

SEVES GLASS BLOCK

NORTH AMERICAN
GLASS BLOCK
DESIGN GUIDE



MORE PATTERNS. MORE COLORS.
MORE SHAPES & SIZES. MORE CHOICE.

CREATE MORE.

Introduction

THE GLASS BLOCK SPECIALISTS

Seves Glass Block is the world's leading manufacturer of glass blocks for architectural and interior design. Our 'Center of Excellence' in Duchov, in the Czech Republic, houses the three key components of our business. Design, Manufacturing and Logistics. This centralized approach ensures timely design of new products and line extensions to the market; a consistent high quality product; and overall cost effectiveness.

Seves Glass Block's success is defined by one clear objective: Maximize the potential of glass blocks by transforming them from a marginal traditional construction component into an artistic expression of light and space. Leading architects and designers have discovered that glass block is an excellent tool to express their ideas - and turn to Seves Glass Block in order to transfer their ideas into reality.

Seves has established a North American based headquarters to better serve the architectural, design and consumer markets in North America. We have also extended our product offerings in our Imperial sized product offerings with more products in imperial measurements and with US based testing. Combine this with our established Design, Basic & Technology Lines, Seves Glass Block now offers the most extensive of Glass Block ever!

Our LightWise® Architectural Systems consist of prefabricated windows and panels for both vertical and horizontal applications. The LightWise Architectural Systems for windows are design, engineered and manufactured for specific applications and requirements like hurricane, tornado, blast and threat resistance. Our LightWise Architectural Horizontal Systems made of glass pavers & precast concrete panels allow light to move through floors and horizontal applications to brighten any space below.



**SEVES
GLASS
BLOCK**

Contents

Benefits / Advantages	4
Premiere Series	6
High Performance	8
Fire Ratings	10
Thinline Series	12
Construction Details	13
Specifications	21
Design Line	23
Technical Drawings	28
Pegasus Specifications	31
Tailor Made	32
Basic Line	34
Technology	40
LWA® Systems	43
MY MiniGlass	54
Accessories	56
Photography	58

Glass Block Advantages



BEAUTY AND VERSATILITY

Extremely versatile, glass block gives designers, architects and consumers the ability to transform ordinary spaces into places of light, color and texture. The combination of Seves patterns, sizes, 3-D options and colors provide unlimited design possibilities while providing the structural strength and light transmission glass block has always been known for.



GRAFFITI AND VANDAL RESISTANT

The surface of glass block is resilient to abuse from paints, markers and stickers with an easier to clean quality making it the intelligent choice for public structures.



VISIBILITY/LIGHT TRANSMISSION

Glass block provides exceptional visibility in compliance with ADA guidelines for enclosed areas and has a dynamic relationship with light, both natural and artificial. With a wide range of patterns & colors you can choose the appropriate levels of visibility & light transmission to match your project needs.



RESISTANCE TO IMPACT

Seves Glass Blocks are inherently stronger than conventional glass due to the thickness of the faces and the mortar that binds the block together. As a result they are more difficult to break, adding extra protection from projectile strikes, incidental impacts and forced entry.





ENERGY CONSERVATION

Seves 'Energy Savings' Glass Block, with a U-Value of .19, betters the standard in the industry for glass block by over 60%. With this addition to the Seves line, we can meet and exceed most energy requirements, for window applications in North America. Horizontal mortar joints create a 'louvering effect' which can impact energy costs by reducing thermal heat gain.

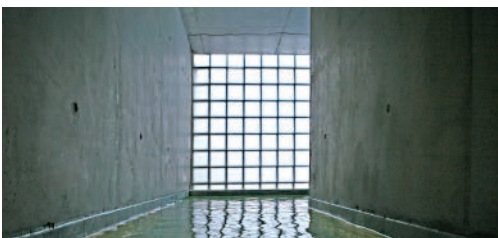


SOUND RESISTANT

Concerns over every increasing noise pollution, architects and designers are looking for products that not only perform in reducing sound transmission but are a design element. Seves Glass Block offer a range of products that offer varying levels of sound reduction capabilities. (Maximum STC Level of 53)

SECURITY

When architect and designers need to add security to their projects, Seves has a wide range of solutions to choose from. Available in numerous sizes and patterns, you can choose your level of visibility and security required for your project. Our blocks can offer enhanced resistance to impact, fire (45, 60 & 90 minute), sound transmission, graffiti and weather.



FIRE RESISTANT

An important feature of glass block, critical to safe building design, is the product's inherent fire-resistant property. By varying the face thickness of the product and conforming to installation specifications, Seves Glass block is able to offer fire rated products approved and rated according to Underwriters Laboratory and/or NFPA standards. Seves Glass Block is available in 45-, 60- and 90-minute ratings for window assemblies.



SUSTAINABILITY

Seves Glass Block is an advocate of all programs that support and advance the environmental and health performance in buildings. (USGBC, LEED, Green Building, etc.) Glass block, made largely from sand and limestone, is 100% recyclable, inert, low maintenance, highly durable lasting 50 years or more and has low construction waste. We also contribute to sustainable design through our day-lighting capabilities and products like energy savings, solar reflective and self-cleaning.

PREMIERE SERIES 4" — specifically designed for North America



IMPERIAL SIZE

The Premier Series is comprised of 4" block, shapes and finishing units for both Commercial and Residential applications. Architects and Designers are familiar with this collection as the standard in the glass block industry. Most are clear glass block, in varying sizes, with numerous pattern choices. Patterns are chosen to control variations in light, direction and levels of visibility. This blocks offer enhanced resistance to impact, fire, sound transmission, graffiti and weather. Most block are rated with UL for 45-minute fire rating.

Options for Imperial Line by special order
(No Energy Savings available on 12x12x4)
(Opal Block has no options available)



Energy Saving



Self Cleaning



Solar Reflecting

Nubio • 12" x 12" x 4" | 8" x 8" x 4" | 6" x 8" x 4" | 6" x 6" x 4" | 4" x 8" x 4"

Intersecting random wave patterns, provide an attractive appearance, proving maximum light transmission and subtle visual distortion.



Nubio

Clarity • 12" x 12" x 4" | 8" x 8" x 4" | 6" x 8" x 4" | 6" x 6" x 4" | 4" x 8" x 4"

Faces are smooth and undistorted to transmit the most light and ultimate visibility.



Clarity

Cortina • 8" x 8" x 4" | 6" x 8" x 4" | 6" x 6" x 4" | 4" x 8" x 4"

Random textures built over the Nubio pattern. Maximum privacy with medium light transmission without a fixed geometric design.



Cortina

Cross Ribbed • 8" x 8" x 4"

Vertical ribs on one side and horizontal on the other side. This unique design diffuses light while allowing maximum light transmission and a medium degree of privacy.



Cross Ribbed

Light Diffusing • 8" x 8" x 4"

The fine grid design of closely spaced ridges helps reduce glare while offering moderate light transmission and maximum privacy.



Light Diffusing

Regent • 8" x 8" x 4"

Multifaceted diamond pattern creates a unique effect of shadows and sparkles. Maximum light transmission with moderate privacy.



Regent

Arctic • 8" x 8" x 4"

Frosted glass appearance yields excellent privacy with no pattern and moderate light transmission.



Arctic

Alpha • 8" x 8" x 4"

Circular geometric pattern with maximum light transmission and visual clarity.



Alpha

IceScapes • 8" x 8" x 4"

Non-directional pattern which light in without sacrificing privacy. Maximum light transmission with medium to maximum privacy.



IceScapes

Cross Large • 8" x 8" x 4"

Large rounded perpendicular flutes diffuse light while allowing maximum light transmission and a medium degree of privacy.



Cross Large

Opal - Plain • 8" x 8" x 4"

Patternless white glass reduces light transmission by nearly 80% with maximum privacy. (No Options Available)



Opal Plain

Opal - Silk • 8" x 8" x 4"

Fine grid pattern on interior face of block reduces light transmission by over 80% with maximum privacy. (No Options Available)



Opal Silk



PREMIERE SERIES 4" - SHAPES & FINISHING UNITS

Shapes such as Corners (90°), Allbends (22.5°), and Tridrons (45°), assist architects/designers in creating movement with glass block. (corners, radius, serpentine walls, etc.) Finishing Units, like the EndBlock and DoubleEnd, are used to terminate walls with like materials and patterns.

AllBend • 4" x 8" x 4" (Nubio / Cortina)

With its 22.5° design, this block is a brilliant way to create smooth graceful curves and columns with a consistency of mortar joints.

90° Radius Corner • 4" x 8" x 4" (Nubio / Cortina)

This 90° Radius edged corner block results in a gentle rounded continuous glass face.

EndBlock • 8" x 8" x 4" (Nubio / Cortina)

Rounded finishing block ideal for vertical and horizontal applications of panels, walls and dividers.

Double-End • 8" x 8" x 4" (Nubio / Cortina)

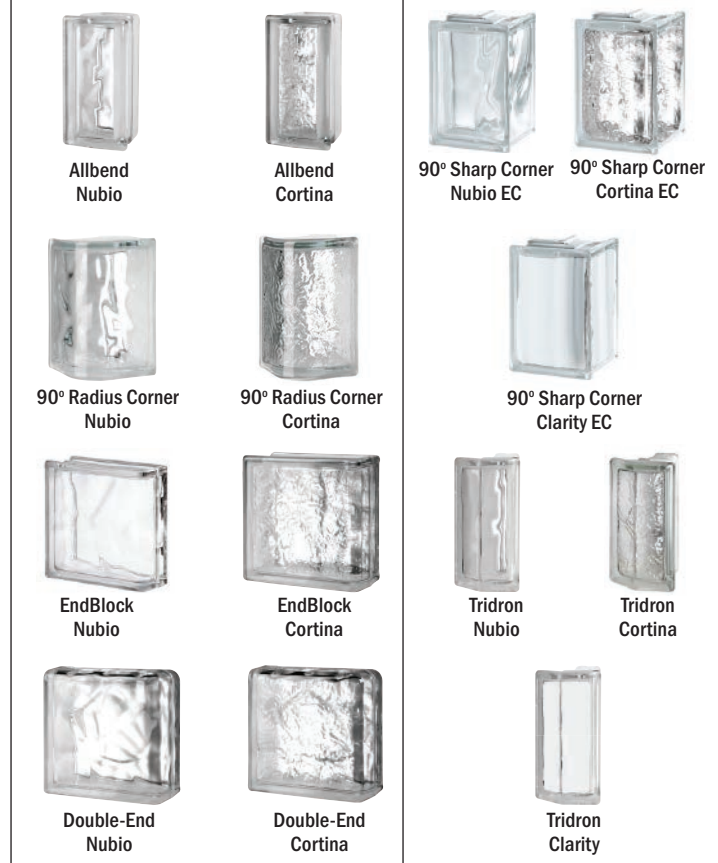
Curved block intended to transition EndBlock used in horizontal and vertical applications, or for step down designs. (Used with 8x8x4 EndBlock)

90° Sharp Corner • (Nubio / Cortina / Clarity)

The 90° 'Sharp' edged corner block is a design alternative to the 90° radius edged corner block.

Tridron • (Nubio / Cortina / Clarity)

This unique block lets you design walls with 45° increments.



PREMIERE SERIES — 7

Physical & Design Data (US STANDARD SIZES IN INCHES)

Glass Block	Nominal Sizes ¹ (Actual size is 1/4" less than nominal)	Weight of Glass Block (lb)	Approximate Installed Weight (lb/ft ²)	Number pieces/sq. ft.	Heat Transmission ² U-value (BTU/hr ft ² °F)	Thermal Resistance ² R-value (hr ft ² °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient ⁴	Sound Transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating
All 4" regular line											
12x12x4 Nubio	11-3/4" x 11-3/4" x 3-7/8"	15.7	23.3	1.0	0.53	1.89	75	.63	35	.66-.68 ⁵	N/A
12x12x4 Cross large	11-3/4" x 11-3/4" x 3-7/8"	15.7	23.3	1.0	0.53	1.89	55	.63	35	.66-.68 ⁵	N/A
12x12x4 Icescape	11-3/4" x 11-3/4" x 3-7/8"	15.7	23.3	1.0	0.53	1.89	67	.63	35	.66-.68 ⁵	N/A
12x12x4 Clarity	11-3/4" x 11-3/4" x 3-7/8"	15.7	23.3	1.0	0.53	1.89	91	.63	35	.66-.68 ⁵	N/A
8x8x4 Nubio	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	75	.65	39	.66-.68 ⁵	45
8x8x4 Cortina	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	67	.65	39	.66-.68 ⁵	45
8x8x4 Cross ribbed	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	55	.65	39	.66-.68 ⁵	45
8x8x4 Light diffusing	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	51	.65	39	.66-.68 ⁵	45
8x8x4 Regent	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	67	.65	39	.66-.68 ⁵	45
8x8x4 Arctic	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	67	.65	39	.66-.68 ⁵	45
8x8x4 Alpha	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	92	.65	39	.66-.68 ⁵	45
8x8x4 Clarity	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	0.53	1.89	91	.65	39	.66-.68 ⁵	45
8x8x4 Opal Plain	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	N/A	N/A	19	N/A	N/A	N/A	N/A
8x8x4 Opal Silk	7-3/4" x 7-3/4" x 3-7/8"	5.7	19.5	2.25	N/A	N/A	17	N/A	N/A	NAA	N/A
6x8x4 Nubio	5-3/4" x 7-3/4" x 3-7/8"	4.9	20.1	3.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x8x4 Cortina	5-3/4" x 7-3/4" x 3-7/8"	4.9	20.1	3.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x8x4 Clarity	5-3/4" x 7-3/4" x 3-7/8"	4.9	20.1	3.0	0.53	1.89	91	.65	41	.66-.68 ⁵	45
6x6x4 Nubio	5-3/4" x 5-3/4" x 3-7/8"	3.8	20.8	4.0	0.53	1.89	75	.65	37	.66-.68 ⁵	45
6x6x4 Cortina	5-3/4" x 5-3/4" x 3-7/8"	3.8	20.8	4.0	0.53	1.89	67	.65	37	.66-.68 ⁵	45
6x6x4 Clarity	5-3/4" x 5-3/4" x 3-7/8"	3.8	20.8	4.0	0.53	1.89	91	.65	37	.66-.68 ⁵	45
4x8x4 Nubio	3-3/4" x 7-3/4" x 3-7/8"	3.6	20.8	4.5	0.53	1.89	75	.65	41	.66-.68 ⁵	45
4x8x4 Cortina	3-3/4" x 7-3/4" x 3-7/8"	3.6	20.8	4.5	0.53	1.89	67	.65	41	.66-.68 ⁵	45
4x8x4 Clarity	3-3/4" x 7-3/4" x 3-7/8"	3.6	20.8	4.5	0.53	1.89	91	.65	41	.66-.68 ⁵	45

1. Size: Block are manufactured to a +/- 1/16" (2mm) tolerance. 3. Light Transmission: Based on test results.

2. Heat Transmission / Thermal Resistance: Winter night values. To calculate instantaneous heat gain through glass panels, see ASHRAE HANDBOOK OF FUNDAMENTALS, 2005, Section 31.3.

4. Shading Coefficient: Estimated figures based on accumulated data.

5. SHGC: Default values as interpreted from International Energy Conservation Code.

High Performance Products

IMPERIAL SIZE

The High Performance collection is comprised of 4" hollow block with thicker faces and 'solid' bricks made of glass. This allows glass block to extend its standard 45 minute fire rating to include 60 and 90 minute when used as window assemblies within fire rated walls. The increased face thickness combined with solid glass bricks, allows for higher levels of safety, security, reduced sound transmission, and in some cases, ballistic capabilities.



Hollow Block (60 & 90 Minute Fire Rated)

UL-9 • NFPA 257

Nubio • 8" x 8" x 4" (Thickset 60)

Provides a 60 minute fire rating. Intersecting random wave patterns, provide an attractive appearance, proving maximum light transmission and subtle visual distortion.

Spray • 8" x 8" x 4" (Thickset 60)

Provides a 60 minute fire rating. Pattern is a combination of frosted and a fine grid design of closely spaced ridges. Pattern offers moderate light transmission and maximum degree of privacy.

Clarity • 8" x 8" x 4" (Thickset 60)

Provides a 60 minute fire rating. Faces are smooth and undistorted to transmit the most light and allow ultimate visibility. The best choice for passive solar collection and visual clarity.

Nubio • 8" x 8" x 4" (Thickset 90)

Provides a 90 minute fire rating. Intersecting random wave patterns, provide an attractive appearance, proving maximum light transmission and subtle visual.

Clarity • 8" x 8" x 4" | 6" x 6" x 4" (Thickset 90)

Provides a 90 minute fire rating. Faces are smooth and undistorted to transmit the most light and allow ultimate visibility. The best choice for passive solar collection and visual clarity.

Endura • 8" x 8" x 4" (Thickset 90)

Provides a 90 minute fire rating. The pattern has narrow flutes that run vertical on one face and horizontal on the opposite face providing moderate light transmission and maximum privacy.



Nubio (Thickset 60)



Nubio (Thickset 90)



Spray (Thickset 60)



Clarity (Thickset 90)



Clarity (Thickset 60)



Endura (Thickset 90)

Solid Block | Vistabrik™ & Vetropieno™ (90 Minute Fire Rated)

UL-9 • NFPA 257

VISTABRIK™

*8" x 8" x 3" (Clear)

Provides a 90 minute fire rating. 3" solid glass block. Clear visibility, durable, impact and vandal resistant with maximum light transmission.

*(Also in 8" x 8" x 1.5" Pavers)



Clear

*8" x 8" x 3" (Stipple)

Provides a 90 minute fire rating. 3" solid glass block with stipple finish to add privacy. Durable, impact and vandal resistant with good light transmission.

*(Also in 8" x 8" x 1.5" Pavers)



Stipple

6" x 8" x 3" (Clear)

Provides a 90 minute fire rating. 3" solid glass block. Clear visibility, durable, impact and vandal resistant with maximum light transmission.



Clear

4" x 8" x 3" (Clear)

Provides a 90 minute fire rating. 3" solid glass block. Clear visibility, durable, impact and vandal resistant with maximum light transmission.



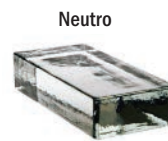
Clear

VETROPIENO™

Rettangolare • 9.25" x 2.125" x 4.5"

(Neutro/Blue/Nordica/Siena)

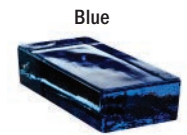
Provides a 90 minute fire rating. 100% solid glass bricks in clear and 3-designer colors. Glass bricks deliver a unique visual and light transparency unlike those of standard hollow brick.



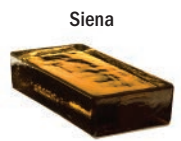
Neutro



Nordica



Blue



Siena

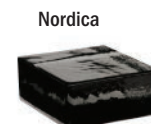
Quadrato • 4.625" x 2.125" x 4.5"

(Neutro/Blue/Nordica/Siena)

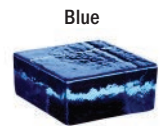
100% solid glass block in clear and 3-designer colors. Can be used in conjunction with Vetropieno Rettangolare to create running bond.



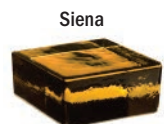
Neutro



Nordica



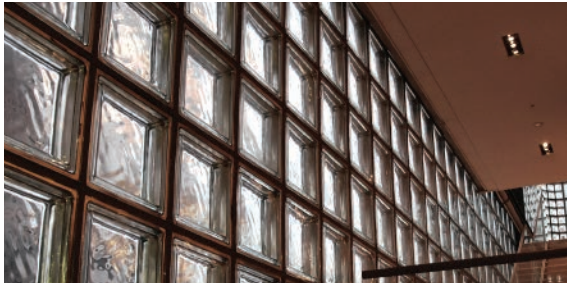
Blue



Siena

Physical & Design Data (US STANDARD SIZES IN INCHES)

Glass block	Nominal Sizes ¹ (Actual size is ¼" less than nominal)	Weight of Glass Block (lb)	Approximate Installed Weight s/f (lb/ft ²)	Number pieces/ sq.ft.	Heat Transmission ² U-Value (BTU/hr ft ² °F)	Thermal Resistance ² R-value (hr ft ² °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient	Sound transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating
High performance products											
60 to 90 minutes Fire rated - Impact strenght											
8x8x4 Nubio 60	7-3/4" x 7-3/4" x 3-7/8"	7.8	22.7	2.25	0.51	1.96	75	.65	48	.66-.68 ⁵	60
8x8x4 Spray 60	7-3/4" x 7-3/4" x 3-7/8"	7.8	22.7	2.25	0.51	1.96	75	.65	48	.66-.68 ⁵	60
8x8x4 Clarity 60	7-3/4" x 7-3/4" x 3-7/8"	7.8	22.7	2.25	0.51	1.96	75	.65	48	.66-.68 ⁵	60
6x6x4 Clarity 90	5-3/4" x 5-3/4" x 3-7/8"	5.5		4.0	0.51	1.96	75	.65	48	.66-.68 ⁵	90
8x8x4 Nubio 90	7-3/4" x 7-3/4" x 3-7/8"	10.6	25.5	2.25	0.51	1.96	75	.65	50	.66-.68 ⁵	90
8x8x4 Clarity 90	7-3/4" x 7-3/4" x 3-7/8"	10.6	25.5	2.25	0.51	1.96	75	.65	50	.66-.68 ⁵	90
8x8x4 Endura 90	7-3/4" x 7-3/4" x 3-7/8"	10.6	25.5	2.25	0.51	1.96	75	.65	50	.66-.68 ⁵	90
Solid block											
8x8x3 VistaBrik	7-5/8" x 7-5/8" x 3"	15.4	17.6	2.25	0.7	1.42	90	49.4	53	.75-.78 ⁵	90
8x8x3 VitraBrik Stipple	7-5/8" x 7-5/8" x 3"	15.4	17.6	2.25	0.7	1.42	90	49.4	53	.75-.78 ⁵	90
6x8x3 VistaBrik	5-5/8" x 7-5/8" x 3"	9.9	32.35	3.0	0.7	1.42	90	49.4	53	.75-.78 ⁵	90
4x8x3 VistaBrik	3-5/8" x 7-5/8" x 3"	7.9	39.24	4.5	0.7	1.42	90	49.4	53	.75-.78 ⁵	90
Vetropieno											
Neutro Rettangolare	9.25" x 2.125" x 4.5"	7.7	51.8	6.4	0.62	1.61	44	58.6	43	51	90
Nuetro Quadrato	4.875" x 2.125" x 4.5"	3.7	51.2	12.6	0.62	1.61	44	58.6	43	51	90
Blu Rettangolare	9.25" x 2.125" x 4.5"	7.7	51.8	6.4	0.62	1.61	7	42.5	43	37	90
Blu Quadrato	4.875" x 2.125" x 4.5"	3.7	51.2	12.6	0.62	1.61	7	42.5	43	37	90
Nordica Rettangolare	9.25" x 2.125" x 4.5"	7.7	51.8	6.4	0.62	1.61	2	39.1	43	34	90
Nordica Quadrato	4.875" x 2.125" x 4.5"	3.7	51.2	12.6	0.62	1.61	2	39.1	43	34	90
Siena Rettangolare	9.25" x 2.125" x 4.5"	7.7	51.8	6.4	0.62	1.61	8	40.2	43	35	90
Siena Quadrato	4.875" x 2.125" x 4.5"	3.7	51.2	12.6	0.62	1.61	8	40.2	43	35	90



1. Size: Block are manufactured to a +/- 1/16" (2mm) tolerance.
2. Heat Transmission / Thermal Transmission: Winter night values. To calculate instantaneous heat gain through glass panels, see ASHRAE HANDBOOK OF FUNDAMENTALS, 2005, Section 31.3.
3. Light Transmission: Based on test results.
4. Shading Coefficient: Estimated figures based on accumulated data.
5. SHGC: Default values as interpreted from International Energy Conservation Code.

