

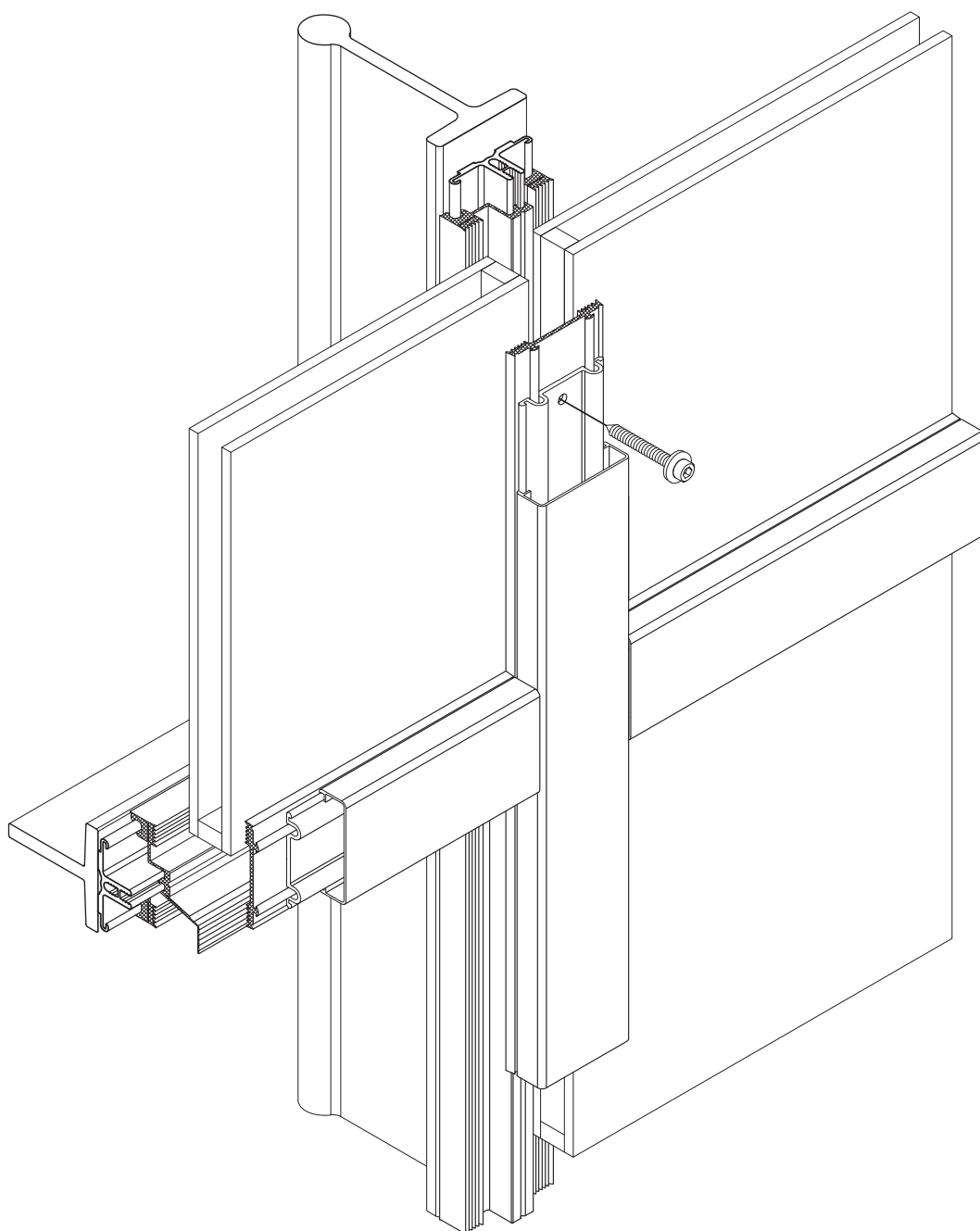
Stabalux T

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System properties

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Steel facade system Stabalux T
Use with a tightening channel

