**FINEO Safety 8 - vacuum insulating glazing with laminated safety glass**

The vacuum insulating glazing with laminated safety glass is a vacuum insulating glass with a laminated safety glass on both sides, laminated with two EVA foils (ethyl vinyl acetate) per layer.

The whole must comply with class 1B1 according to the European standard EN12600.

This vacuum insulating glazing consists of two annealed clear glass sheets separated by a vacuum cavity, by means of a lead-free inorganic edge seal, specially developed for vacuum applications. This lead-free inorganic edge seal provides mechanical strength and hermetic sealing.

This vacuum insulating glazing, without a vacuum evacuation port, has a linear getter in the edge zone of the vacuum cavity where the coating has been stripped.

The vacuum insulating glazing consists of two glass sheets in accordance with EN 572 with a vacuum cavity of approximately 0.1 mm with micro spacers in between, placed in a 20 mm grid over the entire glass surface.

A low-e coating in accordance with EN 1096 is applied in the vacuum cavity.

Main light and energy properties for a composition (1):

3mm annealed clear glass sheet/ 0,8mm eva interlayer / 8mm vacuum insulating glazing / 0,8mm eva interlayer / 3mm annealed clear glass sheet (vacuum cavity of 0.1 mm and low-e coating).

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| --- | --- | --- | --- |
| Property | Value | Unit | EN Stand. |
| LT – Light transmission | 77 | % | EN 410 |
| LR out / LR in – Light reflectance | 13 / 14 | % |
| g | 0.57 | - |
| U glass | 0,7 | W/(m².K) | EN 673 |

The visual aspect is transparent and neutral on both sides.

The hermetic sealing of the vacuum insulating glazing is guaranteed for 15 years according to the provisions of the manufacturer's warranty document.

The vacuum insulating glazing must have ETA approval.

The glass thicknesses of the vacuum insulating glazing are determined in function of the dimensions of the glazing, wind load, climate load; project specific loads and the specific inherent mechanical properties of vacuum insulating glazing.

The annealed clear glass top must be Cradle to Cradle (C2C) Bronze and the low-e coating must be Cradle to Cradle (C2C) Silver according to the program of the independent body MBDC certified.

1. These values are calculated on the basis of spectral measurements in accordance with standards EN 140 and ISO 9050: 1990. The U value is calculated on the basis of the standard EN 673 and measured in accordance with EN 674. The emissivity measurement meets the standards EN 673 (Annex A) and EN 12898.