

LIVING SPACE CONSERVATORY

HAWAII 80 2.0

System description



Overview of the HAWAII 80 2.0

1

Wall connection types

Wall-mounted
Cantilevered
Free-standing

2

7 rafter types (internal statics)

Plane rafter 101, 143, 188
Edge rafter 101
Wall rafter 101, 143, 188
Valley rafter 101
Hip rafter 101

3

Eaves carrier variants

Eaves carrier 102
Eaves carrier 175

4

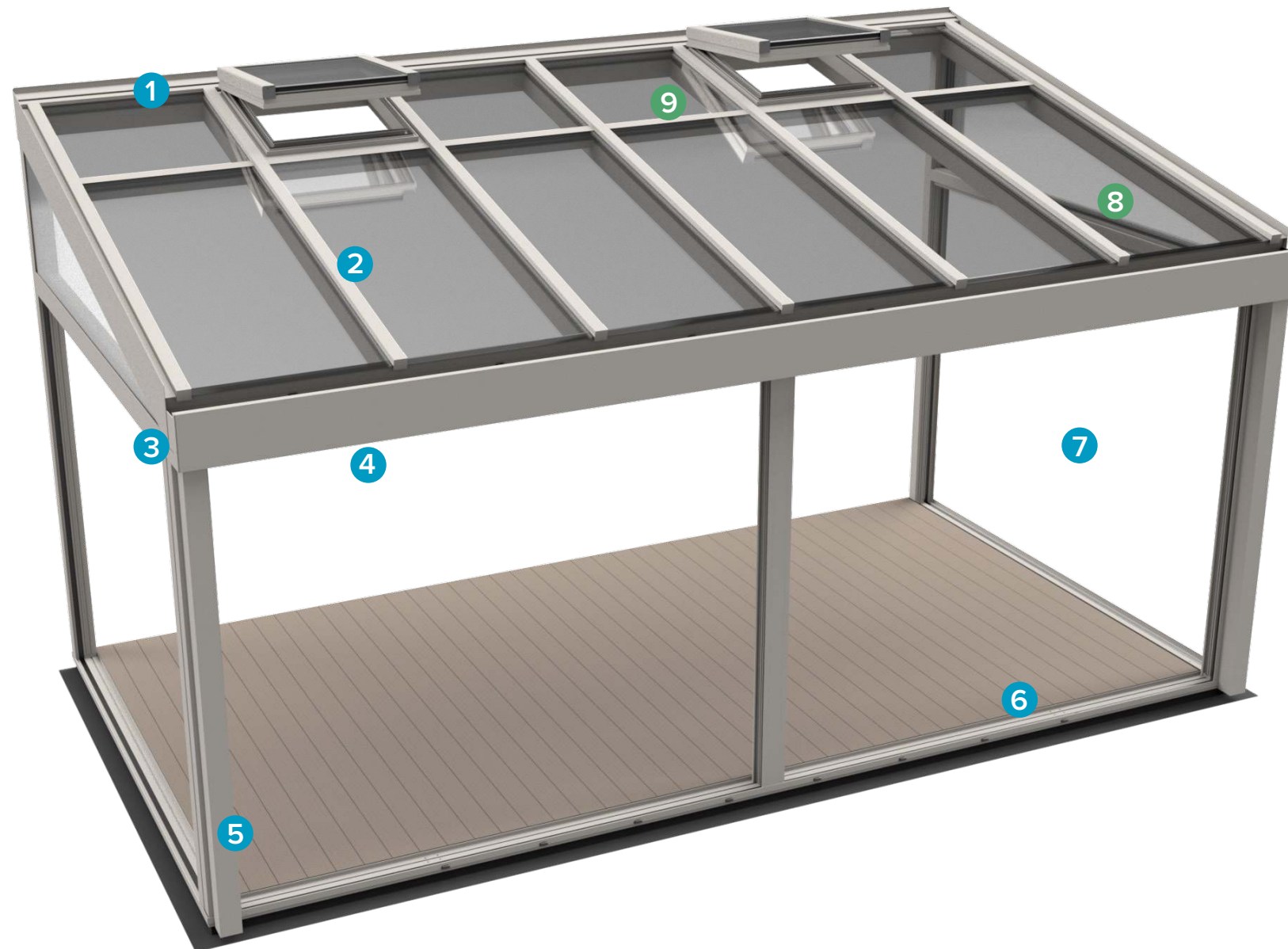
Individual designs

Modern & angular
Panel 276 for shading
Available in bi-coloured finish

5

5 post types

Corner post
Middle post
Recessed middle post
Protruding middle post
Post adjustable by 90° to 180°



6

Floor connection with basic profile

Basic profile incl. EPDM foil
Installation height with Stadur

7

Element combinations Direct glazing (skylight)

Adapted to the Sunparadise systems:

- Supertherm 80
- Monoslide 80
- Thermoslide 80

8

3 cross beam variants

Cross beam 70
Cross beam 135
Cross beam 135 incl. panel 276 for shading

9

2 roof latticework variants

Transom 42, glass-dividing
Transom 109, glass-dividing

Individual options

LED lighting in the rafter and cable duct
Snow trap
Skylight Komet 55
Additional options



Surface load

Up to 5.0 kN/m²
Higher surface loads on request



EN 1090

Process certified as per standard
Proof of stability on request
EXC 2 (public buildings)



EN 13947 / EN ISO 10077

Heat transfer coefficient calculation with proof
and declarations of performance on request



Span

Up to 6.7 m without steel or middle post
Larger spans possible with middle post



Roof pitch

from 5° up to 45° possible



Roof depth

Up to 6.7 m available
Larger roof depths on request

HAWAII 80 2.0 - the features

Perfect thermal insulation

The outstanding insulation values of the conservatory structure are achieved by:

- Precise thermal insulation of the inner and outer profiles with polyamide bars and additional XPS rigid foam insulants
- Stop profiles that ensure a smooth transition from the substructure elements to the support structure, supplied with the delivery
- Option to install triple glazing in the roof as with the substructure elements

Easy and safe installation

Easy and quick installation of the roof structure thanks to its sophisticated design:

- Quick element integration thanks to circumferential battens
- Integrated shading and lighting
- Specially developed connection technology stabilises the frame during assembly
- Reliable drainage of the structure thanks to basic profile incl. EPDM foil
- Ground installation with supplied, made-to-measure Stadur insulation

Guaranteed stability

The innovative joining solution guarantees stability even without glass:

