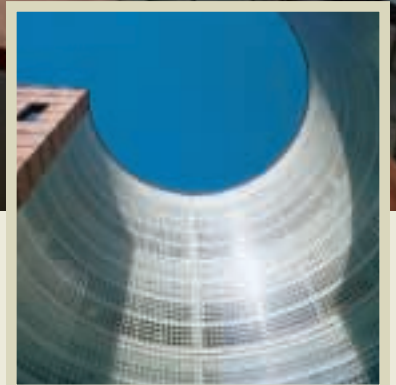




architectural products



GLASS BLOCK PRODUCTS & DESIGN INFORMATION



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.



ISO 9001:2000 Certification assures that Pittsburgh Corning is committed to quality innovation.

www.pittsburghcorning.com

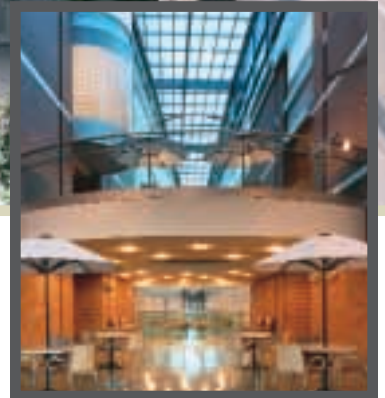
features application photos, product information, specifications, installation details, literature, continuing education, case histories, and much more information on how to design with Pittsburgh Corning Glass Block products.

TABLE OF CONTENTS

Introduction	2
Glass Block Benefits & Applications	3-5
Glass Block Products	6-7
Physical & Design Data	8-10
Fire Ratings and Code Information	11
Accessories	12
Typical Construction Details	12-18
Typical Details For Fire Rated Construction	15
Standard Specifications	18-19
Residential Products	Back Cover

ON THE COVER:

Lake Dallas High School, Dallas, TX // Architect: DMS Architects
 VISTABRIK® Solid Glass Block and VUE® Pattern
 North Hollywood Police Station, N. Hollywood, CA // Architect: Meyer & Allen Associates
 ARGUS® Pattern and HEDRON® Corner Block
 Lawrence College, Appleton, WI // VUE® Pattern
 Appalachian State University, School of Business, Boone, NC
 Architect: J.N. Pease Associates // VUE® Pattern



Circle of Design Excellence Award Winner

Sponsored by Pittsburgh Corning, this program recognizes those designs where glass block forms a prominent architectural feature of a building, either interior or exterior.

Hillman Cancer Center, Pittsburgh, PA // Architect: 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.

PITTSBURGH CORNING’S NEW EZ DESIGN GLASS BLOCK LIBRARY

This easy to use system is powered by SketchUp®, an award-winning design program that allows you to create, view and modify your designs in 3D. It allows you to take your designs from initial concepts all the way through detailing and documentation.

The EZ Design Library features:

- ProVantage™ Glass Block Installation System
- Traditional Mortar Installation System
- Predesigned Applications

You can design with any shape or size Pittsburgh Corning Glass Block and the installation method is already taken into account. Plus, the EZ Design Library will tell you exactly what materials you need based on your design.



Please visit our website at www.pittsburghcorning.com to access this useful tool.

GLASS BLOCK BENEFITS & APPLICATIONS

(l to r): AT&T Information Systems, Weston, MA
 Designer: Hugh Stubbins & Associates // VUE® Pattern
 Zcon Builders Building, Oakland, CA
 Architect: Sandy & Babcock Architects // 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



Lloyd Hall, Philadelphia, PA // Architect: Armstrong Kaulbach Architects // VISTABRIK® Solid Glass Block, VUE® Pattern

BEAUTY AND VERSATILITY

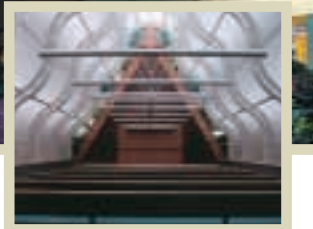
Extraordinarily versatile and available in many aesthetically pleasing sizes and styles, glass block offers virtually limitless design possibilities. Glass block walls, partitions and windows combine the delicate beauty and light transmission of glass with the strength of glass block.

Big opportunities generally mean big challenges. So when Armstrong Kaulbach Architects designed the first new building, Lloyd Hall (see photo above), 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.



Veteran’s Administration Hospital Chapel, Detroit, MI
 Architect: Smith, Hinchman & Grylls, Inc. // DECORA® Pattern



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.



