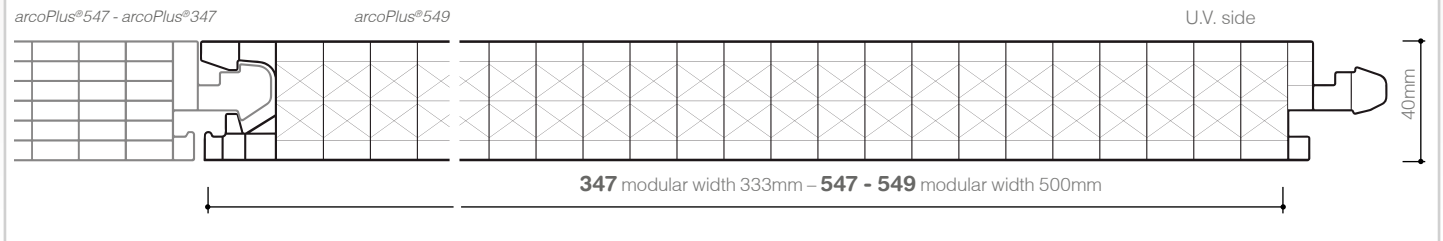


2.1 INTERLOCKING SYSTEMS



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



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/m ² K 1,0 (549) W/m ² K
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



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

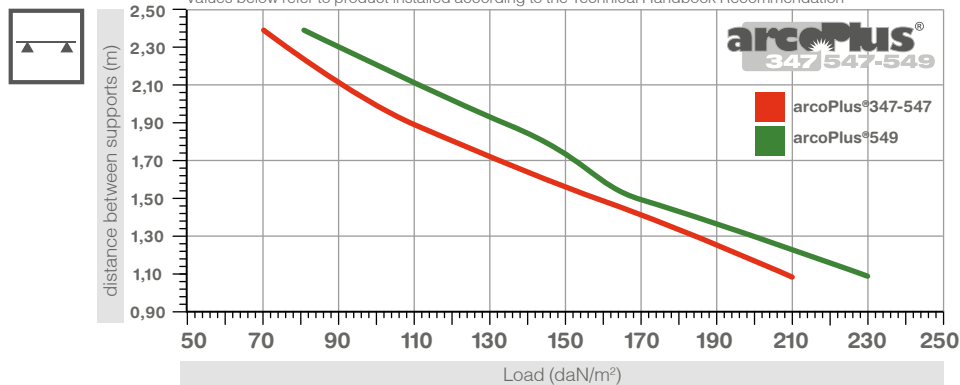




LOAD RESISTANCE

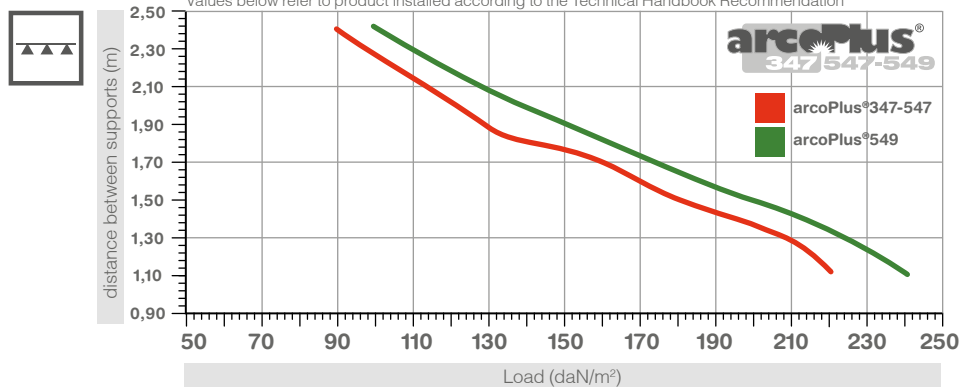
Maximum loads on two supports

Values below refer to product installed according to the Technical Handbook Recommendation



Maximum loads on more supports

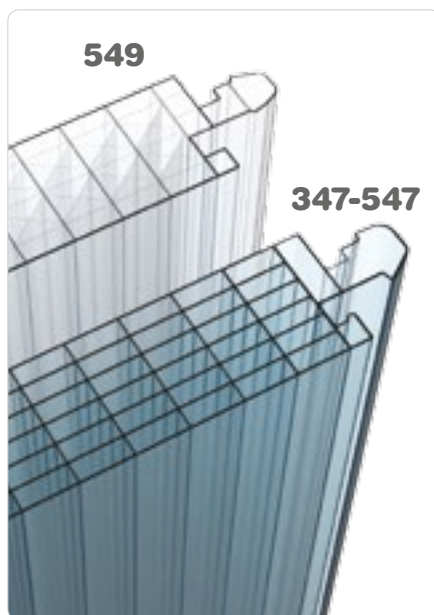
Values below refer to product installed according to the Technical Handbook Recommendation



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).

