SAPA ROOF GLAZING 5050

ROOF AND SLOPED GLAZING WITH FREEDOM OF DESIGN

sapa:

By Hydro

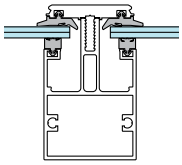
Sapa Roof Glazing 5050

Sapa Roof Glazing 5050 can be used to create almost any shape of roof (single-pitch, saddle or cantilever). In static loading, glazed roofs can be built with large spans. Frame profiles and dividing profiles are 50 mm wide and contain a longitudinal insulator to maintain a low U-value. Horizontal, vertical and dividing profiles are available in a choice of depths. Rebate for double- or triple-glazed unit. External glazing beads are 7 mm high and ensure stability and good water run-off.

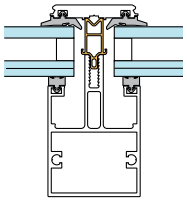
Sash and frame profiles are available for incorporating air and smoke vents. Roof glazing can easily be combined with facade systems 4150, 4150 SX and 5050 SG. Sapa Roof Glazing 5050 is also available as an uninsulated version with rebates for single glazing.

5050 gives exceptional freedom of expression and is easily combined with our facade systems.

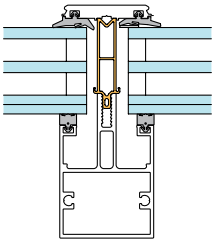
Roof system 5050, clear anodised finish.



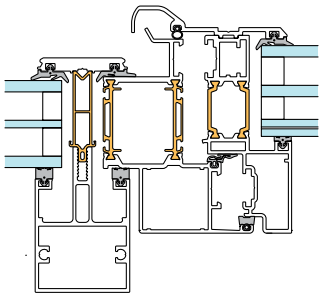
Single-glazing



Double-glazing



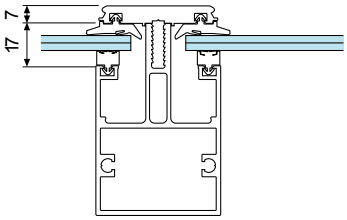
Triple-glazing



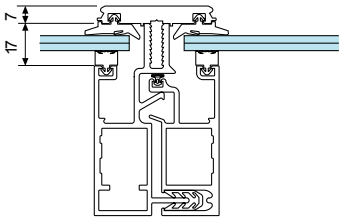
Vent, double- or triple-glazed unit

Insulated or uninsulated profiles. Profile width. 50 mm with external glazing bead.
Vents for fresh air and smoke ventilation.

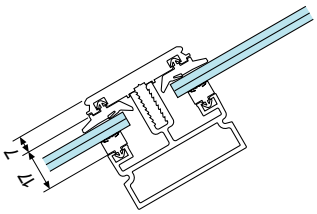
Vandalorum with roof glazing 5050, Värnamo, Sweden.



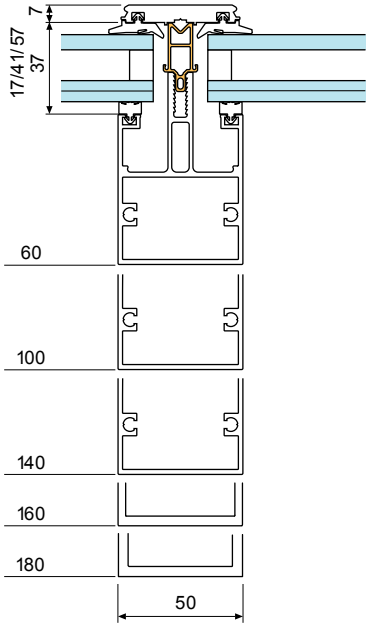
Frame profile, vertical single-glazed



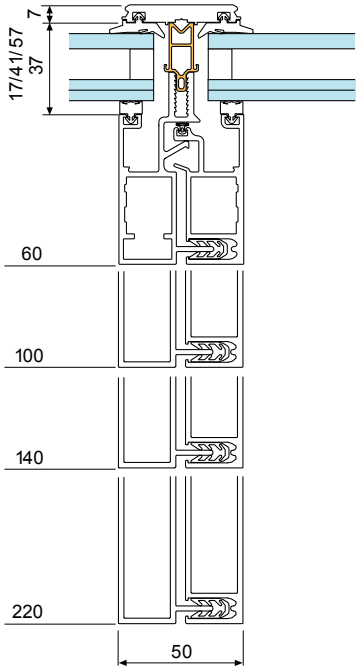
Dividing profile, vertical single-glazed



