

Build Green with Laminated Glass & Mirrors

Bendheim certified products earn sustainability credits towards Green Certifications

Laminated Glass & Mirrors Transparency Documentation contributions, per LEED v4.1

- Third-party verified Environmental Product Declaration (EPD).
- Third-party prepared Health Product Declaration (HPD).
- Third-party verified Recycled Content Certificate.

Laminated Glass & Mirrors by Bendheim



Kansas City International Airport Parking Structure, Kansas City MO

Architect: BNIM

Photo: Michael Robinson Photography

Product description:

Laminated glass to glass is a safety glass that contains two or more glass panes permanently bonded together with a clear or colored interlayer (PVB or EVA) or with liquid resin. A safety glass, if broken, remains in place, held together by the interlayer at its core. The glass is either annealed, heat-strengthened or tempered and it may be back painted or digitally printed. Annealed glass is glass in its basic form that breaks into jagged pieces, while tempered glass is approximately four times stronger and breaks into small, dice-sized pieces. Furthermore, the glass may be regular, low iron, or tinted float glass and may be etched or textured. Laminated glass to mirror are also safety glasses with a glass pane bonded to a mirror pane utilizing a clear or colored interlayer (PVB or EVA).

About Bendheim:

Bendheim is one of the world's foremost resources for specialty glass and glass systems, offering building and design professionals the finest decorative glass options for commercial and residential building use. Decorative laminated, etched, textured, back-painted, digitally printed, and silvered glass varieties are all primary offerings from the company, available with nearly unlimited customization options. Bendheim is also the exclusive distributor of Lamberts channel glass in North America. Channel glass is a specialty architectural glass for interior and exterior wall applications, distinguishable by its linear U-shape. The channel glass planks, standing as tall as 23 feet, contain a high percentage of recycled glass and is produced in Europe's first environmentally sensitive oxygen-fired cast glass furnace.

Product Environmental Performance



Laminated glass and mirrors' contribution to Green Building Certificates.

Material Sustainability Attributes	Category Impact & What it Covers	Laminated glass and mirrors' contribution to LEED v4.1 & References	Other Certifications (direct and indirect support)
<u>Environmental Product Declaration (EPD)</u>	<i>Environmental Impact</i> An Environmental Product Declaration (EPD) is a standardized document that communicates the environmental impact of a product over its life cycle. It is based on Life Cycle Assessment (LCA) and follows international standards such as ISO 14025 and ISO 21930.	<i>Materials and Resources (MR)</i> Laminated Glass and Mirrors EPD is a Product-specific Type III EPD – Products with third-party certification (Type III), including external verification and external critical review, valued as 1.5 products for credit achievement calculation and contributes to option 1 (1 point). Environmental Product Declarations U.S. Green Building Council	WELL, BREEAM, Living Building Challenge (LBC), Green Star
<u>Health Product Declaration (HPD)</u> <u>Glass HPD</u> <u>Mirrors HPD</u>	<i>Health & Ingredient Transparency</i> A Health Product Declaration (HPD) is a standardized report that discloses the material contents of a product and any associated health hazards. Channel Glass HPD threshold disclosure is 1,000 ppm (0.1%).	<i>Materials and Resources (MR)</i> Laminated Glass and Mirrors HPDs are third-party prepared HPDs. They are worth 1 product for credit achievement calculation and contribute to option 1 (1 point). Material Ingredients U.S. Green Building Council	WELL, Green Globes
<u>Recycled Content</u>	<i>Material Sustainability Attribute</i> A Recycled Content Certificate is a formal declaration issued by a manufacturer or by a third-party certifier that verifies the percentage of pre- and post-consumer content in the product.	<i>Materials and Resources (MR)</i> Laminated Glass and Mirrors have a third-party verified Recycled Content Certificate and can contribute up to 2 possible points. Sourcing of Raw Materials U.S. Green Building Council	BREEAM, Green Star, Living Building Challenge (LBC), Green Globes
Low-Emitting Materials	<i>Indoor Air Quality</i> Low-Emitting Materials are products designed to minimize the release of volatile organic compounds VOCs into the indoor environment. Glass is considered an inherently non-emitting source of VOCs.	<i>Indoor Environmental Quality</i> Glass is an inherently non-emitting source of VOCs and can contribute up to 3 possible points. Low-Emitting Materials U.S. Green Building Council	WELL, Living Building Challenge (LBC), BREEAM, Green Globes
<u>JUST Label</u>	<i>Social Equity & Organizational Transparency</i> The JUST Label is a voluntary disclosure tool that measures an organization's performance in six key categories: diversity, equity, safety, worker benefits, local benefits, and stewardship.	<i>Social Equity within the Supply Chain</i> Bendheim JUST Label can contribute up to 1 possible point. Social Equity within the Supply Chain U.S. Green Building Council	WELL, Living Building Challenge (LBC)

Transparency Documentation for HexaLite™ Honeycomb for Glass Cladding and Z-KISS™ Concealed Interior Glass Cladding System:

HexaLite™ [Environmental Product Declaration & Health Product Declaration](#)

Z-KISS™ [Environmental Product Declaration & Health Product Declaration](#)

727 West Madison Parking Structure, Chicago, IL

Architect: Fitzgerald Associates

Photo: Tashio Martinez

For more information about sustainability at Bendheim, please contact Uarda Hoti, Sustainability Program Manager, at uhoti@bendheim.com or visit bendheim.com/sustainability

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