



NORTH AMERICAN

GLASS BLOCK DESIGN GUIDE



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

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 Duchcov, 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 designed, 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.







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Benefits



Glass Block Advantages





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.

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.



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 structural silicone 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.

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PREMIERE[™] SERIES 4"



IMPERIAL SIZE

The Premiere[™] 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. These blocks offer enhanced resistance to impact, fire, sound transmission, graffiti and weather. Most block are rated with UL for 45-minute fire rating.

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.



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



Cortina • 8"x8"x4" | 6"x8"x4" | 6"x6"x4" | 4"x8"x4" Random textures built over the Nubio pattern. Maximum privacy with medium light transmission without a fixed geometric design.



most light and ultimate visibility.

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

Cortina

Light Diffusing • 8" x 8" x 4"

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

Regent • 8" x 8" x 4"

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





Options for Imperial Line by special order





IceScapes • 12" x 12" x 4"

Arctic • 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 • 12" x 12" x 4"

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



Opal - Plain •8" x 8" x 4" Patternless white glass reduces light transmission while achieving maximum level of privacy. (No Options Available)



Opal Plain







Product / Data

Premiere™ SERIES 4" - SHAPES & FINISHING UNITS

Shapes such as Corners (90°), Allbend™s (22.5°), and Tridron^{™™}s (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 consistancy 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.



Allbend™™

Nubio

90° Radius Corner

Nubio

EndBlock

Nubio

Double-End

Nubio

Allbend™™ Cortina



90° Radius Corner Cortina



EndBlock Cortina



Cortina



90° Sharp Corner 90° Sharp Corner Cortina EC Nubio EC



90° Sharp Corner **Clarity EC**



Tridron™ Tridron™™ Nubio Cortina





Physical & Design Data (US STANDARD SIZES IN INCHES)

Glass Block	Nominal Sizes ¹ (Actual size is ¼" less than nominal)	Weight of Glass Block (Ib)	Approximate Installed Weight (lb/ft²)	Number pieces/sq.ft.	Heat Transmission ² U-Value (BTU/hr ft2 °F)	Thermal Resistance ² R-value (hr ft2 °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient ⁴	Sound transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating
				All 4" re	gular line						
12x12x4 Nubio	11-3/4" x11-3/4"x 3-7/8"	15.7	23.3	1.0	0.53	1,89	75	.63	35	.66685	N/A
12x12x4 Cross Large	11-3/4" x11-3/4"x 3-7/8"	15.7	23.3	1.0	0.53	1,89	55	.63	35	.66685	N/A
12x12x4 IceScapes	11-3/4" x11-3/4"x 3-7/8"	15.7	23.3	1.0	0.53	1,89	67	.63	35	.66685	N/A
12x12x4 Clarity	11-3/4" x11-3/4"x 3-7/8"	15.7	23.3	1.0	0.53	1,89	91	.63	35	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	N/A	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	v	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	45

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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 ight 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"x8"x4" | 6"x6"x4" (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)



Clarity (Thickset 90)

Spray (Thickset 60)



Endura (Thickset 90)

Clarity (Thickset 60)

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

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)

8" x 8" x 3" * (Stipple) Provides a 90 minute fire rating. 3" solid glass block with stipple finish to add privacy. Jourable, impact and vandal resistant with good light transmission. *(Also in 8" x 8" x 1.5" Pavers)

6" x 8" x 3" (Clear) Provides a 90 minute fire rating, 3" solid glass block. Clear visibility, duvrable, impact and vandal resistant with maximum light transmission

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.







Stipple



Clear



Clear

VETROPIENO[™]

Rettangolare • 9.25" x 4.5" x 2.125" (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.

Quadrato •

4.625" x 4.5" x 2.125" (Neutro/Blue/Nortica/Siena) 100% solid glass block in clear and 3-designer colors. Can be used in conjunction with Vetropieno Rettangolare to create running bond.









VETROPIENO AMERICANO™ **Rettangolare** •

7.625" x 3.625" x 2.25" (Neutro) Provides a 90 minute fire rating. 100% solid glass bricks in clear.

Glass bricks deliver a unique visual and light transparency unlike those of standard hollow brick.

Quadrato •

3.75" x 3.625" x 2.25" (Neutro) 100% solid glass block in clear. Can be used in conjunction with Vetropieno Rettangolare to create running bond.



Neutro



www.sevesglassblock.com

High Performance Products

IMPERIAL SIZE

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/ft²)	Number pieces/ sq.ft.	Heat Transmission ² U-Value (BTU/hr ft2 °F)	Thermal Resistance ² R-value (hr ft2 °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient ⁴	Sound transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating		
High performance	High performance products												
Thickset® 60 to 90) minutes Fire-rated - I	mpact stren	ight										
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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.75785	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	.75785	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	.75785	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	.75785	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. 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.

Fire-rated Glass Block Window Assemblies

Premiere[™] Series Glass Blocks, THICKSET[®] 60, THICKSET[®] 90, 3" thick VISTABRIK[®] and Vetropieno 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.

Ma	asonry Wal	I Constr	uction	Non-Ma	asonry Wall	Constru	ction			
	Panel Li	mitations	Panel Limitations Figure 1				atings			
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	100 sq. ft.	10 ft.	х	х		THICKSET [®] 60	100 sq. ft.	10 ft.	х	x
THICKSET [®] 90	100 sq. ft.	10ft.	x	х	X*	THICKSET [®] 90	100 sq. ft.	10ft.	x	x
VISTABRIK ®	100 sq. ft.	10 ft.	x	х	Х*	VISTABRIK®	100 sq. ft.	10 ft.	x	x
Vetropieno	100 sq. ft.	10 ft.	x	x	х*	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.

Fire Ratings & Code Information



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 $^{\rm \scriptsize B}$ 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.

Fire Ratings & Code Information

IMPERIAL SIZE

- 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"





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 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) • $8" \times 8" \times 3" + 6" \times 8" \times 3"$ $6" \times 6" \times 3" + 4" \times 8" \times 3"$ 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 visability.

 $\begin{matrix} \textbf{lce} & 8"x8"x3" \mid 6"x8"x3" \\ & 6"x6"x3" \mid 4"x8"x3" \\ Random textures built over the Nubio pattern. \end{matrix}$ Maximum privacy with medium light transmission without a fixed geometric design.

