SGG PLANITHERM® XN
SGG PLANITHERM® XN II

Get the best of Energy Efficiency and Light

Highlights

Energy Efficiency
Energy costs raise continuously and with them the importance of energy-efficient building design. The new SGG PLANITHERM® XN is the perfect solution because it combines highest level of energy efficiency and transparency.

On the other hand it reduces noticeable the energy consumption, heating costs and as a consequence the CO₂ emissions. On the other hand, it provides a comfortable indoor climate even in winter, thanks to the effective use of sunlight.

Daylight Comfort
SGG PLANITHERM® XN creates a new standard for the daylighting and improves the well-being and lowers the demand for artificial light.

Simply, SGG PLANITHERM® XN reaches the highest level of light transmission in a triple glazing unit up to 74%, and up to 82 % in double glazing.

Aesthetics
SGG PLANITHERM® XN has a highly neutral aesthetic appearance; the colour rendering in transmission and reflection is very high.

Winter Comfort
The very low Uğ-value of up to 0.5 W/m²K reduces the losses of heat to a minimum. Therefore, even in winter and close to the glazing, the temperature is always comfortable.

Possible Combinations:
SGG PLANITHERM® XN can be combined with other functionalities, namely
  • SGG BIOCLEAN to get an easy maintenance glazing
  • SGG STADIP SILENCE to improve the acoustic comfort
  • SGG STADIP PROTECT to get a safety/security glazing

To complete the offer, a 'to be tempered' version of SGG PLANITHERM® XN II is also available, with the same level of performances.
Applications

New sgg PLANITHERM® XN has been developed for a residential market in order to be glazed in a window.

It is the best Low-E product on the market and it improves the energy efficiency of DGU and TGU windows.

sgg PLANITHERM® XN is ideal for all windows where neutrality and high energy efficiency are needed. For instance following applications:

- Residential
  - Windows for both renovation and new building
  - Large area sliding bay windows

- Commercial
  - Façades where low Ug Values are required without use of TGU (weight issues for façade structure)

Product Range

sgg PLANITHERM® XN and sgg PLANITHERM® XN II are available and in stock:

- Jumbo size (PLF): 6 000 x 3 210 mm
- DLF size: 3 210 x 2 250 mm
- Thicknesses: 3 / 4 / 5 / 6 / 8 / 10 mm
- Laminated glass: standard compositions and Jumbo size for sgg PLANITHERM® XN

Processing & Performances

sgg PLANITHERM® XN must be used for insulating glazing in double or triple glazing units. The transformation of sgg PLANITHERM® XN is comparable to the sgg PLANITHERM® product range. It can be used only annealed.

sgg PLANITHERM® XN II must be tempered before being assembled in an insulating glazing.

Moreover, thanks to a very low level of absorption, sgg PLANITHERM® XN can be put on a middle pane of the triple glazing without any risk of thermal breakage (for standard TGU configuration such as 4/14/4/14/4 together with good window frame. For more specific glazing configuration or the use of bad frame a thermal calculation is requested). This glazing configuration leads to outstanding performances!

Performances

<table>
<thead>
<tr>
<th>Composition (mm)</th>
<th>Gas Filling</th>
<th>Ug Value W/(m²K)</th>
<th>Transmission of light (%)</th>
<th>g-value (%)</th>
<th>Reflection of light (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/16/*/4</td>
<td>Argon &gt; 90 %</td>
<td>1.1</td>
<td>82</td>
<td>65</td>
<td>12</td>
</tr>
<tr>
<td>4/10/*/4</td>
<td>Krypton &gt; 90 %</td>
<td>1.0</td>
<td>82</td>
<td>65</td>
<td>12</td>
</tr>
<tr>
<td>4/<em>/14/4/14/</em>/4</td>
<td>Argon &gt; 90 %</td>
<td>0.6</td>
<td>74</td>
<td>54</td>
<td>16</td>
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<tr>
<td>4/<em>/12/4/12/</em>/4</td>
<td>Krypton &gt; 90 %</td>
<td>0.5</td>
<td>74</td>
<td>54</td>
<td>16</td>
</tr>
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<td>4/<em>/14/</em>/4/14/*/4</td>
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</tr>
</tbody>
</table>

- Values calculated according to EN410-2011 & EN673-2011 standards.
- Glazing configuration with sgg PLANICLEAR and sgg PLANITHERM® XN
- * position of the coating