Praise
to
transparency
ALVECO
POLYCARBONATE

ALVECO S.R.L. ENTERED THE PLASTIC MATERIALS MARKET IN THE SUMMER OF 2016 TO MEET THE GROWING DEMAND OF A WIDE AND DIVERSIFIED CLIENTÈLE THAT PAYS ATTENTION TO INDUSTRIAL CHANGES.

DYNAMIC AND FLEXIBLE, ALVECO S.R.L. PRODUCES MODULAR SYSTEMS, SLABS AND PROFILES IN COMPACT POLYCARBONATE FOR A VARIETY OF COMMODITY SECTORS, MANUFACTURING IN PARTICULAR COMPONENTS FOR THE BUILDING INDUSTRY.

OUR RANGE OF PRODUCTS OFFICIALLY INTRODUCED IN THE FOLLOWING PAGES ARE MANUFACTURED USING CUTTING-EDGE TECHNOLOGY AND IN FULL RESPECT OF THE ENVIRONMENT, UNDER THE FLAG OF ECO-SUSTAINABILITY.

ALVECO
POLYCARBONATE

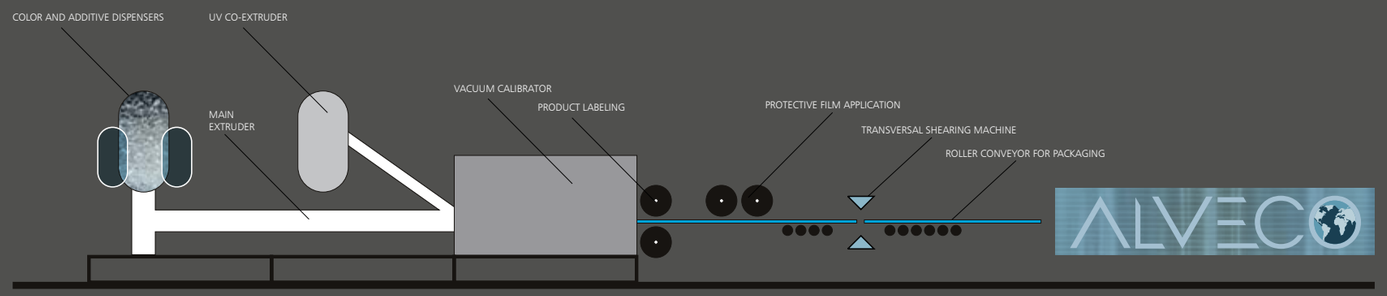
# ALVECO

**POLYCARBONATE: WHAT IS IT?**
A THERMOPLASTIC POLYMER OBTAINED FROM CARBONIC ACID, CHARACTERIZED BY TRANSPARENCY, STURDINESS, FLEXIBILITY, LIGHTNESS, IMPACT RESISTANCE, AND THERMAL AND ACOUSTIC INSULATION. IT IS USED IN A VARIETY OF SECTORS, PARTICULARLY IN THE CIVIL AND INDUSTRIAL BUILDING SECTORS.

**POLYCARBONATE: HOW IS IT PRODUCED?**
IT IS OBTAINED THROUGH A PLASTIC DEFORMATION PROCESS CALLED "EXTRUSION", WHICH ALLOWS THE PRODUCTION OF SLABS OF THE SAME SECTION.

**IS POLYCARBONATE PROTECTED FROM UV RAYS?**
YES, THE SLABS ARE PROTECTED FROM UV RAYS DURING THE PRODUCTION STAGE THANKS TO THE CO-EXTRUSION PROCESS.

**DOES POLYCARBONATE COMPLY WITH EUROPEAN REGULATIONS ON ITS USE?**
YES, IT MEETS THE QUALITY STANDARDS ESTABLISHED IN EU REGULATION 305/2011 FOR THE MARKETING OF CONSTRUCTION PRODUCTS. IN ADDITION ACCORDING TO THE EUROPEAN REGULATION EN 16153: 2013 ENTERED INTO FORCE ON 01/01/2015 IT IS MANDATORY TO AFFIX THE EC MARKING ON EACH ALVEOLAR POLYCARBONATE SLAB.




**WHY USING POLYCARBONATE?**

- BECAUSE IT IS A TRANSPARENT MATERIAL LIKE GLASS, WHICH ALLOWS LIGHT TO PASS THROUGH IT CREATING PLEASANT CHROMATIC EFFECTS THANKS TO THE COLORING OF THE SLABS AND MAINTAINING ENVIRONMENTAL COMFORT AND THERMAL INSULATION UNCHANGED.
- BECAUSE IT IS A STRONG MATERIAL, 250 TIMES MORE RESISTANT THAN GLASS. IT WITHSTANDS UV RAYS, ATMOSPHERIC AGENTS AND ACCIDENTAL IMPACTS EVEN AFTER PROLONGED EXPOSURE TO DIRECT SUNLIGHT.
- BECAUSE IT IS A LIGHTWEIGHT MATERIAL, MUCH MORE THAN GLASS. USING POLYCARBONATE IN THE CIVIL AND INDUSTRIAL BUILDING SECTOR MEANS REDUCING CONSTRUCTION COSTS AND KEEPING PRESSURE AND DEPRESSION LOAD VALUES UNCHANGED.
- BECAUSE IT IS AN INSULATING MATERIAL THAT MINIMIZES THE TRANSFER OF THERMAL ENERGY (SO-CALLED THERMAL INSULATION) AND SOUND ENERGY (SO-CALLED ACOUSTIC INSULATION).
- BECAUSE IT IS A SAFE MATERIAL, CHARACTERIZED BY THE SO-CALLED RESILIENCE THAT IS THE ABILITY TO ABSORB ELASTIC DEFORMATION ENERGY IN COMPLIANCE WITH SAFETY REGULATIONS FOR PUBLIC AND WORK ENVIRONMENTS.
- BECAUSE IT IS A VERSATILE MATERIAL WITH VERY LOW ENVIRONMENTAL IMPACT WHOSE USE ALLOWS CONSIDERABLE ENERGY SAVING. AT THE END OF THEIR LIFE CYCLE, THE SLABS ARE 100% RECYCLABLE.

# ALVE - ROOF 5G 40 8/10/16 mm

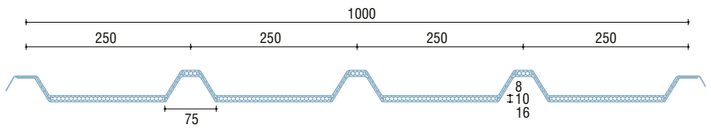
RIBBED SYSTEM IN ALVEOLAR POLYCARBONATE

POSA ALVE-ROOF 5G_40 IS A TRANSLUCENT COVERING ELEMENT IN POLYCARBONATE WHICH, THANKS TO ITS THERMAL INSULATION CHARACTERISTICS AND COUPLING WITH METAL ROOFS ALLOWS THE CONSTRUCTION OF SKYLIGHTS FROM RIDGE TO EAVES, SUITABLE TO GUARANTEE COMPLIANCE WITH REFERENCE REGULATIONS REGARDING ENERGY PERFORMANCE AND ILLUMINATING SURFACE OF BUILDINGS.

## TECHNICAL SPECIFICATIONS

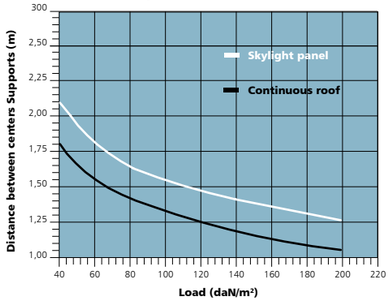
TRANSLUCENT ALVEOLAR POLYCARBONATE ROOF, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, MULTI-ALVEOLAR STRUCTURE, THICKNESS 8/10/16 mm, RIB HEIGHT 40 mm, OPAL CRYSTAL COLOR, ENDS CLOSED WITH HEAT-WELDING.
DIMENSIONS: MODULE WIDTH 1,000 mm, LENGTH CUT TO MEASURE.

| Thickness | **8/10 mm** | **16 mm** |
|---|---|---|
| Rib height | 40 mm | 40 mm |
| Structure | Multi-alveolar | Multi-alveolar |
| Standard width | 1.000 mm | 1.000 mm |
| Standard length | Cut to measure | Cut to measure |
| Color | Crystal / Opal | Crystal / Opal |
| Light transmission | Crystal 58% / Opal 40% | Crystal 55% / Opal 37% |
| Thermal transmittance | U=2,7 W/m² K | U=1,99 W/m² K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C |
| Operating temperature | -30°C + 120°C | -30°C + 120°C |
| Fire resistance certification EN 13501-1 | B-s1,d0 | B-s1,d0 |

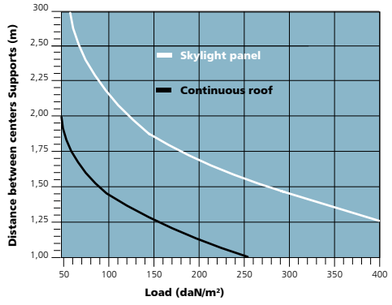



PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 8/10 mm**




**THICKNESS 16 mm**




## ACCESSORIES:

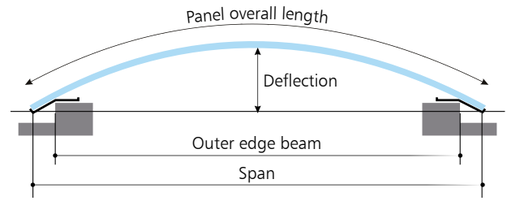
Variable ridge

Upper bird-screen ridge

Lower bird-screen Ridge eaves

Variable length screw

Stainless steel washer with EPDM gasket

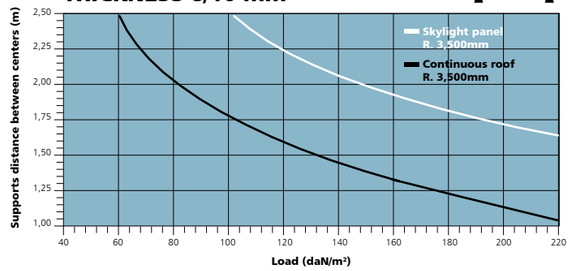



**RADIUS 3.300 mm** MAXIMUM OVERALL LENGTH 5,000
**RADIUS 6.000 mm** MAXIMUM OVERALL LENGTH 6,000

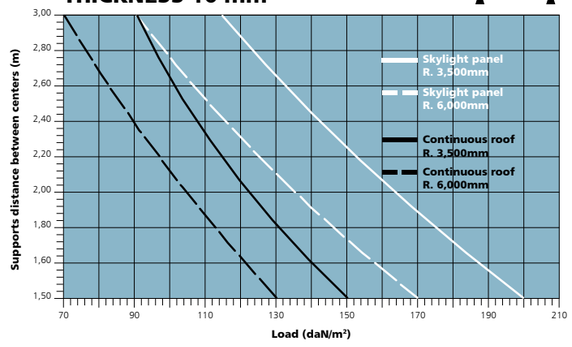
| **Span** | **Deflection** | **Overall Length** | **Deflection** | **Overall Length** |
|---|---|---|---|---|
| 1.000 | 38 | 1.016 | 21 | 1.008 |
| 1.200 | 55 | 1.221 | 30 | 1.210 |
| 1.400 | 75 | 1.428 | 41 | 1.413 |
| 1.600 | 98 | 1.636 | 54 | 1.615 |
| 1.800 | 125 | 1.845 | 68 | 1.819 |
| 2.000 | 155 | 2.057 | 84 | 2.023 |
| 2.200 | 189 | 2.270 | 102 | 2.227 |
| 2.400 | 226 | 2.486 | 121 | 2.432 |
| 2.600 | 267 | 2.705 | 143 | 2.638 |
| 2.800 | 312 | 2.927 | 166 | 2.845 |
| 3.000 | 361 | 3.152 | 191 | 3.052 |
| 3.200 | 414 | 3.381 | 217 | 3.261 |
| 3.400 | 472 | 3.615 | 246 | 3.470 |
| 3.600 | 534 | 3.854 | 276 | 3.681 |
| 3.800 | 602 | 4.098 | 309 | 3.892 |
| 4.000 | 675 | 4.349 | 343 | 4.105 |
| 4.200 | 754 | 4.608 | 380 | 4.319 |
| 4..400 | 840 | 4.875 | 418 | 4.535 |
| 4.600 | 934 | 5.151 | 458 | 4.752 |

PERMISSIBLE LOADS **ON 2 SUPPORTS**
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 8/10 mm**




**THICKNESS 16 mm**



# ALVE - ROOF 5G 80 12/16 mm

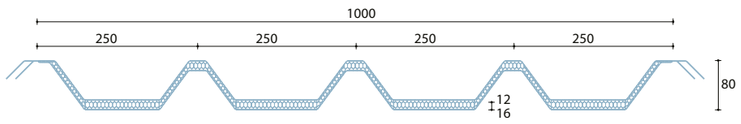
RIBBED SYSTEM IN ALVEOLAR POLYCARBONATE

ALVE-ROOF 5G_80 IS A TRANSLUCENT COVERING ELEMENT IN POLYCARBONATE WHICH, THANKS TO ITS THERMAL INSULATION CHARACTERISTICS AND COUPLING WITH METAL ROOFS ALLOWS THE CONSTRUCTION OF SKYLIGHTS FROM RIDGE TO EAVES, SUITABLE TO GUARANTEE COMPLIANCE WITH REFERENCE REGULATIONS REGARDING ENERGY PERFORMANCE AND ILLUMINATING SURFACE OF BUILDINGS. THE CROSS SECTION OF THIS PANEL, THANKS TO THE 80 MM RIB HEIGHT PROVIDES THE PRODUCT WITH HIGH RESISTANCE TO THE LOAD.

## TECHNICAL SPECIFICATIONS

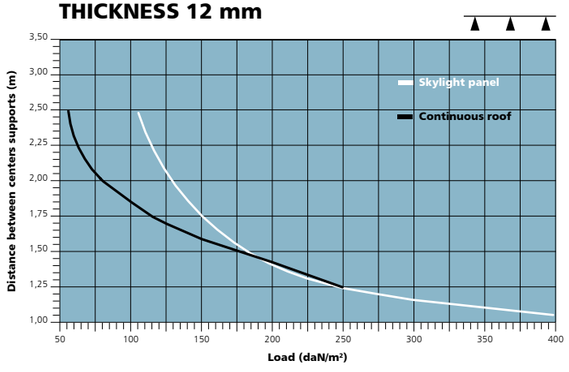
TRANSLUCENT ALVEOLAR POLYCARBONATE ROOF, UV-PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, MULTI-ALVEOLAR STRUCTURE, THICKNESS 8/10/16 mm, RIB HEIGHT 80 mm, CRYSTAL OR OPAL COLOR,
ENDS CLOSED WITH HEAT-WELDING.
DIMENSIONS: MODULE WIDTH 1,000 mm, LENGTH CUT TO MEASURE.

| Thickness | **12 mm** | **16 mm** |
|---|---|---|
| Rib height | 80 mm | 80 mm |
| Structure | Multi-alveolar | Multi-alveolar |
| Standard width | 1.000 mm | 1.000 mm |
| Standard length | Cut to measure | Cut to measure |
| Color | Crystal / Opal | Crystal / Opal |
| Light transmission | Crystal 58% / Opal 40% | Crystal 59% / Opal 37% |
| Thermal transmittance | U=2,7 W/m² K | U=1,99 W/m² K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C |
| Operating temperature | -30°C + 120°C | -30°C + 120°C |
| Fire resistance certification EN 13501-1 | B-s1,d0 | B-s1,d0 |

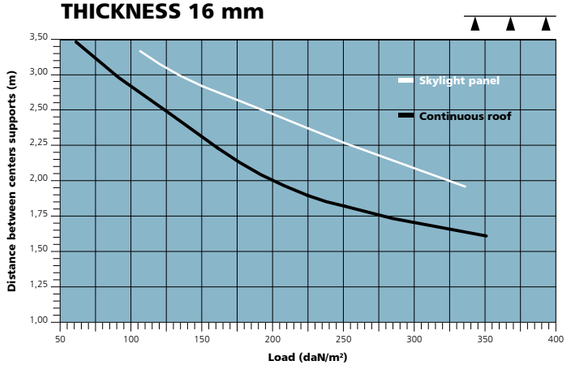


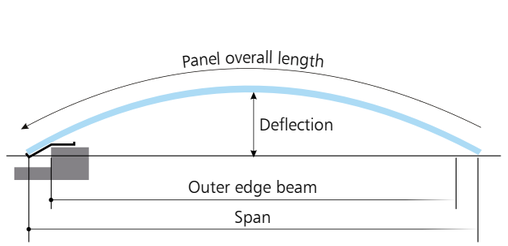

PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 12 mm**




**THICKNESS 16 mm**





**RADIUS 3.300 mm**
MAXIMUM OVERALL LENGTH 5,000

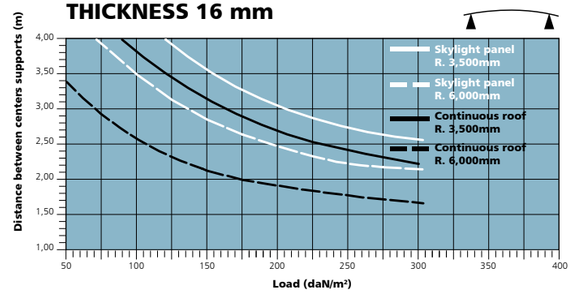
| **Span** | **Deflection** | **Overall Length** | **Deflection** | **Overall Length** |
|---|---|---|---|---|
| 1.000 | 38 | 1.016 | 21 | 1.008 |
| 1.200 | 55 | 1.221 | 30 | 1.210 |
| 1.400 | 75 | 1.428 | 41 | 1.413 |
| 1.600 | 98 | 1.636 | 54 | 1.615 |
| 1.800 | 125 | 1.845 | 68 | 1.819 |
| 2.000 | 155 | 2.057 | 84 | 2.023 |
| 2.200 | 189 | 2.270 | 102 | 2.227 |
| 2.400 | 226 | 2.486 | 121 | 2.432 |
| 2.600 | 267 | 2.705 | 143 | 2.638 |
| 2.800 | 312 | 2.927 | 166 | 2.845 |
| 3.000 | 361 | 3.152 | 191 | 3.052 |
| 3.200 | 414 | 3.381 | 217 | 3.261 |
| 3.400 | 472 | 3.615 | 246 | 3.470 |
| 3.600 | 534 | 3.854 | 276 | 3.681 |
| 3.800 | 602 | 4.098 | 309 | 3.892 |
| 4.000 | 675 | 4.349 | 343 | 4.105 |
| 4.200 | 754 | 4.608 | 380 | 4.319 |
| 4..400 | 840 | 4.875 | 418 | 4.535 |
| 4.600 | 934 | 5.151 | 458 | 4.752 |

PERMISSIBLE LOADS **ON 2 SUPPORTS**
System resistance with evenly distributed load.