 $\begin{array}{c} \textbf{Clarity} \bullet 8"x 8"x 3" & | 6"x 8"x 3" \\ 6"x 6"x 3" & | 4"x 8"x 3" \\ \hline \text{Faces are smooth and undistorted to transmit the} \end{array}$ most light and ultimate visibility.

Alpha • 8" 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 ¼" less than nominal)	Weight of Glass Block (lb)	Approximate Installed Weight s/f (lb/ft ²)	Number pieces/ sq.ft.	Heat Transmission² U-Value (BTU/hr ft2 °F)	Thermal Resistance ² R-value (hr ft2 °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient ⁴	Sound Transmission S.T.C. (dB)	Solar Heat Gain Coefficient (%)	Fire Rating
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	.66685	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	.66685	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	.66685	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	.66685	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	.6668⁵	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	.6668 ^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	.6668 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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	45
6x6x3xArctic	5-3/4" x 5-3/4"x 3-1/8"	3.1	17.2	4.0	0.53	1,89	71	.65	41	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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	.66685	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.

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Typical Detail Information

PHYSICAL & DESIGN DATA

INSIDE RADIUS MINIMUMS FOR CURVED PANEL CONSTRUCTION



FOR C	RADIUS MINIMUMS FOR CURVED PANEL CONSTRUCTION										
Block Size	Inside Radius	Number of Blocks	Vertical Join	t Thickness ches							
	Inches	in 90º Arc	Inside	Outside							
4" × 8"	32	13	1/8	5/8							
6" x 6"	48 ¹ / ₂	13	1/8	5/8							
8" × 8"	65	13	1/8	5/8							
12"×12"	98 ½	13	1/8	5/8							

NOTES:

 It is suggested that curved areas be separated from flat areas by intermediate expansion joints and supports, as indicated in these drawings.

 When straight, ladder-type reinforcing is used on curved walls, the innermost parallel wire may be cut periodically and/or bent to accomodate the curvature of the wall.

RESISTANCE TO SURFACE CONDENSATION



cample: cause condensation on Premiere Series Glass Block or approximately 3 °F above zero on THINUNE® Series block. Under the same conditions, condensation will form on a single-glazed flat glass window at 34°F above zero.



22^{1/2°}, 45°, 67^{1/2°}, & RADIUS 90° CORNERS



WIND LOAD RESISTANCE – PROVANTAGE® SYSTEM

(Based on Standard Nominal 4" Thick Premiere Series Glass Block Installed with ProVantage[®] Silicone System). Based on 2.0 Safety Factor.

WIND LOAD RESISTANCE – MORTAR SYSTEM (Based on Standard Nominal 4" Thick Premiere Series Glass Block. Installed with mortar. Based on 2.7 Safety Factor)



EndBlock™

Finishing Unit

tage® Glass Block Installation $7^{3/4}$ System are up to 25% lighter 7³/4 $7^{3/4}$ per square foot than panels installed with mortar. **Non-load Bearing** - 5⁵/8" -- 4³/4"-7³/4" Glass block panels are nonload bearing; adequate provi-37/8" sions must be made for sup-37/8' port of construction above these panels. Panels are mor-37/8"tared at the sill, with jamb and NUBIO / CORTINA NUBIO / CORTINA / CLARITY NUBIO / CORTINA head details designed to accomodate for building movement Allbend^{™®} 22.5° Unit Tridron^{™®} 45° Block Unit **Double End** and lintel deflection. The com-**Finishing Unit** pressive strength (for information purposes only) of all hollow glass block is 400 to 600 psi.; THICKSET® Series Glass Block $7^{3/3}$ $7^{3/4}$ is 2500 psi.; and VISTABRIK® 7³/4 Series is 80.000 psi. **Detailed Drawings** $1^{1/4}$ 7³/4" Structural members illustrated 22.5° 3 on page 14 and other "detail" pages indicate general principles of construction. Member 37/8 sizes should be determined by structural analysis to avoid ex-NUBIO / CORTINA NUBIO / CORTINA / CLARITY NUBIO / CORTINA cessive deflections. Maximum **Maximum Panel Dimensions** deflection for supports shall not excees L/600. **PREMIRE SERIES THINLINE SERIES® VISTABRIK®** Α w W н н Α н Α **Thermal Expansion Coefficient** (Sq. (Ft.) (Ft.) (Ft.) (Sq.Ft.) (Ft.) (Sq.Ft.) (Ft.) Ft.) EXTERIOR* 144 25 20 100 10 15 100 10 250 25 INTERIOR 20 150 10 15 150 10 H = HeightW = WidthA = Area* All exterior areas and dimensions are based on 20 psf design windload with 2.7 safety factor.

Mortar M An optimum mort	tar mix for installing Sev	Number of	Blocks	for 10) Sq. F	t. Panel		
Portland Cement	Lime	Sand						
1 Part	1/2 Part	3.4 Parts	Block Sizes (Nominal)	6"	8"	12"	4" x 8"	6" x 8"
1.0 cubic foot	0.5 cubic foot	3.4 cubic feet	Number of Blocks	400	225	100	450	300

Premiere[™] SERIES 8" HIGH 90° Sharp

Corner Unit (EC)



Radius Corner Unit



W

(Ft.)

10

15

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The thermal expansion coefficient of glass block is 47 x 10-7/(°F).

Installed Panel Weight

Refer to Physical Data Tables

for weight of panels installed

with mortar. Glass block pan-

els installed with the ProVan-

þ

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 buttwelded 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 13/4"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.