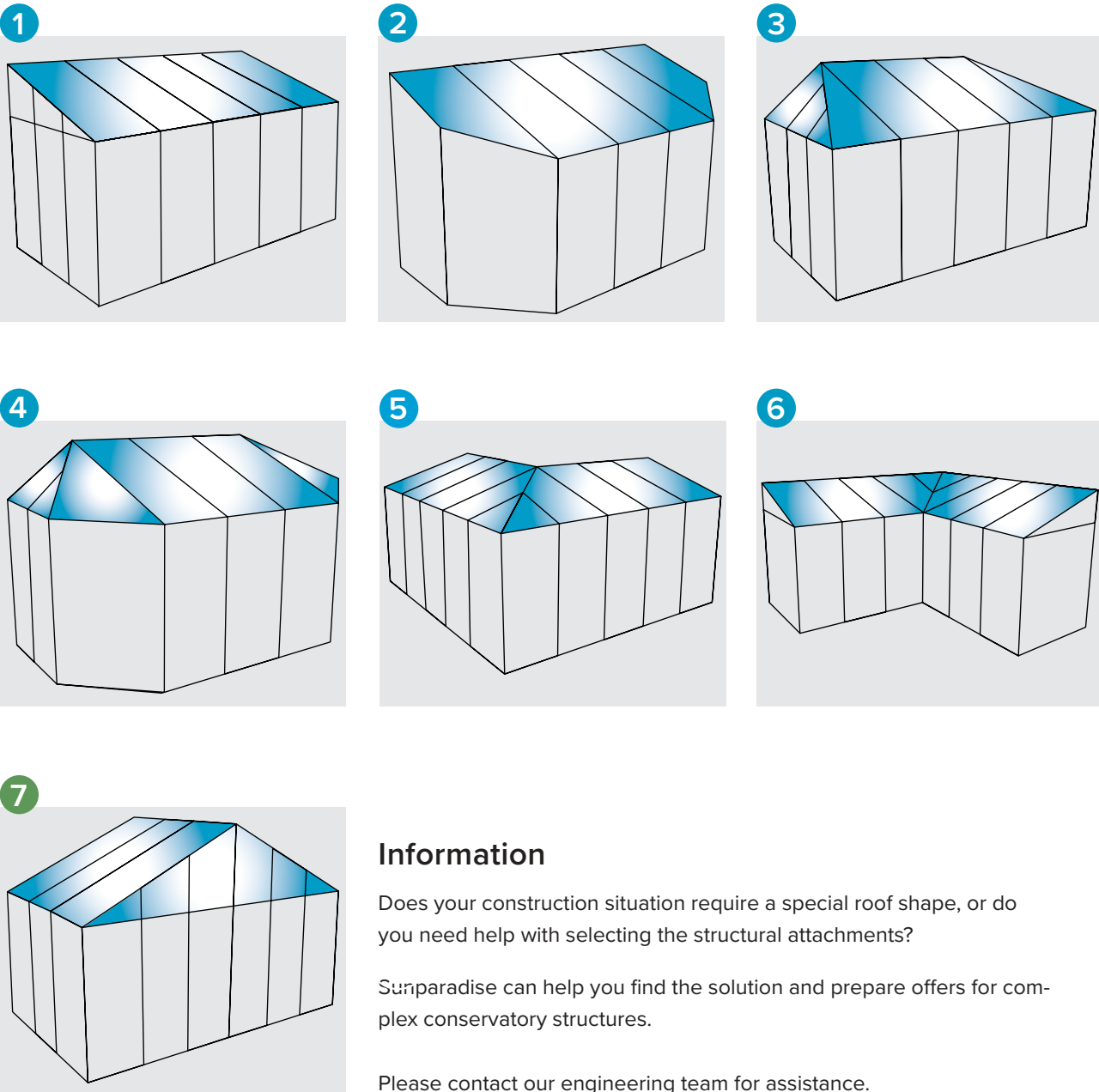
- Specially designed joints between eaves carrier and post made of high-quality steel
- Significant profile walls for maximum stability
- Lightweight construction, no steel in the eaves carriers



The roof types

Our 6 standard roof types

We offer 6 standard roof types that can be quickly and easily planned and calculated. The HAWAII 80 conservatory roof provides the ideal solution for any construction situation. Besides these standard roof types, individual roof types can also be adapted to the local surroundings and planned and implemented according to customer requirements.



Information

Does your construction situation require a special roof shape, or do you need help with selecting the structural attachments?

Sunparadise can help you find the solution and prepare offers for complex conservatory structures.

Please contact our engineering team for assistance.

1 Wall connection

Features

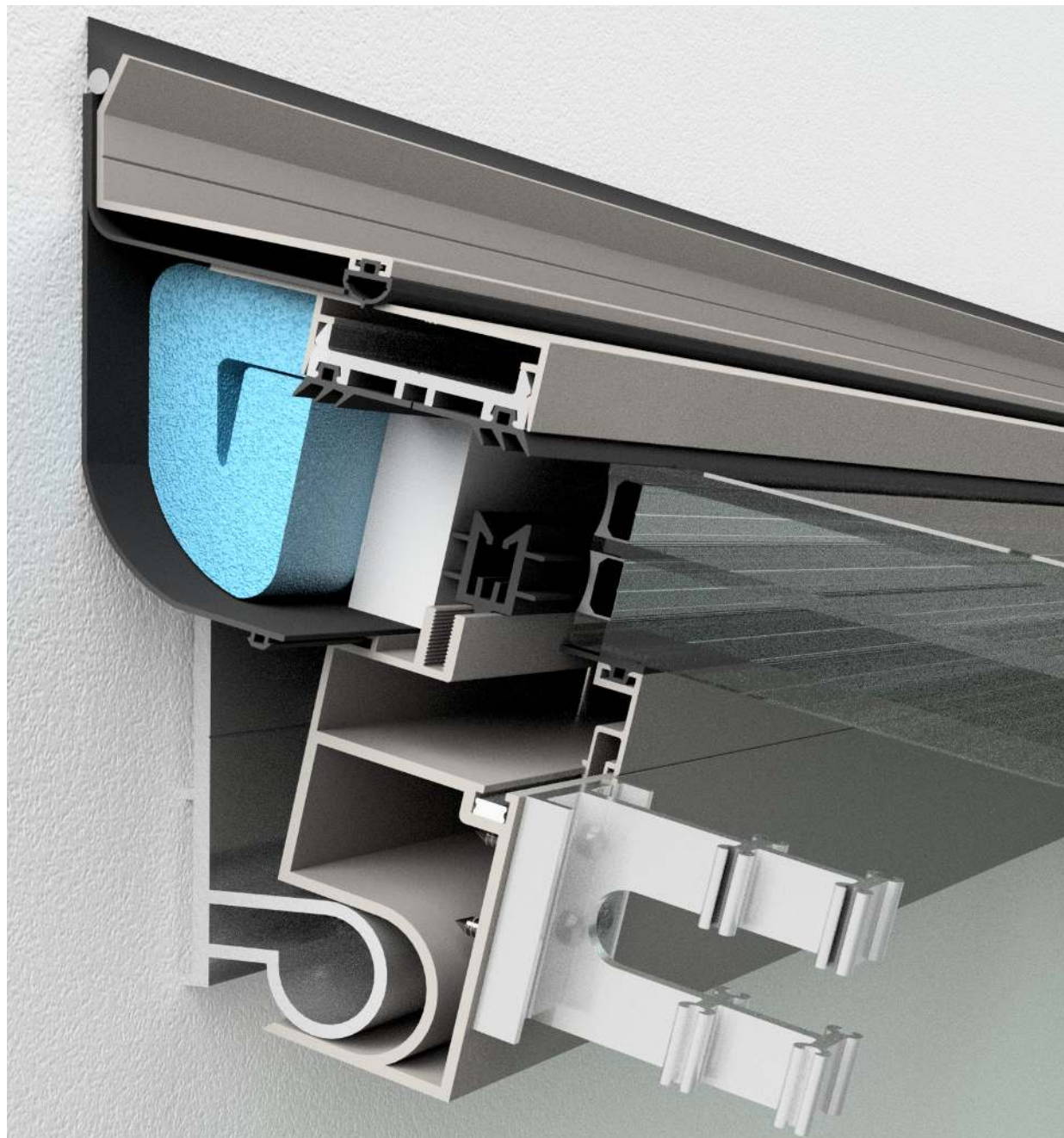
Two-piece wall connection profile enables the implementation of all 6 standard roof types