**THICKNESS 12 mm**




**THICKNESS 16 mm**




## ACCESSORIES:

Variable ridge

Upper bird-screen ridge

Lower bird-screen Ridge eaves

Variable length screw

Stainless steel washer with EPDM gasket

# ALVE - ROOF 2G - 30-40 FLAT

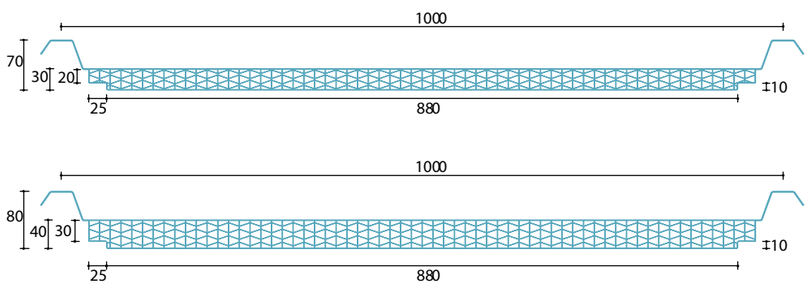
RIBBED SYSTEM IN ALVEOLAR POLYCARBONATE

ALVE-ROOF 2G-40 FLAT IS A TRANSLUCENT COVERING ELEMENT IN POLYCARBONATE WHICH, THANKS TO ITS THERMAL INSULATION CHARACTERISTICS AND COUPLING WITH METAL ROOFS ALLOWS THE CONSTRUCTION OF SKYLIGHTS FROM RIDGE TO EAVES, SUITABLE TO GUARANTEE COMPLIANCE WITH REFERENCE REGULATIONS REGARDING ENERGY PERFORMANCE AND ILLUMINATING SURFACE OF BUILDINGS.

## TECHNICAL SPECIFICATIONS

TRANSLUCENT POLYCARBONATE ROOF, UV-PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, 6-WALL STRUCTURE, 40 mm THICK, CRYSTAL OR OPAL COLOR, ENDS CLOSED WITH ADHESIVE ALUMINUM TAPE. DIMENSIONS: MODULE WIDTH 1,000 mm, LENGTH CUT TO MEASURE; 10-YEAR WARRANTY.

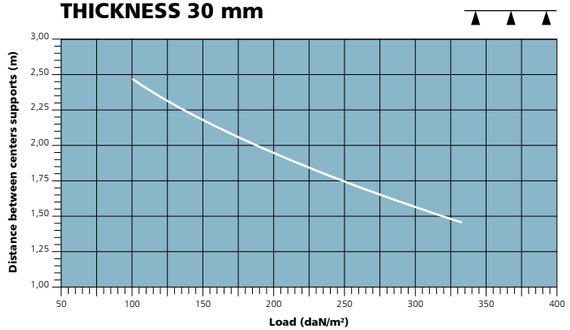
| | |
|---|---|
| Thickness | 30-40 mm |
| Rib height | 80 mm |
| Structure | 6-wall |
| Standard width | 1.000 mm |
| Standard length | Cut to measure |
| Color | Crystal / Opal |
| Light transmission | Crystal 52% / Opal 30% |
| Thermal transmittance | U= 1,15 W/m² K |
| Linear expansion | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 |



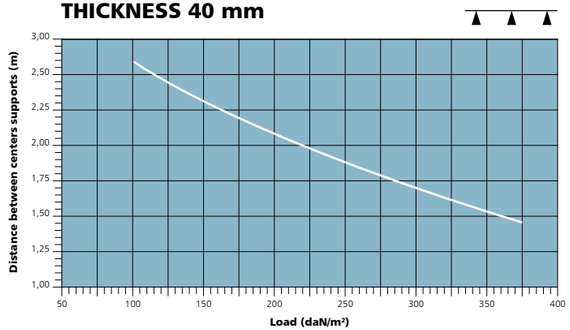

PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 30 mm**




**THICKNESS 40 mm**




## ACCESSORIES:

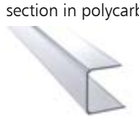
Variable ridge

Upper bird-screen ridge

Variable length screw

Stainless steel washer with EPDM gasket

Alveoli closure with U-shaped section in polycarbonate



# ALVE - ROOF 2G - 40 FULL

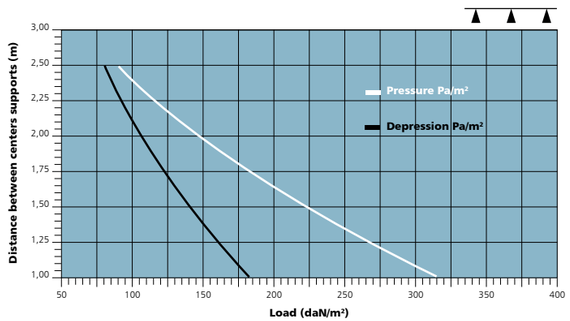
RIBBED SYSTEM IN ALVEOLAR POLYCARBONATE

ALVE-ROOF 2G_40 FULL IS A TRANSLUCENT COVERING ELEMENT IN POLYCARBONATE WHICH, THANKS TO ITS THERMAL INSULATION CHARACTERISTICS AND COUPLING WITH METAL ROOFS ALLOWS THE CONSTRUCTION OF SKYLIGHTS FROM RIDGE TO EAVES, SUITABLE TO GUARANTEE COMPLIANCE WITH REFERENCE REGULATIONS REGARDING ENERGY PERFORMANCE AND ILLUMINATING SURFACE OF BUILDINGS.
THANKS TO THE NUMBER OF ALVEOLI PRESENT IN THE MALE CONNECTION JOINT, THE CONDENSATION-CAUSING THERMAL BRIDGE IS NOT IN USE.

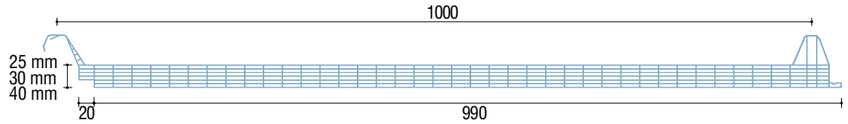
## TECHNICAL SPECIFICATIONS

TRANSLUCENT COVER IN ALVEOLAR POLYCARBONATE, WITH MULTI-ALVEOLAR MALE CONNECTION JOINT, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, 7-WALL STRUCTURE, 40 mm THICK, RIB HEIGHT 80 mm, CRYSTAL OR OPAL COLOR, ENDS CLOSED WITH ADHESIVE ALUMINUM TAPE.
DIMENSIONS: MODULE WIDTH 1,000 mm, LENGTH CUT TO MEASURE.

PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.




Alve-roof full




## ACCESSORIES:

Variable ridge

Upper bird-screen ridge

Variable length screw

Stainless steel washer with EPDM gasket

Alveoli closure with U-shaped section in polycarbonate

# ALVE - ROOF ONDA 4/6 mm

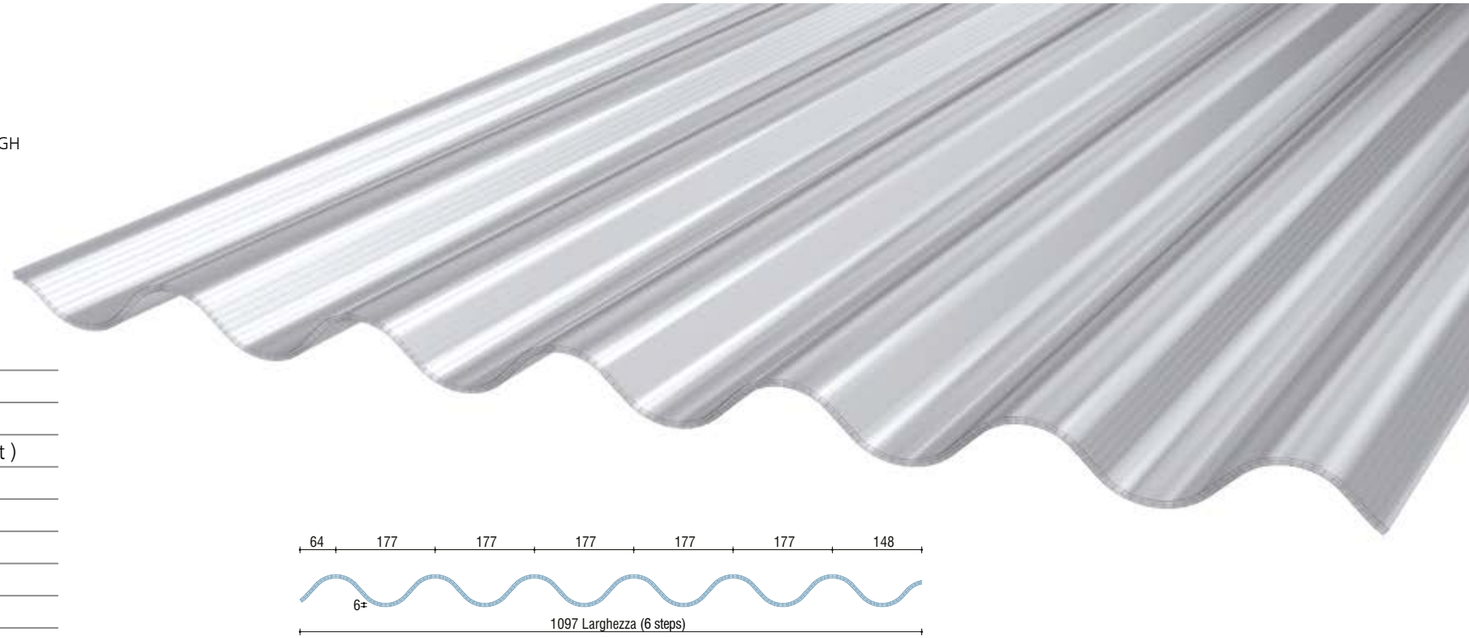
RIBBED SYSTEM IN ALVEOLAR POLYCARBONATE

ALVE-ROOF ONDA_4/6 IS A TRANSLUCENT COVERING ELEMENT IN POLYCARBONATE WHICH IS USED FOR THE CONSTRUCTION OF SKYLIGHTS AND IT IS COMPATIBLE WITH THE 177/51 PROFILE IN FIBER-CEMENT. ITS PARTICULAR GEOMETRY GIVES THE PRODUCT HIGH FLEXIBILITY OF APPLICATION, BOTH AS AN INTRA-PITCH SKYLIGHT, AS A SKYLIGHT FROM RIDGE TO EAVES, AND AS A COMPLETELY TRANSPARENT ROOF.

## TECHNICAL SPECIFICATIONS

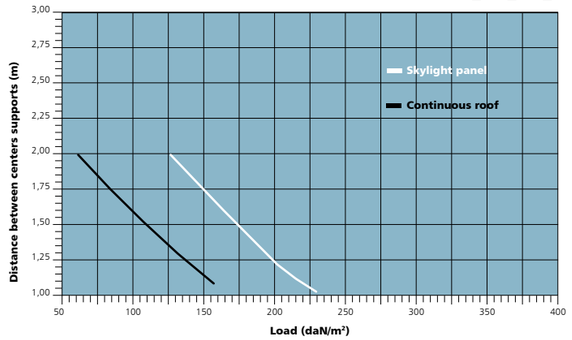
TRANSLUCENT ROOF IN 4/6 mm THICK ALVEOLAR POLYCARBONATE, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, CRYSTAL OR OPAL COLOR, ENDS SEALED WITH HEAT-WELDING. DIMENSIONS: MODULE WITH VARIABLE WIDTH 1,097 mm, LENGTH CUT TO MEASURE.

| Thickness | **4 mm** | **6 mm** |
|---|---|---|
| Step height | 51 mm | 51 mm |
| Step passage | 177 mm | 177 mm |
| Standard width | 1.050 mm ( 875 mm on request ) | 1.050 mm ( 875 mm on request ) |
| Standard length | 5.000 mm (max recommended) | 5.000 mm (max recommended) |
| Color | Crystal / Opal | Crystal / Opal |
| Light transmission | Crystal 80% / Opal 70% | Crystal 73% / Opal 50% |
| Acoustic insulation | 16 dB | 16 dB |
| Thermal transmittance | U=3,9 W/m$^2$ K | U=3,3 W/m$^2$ K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C |
| Operating temperature | -40°C + 120°C | -40°C + 120°C |
| Fire resistance certification EN 13501-1 | B-s1,d0 | B-s1,d0 |



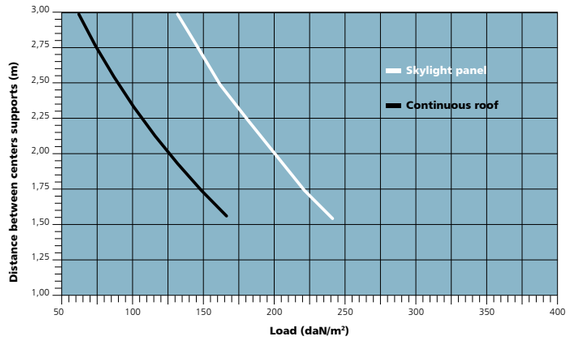

PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 4/6 mm**




PERMISSIBLE LOADS **on 2 SUPPORTS**
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 4/6 mm**




## ACCESSORIES:

Variable ridge

Upper bird-screen ridge

Lower bird-screen Ridge eaves

Variable length screw

Stainless steel washer with EPDM gasket

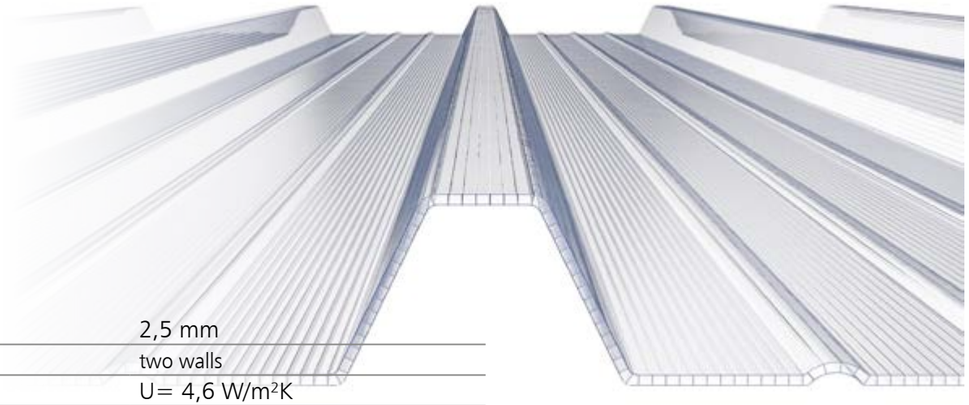
# ALVE-ROOF 5G 2.5

RIBBED SYSTEM IN MICRO-ALVEOLAR POLYCARBONATE

ALVE-ROOF 5G_2.5 IS A TRANSLUCENT COVERING ELEMENT IN MICRO-ALVEOLAR POLYCARBONATE PRODUCED FOR ALL SECTIONS OF POLYURETHANE PANELS AND RIBBED SHEETS ON THE MARKET. ITS PARTICULAR GEOMETRY GIVES THE PRODUCT HIGH FLEXIBILITY OF APPLICATION, BOTH AS AN INTRA-PITCH SKYLIGHT, AS A SKYLIGHT FROM RIDGE TO EAVES, AND AS A COMPLETELY TRANSPARENT ROOF.

## TECHNICAL SPECIFICATIONS

TRANSLUCENT ROOF IN COMPACT POLYCARBONATE, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, 2-WALL ALVEOLAR STRUCTURE, 2.5 mm THICK, ENDS SEALED WITH HEAT-WELDING. DIMENSIONS: MODULE WITH VARIABLE WIDTH 1,000/1,240 mm, LENGTH CUT TO MEASURE.



| | |
|---|---|
| Thickness | 2,5 mm |
| Structure | two walls |
| Thermal transmittance | U= 4,6 W/m²K |
| Color | Crystal / Opal |
| Light transmission | Crystal 85% / Opal 70% |
| Linear expansion | 0,0650 mm/m°C |
| Operating temperature | -30°C + 120°C |
| Fire resistance certification EN 13501-1 | B-s1,d0 |

REQUEST THE LOAD TECHNICAL SHEET
FOR EACH PRODUCT

## ACCESSORIES:

Variable ridge

Upper bird-screen ridge

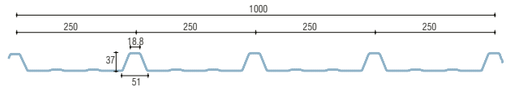
Lower bird-screen Ridge eaves

Variable length screw

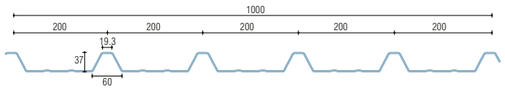
Stainless steel washer with EPDM gasket

## AVAILABLE SECTIONS:

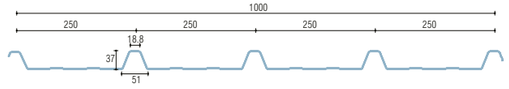
### COMPATIBLE WITH LATTONEDIL EUROCINQUE



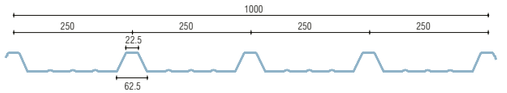

### COMPATIBLE WITH LATTONEDIL ISOCOPRE



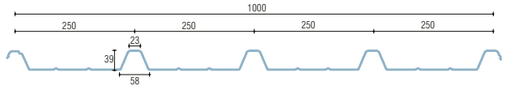

### COMPATIBLE WITH ADRIA ROOF



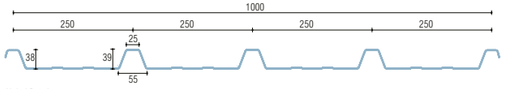

### COMPATIBLE WITH ISOLPACK DELTA 5



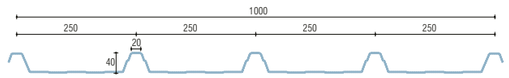

### COMPATIBLE WITH ISOPAN ISOCOP 5



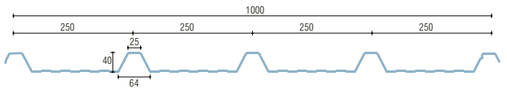

### COMPATIBLE WITH MARCEGAGLIA TD5



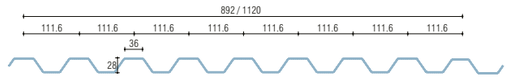

### COMPATIBLE WITH ITALPANNELLI PENTA 01



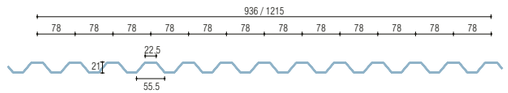

### COMPATIBLE WITH ALUBEL DACH




### COMPATIBLE WITH G9 / ALUBEL 28




### COMPATIBLE WITH PROFILO 20/75



TRANSVERSAL SKYLIGHT

EAVES TO RIDGE SKYLIGHT

# ALVECOMP-ROOF

RIBBED SLABS IN POLYCARBONATE

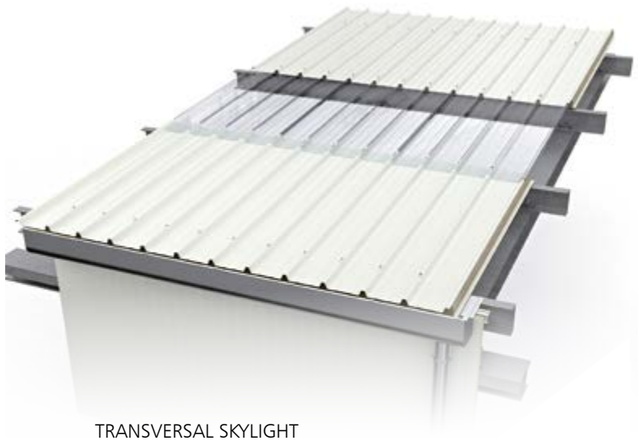
IT IS A TRANSLUCENT COVERING ELEMENT IN COMPACT POLYCARBONATE, PRODUCED FOR ALL SECTIONS OF POLYURETHANE PANELS AND RIBBED SHEETS ON THE MARKET. THE PARTICULAR GEOMETRY GIVES THE PRODUCT HIGH FLEXIBILITY OF APPLICATION, BOTH AS AN INTRA-PITCH SKYLIGHT, AS A SKYLIGHT FROM RIDGE TO EAVES, AND AS A COMPLETELY TRANSPARENT ROOF.

