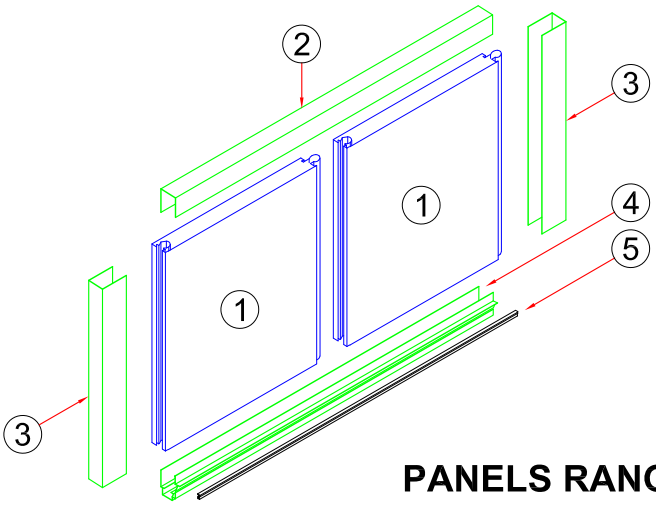
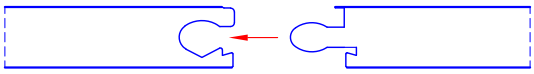
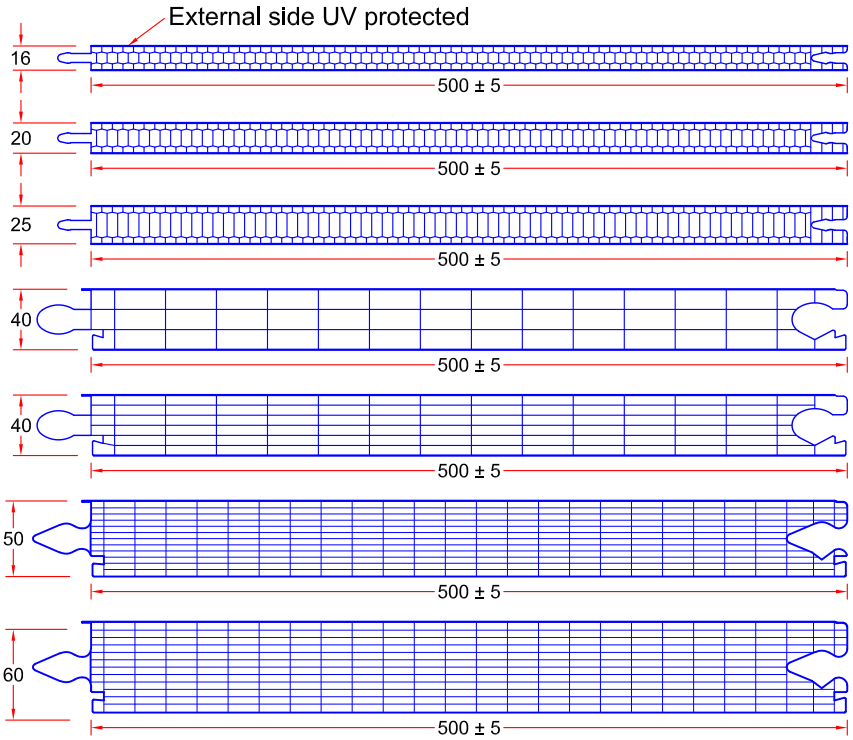
PANELS for EXTERNAL USE



1. AKRAPAN panel in UV protected Polycarbonate
2. Top frame profile in aluminium
3. Side frame profile in aluminium
4. Bottom frame profile in aluminium
5. Gasket for bottom profile in EPDM



PANELS RANGE - UV Protected



16/500 honeycomb	cells taped or thermosealed on request
20/500 honeycomb	cells taped on request
25/500 honeycomb	cells taped on request
40/500 4 walls	cells taped on request
40/500 7 walls	cells taped on request
50/500 13 walls	cells taped on request
60/500 13 walls	cells taped on request

TECHNICAL DATA	16/500	20/500	25/500	40/500/4	40/500/7	50/500	60/500	
Panel modular width	500 ± 5							mm
Pannel thickness (± 0,5 mm)	16	20	25	40	40	50	60	mm
No. of walls	[4]	[4]	[4]	4	7	13	13	
Thermal transmission [U-value]	1,99	1,81	1,60	1,41	1,08	0,79	0,71	W/m²K
Light transmission Clear satinized (*)	~ 69	~ 67	~ 64	~ 53	~ 56	~ 40	~ 39	%
Light transmission Opaline (*)	~ 52	~ 43	~ 35	~ 33	~ 36	~ 22	~ 16	%
SPANS	D max	D max	D max	D max	D max	D max	D max	
q = 500 N/m² (wind ≈ 100 km/h)	1.300	1.400	1.600	2.200	2.350	2.900	3.450	mm
q = 800 N/m² (wind ≈ 130 km/h)	1.200	1.300	1.450	2.050	2.100	2.500	3.100	mm
Fire classification EN13501-1	B s1 d0							
Thermal expansion	0,065							mm/m K
Temperature range	-40 / +120							°C

(*) standard colours - other colours produced on request

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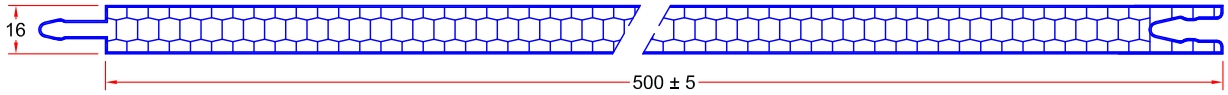
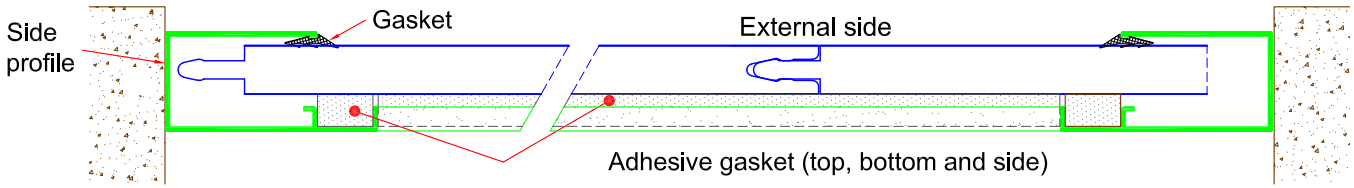
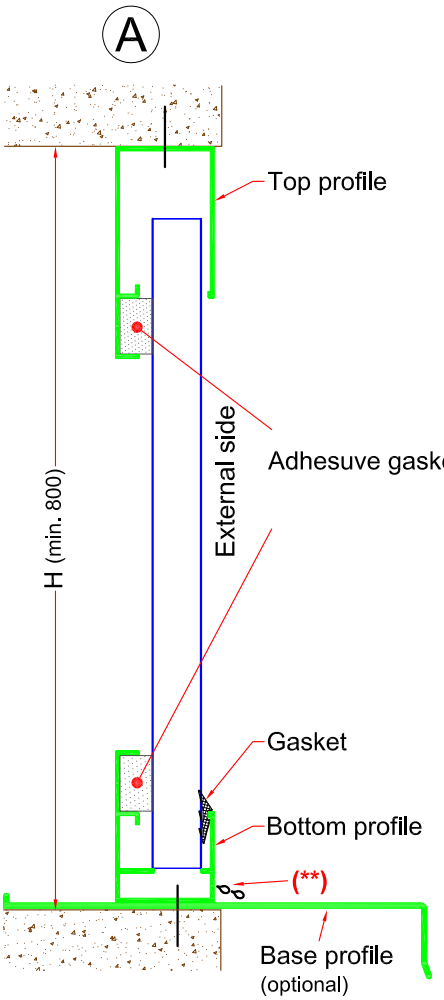