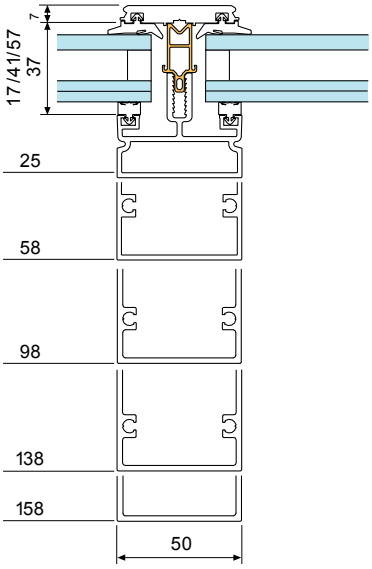
Frame profile, horizontal single-glazed



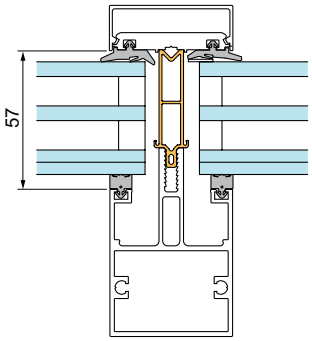
Frame profile, vertical, double-glazed unit



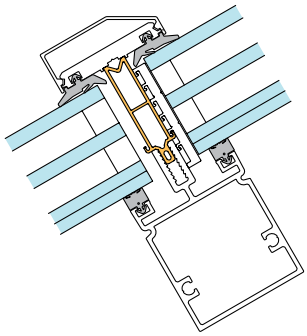
Dividing profile, vertical, double-glazed unit



Frame profile, horizontal, double-glazed unit



Triple-glazed alternative with vertical decorative profile



Triple-glazed alternative with horizontal decorative profiles, 45° or 60° bevel

U-values for roof glazing, pitch correction

When glazing is installed in a roof it gives a higher U-value than when it is installed vertically in a facade. The U-value at the centre of the glazing unit increases as follows:

	double-glazed	triple-glazed
Pitch 15°	+ 0.4 W/m²K	+ 0.3 W/m²K
Pitch 30°	+ 0.3 W/m²K	+ 0.2 W/m²K
Pitch 45°	+ 0.2 W/m²K	+ 0.1 W/m²K

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U-values glass*	double-glazed. Spacer: warm edge. U_g W/m²K (centre point)							
Profile share	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
10%	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.1
15%	1.7	1.7	1.8	1.9	2.0	2.1	2.2	2.2
U-values glass*	triple-glazed. Spacer: warm edge. U_g W/m²K (centre point)							
Profile share	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
10%	0.87	0.96	1.0	1.1	1.2	1.3	1.4	1.5
15%	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.6

** Theoretical U-value calculation with allowance for glass, profile proportion and linear factors for edge zone effects according to EN 10077-1/2. Note that pitch corrections are not included in the table values.*

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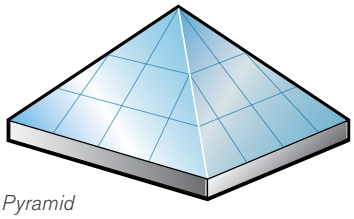
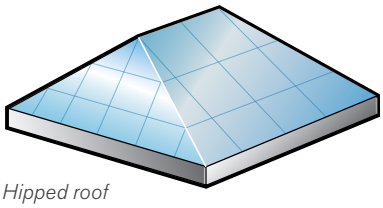
Glass thickness	Single-glazed 6–11 mm Glazing unit 24–35 mm
Frame profiles	Rectangular, I profiles, T profiles, dividing profiles
Frame profile depth	Vertical: 60–220 mm Horizontal: 25–158 mm
Decorative profiles	Vertical: rectangular Horizontal: bevelled
Vents	Smoke vents and fresh air vents are easily installed in roof glazing. Designed to be installed at the time of glazing. Vents are designed to fit in the glass rebate. This makes it easy to replace with a glazing unit or add more vents. Smoke venting complies with EN 12101-2
Solar energy	Sapa Solar BIPV
Watertightness, class	R7 according to EN 12154
Airtightness, class	A4 according to EN 12152

Easy installation simplifies the building process.

