



TECHNICAL DOSSIER

POLYCARBONATE SYSTEM

PANELPIÙ 500/16-20-25



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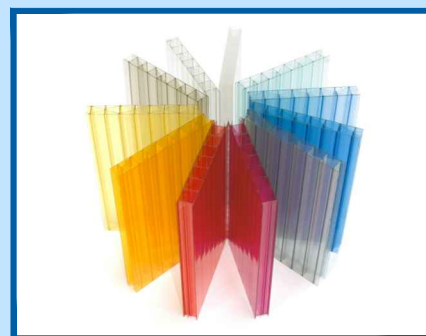
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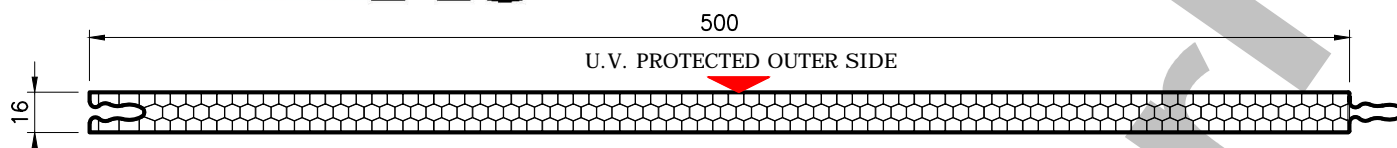
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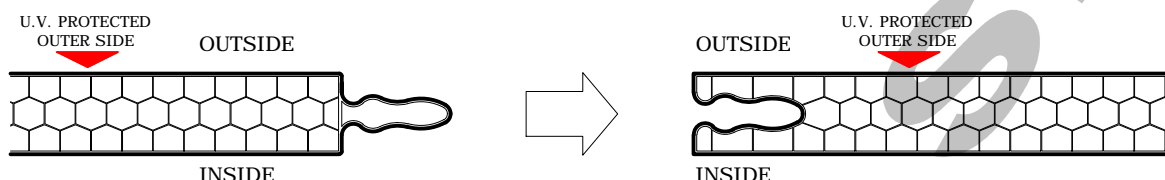
PANELPIU 500/16-20-25

MULTIWALL POLYCARBONATE SHEET CROSS SECTION

PANELPIÙ 500/16

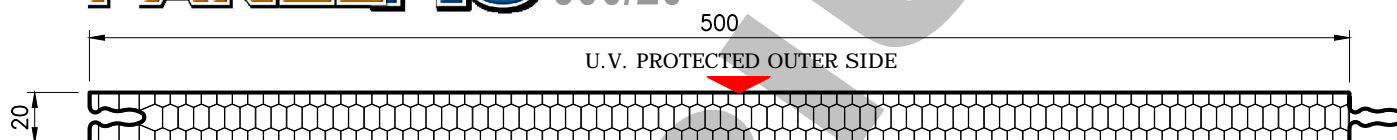


PANELPIÙ 500/16 "Honeycomb" SHEET CROSS SECTION

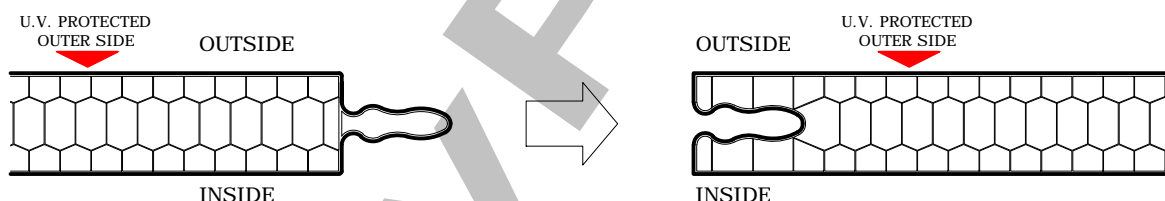


DETAIL OF TONGUE AND GROOVE JOINT

PANELPIÙ 500/20

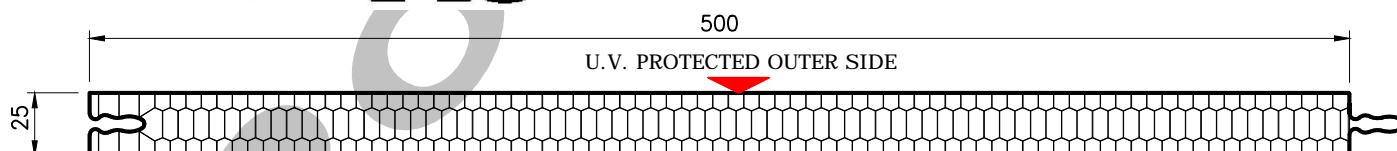


PANELPIÙ 500/20 "Honeycomb" SHEET CROSS SECTION

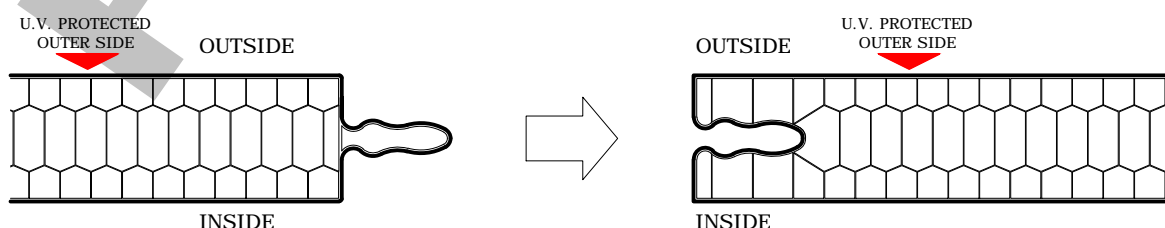


DETAIL OF TONGUE AND GROOVE JOINT

PANELPIÙ 500/25

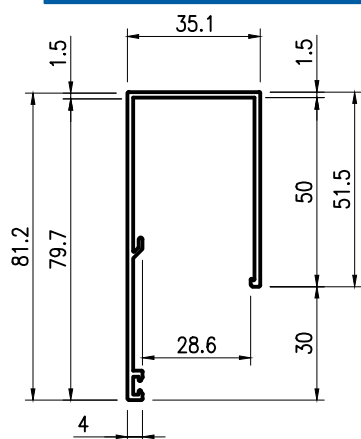


PANELPIÙ 500/25 "Honeycomb" SHEET CROSS SECTION

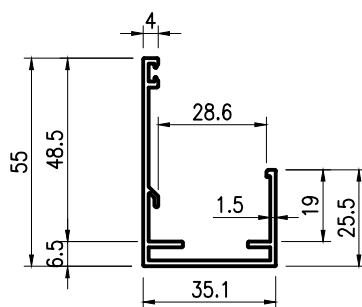


DETAIL OF TONGUE AND GROOVE JOINT

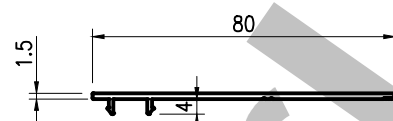
ALUMINIUM PROFILES SIDE VIEW AND DETAIL OF ACCESSORIES