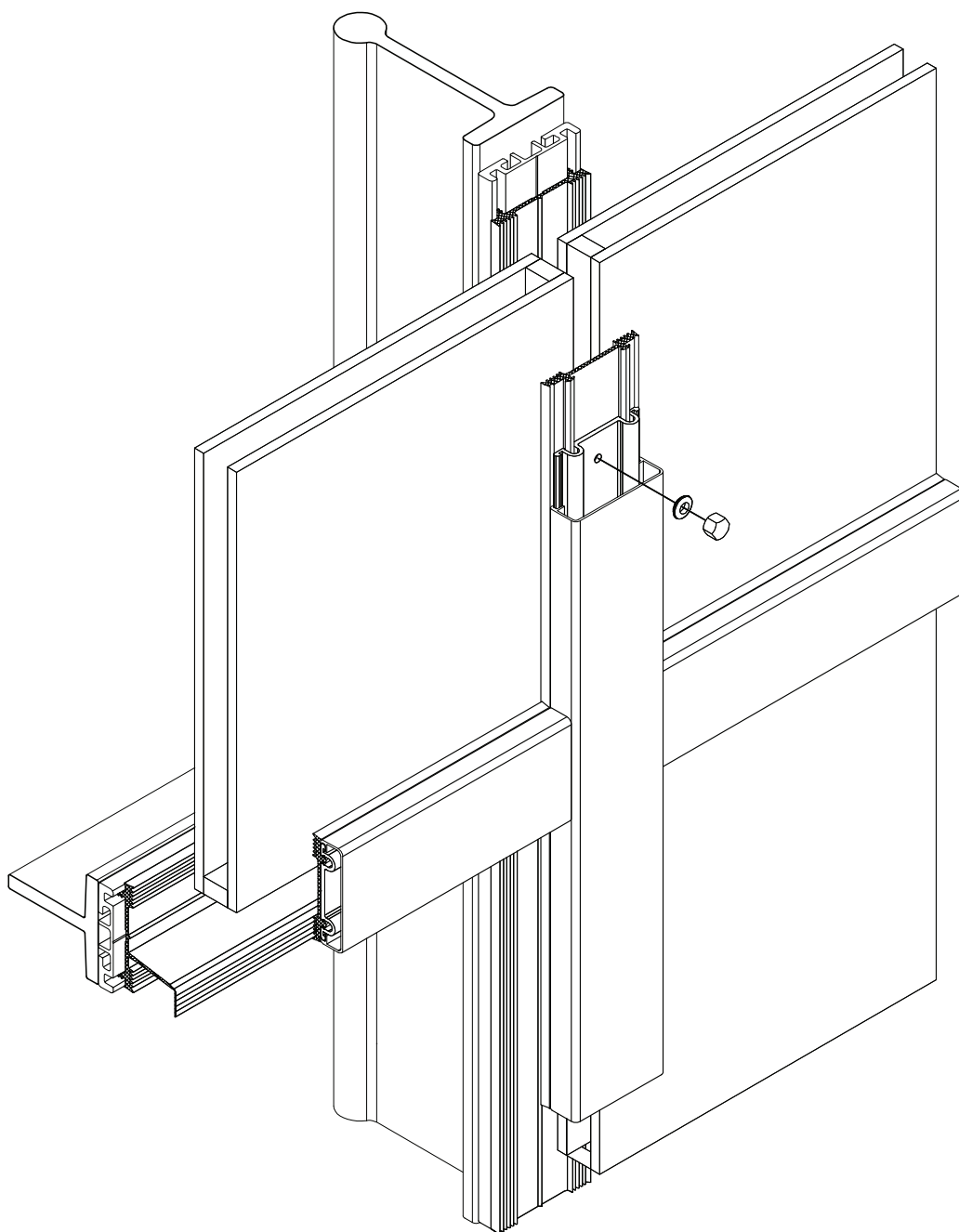


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System properties

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Steel facade system Stabalux T
Use with a tightening channel



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System properties

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Stabalux T system description

Stabalux T-profiles stand out from standard sections due to the angularity and clarity of their forms, which is due to the almost perfect right angles between the individual T elements.