Fire Rated Glass Block Window Assemblies

Premiere Series Glass Blocks, THICKSET® 60, THICKSET® 90, 3" thick VISTABRIK® and Vitropieno Solid Glass Block units have been tested and classified by Underwriters Laboratoris (UL®-9) and/or NFPA 257 for use in fire-rated window assemblies to panel sizes and dimension limitations as listed.

Masonry Wall Construction						Non-Masonry Wall Construction				
Panel Limitations			Fire Ratings			Panel Limitations			Fire Ratings	
Product	Max. Area / Panel	Max Ht. or Width	45 Min.	60 Min.	90 Min.	Product	Max. Area / Panel	Max Ht. or Width	45 Min.	60 Min.
Thinline® Series	120 sq. ft.	12 ft.	x			Thinline® Series	120 sq. ft.	12 ft.	x	
Premiere Series	120 sq. ft.	12 ft.	x			Premiere Series	120 sq. ft.	12 ft.	x	
THICKSET® 60 & Essex® AA Patern	100 sq. ft.	10 ft.	x	x		THICKSET® 60 & Essex® AA Patern	100 sq. ft.	10 ft.	x	x
THICKSET® 90	100 sq. ft.	10ft.	x	x	x*	THICKSET® 90	100 sq. ft.	10ft.	x	x
VISTABRIK®	100 sq. ft.	10 ft.	x	x	x*	VISTABRIK®	100 sq. ft.	10 ft.	x	x
Vetropieno	100 sq. ft.	10 ft.	x	x	x*	Vetropieno	100 sq. ft.	10 ft.	x	x

*1/4" steel channel. 3/4" thick expansion material at head and jambs, and fire retardant sealant are required.

IMPERIAL SIZE

All sizes (exceptions listed below) of Premiere, High Performance 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 (Vistabrik and Vetropieno) have fire ratings of up to 90 minutes, and the THICKSET® 60 glass blocks have fire ratings of up to 60 minutes, when used as window assemblies and where permitted by code.

Seves Glass Block units that are not fire-rated:

- All 12" x 12" sizes
- All Alpha®, pattern block; All Opal Block
- All Corner blocks, TRIDRON 45° Block® units, EndBlock®, Double-End®, and AllBend® finishing units
- All Vistabrik® paver units

PANEL SIZES AND DIMENSION LIMITATIONS

Seves Glass Block listed above have been tested and classified by Underwriters Laboratories® (UL®) or NFPA 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, Alpha® pattern block and Opal 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 and NFPA, for use as a 45-minute rated window assemblies
- These panels are usually acceptable as window assemblies for use in fire separation walls that are rated on hour or less.
- THICKSET® 60 Block are listed for use as a 45- or 60-minute fire rated window assemblies in panels up to 100 square feet.
- THICKSET® 90 Block, VISTABRIK® and Vetropieno Solid Glass Bricks are all listed for use as 45-, 60- or 90-minute fire rated window assemblies in panels up to 100 square feet.
- Where permitted by building codes, glass block fire-rated window assemblies having a fire resistance rating of not less than 45 minutes may be used as "opening protectives". These assemblies shall not exceed 25% of the wall areas separating a tenancy from a corridor or a corridor from an enclosed vertical opening or one fire-rated area from another fire-rated area.
- Exception: Although glass block masonry systems have been tested as window assemblies (not wall assemblies), they may be used as one hour fire partitions as required for corridors in the enclosure of atriums only when sprinkler protection is provided on occupied sides.

45- AND 60-MINUTE RATED CONSTRUCTION

- All 45- and 60-minute rated Seves 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 Seves® 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 Seves Glass Block 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 Thickset 90-minute Vistabrik® and Vetropieno rated Seves Glass Block may be used in masonry walls only.
- 90-minute rated glass block window assemblies must be framed and anchored with 1/4" 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 Seves Glass Block recommendations.
- Twice the typical thickness (3/4" 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 certified with Underwriters Laboratories or NFPA. A listing of our products can also be viewed on the Underwriters Laboratories Website at www.ul.com.

- U.L. Classification: R2556
(For Glass Block)
- U.L. Classification: R18572
(For Plastic Spacers)
- In accordance with NFPA 257 and UL-9
- NAMI Certifications

BUILDING CODE AND NATIONAL STANDARDS REFERENCES:

- International Building Code (IBC)
- International Residential Code (IRC)
- Canadian Standards Association (CSA) A371-94 “Masonry Construction for Buildings”
- Canadian Standards Association (CSA) S304.1-94 “Masonry Design for Buildings”
- TMS 402/ACI 530/ASCE 5 “Building Code Requirements and Specification for Masonry Structures”



Thinline Series 3" — specifically designed for North America



IMPERIAL SIZE

With its 3" block thickness, the Thinline Series was designed for use in residential and light commercial applications. This collection comes in a wide array of patterns, sizes, clear and bronze colored glass with varying levels of light transmission and privacy.

Nubio • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 8" x 4" | 6" x 6" x 3" | 4" x 8" x 3"

Intersecting random wave patterns, provide an attractive appearance, proving maximum light transmission and subtle visual distortion.

Nubio Bronze • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 6" x 3"

Nubio pattern made with 'bronze colored glass.

Diamond (DM) • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 6" x 3" | 4" x 8" x 3"

This repeating diamond pattern features a raised half sphere on each for a stylish look allowing for maximum light transmission and medium degree of privacy.

Aktis • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 6" x 3" | 4" x 8" x 3"
Diamond cut pattern creates a unique pattern of light with maximum light transmission and moderate visibility.

Ice • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 8" x 4" | 6" x 6" x 3" | 4" x 8" x 3"

Random textures built over the Nubio pattern. Maximum privacy with medium light transmission without a fixed geometric design.

Clarity • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 8" x 4" | 6" x 6" x 3" | 4" x 8" x 3"

Faces are smooth and undistorted to transmit the most light and ultimate visibility.

Alpha • 8" x 8" x 3" | 6" x 8" x 3" | 6" x 8" x 4" | 6" x 6" x 3" | 4" x 8" x 3"

Circular geometric pattern with maximum light transmission and visual clarity.



Nubio



Nubio Bronze



Diamond (DM)



Aktis



Ice



Clarity



Alpha

Physical & Design Data (US STANDARD SIZES IN INCHES)

Glass Block	Nominal Sizes ¹ (Actual size is 3/4" less than nominal)	Weight of Glass Block (lb)	Approximate Installed Weight s/f (lb/ft ²)	Number pieces/sq.ft.	Heat Transmission ² U-Value (BTU/hr ft ² °F)	Thermal Resistance ² R-value (hr ft ² °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient ⁴	Sound Transmission S.T.C. (dB)	Solar Heat Gain Coefficient (%)	Fire Rating
3" thick line											
8x8x3 Nubio	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	75	.65	41	.66-.68 ⁵	45
8x8x3 DM (Diamond)	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	75	.65	41	.66-.68 ⁵	45
8x8x3 ICE	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	75	.65	41	.66-.68 ⁵	45
8x8x3 Aktis	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	75	.65	41	.66-.68 ⁵	45
8x8x3 Alpha	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	75	.65	41	.66-.68 ⁵	45
8x8x3 Clarity	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	84	.65	41	.66-.68 ⁵	45
8x8x3 Bronze	7-3/4" x 7-3/4" x 3-1/8"	5.3	15.9	2.25	0.53	1.89	52	.52	41	N/A	45
6x8x3 Nubio	5-3/4" x 7-3/4" x 3-1/8"	4.4	16.4	3.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x8x3 DM (Diamond)	5-3/4" x 7-3/4" x 3-1/8"	4.4	16.4	3.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x8x3 Aktis	5-3/4" x 7-3/4" x 3-1/8"	4.4	16.4	3.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x8x3 ICE	5-3/4" x 7-3/4" x 3-1/8"	4.4	16.4	3.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x8x3 Clarity	5-3/4" x 7-3/4" x 3-1/8"	4.4	16.4	3.0	0.53	1.89	84	.65	41	.66-.68 ⁵	45
6x8x3 Bronze	5-3/4" x 7-3/4" x 3-1/8"	4.4	16.4	3.0	0.53	1.89	52	.52	41	N/A	45
6x6x3 Nubio	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	83	.65	41	.66-.68 ⁵	45
6x6x3 DM (Diamond)	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x6x3 Aktis	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x6x3 Arctic	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	71	.65	41	.66-.68 ⁵	45
6x6x3 ICE	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	75	.65	41	.66-.68 ⁵	45
6x6x3 Clarity	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	84	.65	41	.66-.68 ⁵	45
6x6x3 Bronze	5-3/4" x 5-3/4" x 3-1/8"	3.1	17.2	4.0	0.53	1.89	52	.52	41	N/A	45
4x8x3 Nubio	3-3/4" x 7-3/4" x 3-1/8"	3.1	18.6	4.5	0.53	1.89	75	.65	41	.66-.68 ⁵	45
4x8x3 DM (Diamond)	3-3/4" x 7-3/4" x 3-1/8"	3.1	18.6	4.5	0.53	1.89	75	.65	41	.66-.68 ⁵	45
4x8x3 ICE	3-3/4" x 7-3/4" x 3-1/8"	3.1	18.6	4.5	0.53	1.89	75	.65	41	.66-.68 ⁵	45
4x8x3 Aktis	3-3/4" x 7-3/4" x 3-1/8"	3.1	18.6	4.5	0.53	1.89	75	.65	41	.66-.68 ⁵	45

1. Size: Block are manufactured to a +/- 1/16" (2mm) tolerance.

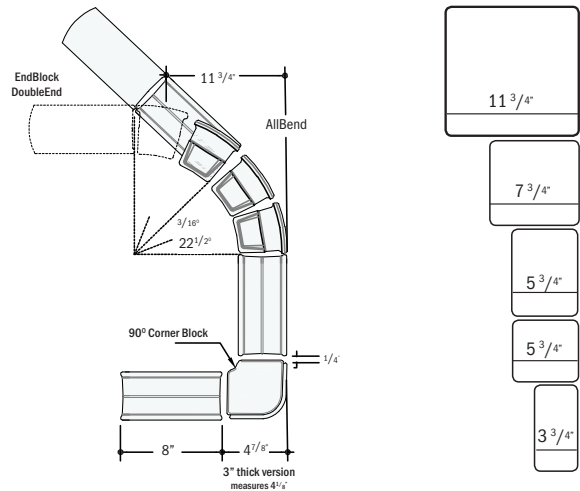
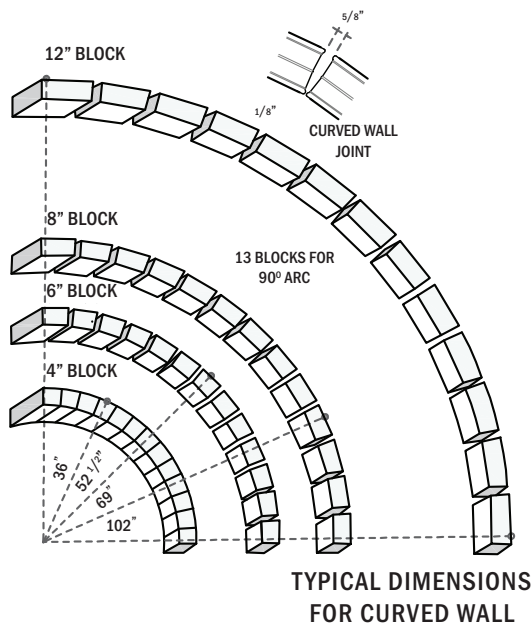
3. Light Transmission: Based on test results.

2. Heat Transmission / Thermal Transmission: Winter night values. To calculate instantaneous heat gain through glass panels, see ASHRAE HANDBOOK OF FUNDAMENTALS, 2005, Section 31.3.

4. Shading Coefficient: Estimated figures based on accumulated data.

5. SHGC: Default values as interpreted from International Energy Conservation Code.

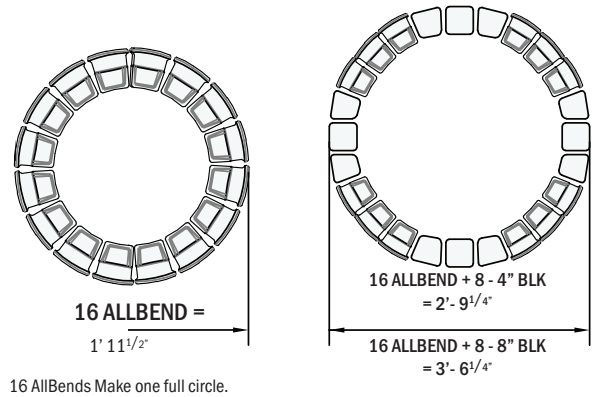
Typical Detail Information



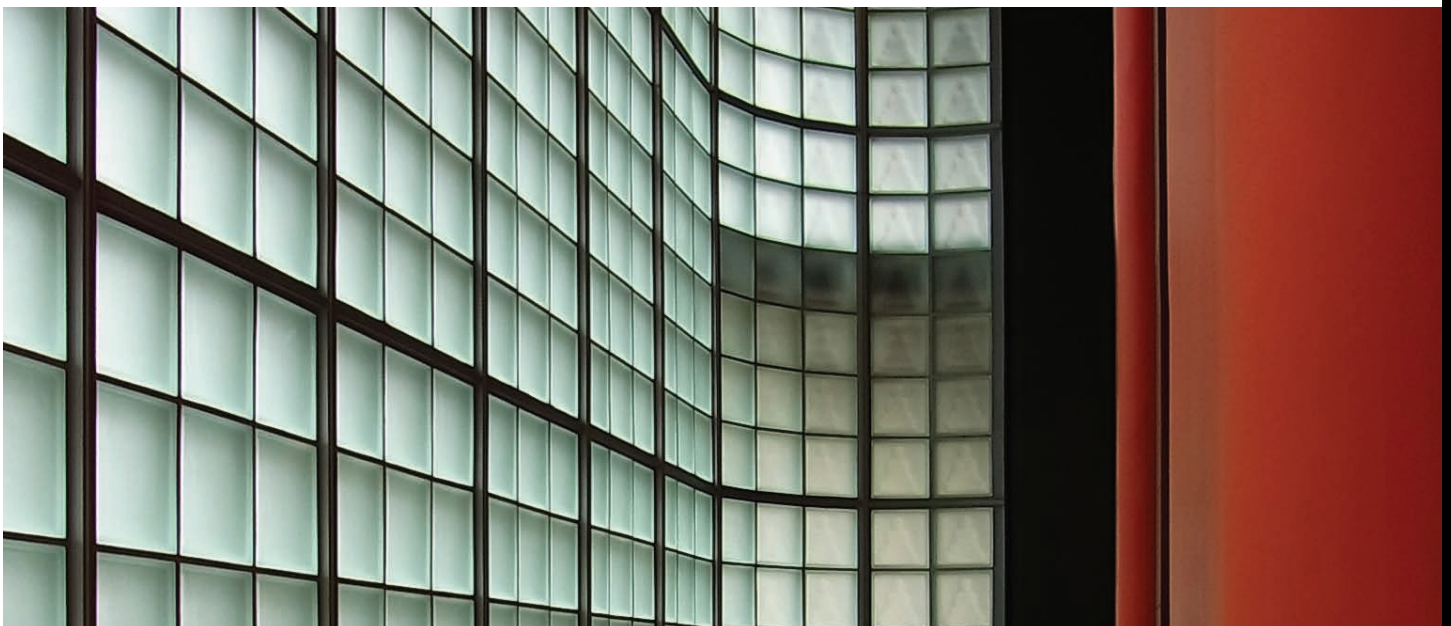
TYPICAL DIMENSIONS FOR 22 1/2°, 45°, 67 1/2°, & RADIUS 90° CORNERS

RADIUS OPTIONS

Blocks	AllBend	Outside Radius inches
1 piece 4" x 8" per	4	14.5
1 piece 4" x 8" per	2	16.7
1 piece 8" x 8" per	4	17.5
1 piece 4" x 8" per	1	21.6
1 piece 8" x 8" per	2	21.7
1 piece 8" x 8" per	1	31.9
2 pieces 4" x 8" per	1	32.5



16 AllBends Make one full circle.

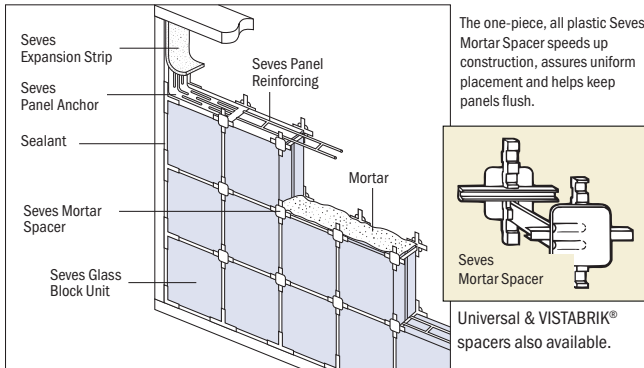


CREATE MORE.

Typical Construction Details

MORTAR ACCESSORIES

Panel Construction Using Seves Spacers



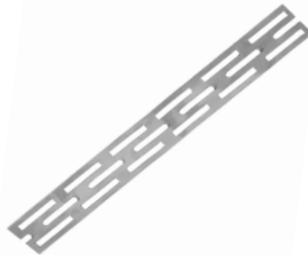
Seves Glass Block Panel Reinforcing

Seves Panel Reinforcing is embedded horizontally in mortar joints every 16" or less. Stainless steel ladder type reinforcing is formed of two, parallel wires 1 5/8" on-center with butt-welded cross-wires every 16" or 12". Available in various lengths.



Seves Glass Block Panel Anchors

Seves Panel Anchors are used to tie Seves Glass Block panels into the surrounding framework when channels are not used. Formed from 20 gauge perforated stainless steel, these anchors are available in 1 3/4" widths x 16" lengths.



Seves Glass Block Expansion Strips

Seves Expansion Strips are made of white polyethylene, and inserted at the heads and jambs. The strips replace the mortar at these points to cushion the glass block and allow the panel to expand and contract freely. The Seves Expansion Strips are available 3/8" thick x 3" widths x 16" lengths.