Roof pitches from 5° to 45° possible

Optional cable duct available for LED cable routing and for housing the lighting control unit

Additional LEDs can be integrated into the cable duct

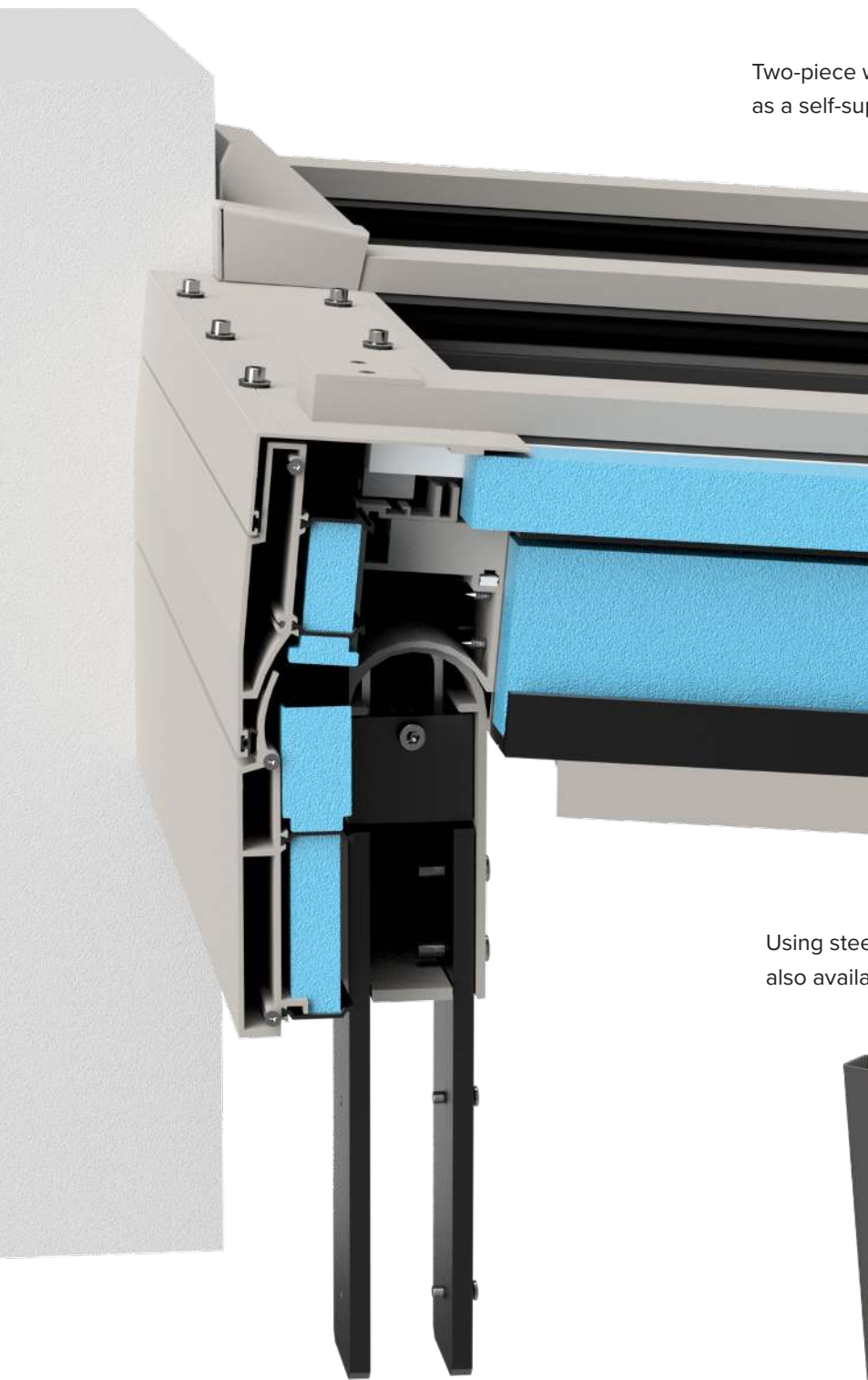
Stable rafter support



Two-part wall connection profile, also available as a self-supporting version.

For bridging non-load-bearing components and reducing the number of fixing points, e.g. in ETICS systems.





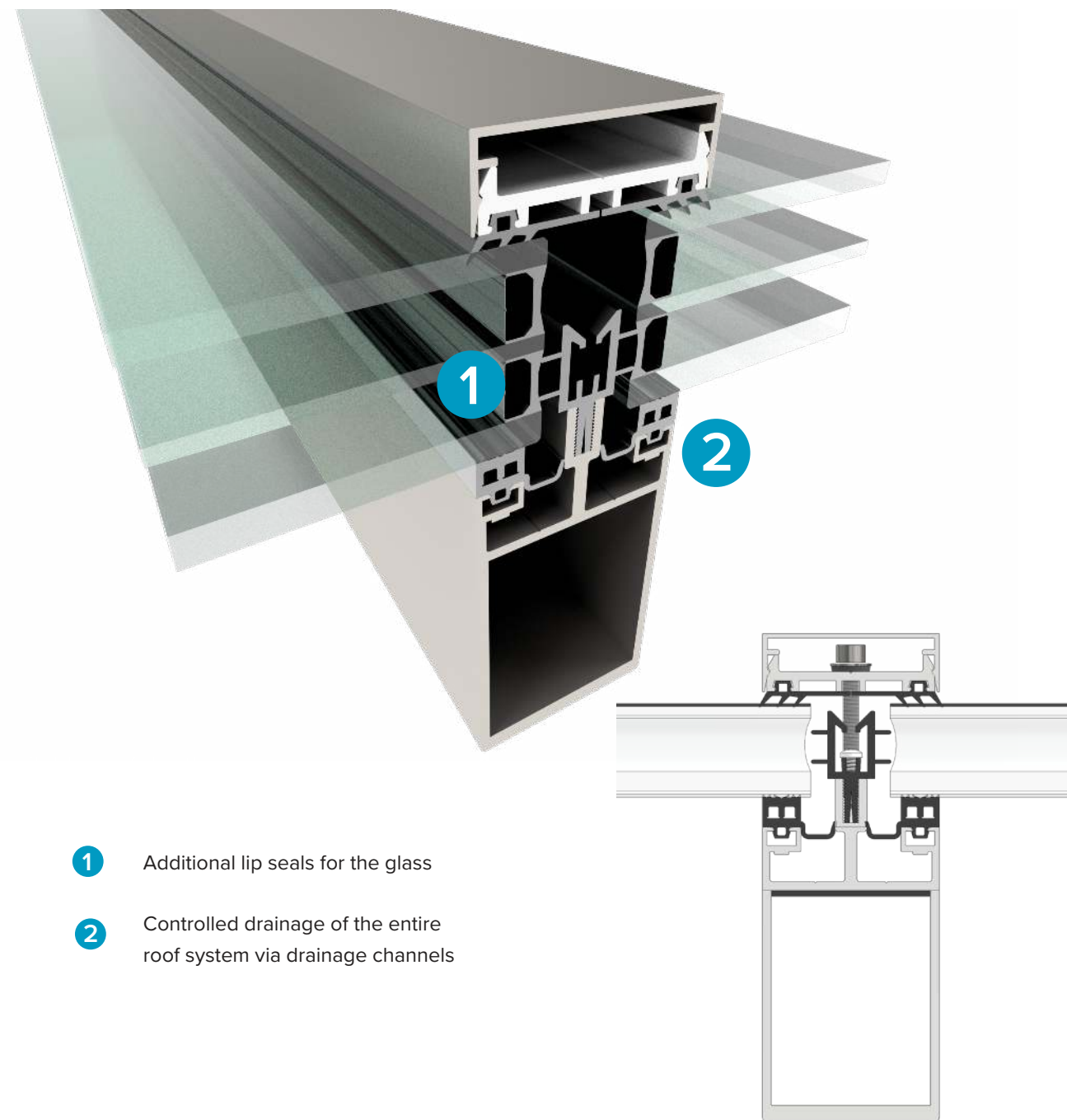
Two-piece wall connection profile, also available as a self-supporting version with roof overhang.