## TECHNICAL SPECIFICATIONS

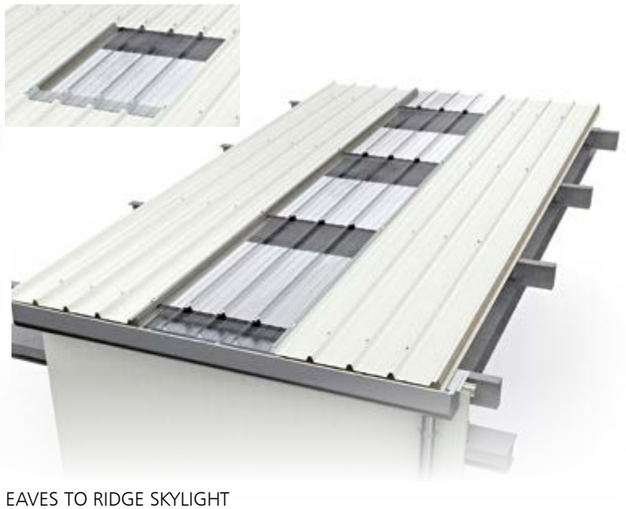
TRANSLUCENT ROOF IN COMPACT POLYCARBONATE, UV-PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, VARIABLE THICKNESS OF 1/2 MM, CRYSTAL OR OPAL COLOR.
DIMENSIONS: MODULE WITH VARIABLE WIDTH 1,000/1,240 MM, LENGTH CUT TO MEASURE.

| | |
|---|---|
| Thickness | 1/2 mm |
| Thermal transmittance | U= 5,7 W/m²K |
| Color | Crystal / Opal |
| Light transmission | Crystal 85% / Opal 70% |
| Linear expansion | 0.0650 mm/m°C |
| Operating temperature | -30°C + 120°C |
| Fire resistance certification: EN 13501-1 | B-s1,d0 |

REQUEST LOAD TECHNICAL DATA SHEET
FOR EACH PRODUCT



TRANSVERSAL SKYLIGHT

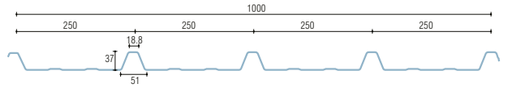


EAVES TO RIDGE SKYLIGHT

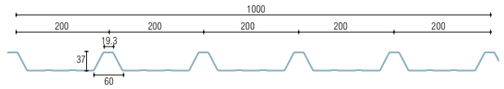
ALVECOMP-ROOF SLABS MUST BE FASTENED IN CORRESPONDENCE OF THE STRUCTURES ON EACH UPPER PORTION OF THE RIB, WITH Ø 6.3 MM SCREWS, EQUIPPED OF THE PROVIDED GASKETS. THE USE OF OTHER TYPES OF FASTENERS CAN ALTER THE SLAB RESISTANCE. FOR FASTENING, IT IS RECOMMENDED PRE-DRILLING WITH A METAL DRILL BIT WITH A DIAMETER 2 MM BIGGER THAN THAT OF THE SCREW. OVER TIGHTENING OF THE FASTENING ELEMENTS PREVENTS THE MOVEMENT OF THE SLABS DUE TO THERMAL EXPANSION, COMPROMISING THEIR INTEGRITY.

## AVAILABLE SECTIONS:

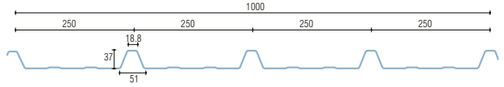
### COMPATIBLE WITH LATTONEDIL EUROCINQUE



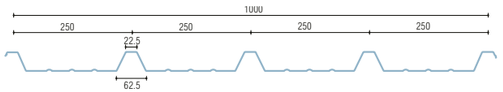

### COMPATIBLE WITH LATTONEDIL ISOCOPRE



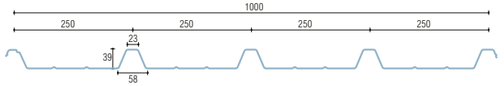

### COMPATIBLE WITH ADRIA ROOF



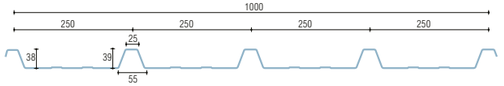

### COMPATIBLE WITH ISOLPACK DELTA 5




### COMPATIBLE WITH ISOPAN ISOCOP 5




### COMPATIBLE WITH MARCEGAGLIA TD5



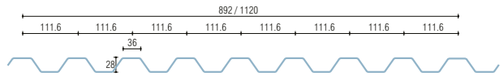

### COMPATIBLE WITH ITALPANNELLI PENTA 01



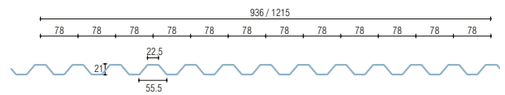

### COMPATIBLE WITH ALUBEL DACH



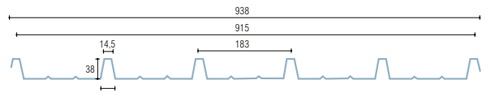

### COMPATIBLE WITH G9/ ALUBEL 28




### COMPATIBLE WITH PROFILO 20/75




### COMPATIBLE WITH PROFILO EGB 401




## ACCESSORIES:

Variable ridge

Upper bird-screen ridge

Lower bird-screen Ridge eaves

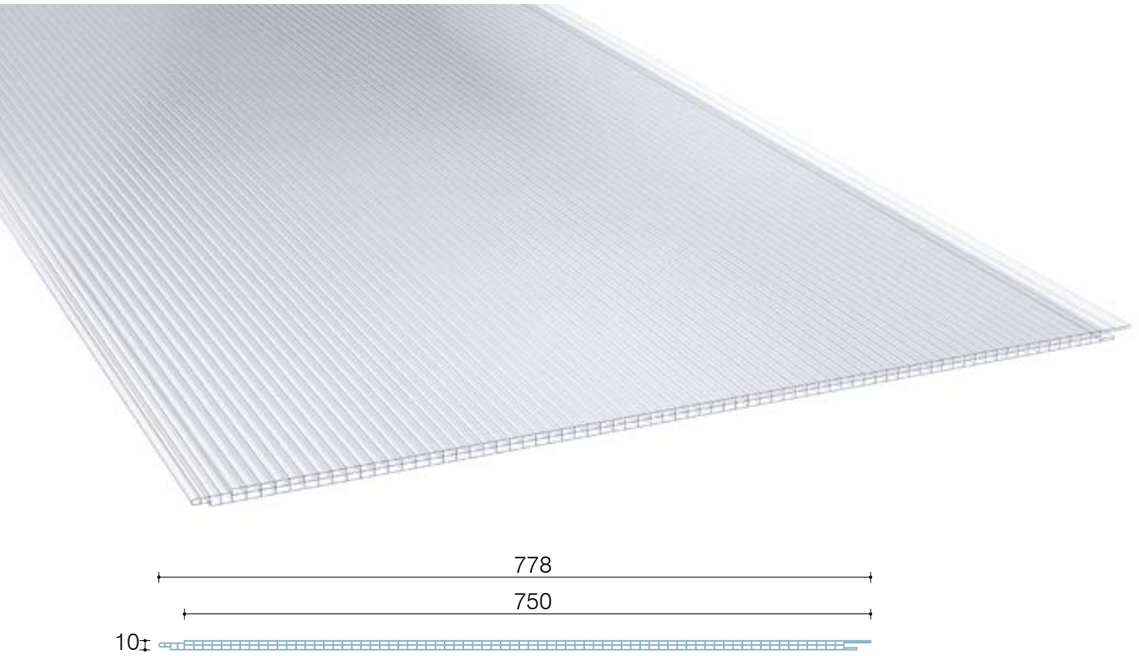
Variable length screw

Stainless steel washer with EPDM gasket

# ALVE - ROOF VELARIO 3 PARETI - NO UV

**10 mm**

MALE FEMALE INTERLOCKING SYSTEM IN ALVEOLAR POLYCARBONATE FOR FALSE CEILINGS




**Maximum distance between supports: 1.60 m**

ALVE-ROOF VELARIO 3-WALL IS RECOMMENDED FOR THE CONSTRUCTION OF FALSE CEILINGS, CURTAINS, INTERNAL DIVIDERS AND IN ALL THOSE SOLUTIONS NOT SUBJECTED TO THE DIRECT ACTION OF SUNLIGHT. PRACTICALITY AND COST-EFFECTIVENESS MAKE IT THE WINNING SOLUTION WHERE THE FOLLOWING IS REQUIRED:

- EXTRA-LIGHTWEIGHT
- HIGH IMPACT RESISTANCE
- HIGH LIGHT TRANSMISSION
- GOOD THERMAL INSULATION

THE SPECIAL INTERLOCKING SYSTEM FACILITATES INSTALLATION AND MAKES IT POSSIBLE TO IMPLEMENT A SOLUTION WITH A CONSTANT THICKNESS OF 10 MM WITHOUT OUTER JOINTS. THE MATTE FINISH ALLOWS A MORE EVEN DIFFUSION OF LIGHT, WHILE MASKING ANY DEPOSITS OF DUST ON THE SURFACE.

## TECHNICAL SPECIFICATIONS

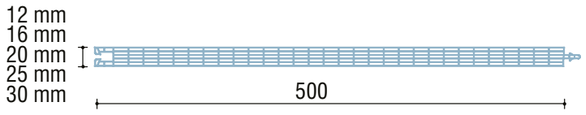
MALE FEMALE INTERLOCKING SYSTEM IN POLYCARBONATE, NON UV PROTECTED, 600/750 VARIABLE MODULE 10 MM THICK CRYSTAL AND OPAL COLOR, ALVEOLI CLOSED WITH HEAT-WELDING.

| | |
|---|---|
| Thickness | 10 mm |
| Width | 750 mm |
| Length | Cut to measure |
| Color | Crystal / Opal |
| Light transmission | Crystal 78% / Opal 60% |
| Thermal transmittance | U= 3,1 W/m² K |
| Linear expansion | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 |
| Operating temperature | min -30 °C / max +120 °C |

# ALVE - ROOF VELARIO 6 PARETI - NO UV

**12/16/20/25/30 mm**

MALE FEMALE INTERLOCKING SYSTEM IN ALVEOLAR POLYCARBONATE FOR FALSE CEILINGS




ALVE-ROOF VELARIO 6-WALL IS RECOMMENDED FOR THE CONSTRUCTION OF FALSE CEILINGS, CURTAINS, INTERNAL DIVIDERS AND IN ALL THOSE SOLUTIONS NOT SUBJECTED TO THE DIRECT ACTION OF SUNLIGHT. PRACTICALITY AND COST-EFFECTIVENESS MAKE IT THE WINNING SOLUTION WHERE THE FOLLOWING IS REQUIRED:

- EXTRA-LIGHTWEIGHT
- HIGH IMPACT RESISTANCE
- HIGH LIGHT TRANSMISSION
- GOOD THERMAL INSULATION

THE SPECIAL INTERLOCKING SYSTEM FACILITATES INSTALLATION AND MAKES IT POSSIBLE TO IMPLEMENT A SOLUTION WITH A CONSTANT THICKNESS OF 12/16/20/25/30 MM. THE MATTE FINISH ALLOWS A MORE EVEN DIFFUSION OF LIGHT, WHILE MASKING ANY DEPOSITS OF DUST ON THE SURFACE.

## TECHNICAL SPECIFICATIONS

ALVE-WALL 12 / 16 / 20 / 25 / 30 COMPOSED OF:
PANEL IN ALVEOLAR POLYCARBONATE NON UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE, MULTI-ALVEOLAR STRUCTURE, COLOR ON REQUEST. DIMENSIONS: MODULE WIDTH 500 mm, LENGTH CUT TO MEASURE.

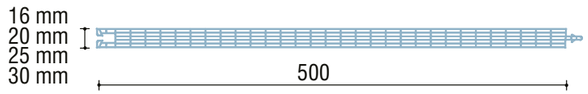
| Thickness | **12 mm** | **16 mm** | **20 mm** | **25 mm** | **30 mm** |
|---|---|---|---|---|---|
| Width | 500 mm | 500 mm | 500 mm | 500 mm | 500 mm |
| Length | on request | on request | on request | on request | on request |
| Color | Crystal / Opal | Crystal / Opal | Crystal / Opal | Crystal / Opal | Crystal / Opal |
| Light transmission | 60% / 46% | 60% / 40% | 58% / 40% | 55% / 38% | 53% / 38% |
| Transmittance Thermal | U= 2,2 W/m² K | U= 1,8 W/m² K | U= 1,6 W/m² K | U= 1,4 W/m² K | U= 1,3 W/m² K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C |
| Fire resistance certification: EN 13501-1 | B-s1,d0 | B-s1,d0 | B-s1,d0 | B-s1,d0 | B-s1,d0 |
| Temperature of operation | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C |

ALVECO
POLYCARBONATE

# ALVE - WALL 6 PARETI UV

**16/20/25/30 mm**

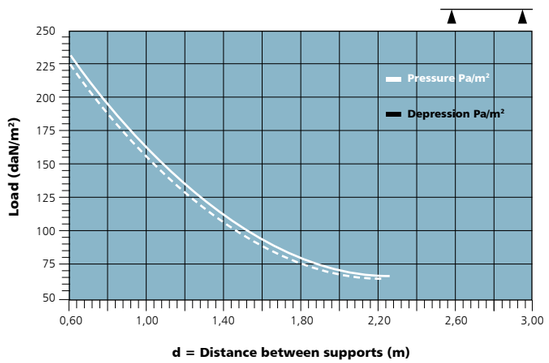
MALE FEMALE INTERLOCKING SYSTEM IN ALVEOLAR POLYCARBONATE




## THICKNESS 20 mm

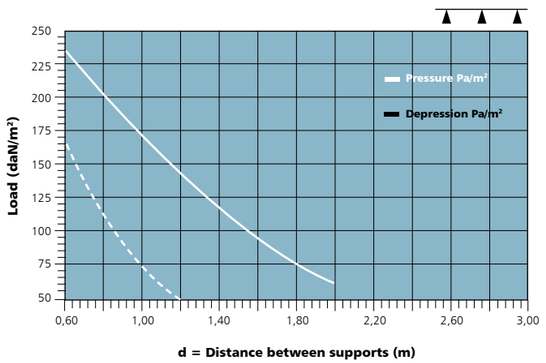
PERMISSIBLE LOADS **ON 2 SUPPORTS**

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.




PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.




ALVE-WALL 16 / 20 / 25 / 30 IS AN ALVEOLAR POLYCARBONATE SYSTEM, RECOMMENDED FOR THE CONSTRUCTION OF TRANSLUCENT WALLS AND VERTICAL INFILL PANELS. THE SYSTEM IS COMPOSED OF PANELS IN MULTI-ALVEOLAR POLYCARBONATE WITH MULTI-ALVEOLAR STRUCTURE, THICKNESS 16/20/25 mm, MODULE WIDTH 500 mm, UV PROTECTED AND CO-EXTRUDED ON THE OUTER SIDE.

## TECHNICAL SPECIFICATIONS

ALVE-WALL 16 / 20 / 25 / 30 COMPOSED OF: PANEL IN ALVEOLAR POLYCARBONATE, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE MULTI-ALVEOLAR STRUCTURE, COLOR ON REQUEST. DIMENSIONS: MODULE WIDTH 500 mm, LENGTH CUT TO MEASURE.

