NEG GLASS BLOCK

Nippon Electric Glass

Electric Glass Building Materials
The NEG Glass Block creates an agreeable space by transmitting, refracting, or reflecting light. The transparent glass block permits a view of the surrounding landscape. Opaline glass block is suitable for securing a private space. Moreover, the glass block creates a quieter space by reducing noise. The NEG Glass Block opens a wide range of design possibilities.

**Patterns & Sizes**

The NEG Glass Block provides a high degree of light transmittance while protecting privacy. Discontinuous pattern has high light transmittance while delicately diffuse light obstructs the view to ensure privacy.

**Basic Glass Block**

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Clear</th>
<th>Corona</th>
<th>Lateral Rib</th>
<th>Fantasy</th>
</tr>
</thead>
<tbody>
<tr>
<td>115×115×80</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>145×145×95</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>190×190×95</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>300×300×85</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>115×240×80</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>190×190×125</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
</tbody>
</table>

**Features**

- Plane inner and outer surfaces offer maximum transparency. Combines with other non-transparent blocks to serve a particular purpose.
- Corona has a light-diffusing concave center. This glass block allows the realization of quiet spaces with light.
- The illusion of patterned squares provides a high degree of light transmittance while protecting privacy.
- Discontinuous pattern has high light transmittance while delicately diffuse light obstructs the view to ensure privacy.

**Variation Glass Block**

Creating glass blocks in shapes other than squares and also conducting additional processing on our basic glass blocks.

<table>
<thead>
<tr>
<th>Frost</th>
<th>Circular Glass Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>Opt</td>
</tr>
</tbody>
</table>

**Features**

- The smooth mat finish can express their own personality by creating an original of plain and patterned block.
- Unique lighting effect is produced by this circular glass block. 140φ×95m size has the mottled effect surrounds clear center.

**For Toplight**

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Prism Glass</th>
<th>Non-Slip Prism Glass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black</td>
<td>Clear</td>
</tr>
</tbody>
</table>

**Features**

- Thick, strong and shock-resistant, prism glass is available as solid glass bricks to be used for skylights, bridges and pavements. It diffuses light and has high light transmittance.
- This material - safe even when wet - has a mat-like design that enhances light diffusion and a striped surface of oblique cuts to help prevent slipping or sliding. It is extremely strong and has all the safety features found in conventional prism glass.

*170φ×50m size has blasted surface without stripes.*
Opaline used in external wall only lets in about 1/10 of the ultraviolet rays that ordinary plate glass does. This means that your interior fabrics & furnishings fade least.

<table>
<thead>
<tr>
<th>Semi-Transparent</th>
<th>Light Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mist</td>
<td>Ibuki</td>
</tr>
<tr>
<td>Hazy surface pattern controls light by keeping it soft and its particularly non-transparent. Fine mist pattern diffuses light more delicately and calmly yet is still highly non-transparent. This glass block shines on ceiling and brighten space by changing the flow light. Outer surfaces are smooth.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>pieces/ml</th>
<th>kg/ml</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>64</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>119</td>
</tr>
</tbody>
</table>

Translucent Milky-White Glass Block “Opaline”

<table>
<thead>
<tr>
<th>Corner Glass Block a-90</th>
<th>Non-Transparent Glass Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mist</td>
<td>Plain</td>
</tr>
<tr>
<td>Light Directive</td>
<td>Silk</td>
</tr>
<tr>
<td>Opaline Plain</td>
<td></td>
</tr>
</tbody>
</table>

Available in three patterns: Mist, Light Directive and Opaline Plain. These blocks permits construction of continuous in corner.

Opaline used in external wall only lets in about 1/10 of the ultraviolet rays that ordinary plate glass does. This means that your interior fabrics & furnishings fade least.

