BG.GLASS

CLEAR VISION. STRONGER FUTURE.

PRODUCT CATALOGUE

GLASS · GLASS BLOCKS · HARDWARE · MINERALS

BAHMAN GROUP

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ABOUT THIS CATALOGUE

BAHMAN GROUP is an international business and business-development group that connects markets, builds partnerships and creates opportunities through export market development, sourcing and supply, commercial representation, and business and project development. This catalogue presents the product ranges of its two divisions: **BG GLASS** (flat, processed and specialty glass, glass blocks and glass hardware) and **BAHMAN MINERALS** (industrial minerals and raw materials). Sizes, grades, packaging and delivery terms are confirmed at inquiry.

Contents

BG GLASS 3

1.1 Float Glass . . . 4

Clear Float Glass . . . 4

Tinted Float Glass . . . 4

Ultra-Clear Glass . . . 5

1.2 Patterned & Wired Glass . . . 6

Patterned Glass . . . 6

Wired Glass . . . 6

1.3 Coated & Energy Glass . . . 7

Reflective (Reflex) Glass . . . 7

Low-Emissivity (Low-E) Glass . . . 8

Solar Glass . . . 8

1.4 Safety & Processed Glass . . . 9

Tempered Glass . . . 9

Laminated Glass . . . 9

Curved & Bent Glass . . . 10

Processed & Decorative Glass . . . 10

Automotive Glass . . . 11

1.5 Mirrors . . . 12

Aluminum Mirror . . . 12

Silver Mirror . . . 12

1.6 Glass Blocks . . . 13

Glass Block (Glass Brick) . . . 13

Applications & Installation . . . 15

Glass Block Spacers . . . 16

1.7 Glass Hardware . . . 16

Die-Cast Glass Fittings . . . 16

BAHMAN MINERALS 17

2.1 Industrial Minerals . . . 18

Soda Ash (Sodium Carbonate) . . . 18

01

BG GLASS

Float, patterned, reflective and processed glass, mirrors, glass blocks and glass hardware.

Float Glass · Patterned & Wired Glass · Coated & Energy Glass
Safety & Processed Glass · Mirrors · Glass Blocks · Glass Hardware

1.1 Float Glass

Flat base glass in clear and tinted versions, supplied in standard thicknesses and used directly or as the starting material for tempered, laminated, coated and mirror products.

FLOAT GLASS

Clear Float Glass

The standard flat glass, made by floating molten glass on a bath of molten tin to give a flat, optically clear sheet with very high light transmission. It is used for windows, doors, facades and furniture, and is the base for further processing.

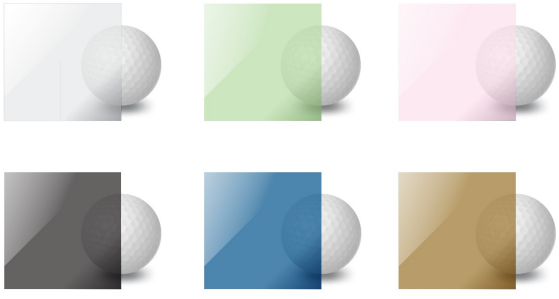


THICKNESS	4 mm, 6 mm, 8 mm, 10 mm
VISIBLE LIGHT TRANSMISSION	87 % to 90 %, depending on thickness
TYPICAL USES	Windows, cabinets, display cases, furniture, facades, base glass for processing

FLOAT GLASS

Tinted Float Glass

Body-tinted glass in which the color is created by adding metal oxides to the raw materials (for example iron, cobalt and chromium compounds). Tinting reduces glare and solar heat gain, adds privacy and gives a decorative appearance. Tinted float glass can be tempered.