The hot-rolled Stabalux T-profiles are manufactured with almost parallel wall surfaces. The corner radii are narrow. The surfaces possess the typical character of rolled steel sections. All standard organic and metallic coatings are possible.

Attachment profiles with sleeve gasket round off the T-profiles to produce outstanding glazing elements with a steel supporting structure. We recommend the Stabalux ZL-S system (spacer strip on steel profiles) and the AK-S system (tightening channel on steel profiles).

Stabalux ZL-S – spacer strip on steel

Stabalux ZL-S is a simple and affordable add-on system for single and double glazing with a complete and customisable range to create facades and roofs with a steel supporting structure.

Kindly refer to the relevant section on Stabalux ZL-S for additional information on the system and system properties, processing instructions and information on the design and anchoring.

Stabalux AK-S – tightening channel on steel

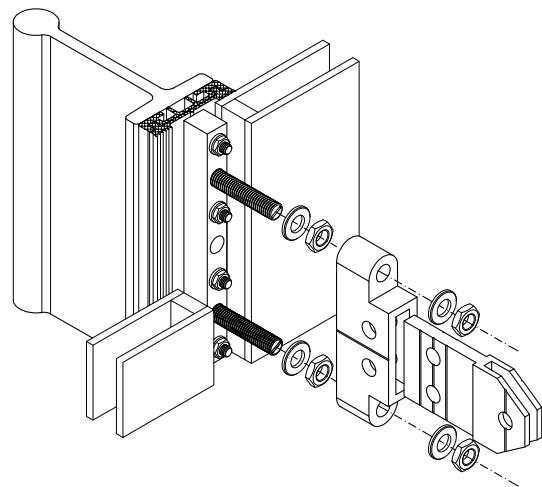
The Stabalux System AK-S provides a complete, coordinated range of products for vertical and inclined glazing. The tightening channel is identical for use on facades and roofs; it is screwed directly on to the steel structure. This exploits the benefits of screw channel technology.

Kindly refer to the relevant section on Stabalux AK-S for additional information on the system and system properties, processing instructions and information on the design and anchoring.

Stabalux SOL

Alongside the usual measures to prevent glare and excessive energy irradiation, we offer a specially developed system of outside lamellae.

Particular attention has been paid here to ensure attachment and assembly can be completed easily with Stabalux systems whilst meeting architectural and climatic requirements. Glazing and clamping strips are not exposed to any load when the sun protection is mounted. Assembly and sealing are simple and efficient.



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System properties

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Fire protection for the Stabalux T system

Aside from the ZL-S and AK-S systems themselves, direct fitting of fire seals on the Stabalux T-profiles, the small number of system add-ons and the use of fire-resistant glazing produce outstanding fire-protection properties. The Stabalux T-profiles in G 30 and F 30 have general approvals by the building authorities in Germany in accordance with DIN 4102 Part 13.

The seals are installed and the screw fittings attached as for the Stabalux ZL-S system, but **without** spacer strip.

The use of stainless steel clamping strips is obligatory in fire-protection glazing. It is permitted to fit lower strips for concealed screw fittings, as well as to attach cover strips for visible screw fittings. All requirements defined in the authorisations must be observed and adhered to.

Fire seals

Stabalux seals are organic natural rubber materials based on EPDM and conform to the DIN 7863 standard, non-cellular elastomer sealing profiles for window and facade construction. Compatibility with contact media should be tested by the processor when making structural connections with non-Stabalux products.

Fire seals are special products; their specific data are filed with DIBt (German Centre of Competence for Construction).