Optional Glass Material (GlassOre, brick of glass, creates spaces with the gentle light dramatically)

<table>
<thead>
<tr>
<th>Milky-White</th>
<th>Semi-Transparent</th>
<th>Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milky glass brick, whose inward glass-crystals produce distinctive expression. Semi-transparent glass brick, which contains numerous fine air bubbles. Blue glass brick, which sends out plenty of glorious blue sparkle in light.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Surface side 97×197, Back side 99×199, Thickness 60

*Please confirm the actual color or pattern with a sample. *Please ask us about our inventories.

**Warning**

Glass Block is made of glass. When they are cracked or broken, you might be injured seriously by their fragments. Be very careful in handling them.
Color Glass Block

It’s a Galaxy of Colorific Expression.

Ceramic Color Series
The lateral surfaces of the Ceramic Color glass block series are coated in 8 colors with acrylic paints. They are available for all patterns & sizes.

Cocktail Color Series
The Cocktail Color glass block series, which is characterized by its transparent color coating on the inner side, is an evolved version of our current glass block series, FANTASY. Size: 145x145x95mm

Metallic Color Series
The Metallic Color glass block series with its metallic color coating on the side has enabled our transparent Clear Glass Block to turn into this glass block. Size: 145x145x95mm, 190x190x95mm

Dichromatic Glass Block: Jewel Color Series
In your favorite space, various types of everyday light, different in direction, angle and strength, turns over a new leaf as auroras. Size: 145x145x95mm

Dichromatic Glass Block: Stardust Color Series
When struck by light from the front, this square dazzles the eye with brilliant lave. Bathed in light from behind, it takes on a gentle, mysterious look. Size: 145x145x95mm

Opaline-Milky Series
The glass block Opaline-Milky series, which is characterized by its acrylic painting on the lateral surfaces, is an evolved version of Opaline. Size: 145x145x95mm, 190x190x95mm

Treasure-Color Series
The Treasure-Color glass block series is characterized by its transparent color coating on the inner side and its frosted surface. Size: 145x145x95mm

Notice
Cocktail Color series, Treasure-Color series and Dichromatic Glass Block: Jewel & Stardust Color series are for interior use only. Outdoor use might cause internal condensation.
The standard installation method for Glass Block is the adoption of expansion strips between the glass block wall and the frame. This allows the glass block walls to respond flexibly and absorb deformation caused by wind pressure or earthquake, assuring the safety of glass block installations.

**Standard Shop Drawing**

**Glossary**

1. **Metal Frame**
   Metal frame of stainless steel, aluminum or so used in the connection between the structure and glass block wall. It is installed to the structure before glass block work.

2. **Expansion Strip**
   Natural rubber charged between the glass block wall and the structure or metal frame at jambs and head to follow the internal deformation caused by external stress.

3. **Slider**
   Synthetic rubber used to insulate the glass block wall from the structure or metal frame and help accommodate an internal deformation.

4. **Anchor Piece**
   Stainless piece used to anchor the wall ties on the metal frame or concrete structure.

5. **Wall Ties**
   Reinforcing wall ties dedicated to glass block work. 5.5 φ stainless bars (SUS 304) processed into a ladder shape.

6. **Masonry Mortar**
   Mortar for laying glass blocks.

7. **Finishing Mortar**
   Finishing mortar mix of white cement and silica or white marble powder. Applied to the interior or to a part not exposed to rain.

8. **Sealant**
   Polysulfide or silicone sealing compound applied to the connection between the metal frame or concrete structure and glass block or to the expansion joints.

9. **Water Drain Plate**

10. **Water Drain Hole**

**Simulation**

- Normal Condition
- Earthquake

- Sway
The glass block panels have excellent fire-proofing and fire-protection capabilities.

Fire-rated Glass Block F145 & F190 series have class A fire door under the Japanese BSL*. F190 series have passed BS**, and AS***. Fire-rated Glass Block F145 & F190 series are shown as follows patterns and sizes.