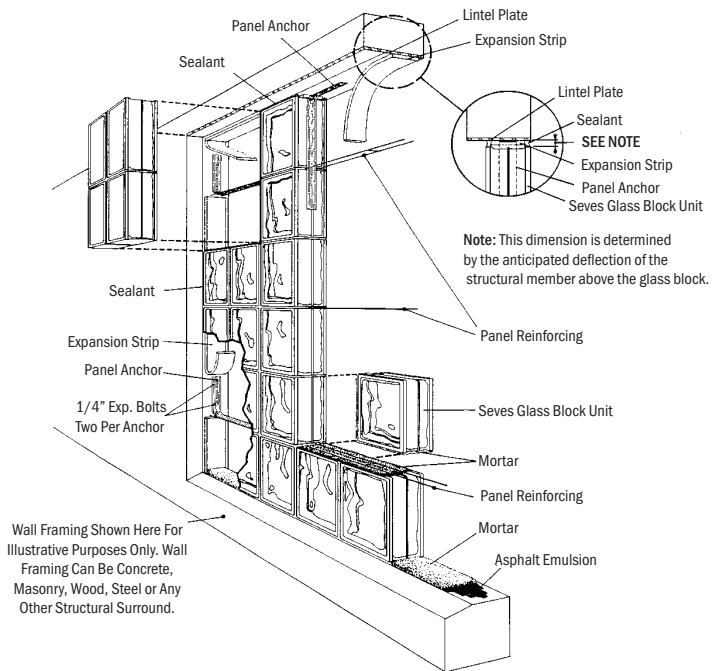


Other Accessories

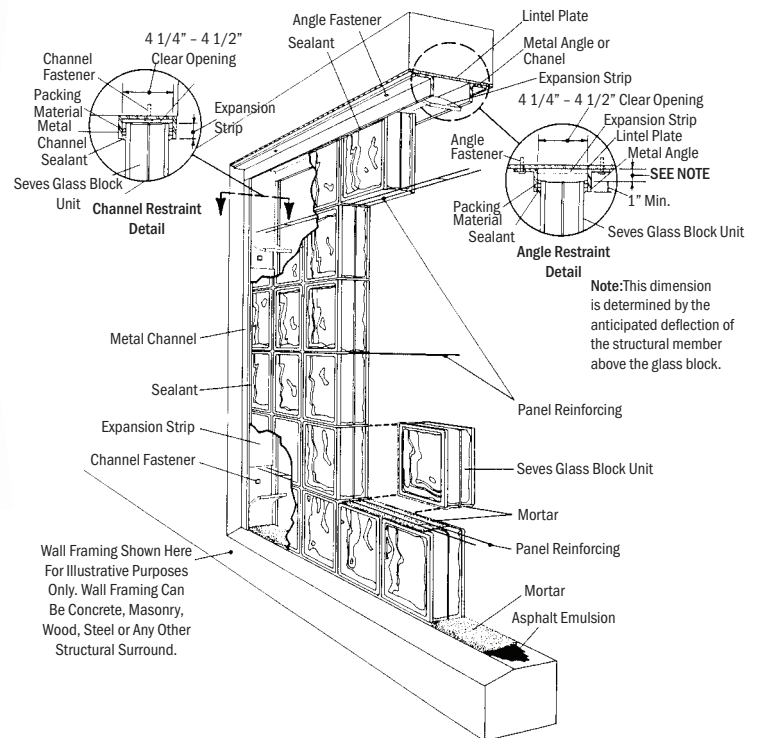
Additional materials - such as premixed mortar, channels or framing, packing, sealants and asphalt emulsion are available from other manufacturers.

TYPICAL CONSTRUCTION DETAILS

Panel Anchor Construction



Channel-Type Restraint Construction



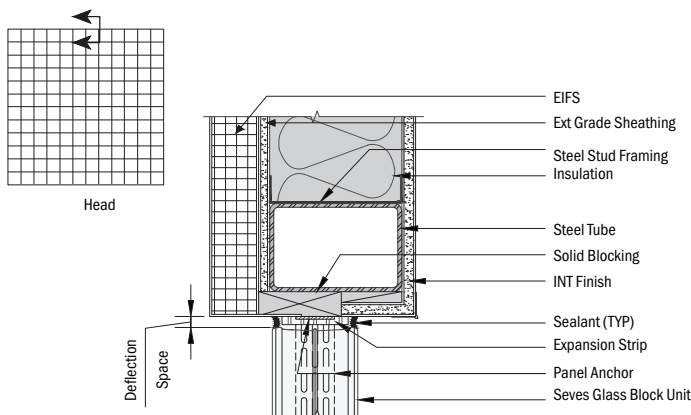
Glossary of Terms (Detail Drawings)

BLDG - Building
CMU - Concrete Masonry Unit
 (concrete block)
CONT STL - Continuous Steel
 (used to reinforce wall)
ELEV - Elevation (side view of building)
GYP BD - Gypsum Board
HM - Hollow Metal (door frame)
INT - Interior
MAX HT - Maximum Height
 (for Seves Glass Block panel 20ft/6m)
SILL - Bottom of Panel
TYP - Typical (detail)
CLG - Ceiling

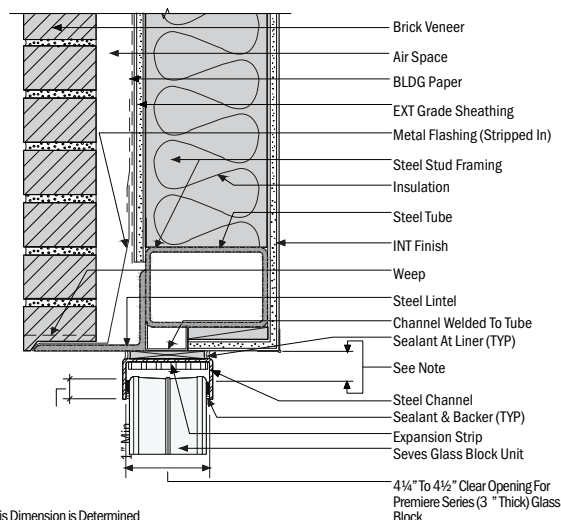
CONC - Concrete
EIFS - Exterior Insulation Finishing System
EXT - Exterior
HEAD - Top of Panel
HORIZ - Horizontal
JAMB - Side of Panel
PLAN - View of Building from above, typically the floor
STL - Steel
WD - Wood

Materials shown other than glass block are for illustration purposes only as examples of typical construction details.

TYPICAL HEAD DETAILS (Exterior Openings)



(SGBH-D002) Head - Glass Block in Steel With Synthetic Plaster Finish

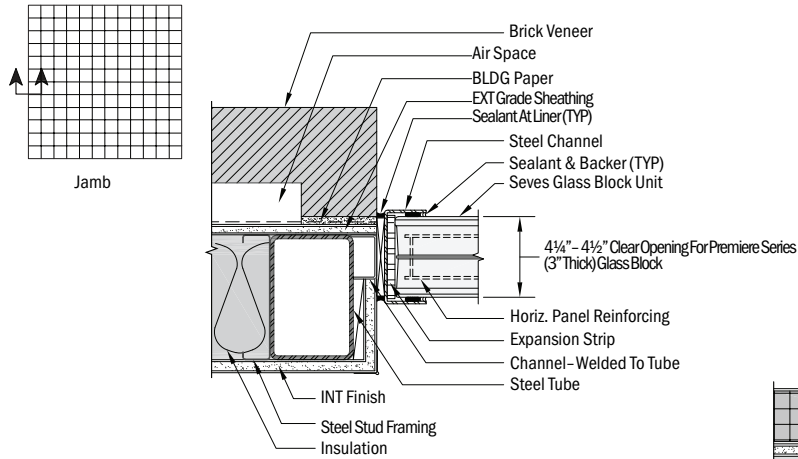


Note: This Dimension is Determined By The Anticipation Of The Structural Member Above The Glass Block.

(SGBH-D003) Head - Glass Block in Steel Stud wall with Brick Veneer Detail

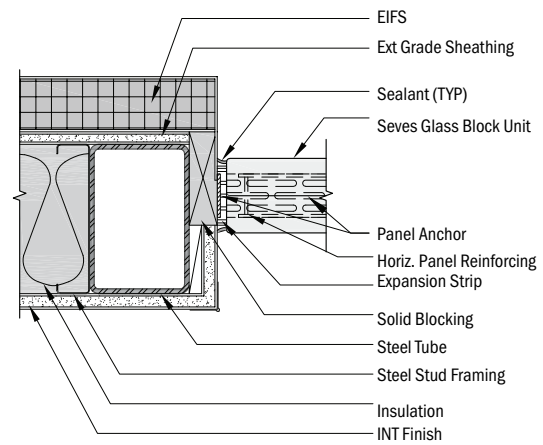
MORTAR ACCESSORIES

TYPICAL JAM DETAILS (Exterior Openings)

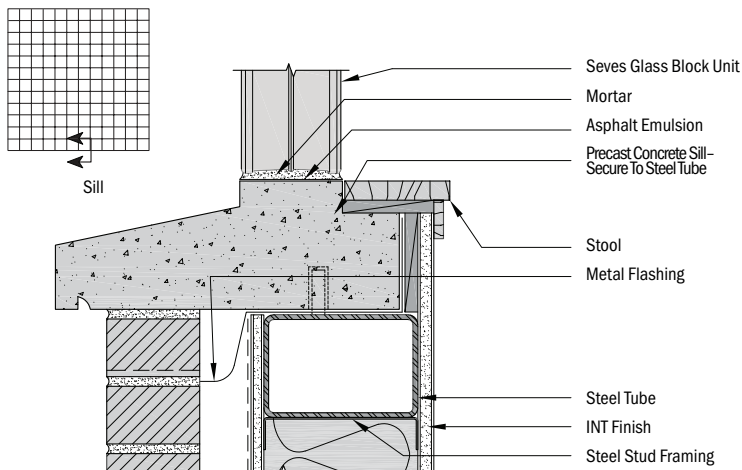


(SGBJ-D021) Jamb - Glass Block in Steel Stud Wall with Brick Veneer Detail

(SGBJ-D016) Glass Block In Steel Stud Wall with Synthetic Plaster Finish

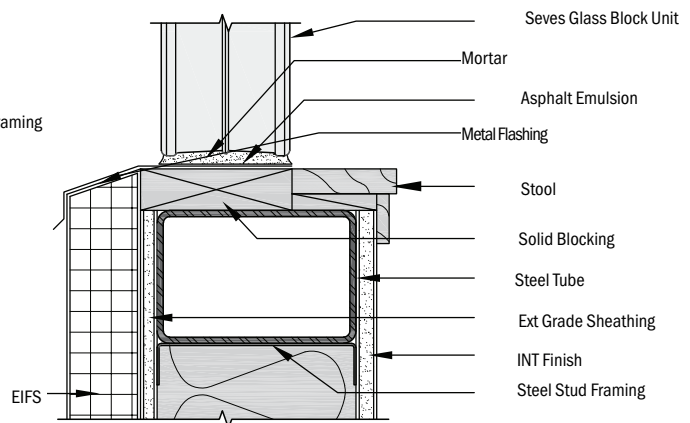


TYPICAL SILL DETAILS (Exterior Openings)



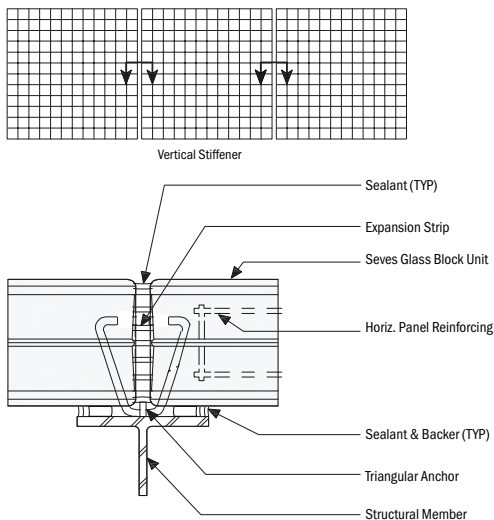
(SGBS-D028) Glass Block in Steel Stud Wall with Brick Veneer

(SGBS-D026) Sill - Glass Block in Steel Stud Wall With Synthetic Plaster Finish

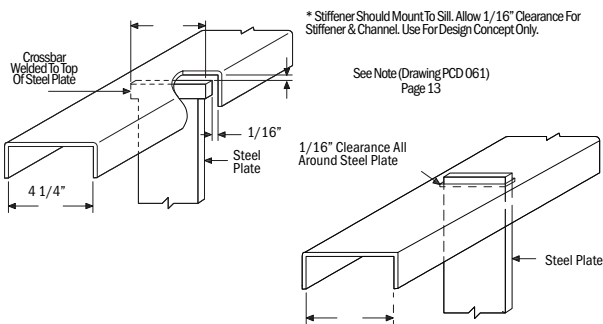
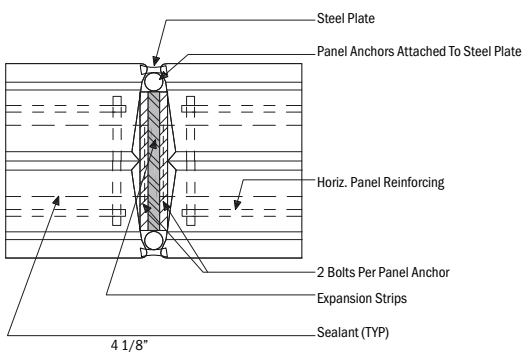


Typical Construction Details

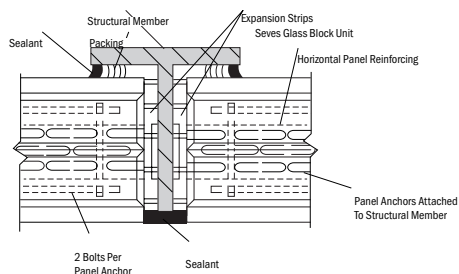
TYPICAL STIFFENER DETAILS (Continuous Panels ≤ 144 Sq. Ft. Each)



(SGBX-D033A) Intermediate Vertical Support in Multiple Horizontal Panels

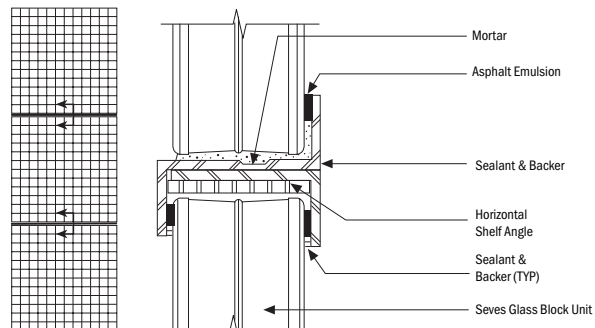


(SGBX-D033B) Intermediate Support in Multiple Horizontal Panels

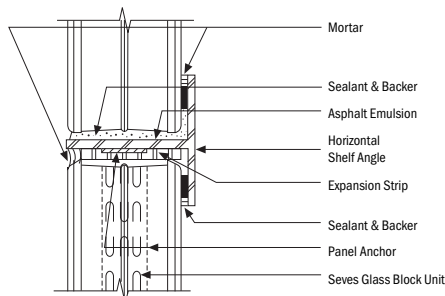


(SGBX-D033C) Intermediate Support in Multiple Horizontal Panels

TYPICAL SHELF ANGLE (Continuous Panels ≤ 144 Sq. Ft. Each)

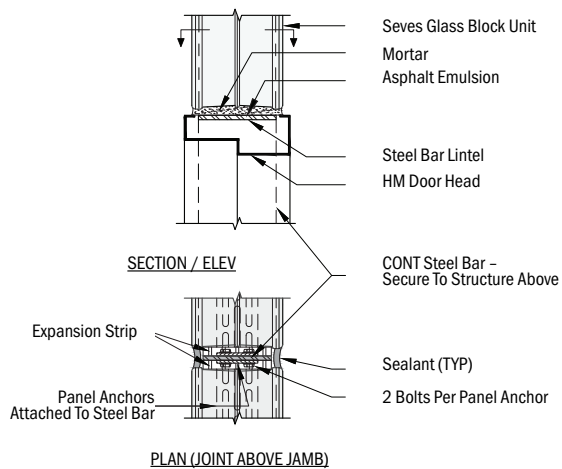


(SGBX-D037A) Intermediate Horizontal Support in Multiple Vertical Panels

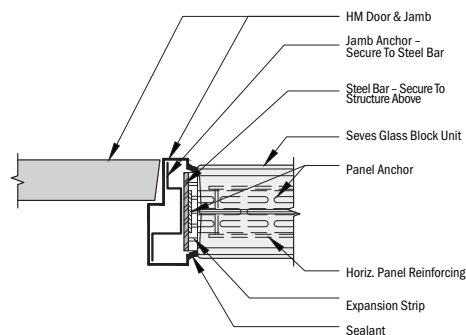


(SGBX-D037B) Intermediate Horizontal Support in Multiple Vertical Panels

HOLLOW METAL DOOR FRAME DETAILS



(SGBH-D005) Head - Hollow Metal Door Frame at Glass Block

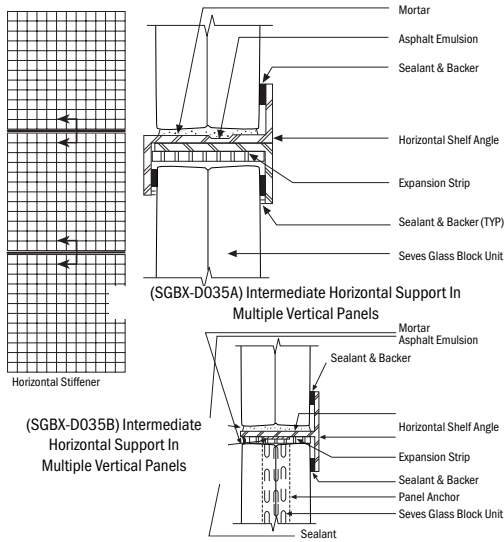


(SGBJ-D019) Jamb-Hollow Metal Door Frame at Glass Block

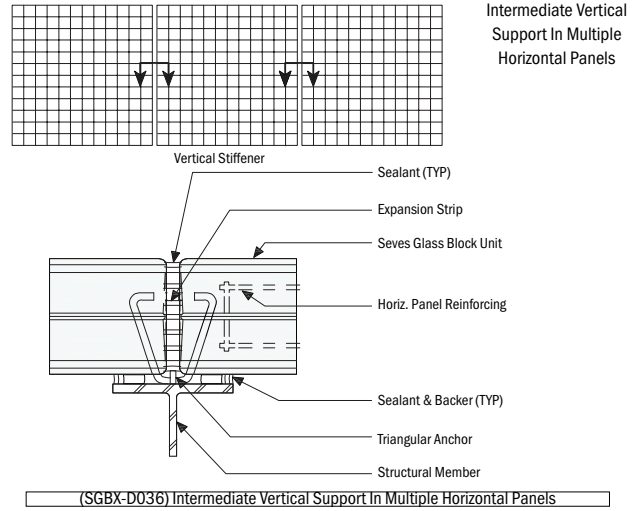
Typical Construction Details

MORTAR ACCESSORIES

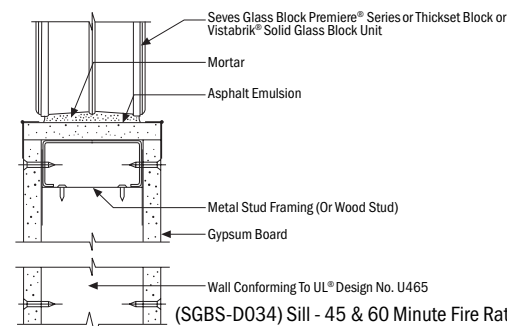
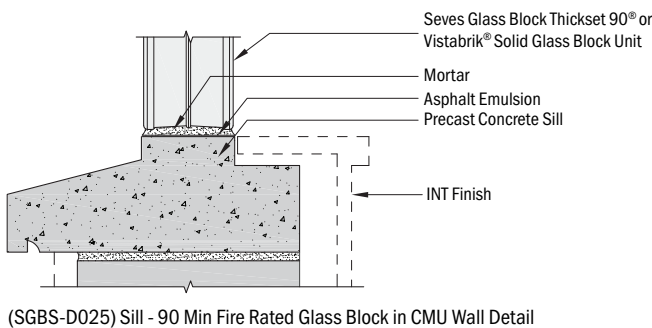
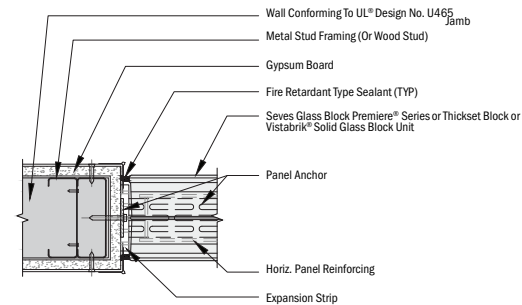
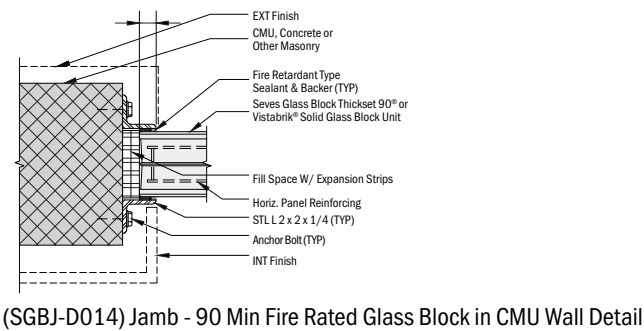
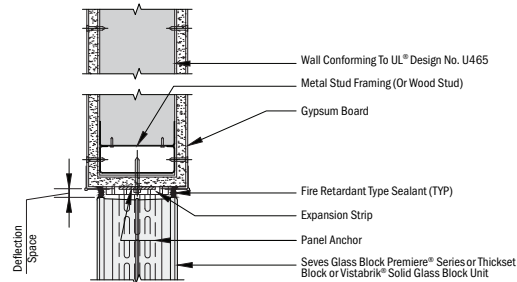
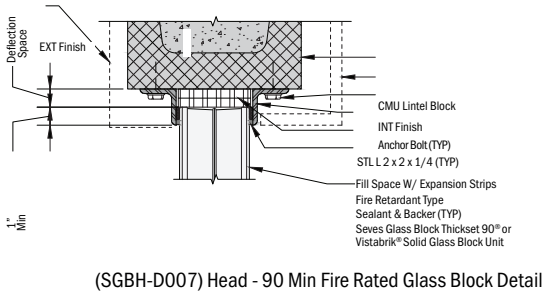
TYPICAL SHELF ANGLE DETAILS - FOR VISTABRIK® PANELS (Continuous Panels ≤ 100 Sq. Ft. Each)



TYPICAL STIFFENER DETAILS - FOR VISTABRIK® PANELS (Continuous Panels ≤ 100 Sq. Ft. Each)