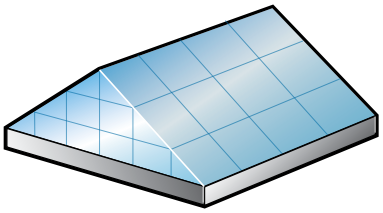
Sapa Roof Glazing 5050 shapes



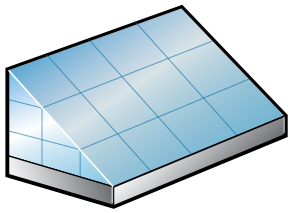
Pyramid



Hipped roof

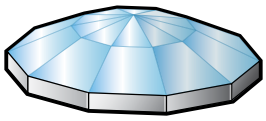


Saddle roof

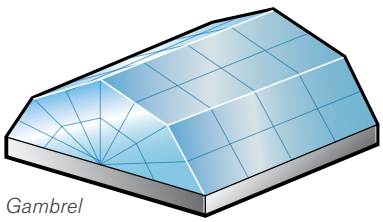


Single-pitch roof

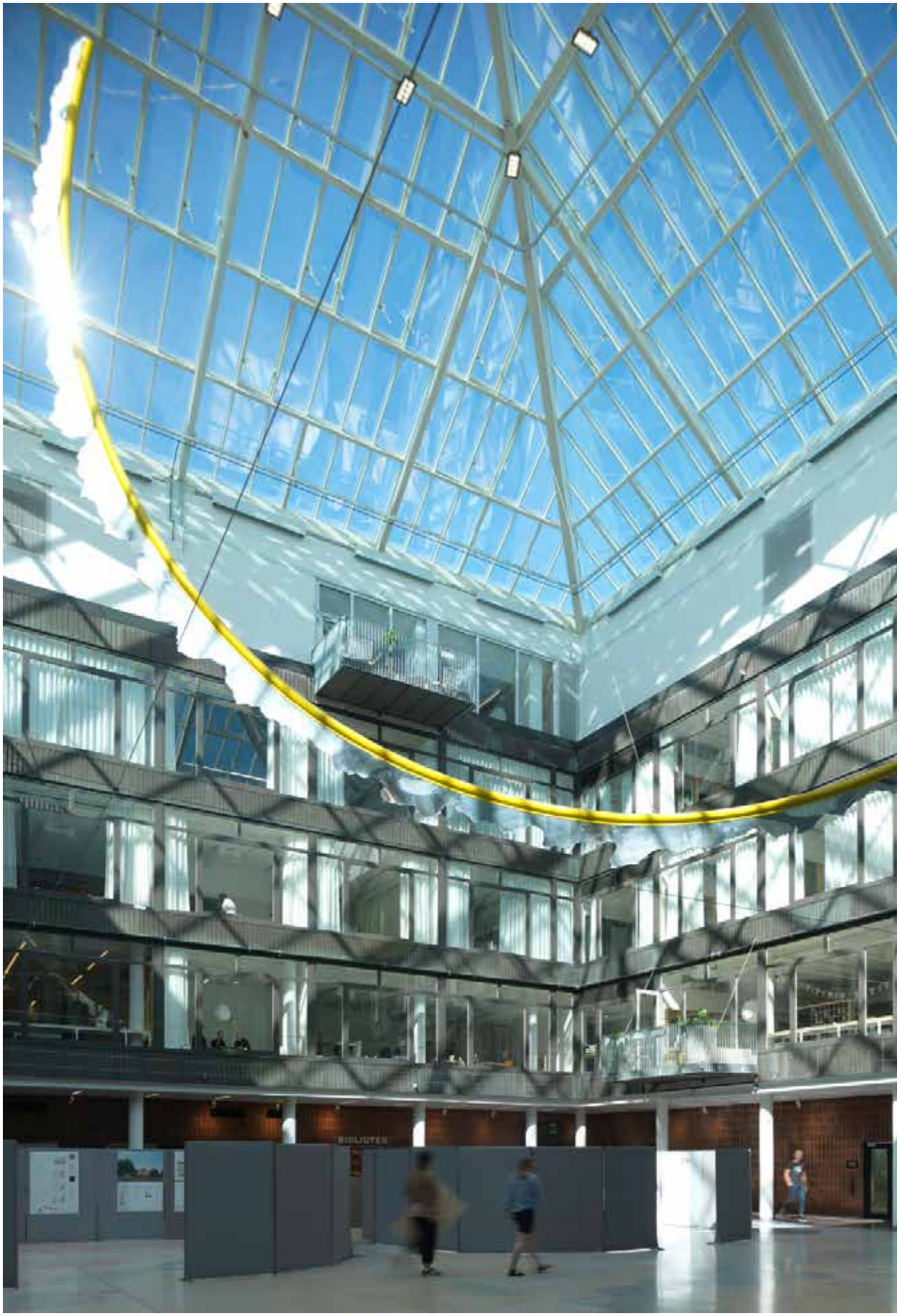
Project solution: Sapa Roof Glazing 5050 shapes