Panel Anchor 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)



(D002) Head - Glass Block in Metal Stud Wall With Synthetic Plaster Finish

TYPICAL JAM DETAILS (Exterior Openings)





Brick Veneer

Air Space

BLDG Paper EXT Grade Sheathing

Metal Flashing (Stripped In)

Steel Stud Framing Insulation Steel Tube



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

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



MORTAR ACCESSORIES

TYPICAL SILL DETAILS (Exterior Openings)



(D030) Sill - Glass Block in Steel Stud Wall with Brick Veneer

(D027) Sill - Glass Block in Steel Stud Wall With Synthetic Plaster Finish

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



(D033B) Intermediate Support In Multiple Horizontal Panels

(D033D) Intermediate Support In Multiple Horizontal Panels



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MORTAR ACCESSORIES



DETAILS FOR Fire-rated CONSTRUCTION





North American GLASS BLOCK DESIGN GUIDE

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

VISTABRIK® SOLID GLASS BLOCK DETAILS (Continued)



(D030) Sill - Solid Glass Block In Steel Stud Wall Wth Brick Veneer



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



Seves Glass Block Vistabrik® Solid Glass Block Unit Mortar Asphalt Emulsion Precast Concrete Sill

INT Finish

(D024) Sill - Solid Glass Block In CMU Wall







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



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



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



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

MORTAR ACCESSORIES



Specifications

DIVISION 4 - MASONRY SECTION 04270 GLASS UNIT MASONRY

PART 1 - GENERAL

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 soley 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
- 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.
- 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.
- 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 40°F (4°C) and falling. Maintain the temperature of glass unit masonry above 40°F (4°C) for the first 48 hours after construction.

1.09 Warranty

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.
- Products of other manufactures proposed as equivalent quality must be submitted through the bidding contractors for written approval of the architect ten days prior to the bid date.
- 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 perforated steel 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.

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, firous 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

06 Submittale

Specifications



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:
- 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, 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). Retempering the mortar after it has taken its initial set shall not be permitted. Do not use antifreeze compounds or accelerators.

- C. Freshly mixed mortar may create skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any mortar gets into the eyes, rinse immediately with water and get prompt medical attention.
- 3.02 Installation
- A. Cover sill area with a heavy coat of asphalt emulsion. Allow emulsion to cure at least 2 hours before placing 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 o.c. 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 along with specified Seves Stainless Steel anchors, and reinforcing 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 naptha 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. rinse immediately with water and get prompt medical attention.











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.



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PEGASUS Q19 - METALIZED

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.





Turquoise Q19 0 MET



Neutro Q19 0 MET





Aquamarine Q19 0 MET

Pink Q19 0 MET

Blue Q19 0 MET





Siena Q19 0 MET

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

Pegasus Q19

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

Special Shapes

All colors above are available in Terminal, Linear, Terminal Curvo, R09 & Sharp Corner 90°. ALL COLORS ARE AVAILABLE IN WAVE = 0 TRANSPARENT = T & SATIN FINISH ON 1 OR 2 SIDES

- No Linear or Curvo in Turquoise

* Angular corner in Neutro only



Terminal Lineare T



Terminal Lineare 0



Terminal Curvo T



Terminal Curvo O

7.5" x 3.5" x 3" T R09



90° Sharp Corner T



7.5" x 3.5" x 3" 0 R09





90° Sharp Corner O



*Angular Corner T (Neutral Only)



*Angular Corner O (Neutral Only)





www.sevesglassblock.com



NEW COLOR COLLECTION Q19 - SPECIAL ORDER ONLY

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. Special order only.







Nero Q19 0 MET

Ardesia Q19 0 MET



Cedro Q19 0 MET







New Color

- WAVE = 0

Collection Q19

METALIZED • 19cm x 19cm x 8cm |

7.5" x 7.5" x 3"



Indaco Q19 0 MET

Magenta Q19 0 MET

Cobalto Q19 0 MET



Tortora Q19 0 MET

Avorio Q19 0 MET



Ocra Q19 0 MET





Scarlatto Q19 0 MET





Kiwi Q19 0 MET



Muschio Q19 0 MET





Smeraldo Q19 0 MET



Malva Q19 0 MET



North American GLASS BLOCK DESIGN GUIDE

Special Shapes

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

Suggested for interior applications only. Special order only.



Scarlatto Ter Curvo O Met 19cm x 19cm x 8cm



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



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



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

DESIGN LINE

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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 "Pegasus" winged glass blocks are injected with vibrant colors, and manufactured with metalized edge coating present a new exciting design element for interiors. Recommended for interior use only.



Agata

Citrino

Ambra





MENDINI COLLECTION Q19



Berillo





Corallo



Ametista



Giada

Malachite

Tormalina

Black 30%

White 30%

Black 100%

White 100%





Zaffiro



Rubino





Topazio



www.sevesglassblock.com





Technical Drawings





VERTICAL "T" STIFFENER-INTERMEDIATE

PERPENDICULAR TO PARTITION WALL

Technical Drawings



www.sevesglassblock.com





MORE COLOR.

MORE PATTERNS.





MORE CHOICE.

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Pegasus Specifications

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 ¼" 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 $1\frac{1}{2}$ " x $3\frac{3}{4}$ " 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 nonload 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.
- 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 UnitsB. 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 aspha
- 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 $1/4" \pm 1/8"$.
- 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.

Tailor Made







North American GLASS BLOCK DESIGN GUIDE

Tailor Made

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 hroizontal applications it adds texture and visual interest.







Transparent

Metalized

Satinated

traditional glass block

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"

Alpha

Cuneis

Midarc

Savona



Light Directing

Maya

Inca





BASIC LINE





Pyramid

Lozenge





90° Radius Corner Arctic





Cross large



Arctic

Cross Small



Marina





industry.

90° Sharp

Corner Wave (EC)

(Also available in

Sahara 1S or 2S)

Special Shapes

The Clear Glass Collection is ideal fo applications where blocks are choser 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

Wave

(Also available in

Sahara 1S or 2S)

19cm x 9cm x 8cm



Clearview

(Also available in

Sahara 1S or 2S)

Opal Plain

Clearview

Deco

Sahara 1s or 2S



Stella



90° Radius Corner Wave







DoubleEnd • Arctic

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

North American GLASS BLOCK DESIGN GUIDE

90° Sharp Corner Arctic (EC)

EndBlock • Wave

EndBlock • Arctic

DoubleEnd • Wave





















Optical

Clearview

Digona



Wave



Paralline

Sahara 1S or 2S



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)

*Ruby

*Turquoise

*Violet

*Yellow

*Pink

*Green

*Grey

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)







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)









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



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MORE CHOICE

Seves has extended the basic line to include additional block thickness, sizes and colors. This gives architects and designers more opportunitnities 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-akind walls and windows. Running bond designs with glass block is now available.

With Seves, the ordinary becomes extraordinary.

Sizes shown are in Metric cm.