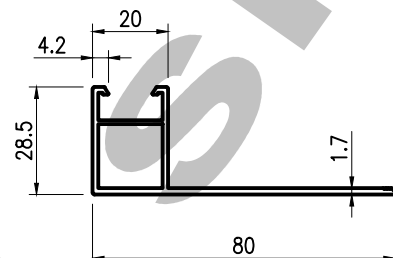
① UPPER Profile F2 P25



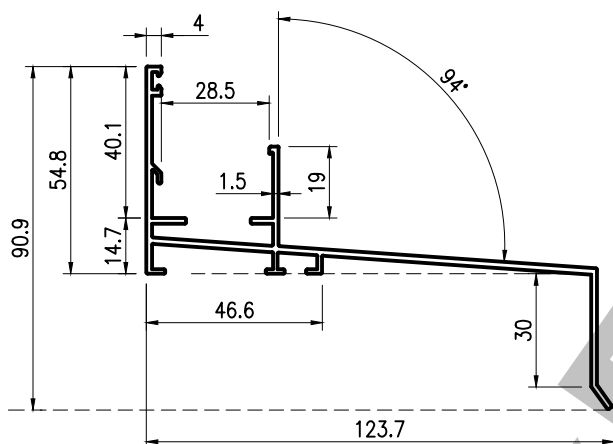
② LOWER Profile F1 P25



④ CLIP F44 FOR SIDE Profile

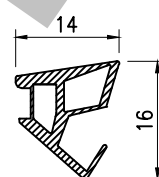


⑤ SIDE Profile F43P25

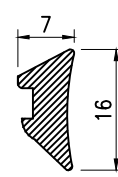


③ LOWER Profile with WALL COVER F6P25

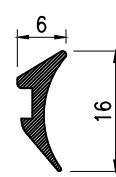
GASKET



⑥ DU5090
for thickness
16 mm

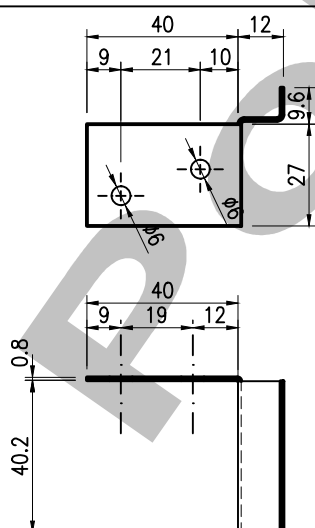


⑦ DU156
for thickness
20 mm



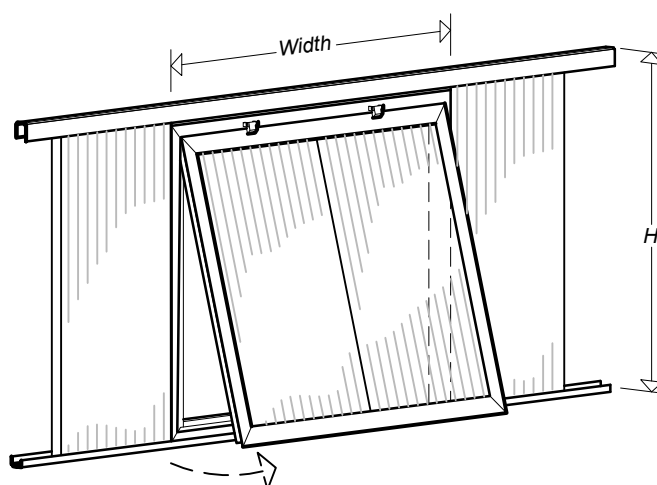
⑧ DU153
for thickness
25 mm

FIXING CLAMP



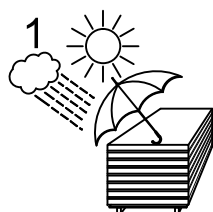
⑨ STEEL CLAMP

OPENING WINDOW

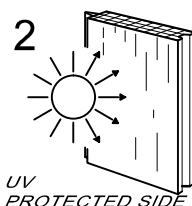


⑩ OPENING WINDOW
WITH ALUMINIUM FRAME

TECHNICAL RECOMMENDATIONS:



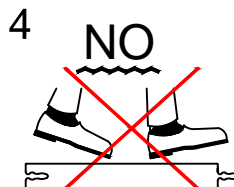
1. PROTECT THE SHEETS
BY THE SUN AND RAIN



2. INSTALL THE SHEETS
ALWAYS WITH THE UV
PROTECTED LAYER
FACING OUTWARDS



3. MULTIWALL
POLYCARBONATE SHEETS
CAN NOT BE WALKED UPON



4. DO NOT WALK ONTO THE
SHEETS AT ANY TIME.
FOLLOW SAFETY
REGULATIONS AND SAFE
METHODS OF INSTALLATION

POLYCARBONATE SUFFER THE CHEMICAL ATTACK OF SOME PRODUCTS, THEREFORE:



5. USE ONLY COMPATIBLE CLEAR SILICONE
FOR THE SEALING

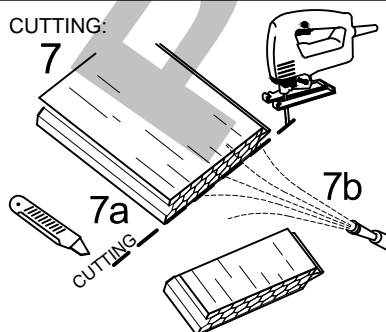
6. USE ONLY WATER AND MILD DETERGENTS
FOR THE CLEANING

RESISTANCE AGAINST CHEMICALS

CHEMICALS	CHANGE	CHEMICALS	CHANGE	CHEMICALS	CHANGE
INORGANIC SALTS		Lactic acid 5%	Unchanged	Methyl isobutyl ketone	Clouding and softening
Sodium chloride 10%	Unchanged	Oxalic acid 10%	Unchanged	Butyl acetate	Clouding and softening
Potassium nitrate 10%	Unchanged	Benzoic acid 10%	Unchanged	Methyl methacrylate	Clouding and softening
Potassium bichromate 10%	Yellowing	Oleic acid 100%	Unchanged		Rapid
Sodium sulphate 10%	Unchanged	LUBRICATING OILS			
Ammonium chloride	Unchanged	Silicone oil	Unchanged	Acrylonitrile decomposition	Clouding and softening
Sodium bicarbonate 10%	Surface cracking	Paraffin oil	Unchanged	Vinyl acetate	Rapid
INORGANIC ACIDS		Machine oil	Unchanged		
Hydrochloric acid 35%	Cracking	PLASTICIZERS			
Hydrochloric acid 10%	Unchanged	Tricresyl phosphate	Light clouding		
Sulphuric acid 70%	Unchanged	Diocetyl adipate	Unchanged	Styrol	Clouding and softening
Sulphuric acid 30%	Unchanged	Diocetyl phthalate	Unchanged	Ethyl ether (5 °C)	Swelling
Nitric acid 40%	Yellowing	Butyl stearate	Unchanged	Diethylenetriamine	Slow decomposition
Nitric acid 10%	Yellowing	Acid trimethyl esters	Unchanged	Ethylenediamine	Slow decomposition
Chromic acid 10%	Unchanged	ALCOHOLS		Triethanolamine	Surface cracking
Concentrated hydrofluoric acid	Unchanged	Methyl alcohol	Surface cracking	Phenol 5%	Yellowing and opacifying
ALKALIS		Ethyl alcohol 50%	Unchanged	Cresol	Unchanged
Sodium hydrate 1%	Unchanged	n-Butanol	Unchanged	Formalin	Unchanged
Sodium hydrate 10%	Light clouding	Ethylene glycol	Unchanged	Hydrogen dioxide 10%	Light yellowing
Ammonium hydrate 10%	Darkening and disintegration	VARIOUS		Triammoniumcitrate (pH = 9)	Unchanged
Calcium hydrate 10%	Unchanged	Benzole	Rapid decomposition	Triammoniumcitrate (pH = 5)	Unchanged
ORGANIC ACIDS		Toluol	Rapid decomposition		
Acetic acid 70%	Unchanged	Industrial petrol	Yellowing, opacifying and cracking		
Acetic acid 10%	Unchanged	Kerosene	Unchanged		
Formic acid 30%	Unchanged	Diesel oil	Unchanged		
		n-Heptane	Unchanged		
		Cyclohexane	Unchanged		

Testing temperature = + 23 °C

CUTTING:

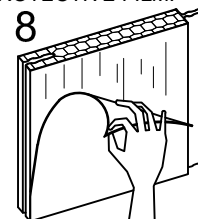


THE PANELPIÙ' SHEETS ARE SUPPLIED TO THE EXACT LENGTH REQUIRED AND SEALED AT THE ENDS WITH AN ALUMINIUM FOIL TAPE

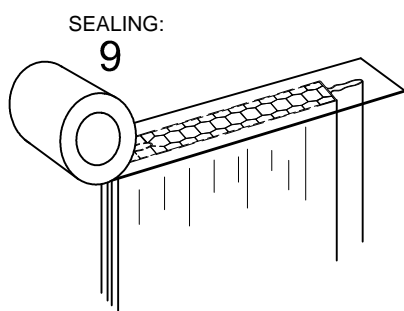
7a. CUTTING OF THE SHEETS CAN BE EXECUTED ON SITE BY MEANS OF A HACK SAWING MACHINE (1) OR OF A CUTTER (2). SEAL THE OPEN CELLS AFTER THE CUTTING.

7b. BLOW OR VACUUM DUST IN EXCESS AFTER CUTTING BEFORE SEALING ENDS

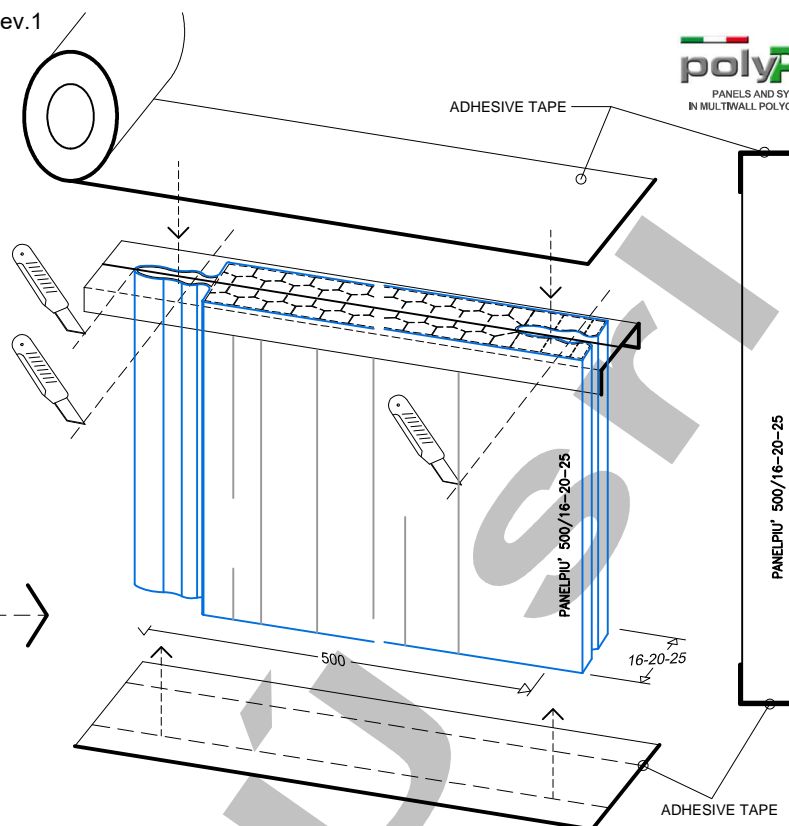
PROTECTIVE FILM:



8. TAKE OFF THE PROTECTIVE FILM BEFORE THE INSTALLATION

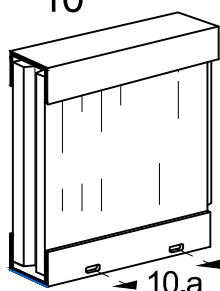


9. SEAL THE OPEN CELLS WITH AN ADHESIVE ALUMINIUM TAPE



PROFILES:

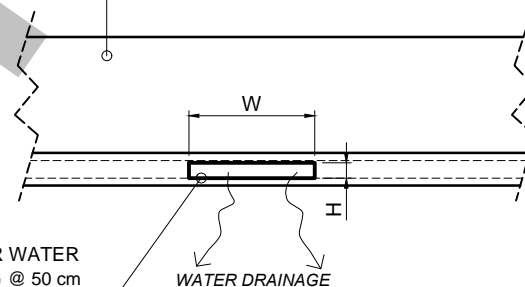
10



10. PROTECT THE SEALING WITH AN UPPER AND A LOWER PROFILE

10.a LOWER PROFILES MUST BE DRILLED FOR WATER DRAINING

LOWER PROFILE

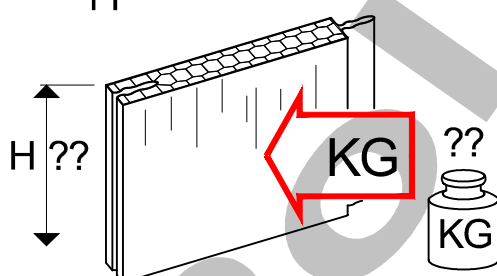


DRILL FOR WATER DRAINING @ 50 cm CENTRES

WATER DRAINAGE

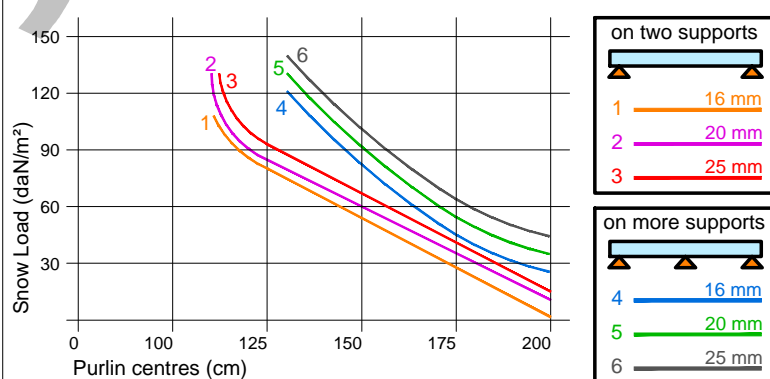
LOADINGS AND SPACINGS:

11



11. CHECK OUR TECHNICAL LITERATURE TO DETERMINE LOADING AND SPACING OF THE WHOLE SYSTEM

LOADING TABLE PANELPIÙ 500/16-20-25
FLAT APPLICATION, ON TWO AND MORE SUPPORTS



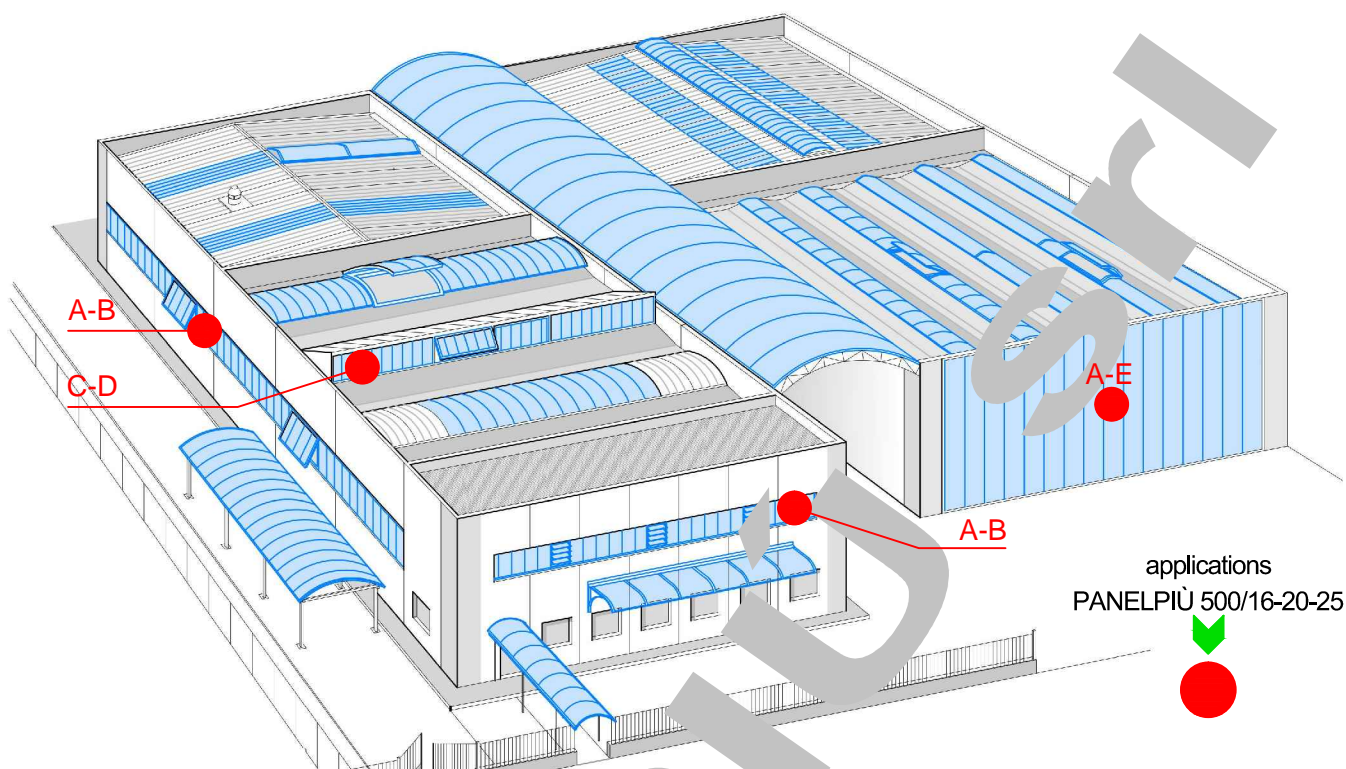
WARRANTY & CERTIFICATIONS:

12



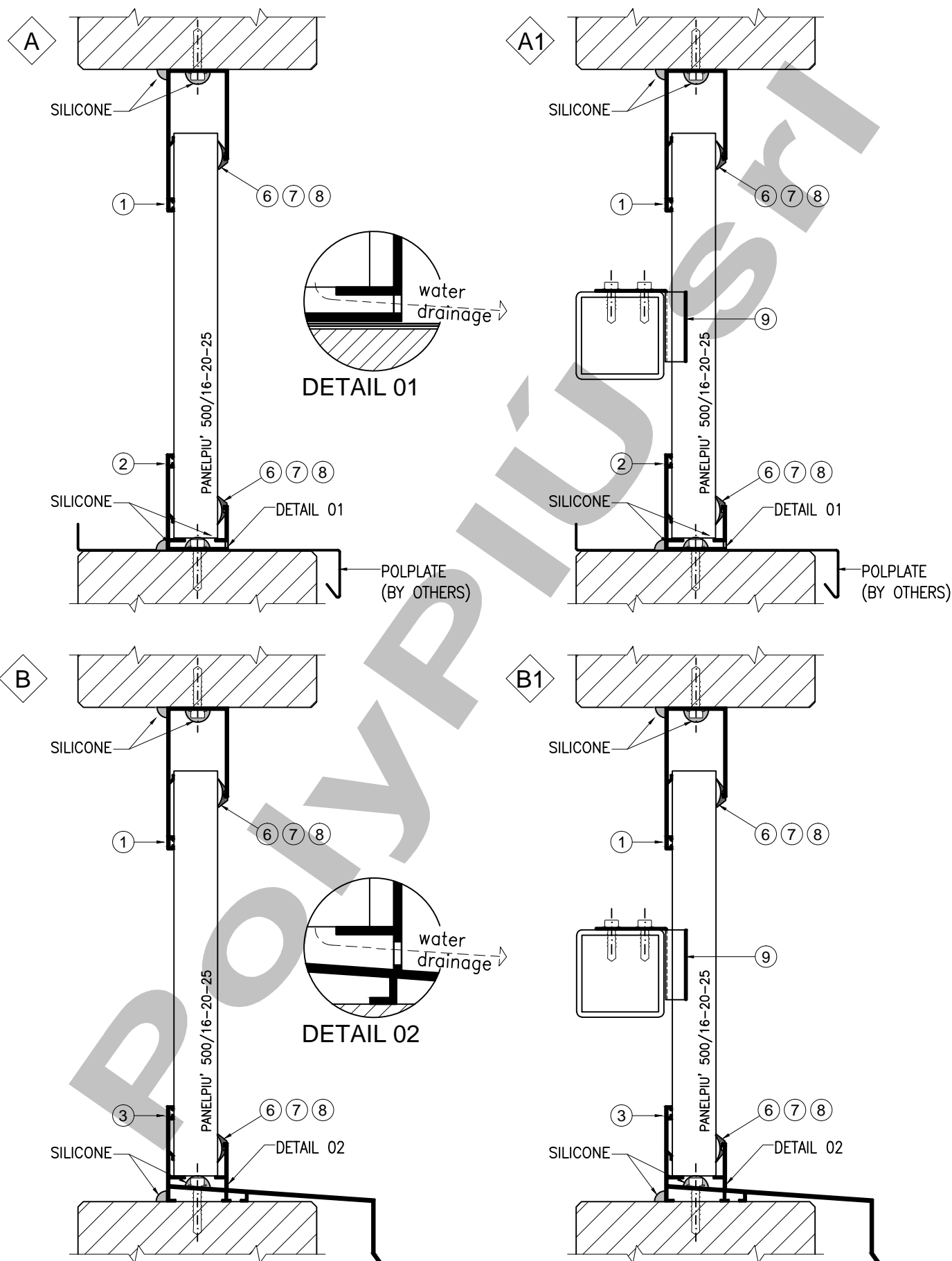
THE POLYPIU' PRODUCTS ARE COVERED BY A 10-YEAR WARRANTY – PLEASE CHECK THE TERMS OF OUR WARRANTY FOR MORE DETAILS.
PLEASE CONTACT OUR TECHNICAL DEPT. FOR MORE DETAILS ON THE CERTIFICATIONS.