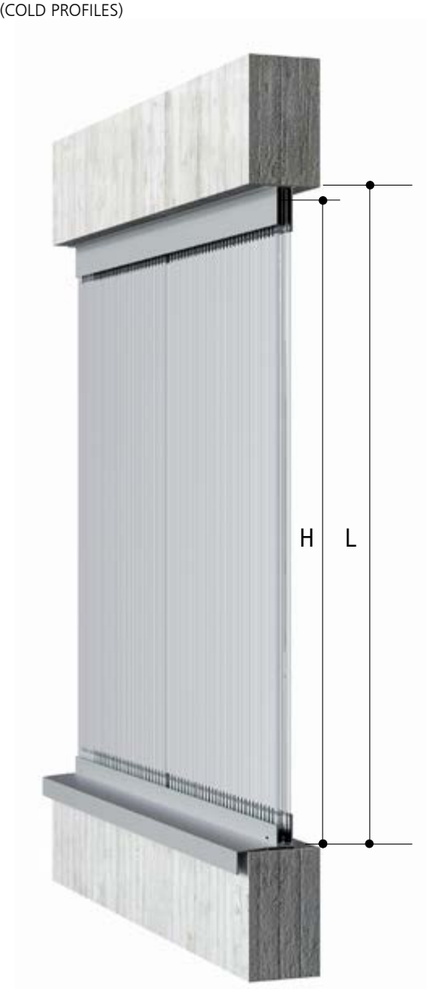
- ANODIZED OR COLORED ALUMINUM PERIMETER PROFILES OR, ALTERNATIVELY, THERMALLY CUT PERIMETER PROFILES.
- OUTER GASKETS IN EPDM RUBBER.
- ALUMINUM PLATE FOR FASTENING THE PANELS (WHERE REQUIRED).

| Thickness | **16 mm** | **20 mm** | **25 mm** | **30 mm** |
|---|---|---|---|---|
| Width | 500 mm | 500 mm | 500 mm | 500 mm |
| Length | on request | on request | on request | on request |
| Color | Crystal / Opal | Crystal / Opal | Crystal / Opal | Crystal / Opal |
| Light transmission | 60% / 40% | 58% / 40% | 55% / 38% | 53% / 38% |
| Transmittance Thermal | U= 1,8 W/m² K | U= 1,6 W/m² K | U= 1,4 W/m² K | U= 1,3 W/m² K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C |
| Fire resistance certification: EN 13501-1 | B-s1,d0 | B-s1,d0 | B-s1,d0 | B-s1,d0 |
| Temperature of operation | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C |

# ALVE - WALL 6 PARETI
# WINDOW SYSTEM

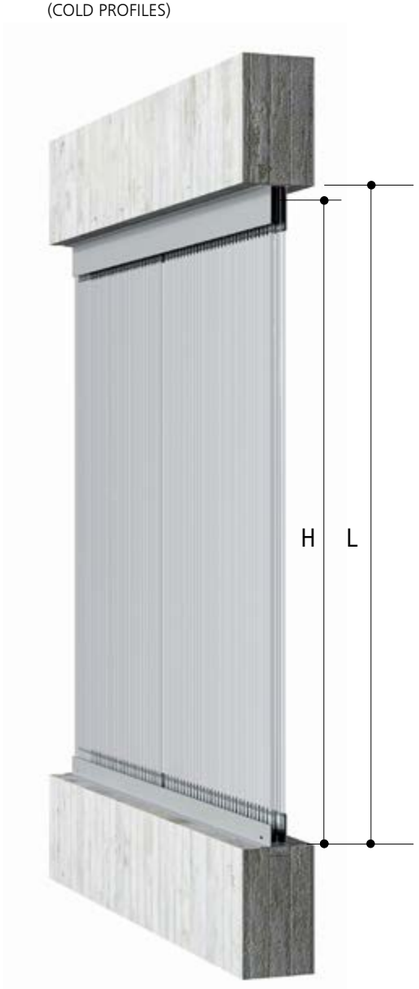
PROFILES NEEDED FOR THE CONSTRUCTION OF WALL SYSTEMS FOR ALVE-WALL PANELS

INSTALLATION FACE TO THE WALL WITH DRIP (COLD PROFILES)




L= SPACE NET SPAN
H= PANEL HEIGHT
H= L -40mm

INSTALLATION FACE TO THE WALL WITHOUT DRIP (COLD PROFILES)

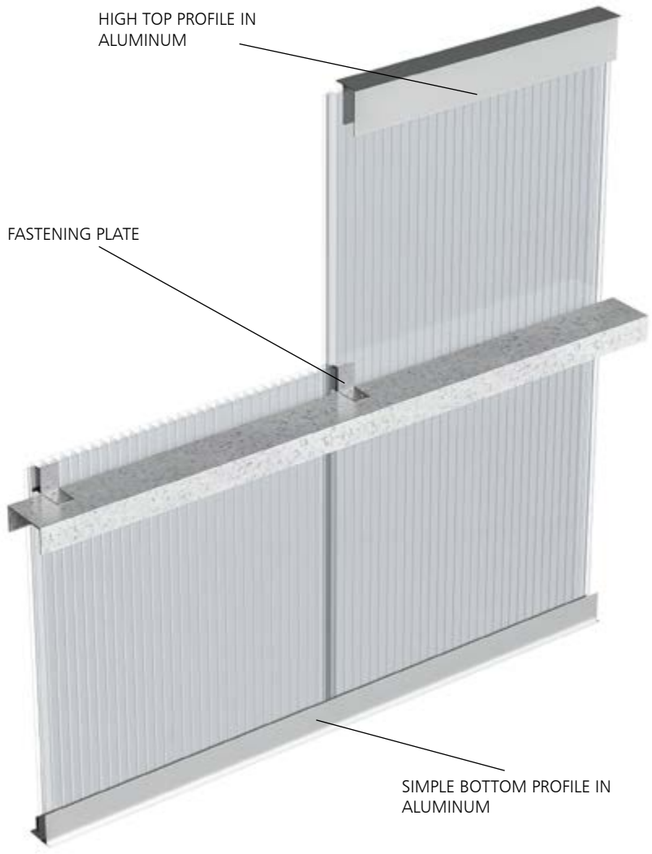



L= SPACE NET SPAN
H= PANEL HEIGHT
H= L -40mm

PLATE DETAIL OF INTERMEDIATE PLATFORM.

LOWER PROFILE DETAIL OF FASTENING, ALSO AVAILABLE WITH THERMAL CUT

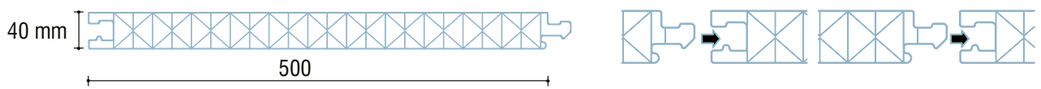
UPPER PROFILE DETAIL



# ALVE - WALL 40X UV

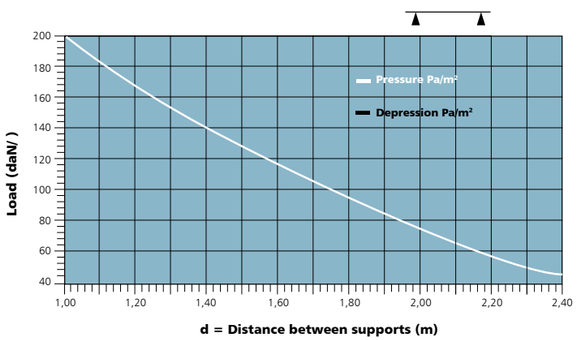
**40 mm**

MALE FEMALE INTERLOCKING SYSTEM IN ALVEOLAR POLYCARBONATE



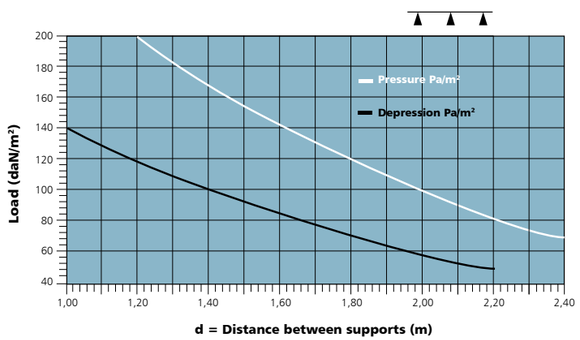

PERMISSIBLE LOADS **ON 2 SUPPORTS**

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.




PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.



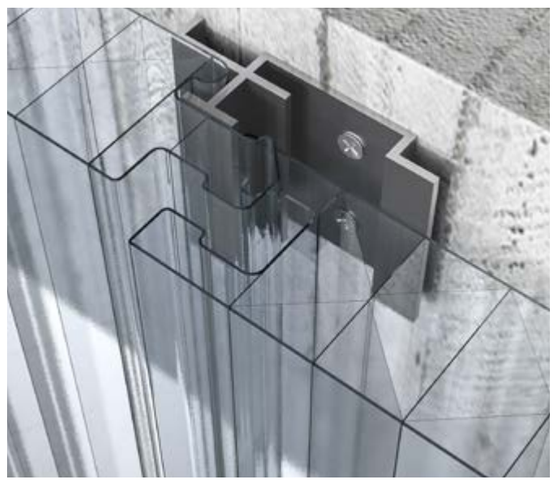

ALVE-WALL 40 9 IS AN ALVEOLAR POLYCARBONATE SYSTEM, RECOMMENDED FOR THE CONSTRUCTION OF TRANSLUCENT WALLS AND VERTICAL INFILL PANELS. THE SYSTEM IS COMPOSED OF PANELS IN MULTI-ALVEOLAR POLYCARBONATE WITH 9-WALL DIAGONAL STRUCTURE, THICKNESS 40 mm, MODULE WIDTH 500 mm, UV PROTECTED AND CO-EXTRUDED ON THE OUTER SIDE.

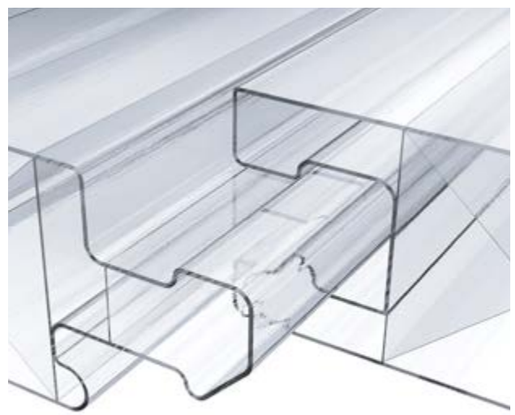
## TECHNICAL SPECIFICATIONS

ALVE-WALL 40_9 COMPOSED OF: PANEL IN ALVEOLAR POLYCARBONATE, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE 9-WALL STRUCTURE, COLOR ON REQUEST. DIMENSIONS: MODULE WIDTH 500 mm, LENGTH CUT TO MEASURE.

- ANODIZED OR COLORED ALUMINUM PERIMETER PROFILES OR, ALTERNATIVELY, THERMALLY CUT PERIMETER PROFILES.
- OUTER GASKETS IN EPDM RUBBER.
- ALUMINUM PLATE FOR FASTENING THE PANELS (WHERE REQUIRED).

| | |
|---|---|
| Thickness | 40 mm |
| Width | 500 mm |
| Length | on request |
| Color | Crystal / Opal |
| Light transmission | 50% / 30% |
| Thermal transmittance | U=1,60 W/m² K |
| Linear expansion | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 |
| Operating temperature | min -30 °C / max +120 °C |





# ALVE - WALL 40/9 PARETI UV

**40 mm**

MALE FEMALE INTERLOCKING SYSTEM IN ALVEOLAR POLYCARBONATE

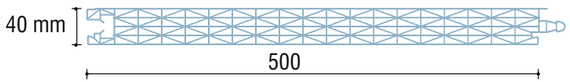
ALVE-WALL 40 9 IS AN ALVEOLAR POLYCARBONATE SYSTEM, RECOMMENDED FOR THE CONSTRUCTION OF TRANSLUCENT WALLS AND VERTICAL INFILL PANELS. THE SYSTEM IS COMPOSED OF PANELS IN MULTI-ALVEOLAR POLYCARBONATE WITH 9-WALL DIAGONAL STRUCTURE, THICKNESS 40 mm, MODULE WIDTH 500 mm, UV PROTECTED AND CO-EXTRUDED ON THE OUTER SIDE.

## TECHNICAL SPECIFICATIONS

ALVE-WALL 40_9 COMPOSED OF: PANEL IN ALVEOLAR POLYCARBONATE, UV PROTECTED, CO-EXTRUDED ON THE OUTER SIDE 9-WALL STRUCTURE, COLOR ON REQUEST. DIMENSIONS: MODULE WIDTH 500 mm, LENGTH CUT TO MEASURE.

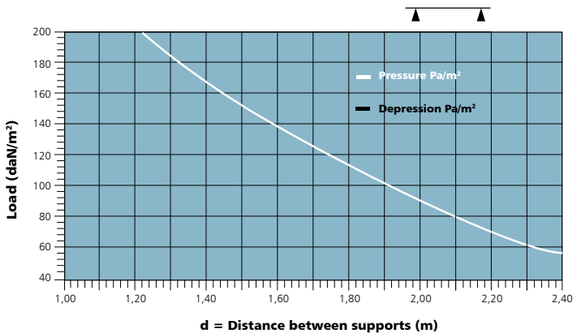
- ANODIZED OR COLORED ALUMINUM PERIMETER PROFILES OR, ALTERNATIVELY, THERMALLY CUT PERIMETER PROFILES.
- OUTER GASKETS IN EPDM RUBBER.
- ALUMINUM PLATE FOR FASTENING THE PANELS (WHERE REQUIRED).

| | |
|---|---|
| Thickness | 40 mm |
| Width | 500 mm |
| Length | on request |
| Color | Crystal / Opal |
| Light transmission | 50% / 30% |
| Thermal transmittance | U=1,10 W/m² K |
| Linear expansion | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 |
| Operating temperature | min -30 °C / max +120 °C |



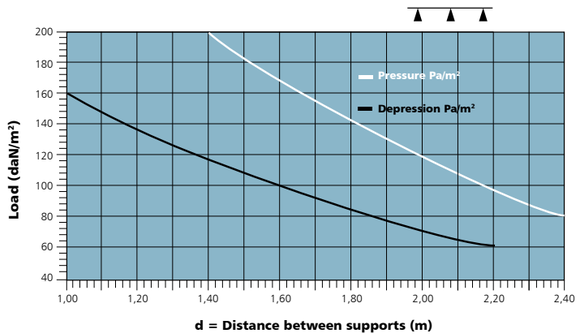

PERMISSIBLE LOADS **ON 2 SUPPORTS**

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.




PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**

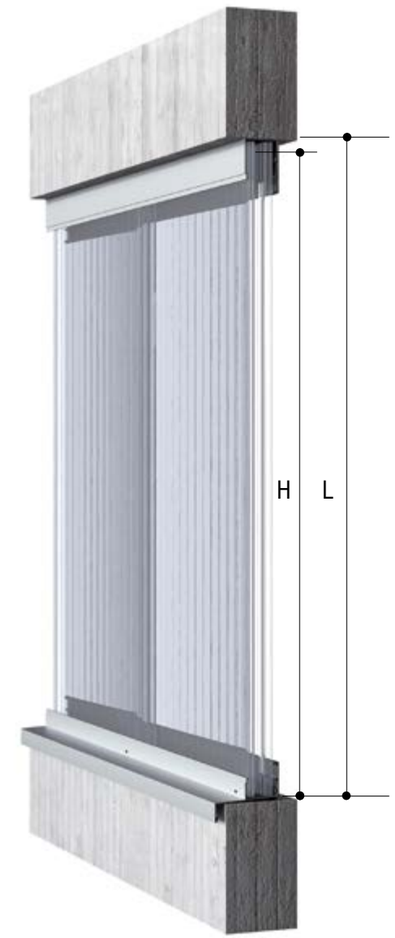
System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.



# ALVE - WALL 40X - 40/9 WINDOW SYSTEM

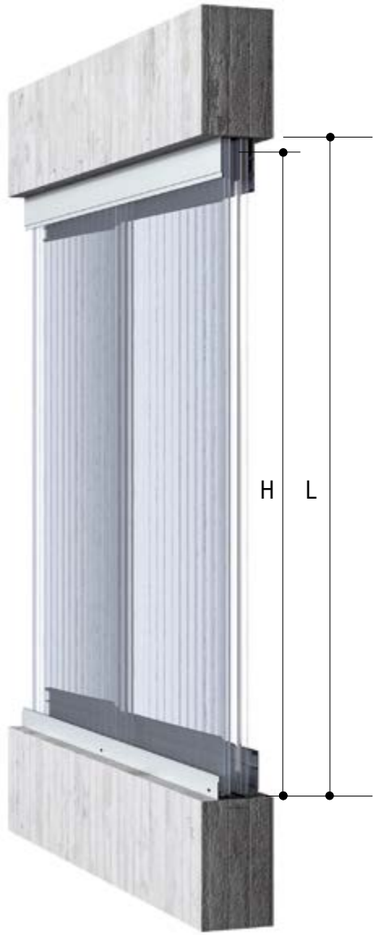
PROFILES NEEDED FOR THE CONSTRUCTION OF WALL SYSTEMS FOR ALVE-WALL PANELS

INSTALLATION FACE TO THE WALL WITH PLATFORM (COLD PROFILES




L= SPACE NET SPAN
H= PANEL HEIGHT
H= L-35mm

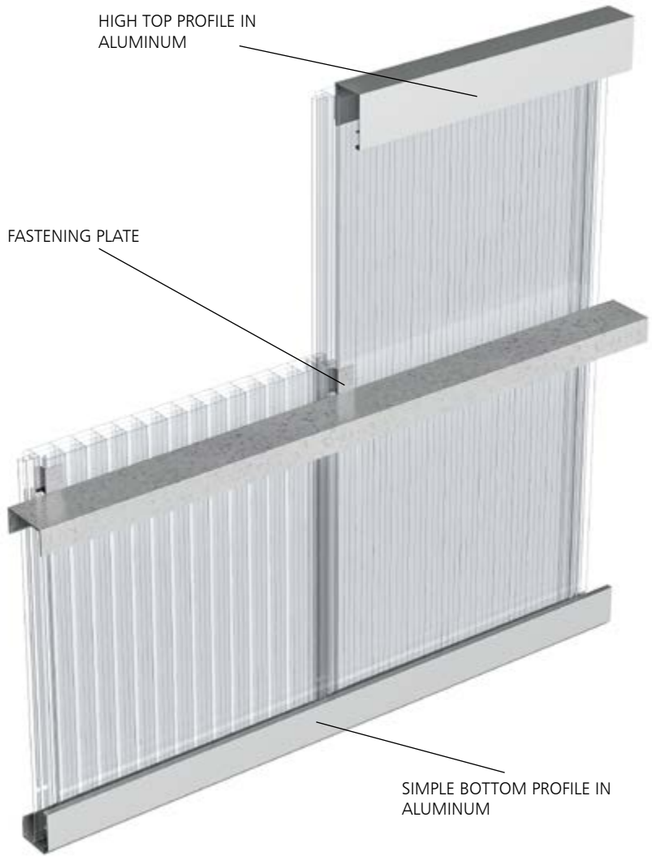
INSTALLATION FACE TO THE WALL WITHOUT PLATFORM (COLD PROFILES)




L= SPACE NET SPAN
H= PANEL HEIGHT
H= L-35mm

DETAIL OF THE PLATFORM LOWER PROFILE, AVAILABLE EVEN WITH THERMAL CUT

DETAIL OF THE UPPER PROFILE



# ALVE - WALL OPENING SYSTEM

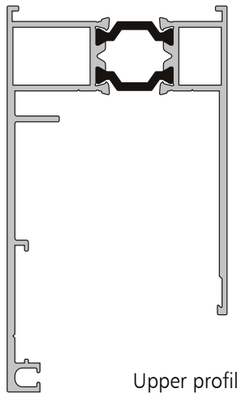
## PROFILES NEEDED FOR THE CONSTRUCTION OF OPENINGS TO BE INCLUDED IN THE ALVE-WALL SYSTEM

THE ALVE-WALL SYSTEM CAN BE EQUIPPED WITH AN OPENING TO ALLOW PERFECT VENTILATION OF THE BUILDING.
THE OPENING SYSTEM IS COMPOSED OF LOWER AND UPPER ALUMINUM PROFILES, EQUIPPED WITH RUBBER GASKETS FOR THE FULL CLOSURE, AND UPPER ANODIZED ALUMINUM HINGES.
THE OPENING CAN BE MANUAL OR THROUGH AN ELECTRIC ACTUATOR.
AVAILABLE EVEN WITH THERMAL CUT.

