**FINEO Safety 8 v101- Vacuum Insulating Glazing with Laminated Glass**

FINEO vacuum insulating glazing with laminated glass is a vacuum insulating glass unit with laminated glass on both sides that has been laminated with one EVA (ethylene-vinyl acetate) interlayer.

FINEO vacuum insulating glazing is CE marked in accordance with EAD 300021-00-0404.

The laminated unit has a pendulum body impact resistance of 1B1, in accordance with EN 12600.

The laminated unit has a sound reduction index of Rw = 41(-1;-3) dB, in accordance with ISO 19916-1, clause 8.

FINEO is a vacuum insulating glazing unit consisting of two sheets of annealed clear glass separated by a vacuum cavity. The sheets are separated by means of a lead-free inorganic edge seal that was specially developed for vacuum applications. This lead-free inorganic edge seal provides mechanical strength and creates a hermetic seal.

FINEO features a linear getter installed along the edge of the vacuum cavity where the coating has been stripped. It does not have a vacuum evacuation port.

The vacuum insulating glazing unit consists of two sheets of EN 572-compliant glass with a vacuum cavity of approximately 0.1mm between them. The cavity is maintained by very small spacer pillars placed between the sheets of glass in a 20mm array (grid pattern) over the entire surface of the glass.

An EN 1096-compliant low-e coating is applied to the inner sides of the glass sheets, i.e. the sides in contact with the vacuum cavity.

Main light and energy properties of the following composition(1):

3mm annealed clear glass sheet / 0.4mm EVA interlayer / 8mm vacuum insulating glazing / 0.4mm EVA interlayer / 3mm annealed clear glass sheet (0.1mm vacuum cavity and low-e coating).

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| --- | --- | --- | --- |
| Property | Value | Unit | EN standard |
| LT – Light transmission | 78 | % | EN 410 |
| External LR / Internal LR – Light reflectance | 14 / 14 | % |
| g | 0.61 | - |
| Ug-value | 0.7 | W/(m².K) | EN 673 |
| Rw | 39(-1;-3) | dB | ISO 19916-1, clause 8 |
| Pendulum body impact resistance | 1B1 | - | EN12600 |
| Actual thickness | 14.2 | mm |  |

The visual appearance is transparent and neutral on both sides.

The hermetic seal of the vacuum insulating glazing unit is guaranteed for 20 years under the manufacturer's warranty.

The vacuum insulating glazing has been awarded ETA approval (ETA 20/0048).

The thickness of the glass sheets in the vacuum insulating glazing unit are determined on the basis of the glazing dimensions, wind load, climate load, project-specific loads and the specific inherent mechanical properties of vacuum insulating glazing.

The annealed clear glass must be Cradle to Cradle Certified® Bronze and the low-e coating must be Cradle to Cradle Certified® Bronze, as assessed by MBDC (an accredited independent certification body).

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 standard EN 673 and measured in accordance with EN 674. The emissivity measurement complies with standards EN 673 (Annex A) and EN 12898.