TIMBER CURTAIN WALL

THERM⁺ H-I
THERM⁺ H-V

The THERM⁺ timber curtain walls provide a thousandfold approved glazing technology for application on structural frames made of any timber based material from 50 mm width. For a sustainable and lasting function the consistent system design assures a strict separation between the structural and design levels made of timber and the functional components made of aluminium and EPDM.

THERM⁺ H-I

For curtain walls, conservatories and sloped glass roofs with an inclination down to 2°, thus also ideal for any type of timber-aluminium conservatory.

Coupling mullion
An ideal aid for efficient assembly. Pre-fabricated frames can be finished in the workshop with split coupling mullions, base profiles, interior gaskets and glass supports. On site these frames are simply coupled, glazed and finished with pressure profiles.

THERM⁺ H-V

is ideal for slim-line, economical curtain walls, with reduced interior gasket dimensions.

Timber cover profiles

can be executed in a sustainable and dependable way with THERM⁺. The glazing technology is based on aluminium and EPDM components. The decorative timber profile is retained by a hidden aluminium profile.

The special advantages

- Outstanding thermal insulation, gradually down to passive house quality with Uₜ = 0.8 W/m²K
- Two aluminium base profile options: with or without guiding extension
- For any timber based profile from 50 mm width
- Entire load compensation tested and approved by the German Building Institute
- Fast and simple screw fixation of the base profile, also possible with the use of an automatic screw gun
- Smooth screw fastening due to the aluminium screw channel
- No components going directly from the exterior into the wood

Technology in detail

Especially in the case of timber curtain wall, the connection between mullion and transom must fulfill specific requirements. The dead load of the infill units lies in front of the timber structure, and the connectors must compensate for this torsional effect as well as the wind pressure and suction forces. RAICO offers a connector system which has been developed specifically for this application and approved by the German Building Institute.

- Three versions:
  - SOLO for glass weights up to 248 kg
  - KOMBI for glass weights up to 596 kg
  - INTEGRAL for glass weights up to 694 kg

- For THERM⁺ H-I and THERM⁺ H-V
- For transom depths between 60 and 300 mm
- Minimum preparation: only a notching in the transom and drilled holes in the mullion
- Simplified assembly: fix mullion and transom element, insert transom, secure transom with nail screws, finished.
- Automatic flush position of the transom due to the integrated stop element
- Pre-fabrication of transportable units possible in the workshop
- Perfect T-connections due to pressure between transom and mullion over the entire depth

Technical data

<table>
<thead>
<tr>
<th></th>
<th>THERM⁺ H-I</th>
<th>THERM⁺ H-V</th>
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<tbody>
<tr>
<td>System width</td>
<td>50, 56, 76 mm</td>
<td>50 and 56 mm</td>
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<tr>
<td>Infill thickness</td>
<td>4 – 64 mm</td>
<td>10 – 64 mm</td>
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<tr>
<td>Glass weight</td>
<td>up to 430 kg</td>
<td>up to 400 kg</td>
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<tr>
<td>Drainage levels</td>
<td>2 or 3</td>
<td>2 or 3</td>
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<tr>
<td>Polygonal assembly</td>
<td>up to 45°</td>
<td>up to 45°</td>
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<tr>
<td>Glass roofs</td>
<td>up to 2° inclination</td>
<td>-</td>
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<tr>
<td>Conservatories</td>
<td>yes</td>
<td>-</td>
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<tr>
<td>Thermal insulation</td>
<td>down to Uₜ = 0.8 W/m²K</td>
<td>down to Uₜ = 0.8 W/m²K</td>
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<tr>
<td>Wind resistance</td>
<td>2500 Pa / 3200 Pa</td>
<td>2500 Pa / 3750 Pa</td>
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<tr>
<td>Resistance against impact</td>
<td>inside IS, outside ES</td>
<td>inside IS, outside ES</td>
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<tr>
<td>Air permeability</td>
<td>AE 1950</td>
<td>AE</td>
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<tr>
<td>Water tightness</td>
<td>KE 1200</td>
<td>KE 2100</td>
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<tr>
<td>Airborne sound insulation</td>
<td>Rₚ (C; Cₚ) = 41 (-3; -7) dB</td>
<td>Rₚ (C; Cₚ) = 51 (-1; -5) dB</td>
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<tr>
<td>Fall protection</td>
<td>yes</td>
<td>yes, without additional measures</td>
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System testing / Approvals / CE system declarations acc. to BS/EN 13830 product standard curtain walling

German general approval glazing system Z-14.4-455
German general approval T-connector 2.9.1-621
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