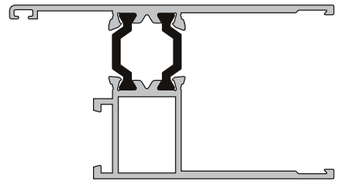
### STANDARD WINDOW WIDTH OUTER FRAME (L/MM)

| Panel | Qty. of panels | | |
|---|---|---|---|
| | 2 | 3 | 4 |
| ALVE - WALL 40/9 - 40X | 1.230 mm | 1.730 mm | 2.230 mm |
| ALVE - WALL 40/9 - 40X (with thermal cut) | 1.250 mm | 1.750 mm | 2.250 mm |
| ALVE - WALL 20 / 6P | 1.180 mm | 1.670 mm | 2.170 mm |

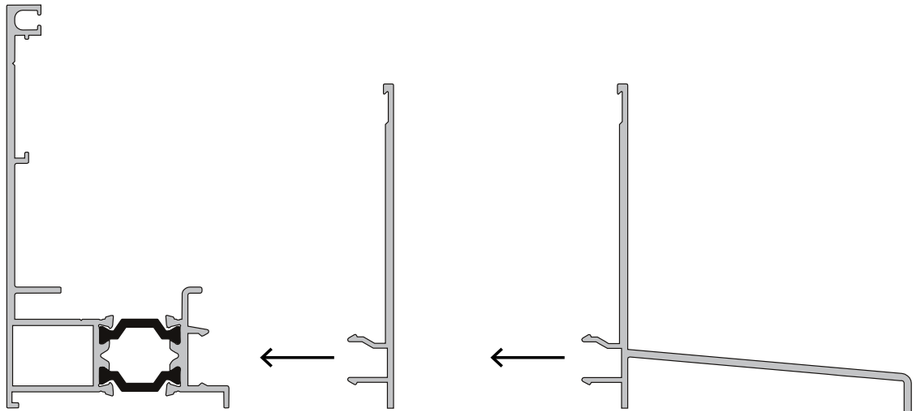
### ALUMINUM PROFILES WITH THERMAL CUT



Upper profile



Frame profile



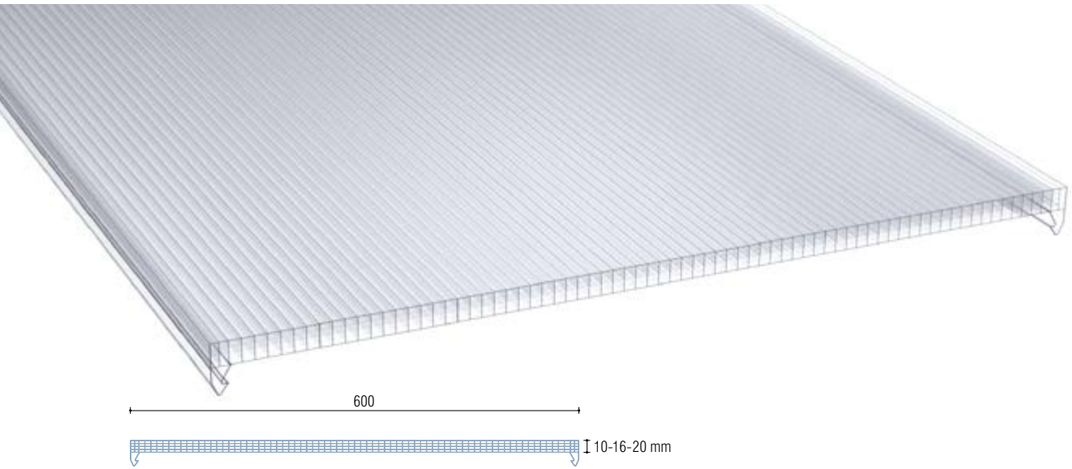
Base profile
Snap-on side

Profile
Snap-on side

Profile
snap-on drip

# ALVE - ROOF DUAL SYSTEM 600

**10/16/20 mm**
JOINT SYSTEM




ALVE-WALL DUAL SYSTEM 600 10-16- 20 IS AN ALVEOLAR POLYCARBONATE SYSTEM, RECOMMENDED FOR THE CONSTRUCTION OF TRANSLUCENT ROOFS AND COVERINGS AND VERTICAL INFILL PANELS. THE SYSTEM IS COMPOSED OF PANELS IN ALVEOLAR POLYCARBONATE WITH 5-WALL DIAGONAL STRUCTURE, 10 mm THICK, 16 mm THICK, 20 mm THICK, MODULE WIDTH 600 mm, UV PROTECTED AND CO-EXTRUDED ON THE OUTER SIDE.

## TECHNICAL SPECIFICATIONS

ALVE-WALL DUAL SYSTEM 600 10-16- 20 IS COMPOSED OF:
PANEL IN ALVEOLAR POLYCARBONATE UV PROTECTED, CO-EXTRUDED ON TWO SIDES, 5-WALL DIAGONAL STRUCTURE, COLOR ON REQUEST.
DIMENSIONS: MODULE WIDTH 600 mm, LENGTH CUT TO MEASURE.

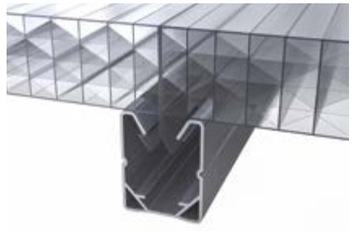
- JOINING PROFILE IN POLYCARBONATE.
- ALUMINUM PLATE FOR PANEL FASTENING
- ALUMINUM / POLYCARBONATE SHUTTER FOR CLOSING THE ALVEOLI OR THROUGH HEAT-WELDING.

FOR CURVED ROOFS ALVECO DESIGNED AN ALUMINUM SYSTEM THAT GUARANTEES TIGHTNESS AND CAPACITY
SPECIAL JOINTS AND SUPPORTS GUARANTEE ELASTICITY AND VERSATILITY OF INSTALLATION.
MINIMUM CURVATURE RADIUS 2 METERS/THICKNESS 10 mm, CURVATURE RADIUS 4 METERS/THICKNESS 16/20 mm.

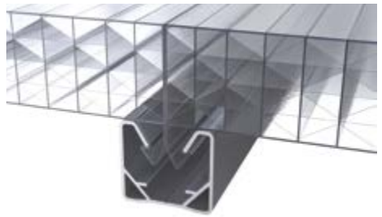
| Thickness | **10 mm** | **16 mm** | **20 mm** |
|---|---|---|---|
| Width | 600 mm | 600 mm | 600 mm |
| Length | on request | on request | on request |
| Color | Crystal / Opal | Crystal / Opal | Crystal / Opal |
| Light transmission | Crystal 65% / Opal 40% | Crystal 65% / Opal 40% | Crystal 65% / Opal 40% |
| Thermal transmittance | U= 2,50 W/m$^2$ K | U= 1,90 W/m$^2$ K | U= 1,70 W/m$^2$ K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 | B-s1,d0 | B-s1,d0 |
| Operating temperature | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C |



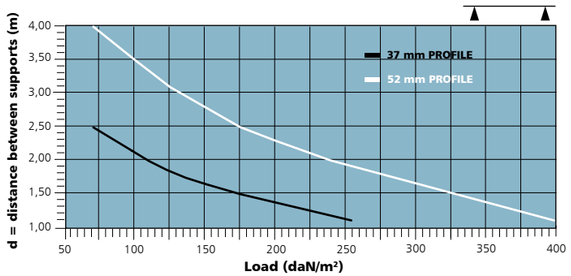
## 52 mm PROFILE



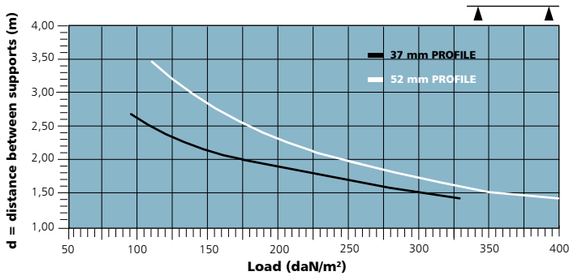
## 37 mm PROFILE



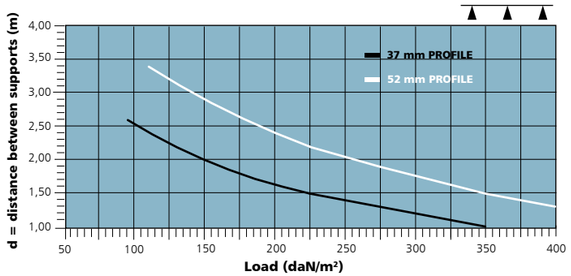
**THICKNESS 10/16 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS**



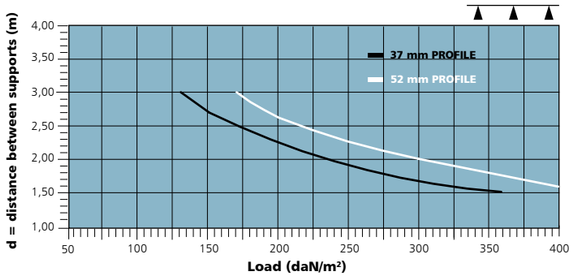

**THICKNESS 20 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS**



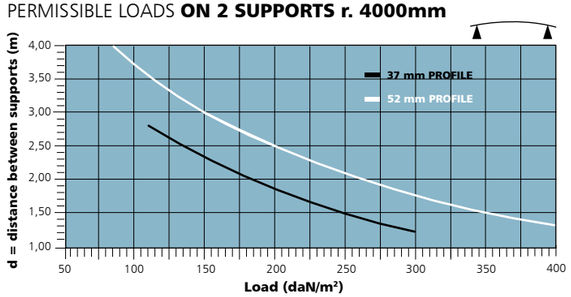

**THICKNESS 10/16 mm**
PERMISSIBLE LOADS ON **MULTIPLE SUPPORTS**




**THICKNESS 20 mm**
PERMISSIBLE LOADS ON **MULTIPLE SUPPORTS**

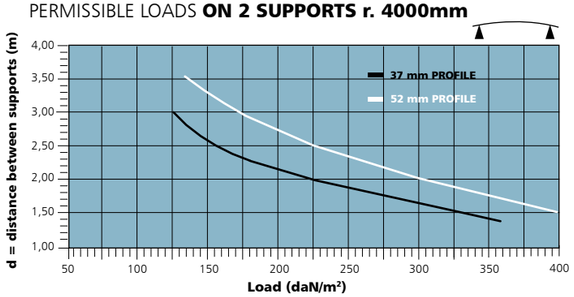



**THICKNESS 10/16 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS r. 4000mm**




System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**THICKNESS 20 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS r. 4000mm**




System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

# ALVE - WALL DUAL SYSTEM 600

**10/16/20 mm**

CONNECTING JOINT SYSTEM

ALVE-WALL DUAL SYSTEM 600 10-16- 20 IS AN ALVEOLAR POLYCARBONATE SYSTEM, RECOMMENDED FOR THE CONSTRUCTION OF TRANSLUCENT ROOFS AND COVERINGS AND VERTICAL INFILL PANELS. THE SYSTEM IS COMPOSED OF PANELS IN ALVEOLAR POLYCARBONATE WITH 5-WALL DIAGONAL STRUCTURE, 10 mm THICK, 16 mm THICK, 20 mm THICK, MODULE WIDTH 600 mm, UV PROTECTED AND CO-EXTRUDED ON THE OUTER SIDE.

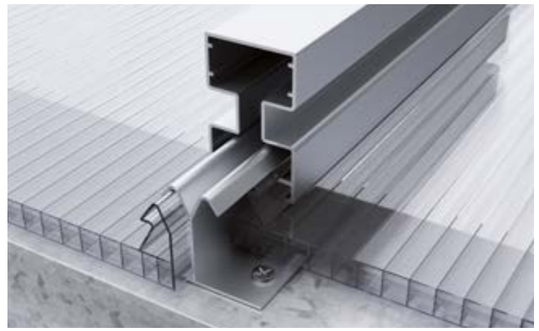
## TECHNICAL SPECIFICATIONS

ALVE-WALL DUAL SYSTEM 600 10-16- 20 IS COMPOSED OF:
PANEL IN ALVEOLAR POLYCARBONATE UV PROTECTED, CO-EXTRUDED ON TWO SIDES, 5-WALL DIAGONAL STRUCTURE, COLOR ON REQUEST.
DIMENSIONS: MODULE WIDTH 600 MM, LENGTH CUT TO MEASURE.

- JOINING PROFILE IN POLYCARBONATE.
- ALUMINUM PLATE FOR PANEL FASTENING
- ALUMINUM / POLYCARBONATE SHUTTER FOR CLOSING THE ALVEOLI OR THROUGH HEAT-WELDING.

| Thickness | **10 mm** | **16 mm** | **20 mm** |
|---|---|---|---|
| Width | 600 mm | 600 mm | 600 mm |
| Length | on request | on request | on request |
| Color | Crystal / Opal | Crystal / Opal | Crystal / Opal |
| Light transmission | Crystal 65% / Opal 40% | Crystal 65% / Opal 40% | Crystal 65% / Opal 40% |
| Thermal transmittance | U= 2,50 W/m$^2$ K | U= 1,90 W/m$^2$ K | U= 1,70 W/m$^2$ K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 | B-s1,d0 | B-s1,d0 |
| Operating temperature | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C |

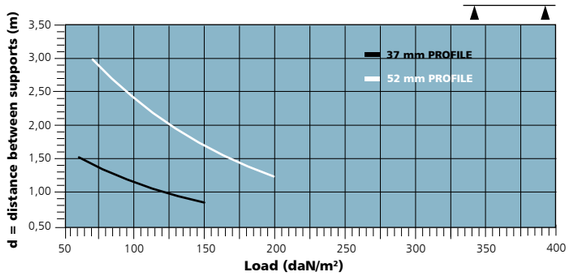
**JOINT COVER IN POLYCARBONATE**



**CONNECTOR IN ALUMINUM**

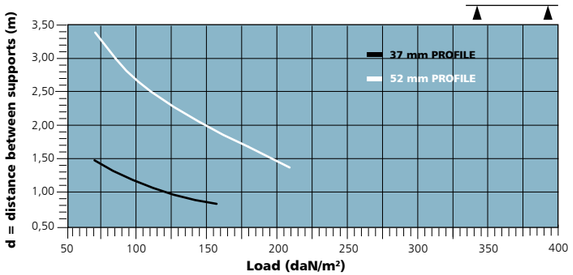
### THICKNESS 10/16 mm

PERMISSIBLE LOADS ON **ON 2 SUPPORTS**



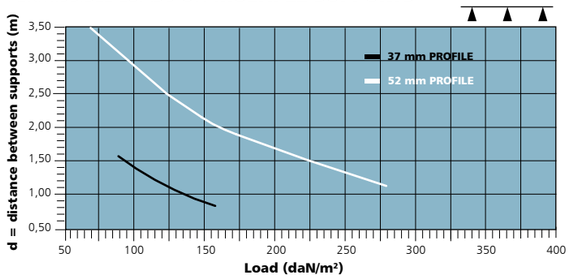

### THICKNESS 20 mm

PERMISSIBLE LOADS ON **ON 2 SUPPORTS**




### THICKNESS 10/16 mm

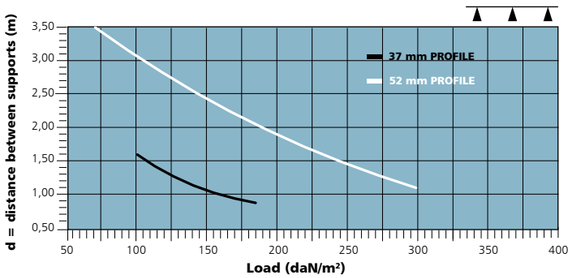
PERMISSIBLE LOADS ON **MULTIPLE SUPPORTS**




