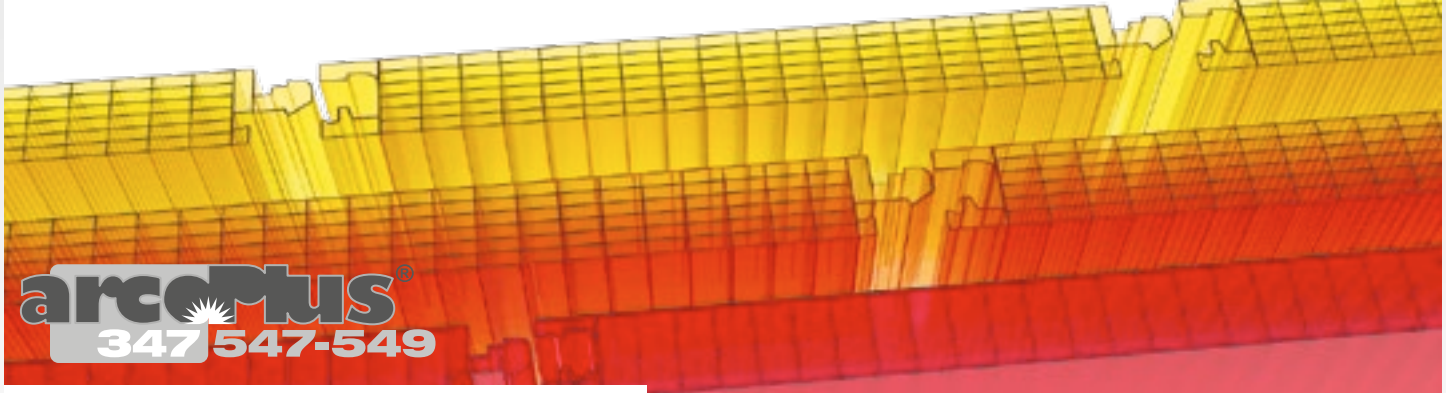
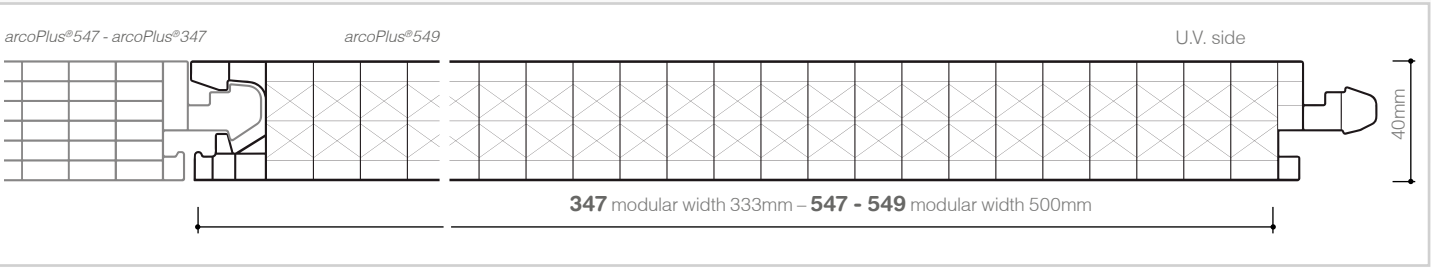


2.1 INTERLOCKING SYSTEMS



Modular system of multiwall UV protected polycarbonate for windows and translucent roofing applications

CALEIDO AR IR UV TECH
ANTIGRAFF BC BICOLOR UV UV-MATT

SPECIAL TREATMENT

PRODUCTION STANDARDS

Thickness	40mm
Structure	7 walls (347-547) - 9 walls (549)
Modular width	333mm (347)–500mm (547-549)
Panel length	no limit
Standard colors	see page 11
Special colors	on demand