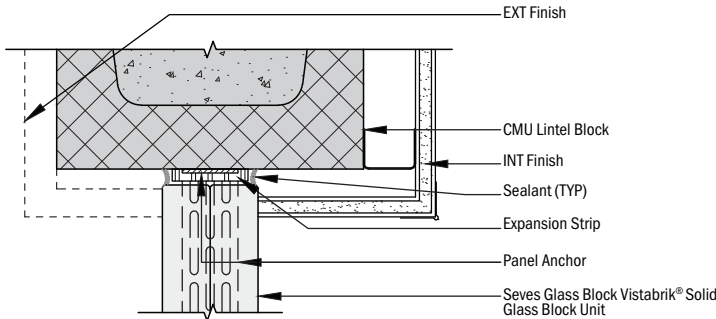


DETAILS FOR FIRE RATED CONSTRUCTION

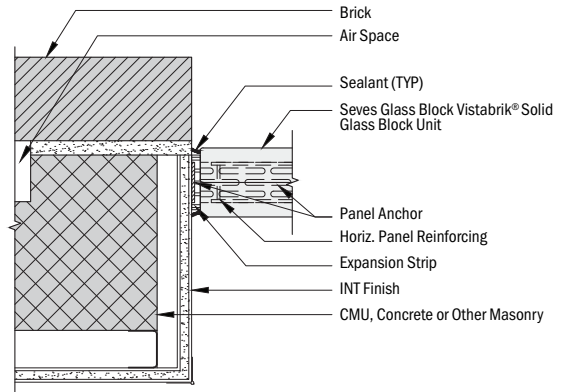


Typical Construction Details

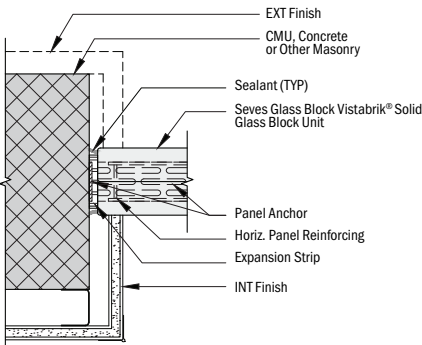
VISTABRIK® SOLID GLASS BLOCK DETAILS



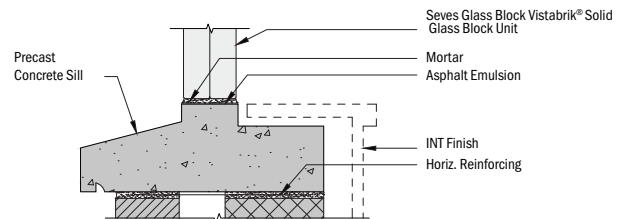
(SGBH-D012) Head - Solid Glass Block in CMU Wall Detail



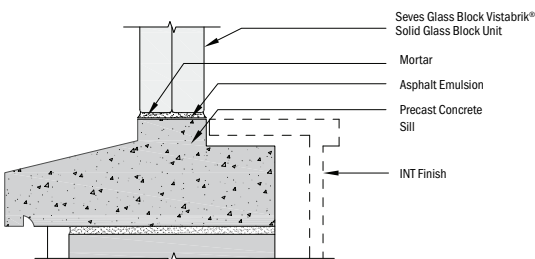
(SGBJ-D018) Jamb - Solid Glass Block in Masonry Cavity Wall Detail



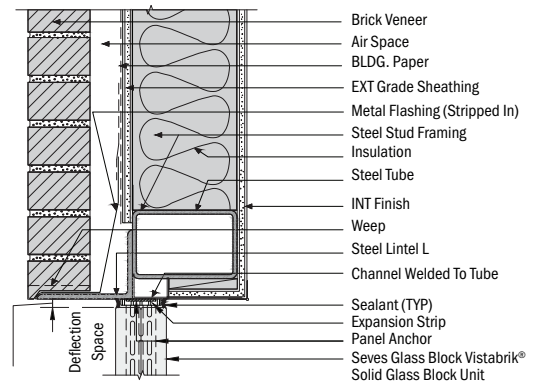
(SGBJ-D013) Jamb - Solid Glass Block in CMU WALL DETAIL



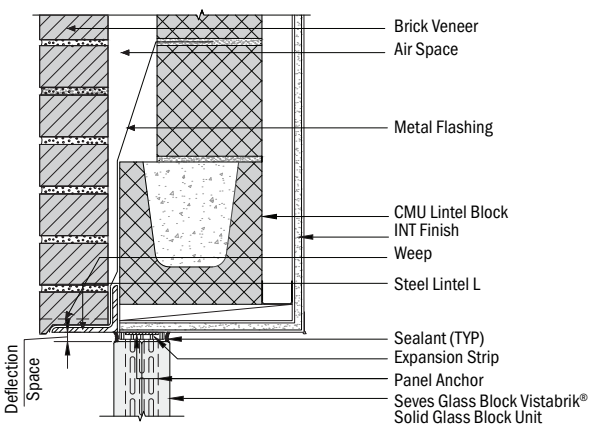
(SGBJ-D032) Sill - Solid Glass Block in brick Masonry Cavity Wall Detail



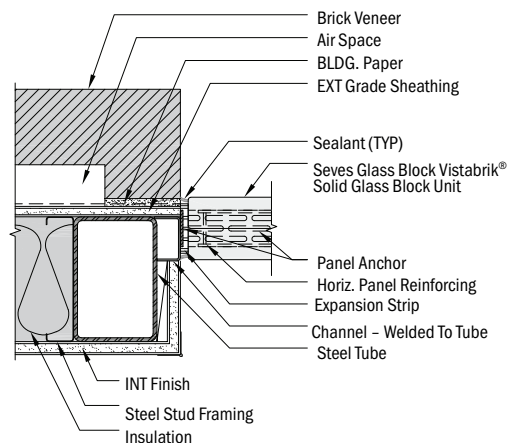
(SGBS-D024) Sill - Solid Glass Block in CMU Wall



(SGBH-D009) Head - Solid Glass Block in stud wall with brick veneer.



(SGBH-D010) Head - Solid Glass Block in Brick Masonry Cavity Wall

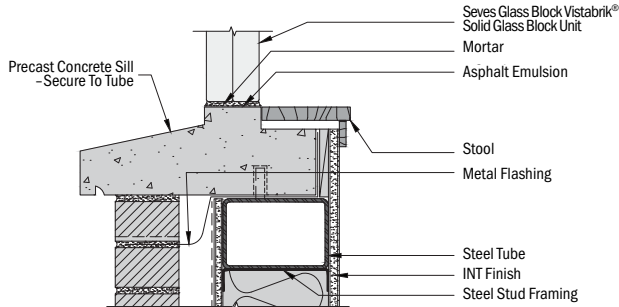


(SGBJ-D022) Jamb - Solid Glass Block in Steel Stud Wall with Brick Veneer

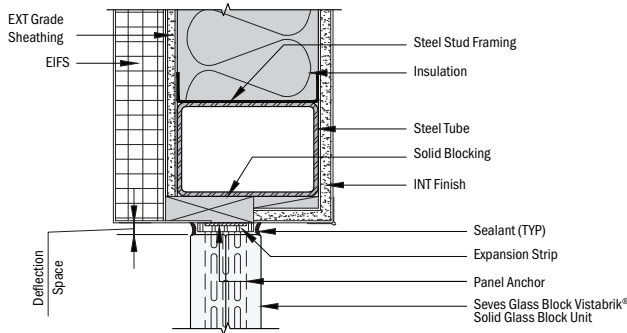
Typical Construction Details

MORTAR ACCESSORIES

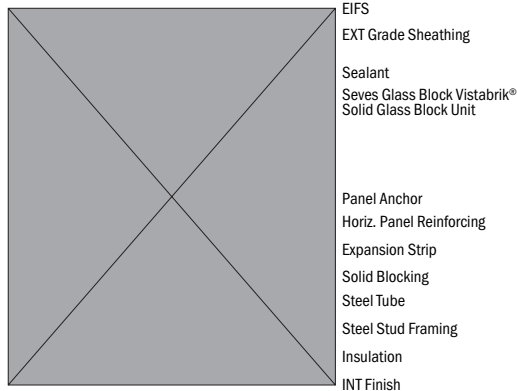
VISTABRIK® SOLID GLASS BLOCK DETAILS (Continued)



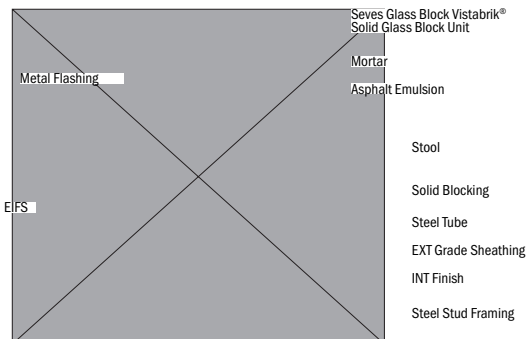
(SGBS-D029) Sill - Solid Glass Block In Steel Stud Wall With Brick Veneer Detail



(SGBH-D008) Head - Solid Glass Block In Steel Stud Wall With Synthetic Plaster Finish

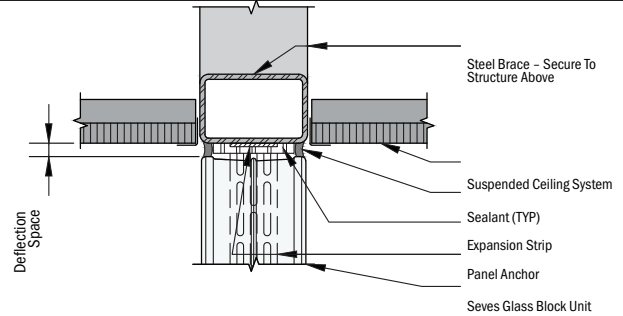


(SGBJ-D023) Jamb - Solid Glass Block In Steel Stud Wall With Synthetic Plaster Finish

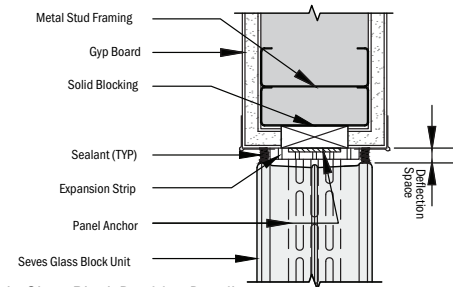


(SGBS-D030) Sill - Solid Glass Block in Steel Stud Wall With Synthetic Plaster Detail

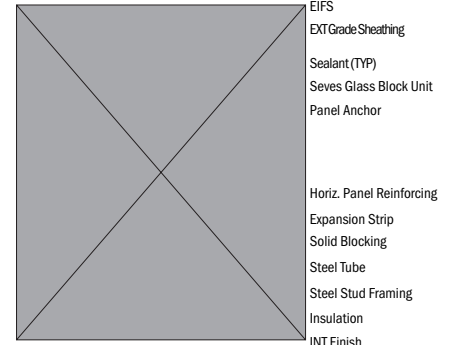
MISCELLANEOUS INTERIOR DETAILS



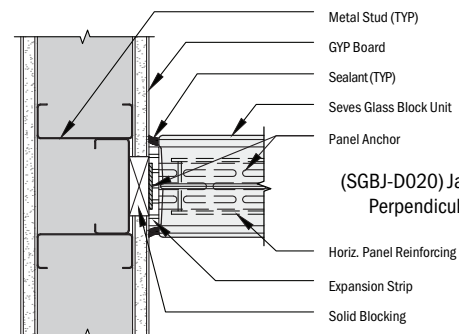
(SGBH-D006) Head - Glass Block in Suspended Ceiling



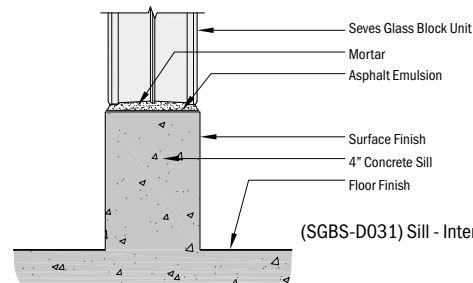
(SGBH-D011) Head - Glass Block Partition Detail



(SGBJ-D038) Jamb - Glass Block in Steel Stud Wall With Synthetic Plaster Finish



(SGBJ-D020) Jamb - Glass Block Perpendicular to Partition



(SGBS-D031) Sill - Interior Concrete Floor Slab Detail

DIVISION 4 - MASONRY SECTION 04270 GLASS UNIT MASONRY

1.01 Summary

This specification has been prepared by Seves Glass Block 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, workmanship or site conditions, Seves Glass Block assumes that the actual design choices and installation will be made by persons trained and qualified in the appropriate disciplines. Therefore, Seves Glass Block 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 and Anchoring
- 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-A5-93)
- 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 Emulsified Asphalt (For Porous Surfaces)

1.05 System Description

Knowledge of the following basic information is essential for proper installation of Seves 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.
4. Provision for expansion, movement

and isolation of the glass units from the surrounding frame, must be made at jambs and heads of all panels. Mortar must not bridge expansion spaces.

5. Mortar should be mixed and applied in accordance with the recommendations of Seves Glass Block. See Mortar Materials. Because glass block will not absorb water, mortar must be considerably stiffer than mortar for ordinary masonry. The consistency can be described as "mashed potatoes" or "peanut butter" and be clay-like. The joints must be full and struck smooth, not sponged. Using a sponge to create a rough porous joint will void any warranty and provide for water leakage.
6. Design and installation of glass block projects should be done by whole units since cutting glass block is not recommended.

1.06 Submittals

- A. Product Data
Submit two (2) copies of manufacturer's literature and two (2) copies of manufacturer's installation instructions.
- B. Samples
Submit two (2) glass block units of each type specified, showing size, design and pattern of faces.
- C. Test Reports -
Fire Tests
Submit documents verifying glass block units are classified for a 3/4, 1 or 1 1/2 hour fire exposure according to ASTM E2010, Underwriters Laboratories of Canada CAN 4-S106-M80, UL@ 9, or NFPA 257 "Fire Tests of Window Assemblies."

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 40oF (4oC) and falling. Maintain the temperature of glass unit masonry above 40oF (4oC) for the first 48 hours after construction.

1.09 Warranty

- A. Seves Glass Block offers a Limited 5-year warranty on Seves Glass Block units. Written copies of Full Warranty are available upon request.

PART 2 - PRODUCTS

2.01 Acceptable Manufacturers

- A. The drawings and specifications are based on catalog data, specifications and products of Seves Glass Block 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 Seves Glass Block based on extensive tests of panels composed of Seves Glass Block Premiere Series Glass Block masonry units as manufactured by Seves Glass Block. 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 units made of clear, colorless glass or full bodied color glass with a latex based or polyvinyl butyral edge coating. Pattern type: _____
- B. Thick faced glass block units, nominally _____ inch x _____ inch x _____ inch thick shall be partially evacuated hollow units made of clear, colorless glass with a latex based or polyvinyl butyral edge coating. Pattern type: THICKSET® 60 or 90
- C. Solid glass units, nominally _____ inch x _____ inch x _____ inch made of clear glass with a polyvinyl butyral edge coating. Pattern type: VISTABRIK® Solid Glass Block.

2.03 Accessories

- A. Panel Reinforcing: two parallel 9 gauge wires either 1 5/8 inch or 2 inch on center with electrically butt-welded crosswires spaced at regular intervals

Type 304 stainless steel, by Seves Glass Block.
- B. Panel Anchors:
20 gauge

by 16 inches long by 1 3/4 inches wide of Type 304 stainless steel, by Seves Glass Block.

- C. Expansion Strips: made of polyethylene foam with a thickness of 3/8 inch, by Seves Glass Block.
- D. Asphalt Emulsion: a water-based asphalt emulsion, by Kamak Chemical Corp. (The Glass Block Supply Co., 1.877-427-8775), or equal.
- E. Sealant (caulk): non-staining, waterproof mastic, (silicone), (urethane), (_____) type.
 - Tremco Incorporated, 1.800.321.7906 in Beachwood, OH. Below is information on the fire retardant sealant used on glass block fire tests:
 - Fyre-Sill Silicone Sealant (for fire-rated construction), by Tremco, Inc. 1.800.321.7906
- F. Packing (Backer Rods): polyethylene foam, neoprene, fibrous glass or equal as approved by sealant manufacturer.
- G. Channels (Aluminum): Available from The Glass Block Supply Co 1-877-427-8775
 - Premiere Series (4" Glass Block) Use: 4 1/2" x 2" x 1/8" size.
 - VISTABRIK® and Thinline® Series (3" Glass Block) Use: 3 3/4" x 2" x 1/8" size.

2.04 Mortar Materials

Mortar: Limit cementitious materials in mortar to Portland Cement and lime. Type S in accordance with ASTM C270. Mortar shall be 1 part Portland Cement, 1/2 part lime, and sand equal to 2 1/4 to 3 times the amount of cementitious material (cement plus lime), all measured by volume. (For exterior glass block panels, an integral type waterproofer should be added to the mortar mix.)

No antifreeze compounds or accelerators allowed.

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

1. Portland Cement: Type I in accordance with ASTM C150. If a waterproof Portland Cement is used, an integral type waterproofer shall still be used. (Masonry Cement is not recommended.)
Color: _____
2. Lime: Shall be a dolomitic pressure-hydrated lime, special hydrate, Type S, in accordance with ASTM C207.
3. Sand: A clean, white quartzite or silica type, essentially free of iron compounds, in accordance with ASTM C144, not less than 100% passing a No. 8 sieve.
4. Integral Type Water-repellent. Stearate type by The Euclid Chemical Company (Integral Waterpeller® Powder, Not Liquid,

DIVISION 4 - MASONRY SECTION 04270 GLASS UNIT MASONRY

Stearate type by The Euclid Chemical Company (Integral Waterpeller® Powder, Not Liquid, 1.800.321.7628), or approved equal. Note: Add Integral Waterpeller® powder to dry mortar mix. Do not add powder to wet mortar mix.

5. External Type Water proofer: Water based silane sealer type by BASF Corporation (HYDROZO ENVIROSEAL™ 40, 1.800.243.6739). Note: Remove excess sealer from glass surfaces soon after application.

PART 3 - EXECUTION

3.01 Preparation

- A. Verify that (channels), (panel anchors) have been provided at head and jambs 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. (See Section 1.05, Item 5). Re-tempering 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 mortar.
- B. Where panel anchors are used at jambs and heads in lieu of channel or chase surrounds, install panel anchors in the same joints (16 inches oc. maximum starting after first course) where panel reinforcing 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 jambs and head. Make certain expansion strip extends to sill and covers leg of panel anchor that is attached to jambs and head.
- D. Set a full mortar bed joint, applied to sill.
- E. Set lower course of block. Maintain a uniform joint width of 1/4 to 3/8 inch plus or minus 1/8 inch. All mortar joints must be full and not furrowed. Furrowing joints will void Warranty. Steel tools must not be used to tap blocks into position. (Place a rubber crutch tip on end

of trowel to tap block into position.) Do not realign, tap or otherwise move block after initial placement. For VISTABRIK®, spacers that provide a 3/8 inch thick mortar joint are available.

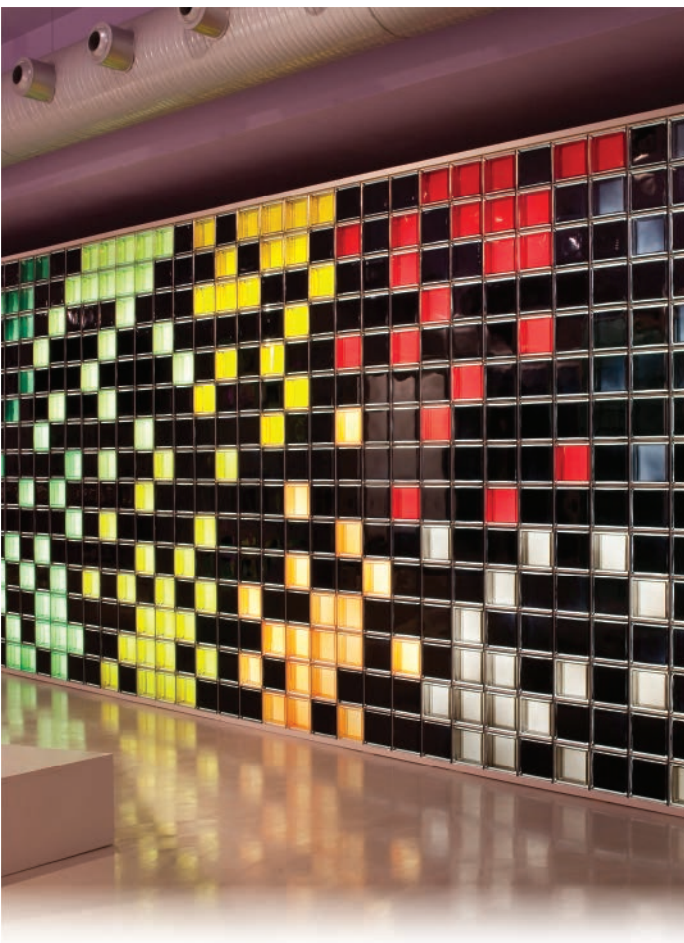
- F. Install panel reinforcing every 16 inches o.c. maximum (starting after the first course) in the horizontal mortar joints. Run reinforcing continuously from end to end of panels. Lap reinforcing not less than 6 inches whenever it is necessary to use more than one length. NOTE: In corrosive atmospheres (i.e. saline air, chlorine air, etc.), the use of stainless steel channels, reinforcing and panel anchors should be used. Consult local building codes in coastal areas. For VISTABRIK® Solid Glass Block, use 1 5/8 inch wide reinforcing (same as Thinline® Series glass block). Do not bridge expansion joints with reinforcing. Install reinforcing as follows:
 - Place lower half of mortar in bed joint. Do not furrow.
 - Press panel reinforcing into place.
 - Cover panel reinforcing with upper half of mortar bed and trowel smooth. Do not furrow.
- G. Place full mortar bed for joints not requiring panel reinforcing - do not furrow. Maintain uniform joint width.
- H. Set succeeding courses of block. Spaces at head of panel and jambs must remain free of mortar for caulking with sealant.
- I. Use only wooden or rubber tipped tools when tapping glass blocks into place.
- J. Strike joints smooth while mortar is still plastic and before final set. Roughly tooled joints can leak. Remove surplus mortar from faces of glass blocks and wipe dry. (See Section 3.03). Tool joints smooth and concave before mortar takes final set. At this time, remove and clean out all excess mortar from jambs, head and other locations.
- K. After final mortar set (approximately 24 hours), install packing tightly between glass block panel and jamb and head locations. Leave space for sealant.
- L. Apply sealant evenly to the full depth of recesses as indicated on the drawings and in accordance with the manufacturers' published application manual and instructions.
- M. All exterior glass block panels shall be well sealed to prevent water entry.