COLORS	Bronze, grey, green, pink, blue
THICKNESS	4 mm, 6 mm, 8 mm, 10 mm
TYPICAL USES	Windows, facades, partitions, furniture, corridors and decorative glazing

FLOAT GLASS PERFORMANCE DATA BY THICKNESS

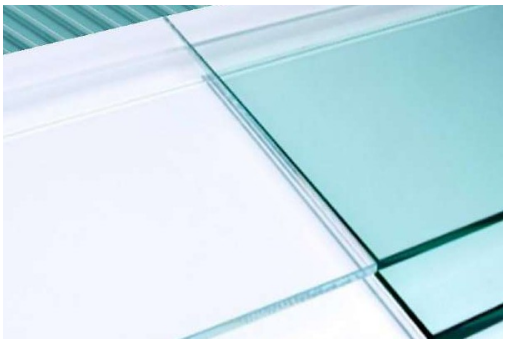
	CLEAR FLOAT GLASS				TINTED FLOAT GLASS (GREY, BRONZE, GREEN, BLUE)			
Property	4 mm	6 mm	8 mm	10 mm	4 mm	6 mm	8 mm	10 mm
Visible light transmission (%)	90	88	88	87	55	45	40	26
Visible light reflectance (%)	8	8	7	7	6	5	5	4
Solar factor (%)	85	81	77	75	67	58	52	50
Shading coefficient	1.02	0.97	0.95	0.93	0.77	0.67	0.60	0.57
U-value (W/m^2K)	5.75	5.69	5.62	5.56	5.8	5.7	5.6	5.6

Solar factor is the share of incident solar energy that enters the room. Shading coefficient is solar gain relative to 3–4 mm clear float glass. A lower U-value means better thermal insulation.

FLOAT GLASS

Ultra-Clear Glass

A low-iron base glass with an exceptionally brilliant, neutral appearance. With very high light transmission and an average iron level of about 100 ppm (0.01 %), it is one of the best base glasses for high-performance residential and architectural projects and for solar panels.



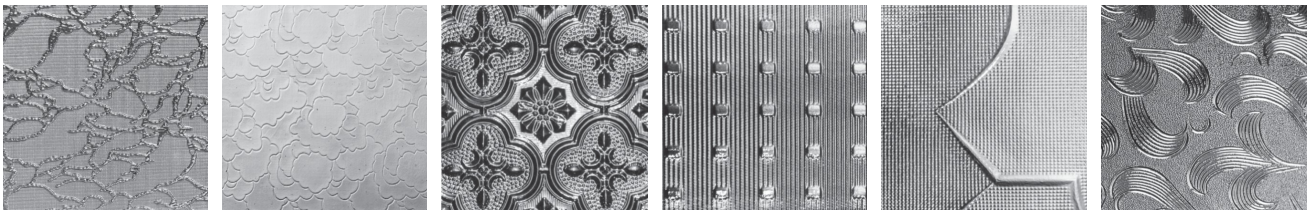
LIGHT TRANSMISSION	Over 91 %
THICKNESS	3 mm to 19 mm
TYPICAL USES	Architectural glazing, display and showcase glass, solar panels, raw glass for solar products

1.2 Patterned & Wired Glass

PATTERNED GLASS

Patterned Glass

Rolled glass with a decorative pattern pressed into one surface. It diffuses light and offers privacy while keeping good light transmission. Available as clear patterned glass and as color patterned glass, with more than 15 different designs.



COLORS	Clear, blue, bronze, pink
THICKNESS	3 mm to 10 mm
DESIGNS	More than 15 patterns
TYPICAL USES	Solar water heaters, photovoltaic cells, interior and decorative design, doors, partitions and furniture

PATTERNED GLASS

Wired Glass

Reinforced glass with a wire mesh embedded in the sheet. The wire holds the glass together if it cracks, and the product offers high resistance to heat and fire. It is installed mainly in public places and in elevators.