APPLICATIONS PANELPIÙ 500/16-20-25:

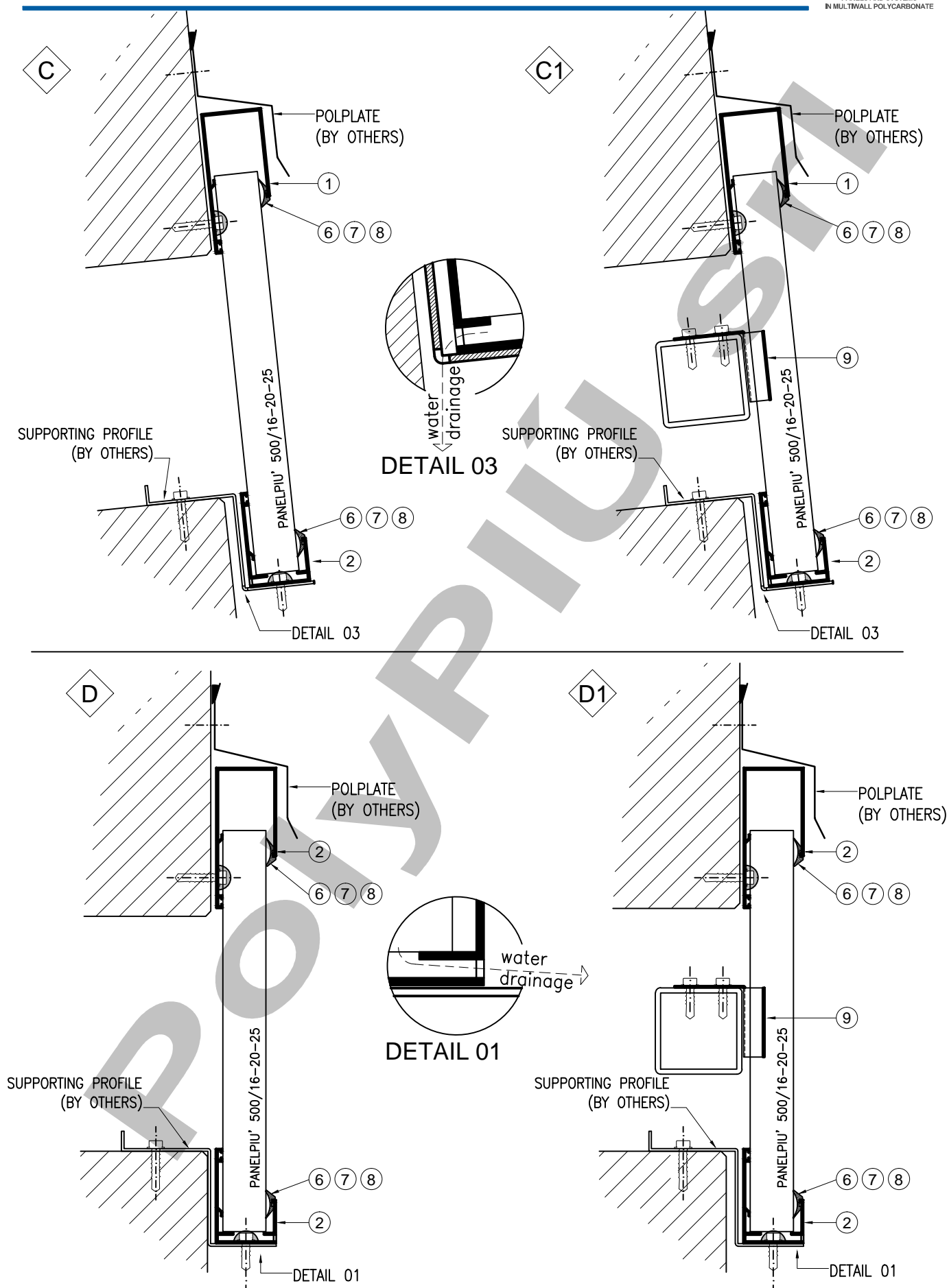


- ◊ A VERTICAL GLAZING
- ◊ A1 VERTICAL GLAZING WITH MIDDLE PURLIN
- ◊ B VERTICAL GLAZING WITH LOWER PROFILE WITH WALL – COVER
- ◊ B1 VERTICAL GLAZING WITH LOWER PROFILE WITH WALL – COVER AND MIDDLE PURLIN
- ◊ C SLOPED NORTHLIGHT
- ◊ C1 SLOPED NORTHLIGHT WITH MIDDLE PURLIN
- ◊ D OUTER VERTICAL GLAZING
- ◊ D1 OUTER VERTICAL GLAZING WITH MIDDLE PURLIN