Using steel posts with welded mounting plates, also available as a freestanding version.

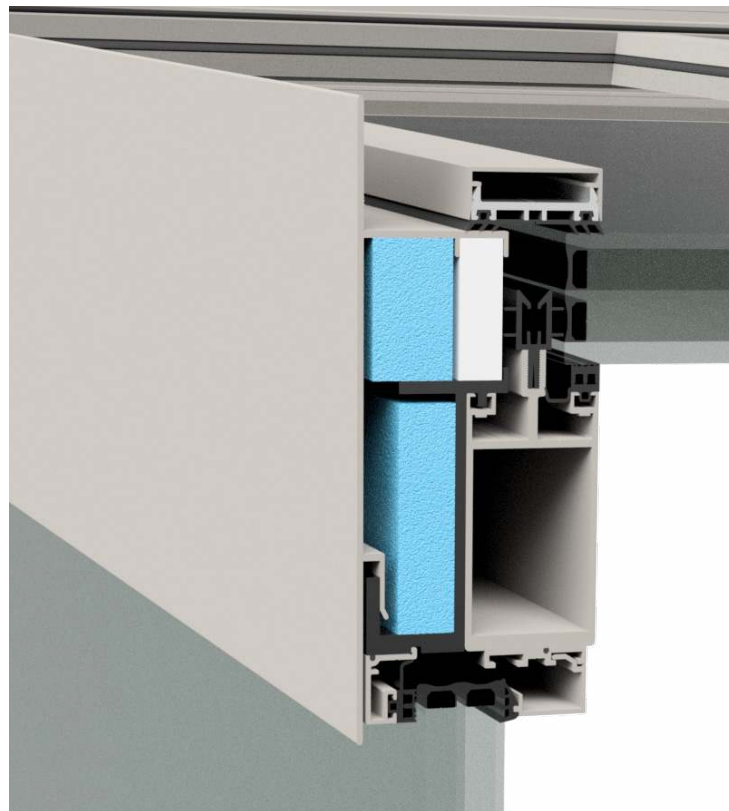


2 Rafter

Plane rafter 101 / 143 / 188



- 1 Additional lip seals for the glass
- 2 Controlled drainage of the entire roof system via drainage channels