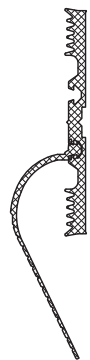
Like all organic materials, elastomers are combustible if they are exposed to high temperatures for a sufficient period in the presence of oxygen. Inorganic substances are added to the seals in order to reduce their combustibility. The proportion of inorganic substances positively influences the flame-retardant properties, but they also make the products harder and reduce their mechanical strength. It is therefore imperative when fitting fire seals to ensure that the structure is absolutely flat and that the sealant joints connect precisely. Depending on their geometry, it may be necessary to stretch fire seals into a mountable form, i.e. to leave them to settle into their mountable form, once they have been removed from their rolled packaging. Warm temperatures also make the seals more malleable and therefore facilitate installation.



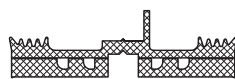
GD 6026 G30 / GD 6026 F30
Inner seal for mullions
Vertical glazing



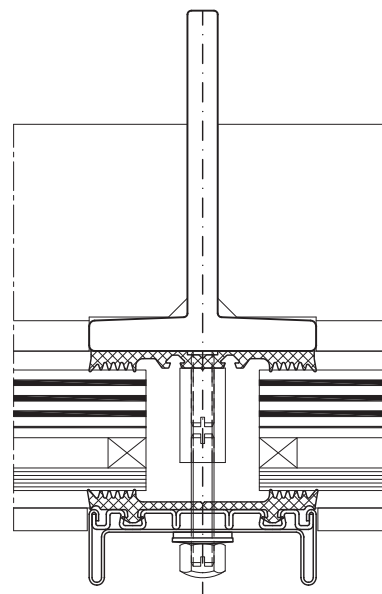
GD 6216 G30
Inner seal for mullions
Inclined glazing



GD 6026 G30 / GD 6026 F30 with
Transom lug Z 0012, Z 0013 or Z 0014
Inner seal for transoms
Vertical glazing



GD 6218 G30
Inner seal for transoms
Inclined glazing



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System profiles

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Steel T-profiles

- The Stabalux T-profiles are hot rolled, non-galvanized special profiles in steel grade S235.
- Scale layers are unavoidable.
- The manufacturing tolerances are defined in DIN ISO 2768 - c - L.
- The round straps on the Stabalux T 60120-R and T 60180-R may have flatter sections due to the production process.
- The hot-rolled Stabalux T-profiles are delivered with a straightness according to DIN 59051 and are suitable for galvanization.

- Colour coating on steel with dip-galvanized surface – duplex system.
- Colour coating on steel with non-galvanized surface.
- Dip-galvanized surface without colour coating.

Coating for the Stabalux T-profiles

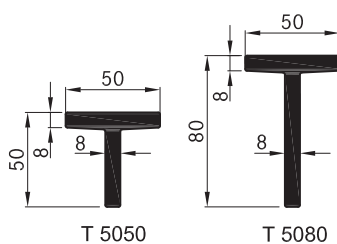
Conventional coating methods such as air-drying multi-layer coating systems (wet coating) or thermosetting coatings (stove enamelling / powder-coating) can be used, provided suitable pre-treatment is applied.

Corrosion protection for the Stabalux T-profiles (Section 9)

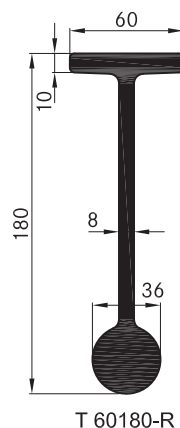
Mullion and transom facades usually receive a coloured coating for aesthetic reasons. The following corrosion protection options are conceivable:

Profile overview Stabalux T-profiles, hot-rolled

System 50 (delivered on request)



System 60 (delivered on request)