TECHNICAL FEATURES

Thermal transmittance U	1,1 (347-547) W/m²K
	1,0 (549) W/m²K
Acoustic insulation Rw (ISO 717-1)	21 dB
Linear thermal expansion	0,065mm/m°C
Temperature range	-40°C +120 °C
U.V. rays protection	Coextrusion
Fire reaction EN 13501-1	EuroClass B-s1,d0

DESCRIPTION

arcoPlus®547 and arcoPlus®549 are modular systems of coextruded 7 walls and 9 walls polycarbonate panels with a thickness of 40mm, aluminium profiles, accessories and opening windows, designed for simple and versatile use.
All the systems can be used for roofing applications with a minimum slope of 7%.

ADVANTAGES

- Easy and low-cost installation
- Light transmission
- Resistance to U.V. rays and to hail
- Heat insulation
- High load resistance

APPLICATIONS

- Vertical windows
- Translucent curtain walls

CERTIFICATIONS

arcoPlus347-547-549

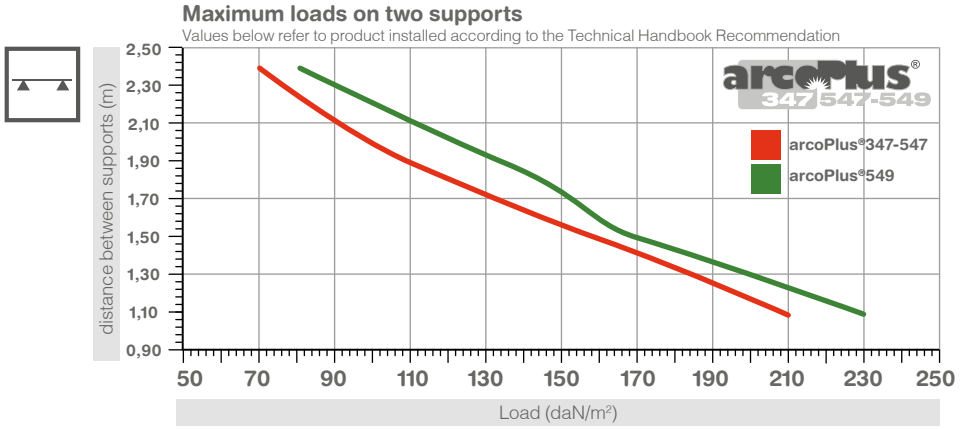
CCFAT COMMISSION CHARGÉE DE FORMULER LES AVIS TECHNIQUES

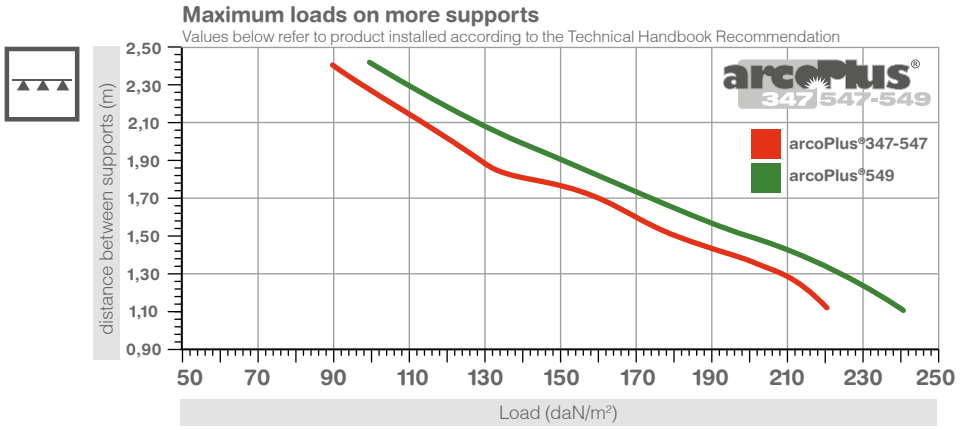
Document Technique d'Application
n°2/14-1610 *V1 published in 27/07/2016