Cortina 19cm x 19cm x 5cm



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



Azur 19cm x 19cm x 10cm



Slearview Satinated 1 side 24cm x 11cm x 8cm



Wave

Wave

Sahara 2s

19cm x 19cm x 10cm

Green

19cm x 19cm x 10cm

Clearview

24cm x 11cm x 8cm

19cm x 19cm x 5cm

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



Clearview Satinated 1 side 11cm x 11cm x 8cm



Wave Satinated 1 side 11cm x11cm x 8cm



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



Wave 19cm x 19cm x 10cm



Pink 19cm x 19cm x 10cm



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



Clearview Satinated 2 sides 11cm x 11cm x 8cm



Wave Satinated 2 sides 11cm x11cm x 8cm



Cearview Sahara 2s 19cm x 19cm x 10cm



Cross Large 19cm x 19cm x 10cm



19cm x 19cm x 10cm



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



Clearview 11cm x11 cm x 8cm



Wave 11cm x11cm x 8cm



Clearview 19cm x 19cm x 10cm



Cross Small 19cm x 19cm x 10cm



Brown



Wave 24cm x 11cm x 8cm

34



Clearview Satinated 1 side 24cm x 24cm x 8cm



Wave Satinated 2 sides 24cm x 24cm x 8cm



Clearview Satinated 2 sides 24cm x 24cm x 8cm



Wave 24cm x 24cm x 8cm



Clearview 24cm x 24cm x 8cm

Wave

Satinated 2 sides

19cm x 19cm x 5cm



Cross Small 24cm x 24cm x 8cm



Light Diffusing 19cm x 19cm x 10cm



Wave

Satinated 1 side 24cm x 24cm x 8cm







CHARACTERISTICS

junctj	Glass Block	Nominal Sizes ¹ (Actual size is ¼" 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 ft2 °F)	Thermal Resistance ² R-value (hr ft2 °F/BTU)	Visible Light Transmission ³ (%)	Shading Coefficient	Sound transmission S.T.C. (dB)	Solar Heat gain coefficient (%)	Fire Rating
Import 	Metric Clear Glass											
940000910009100<	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
Index <t< td=""><td>1919/8 Opal Plain</td><td>7-1/2" x 7-1/2" x 3-1/8"</td><td>5.1</td><td>15.8</td><td>2.3</td><td></td><td></td><td>19</td><td></td><td></td><td></td><td></td></t<>	1919/8 Opal Plain	7-1/2" x 7-1/2" x 3-1/8"	5.1	15.8	2.3			19				
Image <t< td=""><td>1919/8 1S</td><td>7-1/2" x 7-1/2" x 3-1/8"</td><td>5.1</td><td>15.8</td><td>2.3</td><td>0.53</td><td>1.89</td><td>70</td><td>82.8</td><td>37</td><td>72</td><td>45</td></t<>	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
Image <td>1919/8 2S</td> <td>7-1/2" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td>15.8</td> <td>2.3</td> <td>0.53</td> <td>1.89</td> <td>61</td> <td>79.3</td> <td>37</td> <td>69</td> <td>45</td>	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
image <th< td=""><td>1909/8 Wave</td><td>7-1/2" x 3-9/16" x 3-1/8"</td><td>3.1</td><td>20.1</td><td>4.7</td><td>0.56</td><td>1.79</td><td>79</td><td>88.5</td><td>41</td><td>77</td><td>45</td></th<>	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
Image <th< td=""><td>1909/8 Clearview</td><td>7-1/2" x 3-1/2" x 3-1/8"</td><td>3.1</td><td>20.1</td><td>4.7</td><td>0.56</td><td>1.79</td><td>79</td><td>88.5</td><td>41</td><td>77</td><td>45</td></th<>	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
Image <th< td=""><td>1909/8 Arctic</td><td>7-1/2" x 3-1/2" x 3-1/8"</td><td>3.1</td><td>20.1</td><td>4.7</td><td>0.56</td><td>1.79</td><td>69</td><td>80.5</td><td>41</td><td>70</td><td>45</td></th<>	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
DescriptionDescripti	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
bandvictor	1909/82S	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
NameNoteN	Metric 198											
Implement Implement Implement Implement 	19/8 Allbend™ Wave	7-1/2" x 3-1/8" x 4-1/8, 3"	3.1	23.8	NPD	0.54	1.85	78	89.6	NPD	78	-
NAMEN	19/8 Allbend™ Arctic	7-1/2" x 3-1/8" x 4-1/8, 3"	3.1	23.8	NPD	0.54	1.85	78	89.6	NPD	78	-
NAMEN	19/8 Corner Wave	7-1/2" x 3-1/8"	3.5	23.8	NPD	0.53	1.89	77	89.6	NPD	78	-
BarrierSafe startSafe<	19/8 Corner Arctic	7-1/2" x 3-1/8"	3.5	23.8	NPD	0.53	1.89	77	89.6	NPD	78	-
Barlow Constraint Constraint Constraint 	Clear 1919/8 Corner 1S	5-3/16" x 7-1/2" x 3-1/8"	5.1		NPD	0.55	1.82	70	82.8	NPD	72	
Index term14.0 <td>Clear 1919/8 Corner 2S</td> <td>5-3/16" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td></td> <td>NPD</td> <td>0.55</td> <td>1.82</td> <td>61</td> <td>79.3</td> <td>NPD</td> <td>69</td> <td></td>	Clear 1919/8 Corner 2S	5-3/16" x 7-1/2" x 3-1/8"	5.1		NPD	0.55	1.82	61	79.3	NPD	69	
Instantion7.000 <td>Linear End Wave</td> <td>7-1/2" x7-1/2" x 3-1/8"</td> <td>5.3</td> <td>16.8</td> <td>NPD</td> <td>NPD</td> <td>NPD</td> <td>80</td> <td>89.7</td> <td>NPD</td> <td>78</td> <td>-</td>	Linear End Wave	7-1/2" x7-1/2" x 3-1/8"	5.3	16.8	NPD	NPD	NPD	80	89.7	NPD	78	-
Image in the state in	Linear End Arctic	7-1/2" x7-1/2" x 3-1/8"	5.3	16.8	NPD	NPD	NPD	80	89.7	NPD	78	-
Index base Index Index <thindex< th=""> Index Index</thindex<>	Double End Wave	7-1/2" x7-1/2" x 3-1/8"	5.3	14.4	NPD	NPD	NPD	79	89.7	NPD	78	-
Sum of the set o	Double End Arctic	7-1/2" x7-1/2" x 3-1/8"	5.3	14.4	NPD	NPD	NPD	79	89.7	NPD	78	-
Senderstand5.41 <td>Corner 90° Wave EC</td> <td>5-3/16" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td>-</td> <td>NPD</td> <td>0.55</td> <td>1.82</td> <td>80</td> <td>90.8</td> <td>NPD</td> <td>79</td> <td>-</td>	Corner 90° Wave EC	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	NPD	0.55	1.82	80	90.8	NPD	79	-
ResultSufferSuff	Corner 90° Arctic EC	5-3/16" x 7-1/2" x 3-1/8"	5.1	-	NPD	0.55	1.82	80	90.8	NPD	79	-
Bally Law Control of the sector	Corner 90° Clearview EC	5-3/16" x 7-1/2" x 3-1/8"	5.1		NPD	0.55	1.82	80	90.8	NPD	79	
here beinder beinder beinder beinder beinder beinder beinder beinder beinder 	Brilly & Matty		•									
BMOMENTIMEFAUTURALIANESA1SA18SA18C23SA33SA18SA18SA19SA19SA19SA10SA1	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	
ImburgerTrig Trig Trig TrigSol </td <td>Brilly Orange 1919/8</td> <td>7-1/2" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td>15.8</td> <td>2.3</td> <td>0.53</td> <td>1.89</td> <td>38</td> <td>NPD</td> <td>37</td> <td>NPD</td> <td></td>	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	
Image	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	
Here Her <b< td=""><td>Brilly Ruby 1919/8</td><td>7-1/2" x 7-1/2" x 3-1/8"</td><td>5.1</td><td>15.8</td><td>2.3</td><td>0.53</td><td>1.89</td><td>16</td><td>NPD</td><td>37</td><td>NPD</td><td></td></b<>	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	
Hendber 141T-1/2 T-1/2	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	