VERTICAL APPLICATION - SIDE VIEW

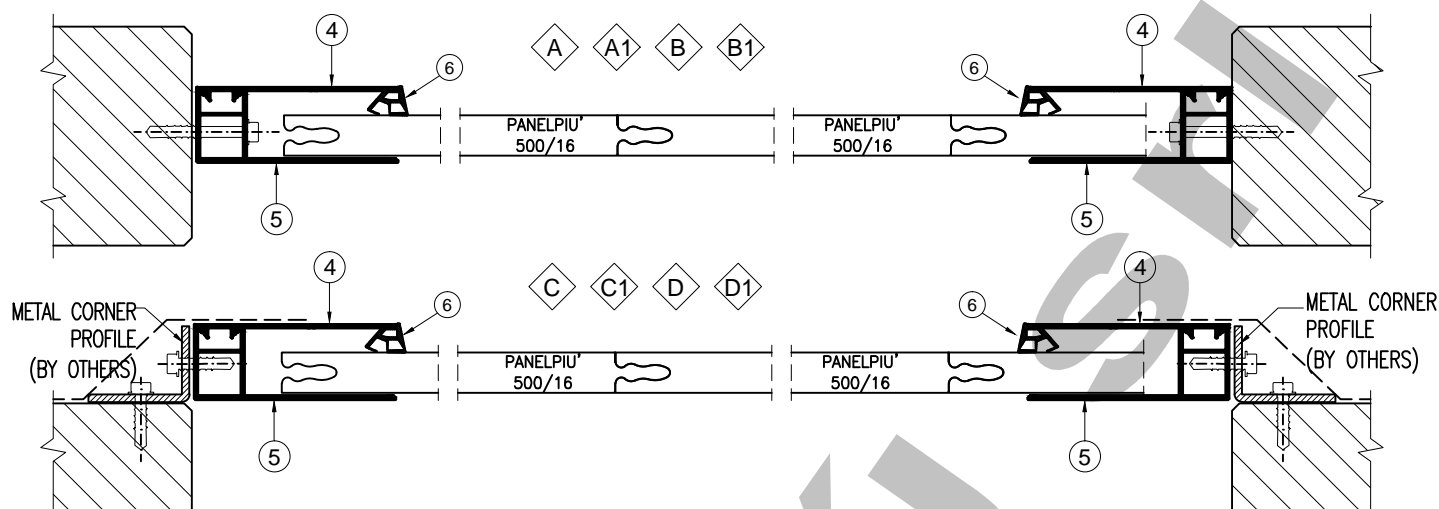


VERTICAL APPLICATION - SIDE VIEW

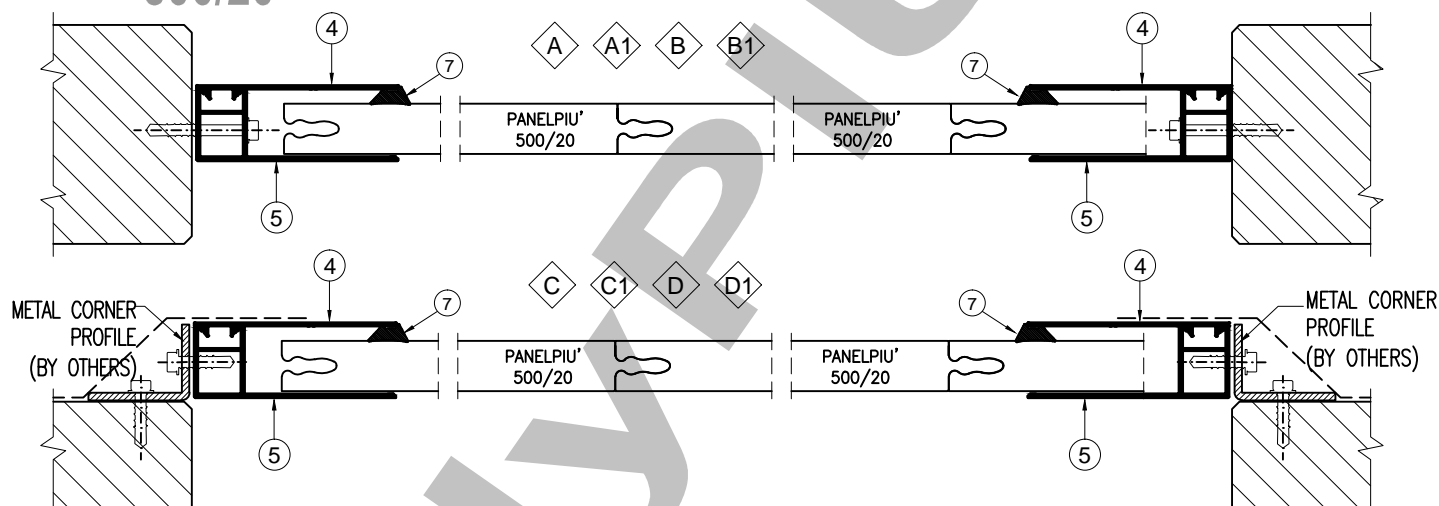


HORIZONTAL APPLICATION ON CROSS SECTION

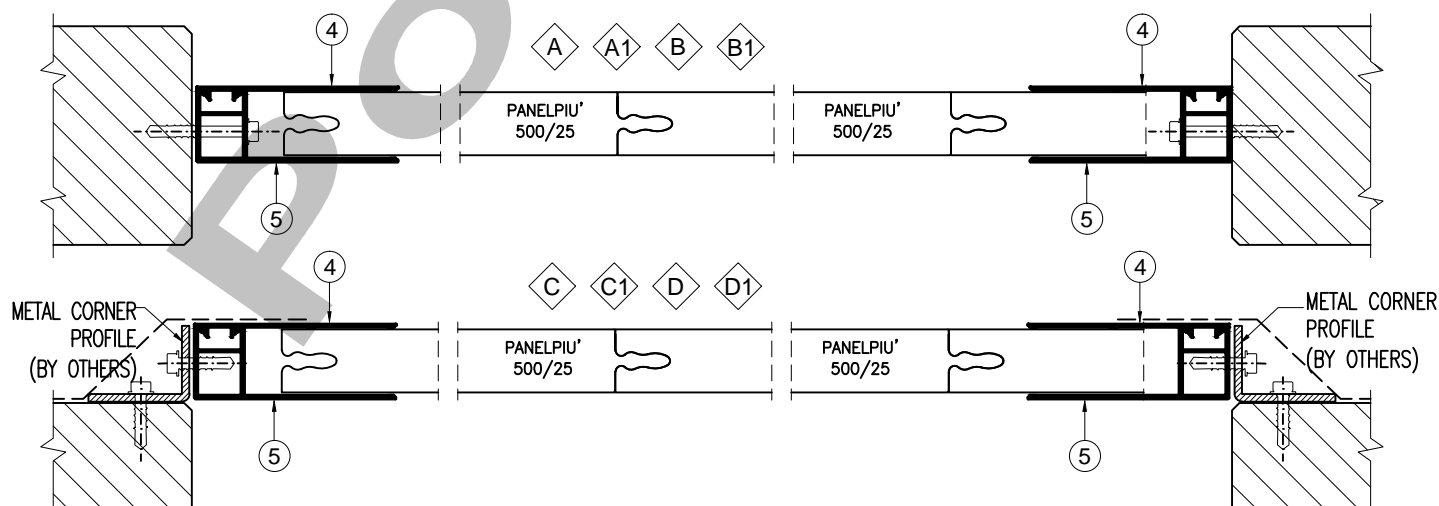
500/16



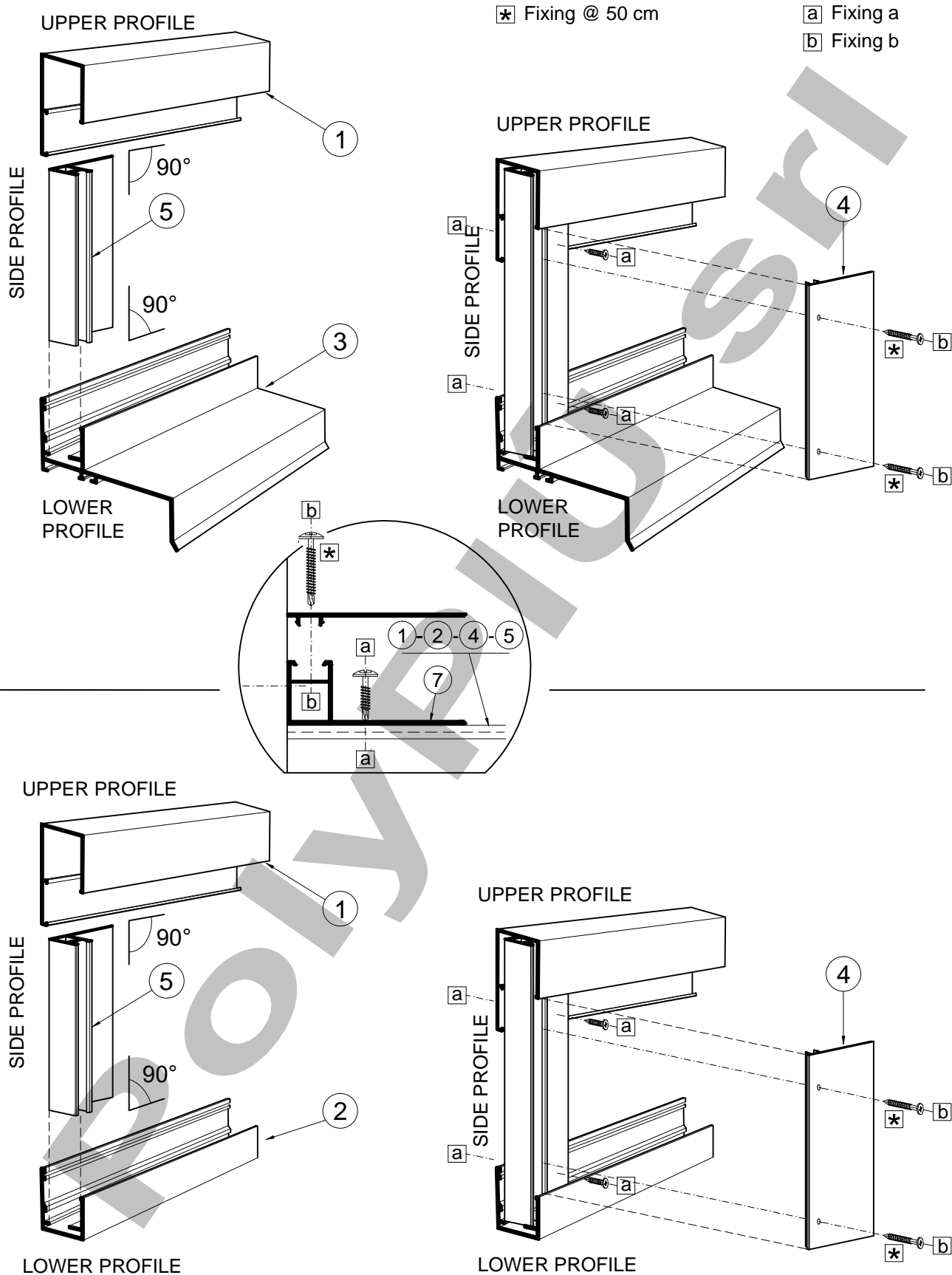