System profiles

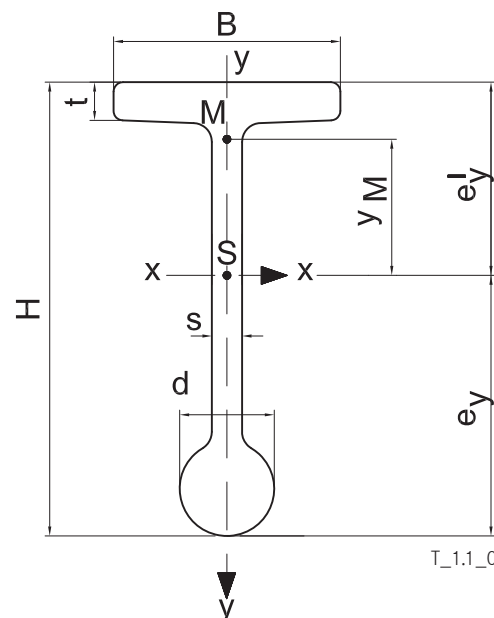
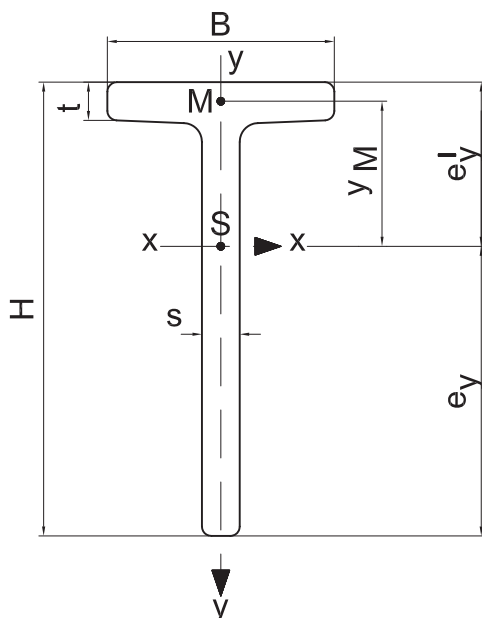
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Table showing the characteristic values of Stabalux T-profile geometries

| Profile number ¹⁾ | H | B | t/s/d | U | U* ²⁾ | g | A | e _y | e' _y | I _x | W _x (e _y) | W _x (e' _y) | i _x | S _x | I _y | W _y (B/2) |
|------------------------------|-----|----|---------|-------------------|-------------------|-------|-----------------|----------------|-----------------|-----------------|----------------------------------|-----------------------------------|----------------|-----------------|-----------------|----------------------|
| - | mm | mm | mm | m ² /m | m ² /m | kg/m | cm ² | cm | cm | cm ⁴ | cm ³ | cm ³ | cm | cm ³ | cm ⁴ | cm ³ |
| T 5050 | 50 | 50 | 8/8/- | 0.198 | 0.148 | 5.91 | 7.53 | 3.48 | 1.53 | 16.65 | 4.79 | 10.92 | 1.49 | 4.83 | 9.03 | 3.61 |
| T 5080 | 80 | 50 | 8/8/- | 0.258 | 0.208 | 7.80 | 9.93 | 5.27 | 2.73 | 63.50 | 12.04 | 23.28 | 2.53 | 11.12 | 9.16 | 3.66 |
| T 60180 R | 180 | 60 | 10/8/36 | 0.503 | 0.443 | 21.29 | 27.12 | 8.76 | 9.24 | 1160.86 | 132.57 | 125.59 | 6.54 | 81.45 | 27.71 | 9.24 |

| Profile number ¹⁾ | W _y (s/2) | W _y (d/2) | i _y | S _y ³⁾ | S _y ⁴⁾ | I _T | W _T | I _w | Z _M | i _p | i _M | W _{x,pl} | α _{x,pl} | W _{y,pl} | α _{y,pl} |
|------------------------------|----------------------|----------------------|----------------|------------------------------|------------------------------|----------------|-------------------|-------------------|-----------------|----------------|----------------|-------------------|-------------------|-------------------|-------------------|
| - | cm ³ | cm ³ | cm | cm ³ | cm ³ | kg/m | m ² /m | m ² /m | cm ² | cm | cm | cm ³ | - | cm ³ | - |
| T 5050 | 22.57 | - | 1.10 | 2.66 | - | 1.72 | 2.03 | 0.00 | -1.10 | 1.85 | 3.41 | 8.67 | 1.81 | 5.97 | 1.65 |
| T 5080 | 22.89 | - | 0.96 | 2.66 | - | 2.24 | 2.63 | 0.00 | -2.30 | 2.71 | 3.55 | 21.54 | 1.79 | 6.45 | 1.76 |
| T 60180 R | - | 15.40 | 1.01 | 4.73 | 3.89 | 21.08 | 11.71 | 1410.49 | -3.88 | 6.62 | 7.67 | 162.21 | 1.29 | 19.35 | 2.10 |