3.03 Cleaning

- A. Remove surplus mortar from the faces of the glass block at the time joints are struck or tooled.

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 while 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 in clean water to remove abrasive particles that could scratch glass surfaces. Allow any remaining film on the block to dry to a powder.
- D. After all sealants, caulking, etc., have been applied, remove excess caulking materials with commercial solvents such as xylene, toluene, mineral spirits or naphtha and follow with normal wash and rinse. Be careful not to damage caulking by overgenerous application of strong solvents. Comply with solvent manufacturers' printed 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 the glass surface. To remove the dry powder from the glass surfaces, use a clean, dry, soft cloth. For stubborn or hard to remove powder or stains, the use of an "extra fine" steel wool (grades 000 or 0000) is suggested. Try this first in an unobtrusive area.



PEGASUS Q19

The Design Line was developed with the contributions and experience of leading figures in contemporary architecture and design who shared our desire to create a new concept of glass block inspired by the principles of creativity, style, functionality and innovation. These innovative technologies, when applied to the manufacturing of the standard module, led to the creation of the “winged” Pegasus glass block. This unique block design allows for a narrow sight line by reducing the mortar joint size thus creating an uninterrupted continuity of glass.

Pegasus Q19

COLORS 19cm x 19cm x 8cm |
7.5" x 7.5" x 3"

Pegasus is a new generation of glass block that features a “Pegasus” winged block design technology allowing for uninterrupted glass surfaces without highly visible joints. Pegasus Pastel Colors present a full assortment of attractive hues for any design Interior or Exterior application.

WAVE = 0 TRANSPARENT = T

AVAILABLE WITH SATIN FINISH 1 OR 2 SIDES



Acquamarina T



Acquamarina O



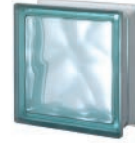
Blue T



Blue O



Turquoise T



Turquoise O



Neutro T



Neutro O



Nordica T



Nordica O



Green T



Green O



Pink T



Pink O



Siena T



Siena O

Special Shapes

All colors above are available in Terminal Linear, Terminal Curvo, & Sharp Corner 90°.

- No Linear or Curvo in Turquoise

* Angular corner available in Neutro only

* R09 available in Neutro only



Terminal Lineare T



Terminal Curvo T



*R09 T
(Neutro Only)



90° Sharp Corner T EC
(Available 1S or 2S)



*Angular Corner T
(Neutro Only)

ALL COLORS ARE AVAILABLE IN
WAVE = 0 TRANSPARENT = T
& SATIN FINISH ON 1 OR 2 SIDES



Terminal Lineare O



Terminal Curvo O



*R09 O
(Neutro Only)



90° Sharp Corner O EC
(Available 1S or 2S)



*Angular Corner O
(Neutro Only)

Pegasus Metalized is an exclusive and innovative glass block by Seves Glass Block. The unique metalized finish on the block's outer edge, creates a mirroring or reflective effect that reduces the perception of 'gaps' between the blocks and renders the glass surface even more brilliant and intriguing. The Pegasus Metalized Collection are available in a range of radiant and diverse colors, ideal for striking interior and exterior designs.



Pegasus Q19

METALIZED • 19cm x 19cm x 8cm |
7.5" x 7.5" x 3"

Ideal for striking interiors and exteriors, Metalized is available in the wavy designs / with a rich variety of colors. The combination of two exclusive Seves technologies, Pegasus design and metalized finish give Pegasus Metalized Block with a mirrored finish brings a special brightness, lightness and luminosity.

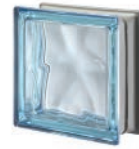
- Also available in T Sizes - Special Order Only



Turquoise Q19 O MET



Neutro Q19 O MET



Aquamarine Q19 O MET



Pink Q19 O MET



Blue Q19 O MET



Green Q19 O MET



Nordica Q19 O MET



Siena Q19 O MET



Special Shapes

All colors above are available in Terminal, Linear, Terminal Curvo, R09 & Sharp Corner 90°.

- No Linear or Curvo in Turquoise

* Angular corner in Neutro only

ALL COLORS ARE AVAILABLE IN
WAVE = O TRANSPARENT = T
& SATIN FINISH ON 1 OR 2 SIDES



Terminal Lineare T



Terminal Curvo T



7.5" x 3.5" x 3" T
R09



90° Sharp Corner T



*Angular Corner T
(Neutral Only)



Terminal Lineare O



Terminal Curvo O



7.5" x 3.5" x 3" O
R09



90° Sharp Corner O



*Angular Corner O
(Neutral Only)

NEW COLOR COLLECTION Q19

The New Color Collection provides endless ways to explore interior design through color. Vibrant injected colors, wave glass design and metalized edges: A collection created to define interior spaces with the power of its bold tones, brilliant shapes, and light effects.

- Suggested for interior applications only.

New Color Collection Q19

METALIZED • 19cm x 19cm x 8cm |
7.5" x 7.5" x 3"

- WAVE = 0



Nero Q19 0 MET



Ardesia Q19 0 MET



Bianco Q19 0 MET



Cedro Q19 0 MET



Scarlato Q19 0 MET



Indaco Q19 0 MET



Cobalto Q19 0 MET



Tortora Q19 0 MET



Avorio Q19 0 MET



Ocra Q19 0 MET



Oro Q19 0 MET



Magenta Q19 0 MET



Kiwi Q19 0 MET



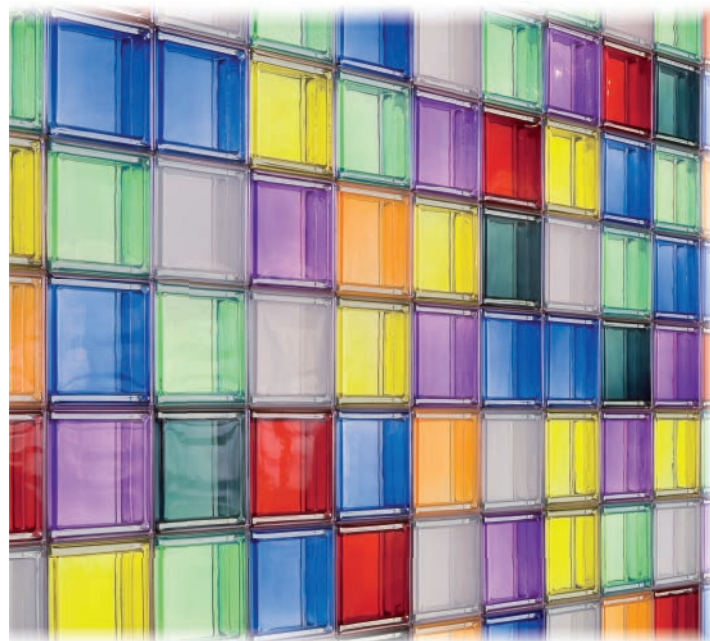
Muschio Q19 0 MET



Smeraldo Q19 0 MET



Malva Q19 0 MET



Special Shapes

All shapes are available in the following colors:
Nero | Ardesia | Bianco | Cedro | Scarlato | Indaco | Cobalto | Tortora
- WAVE = 0 • ALSO AVAILABLE IN TRANSPARENT = T
(Special Orders Only for Transparent)

Suggested for interior applications only.



Scarlato Ter Curvo 0 Met
19cm x 19cm x 8cm



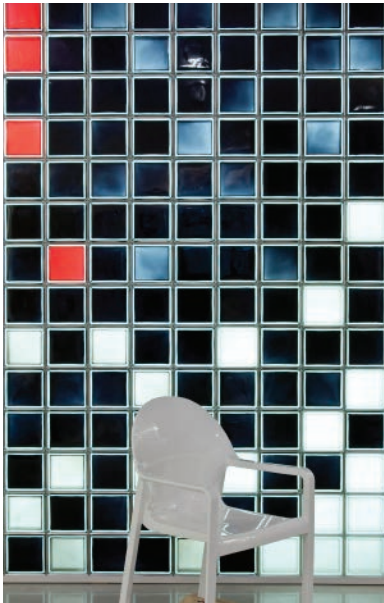
Avorio Angolare 0 Met
19cm x 15.2cm x 8cm



***Bianco 90° Sharp Corner**
13cm x 19cm x 8cm
(Special Order Only)



Cobalto Ter Lineare 0 Met
19cm x 19cm x 8cm



The Mendini Collection Q19

19cm x 19cm x 8cm | 7.5" x 7.5" x 3"

There are 16 colors in this range, from the boldest and sharpest ones to a striking black or white. These vibrant colors, manufactured with "Pegasus" winged glass block technology and metalized edge coating present a new exciting design element for interiors.

Recommended for interior use only.



Agata



Ambra



Ametista



Berillo



Citrino



Corallo



Giada



Malachite



Tormalina



White 30%



White 100%



Zaffiro



Black 30%



Black 100%



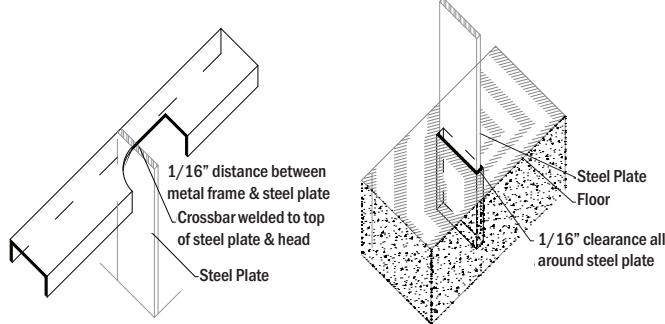
Rubino



Topazio

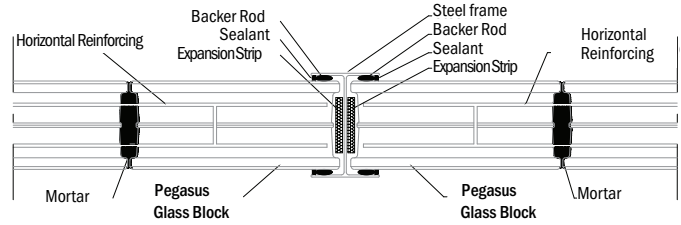


Technical Drawings / Installation

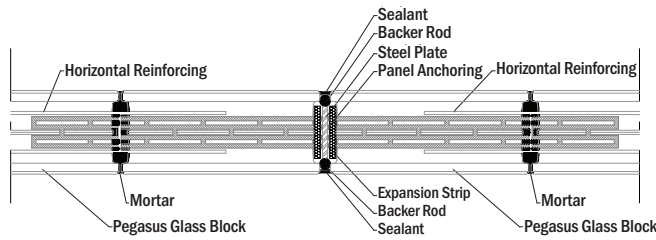


STEEL PLATE CEILING ANCHORING DETAIL

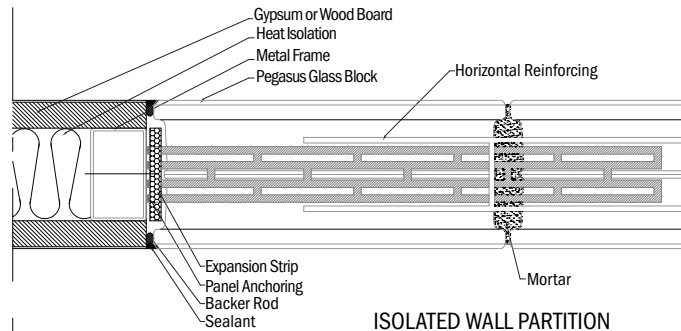
STEEL PLATE FLOOR ANCHORING DETAIL



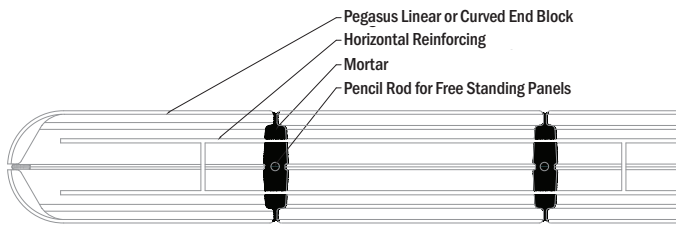
INTERMEDIATE VERTICAL SUPPORT IN MULTIPLE HORIZONTAL PANELS



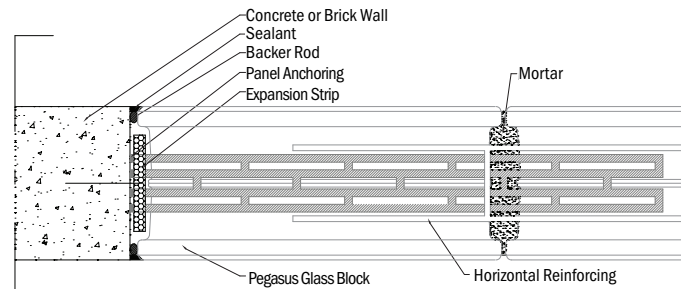
HIDDEN PLATE STIFFENER - INTERMEDIATE



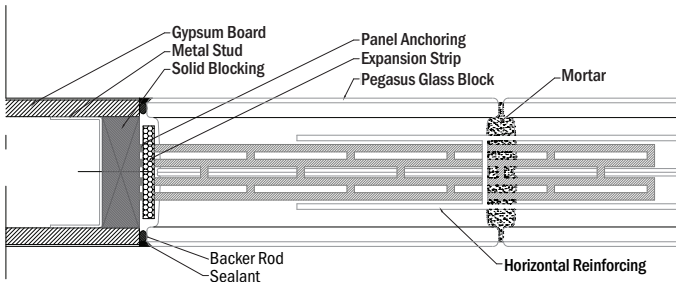
ISOLATED WALL PARTITION



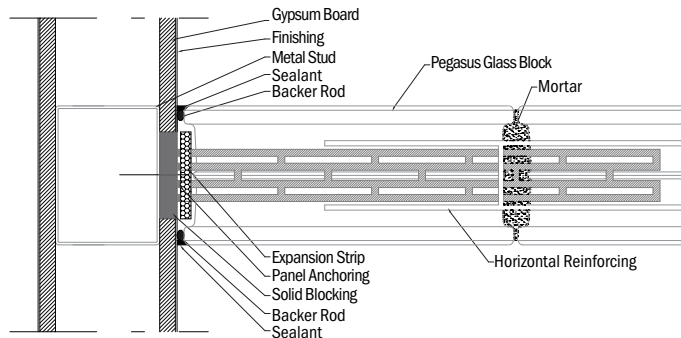
LINEAR & CURVED END BLOCKS



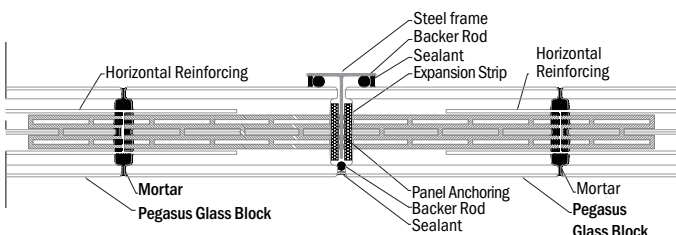
JAMB - CONCRETE WALL



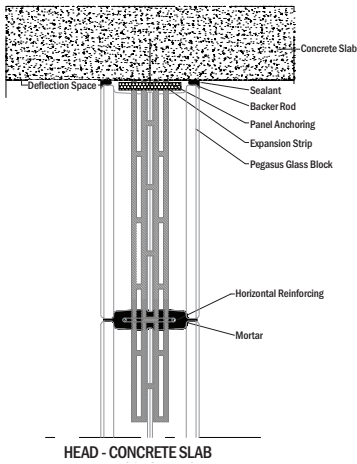
WALL PARTITION



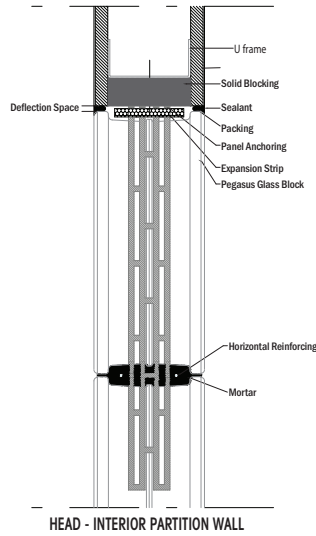
PERPENDICULAR TO PARTITION WALL



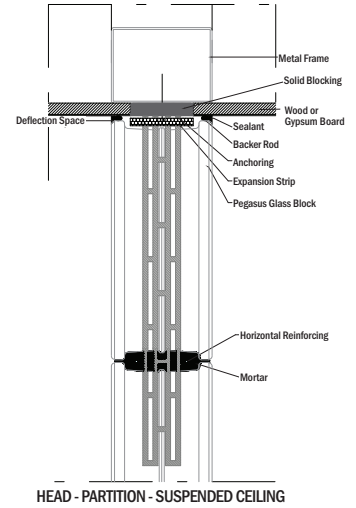
VERTICAL "T" STIFFENER-INTERMEDIATE



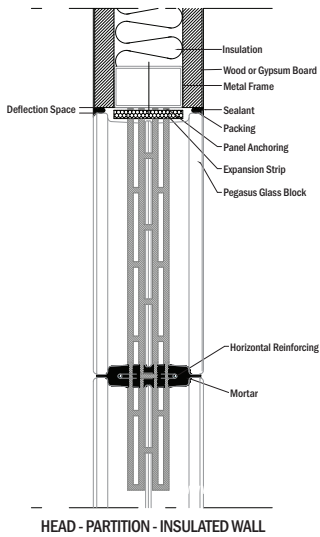
HEAD - CONCRETE SLAB



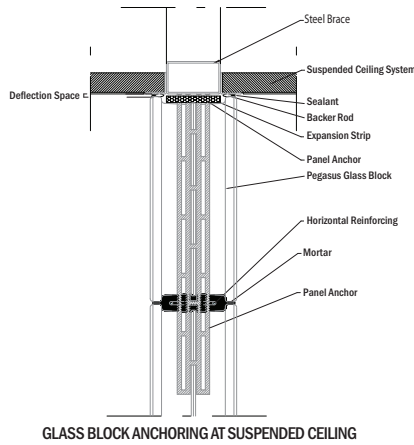
HEAD - INTERIOR PARTITION WALL



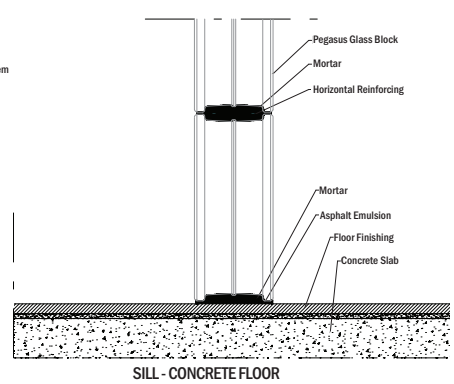
HEAD - PARTITION - SUSPENDED CEILING



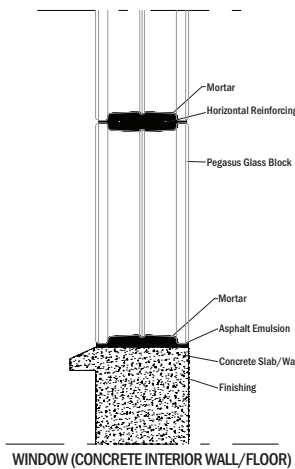
HEAD - PARTITION - INSULATED WALL



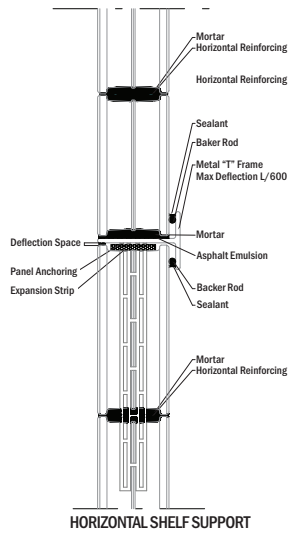
GLASS BLOCK ANCHORING AT SUSPENDED CEILING



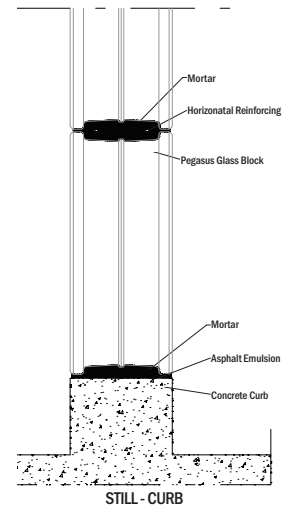
SILL - CONCRETE FLOOR



WINDOW (CONCRETE INTERIOR WALL/FLOOR)



HORIZONTAL SHELF SUPPORT



STILL - CURB



MORE COLOR.

MORE PATTERNS.



MORE CHOICE.