COLORS	Clear, bronze
TYPICAL USES	Public buildings, elevators, doors and partitions in safety-sensitive areas

1.3 Coated & Energy Glass

COATED GLASS

Reflective (Reflex) Glass

Glass with a metallic reflective coating, in grey, bronze, green, golden, pink and blue. The coating changes the amount of light reflected: by day the glass reflects light and makes the inside of the building less visible from outside, while the effect reverses at night. It reduces incoming solar heat and radiation, and is in strong demand for windows and balconies.



COLORS	Grey reflex, bronze reflex, green, golden, pink, blue
THICKNESS	5 mm, 6 mm
TYPICAL USES	Windows, balconies, facades, curtain walls

REFLECTIVE GLASS TECHNICAL DATA

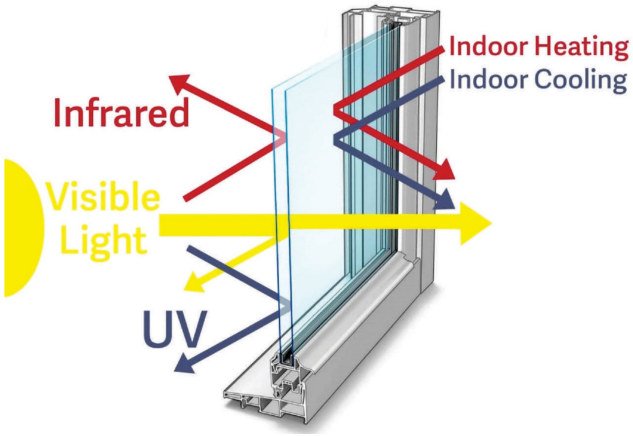
Type	Thickness	nm	Condensation resistance	Acid resistance	Neutral salt spray resistance	Abrasion resistance	Visual inspection	Light transmission (%)	Solar direct transmission (%)
Bronze reflective glass	5 mm	550	0.1321	0.1323	0.1336	0.1256	ok	18.7	24.07
		900	0.2321	0.2349	0.2384	0.2331			
Tinted reflective glass	5 mm	550	0.1235	0.1301	0.1328	0.1288	ok	9.86	17.05
		900	0.2289	0.2349	0.1357	0.2301			
Tinted reflective glass	6 mm	550	0.1235	0.1301	0.1328	0.1288	ok	9.46	17.01
		900	0.2289	0.2349	0.1357	0.2301			

Test method reference: INSO 10672-2. Spectrophotometric properties shown in the two right-hand columns.

ENERGY GLASS

Low-Emissivity (Low-E) Glass

Energy-control building glass made with a low-emissivity coating of thin layers of silver or other materials, far thinner than a human hair. The coating blocks ultraviolet rays and infrared heat waves while letting visible light pass, helping keep interior temperature comfortable and reducing energy consumption for heating and cooling.



FUNCTION	Reflects infrared heat and blocks UV while transmitting visible light
TYPICAL USES	Energy-efficient windows, insulating glass units, facades

ENERGY GLASS

Solar Glass

Glass for solar-energy applications. It combines high strength with good light transmission and is used in solar panels and solar water heaters; ultra-clear float glass is commonly used as the raw glass for solar products.



THICKNESS	2 mm to 6 mm
TYPICAL USES	Solar panels, photovoltaic modules, solar water heaters

1.4 Safety & Processed Glass

SAFETY GLASS

Tempered Glass

Glass strengthened by a process of extreme heating followed by rapid cooling, making it much harder and stronger than standard glass. Also known as safety glass, it is one of the most popular processed products and is used wherever higher safety standards are needed. Tempered glass must be cut and drilled before tempering.