System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

### THICKNESS 20 mm

PERMISSIBLE LOADS ON **MULTIPLE SUPPORTS**



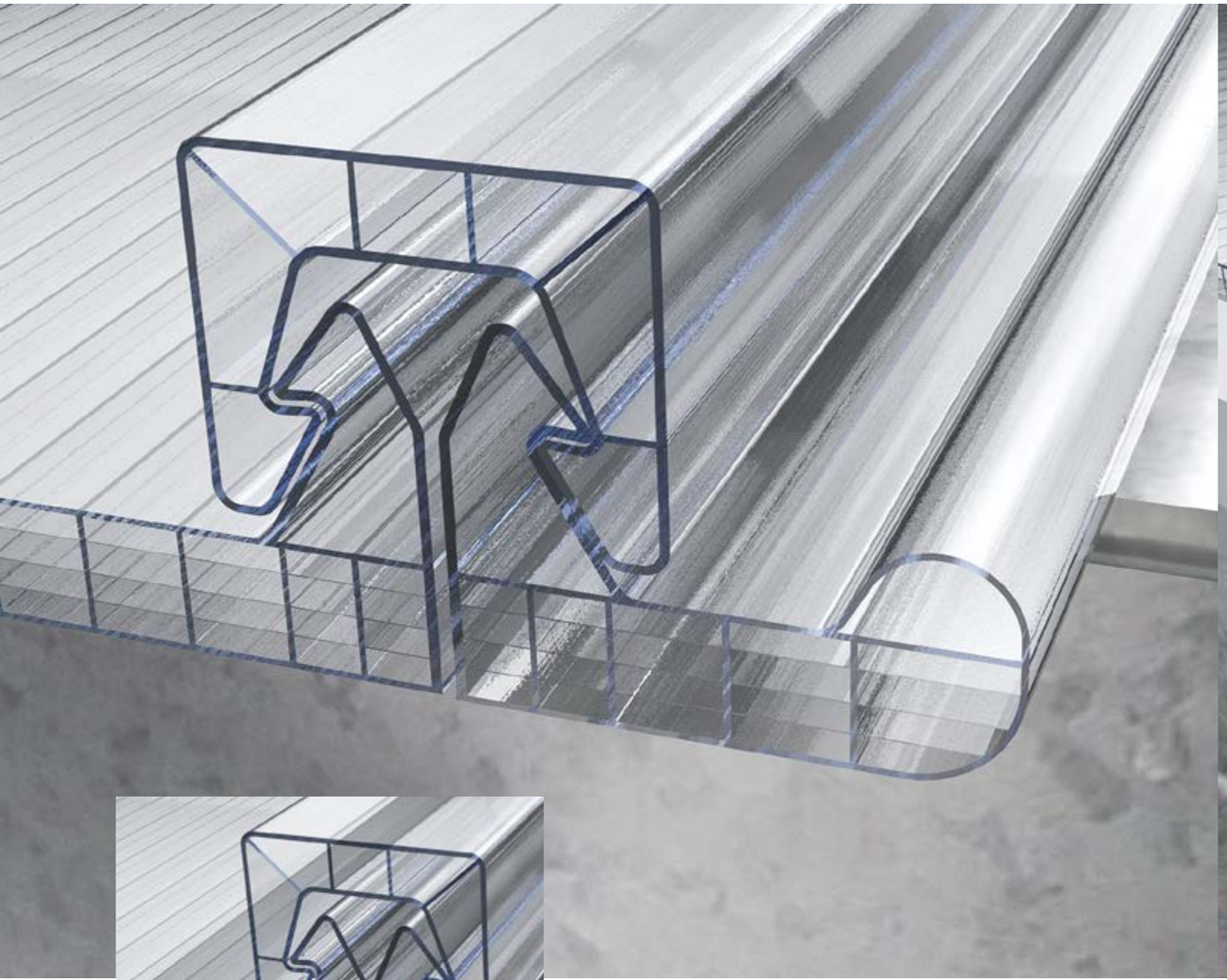

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

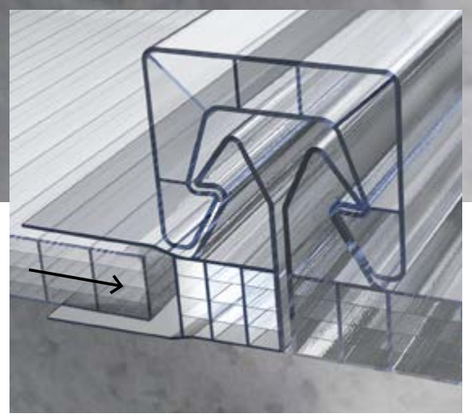
ALVECO
POLYCARBONATE

## CONNECTOR IN ALUMINUM

## JOINT COVER IN POLYCARBONATE

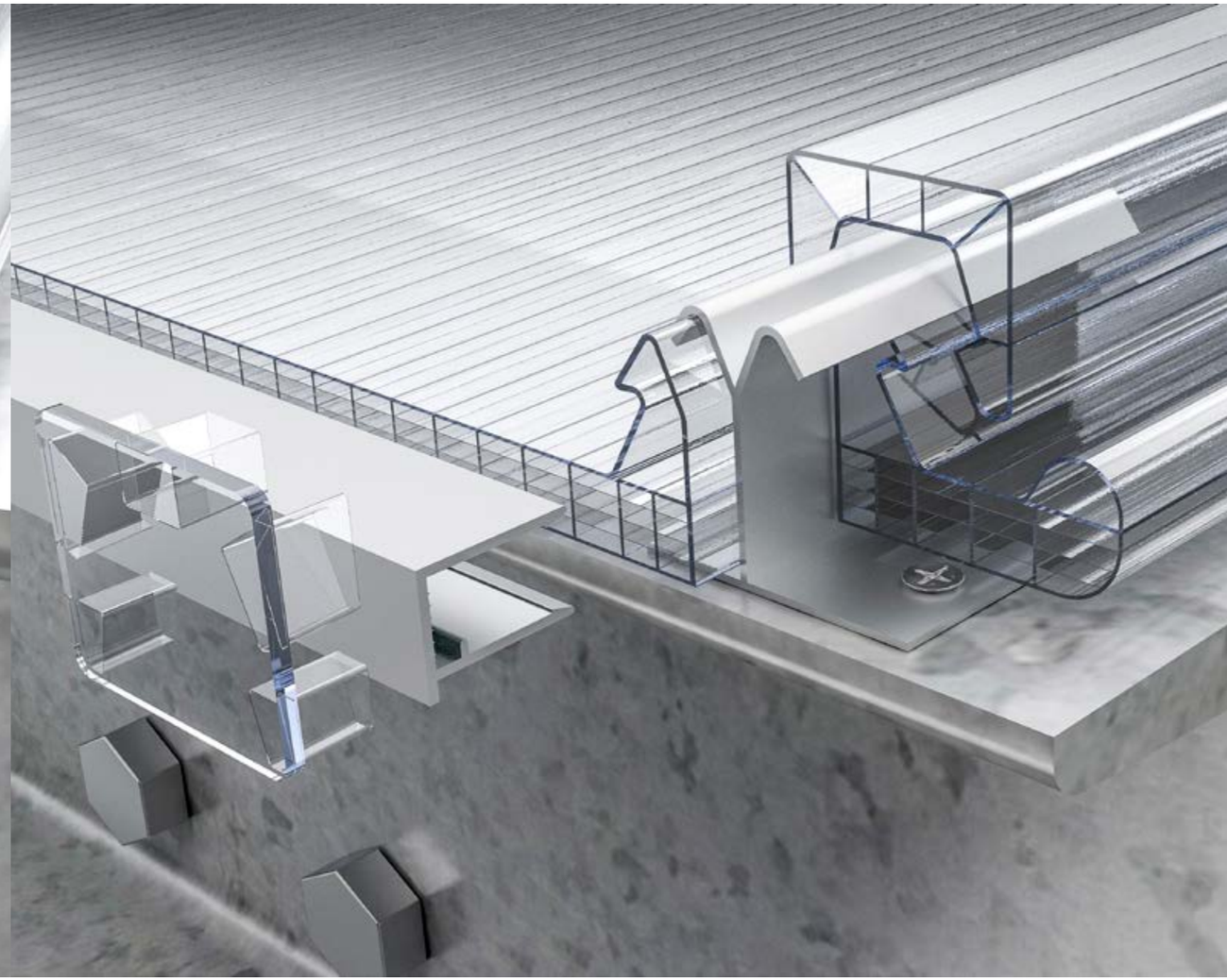
## WALL SYSTEM END





**CLOSURE PROFILE DETAIL**

## COMPONENTS OF WALL SYSTEM JOINT COVER IN POLYCARBONATE



# ALVE - WALL DUAL SYSTEM 1000

**25/32/40 mm**
JOINT SYSTEM

ALVE-WALL DUAL SYSTEM 1000 25-32- 40 IS AN ALVEOLAR POLYCARBONATE SYSTEM, RECOMMENDED FOR THE CONSTRUCTION OF TRANSLUCENT ROOFS AND COVERINGS AND VERTICAL INFILL PANELS. THE SYSTEM IS COMPOSED OF PANELS IN ALVEOLAR POLYCARBONATE WITH 10-WALL DIAGONAL STRUCTURE, 25 mm THICK, 32 mm THICK, 40 mm THICK, MODULE WIDTH 1000 mm, UV PROTECTED AND CO-EXTRUDED ON THE OUTER SIDE.

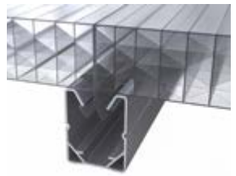
## TECHNICAL SPECIFICATIONS

ALVE-WALL DUAL SYSTEM 1000 25-32- 40 IS COMPOSED OF: PANEL IN ALVEOLAR POLYCARBONATE UV PROTECTED, CO-EXTRUDED ON TWO SIDES, 10-WALL DIAGONAL STRUCTURE, COLOR ON REQUEST. DIMENSIONS: MODULE WIDTH 1000 mm, LENGTH CUT TO MEASURE.

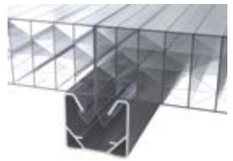
- JOINING PROFILE IN POLYCARBONATE.
- ALUMINUM PLATE FOR PANEL FASTENING.
- CAP IN ALUMINUM/POLYCARBONATE FOR ALVEOLI CLOSURE.

| Thickness | **25 mm** | **32 mm** | **40 mm** |
|---|---|---|---|
| Width | 1000 mm | 1000 mm | 1000 mm |
| Length | on request | on request | on request |
| Color | Crystal / Opal | Crystal / Opal | Crystal / Opal |
| Light transmission | Crystal 58% / Opal 40% | Crystal 55% / Opal 39% | Crystal 49% / Opal 38% |
| Thermal transmittance | U= 1,30 W/m² K | U= 1,10 W/m² K | U= 1,00 W/m² K |
| Linear expansion | 0,065 mm/m °C | 0,065 mm/m °C | 0,065 mm/m °C |
| Fire resistance certification EN 13501-1 | B-s1,d0 | B-s1,d0 | B-s1,d0 |
| Operating temperature | min -30 °C / max +120 °C | min -30 °C / max +120 °C | min -30 °C / max +120 °C |

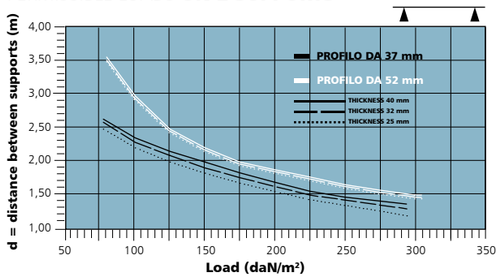
**52 MM PROFILE**



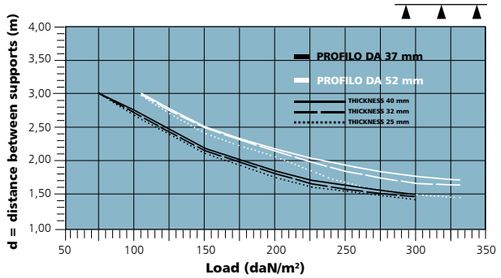
**37 MM PROFILE**



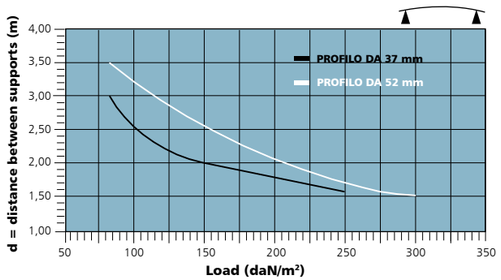
**THICKNESS 25/32/40 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS**




**THICKNESS 25/32/40 mm**
PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**



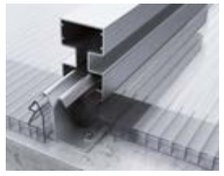

**THICKNESS 25 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS r. 4000mm**



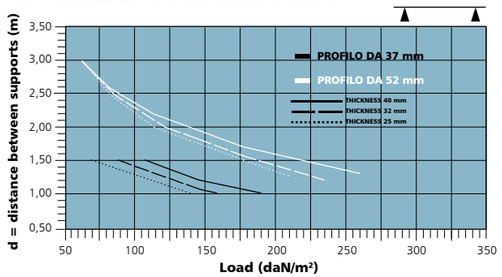

System resistance with evenly distributed load. The graph refers to a correct installation according to the Technical Manual.

**JOINT COVER IN POLYCARBONATE**

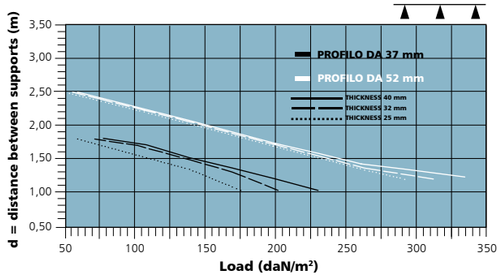
**CONNECTOR IN ALUMINUM**



**THICKNESS 25/32/40 mm**
PERMISSIBLE LOADS **ON 2 SUPPORTS**

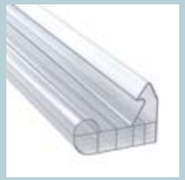



**THICKNESS 25/32/40 mm**
PERMISSIBLE LOADS **ON MULTIPLE SUPPORTS**

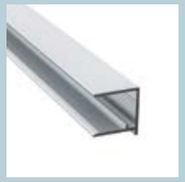


# ALVEWALL SYSTEM 600 ACCESSORIES

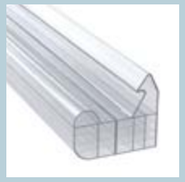
CLOSURE PROFILE
DUAL SYSTEM IN ALUMINUM
10 mm



PC END PROFILE
FOR REVERSE 600
10 mm



CLOSURE PROFILE
DUAL SYSTEM IN ALUMINUM
16 mm



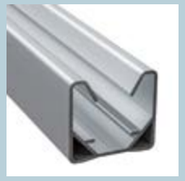
PC END PROFILE
FOR REVERSE 600
16 mm



CLOSURE PROFILE
DUAL SYSTEM IN ALUMINUM
20 mm



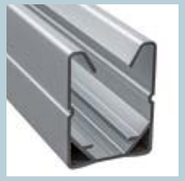
PC END PROFILE
FOR REVERSE 600
20 mm



JOINING PROFILE IN
ALUMINUM
H 37 mm

JOINING PROFILE IN
ALUMINUM CURVED
H 37 mm

JOINING PROFILE PC



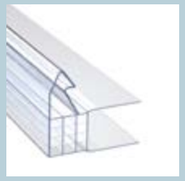
JOINING PROFILE IN
ALUMINUM
H 52 mm

JOINING PROFILE IN
ALUMINUM CURVED
H 52 mm

CLOSURE CAP
DUAL WALL
SYSTEM

FASTENING PLATE
10/ 16 mm

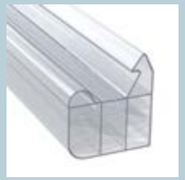
FASTENING PLATE
20/ 25/ 32/ 40 mm



CLOSURE PROFILE
DUAL SYSTEM 600
IN ALUMINUM
25 mm

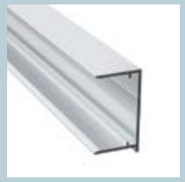
# ALVEWALL SYSTEM 1000 ACCESSORIES

CLOSURE PROFILE
DUAL SYSTEM 1000
IN ALUMINUM
25 mm

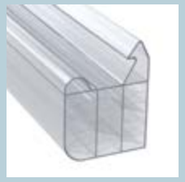


PC END PROFILE
FOR REVERSE 1000
25 mm

CLOSURE PROFILE
DUAL SYSTEM 1000
IN ALUMINUM
25 mm



CLOSURE PROFILE
DUAL SYSTEM 1000
IN ALUMINUM
32 mm



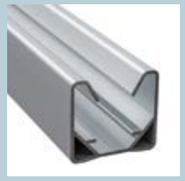
PC END PROFILE
FOR REVERSE 1000
32 mm



CLOSURE PROFILE
DUAL SYSTEM 1000
IN ALUMINUM
40 mm



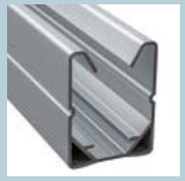
PC END PROFILE
FOR REVERSE 1000
40 mm



JOINING PROFILE IN
ALUMINUM
H 37 mm

JOINING PROFILE IN
ALUMINUM CURVED
H 37 mm

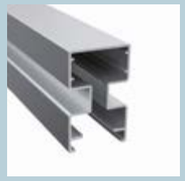
JOINING PROFILE PC



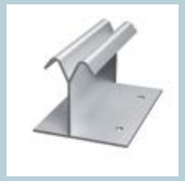
JOINING PROFILE IN
ALUMINUM
H 52 mm

JOINING PROFILE IN
ALUMINUM CURVED
H 52 mm

CLOSURE CAP
DUAL WALL
SYSTEM



CONNECTOR IN
ALUMINUM



FASTENING PLATE
10/ 16/ 20/ 25/ 32/ 40 mm

# ALVECOMP

## SPECIAL SLABS IN COMPACT POLYCARBONATE

**APPLICATIONS**
TRANSPARENCY, LIGHTNESS AND THERMAL INSULATION PROVIDE THE NECESSARY CHARACTERISTICS TO THE ALVECOMP PRODUCTS TO MEET BOTH THE TECHNICAL-APPLICATION SOLUTIONS REQUESTED AND THE REGULATIONS IN FORCE FOR THE DESIGN AND RESTORATION OF CIVIL AND INDUSTRIAL BUILDINGS:
- HIGH THERMAL INSULATION;
- LIGHT MANAGEMENT;
- EXCELLENT FIRE BEHAVIOR;
- EXCELLENT SELF-WEIGHT/MECHANICAL STRENGTH RATIO;
- EXCELLENT LOAD RESISTANCE PERFORMANCE;
- UNCHANGED PHYSICAL/MECHANICAL PROPERTIES OVER TIME;
THANKS TO THESE CHARACTERISTICS, THE ALVECOMP SLABS ARE THE IDEAL SOLUTION FOR A VARIETY OF APPLICATIONS: DOORS, WINDOWS AND SHUTTERS, SKYLIGHTS, ROOFS, COVERINGS, CURTAIN WALLS, FALSE CEILINGS AND PARTITION WALLS.

**TRANSPARENCY**
THE PHYSICAL CHARACTERISTICS OF POLYCARBONATE PROVIDE TO THE ALVECOMP PRODUCT THE ABILITY TO CONVEY INSIDE BUILDINGS A HIGH PERCENTAGE OF LIGHT, WHICH THANKS TO SPECIAL PIGMENTS CAN BE MANAGED ACCORDING TO DESIGN NEEDS.

**LIGHTNESS**
THE LOW SPECIFIC WEIGHT OF POLYCARBONATE MAKES THE ALVECOMP PRODUCT VERY LIGHT, MINIMIZING LABOR COSTS FOR INSTALLATION OF THE PRODUCT AND ENHANCING LOAD RESISTANCE PERFORMANCE.

**THERMAL INSULATION**
MULTIPLE-WALL DRAWINGS AND THICKNESSES THAT POPULATE THE WIDE RANGE OF THE ALVECOMP PRODUCT COMBINED WITH THE CHEMICALPHYSICAL CHARACTERISTICS OF POLYCARBONATE MINIMIZE THERMAL EXCHANGE, ENHANCING PRODUCT PERFORMANCE AND METING THE REGULATIONS IN FORCE IN TERMS OF ENERGY SAVINGS.

**IMPACT RESISTANCE**
THE MECHANICAL CHARACTERISTICS OF POLYCARBONATE PROVIDE TO THE ALVECOMP PRODUCT HIGH IMPACT RESISTANCE, WHICH IS OPTIMIZED AGAINST DAMAGES CAUSED BY WEATHER AGENTS AND ACCIDENTAL IMPACTS, MEETING THE REGULATIONS IN FORCE IN TERMS OF SAFETY.