arcoPlus547

DIBt Ab Zulassung
n°Z-10.-480 published in 23/12/2014

LOAD RESISTANCE

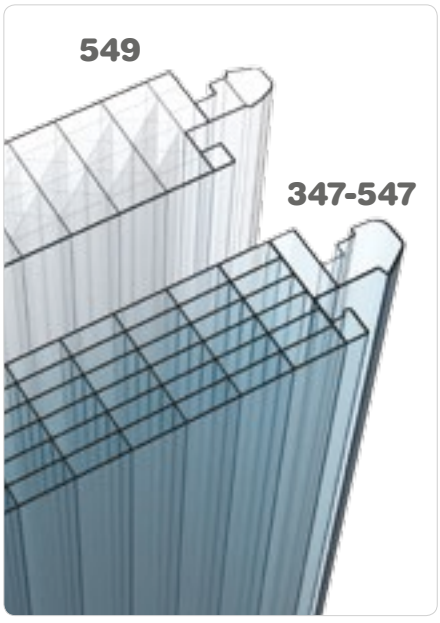




EASY AND LOW-COST INSTALLATION

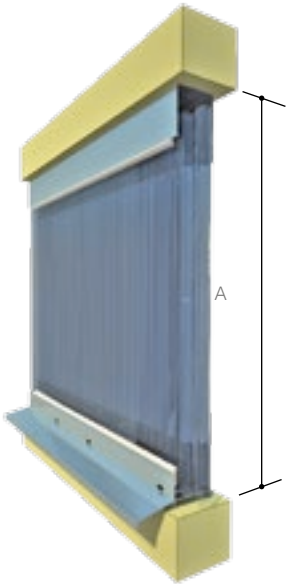
The 40mm-thick, 7 walls and 9 walls design with tongue and groove connection gives the panels remarkable flexural strength. It also allows the panels to be installed without the use of metal reinforcement frames (continuous glazing), thus eliminating heat loss due to the thermal bridges caused by these structures (discontinuous glazing).

For installations exceeding 2.2m, a suitable section-breaker profile must be installed to which the arcoPlus® panels can then be fixed. This is done using the specific brackets to give the system the necessary resistance to negative wind load and permit sliding due to thermal expansion (see load resistance graph).

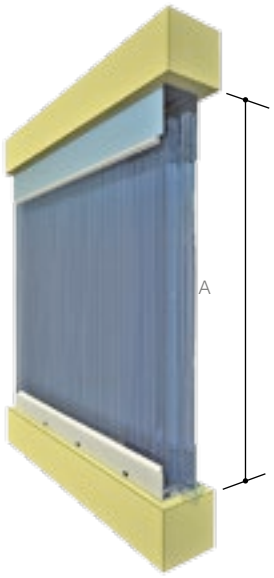


PROFILES

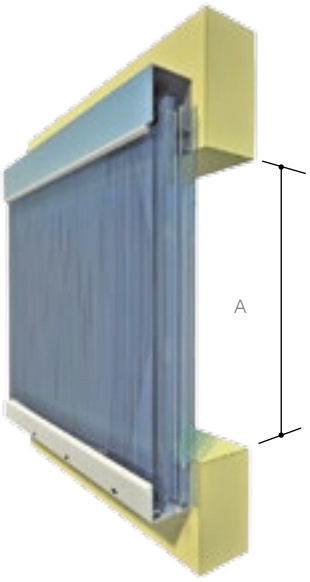
CALCULATION AND INSTALLATION EXAMPLES OF PANEL LENGTH (PL)