Edge rafter 101



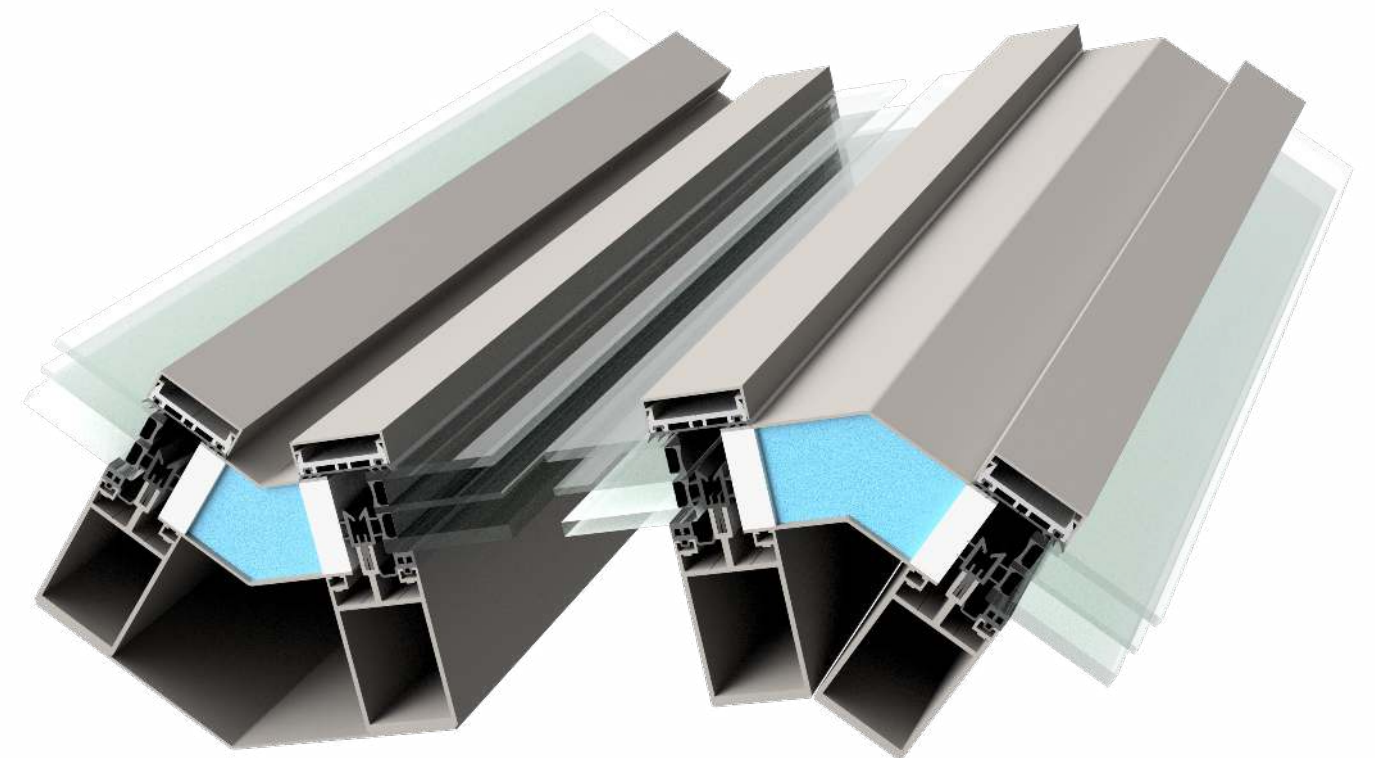
Wall rafter 101 / 143 / 188



1 Plane rafter 101

2 Plane rafter 143

3 Plane rafter 188



Hip-/ Valley rafter 101

3 Eaves carrier

Features

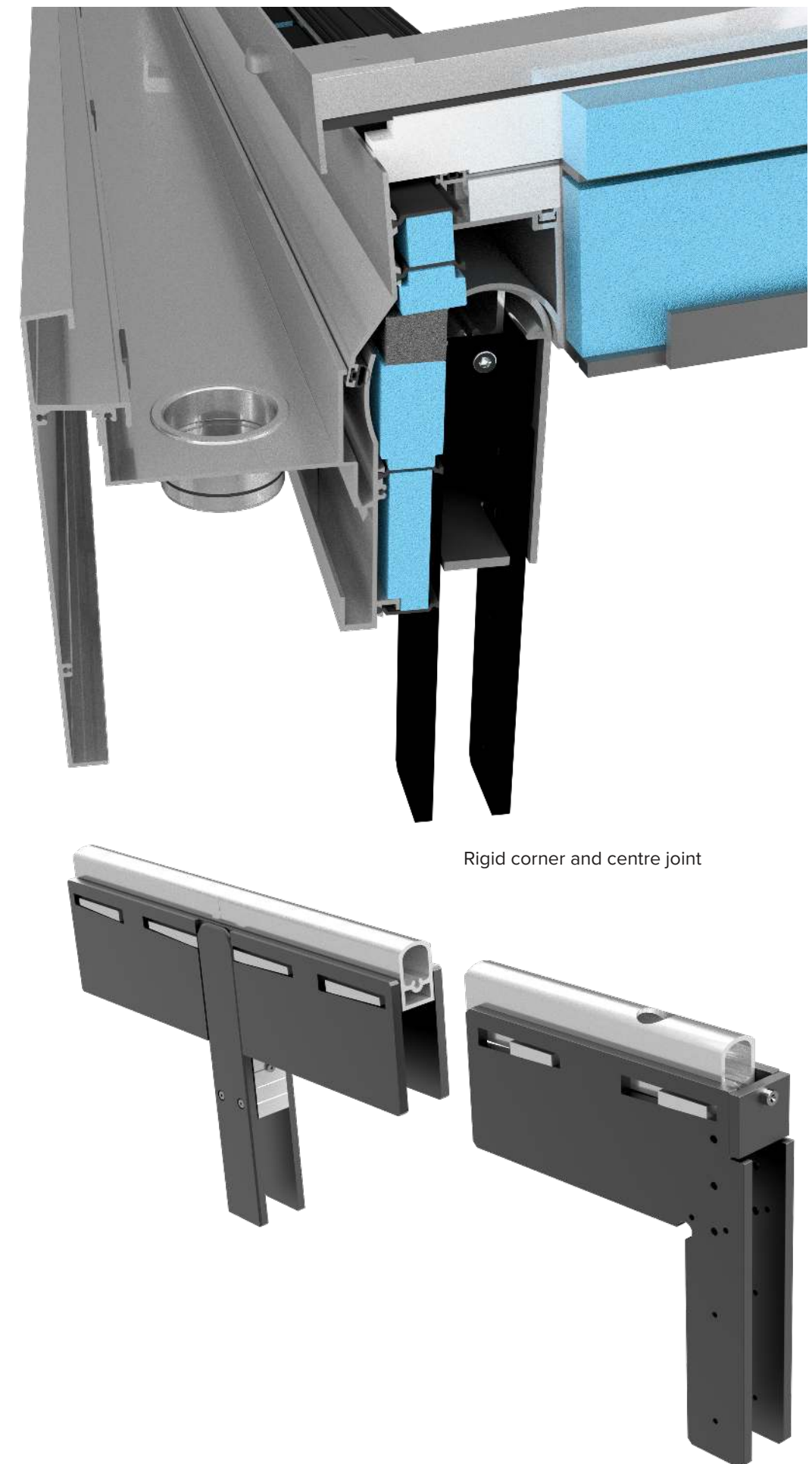
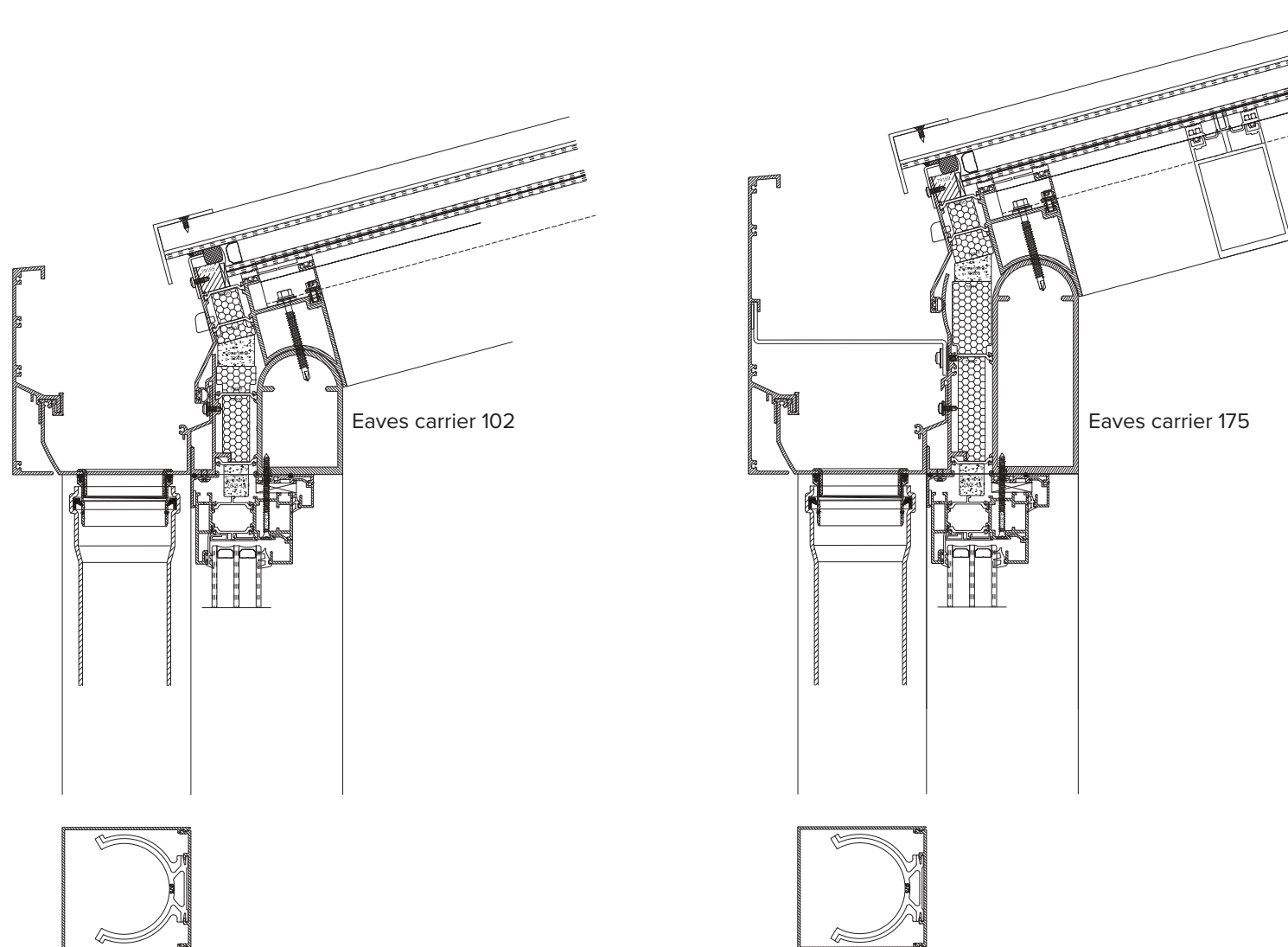
The beams are available in two versions, depending on the structural requirements:

Eaves beam 102

Eaves beam 175

Thanks to the specially developed rigid connector to the post, steel inserts are no longer required in the front beam. The stability of the supporting structure is guaranteed in accordance with EN 1090 without the bracing effect of the glass.

The rocker profile allows roof pitches of 5° to 45°.



Rigid corner and centre joint

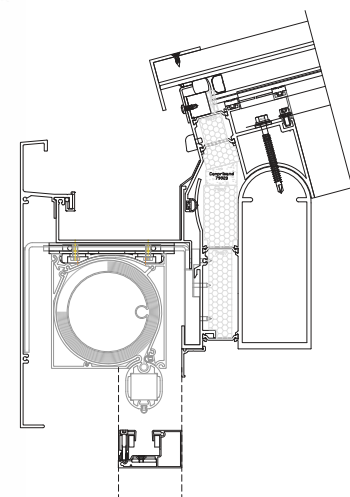
5 Post types and downpipes



Modern, angular design



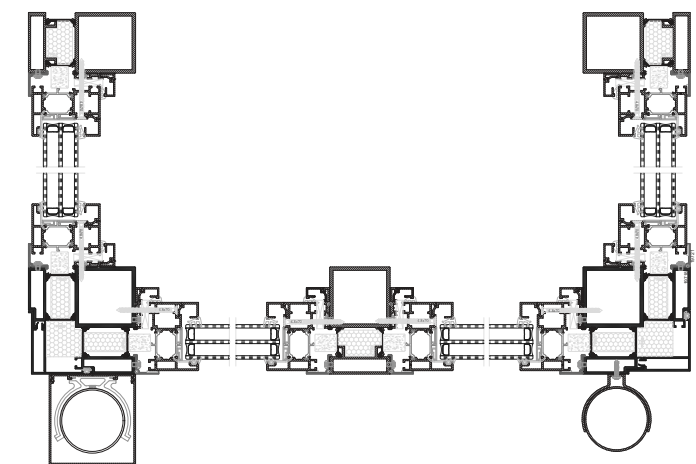
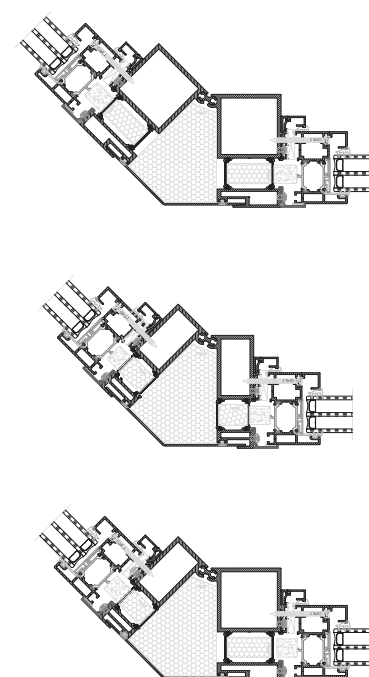
Panel for the integrated shading