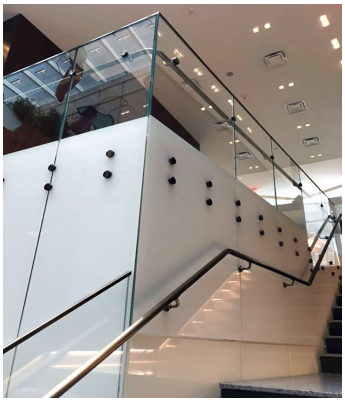


TYPICAL USES	Car windows, shower doors, glass tables, greenhouses, doors, partitions, balustrades
BASE GLASS	Clear or tinted float glass

SAFETY GLASS

Laminated Glass

Safety glass in which two or more layers of glass are bonded by an interlayer, typically polyvinyl butyral (PVB) or EVA. If the glass breaks, the interlayer keeps the pieces bonded and prevents them from falling out as large sharp shards, producing a characteristic “spider web” crack pattern when the impact is not enough to pierce the glass completely.





INTERLAYER	PVB or EVA
TYPICAL USES	Balustrades, stair railings, partitions, elevator and atrium glazing, overhead glazing

ARCHITECTURAL GLASS

Curved & Bent Glass

Bent and curved glass for distinctive architectural solutions, produced with precise bending to achieve smooth, uniform curves. It is used where flowing forms are wanted in interiors and facades.





TYPICAL USES Curved partitions, round offices and lobbies, spiral staircase balustrades, display units

PROCESSED GLASS

Processed & Decorative Glass

A range of value-added glass products made from float glass for architectural, interior and decorative use:



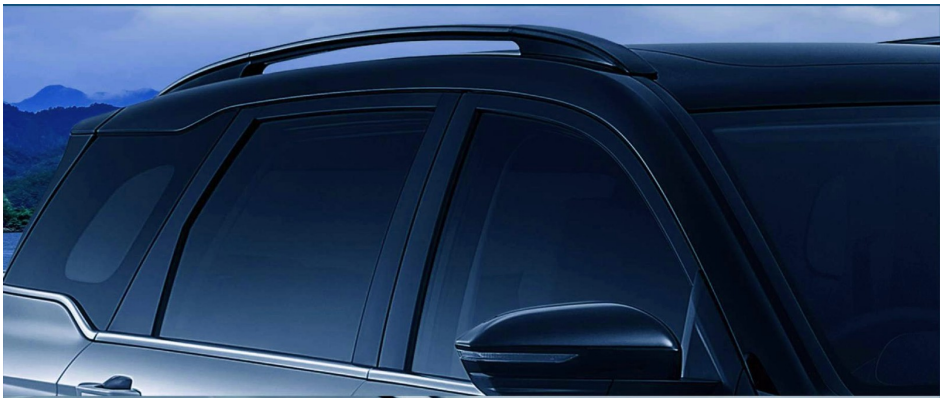


- Printed glass
- Back-painted glass
- Decorative glass
- Double glazing (insulating glass)
- Multi-layer (multi-walled) glass
- Shatterproof safety glass

SAFETY GLASS

Automotive Glass

Glass for vehicles, where safety is the most important design indicator. Automotive glass must be optically clear so drivers and passengers have an undistorted view, while selectively transmitting light so drivers can see without squinting and the interior stays cool on hot sunny days.



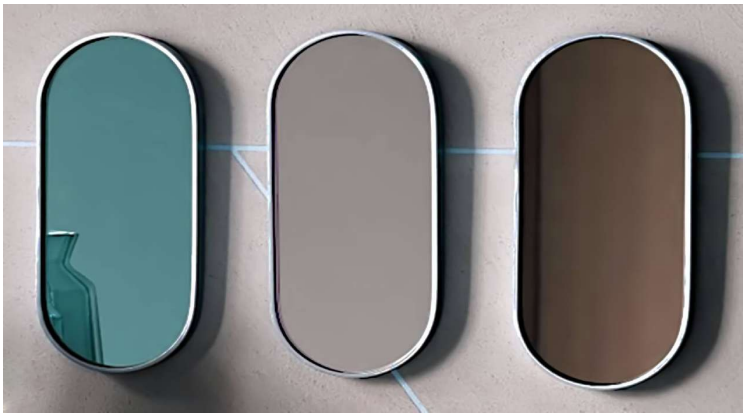
TYPICAL USES	Windscreens, side and rear windows, tinted vehicle glazing

1.5 Mirrors

MIRROR

Aluminum Mirror

One of the most common mirrors used in everyday life. It is produced with a coating of aluminum metal on the glass and is highly durable. Used in interior decoration and to increase the effectiveness of lighting in rooms and interior spaces of buildings.