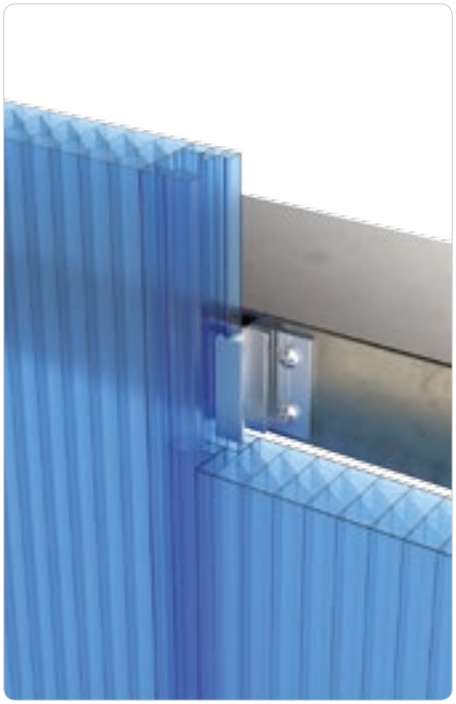
WITH EAVE
LP = A - 50 mm
(base profile without TT)
LP = A - 70 mm
(base profile with TT)
A = opening measure



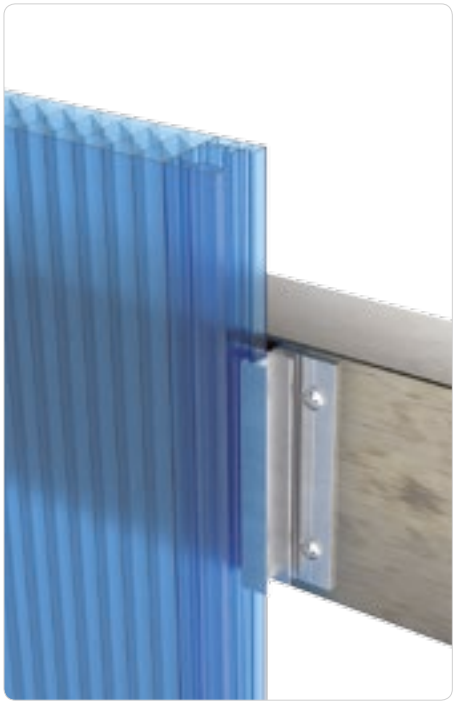
WITHOUT EAVE
LP = A - 45 mm
(base profile without TT)
LP = A - 60 mm
(base profile with TT)
A = opening measure



OUTSIDE OF THE BUILDING
LP = A + 95 mm
A = opening measure

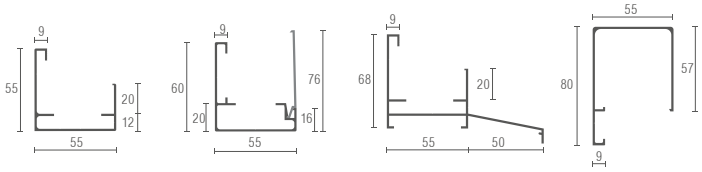


ALUMINUM BRACKET JOINT
Anchorage to existing structures by inserting aluminum bracket code 4050/60



REINFORCED ALUMINUM BRACKET JOINT
Anchorage to existing structures by inserting aluminum bracket code 4050/120