- 1) Kindly enquire as to the profile delivery options
- 2) Coating surface = visible surface of the profiles when mounted
- 3) First moment of area in the upper strap
- 4) First moment of area in the lower strap (round)



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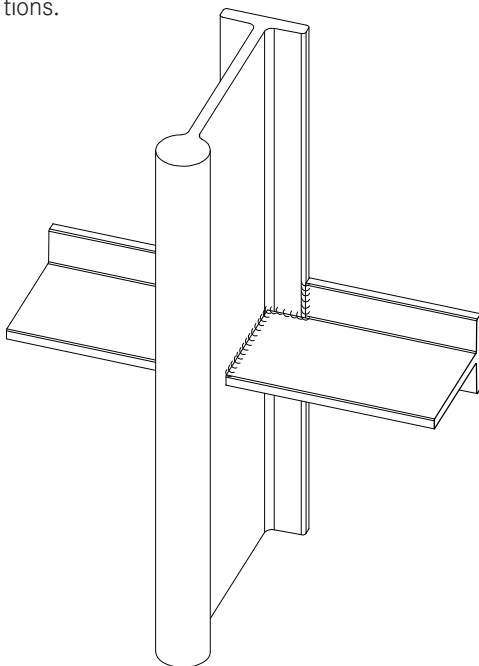
Mullion-transom joint

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The mullion and transom joints in the Stabalux T-profiles must be connected in a typical manner for steel constructions; the planner or processor is free to choose their design.

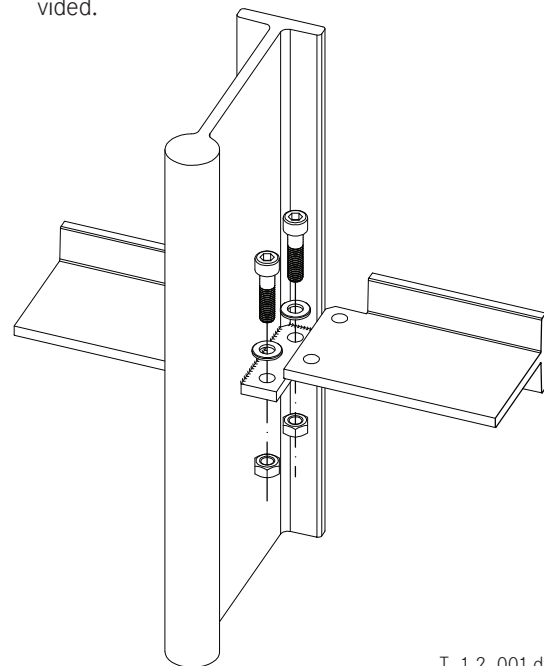
Welded joints

- The transom profiles must be notched according to the instructions. The stated dimensions refer to the rated dimensions of the profiles. Profile tolerances must be taken into account.
- Any weld seams in the sealing sections must be ground flat.
- The weld seam must be produced in accordance with the static calculations and the relevant regulations.



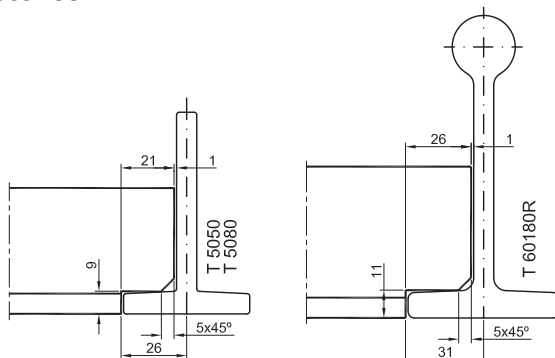
Screwed connections

- The transom profiles must be notched according to the instructions. The stated dimensions refer to the rated dimensions of the profiles. Profile tolerances must be taken into account.
- Alternatively, the notches can also be designed for aesthetic reasons to suit the architectural requirements.
- The sealing sections must be kept flat.
- Static proof of the screw connections must be provided.