Corner post with
drainage cover

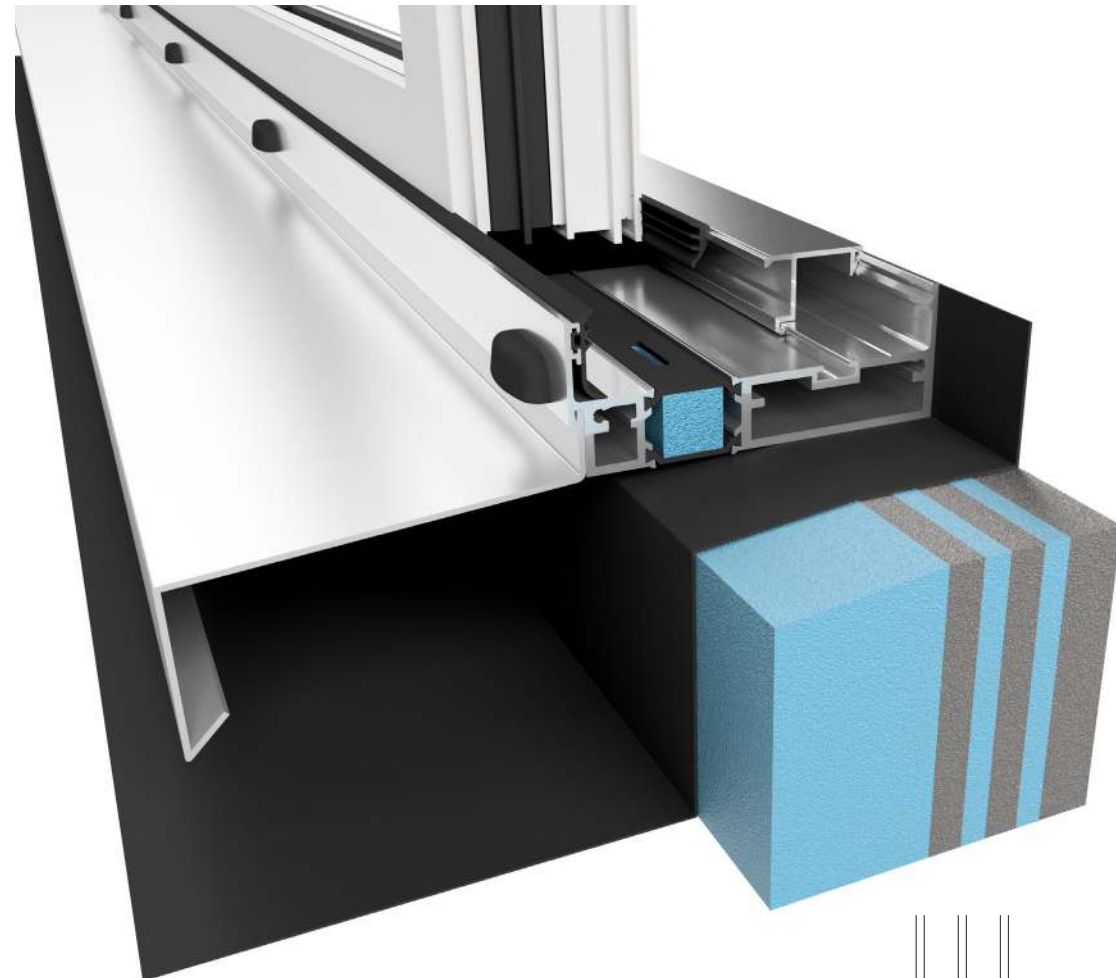


Corner post with
aluminium downpipe



6 Floor connection with basic profile

Basic profile incl. EPDM foil and Stadur floor structure

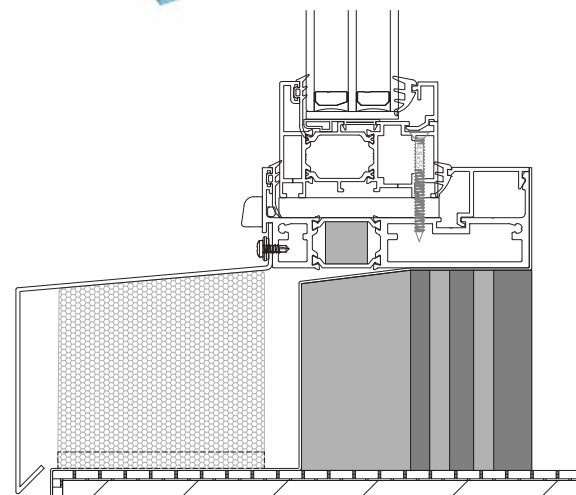


STADUR
MADE IN GERMANY

STADUR ProfileTec & FrameTec — The thermal insulation solution for frame extensions and substructures.

- Excellent thermal insulation; heat bridges are prevented
- Weather and rot resistant
- High compression and bending strength
- Excellent screw extraction values
- Ready-made with respect to length, width and profile depth

Additional information at: www.stadur.com



Information

When using the basic profile incl. EPDM foil, Sunparadise guarantees controlled drainage of the structure.

7 Element combinations

Direct glazing (skylight)



Simple and quick glazing of the triangular skylight using glazing beads (only possible in combination with wall posts)

Particularly suitable for small skylight glazing (feasibility depends on roof depth and snow load)

More light incidence thanks to low profile heights
Element surround also via external stop and internal glazing bead

8 Option: cross beams



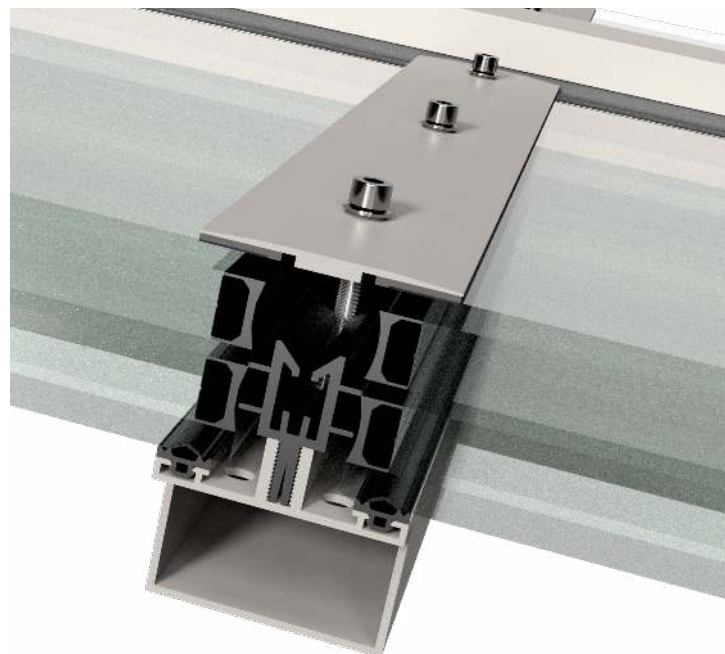
Cross beam 135 incl. panel 276
for shading