MODELS	Grey, bronze, white
TYPICAL USES	Interior decoration, wall mirrors, furniture, lighting enhancement

MIRROR

Silver Mirror

Also called plain or white mirror, a construction glass with very high quality and surprising transparency. It is produced using silver and silver compounds rather than mercury, which is harmful to the environment, and is available in different quality levels.





MODELS	Grey silver, bronze, white
TYPICAL USES	Interior design, bathrooms, dressing rooms, wall cladding, furniture

Grey Bronze White

1.6 Glass Blocks

GLASS BLOCKS

Glass Block (Glass Brick)

An architectural element made of glass with a thickness of 8 cm, filled with semi-vacuum space. Glass blocks provide visual obscuration while letting light through, and their appearance varies in color, size, texture and form. The modern glass block developed from prism lighting principles of the early 1900s and is used today in walls, partitions, windows, skylights and sidewalk lights.







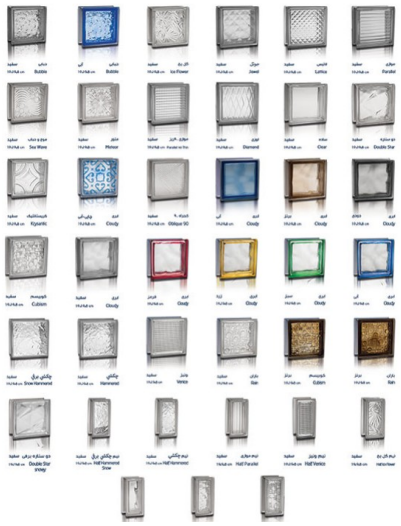
CONSTRUCTION	Hollow block made as two halves that are pressed together while the glass is still molten, leaving a partial vacuum at the center
THICKNESS	80 mm
FULL BLOCK SIZE	190 × 190 × 80 mm
HALF BLOCK SIZE	190 × 90 × 80 mm
COLORS	Clear (white), bronze, blue, smoky; the Cloudy pattern is also shown in red, yellow and green
LOAD CAPACITY	Hollow wall blocks are non-load-bearing unless stated otherwise





KEY FEATURES

High compressive strength Strong under pressure	**Thermal & acoustic insulation** Insulates the space	**Slim walls, efficient space** Thinner than traditional walls
Easy cleaning Smooth glass surface	**Interior & exterior use** Building designs and decoration	**Cost-effective** No joinery required





PATTERN RANGE — FULL BLOCKS

Pattern	Size	Colors
Bubble	190 × 190 × 80 mm	Clear Blue
Ice Flower	190 × 190 × 80 mm	Clear
Jewel	190 × 190 × 80 mm	Clear
Lattice	190 × 190 × 80 mm	Clear
Parallel	190 × 190 × 80 mm	Clear
Parallel Thin	190 × 190 × 80 mm	Clear
Sea Wave	190 × 190 × 80 mm	Clear
Meteor	190 × 190 × 80 mm	Clear
Diamond	190 × 190 × 80 mm	Clear
Clear (plain)	190 × 190 × 80 mm	Clear
Double Star	190 × 190 × 80 mm	Clear
Double Star Snowy	190 × 190 × 80 mm	Clear
Kysantic	190 × 190 × 80 mm	Clear
Oblique 90	190 × 190 × 80 mm	Clear
Cloudy	190 × 190 × 80 mm	Clear Bronze Smoky Blue Red Yellow Green
Cloudy (blue ornamental print)	190 × 190 × 80 mm	Blue
Cubism	190 × 190 × 80 mm	Clear Bronze
Hammered	190 × 190 × 80 mm	Clear
Snow Hammered	190 × 190 × 80 mm	Clear
Venice	190 × 190 × 80 mm	Clear
Rain	190 × 190 × 80 mm	Clear Bronze