500/20



500/25

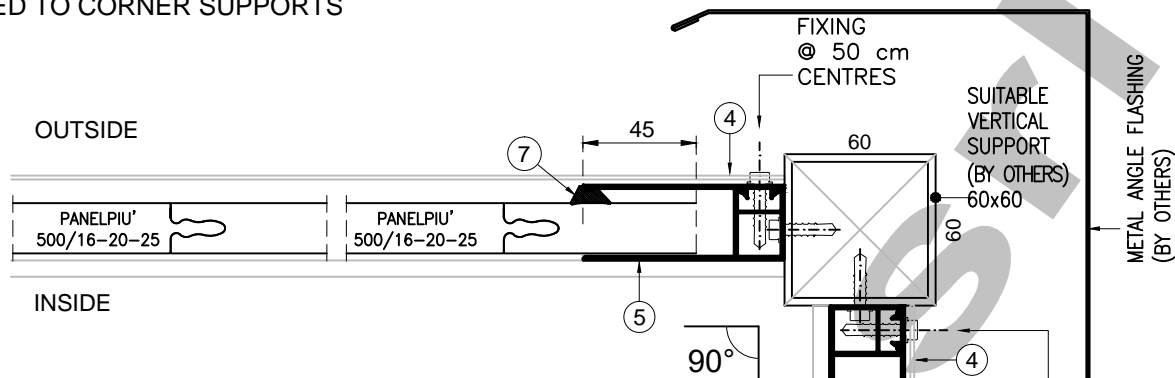


CONNECTION BETWEEN PROFILES

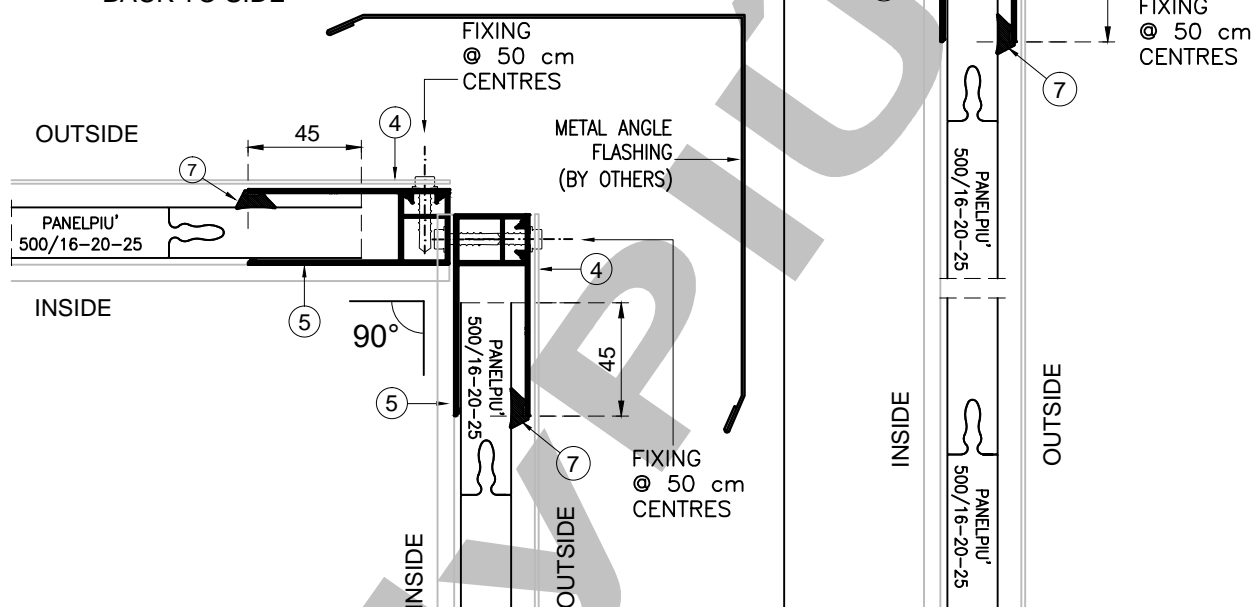


EXTERNAL CORNER

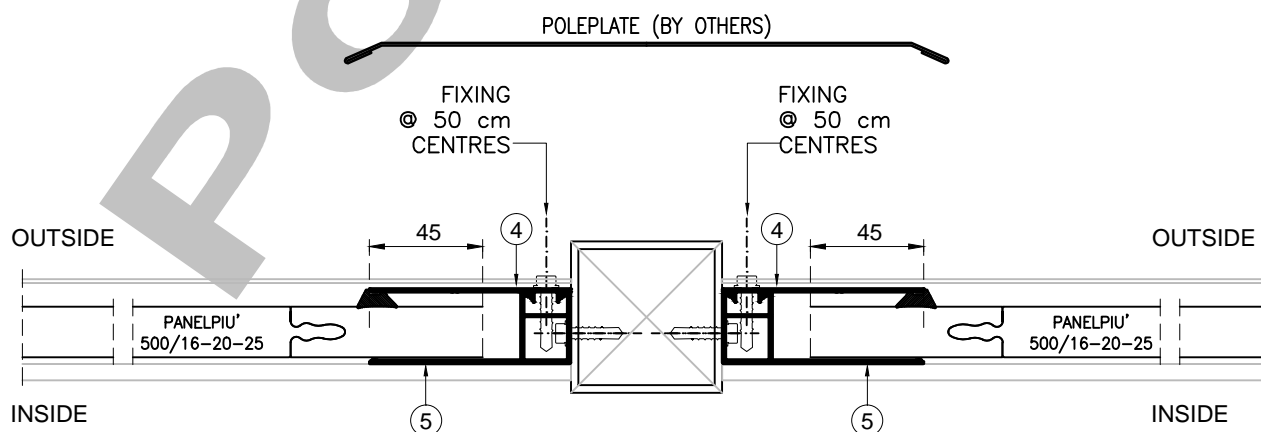
A. CORNER DETAIL WITH ALUMINIUM PROFILES FIXED TO CORNER SUPPORTS