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Notches

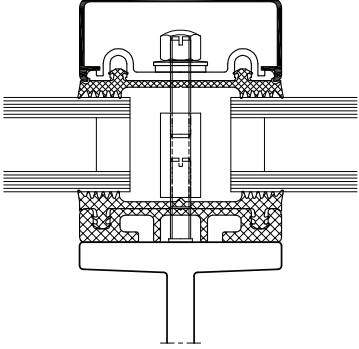
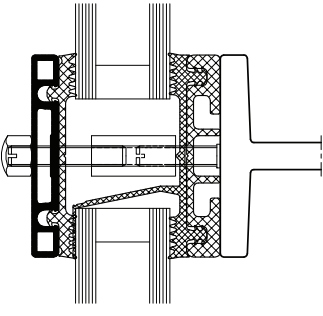
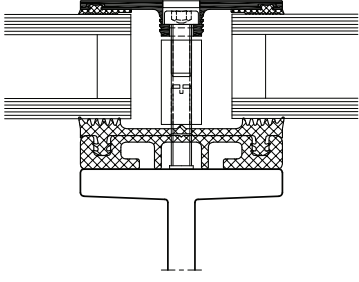
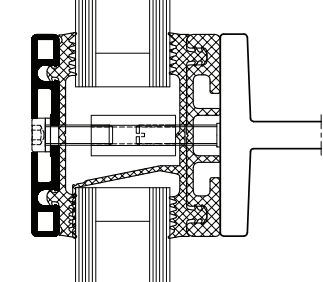
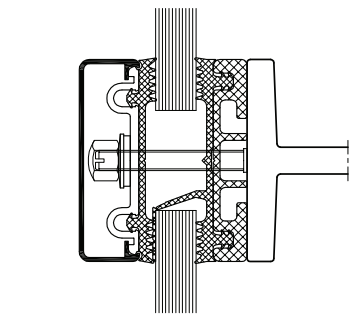
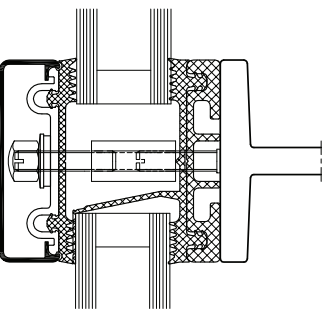
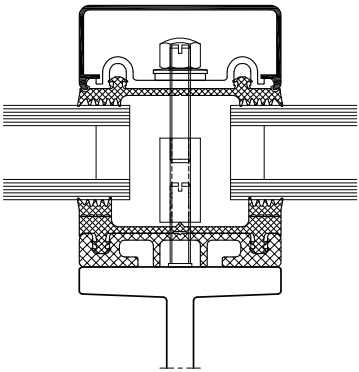
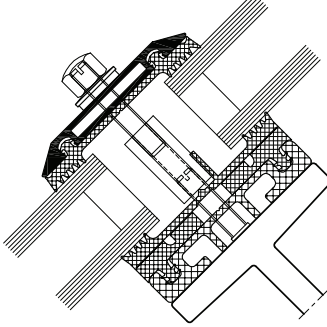


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System cross sections

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Examples of the Stabalux ZL-T system