HORIZONTAL SECTION with framing profiles in anodised aluminium

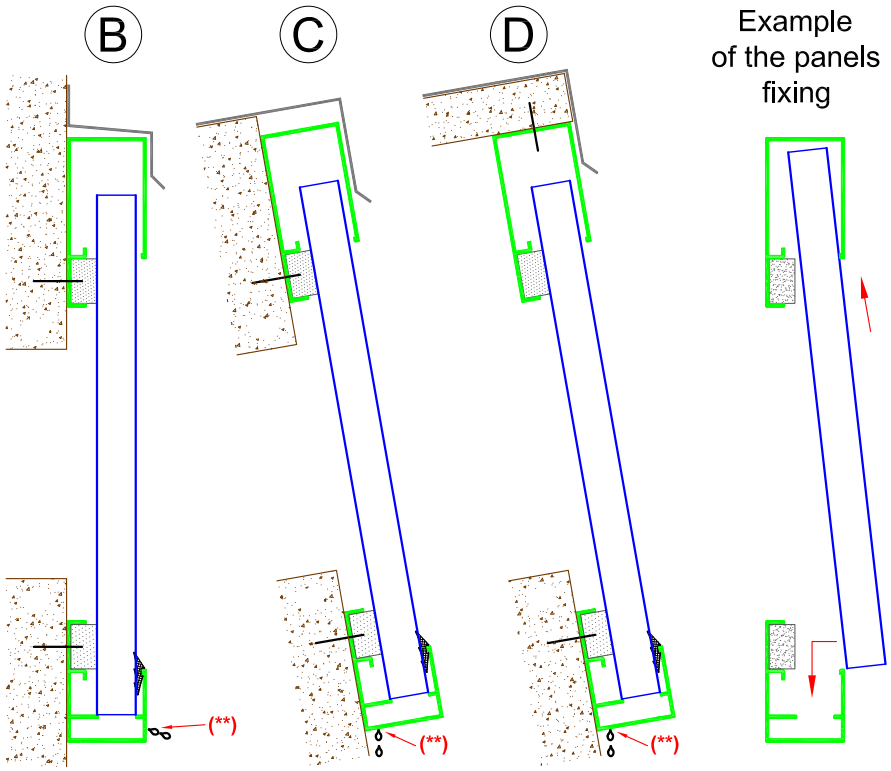


HORIZONTAL SECTION with framing profiles in anodised aluminium

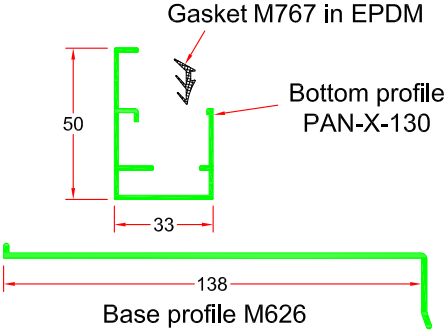
Wall application

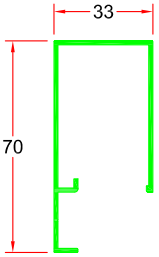


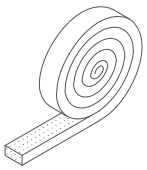
External applications



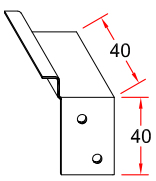
(**) Drill holes for drainage







Adhesive gasket
20x10 mm in PE
(rolls L=10 m)



Hook
Inox steel
for fixing on purlins

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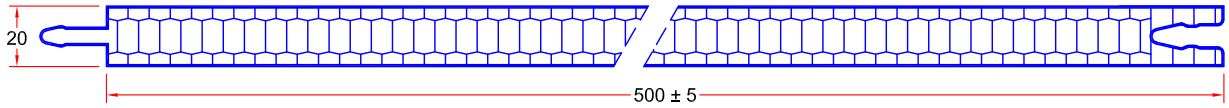
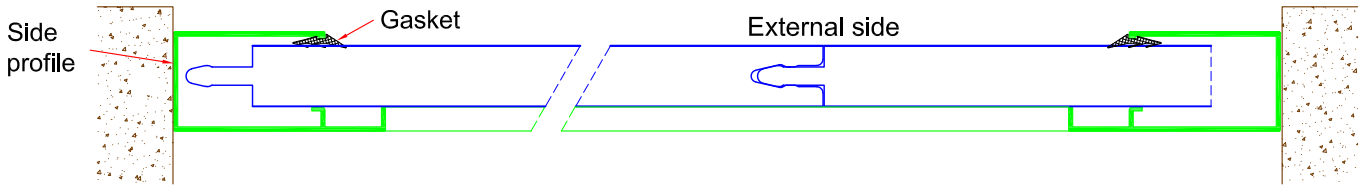
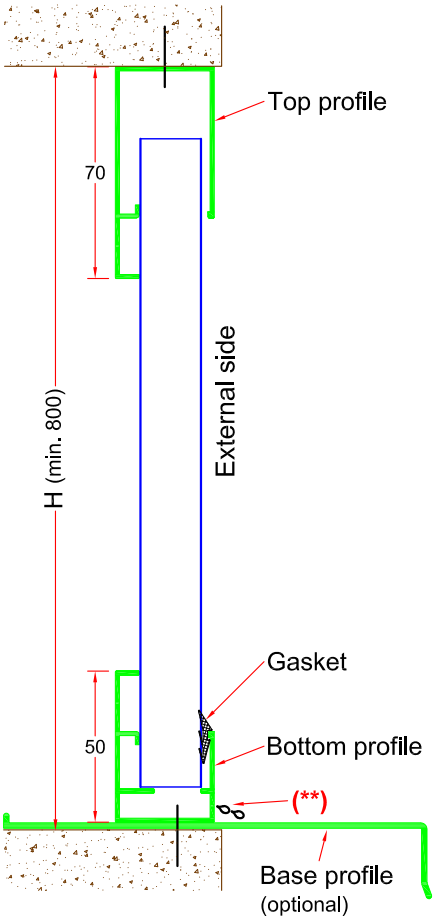




