of the following basic information is essential for proper installation of Pittsburgh Corning Glass Block units:
     - 1. Glass block panels shall not be designed to support structural loads.
     - 2. Maximum deflection of structural members supporting glass block panels shall not exceed L/600.
     - 3. Sills of all panels must be painted with a heavy coat of asphalt emulsion and must cure for two hours before first mortar bed is placed.

1.06 **Submittals**
   - A. Product Data
   - B. Samples
   - C. Test Reports — Fire Tests
   - D. Substitutions

1.07 **Storage and Protection**
   - A. Store unopened cartons of glass block in a clean, cool, dry area.
   - B. Protect opened cartons of glass block against windblown rain or water run-off with tarpaulins or plastic covering.

1.08 **Project/Site Conditions**
   - A. Do not install glass block units when temperature is 40°F (4°C) and falling. Maintain the temperature of glass unit masonry above 40°F (4°C) for the first 48 hours after construction.

1.09 **Warranty**
   - Pittsburgh Corning Corporation offers a limited 5-year warranty on Pittsburgh Corning Glass Block units.

**PART 2 – PRODUCTS**

2.01 **Acceptable Manufacturers**
   - A. The drawings and specifications are based on catalog data, specifications and products of Pittsburgh Corning Corporation and designate the type and quality of work intended under this section.
   - 1. Products of other manufacturers proposed as equivalent quality must be submitted through the bidding contractors for written approval of the architect ten days prior to the bid date.
   - 2. Supporting technical data, samples, published specifications and the like must be submitted for comparison.
3. Contractor shall warrant that proposed substitutions, if accepted, will provide performance equivalent to the materials specified herein.

4. These specifications have been developed by Pittsburgh Corning Corporation based on extensive tests of panels composed of Pittsburgh Corning Premiere Series Glass Block masonry units as manufactured by Pittsburgh Corning Corporation. These specifications do not apply to panels made from glass block masonry units produced by any other manufacturer.

2.02 Glass Block Units
A. Glass block units, nominally ______ inch x ______ inch x ______ inch thick shall be partially evacuated hollow glass block with a polyvinyl butyral edge coating.

B. Solid glass units, nominally ______ inch x ______ inch x ______ inch thick shall be made of clear colorless glass with a polyvinyl butyral edge coating.

Pattern type: ____________________________

NOTE: All model building codes also accept the use of Type N mortar.

2.04 Mortar Materials
Mortar: Type S in accordance with ASTM C270. Mortar shall be 1 part Portland Cement, 1/2 part lime, and sand equal to 2/8 to 3 times the amount of cementitious material (cement plus lime), all measured by volume. (For exterior glass block place an integral type waterproofer shall be added to the mortar mix.)

C. Freshly mixed mortar may create skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any mortar gets into the eyes rinse immediately with water and get prompt medical attention.

3.01 Preparation
A. Verify that channels, (panel anchors) have been provided at head and jamb for the purpose of providing panel support within the opening.

B. Mix all mortar components to a consistency that is drier than mortar for ordinary masonry. Retempering the mortar after it has taken its initial set shall not be permitted. Do not use antifreeze compounds or accelerators.

C. Freshly mixed mortar may create skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any mortar gets into the eyes rinse immediately with water and get prompt medical attention.

3.02 Installation
A. Cover sill area with a heavy coat of asphalt emulsion. Allow emulsion to cure at least 2 hours before placing block.

B. Where panel anchors are used at jams and heads in lieu of channel or chase surrounds, install panel anchors in the same joints (16 inches o.c., maximum spacing after first course) where panel reinforcement will be laid. Panel anchors are to be embedded a minimum of 12 inches into the mortar joints.

C. Place or adhere expansion strips to jams and head. Make certain expansion strip extends to sill and covers leg of panel anchor that is attached to jams and head.