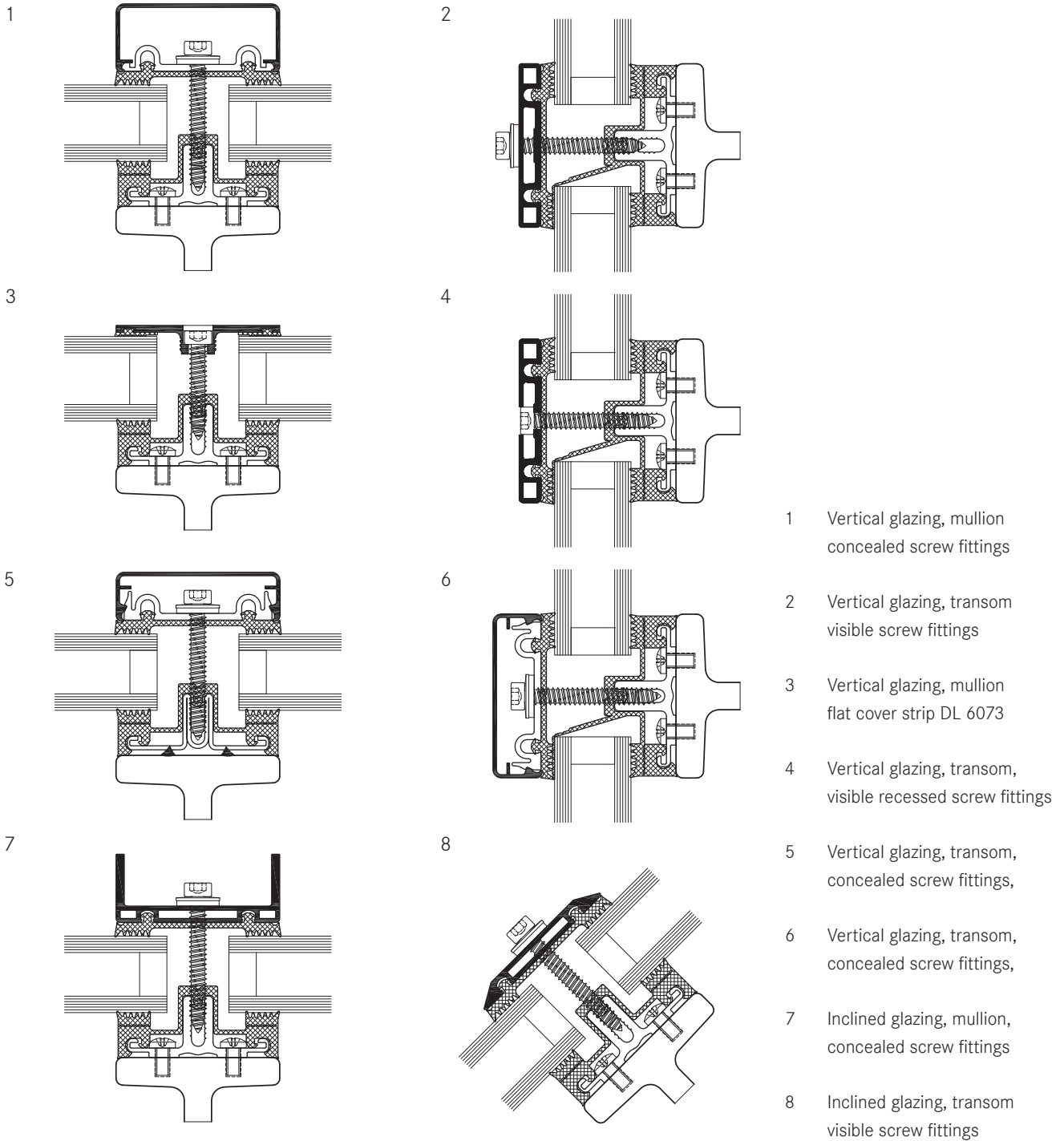
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|---|---|---|--|--|
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| 3 |  | 4 |  | |
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| 7 |  | 8 |  | |

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System cross sections

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Examples of the Stabalux AK-S on T



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Notes

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Pane support variants

Kindly refer to the Stabalux ZL-S and AK-S sections for notes and examples. Contact us if you do not find all catalogue diagrams for the Stabalux T system or in the download section at www.stabalux.com.

System details

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Structural attachments

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Fitting doors and windows

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