HORIZONTAL SECTION with framing profiles in anodised aluminium

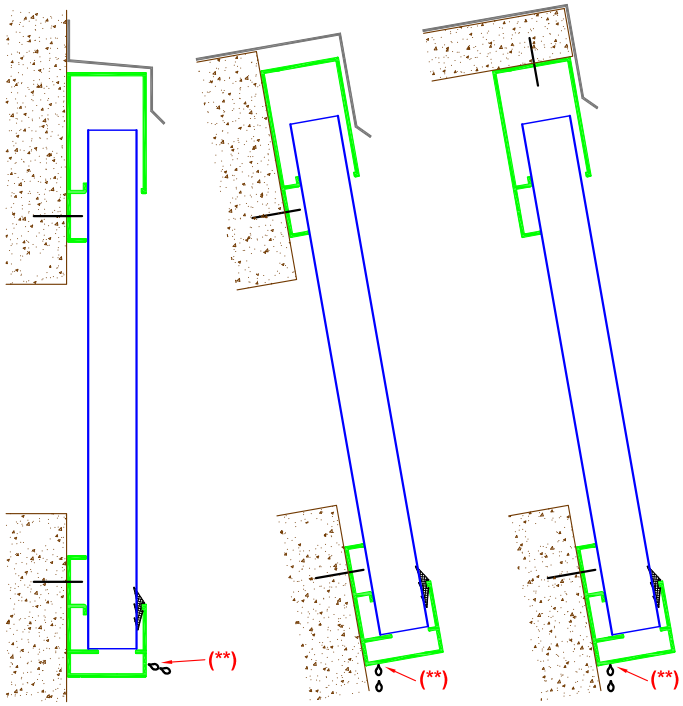
Wall application

A

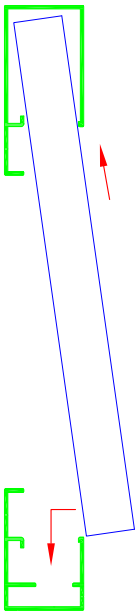


External applications

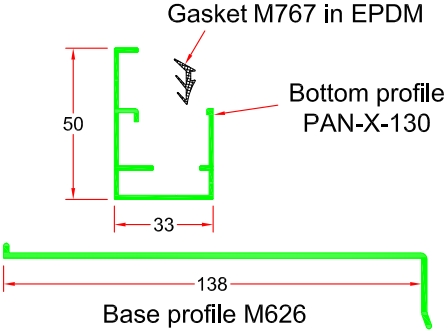
B C D

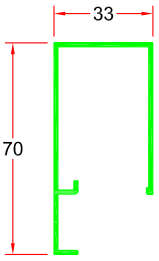


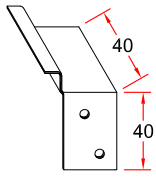
Example of the panels fixing

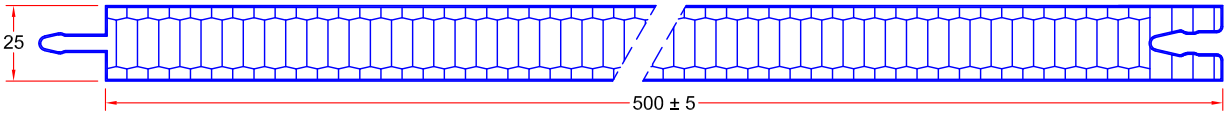


(**) Drill holes for drainage

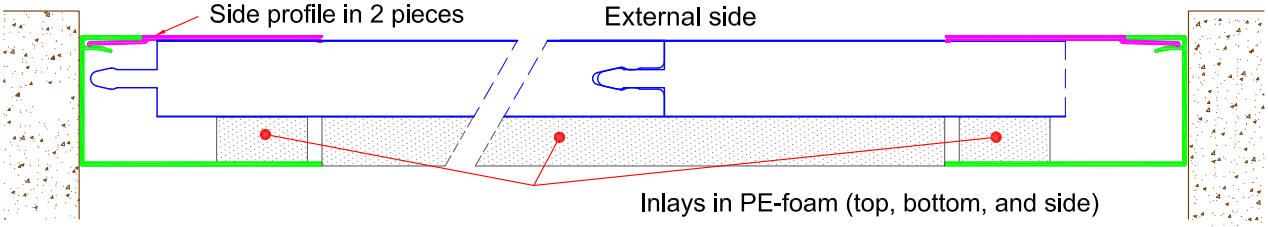








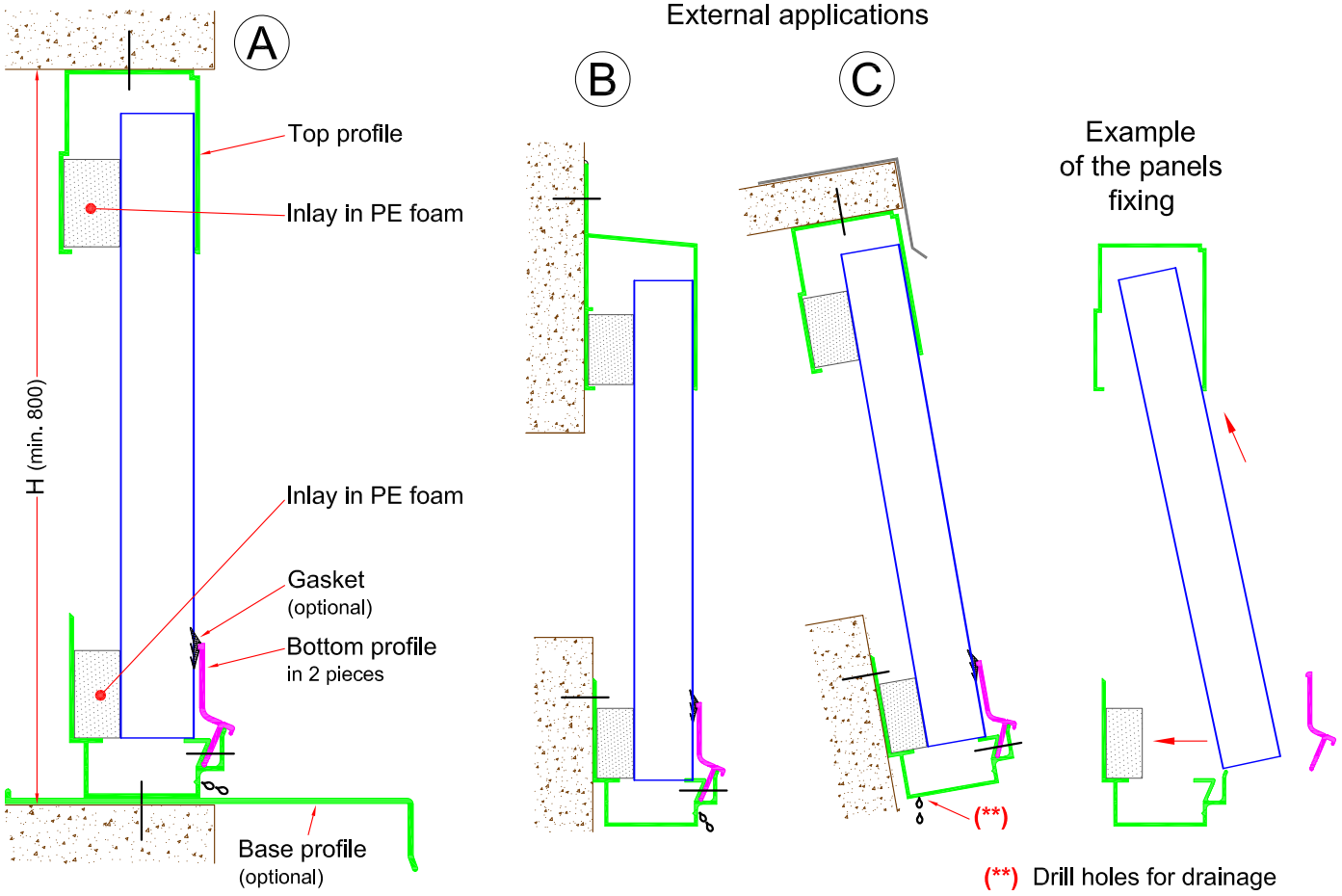
HORIZONTAL SECTION with framing profiles in anodised aluminium