Polygonal



Gambrel

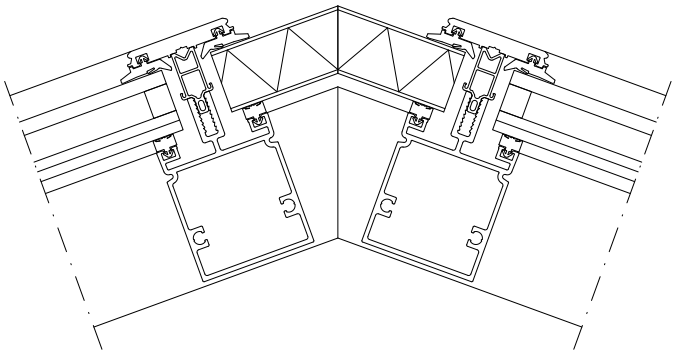


Chalmers University with roof glazing 5050, Gothenburg, Sweden.

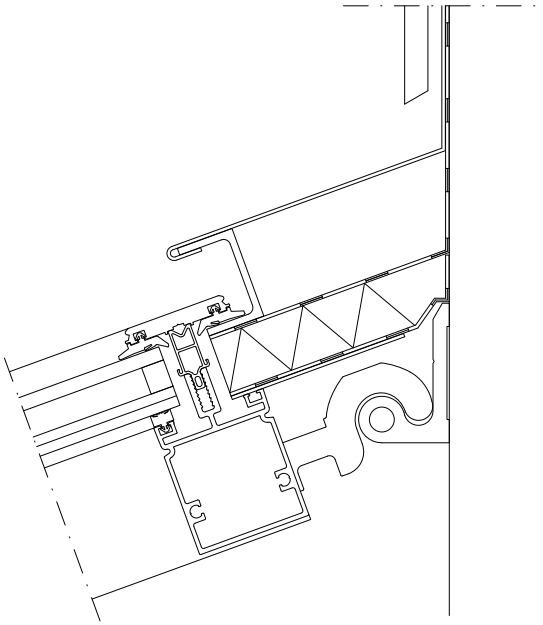
Chalmers University with roof glazing 5050, Gothenburg, Sweden.