B. CORNER DETAIL WITH ALUMINIUM PROFILES BACK TO SIDE

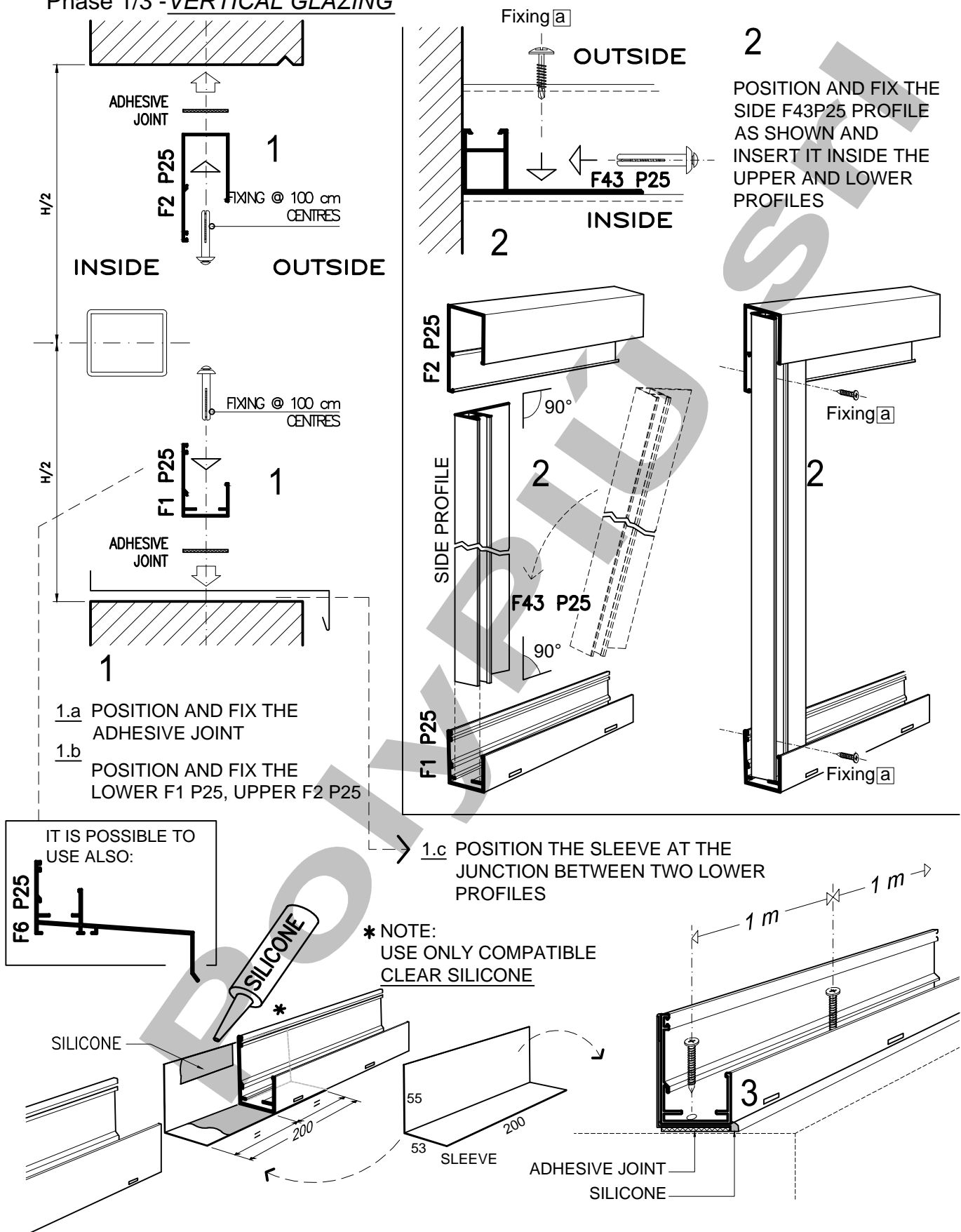


REALIZATION OF INTERRUPTION OF GLAZING OR OF EXPANSION JOINT



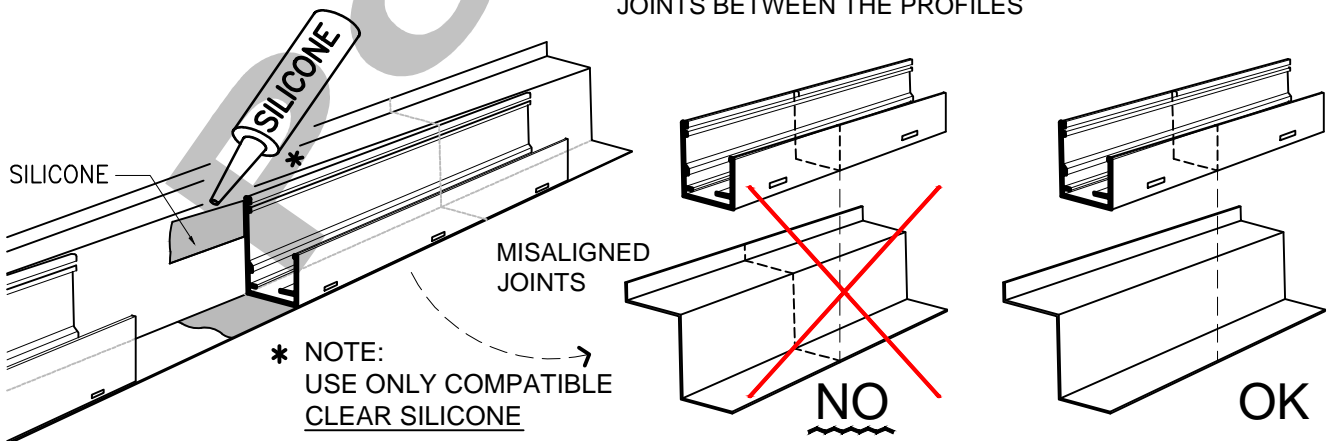
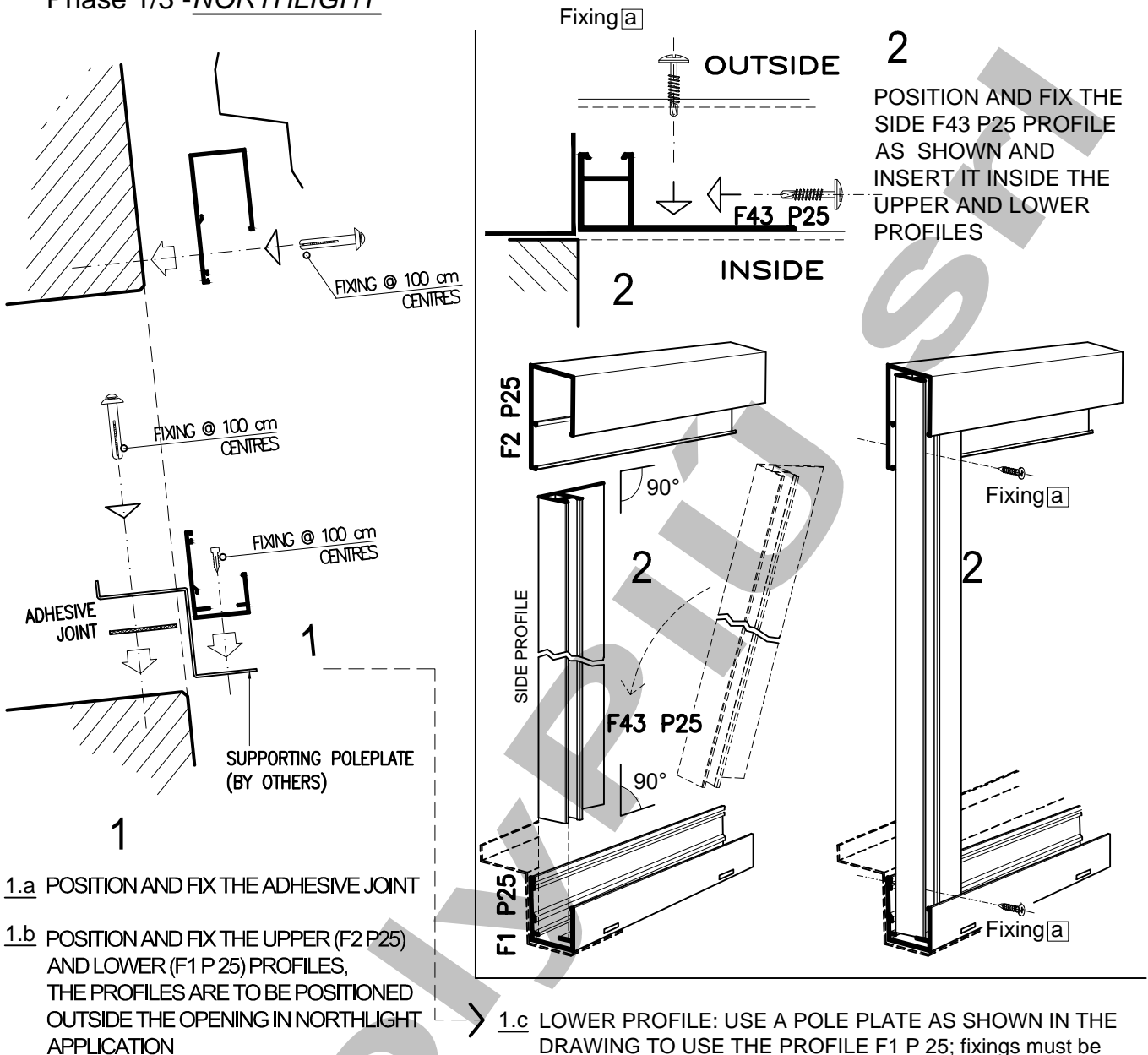
TYPICAL INSTALLATION GUIDE FOR FIXED GLAZING

Phase 1/3 - VERTICAL GLAZING



TYPICAL INSTALLATION GUIDE FOR FIXED GLAZING

Phase 1/3 - NORTHLIGHT



TYPICAL INSTALLATION GUIDE FOR FIXED GLAZING

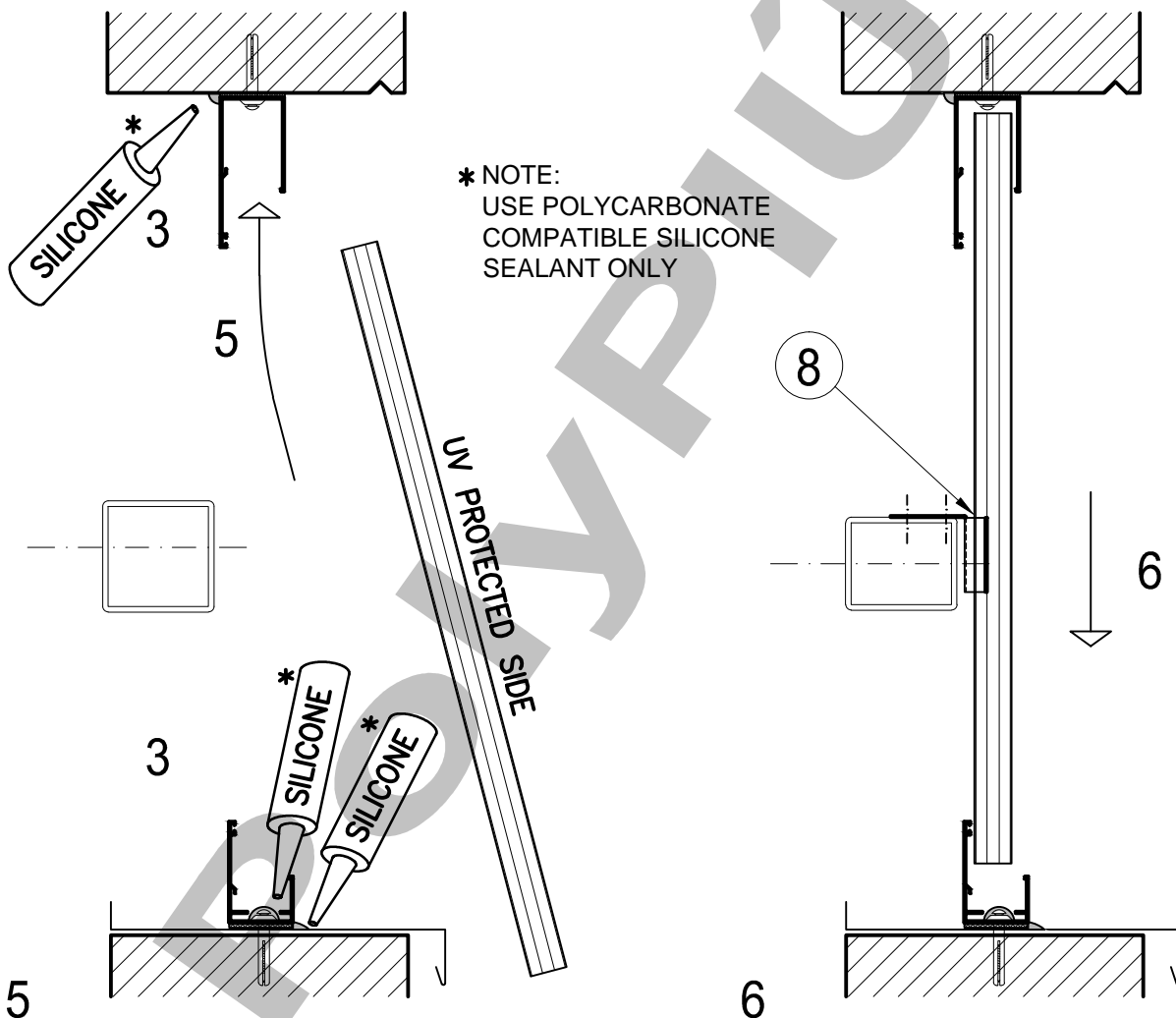
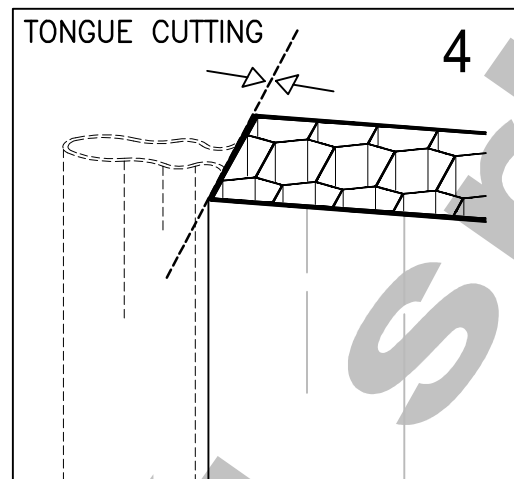
Phase 2/3