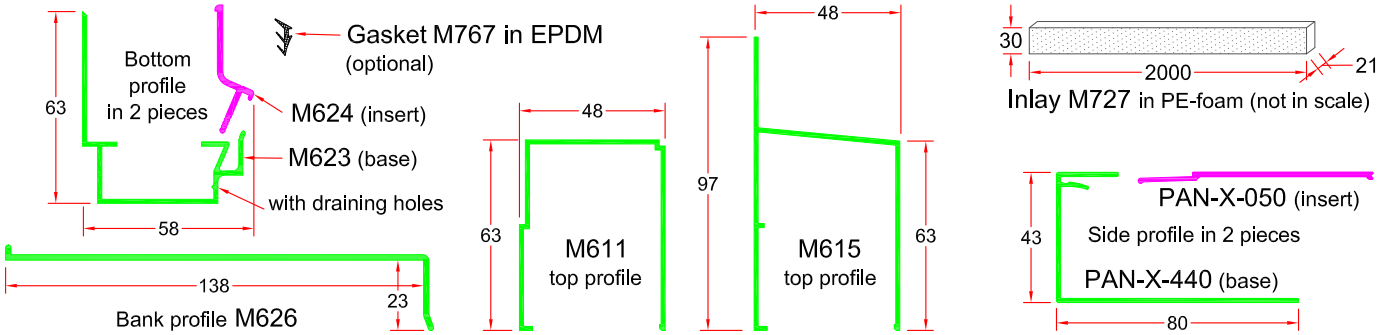


VERTICAL SECTIONS with framing profiles in anodised aluminium

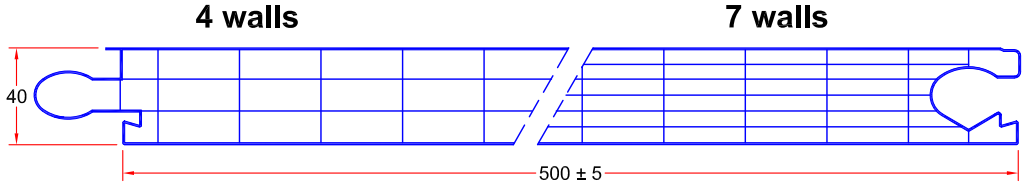
Wall application

External applications

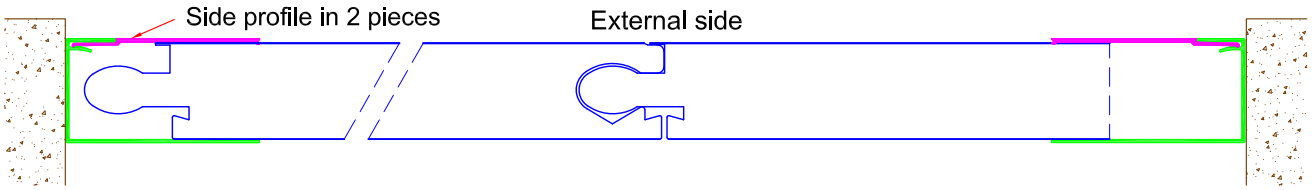




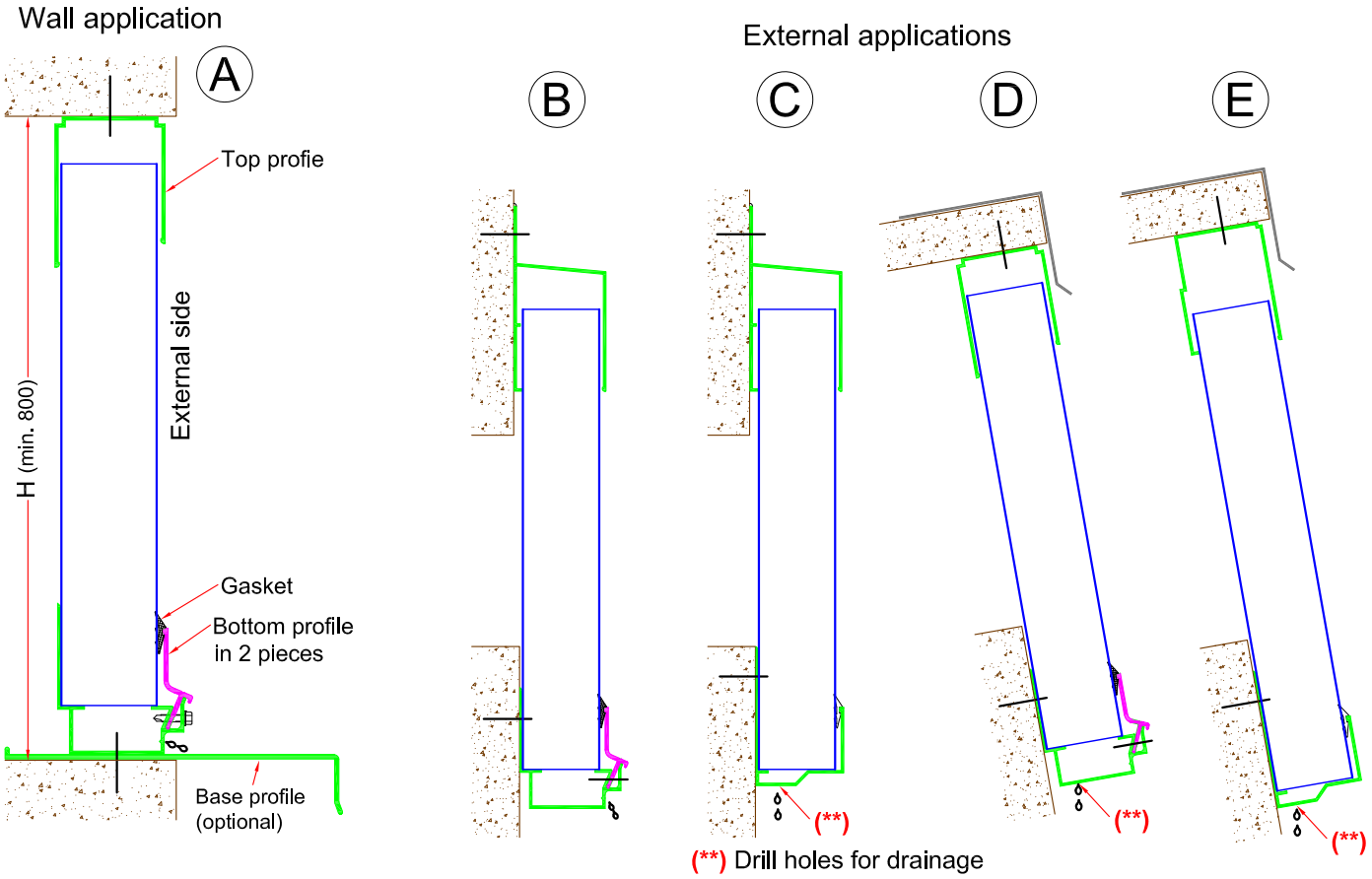
WALL- NORTHLIGHT with 40 mm panels

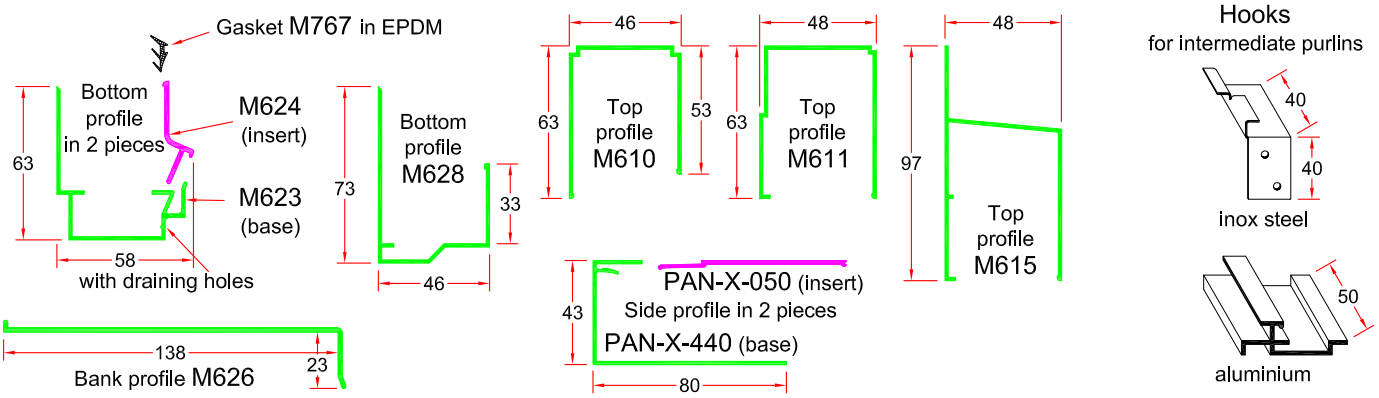


