**ALUMINIUM CURTAIN WALL**

**THERM⁺ A-I**

The THERM⁺ aluminium curtain wall stick systems combine a maximum application range with straightforward planning and manufacture, providing high processing reliability due to the consistent modular technology.

**THERM⁺ A-I**

- All profiles for mullion and transom
- Extremely solid T connections
- Glass weight up to 400 kg
- Thermal insulation down to $U_f=0.8\,\text{W/m}^2\text{K}$

**THERM⁺ A-V**

- Economic solutions and maximum energy conservation due to adaptable thermal insulation with insulation bloc gaskets, with $U_f$ values down to $0.8\,\text{W/m}^2\text{K}$
- Wide selection of structural profiles in box and in tee-shape
- All profiles can be used for mullions and transoms, thus minimizing waste in production and optimizing stock

**The special advantages**

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**Technology in detail**

A distinctive feature of the THERM⁺ aluminium curtain walls is their innovative T-connection technology. Every single detail has been analysed in its development to provide an abundance of advantages:

- The connectors are identical for THERM⁺ A-I and THERM⁺ A-V and for all system widths
- Easy butt joint with straight profile cuts, no notching required
- Various options for structural requirements and assembly methods
- T-connectors for vertical loads up to 550 kg with German general approval
- Extremely rigid connections due to a spreader-clamping mechanism when fixing with screws
- Ideal for the pre-fabrication of transportable units in the workshop
- Perfect optical T-connections due to an optimum contact between mullion and transom over the entire profile
- The T-connectors can be used as profiles for structural reinforcement, head or sill connections and for profile joins.

**THERM⁺ A-I**

- Offers an exceptional freedom for the design of curtain wall, conservatories and sloped glass roofs with an inclination down to 2°, even with demanding structural or construction requirements.

**THERM⁺ A-V**

- Is ideal for very slim and economic curtain wall solutions, featuring reduced gasket dimensions on the interior and an optimised cost-benefit ratio for common façade applications.

**Technical data**

<table>
<thead>
<tr>
<th></th>
<th>THERM⁺ A-I</th>
<th>THERM⁺ A-V</th>
</tr>
</thead>
<tbody>
<tr>
<td>System width</td>
<td>50 and 56 mm</td>
<td>50 and 56 mm</td>
</tr>
<tr>
<td>Box profile depth</td>
<td>25 - 200 mm</td>
<td>25 - 200 mm</td>
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<tr>
<td>Expansion profile depth</td>
<td>75 - 200 mm</td>
<td>60 - 175 mm</td>
</tr>
<tr>
<td>Tee profile depth</td>
<td>50 - 200 mm</td>
<td>50 - 200 mm</td>
</tr>
<tr>
<td>Profiles in tee shape</td>
<td>yes, 50 mm</td>
<td>yes, 50 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 300 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 rapid</td>
<td>down to 2° inclination</td>
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<tr>
<td>Conservatories</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

**System testing / Approvals / CE system declarations**

acc. to BS/EN 13830 product standard curtain walling

**Thermal insulation**

- THERM⁺ A-I: down to $U_f = 0.95\,\text{W/m}^2\text{K}$
- THERM⁺ A-V: down to $U_f = 0.8\,\text{W/m}^2\text{K}$

**Wind resistance**

- Positive / negative: 2800 Pa / 3500 Pa
- German general approval for curtain systems: Z-14.4-454

**Air permeability**

- $AE = 4600$

**Water tightness**

- Static / dynamic: RE 1200 / RE 1650

**Airborne sound insulation**

- $K_f [C, C_t] = 41 [-3, -7]$ dB

**Sound protection**

- Yes, without additional measures

**German general approval**

- Glazing systems: 2.14.4.444 / 2.14.4.504
- T-connector Z-14.4-461 / T-connector Z-14.4-461