D. Set a full mortar bed, jointed, and sanded to the sill.

E. Set lower course of block. Maintain a uniform joint width of 3/8 inch plus or minus 8/32 inch. All mortar joints must be full and not furrowed. Joint width is determined by Type of mortar used, the integral type waterproofer, and the manufacturer's published application instructions and directions on label for toxicity and flammability warnings.

3.03 Cleaning
A. Remove surplus mortar from the faces of the glass block at the time joints are struck or too long. Mortar should be removed while it is still plastic using a clean, wet sponge or an ordinary household scrub brush with stiff bristles.

B. Do not use harsh cleaners, acids (of any strength), abrasives or alkaline materials on cleaning glass block. Never use a wire brush to remove mortar from glass block surfaces.

C. Final mortar removal is accomplished with a clean, wet sponge or cloth. Rinse sponge or cloth frequently to eliminate dried mortar particles and follow with normal wash and rinse. Be careful not to damage caulking with strong solvents. Comply with solvent manufacturers' printed directions on label for toxicity and flammability warnings.

D. After all sealants, caulking, etc., have been applied, remove excess caulking materials with commercial solvents such as xylene, toluene, mineral spirits or acetone and follow with normal wash and rinse. Never use a wire brush to remove mortar from glass block surfaces.

4.01 Preparation
A. Verify that channels, (panel anchors) have been provided at head and jamb for the purpose of providing panel support within the opening.

B. Mix all mortar components to a consistency that is drier than mortar for ordinary masonry. Retempering the mortar after it has taken its initial set shall not be permitted. Do not use antifreeze compounds or accelerators.

C. Freshly mixed mortar may create skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any mortar gets into the eyes rinse immediately with water and get prompt medical attention.

D. Set a full mortar bed, jointed, and sanded to the sill.

E. Set lower course of block. Maintain a uniform joint width of 3/8 inch plus or minus 8/32 inch. All mortar joints must be full and not furrowed. Joint width is determined by Type of mortar used, the integral type waterproofer, and the manufacturer's published application instructions and directions on label for toxicity and flammability warnings.

E. Final cleaning of glass block panels is accomplished after they are completely installed. Wait until panels are not exposed to direct sunlight. Start at the top of the panel and wash with generous amounts of clean water. Dry all water from the glass block surface. Change cloth frequently to eliminate dried mortar particles or aggregate that could scratch glass surfaces. To remove the dry powder from hardened mortar deposits, use a clean, dry, soft cloth. For stubborn or hard to remove powder or stains, the use of an "extra fine" steel wire brush (grades 000 or 0000) is suggested. Try this first in an unobtrusive area.
PITTSBURGH CORNING PROJECT DESIGN ASSISTANCE

Unmatched Service
When specifying Pittsburgh Corning Glass Block, you receive a level of technical support and guidance unavailable from any other glass block producer.

Pittsburgh Corning Representative and Distributor Assistance
Services are available through your local Pittsburgh Corning Representative and Distributor. They will arrange for drawing review and technical guidance, full sample selection, professional installation, on-site assistance, and provide technical support after the job is completed, if needed.

Technical Service Department
Our Technical Service Department, located in Pittsburgh, is available for technical advice, project design assistance, and plan review. Please call the Pittsburgh Corning Glass Block Resource Center, 1-800-624-2120.

Pittsburgh Corning Glass Block Resource Center
From your first inquiry, information is readily available to you, toll-free from anywhere in the continental United States and Canada. Our Resource Center, 1-800-624-2120, is your initial channel for literature requests and answers to technical questions.

To further our dedication to the architectural community, Pittsburgh Corning is teaming up with the AIA to bring you innovative ways to earn continuing education credits, including a great slide presentation that we can set up in your offices. This program provides HSW Learning Units. For more information, visit our website at www.pittsburghcorning.com.

PITTSBURGH CORNING GLASS BLOCK WEBSITE
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features application photos, product information, specifications, installation details, literature, continuing education, case histories, and much more information on how to design with Pittsburgh Corning Glass Block products.

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