PATTERN RANGE — HALF BLOCKS

Pattern	Size	Colors
Half Parallel	190 × 90 × 80 mm	Clear
Half Venice	190 × 90 × 80 mm	Clear
Half Ice Flower	190 × 90 × 80 mm	Clear
Half Hammered	190 × 90 × 80 mm	Clear
Half Hammered Snow	190 × 90 × 80 mm	Clear
Half Cloudy	190 × 90 × 80 mm	Clear
Half Bubble	190 × 90 × 80 mm	Clear
Half Cubism	190 × 90 × 80 mm	Clear

Glass blocks are produced in clear (white), bronze, blue and smoky colors. Patterns are pressed into the inner void or the outer surface during cooling; glazes or inserts can be added for a private or decorative effect.

GLASS BLOCKS

Applications & Installation

Glass blocks can be installed in several ways depending on the location.







WALLS	Blocks are bedded in a Portland cement-based mortar with reinforcing steel rods as recommended by the project architect. Other systems replace the mortar with timber or PVC extrusions.
MAXIMUM WALL AREA	13.4 m^2 (144 sq ft) with a masonry or steel frame; 9.3 m^2 (100 sq ft) without a frame
WINDOWS	Prepare a window opening sized as a multiple of the block module, then set the blocks side by side in rows with the special mortar
PARTITIONS	Prepare a metal frame first, then install the blocks; an easy way to divide and use space efficiently
CEILINGS	Fix metal box sections or beams in parallel at 20 cm spacing, then place the blocks in the 20 cm cells
SKYLIGHTS AND SIDEWALK LIGHTS	Solid or thicker-walled hollow blocks cast into a reinforced concrete grid or set in a metal frame. Standard wall blocks must not be used as flooring.

GLASS BLOCK ACCESSORY

Glass Block Spacers

Cross-shaped plastic spacers placed between blocks and at corners during installation so that joints stay consistent. Their thickness defines the joint width between two blocks.





MATERIAL	Plastic
SIZES	2 mm to 10 mm joint thickness

1.7 Glass Hardware

GLASS HARDWARE

Die-Cast Glass Fittings

Metal parts for glass doors and architectural glazing, made by die casting (pressure casting), one of the most widely used methods for mass production of complex metal parts. The process has five stages: mold preparation, molten metal injection, cooling, mold opening and cutting. Molten metal is introduced into the mold under mechanical pressure and freezes under pressure, giving parts of very high strength.

RANGE	Glass door patch fittings (top, bottom and pivot, corner and side types), floor-mounted door closers, decorative structural fittings and security parts
FINISH	Polished stainless-steel look with brass details
TYPICAL USES	Frameless glass doors, shopfronts, partitions, office and hotel entrances

02

BAHMAN MINERALS

Industrial minerals and raw materials for glass and allied industries.

Soda Ash (Sodium Carbonate)

2.1 Industrial Minerals

INDUSTRIAL MINERAL

Soda Ash (Sodium Carbonate)

Sodium carbonate, Na_2CO_3, in light and heavy grades. It is a key raw material for glass manufacturing and is widely used across the detergent, soap, paint, textile, leather, metal and chemical industries.



GRADES	Light soda ash, heavy soda ash
PROPERTIES	High solubility in cold or hot water; low iron concentration; low chloride ion content; lump-free; free-flowing even at low humidity
TYPICAL USES	Glass production, detergents, soap, paint, textiles, leather, metal industries, salt refining, battery production, foundry units and other chemical industries
SUPPLY	Packaging, grade and quantity confirmed at inquiry

Inquiries

To request specifications, samples, pricing, packaging or shipping terms for any product in this catalogue, contact BAHMAN GROUP.

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