HORIZONTAL SECTION with framing profiles in anodised aluminium



VERTICAL SECTIONS with framing profiles in anodised aluminium





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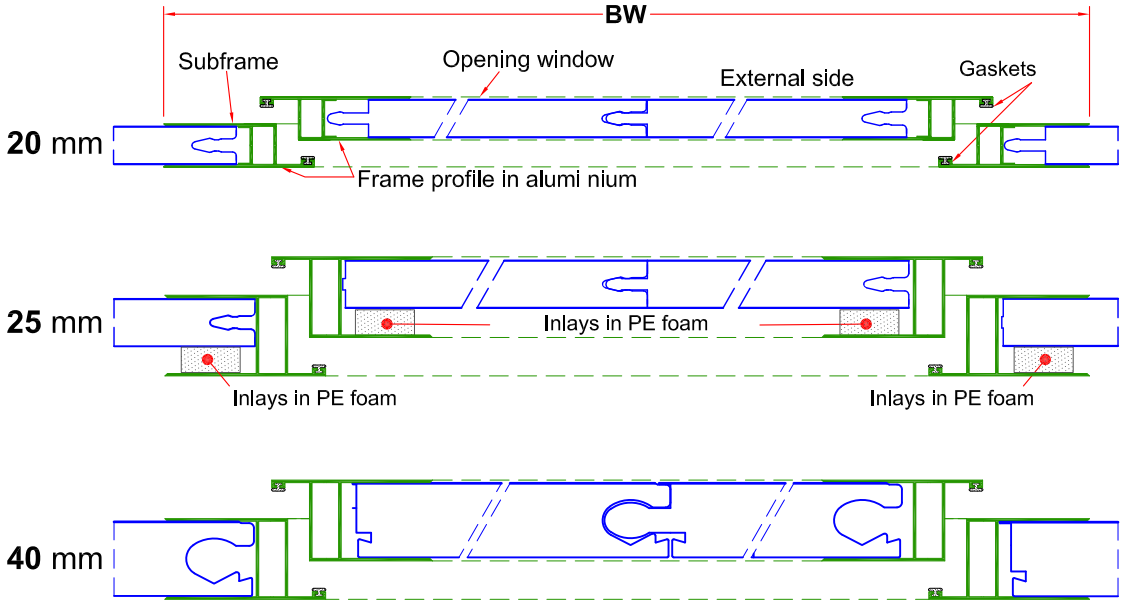
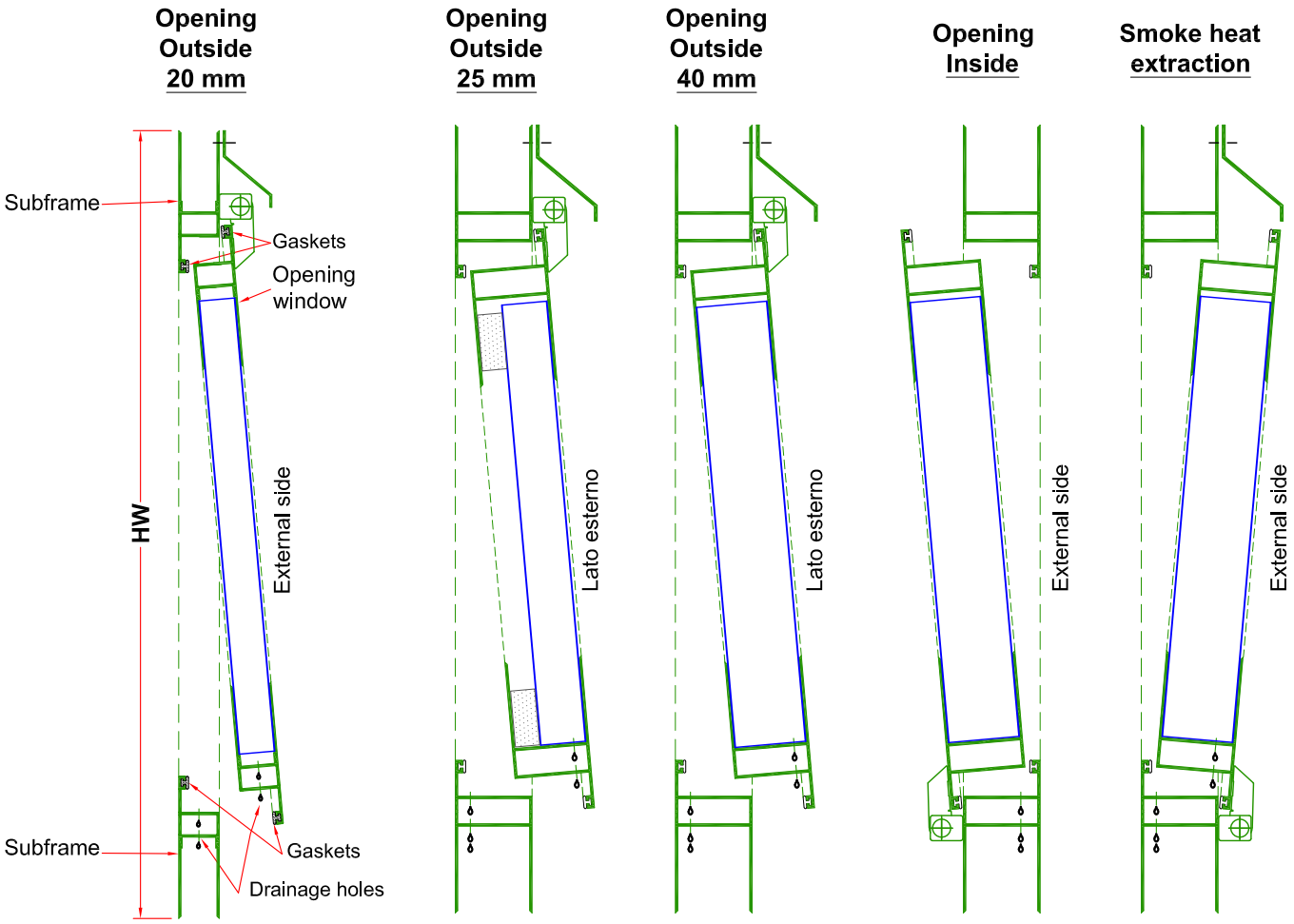
Supplied assembled - size BW x HW on request - opening manual or motorized