TYPICAL DETAIL INFORMATION AND CODE LIMITATIONS SEVES Pegasus Glass Block Products

- A. Hollow glass blocks –80mm thickness and special shapes. All blocks are designed for a modular face dimension in metric sizes with 2mm visible joint thickness.
- B. Mortar shall conform to ASTM C270 Type 'S' for maximum bond strength.
- C. Horizontal reinforcing for 80mm to 1 5/8" wide. All reinforcing to stainless steel. Horizontal reinforcing to have a maximum spacing of every third joint for 145mm block, every other joint at 190mm block and every joint at 300mm block.
- D. Panel anchors to be 13/4" x 16" x 20 gauge steel with elongated perforations. Locate panel anchors in same joint as horizontal reinforcing. Panel anchor to be installed in horizontal joint of masonry wall if possible and embedded 12". For alternate connection, return panel anchor up face of jamb and add two 1/4" anchors with washers just above bend of anchor. Anchors to be in horizontal alignment.
- E. Aluminum channels with panel anchors are an acceptable alternate.
- F. Head and jamb channel to be 1 1/2" x 3 3/4" x 14 gauge for 80mm. Channels used for exterior installations should have hot dipped zinc coating or stainless steel.
- G. All glass block panels to be non-load bearing and isolated from surrounding structures/walls with 3/8" thick glass fiber or white polyethylene foam expansion strips at jambs and head. Sill to be coated with asphalt emulsion to serve as a bond breaker.
- H. Structural members around glass block panels shall be limited to a deflection of L/600.
- I. Provide for vertical expansion joints where straight walls and curved walls (radius larger than 24") intersect or at a reversal of the curved wall.
- J. Expansion material at jambs may be omitted for panels with areas of 25 sq. ft. or less. Expansion joint at head must be maintained.
- K. All steel on the outside, within the wall system and adjacent to wall on inside, should be hot dipped galvanized or stainless steel to minimize rust staining.
- L. Structural silicone sealant may be used in lieu of mortar in which the exposed joints are approximately 1/8" thick and panels are limited to 25 square feet on

exterior and 85 square feet on interior installations.

M. Limitation of panel sizes:

- 1. Exterior or interior wall panels using Thinline Series (80mm thick) block, exposed to 20 lbs./square foot wind load or less to be limited to 85 square feet when supported on all four sides. Area may be increased to 150 square feet when an intermediate stiffener is incorporated as an additional supporting member near the middle of the panel. Maximum height is limited to 10 feet for exterior and 20 feet for interior installations. Maximum width is limited to 25 feet for exterior and interior.
- 2. Check governing building code for additional details.
- 3. Contact SEVES (1-855-823-4411) for design of glass block panels subjected to a wind load greater than 20 lbs./sq. ft. for design of free standing exterior panels.

STANDARD SPECIFICATIONS DIVISION 4 SECTION 04270 GLASS UNIT MASONRY

PART 1 GENERAL

- 1.01 SUMMARY
SEVES has prepared this specification by using generally accepted and appropriate technical information. The information contained herein should not be solely relied upon but used as a guide for the design and specification of the intended application by the design professional with the appropriate disciplines. SEVES has no control over the elements of design, installation and workmanship and therefore disclaims all liability arising from the use or misuse of this specification

- 1.02 WORK INCLUDED
A. SEVES Pegasus Hollow Glass Blocks Units
B. Integral joint reinforcing.
C. Mortar

- 1.03 RELATED WORK
A. Steel Channels
B. Sills, Lintels and Jamb Conditions
C. Sealant
D. Expansion and Packing Materials

- 1.04 REFERENCES
A. ASTM A82 - Spec for Cold Drawn Steel Wire.
B. ASTM C144, Aggregate for Masonry.
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 - A5 - 93).
- G. ASTM E2010 and NFPA 257, Fire Test of Window Assemblies (equivalent to UL® 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 slip joints at still.
- K. ASTM D1227, Type III - Spec. for Emulsified Asphalt (For Porus Surfaces).

- 1.05 SUBMITTALS
A. Product Data
1. Submit two (2) Copies of SEVES Pegasus Glass Blocks Catalog.
B. Samples
1. Submit two (2) Pegasus glass blocks of each type showing size and pattern for approval

- 1.06 ENVIRONMENTAL REQUIREMENTS
A. Maintain materials and ambient air temperatures to a minimum of 40° F prior to, during and 48 hours after completion of work.
B. Protect Seves Pegasus glass blocks from moisture prior to construction.

- 1.07 WARRANTY
A. SEVES offers a limited 5 year warranty on all glass block.

PART 2 PRODUCTS

- 2.01 ACCEPTABLE MANUFACTURERS
A. SEVES Glass Block (1-855-823-4411)
- 2.02 GLASS UNITS
A. Glass Block units _____ X _____ X _____ mm thick shall be partially evacuated hollow units made of clear or colored glass.
B. Color (Clear or Colors) _____
D. Pattern _____
E. Edge Coating - - White latex based or Metalized edge coating

- 2.03 ACCESSORIES
A. Joint Reinforcing: Ladder type, stainless steel 9 gauge parallel longitudinal wire at 1-5/8" apart and cross rods welded every 16" o.c.by Seves Glass Block.
B. Panel Anchors: 20 gauge X 1-3/4" X 16" hot dipped galvanized or stainless steel with staggered perforations by Seves Glass Block.
C. Perimeter Chase: Masonry recess, aluminum channel or steel channel.
D. Asphalt Emulsion: Karnac 100 or approved equal.
E. Expansion Strips: 3/8" X 3" polyethylene foam by Seves Glass Block.
F. Sealant: Sealant Type and Color _____
G. Backer Rod: As recommended by sealant supplier

- 2.04 MORTAR MATERIALS
A. Shall be prepared according to ASTM C270 for Type S Mortar. Mortar to have 1 part Portland Cement (Type 1), 1 part Type S Lime and 2-1/2 to 3 parts of fine sand passing No. 20 sieve and free of iron compounds to avoid stains. Use white Portland Cement and silica sand for white joints. Mix mortar drier than normal and only an amount that will be used in 1/2 to 1 hour. Glass block will not absorb water the same as brick. Do not use retempered mortar. Do not use antifreeze compounds or accelerators.
B. Add _____ mortar color per manufacturer's instructions.
C. Add Latricrete 8510 or approved equal to increase waterproofing qualities of mortar.

PART 3 EXECUTION

- 3.01 PREPARATION
A. Verify that pocket recesses or chases provided under another section are accurately located and sized.
B. Establish and protect lines, levels and coursing.
- 3.02 INSTALLATION
A. Arrange coursing pattern to provide consistent joint work throughout.
B. Locate and secure perimeter metal chase.
C. Coat sill under units with asphalt emulsion as a bond breaker.
D. Mortar joints must be solid. Furrowing not permitted. Neatly tool surface to a concave joint.
E. Place panel reinforcing in horizontal joint above first course of block and not more than 18" c.c. for Standard Series, every other course for Thinline Series and every course for Fire Stop Series. Panel anchors if used shall be installed in the same joints as reinforcing.
F. Isolate panel from adjacent construction on sides and top with expansion strips. Keep expansion joint voids clear of mortar.
G. Maintain uniform joint width of 1/4" ± 1/8".
H. Maximum variation from plane of unit to next unit - 1/32".
I. Maximum variation of panel from plane - 1/16".
J. Do not use retempered mortar.
K. Do not tap glass block with steel tools.
L. When mortar has set, pack backer rod in jamb and head channels. Recess to allow for sealant.
M. Apply sealant.

- 3.03 CLEANING
A. Remove excess mortar from glass surfaces with a damp cloth before set occurs.
B. Strike and tool the joints as required for proper sealing.
C. Number 4 (0000) steel wool can be used to remove remaining mortar and dried film.



Seves Glass Block accepts all those challenges that seem “impossible” and transforms them into actual, innovative projects. Thanks to solid, productive know-how, Seves can effectively adapt the production process of a glass block to meet a wide range of demands. Seves Glass Block prides itself on providing customized solutions to architects and designers, and works closely with design professionals during project development to create unique glass blocks that meet specific aesthetic requirements. Design professionals, you can finally put your own signature on your own glass block and give shape to your creativity.

Doric (Q30) 30cm x 30cm x 8cm | (Q19) 19cm x 19cm x 8cm

Inspired by the ancient Greek columns of the same name, Doric unites classic and modern styles into one exclusive design element. Ideal for creating dramatic linear patterns and optical illusions that play upon the depths of space, Doric is available in transparent and sand blasted finishings. Doric can be combined both vertically and horizontally. In vertical compositions such as walls, it provides a uniform column effect, whereas in horizontal applications it adds texture and visual interest.



Metalized



Satinated



Transparent

33cm x 33cm x 12cm
AVAILABLE IN TRANSPARENT = T



Q33 T Metalized



Q33 T Satinated 1 Side



Q33 T Satinated 2 Sides

42cm x 42cm x 12cm
AVAILABLE IN TRANSPARENT = T

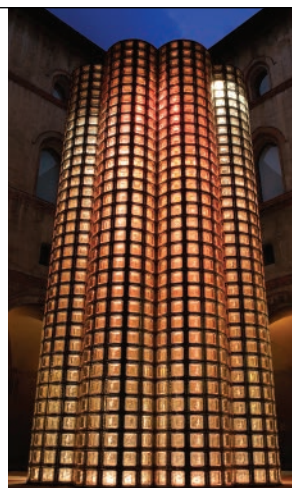


Q42

24cm x 24cm x 12cm

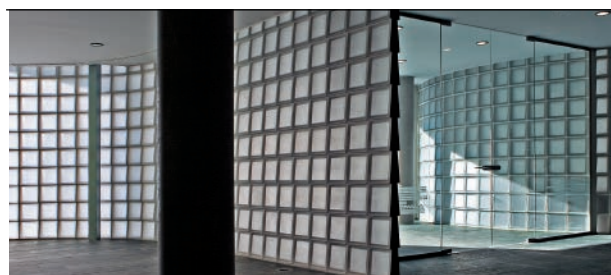


Curve



Ginza Collection

Ginza comes from “Gin”, Japanese for silver. These blocks derive their lightness and brightness from the silver reflections that have been achieved with a new and exclusive metallization treatment of the lateral profile. These large blocks are ideal for exteriors and large façades and as elegant furnishing solutions for interiors.



Metalized



Satinated



Clear

Side Cut Detail



Trapezoidal (Q30) 30cm x 30cm

The Trapezoidal block, with its square Pegasus shape, has been designed with a brand new section created by inclining the two parallel faces of the block by 5 degrees. Walls with new shapes and geometries can be created by combining, either vertically or horizontally, edges with similar or different thickness.



Diamante (Q30) 30cm x 30cm x 8cm

The Diamante block, with its raised diamond shaped face, has been designed to give a dramatic geometric contour to interior and exterior walls and surfaces. Diamante was exclusively custom designed with strength and style in mind.



CLEAR GLASS

The Basic Line is ideal for applications where glass blocks are chosen mainly for their prime function in design – the passage of light. With over 20+ patterns to choose from, this line offers the most diversity of any collection in the Seves Lines. To complete this line, we offer additional sizes, shapes and finishing units, and an extensive array of soft and vibrant color options. 19cm x 19cm x 8cm | 7.5" x 7.5" x 3"



Light Directing



Light Diffusing



Arctic



Alpha



Clearview
Sahara 1s or 2S



Clearview



Maya



Cross large



Cross Small



Cuneis



Deco



Digona



Inca



Lozenge



Marina



Midarc



Opal Plain



Optical



Paralline



Pyramid



Samba



Savona



Sponge



Stella



Wave
Sahara 1S or 2S



Wave

19 x 9 x 8 CM



Wave
(Also available in
Sahara 1S or 2S)



Clearview
(Also available in
Sahara 1S or 2S)



90° Radius Corner
Wave



90° Radius Corner
Arctic



90° Sharp Corner EC
Wave
(Also available in
Sahara 1S or 2S)



90° Sharp Corner EC
Clearview
(Also available in
Sahara 1S or 2S)



90° Sharp Corner EC
Arctic

Special Shapes

The Clear Glass Collection is ideal for applications where blocks are chosen mainly for their prime characteristic function – the passage of light. Available in a large variety of glass design faces and finishes, Seves Clear Glass Blocks are traditional yet distinctive and set the standard in the industry.



Allbend • Wave



Allbend • Arctic



EndBlock • Wave



EndBlock • Arctic



DoubleEnd • Wave



DoubleEnd • Arctic

A selection of 7 gentle colors in the 'wave pattern'. These delicate soft colors can stand alone in your project or can be mixed with our standard wave pattern to add touches color in your design.
19cm x 19cm x 8cm | 7.5" x 7.5" x 3"

- Excellent for Exterior Applications



* Available in Sahara Finish (light sandblasted) on one face, or two. (Special Order)

Soft Shades (colored glass)

Color Special Shapes

Linear End:

Azur, Green, Pink, Brown



Double End:

Azur, Green, Pink, Brown



90° Sharp Corner available by special order.

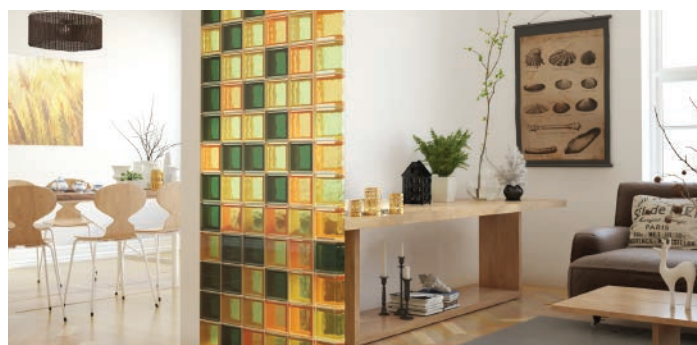
Brilly (injected color)



* Available in Sahara Finish (light sandblasted) on one face, or two. (Special Order)

The Brilly range is available in 9 bright / bold colors in the 'wave pattern'. Make a strong color statement with your design or mix with our standard wave pattern for a hint of the dramatic
19cm x 19cm x 8cm | 7.5" x 7.5" x 3"

(Recommended for interior applications, only)



MORE CHOICE

Seves has extended the basic line to include additional block thickness, sizes and colors. This gives architects and designers more opportunities to incorporate Seves Glass Block in their projects vision.

MORE SHAPES & SIZES

By adding additional sizes, we help extend our customers vision. Intermix patterns and sizes to create one-of-a-kind walls and windows. Running bond designs with glass block is now available.

With Seves, the ordinary becomes extraordinary.

Sizes shown are in Metric cm.



Clearview
Saturated 1 side
11cm x 11cm x 8cm



Clearview
Saturated 2 sides
11cm x 11cm x 8cm



Clearview
11cm x 11cm x 8cm



Wave
Saturated 1 side
11cm x 11cm x 8cm



Wave
Saturated 2 sides
11cm x 11cm x 8cm



Wave
11cm x 11cm x 8cm



Cortina
19cm x 19cm x 5cm



Wave
19cm x 19cm x 5cm



Clearview Sahara 1s
19cm x 19cm x 10cm



Clearview Sahara 2s
19cm x 19cm x 10cm



Clearview
19cm x 19cm x 10cm



Wave
Sahara 1s
19cm x 19cm x 10cm



Wave
Sahara 2s
19cm x 19cm x 10cm



Wave
19cm x 19cm x 10cm



Cross Large
19cm x 19cm x 10cm



Cross Small
19cm x 19cm x 10cm



Azur
19cm x 19cm x 10cm



Green
19cm x 19cm x 10cm



Pink
19cm x 19cm x 10cm



Brown
19cm x 19cm x 10cm



Clearview
Saturated 1 side
24cm x 11cm x 8cm



Clearview
Saturated 2 sides
24cm x 11cm x 8cm



Clearview
24cm x 11cm x 8cm



Wave
Saturated 1 side
24cm x 11cm x 8cm



Wave
Saturated 2 sides
24cm x 11cm x 8cm



Wave
24cm x 11cm x 8cm



Clearview
Saturated 1 side
24cm x 24cm x 8cm



Clearview
Saturated 2 sides
24cm x 24cm x 8cm



Clearview
24cm x 24cm x 8cm



Cross Small
24cm x 24cm x 8cm



Wave
Saturated 1 side
24cm x 24cm x 8cm



Wave
Saturated 2 sides
24cm x 24cm x 8cm



Wave
24cm x 24cm x 8cm

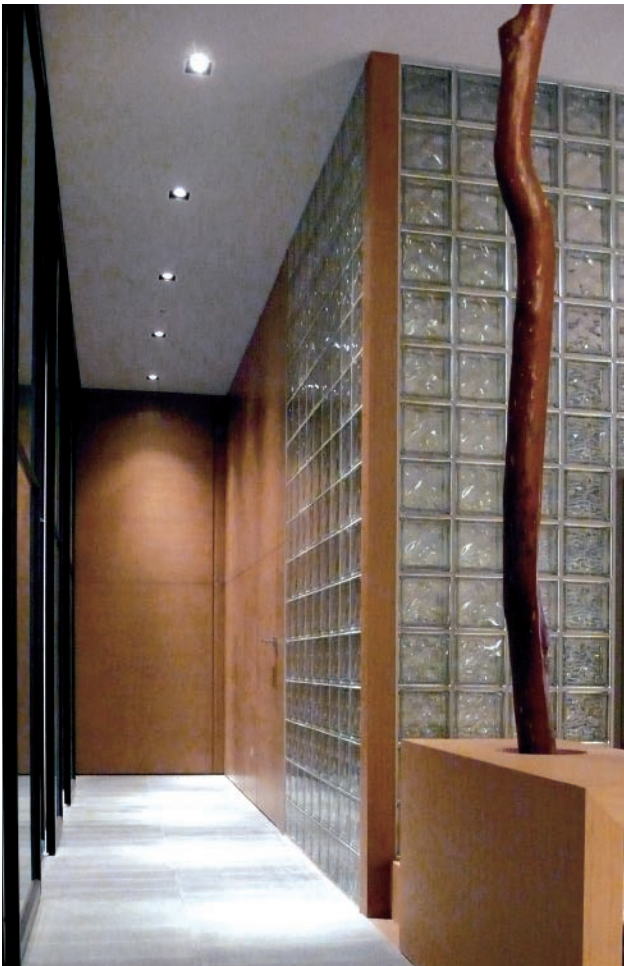


Wave
Saturated 2 sides
19cm x 19cm x 5cm



Light Diffusing
19cm x 19cm x 10cm

All sizes shown are in Metric cm.



CHARACTERISTICS

Glass Block	Nominal Sizes ¹ (Actual size is 3/4" less than nominal)	Weight of glass block (lb)	Approximate Installed Weight (lb/ft ²)	Number pieces/sq.ft.	Heat Transmission ² U-value BTU/hr ft ² °F	Thermal Resistance ² R-value (hr ft ² °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient	Sound transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating
Metric Clear Glass											
1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	80	90.8	37	79	45
1919/8 Opal Plain	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3			19				
1919/8 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	70	82.8	37	72	45
1919/8 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	61	79.3	37	69	45
1909/8 Wave	7-1/2" x 3-9/16" x 3-1/8"	3.1	20.1	4.7	0.56	1.79	79	88.5	41	77	45
1909/8 Clearview	7-1/2" x 3-1/2" x 3-1/8"	3.1	20.1	4.7	0.56	1.79	79	88.5	41	77	45
1909/8 Arctic	7-1/2" x 3-1/2" x 3-1/8"	3.1	20.1	4.7	0.56	1.79	69	80.5	41	70	45
1909/8 1S	7-1/2" x 3-9/16" x 3-1/8"	3.1	20.1	4.7	0.56	1.79	69	80.5	41	70	45
1909/8 2S	7-1/2" x 3-9/16" x 3-1/8"	3.1	20.1	4.7	0.56	1.79	60	77.0	41	67	45
Metric 198											
19/8 Allbend Wave	7-1/2" x 3-1/8" x 4-1/8, 3"	3.1	23.8	-	0.54	1.85	78	89.6	NPD	78	-
19/8 Allbend Arctic	7-1/2" x 3-1/8" x 4-1/8, 3"	3.1	23.8	-	0.54	1.85	78	89.6	NPD	78	-
19/8 Corner Wave	7-1/2" x 3-1/8"	3.5	23.8	-	0.53	1.89	77	89.6	NPD	78	-
19/8 Corner Arctic	7-1/2" x 3-1/8"	3.5	23.8	-	0.53	1.89	77	89.6	NPD	78	-
Clear 1919/8 Corner 1S	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	-	0.55	1.82	70	82.8	NPD	72	-
Clear 1919/8 Corner 2S	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	-	0.55	1.82	61	79.3	NPD	69	-
Linear End Wave	7-1/2" x 7-1/2" x 3-1/8"	5.3	16.8	-	NPD	NPD	80	89.7	NPD	78	-
Linear End Arctic	7-1/2" x 7-1/2" x 3-1/8"	5.3	16.8	-	NPD	NPD	80	89.7	NPD	78	-
Double End Wave	7-1/2" x 7-1/2" x 3-1/8"	5.3	14.4	-	NPD	NPD	79	89.7	NPD	78	-
Double End Arctic	7-1/2" x 7-1/2" x 3-1/8"	5.3	14.4	-	NPD	NPD	79	89.7	NPD	78	-
Corner 90° Wave EC	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	-	0.55	1.82	80	90.8	NPD	79	-
Corner 90° Arctic EC	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	-	0.55	1.82	80	90.8	NPD	79	-
Corner 90° Clearview EC	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	-	0.55	1.82	80	90.8	NPD	79	-
Brilly & Matty											
Brilly Yellow 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	61	NPD	37	NPD	
Brilly Orange 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	38	NPD	37	NPD	
Brilly Red 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	13	NPD	37	NPD	
Brilly Ruby 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	16	NPD	37	NPD	
Brilly Violet 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	14	NPD	37	NPD	
Brilly Blue 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	22	NPD	37	NPD	
Brilly Turquoise 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	22	NPD	37	NPD	
Brilly Emerald 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	19	NPD	37	NPD	
Brilly Bronze 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	29	NPD	37	NPD	
Matty White 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	9	NPD	37	NPD	
Matty Yellow 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	41	NPD	37	NPD	
Matty Red 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	10	NPD	37	NPD	
Matty Blue 1919/8	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	11	NPD	37	NPD	
Body Tinted Colors & Shapes											
1919/8 Blu	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	26	74.7	37	65	45
1919/8 Blu 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	23	71.3	37	62	45
1919/8 Blu 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	20	65.5	37	57	45
1919/8 Brown	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	58	81.6	37	71	45
1919/8 Brown 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	47	72.4	37	63	45
1919/8 Brown 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	38	70.1	37	61	45
1919/10 Brown	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	55	79.3	39	69	45