Belly lenges 191987.1/2" r.1/2" r.1.1/" r.3.1/8"5.1115.82.30.531.18.92.2NPD3.7NPD <t< td=""><td>Brilly Blue 1919/8</td><td>7-1/2" x 7-1/2" x 3-1/8"</td><td>5.1</td><td>15.8</td><td>2.3</td><td>0.53</td><td>1.89</td><td>22</td><td>NPD</td><td>37</td><td>NPD</td><td></td></t<>	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	
Brill 19108TrilSinS	Brilly Turquiose 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	
HeighbareTri/2'x7-1/2'x3-1/8'S.1S.16Z.3S.053J.18Z.9NPDS.7NPD <th< td=""><td>Brilly Emerald 1919/8</td><td>7-1/2" x 7-1/2" x 3-1/8"</td><td>5.1</td><td>15.8</td><td>2.3</td><td>0.53</td><td>1.89</td><td>19</td><td>NPD</td><td>37</td><td>NPD</td><td></td></th<>	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	
Metty Whie 1919/sTri/2x Tri/2x 3:1/s*5.115.82.30.531.899NP3.7NPONPOMetty Weid 1919/sTri/2x Tri/2x 3:1/s*5.115.82.30.531.890.10NPO3.7NPO1.00Metty Met 1919/sTri/2x Tri/2x 3:1/s*5.115.82.30.531.890.10NPO3.7NPO1.001.00Metty Met 1919/sTri/2x Tri/2x 3:1/s*5.115.82.30.531.890.10NPO3.7NPO1.00Metty Met 1919/sTri/2x Tri/2x 3:1/s*5.115.82.30.531.890.10NPO3.7NPO1.00Metty Met 1919/sTri/2x Tri/2x 3:1/s*5.115.82.30.531.891.891.10NPO3.7NPO1.00B19/s MetTri/2x Tri/2x 3:1/s*5.115.82.30.531.891.891.10NPO3.7NPO1.001919/s MetTri/2x Tri/2x 3:1/s*5.115.82.30.531.892.67.43.76.64.51919/s MetTri/2x Tri/2x 3:1/s*5.115.82.30.531.892.67.43.76.64.51919/s MetTri/2x Tri/2x 3:1/s*5.115.82.30.531.892.31.892.31.892.31.892.31.891.811.63.71.63.11919/s MetTri/2x Tri/2x 3:1/s*	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	
Methylelow 1919/87.1/2*X7-1/2*X3-1/8*5.115.82.30.531.894.1NPD3.7NPDNPDMethyle 1919/87.1/2*X7-1/2*X3-1/8*5.115.82.30.531.891.00NPD3.7NPDNPDNPDMethyle 1919/87.1/2*X7-1/2*X3-1/8*5.115.82.30.531.891.10NPD3.7NPD <td>Matty White 1919/8</td> <td>7-1/2" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td>15.8</td> <td>2.3</td> <td>0.53</td> <td>1.89</td> <td>9</td> <td>NPD</td> <td>37</td> <td>NPD</td> <td></td>	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	
Mathy def 19197.1/2 x 3.1/3 var5.115.82.30.631.891.00NPO3.7NPONPOMathy Blue 19197.1/2 x 3.1/3 var5.13.15.82.30.533.18.91.18NPONPO3.7NPO1.10Bertram Service Serv	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	
Mathyle 1007.1/2 YA-1/2 YA-1/8'5.115.82.30.631.8911NPD3.7NPD <th< td=""><td>Matty Red 1919/8</td><td>7-1/2" x 7-1/2" x 3-1/8"</td><td>5.1</td><td>15.8</td><td>2.3</td><td>0.53</td><td>1.89</td><td>10</td><td>NPD</td><td>37</td><td>NPD</td><td></td></th<>	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	
BedyInterColors Jew Set A 15.8 A 2.3 A 0.53 A 18.9 A 2.6 A 7.7 A 7.7 </td <td>Matty Blue 1919/8</td> <td>7-1/2" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td>15.8</td> <td>2.3</td> <td>0.53</td> <td>1.89</td> <td>11</td> <td>NPD</td> <td>37</td> <td>NPD</td> <td></td>	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	
19198bu $7.1/2^{*} x.1/2^{*} x.31/8^{*}$ 6.1 15.8 2.3 0.63 1.89 2.6 7.4 3.7 6.6 4.5 $19198bu$ $7.1/2^{*} x.1/2^{*} x.31/8^{*}$ 5.1 1.58 2.3 0.53 1.89 2.3 7.13 <td>Body Tinted Colors & Sh</td> <td>napes</td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Body Tinted Colors & Sh	napes	•									
1919/8 lu S 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.53 1.89 2.3 7.13 3.7 6.2 4.5 1919/8 lu S 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.53 1.89 2.0 65.5 3.7 62 45 1919/8 lu S 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.53 1.89 2.0 65.5 3.7 5.7 45 1919/8 lown 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.53 1.89 5.8 8.16 3.7 7.1 4.5 1919/8 lown 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.53 1.89 4.7 7.4 3.7 6.3 4.5 1919/8 lown2 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.53 1.89 4.7 7.4 3.7 6.3 4.5 1919/8 lown2 7.1/2*X-1/2*X-31/8* 5.1 15.8 2.3 0.55 1.80 5.1 3.7 6.1	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
1919/88u2S 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 2.0 65.5 3.7 5.7 4.5 1919/88ux0 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 2.6 3.6 3.7 5.7 4.5 1919/88ux0 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 5.8 8.16 3.7 7.1 4.5 1919/88ux0x1 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 4.7 7.2.4 3.7 6.3 4.5 1919/88ux0x2 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 3.8 7.0.1 3.7 6.3 4.5 1919/88ux0x2 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 3.8 7.0.1 3.7 6.1 4.5 1919/08*ux0 7.1/2*x7.1/2*x3.1/8* 6.0 8.6 5.5 9.7 9.1 9.1 9.1 9.1 <td>1919/8 Blu 1S</td> <td>7-1/2" x 7-1/2" x 3-1/8"</td> <td>5.1</td> <td>15.8</td> <td>2.3</td> <td>0.53</td> <td>1.89</td> <td>23</td> <td>71.3</td> <td>37</td> <td>62</td> <td>45</td>	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 Brown 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 5.8 8.16 3.7 7.1 45 1919/8 Brown 13 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 47 7.4 3.7 6.3 45 1919/8 Brown 25 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 3.8 7.1 3.7 6.3 45 1919/8 Brown 25 7.1/2*x7.1/2*x3.1/8* 5.1 15.8 2.3 0.53 1.89 3.8 7.1 3.7 6.1 4.5 1919/10 Brown 26 7.1/2*x7.1/2*x3.1/8* 6.0 18.6 2.3 0.53 1.89 3.8 7.1 3.7 6.1 4.5 1919/10 Brown 26 7.1/2*x7.1/2*x3.15/16* 6.0 18.6 2.3 0.55 1.82 55 9.3 9.4 9.4 9.4	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 15 7.1/2* x7.1/2* x3.1/8* 5.1 15.8 2.3 0.53 1.89 47 72.4 37 63 45 1919/8 Brown 25 7.1/2* x7.1/2* x3.1/8* 5.1 15.8 2.3 0.53 1.89 38 70.1 37 61 45 1919/8 Brown 25 7.1/2* x7.1/2* x3.1/8* 6.0 18.6 0.55 1.82 55 70.1 39 61 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
1919/8Brown2S 7.1/2*x7-1/2*x3-1/8* 5.1 15.8 2.3 0.53 1.89 3.8 70.1 3.7 61 45 1919/10Brown 7-1/2*x7-1/2*x3-15/16* 6.0 18.6 2.3 0.55 1.82 55 9.3 9.4 69 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
1919/10 Brown 7-1/2* x7-1/2* x3-15/16* 6.0 18.6 2.3 0.55 1.82 55 79.3 39 69 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 ¼" 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 ft2 °F)	Thermal Resistance ² R-value (hr ft2 °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 & Fo	rmats										
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	
2424/82S	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	
2411/82S	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
1111/81\$	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
1111/82S	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
1919/102S	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