HORIZONTAL SECTION (type opening outside) - profiles without thermal break

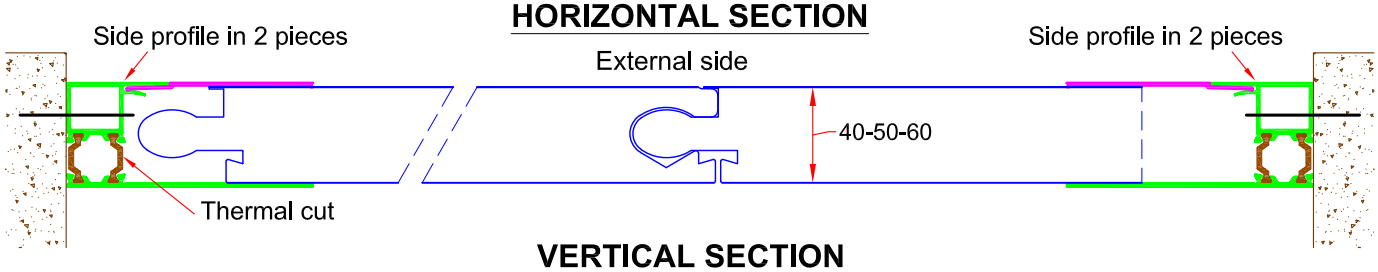


VERTICAL SECTIONS - profiles without thermal break

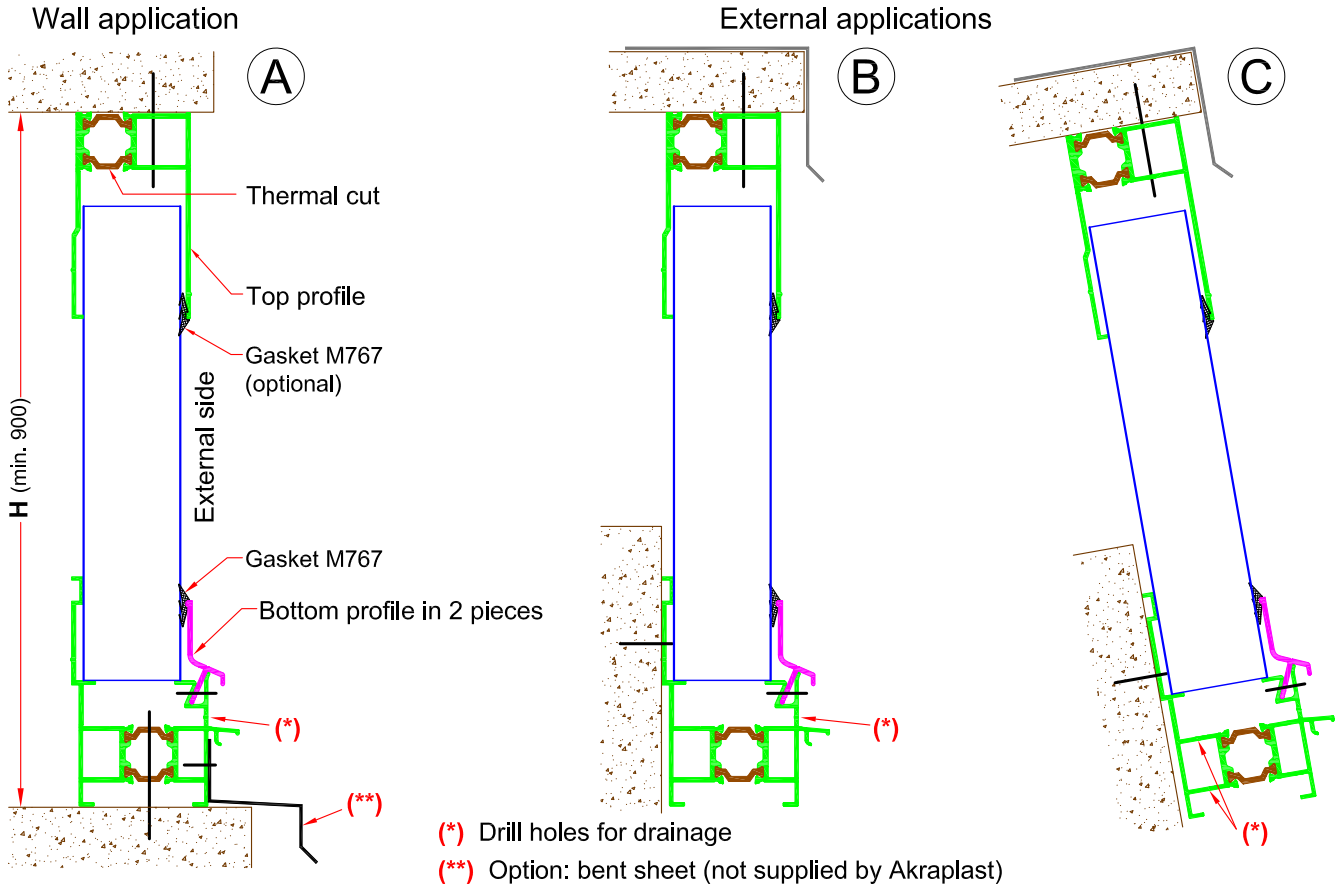


SECTIONS with 40 - 50 - 60 mm panels

HORIZONTAL SECTION



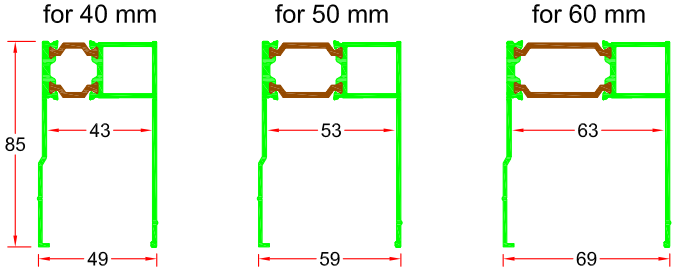
VERTICAL SECTION



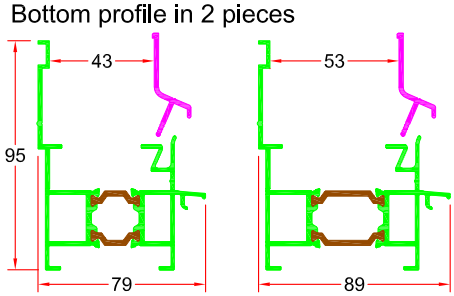
(*) Drill holes for drainage

(**) Option: bent sheet (not supplied by Akraplast)