* 1 BSL = Building Standard Law in Japan
* 2 BS = BRITISH STANDARD 476
* 3 AS = AUSTRALIAN STANDARD 1530.4-1985

** Patterns and Sizes:

- **Clear (Transparent)**
  - Size: 190×190×95mm

- **Lateral Rib (Semi-Transparent)**
  - Size: 145×145×95mm / 190×190×95mm

- **Fantasy (Semi-Transparent)**
  - Size: 145×145×95mm / 190×190×95mm

- **Mist (Semi-Transparent)**
  - Size: 145×145×95mm / 190×190×95mm

- **Bark (Semi-Transparent)**
  - Size: 190×190×95mm

- **Fantasy (Semi-Transparent)**
  - Size: 300×300×95mm

Office Building (Tokyo)
Pattern: Fire-rated Glass Block (Mist)
Without Mortar, With Aluminum Plate!
It’s the latest easy installation System of Glass Block.

1. Jointless.
   10mm → 2.6mm !!

2. Mortarless.
   Reinforcement with Aluminum plate

3. Enjoy with LED Illumination !!

*For further information about this new System, please ask us.
*Pat. Pend.
Realize greatly reduced construction period with highly functional walls that allow light to pass through.

The Glass Block Panel Wall is the reliable installation method, combining the advantages of Glass Block with those of pre-cast concrete (PC).

Since the panels are prefabricated in a factory and therefore of consistent quality, the Panel Wall can be installed quickly and is excellent for a large-scale glass block wall.

This dry construction method allows installation in any weather or seasons, including in cold climates where conditions are not good.

Lifting a panel wall into place

Office Building
Pattern: Fantasy
Prism Glass Toplight can be walked over, allowing people to experience light rising from below their feet.

Patterns & Sizes

<table>
<thead>
<tr>
<th>Prism Glass</th>
<th>Non-Slip Prism Glass</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
</tr>
<tr>
<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
</tr>
</tbody>
</table>

Prism Glass diffuses light and has a high degree of light transmittance. It may be used on the ceiling, porch, or basement for lighting the lower part of the building.

Non-Slip Prism Glass is safe even when wet. It has a mat-like design that enhances light diffusion and a striped surface of oblique cuts to help pavement slipping or sliding.

Stainless Toplight

Prism Glass is a solid glass block and is used for skylights. As Prism Glass set in a stainless iron grate is thick, strong, and shock-resistant, it can be used for pedestrian bridges and walkways that we can walk on.

Campus
Pattern: Non-Slip Prism Glass
Illumination Glass Block Color-Palette

LED meets the Glass Block panel produced by the dry system without mortar.

Illumination Glass Block **Color-Palette** arouses artistic curiosity of space creators. LED, which is installed into joints of glass block panels adopting the dry system without mortar, emit light to both sides of the glass block.

Bar (Tokyo)
Pattern: Opaline-Plain, House-Panel-Mist

**Color-Palette** comes in the combination of Opaline, a translucent white glass block, and Housepanel, a thin glass block panel 50mm thick. As a partition, it constantly projects fresh images into your own space changing its colors gently while your privacy is being respected.

Glass Brick GlassOre

Rough but Gentle, Agile but Dignified. Constructs space with artistic light.

**GlassOre**, brick of glass, is characterized by its unique texture. Its surface is rough like a rock that has been weathered for ages, adjusted to its surroundings. The very moment **GlassOre** is lit up, its expression changes dramatically.

**GlassOre** has 3 tones, Milky-White, Semi-Transparent and Blue, and 3 shapes, Brick, VOA (Bar type) and BAN (narrow rectangular plate type).

*Please see the sample photos on page 2.*
Applications

Elementary School
Pattern: Clear, Mist

Apartment
Pattern: Opaline-Plain

Animal Hospital
Pattern: Opaline-Plain, Opaline Milky-Series

Renewed Apartment House
Pattern: Frost

Handicrafts Gallery
Pattern: Opaline-Plain, Clear

Bathroom
Pattern: Housepanel-Opaline

http://www.neg.co.jp/arch/