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Technology

HORIZONTAL

high performance glass blocks _____•

TECHNOLOGY

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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 11cm x 11cm x 6cm

BG Clearview

19cm x 19cm x 10cm

Sahara 1S



Clearview 11cm x 11cm x 6cm

BG Dots

Satinated 1S

19cm x 19cm x 8cm



Circles 14cm x 14cm x 5cm



Circles 19cm x 19cm x 7cm





BG Circles 14cm x 14cm x 11cm



BG Clearview 19cm x 19cm x 8cm Sahara 1S



BG Clearview 19cm x 19cm x 8cm Sahara 2S



BG Circles

19cm x 19cm x 8cm

Prisma 16cm x 16cm x 3cm



BG Dots

19cm x 19cm x 8cm

Circles 20cm x 20cm x 2cm



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



BG Clearview 19cm x 19cm x 8cm



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



BR19/5 Sahara 1S



BGR19/10 Sahara 2S



BR11/6

Clearview



BR11/6 **Clearview Sahara 1S**



BR19/5

Prisma 20cm x 20cm x 2cm





Technology HORIZONTAL PAVERS

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 10 lumens of 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.











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 paneland its heat insulation quality to be verified over time.



BG 1919/8 **30F Clearview**



BG 1919/8 **30F Clearview** Shara 2S



BG 1919/16 90F Clearview Sahara 2S



BG 1919/8 **30F Clearview** Sahara 1S



BG 1919/16 90F Clearview Sahara 1S



BG 1919/16 **60F Clearview**

BG 1919/16 **60F Clearview** Sahara 2S



BG 1919/16 **60F Clearview** Sahara 1S

www.sevesglassblock.com

BG 1919/16

90F Clearview

More Technology



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





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

• Seves **Energy Savings** Techology, 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.





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 imporves 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

PREFABRICATED SYSTEMS

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 • 8 x 8 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.



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.







HURRICANE RESISTANT

VERTICAL APPLICATIONS

HURRICANE RESISTANT GLASS BLOCK WINDOWS

HURRICANE RESISTANT

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) 18-0522.04 | 18-0725.05 | 18-0725.06
- Florida State Product Approval FL 25879 | FL 25880 | FL 25881
- Texas Department of Insurance TDI WIN - 62 / WIN - 63

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Hurricane Resistant Glass Block Windows:

LightWise[®] Architectural Systems 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

HURRICANE RESISTANT

Glass Block Patterns Available:

NUBIO[®] Pattern



CLARITY[®] Pattern

ENDURA[™] Pattern



Tests Passed/Code Approvals:

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

System Design Features:

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

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



TORNADO RESISTANT

VERTICAL APPLICATIONS

TORNADO RESISTANT WINDOWS

TORNADO RESISTANT

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:

LightWise[®] Architectural Systems 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.