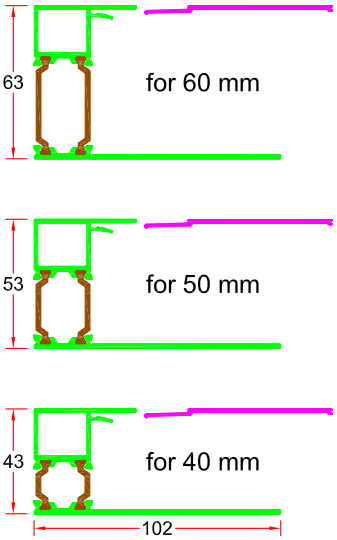
Top profile



Bottom profile in 2 pieces

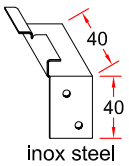


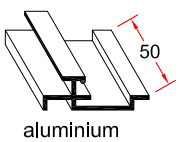
Side profile in 2 pieces



Gasket M767
in EPDM

Hooks
for intermediate purlins





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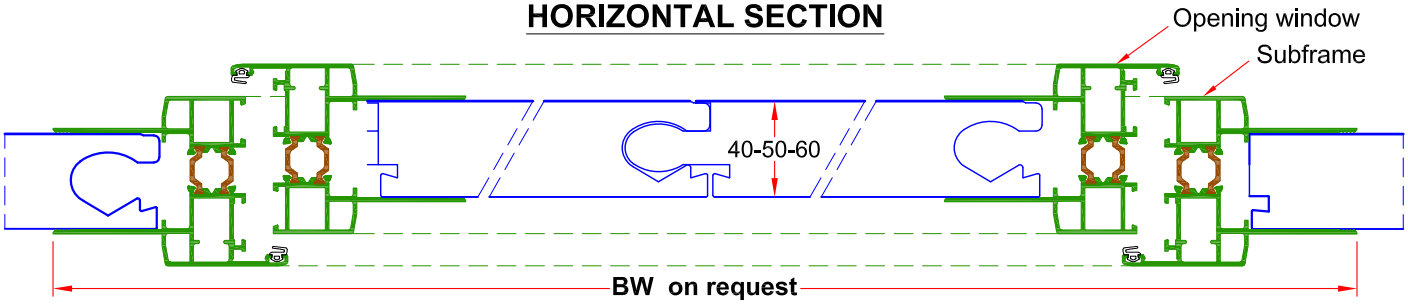
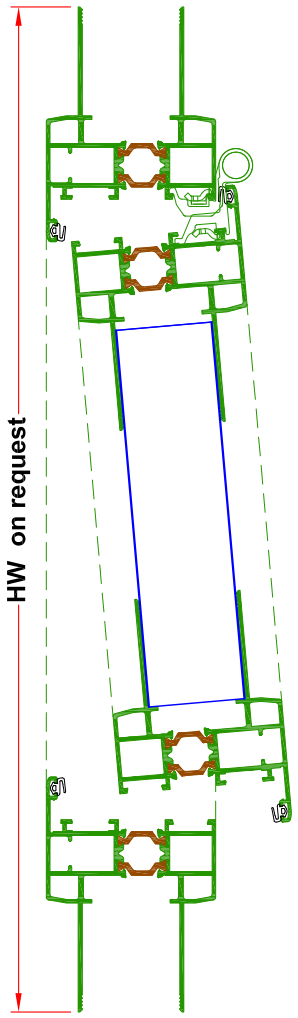
SECTIONS with 40 - 50 - 60 mm panels