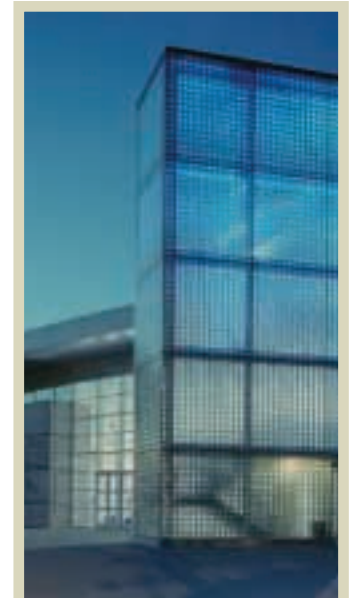
Regional Transit District Station, Denver, CO
 VISTABRIK® Solid Glass Block, VUE® Pattern

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

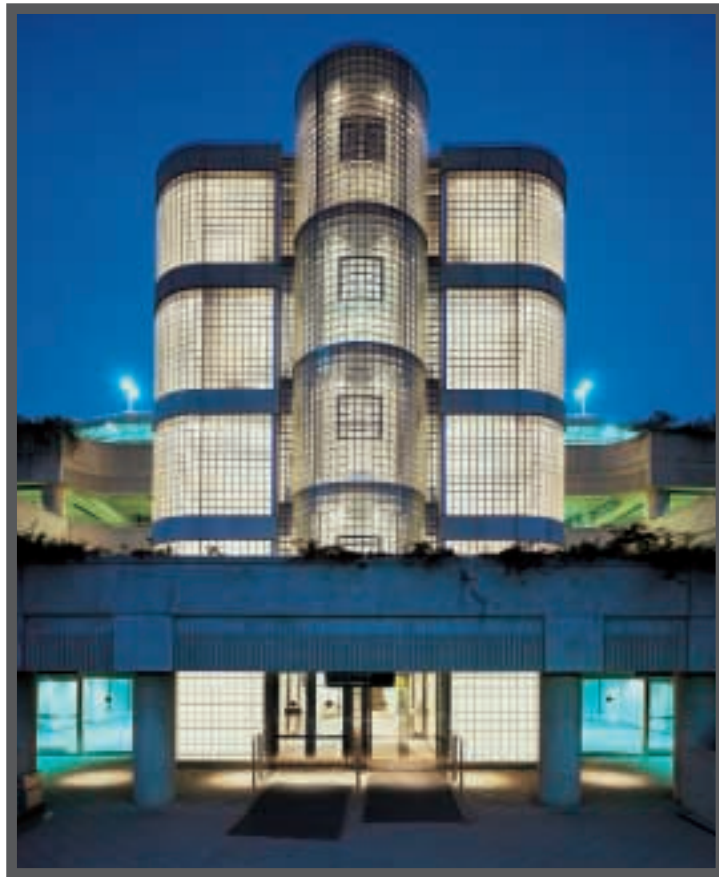
Three inches of solid glass block make this the top-performing product offering the highest ballistic ratings, resistance to impact and sound transmission while still transmitting 80% of available light



University of New Hampshire // DECORA® Pattern



University of Toledo - Nitschke Auditorium
ARGUS® Pattern and VUE® Pattern



Terminal A Parking Garage, Ronald Reagan Washington National Airport, Washington, D.C.
Architect: Hartman-Cox Architects (In association with HNTG Corporation) // DECORA®, ESSEX® AA and VUE® Patterns

“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

VISIBILITY/LIGHT TRANSMISSION

Glass block provides exceptional visibility in compliance with ADA guidelines for enclosed areas. It is also scratch-resistant and transmits up to 80% of available light in both directions without any yellowing, clouding or weathering.

NOISE RESISTANT

Three inches of solid glass makes VISTABRIK® a dense barrier to sounds from trains, traffic, crowds, sirens, and machinery with a 53 STC level. THICKSET® Series Block STC ranges between 48-50, and Premiere Series Glass Block 35 to 40.

BULLET RESISTANT

UL® tested and approved for Levels 1, 2, and 6, VISTABRIK® resists penetration from high-impact ballistics, including 9mm and .357 magnum bullets.

GRAFFITI RESISTANT

Glass block resists damage and is easy to clean.

ENERGY CONSERVATION

Glass block can provide more than double the thermal resistance (R-Value) of single-glaze 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. Now with the advent of new energy codes, solar heat gain has become an important issue. Glass block can satisfy the higher SHGC (Solar Heat Gain Coefficient) requirements of northern states, as well as lower SHGC requirements of southern states with the SRT (Solar Reflective Tint) glass block.



University of New Hampshire // DECORA® Pattern



Swindon Market – Swindon, Wiltshire, U.K. // Architect: Harrison Patience, Architect // VUE® Pattern

“This building had to embody the LAPD’s more open, community-oriented mission. The ARGUS® pattern glass block was really critical in creating that openness. It gives us the perfect balance of light and security.” – Clifton Allen, Architect

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.



North Hollywood Police Station, N. Hollywood, CA // Architect: Meyer & Allen Associates
ARGUS® Pattern and HEDRON® Corner Block



Combined Operations Center // Heathrow Airport, U.K. // Architect: Nicholas Grimshaw & Partners // VUE® Pattern

FIRE RESISTANT

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 for electronic details.



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"