METAL PROFILES



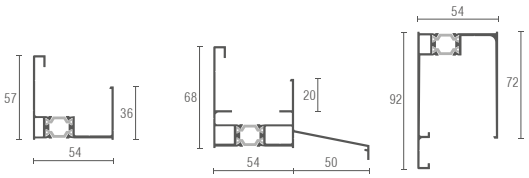
4047
Base
AL profile

4140
Base/side AL profile
with flap frontal opening

4046
Base AL profile
with drip sill

4045
Upper/side
AL profile

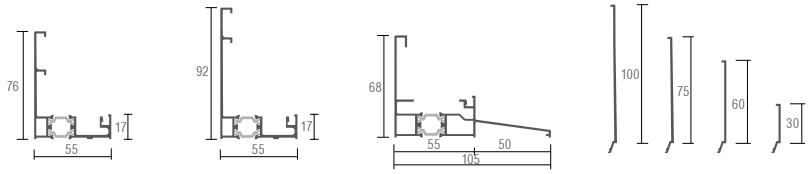
METAL PROFILES with thermal break



4587
Base
AL profile TB

4590
Base AL profile TB
with drip sill

4585
Upper/side
AL profile TB



4597
Perimetral short
AL snap profile TB

4598
Perimetral high
AL snap profile TB

4595
Base AL snap profile TB
with drip sill

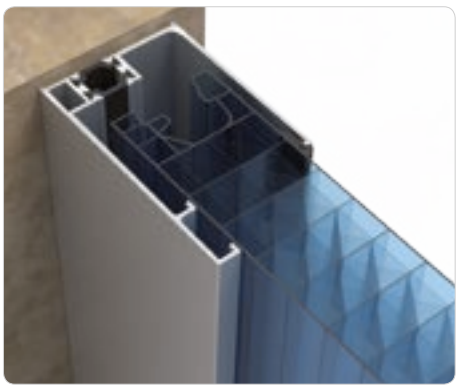
4275-4743-4742-4755
Flap AL for profiles:
4597-4595-4598

ACCESSORIES

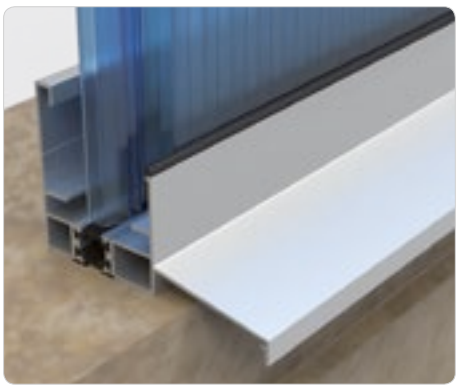
In addition to a complete range of aluminium profiles (also available as thermally insulated) for installing the panels, the system also includes opening windows (manually operated or motorised) to ventilate the building. The air cells of the polycarbonate panels must be sealed using vented aluminium breather tape.

This allows correct ventilation and prevents soiling on the inside.

IMPORTANT:
The fixing of the Flap profile 4725 must be carried out with adhesive seal tape 4329 and EN ISO 15481 4,2x13 A2 self-drilling screws.

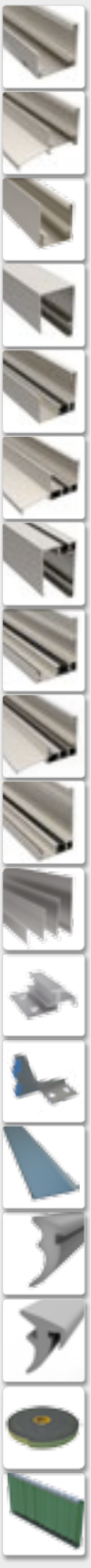


SIDE PROFILE
Detail side profile TT in AL



BASE PROFILE WITH TT
Detail base profile TT with eave in AL

ACCESSORIES



4047
Base AL profile

4046
Base AL profile
with drip sill

4140
Base/side AL profile
with flap frontal opening

4045
Upper/side
AL profile

4587
Base
AL profile TB

4590
Base AL profile TB
with drip sill

4585
Upper/side
AL profile TB

4597
Perimetral short
AL snap profile TB

4595
Base AL snap profile TB
with drip sill

4598
Perimetral high
AL snap profile TB

4755 - H.30
4742 - H.60
4743 - H.75
4275 - H.100
Flap AL for profiles: 4597-4595-4598

4050/60
4050/120
Alu bracket 60/120mm

4052
Inox bracket

4312
Joining eclipse
for base profile

1169/B
Slip-coated rubber
seal strip

1169/B/AGS
Overlap Slip-coated
seal strip

4329 (+4275)
Single-side self-adhesive
PE-LD seal strip 4*15

4108
Taping surcharge