LightWise[®] Architectural Systems 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, LightWise[®] Architectural Systems 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

TORNADO RESISTANT

Laminated VISTABRIK[®] Solid Glass Block:







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
- FWMA 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® Solid Glass Block. Patent Pending

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
- Meets GSA and UFC 04-010-01 Blast Glass Standards
- Complies With Numerous Blast Standards & Requirements



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 LightWise[®] Architectural Systems 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.

BLAST RESISTANT

System Facts:

LightWise[®] Architectural Systems Blast Resistant Glass Block Panels consist of glass block framed by a 2-piece aluminum channel. 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.

THREAT RESISTANT



VERTICAL APPLICATIONS

THREAT RESISTANT WINDOWS

SECURITY & DETENTION

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
- UL 752 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:

LightWise[®] Architectural Systems 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. LightWise® Architectural Systems 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 maintenan ce costs

This Factory Assembled Window Provides:

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

THREAT RESISTANT

VISTABRIK[®] Solid Glass Block:

VISTABRIK® Solid Glass Block in 4"x 8", 6" x 8" and 8" x 8" sizes. - (VISTABRIK® Solid Glass Block meet UL 752 ballistic resistance levels 1, 2 and 6.)

VISTABRIK® STIPPI FD - Solid Glass Block

Laminated VISTABRIK® - Clear, Stipple

Laminated VISTABRIK® - Sand-blasted

- (Laminated VISTABRIK® Solid Glass Block meet UL 752 ballistic resistance levels 1 through 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.

PANELS

PRECAST CONCRETE & GLASS PAVER PANELS

HORIZONTAL APPLICATIONS

DESIGNED, ENGINEERED & TESTED PRE-FABRICATED PANELS

Glass Paver & 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.

- Designed & Engineered for Durability
- Withstand Any Type of Climate
- Air & Water Tight
- 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

SOLAR 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.

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.

MYMINIGLAS S[™]

Life is Colorful

MINI COLLECTION

The мyMINIGLASS[™] 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.

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

52

Classic Type 6" x 6" x 3"

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

MG/s MINI Cherry

Apricot

MG/s MINI Vanilla

MG/s MINI Blueberry

North American GLASS BLOCK DESIGN GUIDE

MG/s MINI Mint

MG/s MINI Licorice

Energy Saving Plus

Energy conservation • sustainable architecture

Energy Saving PLUS technology sets a new standard in energy conservation, making glass blocks even more eco-friendly and suitable for sustainable architecture.

In fact, Seves has further reduced the thermal transmittance of the glass block to a never-before-reached level: U=.228

In 2009, Seves was the first company to revolutionize glass block with the introduction of this new "Energy Saving" technology, reducing the thermal transmittance of the classic glass block to U=.264

(from U=.493).

Today Seves has rendered this technology even more effective, thanks to continuous research and investment in new ecological solutions.

The new Energy Saving PLUS glass block allows for an even more efficient use of energy in architecture, by providing greater control of thermal dispersion to significantly reduce its consumption. This represents a 46% increase in efficiency.

TECHNOLOGY

Since its introduction, Energy Saving technology has improved the thermal transmission properties of the glass block. The new thermal values are achieved by inserting a low-emissive glass plate and pressure controlled Argon gas inside the glass block. The low-emissive plate interrupts the thermal bridge of the block, while the gas further reduces the heat transfer caused by convective motions.

With the new Energy Saving PLUS technology, Seves has successfully lowered the levels of thermal transmittance even more thanks to the addition of a polystyrene frame between the two glass block halves, which further interrupts the thermal bridge and protects the low-emissive glass plate within.

ENERGY SAVING AND THE FUTURE

Seves has always been attentive to energy conservation and to promoting a more efficient use of resources and renewable energy materials in architecture. Today, it offers professionals a new tool that significantly reduces the energy consumption of a glass structure and improves its energy efficiency. For the architect focused on 'green' building, who does not want to compromise on style and design, the Energy Saving PLUS glass block can add color, light, transparency AND sustainability to any project.

VALUES

The new Energy Saving PLUS glass blocks were subjected to the necessary tests required to obtain CE certification, in compliance with the UNI EN 1051-1 and EN 1051-2 standards - as well as the following laboratory tests:

+

- Resistance to compression along the side of the block according to the EN 1051/1:2005 standards;
- Resistance to thermal shock according to the EN 1051/2 2008 standards;
- Evaluation of the solar characteristics, according to the EN 410: 2000 standards;
- Calculation of the U-value according to the EN 673:2005 standards;
- Sound insulation according to the EN 717/1:2007 standards.

All values are certified by international laboratories.

Masonry Joint Width	U-Value
2mm	.241
5mm	.243
10mm	.247

3" Channel 4' Long	Retail	704360	12 Pcs. Per Box	18	1
3" Channel 4' Long	Bulk	704280	12 Pcs. Per Box	18	
3" Channel 8' Long	Bulk	704375	12 Pcs. Per Box	36	
4" Channel 4' Long	Retail	704282	12 Pcs. Per Box	22	
4" Channel 8' Long	Bulk	704352	12 Pcs. Per Box	44	

KWiK N' EZ 80mm Allbend™ Shapes	Bulk	704353	50 Pcs. Per Box	2.3	
KWiK N' EZ 80mm Corner Shapes	Bulk	704354	50 Pcs. Per Box	3.2	
KWiK N' EZ 80mm Allbend™ A to A Precuts	Bulk	704356	50 Pcs. Per Box	18	1
KWiK N' EZ 80mm Allbend™ B to C Precuts	Bulk	704357	50 Pcs. Per Box	3.2	
KWiK N' EZ 80mm Allbend™ B to A Precuts	Bulk	704358	50 Pcs. Per Box	3.6	H
KWiK N' EZ 80mm New Horizontal Spacer 38"	Bulk	704503	50 Pcs. Per Box	18.5	ų
KWiK N' EZ 80mm New Horizontal Spacer 72"	Bulk	704345	24 Pcs. Per Box	15	ų
KWiK N' EZ 80mm New Vertical Spacer - 181mm	Bulk	704346	150 Pcs. Per Box	10.8	1
KWiK N' EZ 80mm Layout Card Master Pack	Bulk	704614	8-Allbend™, 2-90° Sharp, 2-Corner Radius, 20-1919, 3-End- Block, 4-1909		