Note

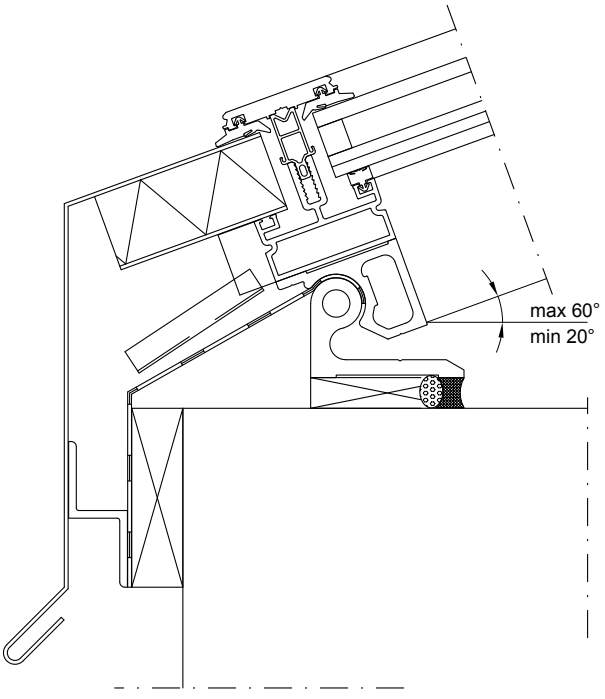
Minimum pitch 15°



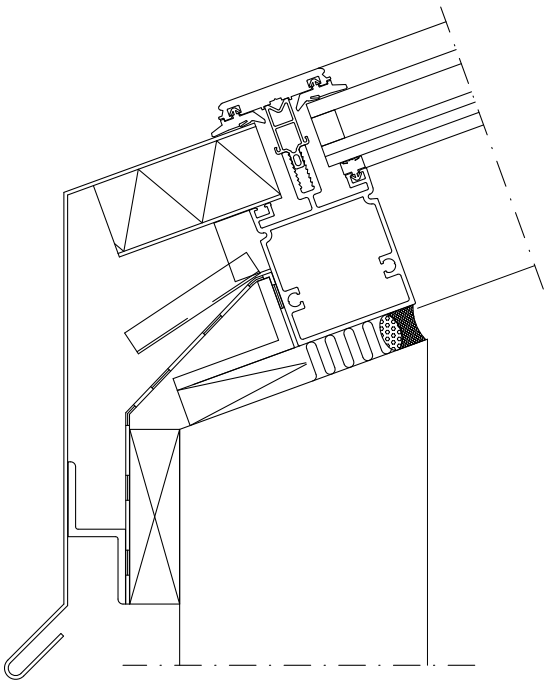
Ridge in saddle roof



Connection to wall at top edge of roof glazing



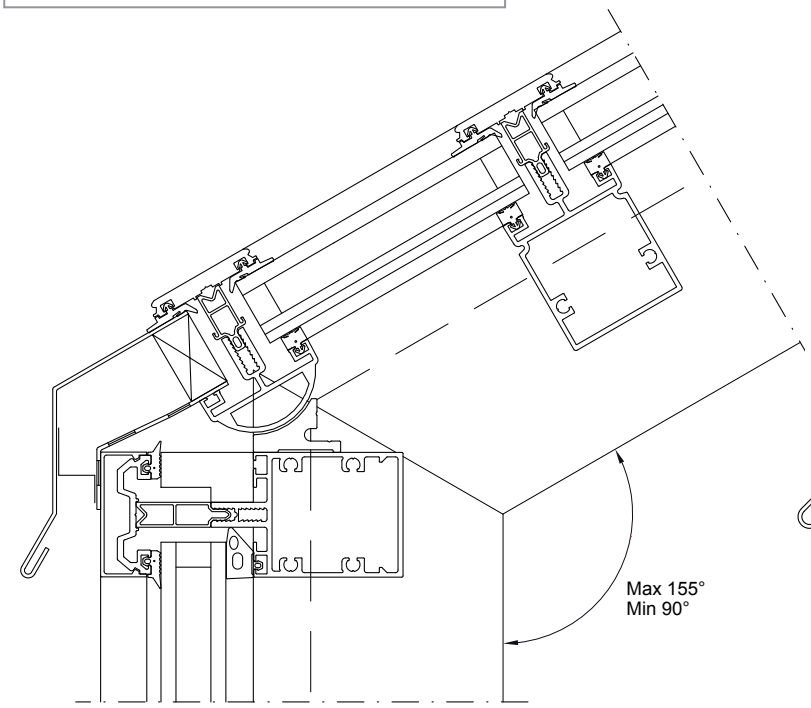
Connection to fascia at bottom edge of roof glazing



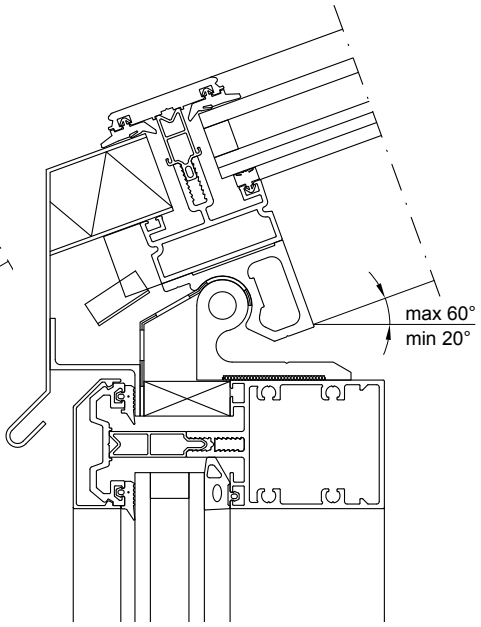
Connection to fascia at bottom edge of roof glazing