Cross beam 135

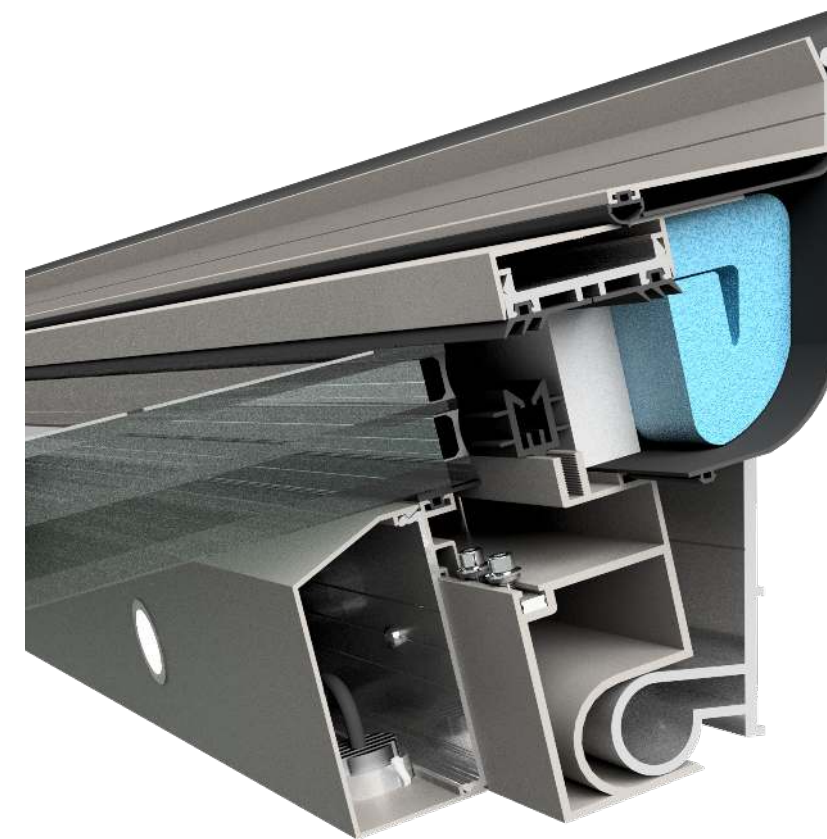
Cross beam 70

9 Option: transoms

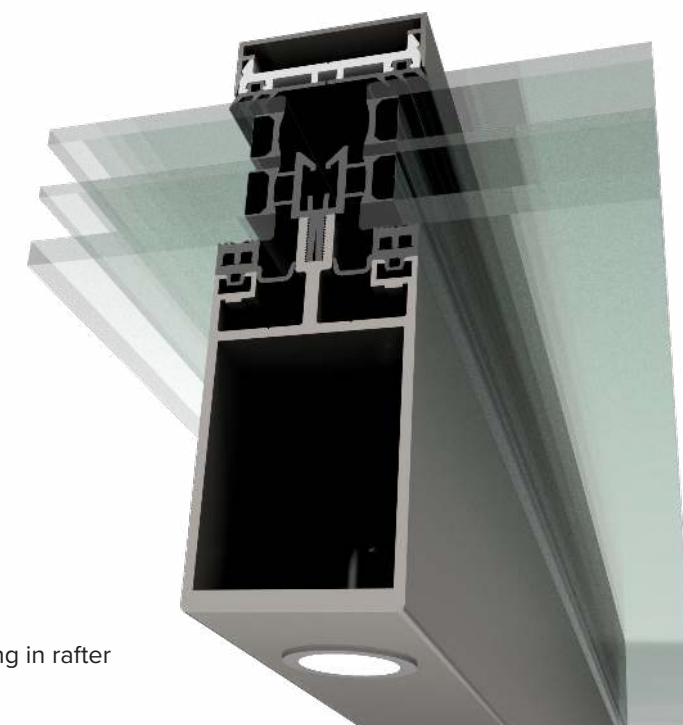
Transom 42 / 108.5 glued / bolted



Additional options



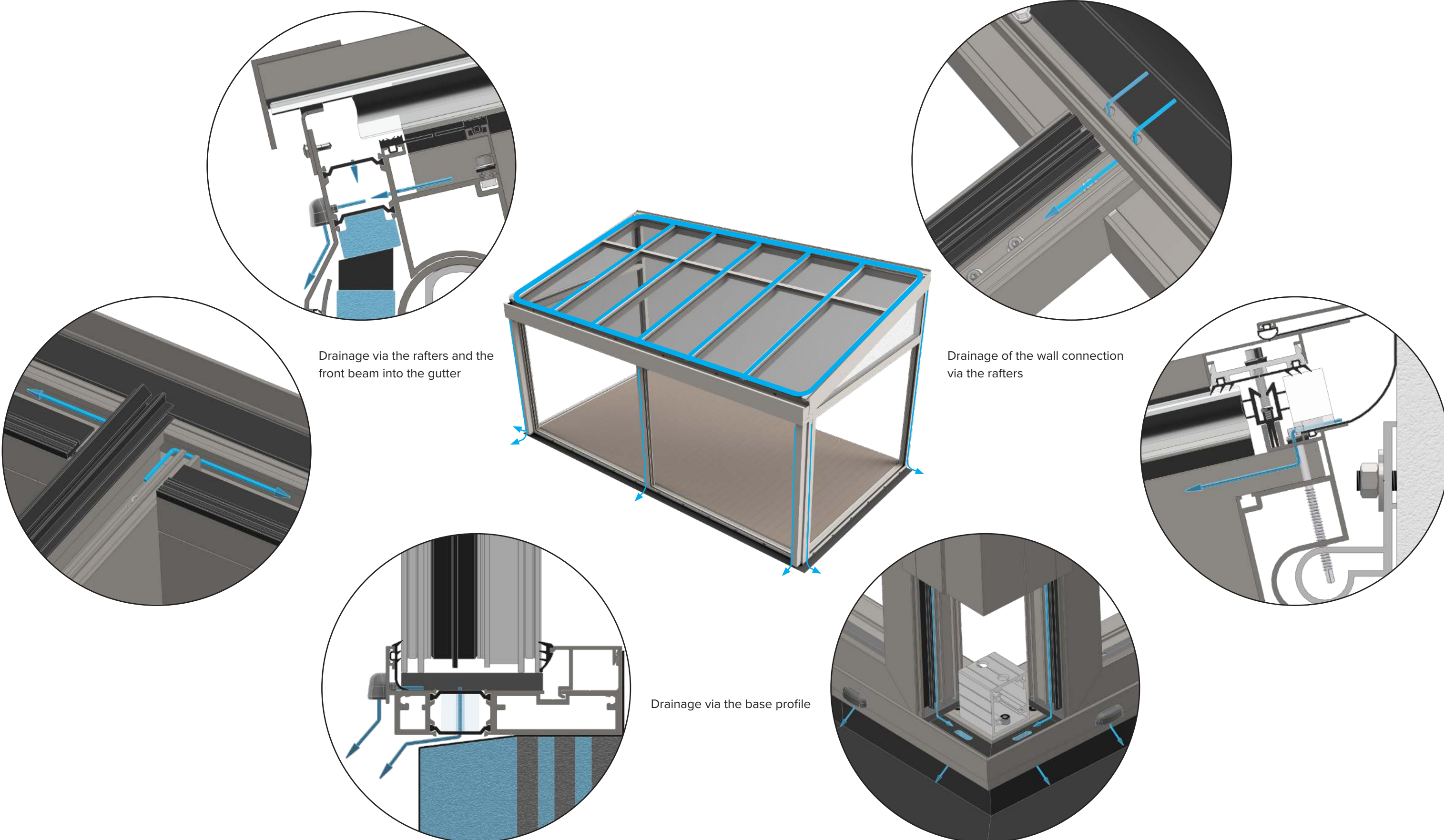
Optional cable duct available for routing the LEDs' cables
and housing the lighting control unit.
Additional LEDs can be integrated into the cable duct.



LED lighting in rafter

Internal drainage

Water ingress and condensation are drained away in a targeted manner via wall connections, rafters, eaves, posts and base profiles.



Additional options

Snow trap



Skylight "Komet 55"

The roof glazing of the HAWAII 80 can be expanded with the Komet 55 skylight.

The position of the skylight can be planned and realised individually.

The skylight can be operated electronically or manually.



Additional individual options

Every HAWAII 80 2.0 can be supplemented with additional options. This makes any conservatory unique and fulfills individual wishes and requirements.

Roof, sub-roof and vertical shading

Designed for the HAWAII 80 2.0

Complete sets for quick and easy installation

Additional downpipe covering

Optional for middle and corner posts without downpipe

For a uniform appearance of the conservatory roof

HTC calculation

To calculate the heat transfer coefficient, the insulation values of profiles (U_f) and glass (U_g) are determined. Via linear allowance values (ψ values) for profile combinations and glass edge seal, heat bridges are considered in the calculation.

The entire roof structure (glazing, elements, roof) are considered in an HTC calculation for the HAWAII 80. Very good HTC values can be achieved by adapting the roof and the element systems.

Example: HTC value: $0.86 \text{ W/(m}^2\cdot\text{K)}$



Roof

System:
HAWAII 80 2.0

Glass:
Triple glazing, 52 mm / $0.6 \text{ W/(m}^2\cdot\text{K)}$

- 1

PST Supertherm 80, 2 sliding panels, central opening
- 2

PST Supertherm 80, 1 sliding panel
- 3

Direct glazing
- 4

PST Supertherm 80, 1 sliding panel
- 5

Direct glazing

Glass: triple glazing, 52 mm / $0.6 \text{ W/(m}^2\cdot\text{K)}$

!

Information

The HTC calculation depends on the structure and is available on request.

Sunparadise partner

Sunparadise has been a reliable partner for over 25 years, offering a broad range and customised products. These allow you to offer your customers the ideal solution for the most varied applications, such as terraces, balconies and facades. Benefit from the advantages of competent advice, personal assistance and mutual cooperation.

Advice and assistance right from the start



Help with project implementation

We offer you assistance ranging from project planning to installation.



Complete delivery

All our systems are prefabricated for easy on-site installation.



Our service does not stop there

Our competent team will gladly assist you in the case of questions or problems.

Certified quality

Accredited certificates prove the quality and expertise behind the systems and services by Sunparadise.

- Quality management in accordance with **ISO 9001**
- Environmental management in accordance with **ISO 14001**
- CE- standard for supporting structures according to **EN 1090**
- CE- standard for elements according to **EN 14351-1**