Glass Block	Nominal Sizes ¹ (Actual size is 1/4" less than nominal)	Weight of glass block (lb)	Approximate Installed Weight (lb/ft ²)	Number pieces/sq. ft.	Heat Transmission ² U-Value BTU/hr ft ² °F	Thermal Resistance ² R-value (hr ft ² °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient	Sound transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating
1919/8 Brown Linear End	7-1/2" x 7-1/2" x 3-1/8"	5.3	16.8	-	NPD	NPD	55	79.3	NPD	69	
1919/8 Brown Double End	7-1/2" x 7-1/2" x 3-1/8"	5.3	14.4	-	NPD	NPD	53	78.2	NPD	68	
1919/8 Green	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	77	79.3	37	69	45
1919/8 Green 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	63	69.0	37	60	45
1919/8 Green 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	51	66.7	37	58	45
1919/8 Green Linear End	7-1/2" x 7-1/2" x 3-1/8"	5.3	16.8	-	NPD	NPD	76	88.5	NPD	77	
1919/8 Green Double End	7-1/2" x 7-1/2" x 3-1/8"	5.3	14.4	-	NPD	NPD	75	88.5	NPD	77	
1919/8 Pink	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	72	87.4	37	76	45
1919/8 Pink 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	61	78.2	37	68	45
1919/8 Pink 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	52	75.9	37	66	45
1919/8 Pink Linear End	7-1/2" x 7-1/2" x 3-1/8"	5.3	16.8	-	NPD	NPD	71	86.2	NPD	75	
1919/8 Pink Double End	7-1/2" x 7-1/2" x 3-1/8"	5.3	14.4	-	NPD	NPD	70	85.1	NPD	74	
1919/8 Nordica	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	53	79.3	37	69	45
1919/8 Nordica 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	43	69.0	37	60	45
1919/8 Nordica 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	35	66.7	37	58	45
1919/8 Azur	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	75	87.4	37	76	45
1919/8 Azur 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	62	73.1	37	64	45
1919/8 Azur 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	52	71.3	37	62	45
1919/8 Azur Linear End	7-1/2" x 7-1/2" x 3-1/8"	5.3	16.8	-	NPD	NPD	74	86.2	NPD	75	
1919/8 Azur Double End	7-1/2" x 7-1/2" x 3-1/8"	5.3	14.4	-	NPD	NPD	73	86.2	NPD	75	
1919/8 Turquoise	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	65	86.2	37	75	45
1919/8 Turquoise 1S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	60	65.5	37	57	45
1919/8 Turquoise 2S	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	55	63.2	37	55	45
Light Control											
Light Directing	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	61	90.8	37	79	45
Light Diffusing	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3	0.53	1.89	63	90.8	37	79	45
Other Thicknesses & Formats											
2424/8	9-7/16" x 9-7/16" x 3-1/8"	8.8	16.2	1.5	0.53	1.89	78	88.5	36	77	
2424/8 1S	9-7/16" x 9-7/16" x 3-1/8"	8.8	16.2	1.5	0.53	1.89	68	80.5	36	70	
2424/8 2S	9-7/16" x 9-7/16" x 3-1/8"	8.8	16.2	1.5	0.53	1.89	60	77.0	36	67	
2411/8	9-7/16" x 4-1/2" x 3-1/8"	4.9	19.1	3.0	0.55	1.82	78	87.4	37	76	
2411/8 1S	9-7/16" x 4-1/2" x 3-1/8"	4.9	19.1	3.0	0.55	1.82	68	79.3	37	69	
2411/8 2S	9-7/16" x 4-1/2" x 3-1/8"	4.9	19.1	3.0	0.55	1.82	60	77.0	37	67	
1111/8	4-1/2" x 4-1/2" x 3-1/8"	2.4	20.5	6.0	0.49	2.04	78	85.1	42	74	45
1111/8 1S	4-1/2" x 4-1/2" x 3-1/8"	2.4	20.5	6.0	0.49	2.04	76	82.8	42	72	45
1111/8 2S	4-1/2" x 4-1/2" x 3-1/8"	2.4	20.5	6.0	0.49	2.04	73	80.5	42	70	45
1919/10	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	80	89.7	39	78	45
1919/10 1S	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	70	81.6	39	71	45
1919/10 2S	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	61	78.2	39	68	45
1919/10 Azur	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	74	86.2	39	75	45
1919/10 Green	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	76	88.5	39	77	45
1919/10 Pink	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	71	86.2	39	75	45
1919/10 Brown	7-1/2" x 7-1/2" x 3-15/16"	6.0	18.6	2.3	0.55	1.82	55	79.3	39	69	45

HORIZONTAL

Horizontal

These paver blocks are designed for durability and high traffic while still delivering the passage of light if desired. Seves has engineered blocks capable of being featured in flooring, walkway and other design structures where maximum strength is a requirement.

Sizes are in Metric cm.



Clearview
Sahara 1S
11x11x6



Clearview
11x11x6



Circles
14x14x5



Circles
19x19x7



BG Clearview
Sahara 1S
19x19x10



BG Dots
Satinated 1S
19x19x8



BG Clearview
Sahara 2s
19x19x10



BG Circles
14x14x11



BG Clearview
19x19x10



BG Circles
19x19x8



BG Dots
19x19x8



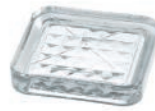
BG Clearview
19x19x8



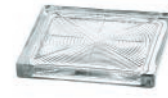
BG Clearview
19x19x8
Sahara 1S



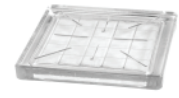
BG Clearview
19x19x8
Sahara 2S



Prisma
16x16x3



Circles
20x20x2



Prisma
20x20x2

Orbis

Orbis is a unique option for both horizontal and vertical applications. All the elements for structures that require maximum strength, but with a flare for the design component.

Sizes are in Metric cm.



BGR19/10



BGR19/10
Sahara 2S



BGR19/10
Sahara 1S



BR19/5



BR19/5
Sahara 1S



BR11/6
Clearview



BR11/6
Clearview Sahara 1S

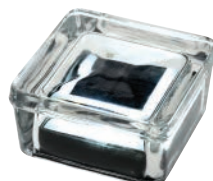
Photovoltaic

SUN POWERED ILLUMINATION

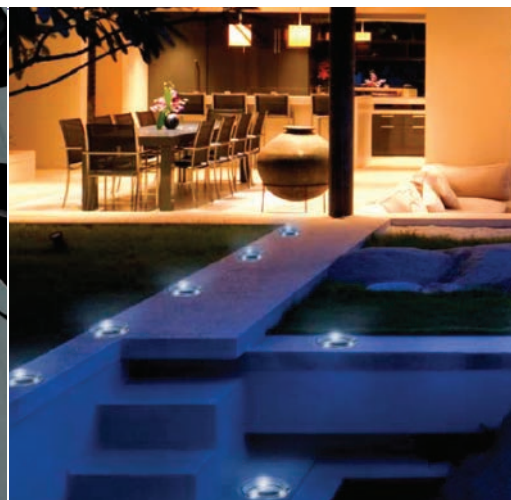
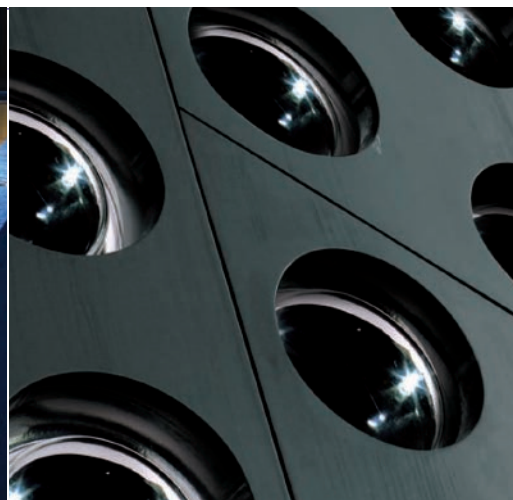
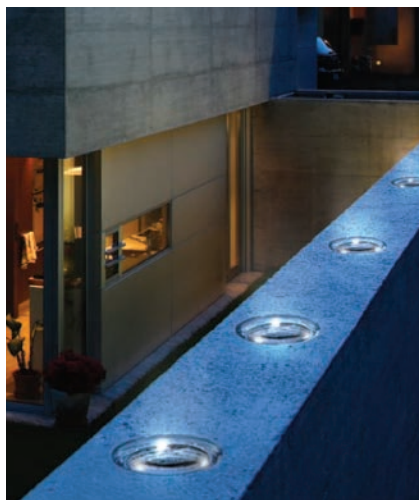
Photovoltaic transforms the already eco-friendly glass block into a new building instrument, ideal for brightening exterior applications while conserving energy. The Seves Photovoltaic Collection features solar powered, low-voltage illuminating glass pavers - a fast, easy and low-cost alternative to electrical ground lighting. Add soft droplets of light to dark exteriors or create glowing walkway patterns all without the need for intricate electrical installation, wiring or maintenance. This collection is designed specifically for exterior use in commercial, public and residential applications such as walkways, sidewalks, bridges, balconies, patios, decks and gardens as well as in exterior walls and panels.



BR11/6



B1111/6 - COMING SOON



Fire Resistant Horizontal Pavers

A specific range of glass blocks suitable for horizontal applications that demand high levels of protection against fire in compliance with the principal regulations. Seves glassblock submits the "fire resistant" glass blocks to strict quality controls which raise their mean resistance and enable the stability of the panel and its heat insulation quality to be verified over time.



BG 1919/8
30F Clearview



BG 1919/8
30F Clearview
Sahara 2S



BG 1919/8
30F Clearview
Sahara 1S



BG 1919/16
60F Clearview



BG 1919/16
60F Clearview
Sahara 2S



BG 1919/16
60F Clearview
Sahara 1S



BG 1919/16
90F Clearview



BG 1919/16
90F Clearview
Sahara 2S



BG 1919/16
90F Clearview
Sahara 1S

Plus: High-Tech Options

Seves has created High-Tech Options to enhance our basic block characteristics. Energy Savings, Self-Cleaning and Solar-Reflecting technologies add value to architectural projects due to their high performance characteristics and sustainable building design.

- Available for 8" x 8" & 19cm x 19cm
- Available with a 1S or 2S Frosted option



Energy Savings



Option available on all Imperial 8" and 19mm products.

- Seves Energy Savings Technology, ES 1.1, has a U-Value of .19. Bettering the standard in the industry by nearly 60%. Meeting the energy requirements for most projects.



Self-Cleaning



Option available on most block. Option perfect for shower applications.

- The Self-Cleaning technology reduces cleaning and maintenance cost. The invisible surface coating contain hydrophilic properties that breakdown dirt and wash away rain water, so the glass maintains a cleaner appearance over time.



Solar-Reflecting



Option available on all Imperial 8" and 19mm product .

- The addition of Solar-Reflecting option reduces heat loss from the building in the winter, reduces overheating of the interior in the summer and protects against UV radiation.



Seves has always been attentive to energy conservation and to promoting a more efficient use of resources and renewable energy materials in architecture. Today, we offer a new tool that significantly reduces the energy consumption of a glass structure and improves its energy efficiency.

Seves is proud to introduce the NEW Energy Savings 1.1 with a U-Value of .19; a reduction of almost 60% from the market standard of glass block. This innovative glass block meets or exceeds the required energy requirements in the marketplace. Available in our Imperial, Thinline, Basic and Pegasus Lines in sizes 8" x 8" and 19cm x 19cm. (Patterns: Nubio, Clarity, Wave and Clearview)

- Additional patterns available for special order

The LightWise Architectural Systems are engineered prefabricated systems utilizing Seves glass block components which provide both aesthetic and performance characteristics. Five options of systems available:



Hurricane-Resistant

The Hurricane-Resistant Glass Block windows protect your building and its occupants from hurricane winds and most importantly flying debris. They meet the large missile tests referenced in the International Building Code, Dade County Approval Protocols and Florida Building Code. System Block patterns available are 884 Endura Thick Set 90, 884 Thick Set 90 Nubio, and 884/664 Clarity Thick Set 90.



Hurricane-Resistant

Blocks out the elements while letting in light to allow natural lighting.



Tornado-Resistant

This high performance window provides effective protection against air pressure and flying debris caused by tornado-force winds. Perfect choice for Safe Rooms, Community Shelters, Schools and Government Facilities. Highest Standards of performance for FEMA 361 - Air Pressure and Tornado Missile Impact Test - Passed air pressure tests (+309/-413) psf - Easy to install and available in various sizes. Window is designed with a steel frame and grid system and is available in VistaBrik Clear, Stipple and Sahara Finish (Light Sandblasted).



Tornado-Resistant • 8x8

Steel frame laminated Vistabrik® solid glass block.



Blast-Resistant

The Blast-resistant panel have been designed and tested to meet and exceed stringent government, military and international building requirements to give you the beauty of glass block with the utmost protection. Meets GSA Standards and DOD/UFC Criteria for various threat levels. With 3-pattern choices, Nubio, Clarity and Endura, these panels let in light while providing privacy and protection for various levels of blast.



Blast-Resistant

Perfect choice for high-risk buildings of government, military, public and retail.



Threat-Resistant

We have an engineered solution to meet the demanding security needs of the architectural and design community. The system is perfect choice for prisons, detention centers, holding cells, correctional facilities, jails, and police departments. The windows are factory assembled in steel frames with various VistaBrik options to fulfill your security, privacy and ballistic requirements.



Threat-Resistant •

Steel frame laminated Vistabrik® solid glass block

Commercial System

Prefabricated glass block panels designed to be set in a 2-piece aluminum framing system. Numerous pattern options from our Imperial Line allows you to select various levels of light transmission and privacy to meet your design needs.



VERTICAL APPLICATIONS

HURRICANE RESISTANT GLASS BLOCK WINDOWS



HOLDS BACK HURRICANES.
DANCES WITH LIGHT.

Anyone who has ever experienced a hurricane knows that hurricane force winds are powerful, but the real danger comes in the form of flying debris. That means, if you're designing a building to withstand a hurricane, it needs to be able to stand up to flying debris as well.

Protect your building and its occupants with LightWise® Architectural Systems Hurricane Resistant Glass Block Windows. They meet the large missile impact tests referenced in the International Building Code, Miami Dade County and Florida State Approvals. Plus they're attractive, easy to install and offer the kind of privacy and light aesthetics you can only get with glass block.

- No need for shutters
- Protects Against Flying Debris
- Withstands Hurricane Force Winds
- Miami / Dade County (NOA)
17 - 0821.13 | 17 - 0821.14 | 17 - 0821.15
- Florida State Product Approval
FL 25879 | FL 25880 | FL 25881
- Texas Department of Insurance
TDI WIN - 62 / WIN - 63



Hurricane Resistant Glass Block Windows:

LWA® Hurricane Resistant Glass Block Windows brighten any application with soft, natural light. They're ideal for use in commercial applications where beauty, light transmission and protection against hurricane force winds and debris is critical. The window has passed the large missile impact tests recognized by the International Building Code, Florida State and Miami Dade County and is approved for use in coastal areas.

Features & Benefits of The Window Include:

- Visually stunning, pre-fabricated panels that are easy to install
- No need for shutters
- Customizable to meet project needs
- Guaranteed to meet your performance requirements
- Useful for daylighting strategies and can contribute to LEED points
- Protects against flying debris and hurricane force winds
- Available with a range of visibility and privacy options
- Graffiti-resistant, damage-resistant and easy to clean
- Greater security than conventional windows
- Possibilities are limited only by your imagination

Glass Block Patterns Available:

NUBIO®
Pattern



CLARITY®
Pattern



ENDURA™
Pattern



Tests Passed/Code Approvals:

- Meets large missile impact tests referenced in the International Building Code (IBC), in accordance with ASTM E-1886 and ASTM E-1996
- Tested to Florida State and Miami Dade County Approval protocols TAS 201, 202, and 203
- Window Size and Design Pressure Rating: 4' x 8' = 80 PSF Design Pressure

System Design Features:

LWA® Hurricane Resistant Glass Block windows consist of glass block framed by a 2-piece aluminum frame. Standard Aluminum Channel is mill finished, anodized clear or bronze Powder coating is also available.

LWA® Hurricane Resistant Glass Block Windows are available as pre-assembled windows for easy installation. They can be ordered in custom sizes in 8" increments up to 4' x 8' (with 80 PSF Design Pressure Rating).

Seves Glass Block has a sales and technical support team that is ready to help you design, engineer and specify glass block solutions.

VERTICAL APPLICATIONS

TORNADO RESISTANT WINDOWS

YOU'LL FEEL SAFE AND SECURE KNOWING THIS WINDOW CAN RESIST WIND SPEEDS OF 250 MPH

Seves Glass Block has engineered a high-performance window that provides effective protection against air pressure and flying debris caused by tornado-force winds. The following information can assist you in the design and incorporation of these windows into your projects.

This window is the perfect choice for Safe Rooms, Community Shelters, Schools and Government Facilities. See what is happening outside the shelter while providing needed protection from the elements. LightWise® Architectural Systems Tornado Resistant Windows are factory assembled, steel framed glass block windows. Custom sizes are available.

- ASTM 330 - 08
- ICC/NSSA 500 - 08
- AAMA 520 & ASTM 2268
- Passed Air Pressure Tests (+309 / -413) psf
- Easy To Install & Available In Various Sizes
- Highest Standards of Performance For FEMA 361 / 320
Air Pressure & Tornado Missile Impact Test



Safety, Durability, & Light Transmittance:

LWA® Tornado Resistant Windows are extraordinarily versatile and available in various sizes. Utilizing laminated VISTABRIK® solid glass block with a steel frame and grid, this window requires minimal maintenance and is ideal for facilities where safety and security is critical.

LWA® Tornado Resistant Windows provide the needed protection from the elements while letting people see what is happening outside of the shelter, and letting daylight into a space that would otherwise rely on artificial light.

In accordance with FEMA 361, LWA® Tornado Resistant Windows passed several levels of air pressure tests including 309 positive psf and negative 413 psf. The 413 psf equates to a wind speed of over 400 mph. It is significant to note that the highest recorded wind speed on earth was 253 mph.

Performance Features & Benefits:

- Effective protection against air pressure and flying debris caused by tornado-force winds
- Highest standard of performance for FEMA 361
“Design and Construction Guidelines for Community Safe Rooms”
- Factory assembled for consistent quality

This Factory Assembled Window Provides:

- Strength and durability of steel
- Beauty and strength of laminated VISTABRIK®
- Enhanced security with vision and light transmission
- Resistance to Tornado-force winds and flying debris
- Reduced on-site labor costs
- Protection from damaging UV rays

North American GLASS BLOCK DESIGN GUIDE

Laminated VISTABRIK® Solid Glass Block:



Laminated VISTABRIK®
Clear



Laminated VISTABRIK®
Stippled

Seves Glass Block Tornado Resistant Windows Are Manufactured To Meet The Following Standards:

- ASTM E283
– Standard Test Method for Determining Rate of Air Leakage
- FEMA 361
– Air Pressure and Tornado Missile Impact Test
– Two hits: 15lbs., 2x4 @100 mph
- FEMA 320
– Taking Shelter From the Storm:
– Building a Safe Room For Your Home or Small Business
- ICC/NSSA 500–2008
- ASTM E330-02
– Standard Test Method for Structural Performance
- Passed air pressure tests (+309/-413) psf., which equates to a wind speed of over 400 mph (with a 1.5 safety factor).



Steel frame with 8" x 8"
Laminated VISTABRIK®

SEVES Glass Block has a sales and technical support team that is ready to help you design, engineer and specify glass block solutions.

VERTICAL APPLICATIONS

BLAST RESISTANT GLASS BLOCK PANELS



MAKES THREATS LESS THREATENING BY MAKING IMPACTS LESS IMPACTFUL.

Our blast resistant panels have been designed and tested to meet and exceed stringent government, military and international building requirements to give you the beauty of glass with the utmost protection.

Many injuries to building occupants are caused by glass fragments sent flying through the air from the force of a blast. Unlike laminated flat glass, which will often crack and sometimes release fragments during a blast, there was no cracking or loss of glass in the tests conducted on our LightWise® Architectural Systems Blast Resistant Glass Block Panels.

- ASTM F 1642
- GSA - TS01 - 2003 • DOD UFC04 - 010 - 01
- Enhanced Protection For Building Occupants
- Greater Security Than Conventional Windows
- Complies With Numerous Blast Standards & Requirements



LWA® Blast Resistant Glass Block Panels let in light while providing privacy and protection from various levels of blast. They are the perfect choice for high-risk buildings such as military facilities, airports, government offices, courthouses, offices, embassies, correctional facilities, arenas, financial centers and other high-profile public and retail spaces.

System Security Features:

- Meets GSA and UFC 04-0110-01 blast glass standards
- Offers enhanced protection to building occupants
- Provides greater security than conventional windows
- Reduces hazardous glass fragments
- No cracking or loss of glass during testing

Engineering analysis supplemented with shock tube testing performed by an independent laboratory has determined that LWA® Blast Resistant Glass Block Panels with sizes ranging from 4' x 4' to 8' x 8' perform to an ASTM "Minimal Hazard" or GSA.

"Performance Condition 2" or Better For:

- General Services Administration (GSA) Level C and Level D
- Unified Facilities Criteria (UFC) DoD Minimum Anti-terrorism Standards for Buildings Type I threats at 25m and 45m standoff distances and Type II threats at 10m and 25m standoff distances
- For Petrochemical applications, a successful blast test of longer duration was also performed.