Note

Minimum pitch 15°

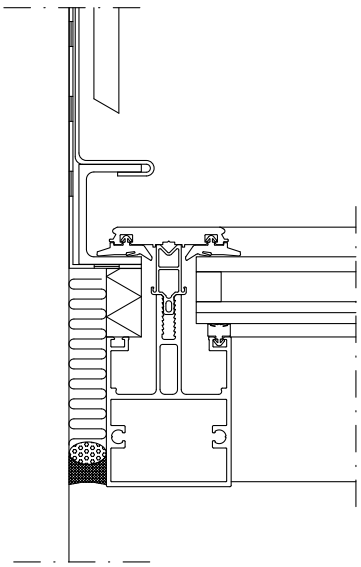


Transition from roof glazing to facade 4150

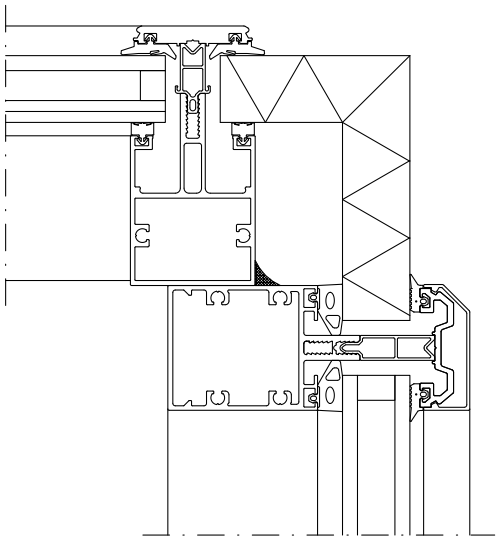


Transition from roof glazing to facade 4150

Sapa Roof Glazing 5050 Details of connections/transitions



Connection between side of roof glazing and wall



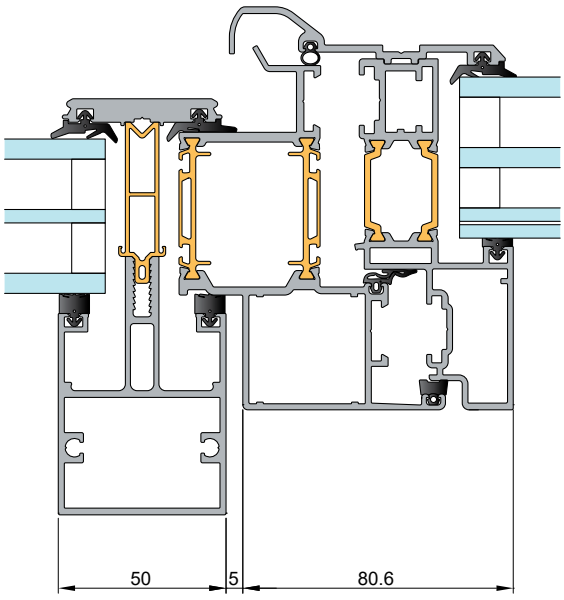
Connection between side of roof glazing and facade

Roof and sloped glazing with freedom of design

A common method of providing fresh air and smoke ventilation is to fit top-hinged outward-opening roof vents. Bottom-hinged roof vents provide better ventilation, but must be closed quickly when it rains. Vents are opened and closed using window motors, chain or rack-and-pinion motors.

Fresh air and smoke ventilation vents are easy to install in roof glazing. Designed to be installed at the time of glazing. Vents are designed to fit in the glass rebate. This makes it easy to replace with a glazing unit or add more vents.

Fresh air vent



Triple-glazed fresh air vent. Smoke vents complying with EN 12101-2 only available in double-glazed variant.

Trädgårdarna with roof glazing 5050, Örebro, Sweden.

sapa:

By Hydro

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