Description	Packaging	Part Code	Pieces Per Box	Weight Per Box

6" MyMini Collection New Vertical Spacer	Bulk	704481	150 Pcs. Per Box	7.7	S 1 14
6" MyMini Collection Install Kit (42 Block)	Bulk	704464	4 - Silicone seal- ant, 7- B2B 38", 40 - B2B 5.5", 7 Anchors		V

Provantage 3" x 31-½" Horizontal Track Spacer	Bulk	704295	24 Pcs. Per Box	9	
Provantage 3" x 7-1/4" Vertical Spacers (150 per Box)	Bulk	704391	150 Pcs. Per Box	11	1

Provantage 4" Vertical Allbend™ A to A Precuts	Bulk	704370	50 Pcs. Per Box	V
Provantage 4" Vertical Allbend™ B to C Precuts	Bulk	704371	50 Pcs. Per Box	
Provantage 4" Vertical Allbend™ B to A Precuts	Bulk	704372	50 Pcs. Per Box	T

Provantage 4" Horizontal Allbend™ Master Pack	Retail	704366	12 Bags per Box (Each Bag contains 3 - A to A Vertical Spacers, 2 - A to B Vertical Spacers, 4 - Allbend™ Horizontal Shapes)	and the second
Provantage 4" Horizontal Allbend™ Shapes	Bulk	704368	50 Pcs. Per Box	
Provantage 4" Horizontal Corner Shapes	Bulk	704369	50 Pcs. Per Box	

Description Packaging Code Pieces Per Box Per Box

Provantage 4" Horizontal Spacer 40" Hurricane Certified	Retail	704294	24 Pcs. Per Box	18.9	1
Provantage 4" Horizontal Spacer 40" for Grout	Retail	704676	24 Pcs. Per Box		13
Provantage 4" Horizontal Spacer 72" Hurricane Certified	Bulk	704373	20 Pcs. Per Box	22	1.1
Provantage 4" Horizontal Spacer 72" for Grout	Bulk	704679	20 Pcs. Per Box		1

Provantage 4" Vertical Spacer Hurricane Certified	Retail	704296	12 Bags per Box	15.56	
Provantage 4" Vertical Spacer for Grout	Retail	704680	12 Bags per Box		S
Provantage 4" Vertical Spacer Hurricane Certified	Bulk	704374	150 Pcs. Per Box	13	X
Provantage 4" Vertical Spacer for Grout	Bulk	704681	150 Pcs. Per Box		

Pegasus Horizontal Spacer 45-3/4"	Bulk	704472	24 Pcs. Per Box	16	11
Pegasus Vertical Spacer - 7"	Bulk	704473	150 Pcs. Per Box	12	

Universal Mortar Spacers 1/4"	Retail	704283	192 pcs per Carton	6	T-Z
4" Premiere™ Mortar Spacers 1/4"	Bulk	704240	200		T.S.
Vistabrik Mortar Spacers 3/8"	Bulk	704489	200		II.
Pegasus Mortar Spacers 2mm	Bulk	704080	100		T.
1919/10 Mortar Spacers 10mm	Bulk	701762	100		I.S.
1919/8 Mortar Spacers 10mm	Bulk	702030	100		

Description Packaging	Part Code	Pieces Per Box	Weight Per Box
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Expansion Strips	Retail	704290	36 Pcs. Per Box	3	
Expansion Strips	Bulk	704483	700 Pcs. Per Box	16	1

1-5/8" x 36" Stainless Steel Panel Reinforcing 16" on Center	Retail	704292	36 Pcs. Per Box	15	A
1-5/8" x 36" Stainless Steel Panel Reinforcing 16" On Center	Bulk	704510	50 Pcs. Per Bundle	20	
1-5/8" x 84" Stainless Steel Panel Reinforcing 12" on Center	Bulk	704511	50 Pcs. Per Bundle	46	1117
1-5/8" x 48" Stainless Steel Panel Reinforcing 16" on Center	Bulk	704512	50 Pcs. Per Bundle	26	H.,
1-5/8" x 120" Stainless Steel Panel Reinforcing 16" on Center	Bulk	704513	50 Pcs. Per Bundle	66	

Wall Anchor Pack Master Pack	Retail	704293	10 boxes per Carton (50 Pieces)	11	
Wall Anchor Pack	Bulk	704359	150 Pcs. Per Box	34	

Silicone Sealant Neutral Cure	Retail	704344	12 Tubes per Box	10	
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1-3/4" x 16" Stainless Steel Panel Anchors	Retail	704291	36 Pcs. Per Box		
1-3/4" x 16" Stainless Steel Panel Anchors	Bulk	704514	150 Pcs. Per Box	22	HARA

16" x 8" x 4" Universal Hopper Vent	Retail	704297	1 Pc. Per Box	4	
8" x 8" x 4" Universal Dryer Vent	Retail	704298	1 Pc. Per Box	1	

VETROKWIK was developed as a cost effective Vetropieno[®] glass brick installation system that makes traditional mortar or silicone methods obsolete. The snap together structure assembles with only a rubber mallet. Labor and materials savings far outweighs the cost of the structural components. The precisely formed vertical spacers are formed to match the tapered shape of Seves Glass Bricks.

AVAILABLE IN CLEAR POLYCARBONATE, OR ABS WHITE OR GREY.

LAYOUT MODULE

INTERLOCKING MODULE

LAYOUT MODULE

INTERLOCKING MODULE

Benefits	Features
75% Reduction of labor. Reduced material costs.	Available in clear polycarbonate, or ABS white or grey.
Polycarbonate affords increased light transmission.	Utilizes a clean working method.
Dimensional stability	Snap together system of assembly.
Structural adhesives may be used for external applications	Precise spacing
Low maintenance	Structural integrity
No mess installation	Light weight assembly
No special tools required; just a rubber mallet.	Made in USA

Interior Residential Applications

60

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

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Seves Glass Block, Inc. North American Sales Office 10576 Broadview Road Cleveland, Ohio 44147 1.440.627.6257 Inquiries: inquiry@sevesglassblock.com