**FIRE BEHAVIOR**
ALVECOMP IS CLASSIFIED EURO CLASS B-S1,D0.

**GUARANTEE OVER TIME**
THE MODERN PLANTS USED BY ALVECO, EQUIPPED WITH THE MOST RECENT AND ADVANCED TECHNOLOGY FOR THE MANUFACTURING OF ALVEOLAR SLABS ALLOW PRODUCING THE ALVECOMP PRODUCT WITH UV PROTECTION ON BOTH SIDES BY APPLYING THE UV ABSORBER, WHICH PROTECTS THE SLAB FROM AGING CAUSED BY UV RAYS.
THE UV PROTECTION HINDERS THE DEGRADATION OF THE SLAB, PRESERVING THE ALVECOMP PRODUCT FROM LOSS OF MECHANICAL CHARACTERISTICS, BRIGHTNESS AND TRANSPARENCY.
THE ALVECOMP PRODUCT IS GUARANTEED FOR A 10-YEAR PERIOD

**GLASS COMPARISON TABLE**

| | **Weight Kg/m²** |
|---|---|
| Glass thickness 4 mm | 10,0 |
| Polycarbonate thickness 4 mm | 4,8 |

**THERMAL CONDUCTIVITY COMPARISON TABLE**

| | **Thermal conductivity λ** |
|---|---|
| Glass | 1,30 W/m² K |
| Polycarbonate | 0,20 W/m² K |

**IMPACT RESISTANCE COMPARISON TABLE**

| | **Charpy without score marks ISO 179 (kJ/m ²)** | **Plzod with score marks ISO180 (kJ/m ²)** |
|---|---|---|
| Glass | 2 | - |
| Tempered glass | 10 | - |
| Polycarbonate | no breaking | 70 |

**BENDING RADIUS**
THE ALVECOMP SLABS OFFER A WIDE RANGE OF APPLICATIONS FOR USE, AMONG WHICH COLD BENDING OF THE SLAB TO MAKE IT SUITABLE TO THE USE AS AN ELEMENT TO CREATE CURVED SKYLIGHTS, SMALL DOMES AND TUNNELS.
THE MINIMUM SAFETY VALUE IS:
**50 TIMES THE THICKNESS OF THE SLAB**

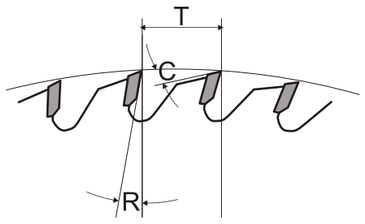
# ALVECOMP

## SPECIAL SLABS IN COMPACT POLYCARBONATE

### CUTTING

ALVECOMP COMPACT POLYCARBONATE SLABS CAN BE CUT WITH STANDARD CUTTING TOOLS SUCH AS VERTICAL AND HORIZONTAL SHEARING MACHINES, CIRCULAR SAWS, BAND SAWS OR JIG SAWS. IN ANY CASE, IT I NECESSARY TO PAY EXTREME ATTENTION TO LOCK THE BLADE IN SUCH A WAY TO MINIMIZE VIBRATIONS AND LOCAL TWISTING.

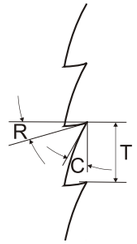
**CIRCULAR SAW** – RECOMMENDED PARAMETERS




| | | |
|---|---|---|
| Cutting angle | C | 20° - 30° |
| Clearance angle | R | 0°- 5° |
| Tooth pitch | T | 9 -15 mm |
| Blade speed | | 1800-2400 m/min |
| Forward movement speed | | max 22 m/min(*) |

(*) reference speed for 3 mm thickness

**BAND SAW** – RECOMMENDED PARAMETERS

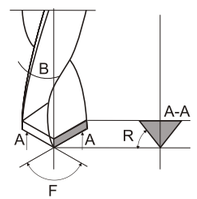



| | | |
|---|---|---|
| Cutting angle | C | 20° - 30° |
| Clearance angle | R | 0°- 5° |
| Tooth pitch | T | 1,5 - 4 mm |
| Blade speed | | 600-1000 m/min |
| Forward movement speed | | max 22 m/min(*) |

(*) reference speed for 3 mm thickness

TO DRILL THE ALVECOMP PRODUCT IS RECOMMENDED TO USE HELICAL BITS IN STEEL SUITABLE TO DRILL PLASTIC MATERIALS.

**DRILLING** – RECOMMENDED PARAMETERS




| | | |
|---|---|---|
| Clearance angle | R | 0°- 15° |
| Drill bit angle | F | 120° - 160° |
| Twist angle | B | 20° - 40° |
| Forward movement speed | | 0,1 - 0,3 mm/rev |

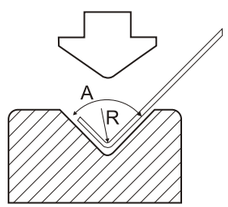
(*) reference speed for 3 mm thickness

| **ROTATION SPEED** | Hole diameter |
|---|---|
| 3 mm | 1750 rpm/min |
| 6 mm | 1500 rpm/min |
| 9 mm | 1000 rpm/min |
| 12 mm | 650 rpm/min |
| 18 mm | 350 rpm/min |

### BENDING

ALVECOMP SLABS CAN BE COLD-BENT USING SPECIAL EQUIPMENT.

RECOMMENDED PARAMETERS
(ambient temperature 20°C)




| Slab thickness (mm) | Bending radius R (mm) | Minimum angle (A) |
|---|---|---|
| 3 - 4 | 3 | 90° |
| 5-5 | 5 | 90° |

IN THE BENDING POINT THE UV PROTECTION IS COMPROMISED. THIS PROCESSING IS NOT RECOMMENDED FOR SLABS THAT MUST BE INSTALLED UNDER DIRECT EXPOSURE TO UV RAYS.

### THERMOFORMING

ALVECOMP SLABS CAN BE HOT THERMOFORMED. TO DO SO IT IS IMPORTANT TO FOLLOW A FEW RECOMMENDATIONS:

- PRIOR DRYING OF THE SLABS AT A TEMPERATURE OF APPROX. 120°C;
- REMOVAL OF PROTECTION FILM PRIOR TO THERMOFORMING;
- THERMOFORMING TEMPERATURE RANGING BETWEEN 175° AND 200°C;

THE THERMOFORMING OPERATION CAUSES STRETCHING BOTH IN TERMS OF THICKNESS AND COEXTRUSION LAYER THUS IT IS IMPORTANT TO ASSESS WITH CARE THE LIMITATIONS OF USE FOR EACH PROJECT. THE SLAB SUBJECTED TO THIS PROCESSING IS NO LONGER UNDER STANDARD WARRANTY.

# ALVECOMP

SPECIAL SLABS IN COMPACT POLYCARBONATE

| MECHANICAL PROPERTIES | | VALUE | UNIT | REGULATION |
|---|---|---|---|---|
| Tensile strength at yield SY | | >60 | N/mm² | DIN 53455 |
| Tensile strength at rupture SR | | >70 | N/mm² | DIN 53455 |
| Elongation at yield EY | | 6 | % | DIN 53455 |
| Elongation at rupture ER | | >100 | % | DIN 53455 |
| Tensile modulus of elasticity E | | 2300 | N/mm² | DIN 53457 |
| Impact resistance AN | +23°C | 65 | kJ/m² | DIN 53453 |
| | - 40°C | 65 | kJ/m² | DIN 53453 |
| Resilience AK at +23°C | | 35 | kJ/m² | DIN 53453 |
| Izod impact resistance with score marks | | >700 | J/m | ASTM 256-56 |
| Brinnel Harness H30 | | 110 | N/mm² | DIN 53456 |

| PHYSICAL PROPERTIES | VALUE | UNIT | REGULATION |
|---|---|---|---|
| Density | 1.2 | g/cm3 | DIN 53479 |
| ND refraction index | 1.58 | no | DIN 53491 |
| Water absorption by immersion | 0.36 | % | DIN 53495 |
| Permeability to water vapor (0,1mm) | 15 | g/m² d | DIN 53122 |

| THERMAL PROPERTIES | VALUE | UNIT | REGULATION |
|---|---|---|---|
| Linera Thermal Expansion A | 0.065 | mm/m °C | DIN 53752 |
| Thermal conductivity λ | 0.2 | W/m K | DIN 52612 |
| Softening temperature VICAT | 145-150 | °C | DIN 53460 |

Typical polycarbonate material values

**FORMATS AND TRANSMITTANCE**

| Thickness | Weight Kg/m² | Standard formats width mm | Standard formats length mm | Light transmittance LT (%) Crystal | Opal | Bronze | Value U W/m² K |
|---|---|---|---|---|---|---|---|
| 2 mm | 2.4 | 2,050 | 3,050 / 6,100 | 90 | 72 | 52 | 5.6 |
| 3 mm | 3.6 | 2,050 | 3,050 / 6,100 | 89 | 60 | 52 | 5.5 |
| 4 mm | 4.8 | 2,050 | 3,050 / 6,100 | 88 | 52 | 52 | 5.3 |
| 5 mm | 6.0 | 2,050 | 3,050 / 6,100 | 88 | 46 | 52 | 5.2 |
| 6 mm | 7.2 | 2,050 | 3,050 / 6,100 | 88 | 40 | 52 | 5.1 |
| 8 mm | 9.6 | 2,050 | 3,050 / 6,100 | 87 | 31 | 52 | 4.8 |
| 10 mm | 12.0 | 2,050 | 3,050 / 6,100 | 86 | 22 | 52 | 4.6 |
| 12 mm | 14.4 | 2,050 | 3,050 / 6,100 | 86 | 16 | 52 | 4.4 |

**ACOUSTIC INSULATION**

| Thickness | Weight Kg/m² | Standard formats width mm |
|---|---|---|
| 2 mm | 2.4 | 25 dB |
| 3 mm | 3.6 | 26 dB |
| 4 mm | 4.8 | 27 dB |
| 5 mm | 6.0 | 28 dB |
| 6 mm | 7.2 | 29 dB |
| 8 mm | 9.6 | 31 dB |
| 10 mm | 12.0 | 32 dB |
| 12 mm | 14.4 | 34 dB |

# ALVECOLAR

## SPECIAL SLABS IN ALVEOLAR POLYCARBONATE

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TRANSPARENCY, LIGHTNESS AND THERMAL INSULATION PROVIDE THE NECESSARY CHARACTERISTICS TO THE ALVECOLAR PRODUCT TO MEET BOTH THE TECHNICAL-APPLICATION SOLUTIONS REQUESTED AND THE REGULATIONS IN FORCE FOR THE DESIGN AND RESTORATION OF CIVIL AND INDUSTRIAL BUILDINGS:

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- EXCELLENT FIRE BEHAVIOR;
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**FIRE BEHAVIOR**
ALVECOLAR IS CLASSIFIED EURO CLASS B-S1,D0.

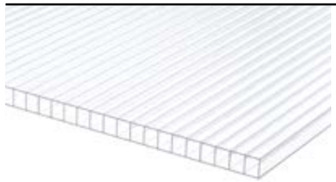
**GUARANTEE OVER TIME**
THE MODERN PLANTS USED BY ALVECO, EQUIPPED WITH THE MOST RECENT AND ADVANCED TECHNOLOGY FOR THE MANUFACTURING OF ALVEOLAR SLABS ALLOW PRODUCING THE ALVECOLAR PRODUCT WITH UV PROTECTION ON BOTH SIDES BY APPLYING THE UV ABSORBER, WHICH PROTECTS THE SLAB FROM AGING CAUSED BY UV RAYS.
THE UV PROTECTION HINDERS THE DEGRADATION OF THE SLAB, PRESERVING THE ALVECOLAR PRODUCT FROM LOSS OF MECHANICAL CHARACTERISTICS, BRIGHTNESS AND TRANSPARENCY.
THE ALVECOLAR PRODUCT IS GUARANTEED FOR A 10-YEAR PERIOD.

**TECHNICAL CHARACTERISTICS**

| | |
|---|---|
| Reaction to fire | EUROCLASS B s1 d0 |
| Linear expansion | 0,065 mm/m°C |
| Operating temperature | -30°C + 120°C |
| Vicat (B/50) | 150°C |

**LIGHT TRANSMITTANCE LT (%)**

| STRUCTURE | Thickness | Crystal % | Bronze % | Opal % |
|---|---|---|---|---|
| 2W | 4 | 84 | 65 | 55 |
| 2W | 6 | 82 | 62 | 51 |
| 2W | 8 | 80 | 62 | 50 |
| 2W | 10 | 80 | 60 | 48 |
| 5W/X | 16 | 65 | 40 | 55 |
| 5W/X | 20 | 60 | 30 | 40 |
| 5W/X | 25 | 60 | 28 | 40 |
| 10 W/X | 16 | 55 | - | 37 |
| 10 W/X | 20 | 52 | - | 34 |
| 10 W/X | 25 | 50 | 32 | 34 |
| 10 W/X | 32 | 48 | 30 | 31 |
| 10W/X | 35 | 48 | - | 31 |
| 10W/X | 40 | 45 | 26 | 28 |

| SECTION | THICKNESS | WIDTH | LENGTH | WEIGHT kg/m² | Thermal U W/m²K |
|---|---|---|---|---|---|
|  | 4 mm | 2.100 | 6.000 | 0,80 | 3,90 |
| | 6 mm | 2.100 | 6.000 | 1,30 | 3,60 |
| | 8 mm | 2.100 | 6.000 | 1,50 | 3,30 |
| | 10 mm | 2.100 | 6.000 | 1,70 | 290 |
| | 16 mm | 2.100 | 6.000 | 2,50 | 2,00 |
| | 20 mm | 2.100 | 6.000 | 3,10 | 1,80 |
| | 25 mm | 2100 | 6000 | 3,10 | 1,60 |
| | 16 mm | 2100 | 6000 | 2,80 | 1,70 |
| | 20 mm | 2.100 | 6.000 | 3,20 | 1,50 |
| | 25 mm | 2.100 | 6.000 | 3,30 | 1,40 |
| | 32 mm | 2.100 | 6.000 | 3,5 | 1,20 |
| | 35 mm | 2.100 | 6.000 | 3,8 | 1,20 |
| | 40 mm | 2.100 | 6.000 | 4,1 | 1,10 |

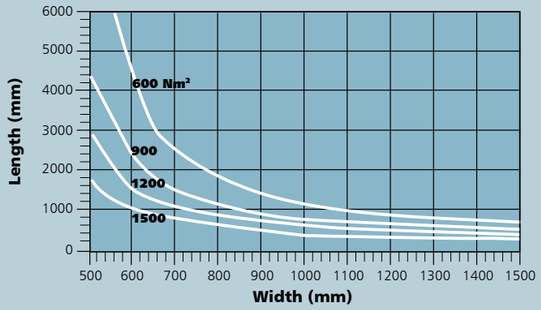
# ALVECOLAR CAPACITY TABLES

SPECIAL SLABS IN FLAT ALVEOLAR POLYCARBONATE

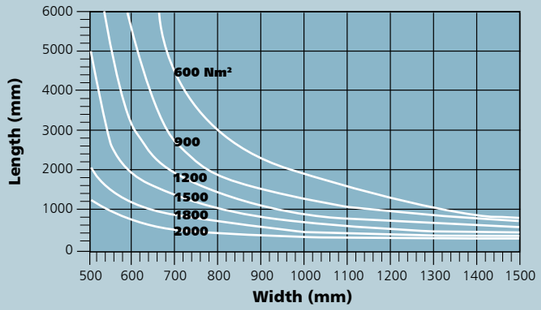
## ALVECOLAR CAPACITY

THE TABLES BELOW REPORT THE LOAD VALUES FOR SLABS ANCHORED ON FOUR SIDES.