Smaller and larger windows are available.
Contact Seves Glass Block for more information.

System Facts:

LWA® Blast Resistant Glass Block Panels consist of glass block framed by a 2-piece aluminum frame. Standard channel is mill finished, anodized clear or bronze. Powder coating is also available.

Glass Block Patterns Available:

NUBIO®
Pattern



CLARITY®
Pattern



ENDURA™
Pattern



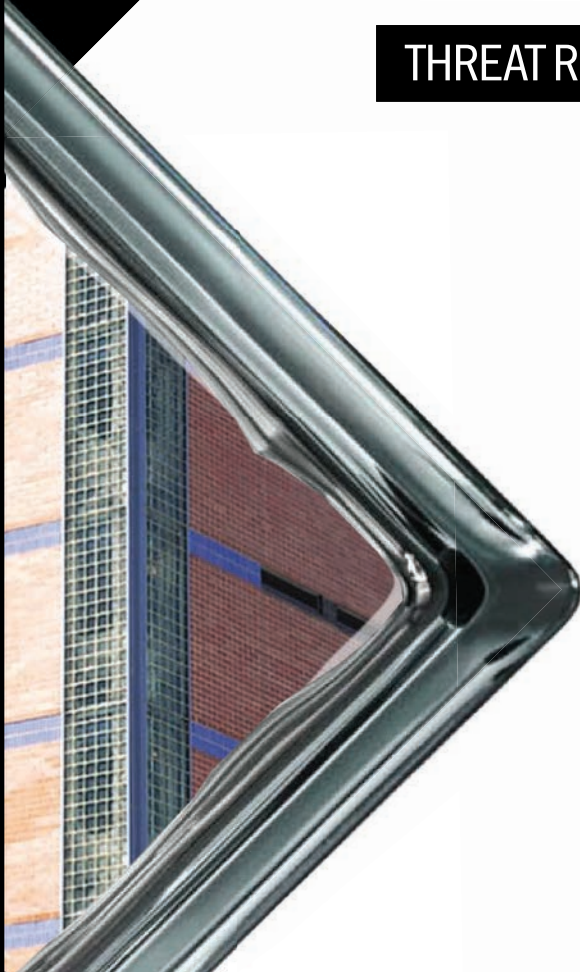
System Design Features:

- Visually stunning, pre-fabricated panels are easy to install
- Customizable to meet project needs
- Guaranteed to meet your performance requirements
- Useful for daylighting strategies and can contribute to LEED points
- Available with a range of visibility and privacy options
- Graffiti-resistant, damage-resistant and easy to clean
- Panels can be installed from either the interior or exterior of a building
- Real glass is easy to maintain unlike films or plastics, which scratch easily
- Real glass will not yellow over time unlike films or plastics
- Possibilities are limited only by your imagination

Seves Glass Block has a sales and technical support team that is ready to help you design, engineer and specify glass block solutions.

VERTICAL APPLICATIONS

THREAT RESISTANT WINDOWS



YOU CAN'T ESCAPE IT – A SECURITY SYSTEM MADE OF GLASS AND STEEL

Seves Glass Block has an engineered solution to meet the demanding security needs of the architectural and design community. The following information can assist you in the design and incorporation of these windows into your projects.

This system is the perfect choice for prisons, detention centers, holding cells, correctional facilities, criminal justice facilities, police departments and jails. LightWise® Architectural Systems Threat Resistant Windows are factory assembled, steel framed glass block windows. Customizable to various shapes and sizes.

- ASTM F1233 - 08
- ANSI Z97.1
- SD - STD - 01.01 • CPSC 16 CFR 1201
- Enhanced Security With Vision & Light Transmission
- Extraordinarily Versatile & Available In Various Sizes
- Ability To Meet UL 752 Ballistic Resistance
Levels 1 through 6



Steel Frame With a White Finish

Versatility, Durability and Light Transmittance:

LWA® Threat Resistant Windows are extraordinarily versatile and available in various sizes. Utilizing VISTABRIK® solid glass block with a steel frame and grid, this window requires minimal maintenance and is ideal for facilities where safety and security is critical. LWA® Threat Resistant Windows increase the amount of natural daylighting that comes into a room while still providing a secure environment.

Performance Features & Benefits:

- Enhanced Security
- Ballistic Resistant levels
- Varying privacy levels
- Impact Resistant
- Pick Proof
- Factory assembled for consistent quality

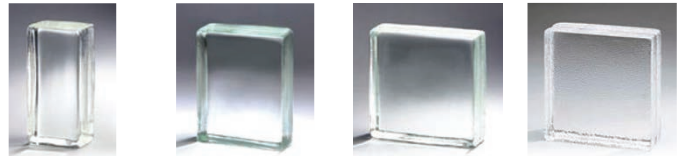
High Performance Glazing:

- Will not burn
- Resists scratching and marring
- Will not discolor
- Reduces maintenance costs

This Factory Assembled Window Provides:

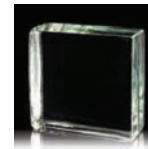
- Strength and durability of steel
- Resistance to Forced Entry/Exit
- Welded corners and grids
- Reduced on-site labor costs
- Narrow sight-lines
- Expedited installation sequencing
- Enhanced security with vision and light transmission
- Ballistic resistance

VISTABRIK® Solid Glass Block:



VISTABRIK® in 4" x 8", 6" x 8" and 8" x 8" sizes.

(VISTABRIK® meets UL 752 ballistic resistance levels 1, 2 and 6.)



Laminated VISTABRIK®
Clear, Stipple



Laminated VISTABRIK®
Sand-blasted

(Laminated VISTABRIK® meets UL 752 ballistic resistance levels 1 thru 6.)

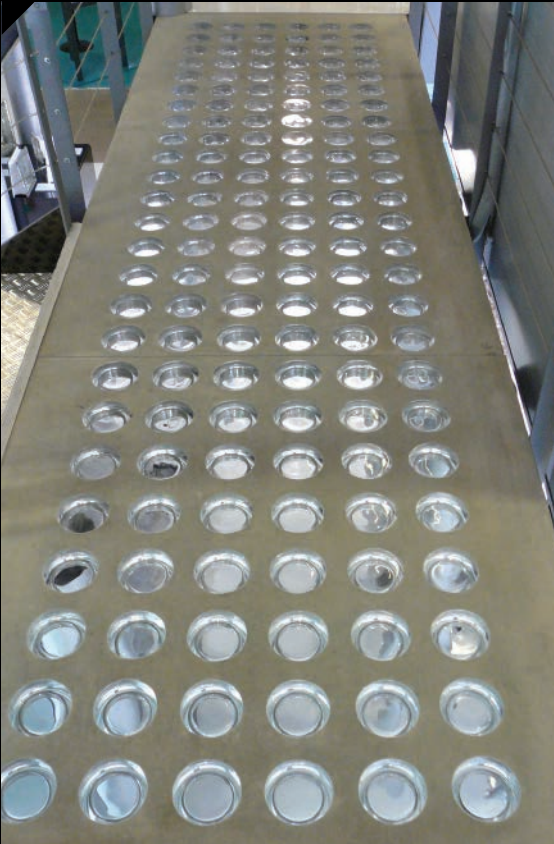
Seves Glass Block Threat Resistant Windows Are Manufactured To Meet The Following Standards:

- ASTM E283
- Standard Test Method for Determining Rate of Air Leakage
- ASTM E330
- Standard Test Method for Structural Performance
- ASTM E547
- Standard Test Method for Water Penetration
- ASTM A1011
- Standard Specification for Steel
- ASTM C920
- Standard Specification for Elastomeric Joint Sealants
- AN SI Z97.1
- Safety Glazing Materials Used in Buildings
Safety Performance Specifications and Methods of Test
- 16 CFR Part 1201
- Consumer Product Safety Commission (CPSC)
Safety Standard for Architectural Glazing Materials

Seves Glass Block has a sales and technical support team that is ready to help you design, engineer and specify glass block solutions.

HORIZONTAL APPLICATIONS

PRECAST CONCRETE & GLASS PAVER PANELS



HORIZONTAL APPLICATIONS

Designed, Engineered & Tested PRE-FABRICATED PANELS

Glass Paver and Precast Concrete Panel Systems allow light to be shared between levels of a building. They allow light to travel through the floor to brighten a space below, or create a decorative feature at night as the light shines up from underfoot.

A glass block flooring option that is easy and quick to install.
It is the most durable horizontal glass system in the world.

These precast concrete and glass paver panels are designed and engineered for high traffic areas where durability is essential. They are able to withstand any type of climate and are air and water tight. Our panels are so strong that a tractor trailer can drive across them with no affect to them. They are ideal for transit projects, high end residences, educational, corporate or institutional projects where light is needed to be transfered to a lower level.



Applications

- Sidewalk Vault Lines
- Bridges
- Skylights
- Stair Treads & Landings

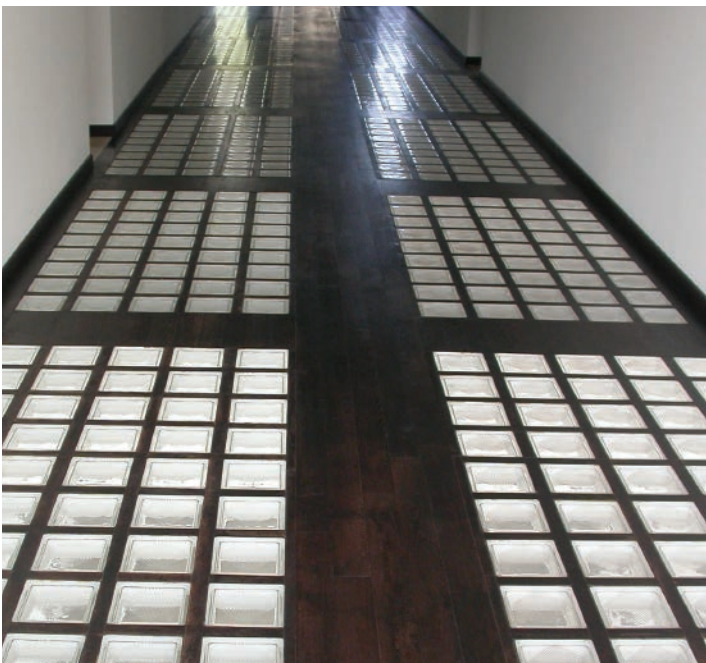
Orbis

Orbis is a unique option for both horizontal and vertical applications. All the elements for structures that require maximum strength, but with a flare for the design component.

Photovoltaic

SUN POWERED ILLUMINATION

Photovoltaic transforms the already eco-friendly glass block into a new building instrument, ideal for brightening exterior applications while conserving energy. The Seves Photovoltaic Collection features solar powered, low-voltage illuminating glass pavers - a fast, easy and low-cost alternative to electrical ground lighting. Add soft droplets of light to dark exteriors or create glowing walkway patterns all without the need for intricate electrical installation, wiring or maintenance. This collection is designed specifically for exterior use in commercial, public and residential applications such as walkways, sidewalks, bridges, balconies, patios, decks and gardens as well as in exterior walls and panels.



Horizontal

These paver blocks are designed for durability and high traffic while still delivering the passage of light if desired. Seves has engineered glass blocks as pavers capable of being featured in flooring, walkway and other design structures where maximum strength is a requirement. The most durable structural horizontal glass system available.

Glass Pavers

Many options are available from round, square, rectangular, custom and historic pavers.

Panel Sizes

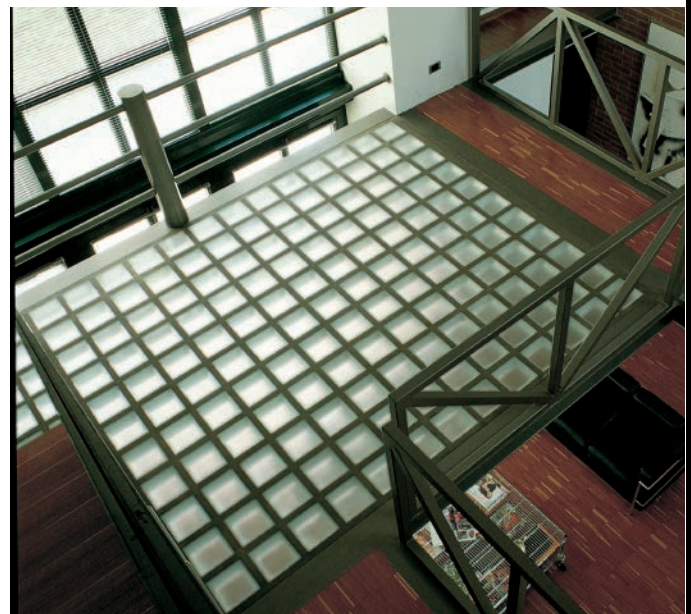
Custom manufactured to your project requirements. Available in traditional square or rectangular, and custom shapes like round or any other geometric shape.

Finishes

Concrete can be finished in a traditional light broom finish for slip resistance, or sandblasted terazzo style or capped with marble or granite.

Colors

Available in a standard light gray finish or virtually any custom color is available.



Seves Glass Block has a sales and technical support team that is ready to help you design, engineer and specify glass block solutions.

MINI COLLECTION

The MYMINIGLASS Collection

6" x 6" x 3"

Choose from seven styles to create a mood for every room: Classic, Natural, Romantic, Vegan, Sophisticated, Futuristic and Daredevil Types. Use MYMINIGLASS to add light and modern flair to bathrooms and kitchens, for statement pieces throughout your home. Add light, texture and artistic interest to your interiors.

Recommended for interior use only.

Classic Type 6" x 6" x 3"

Add light and privacy for a timeless look. (Arctic Pattern)



MG/s MINI
Blueberry



MG/s MINI
Mint



MG/s MINI
Licorice



MG/s MINI
Cherry



MG/s MINI
Apricot



MG/s MINI
Vanilla



MG/s MINI
Arctic

Special Shapes

Available only in Classic Type (Blueberry, Mint, Licorice, Cherry, Apricot, Vanilla & Arctic)



MG/s MINI
Linear End



MG/s MINI
Curved End



MG/s MINI
Corner

Very Natural Type 6" x 6" x 3"

Slip into an attitude as cozy as your favorite t-shirt. (Wave Pattern)



MG/s MINI
Very Natural White



MG/s MINI
Very Natural Bronze



MG/s MINI
Very Natural Green



Sophisticated Type 6" x 6" x 3"

Show off your sophisticated style. (Ice Pattern)



MG/s MINI
Sophisticated Blue



MG/s MINI
Sophisticated Violet



MG/s MINI
Sophisticated Ruby

Romantic Type 6" x 6" x 3"

Unleash your inner pop-chic! (Diamond Pattern)



MG/s MINI
Romantic White



MG/s MINI
Romantic Pink



MG/s MINI
Romantic Violet



MG/s MINI
Romantic Ruby

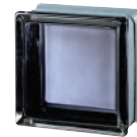


Futuristic Type 6" x 6" x 3"

Be a trendsetter with a touch of the abstract. (Clarity Pattern with Metalized edge coating)



MG/s MINI
Futuristic
Black 100%



MG/s MINI
Futuristic
Black 30%



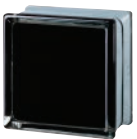
MG/s MINI
Futuristic Blue



MG/s MINI
Futuristic
White 100%

Daredevil Type 6" x 6" x 3"

Dare to be different. (Diamond Pattern with Metalized edge coating)



MG/s MINI
Daredevil Black



MG/s MINI
Daredevil Yellow



MG/s MINI
Daredevil Red



MG/s MINI
Daredevil Blue



Vegan Type 6" x 6" x 3"

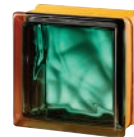
Interiors that reflect your lifestyle. (Wave Pattern)



MG/s MINI
Vegan Green

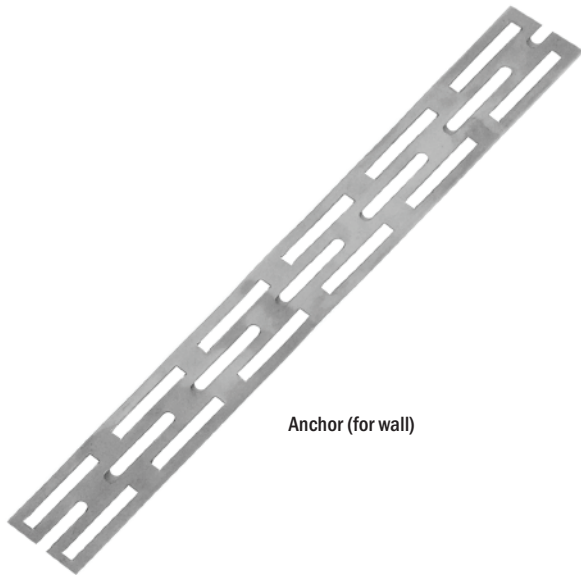


MG/s MINI
Vegan Yellow



MG/s MINI
Vegan Emerald

MORTAR



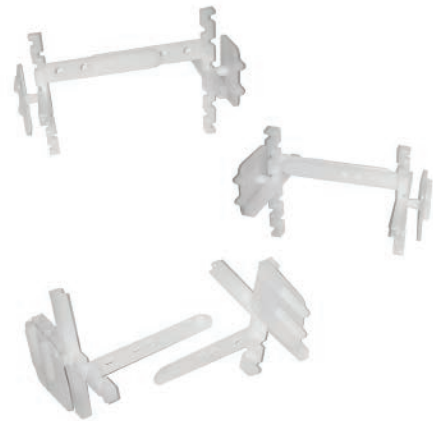
Anchor (for wall)



Reinforcing for
Block



Expansion Material



Mortar Spacers

Mortar Accessories

Metal Anchors: Can be used for 4" Vertical, 3", 80mm and Pegasus

Pegasus Spacer: Can be used for Horizontal and Vertical

Mortar Spacers: 4", 80mm, 100mm, Vistabrik®, Universal Spacers as well



Channels
(4", 3"/80mm)
Different Lengths



Horizontal
(4", 3"/80mm)



Spacers
Vertical & Horizontal
(3" and 4")



Pegasus Spacers
Vertical & Horizontal
(80mm Only)

Silicone Accessories

A= AllBend | B= Block | C= Corner

Vertical Spacers:

From B to B
Vertical - 4", 3"/80mm, MY MiniCollection

From A to B
Vertical - 80mm Only

From A to A
80mm Only

From B to C
80mm Only

A= AllBend | B= Block | C= Corner

Horizontal Spacers:

Horizontal Corner
80mm Only

Horizontal AllBend
80mm Only



Wall Anchors

Seves Silicone



Hopper Vent



Dryer Vent



Other Accessories

- Seves Glass Block Silicone
- Hopper Vent: 16" x 8" - Either 3" or 4" Block
- Dryer Vent: 8" x 8"



Interior Residential Applications





Exterior Commercial Applications





Interior Residential Applications





Interior Residential Applications

MORE TECHNOLOGY.

Seves Product Design & Technical Assistance

UNPARALLELED GLOBAL SUPPORT

SEVES is the only global glass block manufacturer that can provide you and your design staff technical and design support for projects around the globe. With sales and technical staff available in most countries and every continent around the world, you can feel confident in specifying any one of our over 1,000 available glass block products. Many additional services are available through SEVES's distribution and dealer networks. They can provide valuable services such as sample selection, professional installations, on-site assistance and technical support. Call 1.877.738.3711 or visit www.sevesglassblock.com to find out why architects specify SEVES Glass Block more than any other glass block in the world. Please send inquiries to inquiry@sevesglassblock.com.

SEVES GLASS BLOCK 5 YEAR LIMITED WARRANTY

Seves Glass Block promises to replace any glass blocks that are found to be defective within five years from the date of purchase. Damaged glass blocks will not be replaced due to or from the result of faulty installation. Upon discovery of any defect or damage, you should send written notice to Seves Glass Block, Inc. 10576 Broadview Rd. Cleveland, Ohio 44147. Proof of purchase is required and actual glass block sample and/or photographs of glass block(s) deemed to be faulty will be required. Seves will fully review the claim and replace block(s) found to be defective by manufacturing.

Seves agrees to replacement of all defective blocks excluding labor. Seves is not liable for consequential or incidental damages or injury relating to customer purchase or use of Seves Glass Block products. Warranties are limited to a five year duration time from the exact date of purchase of any Seves Glass Block product. Some states or providences may or do not currently allow the limitation or of incidental or consequential damages, or the limitation on how long an implied warranty may last - thus the above limitations may not apply to all. This warranty gives you specific legal rights - you may also have other rights which vary from state to state / providence to providence. All of the above information contained herein is as accurate and reliable to the date of publication to the best of Seves Glass Block's knowledge. Due to Seves Glass Block having no control or direction over actual installation method and workmanship, accessory materials, or conditions during actual application, NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE as to the performance of an installation containing Seves Glass Block products. In no event shall Seves Glass Block be liable for any damages arising because of product failure, whether incidental, special, consequential or punitive, regardless of the theory of liability upon which any such damages are claimed.

MORE PATTERNS. MORE COLORS.
MORE SHAPES & SIZES. MORE CHOICE.
CREATE MORE.



SEVES GLASS BLOCK

1.877.738.3711

www.sevesglassblock.com

Seves Glass Block, Inc.
North American Sales Office
10576 Broadview Road
Cleveland, Ohio 44147

1.440.627.6979

Inquiries: inquiry@sevesglassblock.com

WARRANTY

The information contained herein is accurate and reliable to the best of our knowledge. But, because SEVES has no control over installation, workmanship, accessory materials or conditions of application, NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE as to the performance of an installation containing SEVES products. In no event shall SEVES be liable for the damages arising because of failure, whether incidental, special, consequential or punitive, regardless of theory of liability upon which any such damages are claimed. SEVES provides written warranties for many of its products, and such warranties take precedence over the statements contained herein.