HORIZONTAL SECTION

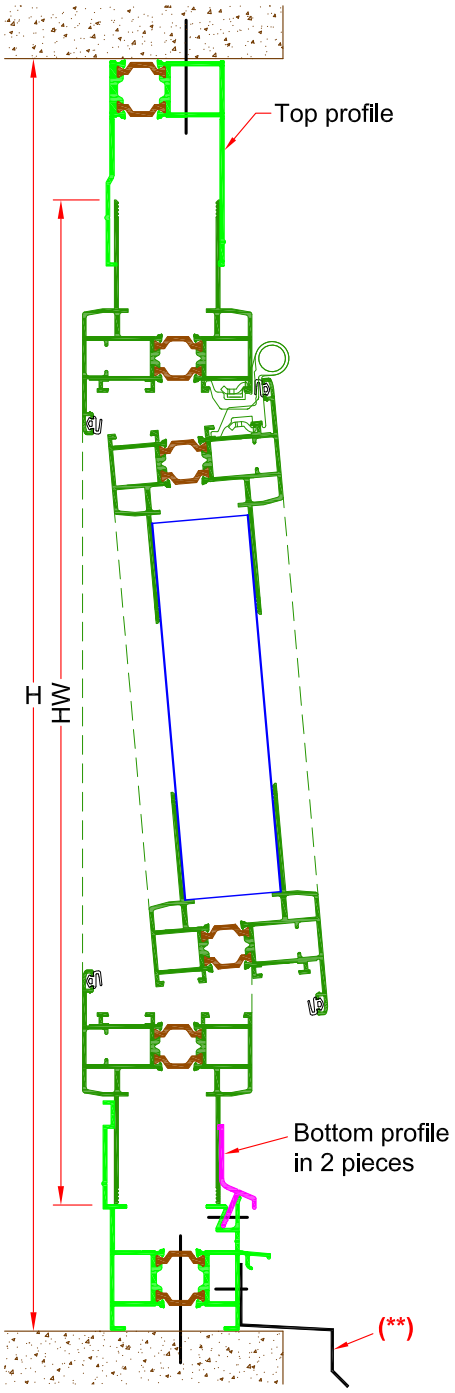


VERTICAL SECTION

type opening outside (*)



Application with top and bottom profiles



(*) **Also available opening inside and smoke heat extraction type**

(**) Option: bent sheet (not supplied by Akraplast)

SPECIFICATION TEXT

Choose between alternatives marked by •

• Wall; • Northlight;
realised with modular system type **AKRAPAN** by Akraplast Sistemi, composed of:

1) UV protected multi-wall polycarbonate panels with lateral tongue and groove joint,
   - thickness 16 mm, modular width 500 mm, 4 walls honeycomb, thermal transmission U=1,99 W/m²K
   - thickness 20 mm, modular width 500 mm, 4 walls honeycomb, thermal transmission U=1,81 W/m²K
   - thickness 25 mm, modular width 500 mm, 4 walls honeycomb, thermal transmission U=1,60 W/m²K
   - thickness 40 mm, modular width 500 mm, 4 walls, thermal transmission U=1,41 W/m²K
   - thickness 40 mm, modular width 500 mm, 7 walls, thermal transmission U=1,08 W/m²K
   - thickness 50 mm, modular width 500 mm, 13 walls, thermal transmission U=0,79 W/m²K
   - thickness 60 mm, modular width 500 mm, 13 walls, thermal transmission U=0,71 W/m²K

   colour • transparent; • opal-white; • others ……
2) Profiles for perimeter framing in natural anodized aluminium, gaskets and what else is necessary for perfect tightness of the system.

WARRANTIES

In Europe they are covered by **10 YEARS WARRANTY** from the date of purchase against yellowing and weather damages (hail etc.). For Extra-European Countries the warranty may have a different duration.
For further details, please ask for the Warranty Certificate.

CERTIFICATIONS

Regarding fire performance, the **AKRAPAN** panels have **fire classification EN13501 Bs1d0.**
For further details, please ask for the respective certificates for the different countries.

POSITIONING, TOOLS and FIXING

Install the panels with the UV protected side towards the outside.
Respect the tolerances between top and bottom frame profiles because of the thermal expansion (3-4 mm/meter).
Usually the AKRAPAN panels are supplied with the borders sealed by a special aluminium tape, or (if requested) thermo-sealed.
For cutting on size can be used a circular saw with fine teeth or shears; remove chips and dust using compressed air and then close the cells with the special aluminium tape for polycarbonate.
If necessary please use only polycarbonate compatible silicon.

CARE and MAINTENANCE

It is recommended to clean the panels regularly in order to remove dust and atmospheric pollution.
To clean the sheets use cold or lukewarm water and (if necessary) neutral detergents. Do not use abrasive cloths, hot water and chemical detergents. Avoid to clean the panels when they are heated by the sun.

RESISTANCE to CHEMICAL AGENTS

Please contact us to ask about compatibility with chemical agents.

TECHNICAL HANDBOOK

A **TECHNICAL HANDBOOK** is available with detailed technical information and examples about the following topics:
APPLICATIONS - ASSEMBLY INSTRUCTIONS
The use of the handbook is recommended for architects for elaboration of projects foreseeing application of the system, and for the companies doing the installation.

Responsibility clause: all information and technical advice given are made in good faith and based on the best of our knowledge; but having no control over the use of their material, we accept no responsibility for their applications. These indications do not exempt the customer from its controls to determine compliance of materials and installation procedures to their needs and standards.
AKRAPLAST Sistemi reserves the right to change specifications at any time.

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