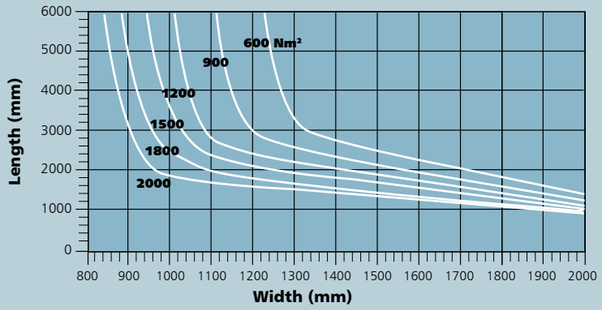
### ALVECOLAR 6 mm 2P



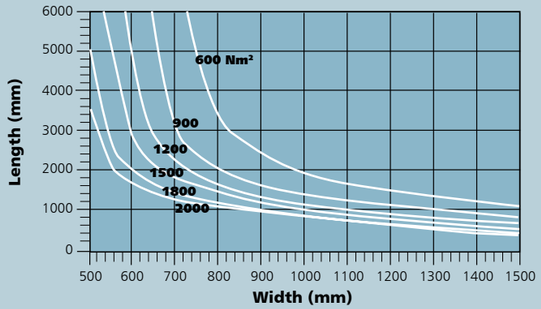

### ALVECOLAR 8 mm 2P



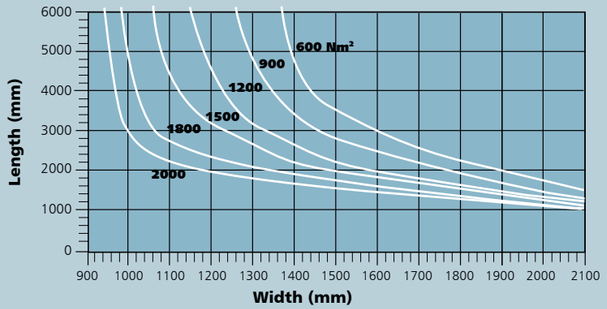

### ALVECOLAR 20/25 mm 10PX



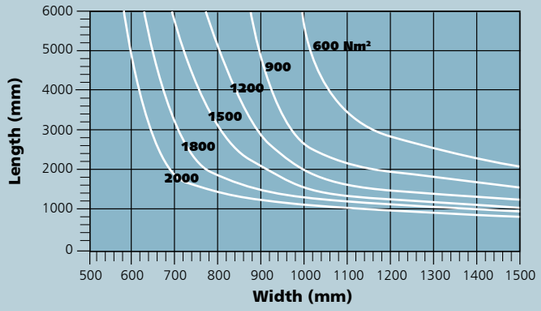

### ALVECOLAR 10 mm 2P



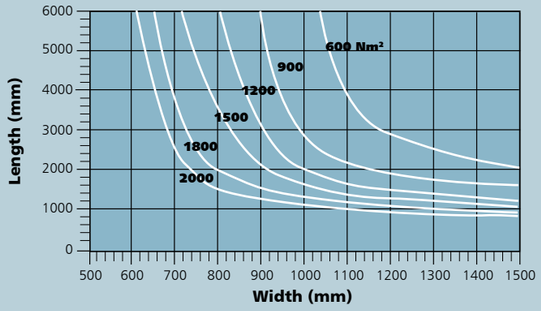

### ALVECOLAR 32/35 mm 10PX



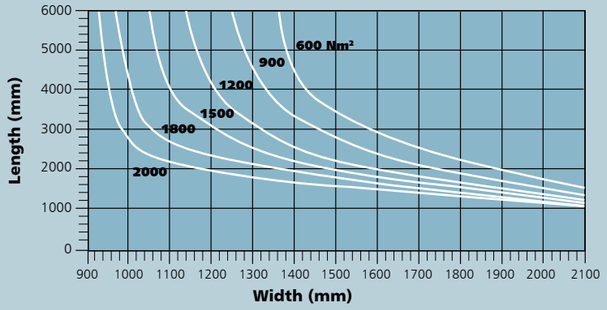

### ALVECOLAR 16 mm 5PX / 10 PX




### ALVECOLAR 20 mm 5PX




### ALVECOLAR 40 mm 10PX



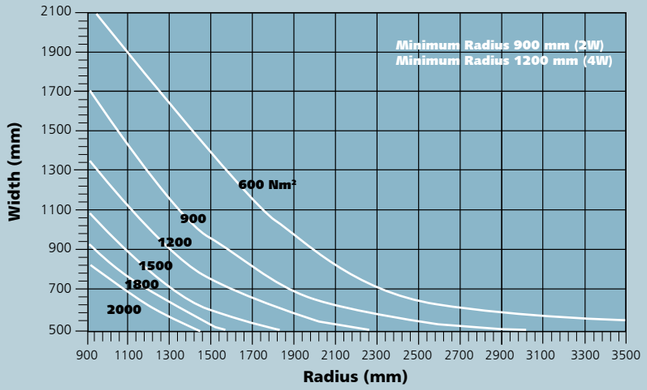
# ALVECOLAR

SPECIAL SLABS IN CURVED ALVEOLAR POLYCARBONATE

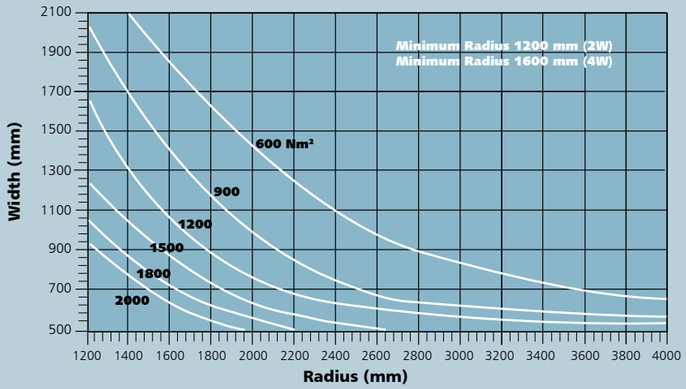
## ALVECOLAR CAPACITY APPLICATION CURVE

THE GRAPHS SHOW THE PERMISSIBLE WIDTH OF THE SLAB BASED ON THE LOAD AND BENDING RADIUS

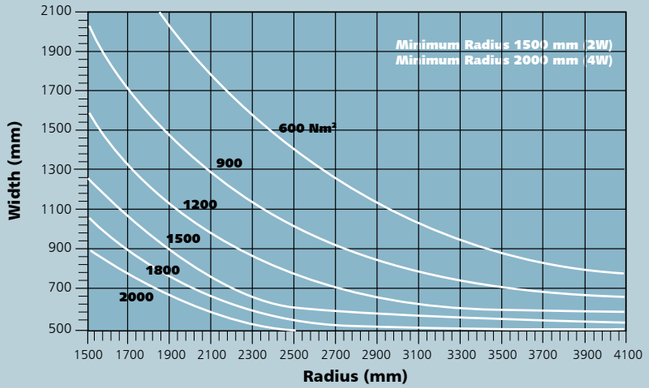
### ALVECOLAR 6mm 2P



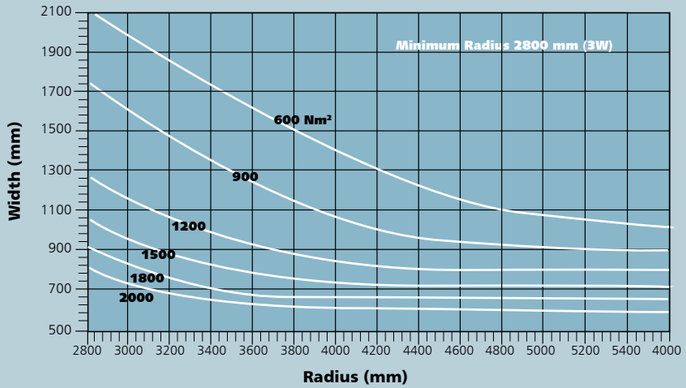

### ALVECOLAR 8mm 2P



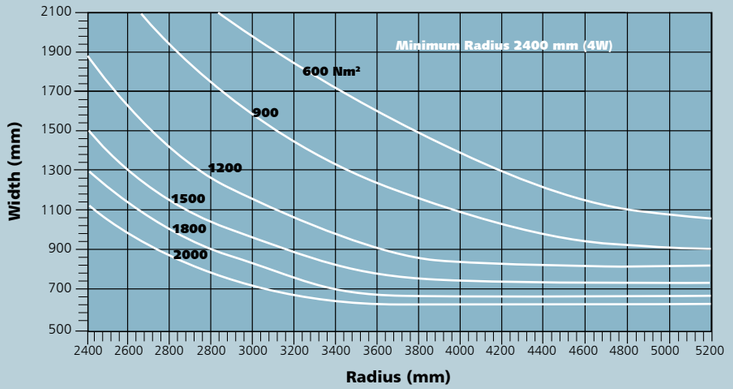

### ALVECOLAR 10mm 2P




### ALVECOLAR 16mm 5PX




### ALVECOLAR 20mm 5PX



# GENERAL TERMS AND CONDITIONS OF SALE

The **Seller** party is understood as ALVECO SRL, a manufacturer and/or supplier company of the products in question, which will issue an invoice for said products.
The **Buyer** party is understood as the addressee of the invoices related to the products in question.

**1 Purpose**
**1.1** All sales of products and/or accessories ("Products") made by the Seller are subject to and governed by these General Terms and Conditions of Sale, except any special conditions agreed in writing between the Seller and the Buyer. These General Terms and Conditions of Sale shall prevail on any other document, clause, provision (even if not explicitly contested by the seller) contained in forms, quotes, orders of the Buyer including also any general terms of purchase.
**1.2** All specifications, drawings, specifications of weight and dimensions and data related to the performance contained in any documentation of the Seller are to be considered indicative.
**1.3** The Seller reserves the right to improve and/or modify specifications, drawings and dimensions without notice.
**1.4** The information published on the website www.alveco.info represents the most up-to-date version regarding all the technical specifications related to the Products and the related updates, consequently what has been published there in prevails in any case on what has been published on paper.
**1.5** These General Terms and Conditions of Sale are applicable to all sales contracts, even future ones, with the Buyer, unless specific written exceptions are agreed between the parties.

**2. Order - Acceptance**
**2.1** All orders must be submitted in writing.
**2.2** The Order Confirmation will be processed by the Seller only after the Buyer has sent to the Seller the order confirmation signed for acceptance.

**3. Delivery, Shipping and Transportation of Materials**
**3.1** The delivery terms specified in each order confirmation are indicative and not binding for the Seller who assumes no responsibility for the delay, unless the term is specifically agreed in writing with the Seller. No delay may give rise to claims by the Buyer for compensation of direct or indirect damages.
**3.2** If specific terms are agreed in writing as mandatory, any facts that may prevent or delay the production of the Products such as, but not limited to, strikes (including corporate strikes), lockouts, fires, import bans, delayed supply of raw materials or limitations of energy sources and other facts that may prevent or delay the manufacture, are conventionally considered as a force majeure and the Seller shall not be held responsible for the delay in delivery whose terms will be prorogued for the duration of the aforementioned situations. In no case can the orders be canceled by the Buyer.
**3.3** In the cases indicated in article 3.2, the Seller must inform the Buyer without delay of the fact occurred, and may delay delivery should the causes of the delay persist. If the causes of the delay last longer than 30 (thirty) days, the Seller shall have the right to withdraw from the contract, without this implying the Buyer's right to compensation for damages directly or indirectly attributable to the delay.
**3.4** Unless otherwise stated in the order confirmation, the Products are sold "ex works" by the Seller (loaded on the arriving vehicle). " The Products will be delivered in the Seller's standard packaging with labeling and standard marking. The commercial terms of transport will be interpreted according to I ncoterms 2010 as published by the International Chamber of Commerce.
**3.5** The Products, even if sold ex-works travel always at risk of the Buyer.
**3.6** Upon delivery, the Buyer shall be obligated to check the Products. The Buyer undertakes to inspect the Products, in particular the quantity, the dimensions, the integrity of the packaging and the compliance with the order confirmation and if the delivery is free on site delivery it must notify any claim to the carrier at the time of delivery. Otherwise, it is assumed that the delivered products fully respect what has been ordered. Any claim or dispute raised by the Buyer must be followed by sending within eight (8) days of delivery/return of the product a complaint in writing to the Seller.
**3.7** Failure to notify in writing the defects/shortcomings within the terms and according to the provisions of these General Termsa nd Conditions of Sale entails loss of rights by the Buyer. The Buyer cannot refuse the goods unless they have serious quality defects or shortcomings such as to affect the use of the product.
**3.8** The Seller shall not be responsible for defects caused by incorrect t ransportation of the Products.
**3.9** After 8 (eight) days from the issuance of the notice of goods ready, an invoice will be issued, and payment terms will start as stated in the order confirmation.

**4. Packaging and Protection**
**4.1** All materials are supplied with standard packaging. Any specific packaging must be requested at the time of order, specified in the Order Confirmation and will be charged on the invoice.
4.2 The Seller is held harmless from any liability in the event that the Buyer does not strictly follow the instructions of the Seller for storage and maintenance and/or those published on the website www.alveco.info

**5. Tolerances**
**5.1** The Buyer accepts the tolerances shown in the Seller's catalogs and/or technical sheets delivered to the Buyer or published in the catalogs and/or on the website: www.alveco.info consequently no defect or fault can be claimed against the Seller if within said tolerances.

**6. Warranty**
**6.1** The Seller guarantees that the Products sold match the technical specifications and/or technical sheets delivered to the Buyer and/or published in the catalogs and/or on the website: www.alveco.info and guarantees compliance with EU legislation where applicable as well as the absence of material and workmanship defects on the Products. Therefore, the Seller does not provide guarantees regarding the conformity of the products with the requirements prescribed by regulations other than Italian and/or European ones. The Seller does not guarantee in any way conformity of the products to standards, technical standards or regulatory provisions other than those specified in the product data sheet.
Therefore, it will be the sole responsibility of the Buyer to verify compliance of the products with the regulations and technical requirements of the countries in which it i ntends to use the products.
**6.2** With regard to the technical instructions and updates as published on the website, what has been published on paper shall prevail.
**6.3** The above warranty is valid for twelve months from the delivery of the products. Different warranty periods and warranty conditions must be specified in writing in the Order Confirmation.
**6.4** The Products must be stored, handled and maintained in full respect of the instructions of the Seller's technical documentation, delivered and/or published in the catalogs or on the website: www.alveco.info. Therefore, the warranty shall be void if the products are installed in a non-compliant manner with the above instructions or installation diagrams and if theydo not comply with the technical data sheets (latest edition) delivered and/or published in the catalogs and/or on the website.
**6.5** Any claims concerning apparent defects of the Products must be reported in writing (by registered letter with return receipt or telegram, or certified email address) to the Seller within 8 (eight) days of delivery of the products, be it understood that the Buyer's warranty shall be void after this deadline has elapsed concerning defects and/or poor quality and/or non-compliance with the products sold. Any hidden defects, not detectable upon delivery of the Products, must be reported in writing to the Seller (by registered mail with return receipt or telegram, or certified email address advanced by e-mail/fax) within eight days of discovery and in any case within the term indicated in Article 6.3.
**6.6** It is understood that any claims shall not give the Buyer the right to suspend or in any case delay the payments of the Products subject to dispute or those related to other supplies.
**6.7** Claims must be accompanied by explanations to allow the Seller to perform prompt and complete verification. The Products subject matter of the claim must be made available to the Seller, in the state in which they were delivered, in compliance with the "rules on transportation, handling and storage" as published in the catalogs and/or on the website: www.alveco.info and any other instructions provided by the Seller in writing.
**6.8** The Seller in the case of defects, lack of quality, non-compliance of the product will be required to repair or replace the individual defective Product with replacement made in the contractually agreed location specified in the Order Confirmation or to compensate the Buyer within the limits of the amount agreed in the Order Confirmation for the individual defective product. It is understood that the aforementioned warranty (consisting of the obligation to repair or replace the i ndividual Product or reimbursement within the limits of the agreed price for the defective Product) is in lieu and substitution of any other guarantee by law and excludes any other responsibility of the Seller (both contractual and extra contractual) however originated from the Products supplied (for example compensation for direct and/or indirect damages, loss of earnings, recalls etc.)
**6.9** The Buyer's right to terminate the contract as a result of any defects in the Products is excluded.
**6.10** In the case of supply in partial deliveries, any claims, even if timely, do not exempt the Buyer from the obligation to pick up and pay the remaining quantity of products ordered.
**6.11** The Seller's warranty does not extend to the repaired and/or replaced parts or to the products supplied as a replacement.
**6.12** The Seller's warrants the absence of defects in material and craftsmanship and that the Products are within the tolerances specified in art. 5 consequently the Seller does not guarantee any aesthetic result originating from the laying of the Products and the Seller cannot be charged in any case any differences in i nstallation, interlocking, alignment between the Products.
**6.13** The Buyer must comply with the Seller's instructions regarding storage, handling, assembly and maintenance of the Product as published in the catalogs and/or on the website www.alveco.info. The calculation data, table values, bills of material, drawings, and any other document provided by the Seller, even as mere advice, shall be considered as simple general elements and do not give rise to any liability of the Seller, the design, project management and testing remaining under the exclusive competence, responsibility and care of the Buyer.
**6.14** Any warranty referred to in this art. 6 is no longer valid and becomes void if:
**a)** The Product is used in a manner that does not comply with its performance characteristics as set out in the technical data sheets published in the catalogs and/or on the website.
**b)** Failure by the Buyer to comply with the assembly, storage, handling and maintenance instructions as published in the catalogs and/or on the www.alveco.info website. Under no circumstance the products that are defective shall be used in any way by the Buyer or the Buyer forfeits all warranty rights.
**c)** Installation carried out by adopting systems, accessories not in compliance with the Seller's technical sheets attached to the catalogs and/or published on the site or using accessories not supplied and/or not expressly approved by the Seller;
**d)** Interventions of any kind performed by third parties other than the Seller, on the Product after delivery;
**e)** Use and/or installation of the alleged defective Product by the Buyer, following the claim and/or dispute;
**f)** Faults and defects not confirmed as such according to the state of the art and science at the time of placing the Products on the market.
**6.15** Special warranties and/or certifications may be issued only if requested by the Buyer when the order is placed and if specifically accepted in the Seller's order confirmation.
**6.16** The Products only perform the function of roof/coverings and/or improvement of energy level of the building, and unless otherwise expressly agreed in writing with the Seller, do not contribute in any way to the overall or partial stability of the structure of the building. Therefore, they are not suitable for supporting vertical - horizontal loads or permanent static loads (excluding their own weight). The Buyer must assess and size the existing supporting structure, in order to ascertain its suitability and hold harmless the Seller from any and all liability.
**6.17** The Seller reserves the right to make the necessary technical changes or improvements to its production.
**6.18** The Products subject to dispute must be kept available to the Seller to allow a joint and out-of-court assessment, at no charge from the Buyer to the Seller.

**7. Payments**
Every delivery will be invoiced.
**7.1** The methods of payment are those specified in the order confirmation. All Payments must be made to the Seller's account. All payments made before delivery or before the invoice deadline are considered an advance on the final price, and remain acquired by the Vendor regardless of the outcome of t he order.
**7.2** The collection by the Seller of amounts paid upon ordering does not constitute acceptance of the same. If the Seller does not accept the order, for reasons not attributable to the Buyer, the Seller shall return the amounts collected, without interest.
**7.3** In the event of non-fulfillment by the Buyer and consequent termination of the contract, the amounts paid in advance shall be retained by the Seller as a penalty without prejudice to the right to compensation for greater damages;
**7.4** In the case of late payments, the Buyer shall pay, in accordance with Legislative Decree 231/02, interest for late payment, in addition to the compensation for costs
**7.5** If the payment of the products is planned through bills of exchange or securities (checks, bills of exchange at the official reference rate plus seven points, starting from the deadline of the agreed term, etc.), these must reach the Seller's office before or simultaneously with the pick up of the Products.
**7.6** In the case of payment in installments, in the event of non-payment on the expected deadline of only a portion of the price, the Buyer shall lose the benefit of the payment extension ("benefit of the term") and the Seller may request immediate payment of all the amount due in a single installment. The statement sent by the Seller is understood as accepted by the Buyer, if it has not been challenged within 15 (fifteen) days of receipt.

**8. Contract Withdrawal**
**8.1** The Seller reserves the right to withdraw from the contract without any penalty if there are facts or circumstances that alter the stability of the markets, the value of money, the conditions of the companies producing the raw material and the conditions of supply. The Seller will also have the right to withdraw from the contract without any penalty, should it become aware of the existence of protests, securities, as well as the start of court proceedings, bankruptcy proceedings, including out of court proceedings against the Buyer.

**9. Confidentiality - Intellectual Property Rights**
**9.1** The Buyer may in no case disclose or transfer to third parties any confidential information, including commercial or other information owned by the Seller or under the control of the Seller, without the Seller's prior written consent.
**9.2** All patents, copyrights, trademarks and/or any other intellectual property and/or confidential information regarding the Product shall remain the property of the Seller.

**10. Applicable Law**
**10.1** These "General Terms and Conditions of Sale", as well as all sales contracts governed by them are governed by Italian law.

**11. Court of Jurisdiction**
**11.1** Any dispute deriving from the interpretation, application, execution, termination of the contract of sale and/or of these "General Terms and Conditions of Sale" or in any case related to it, is subject to Italian jurisdiction and shall be exclusively under the jurisdiction of the Court of Como, also in the case of connection of lawsuits.
**12. Data Processing**
The Buyer states to have received the information note on the processing of personal data pursuant to article 13 of the Law Decree 196/2003

ALVECO

POLYCARBONATE

**Sales Office**
**Via Stazione 25 – 22060 Carimate (CO)**
**Tel. +39 031 790625**
**Fax +39 031 791746**

**Manufacturing Plant**
**Via bosco II – 84091 Battipaglia (SA)**
**Tel.+39 0828 302235**
**Fax +39 0828 303921**

**www.alveco.info**
**info@alveco.info**

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ALVECO
POLYCARBONATE