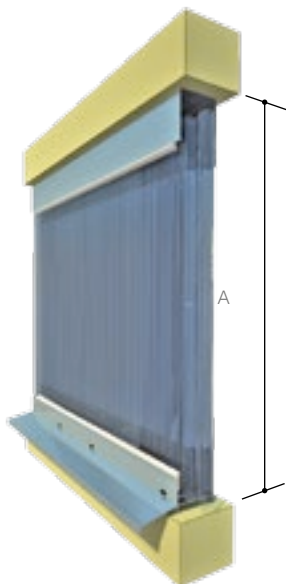
For installations exceeding 2.2m, a suitable section-breaker profile must be installed to which the arcoPlus[®] panels can then be fixed. This is done using the specific brackets to give the system the necessary resistance to negative wind load and permit sliding due to thermal expansion (see load resistance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



PROFILES

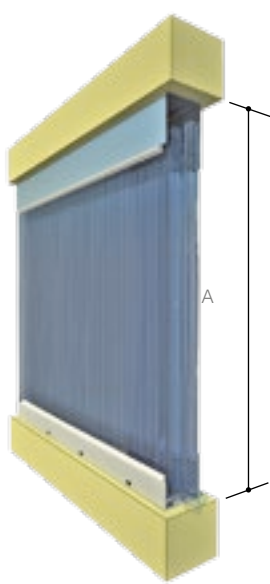


**CALCULATION AND INSTALLATION
EXAMPLES OF PANEL LENGTH (PL)**



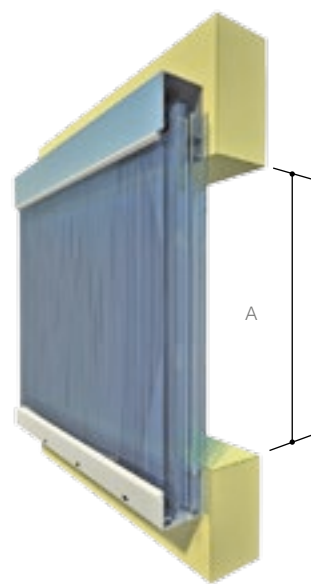
**WITH
EAVE**

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



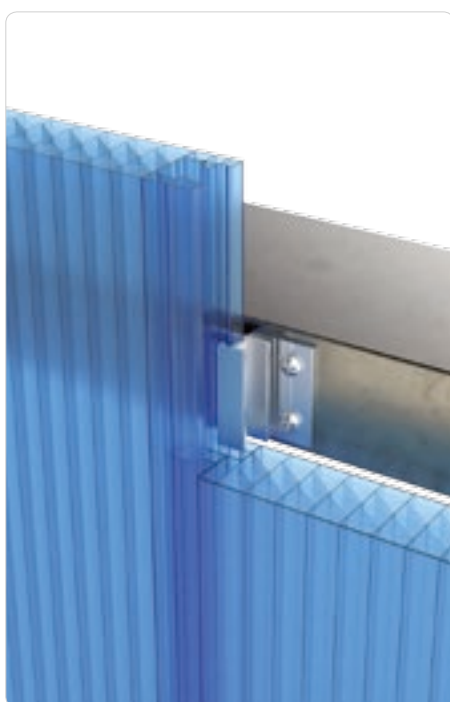
**WITHOUT
EAVE**

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



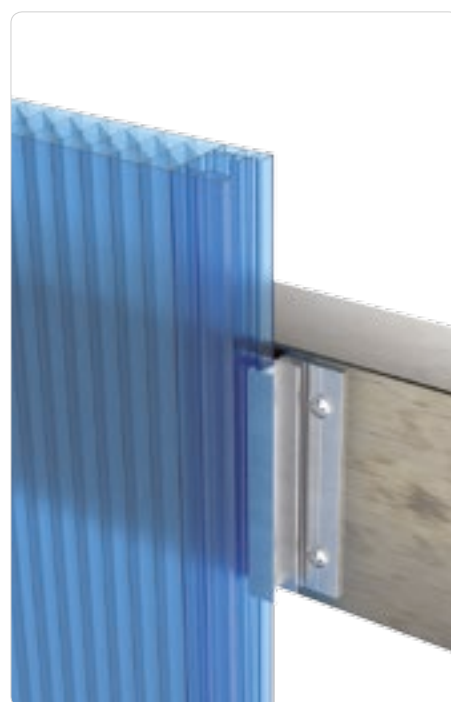
**OUTSIDE OF
THE BUILDING**

LP = A + 95 mm
A = opening measure



ALUMINUM BRACKET JOINT

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

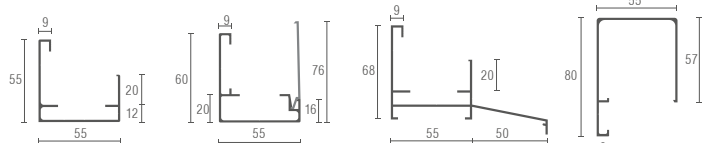


REINFORCED ALUMINUM BRACKET JOINT

Anchorage to existing structures by inserting aluminum bracket code 4050/120



METAL PROFILES



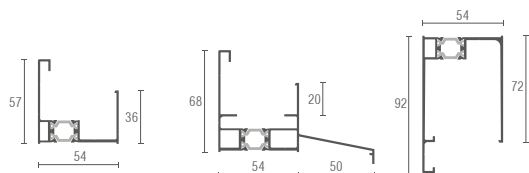
4047
Base
AL profile

4140
Base/side AL profile
with flap frontal opening

4046
Base AL profile
with drip sill

4045
Upper/side
AL profile

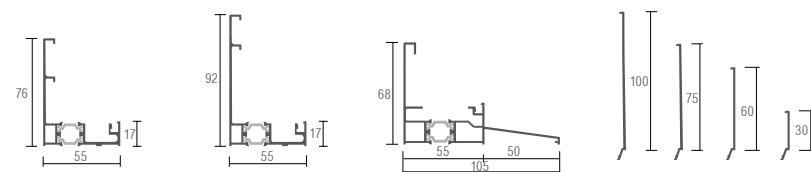
METAL PROFILES with thermal break



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