3

SILICONE THE HEADS OF SCREWS AND THE JUNCTION BETWEEN THE INNER SIDE AND THE SUPPORT

4

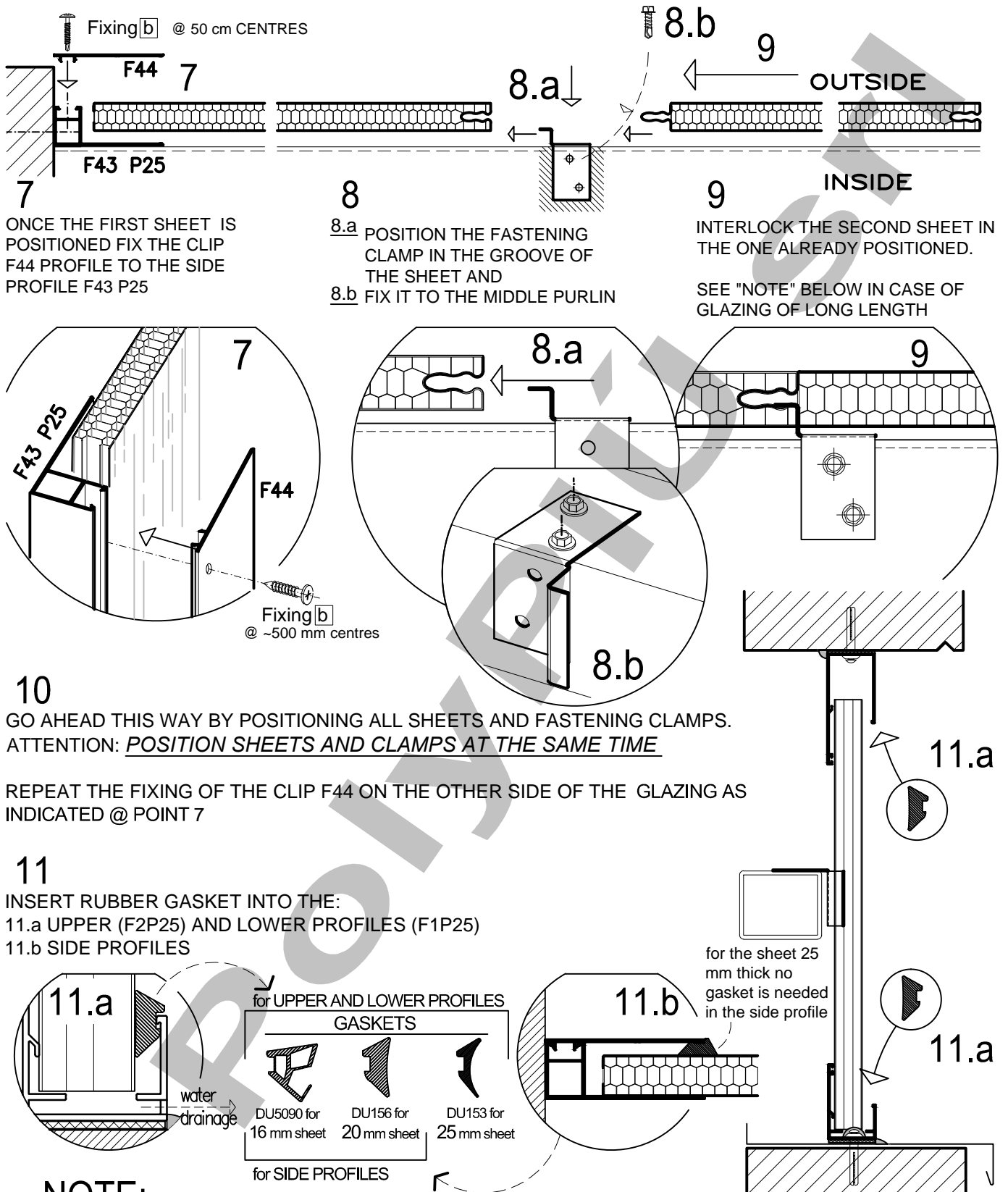
CUT OFF THE TONGUE OF THE FIRST SHEET PANELPIÙ 500 SO THAT IT CAN BE INSERTED INTO THE VERTICAL PROFILES (fig. 7)



5-6 POSITION THE FIRST SHEET BY SLIDING IT VERTICALLY INSIDE THE UPPER PROFILE AND THEN DOWN INTO THE LOWER PROFILE

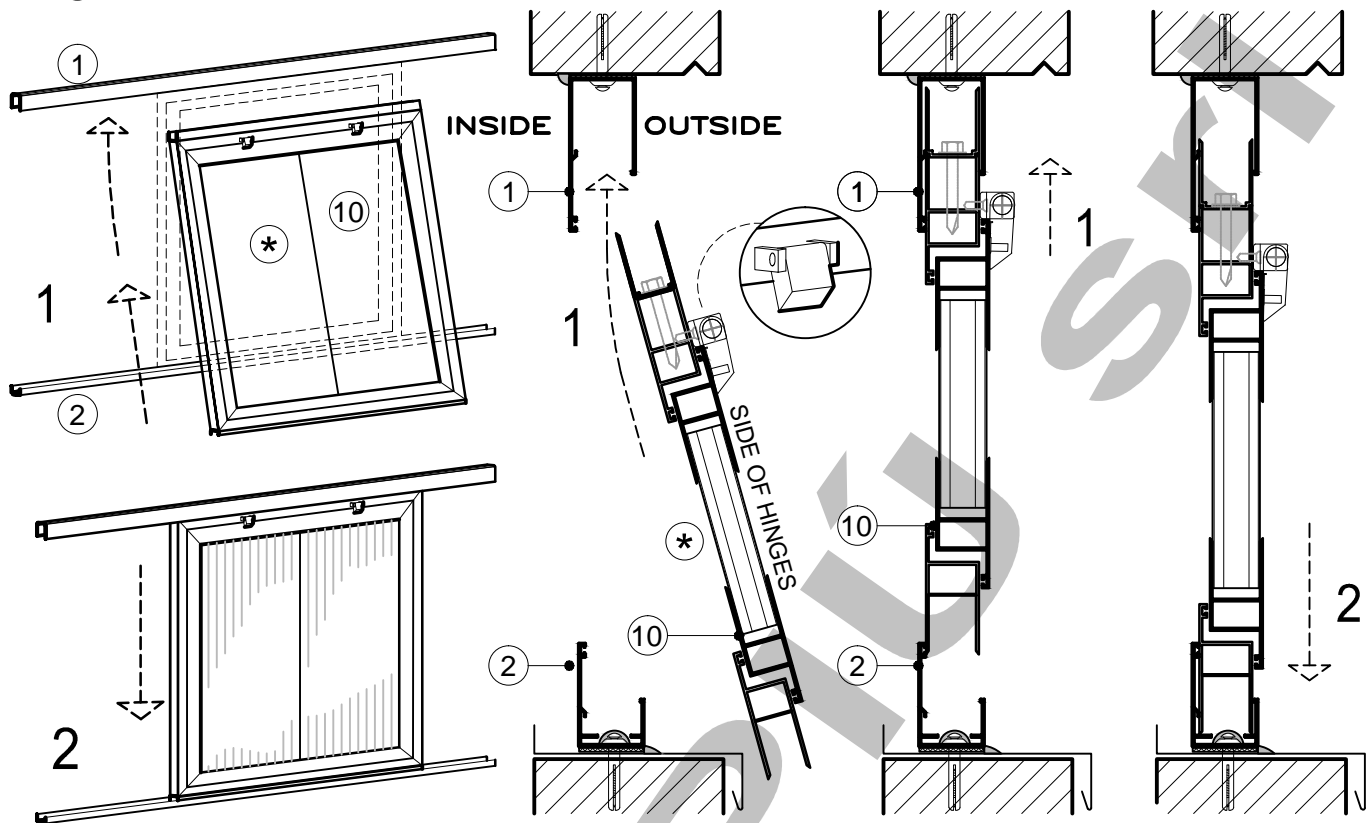
TYPICAL INSTALLATION GUIDE FOR FIXED GLAZING

Phase 2/3



FITTING GUIDE FOR OPENING SECTION

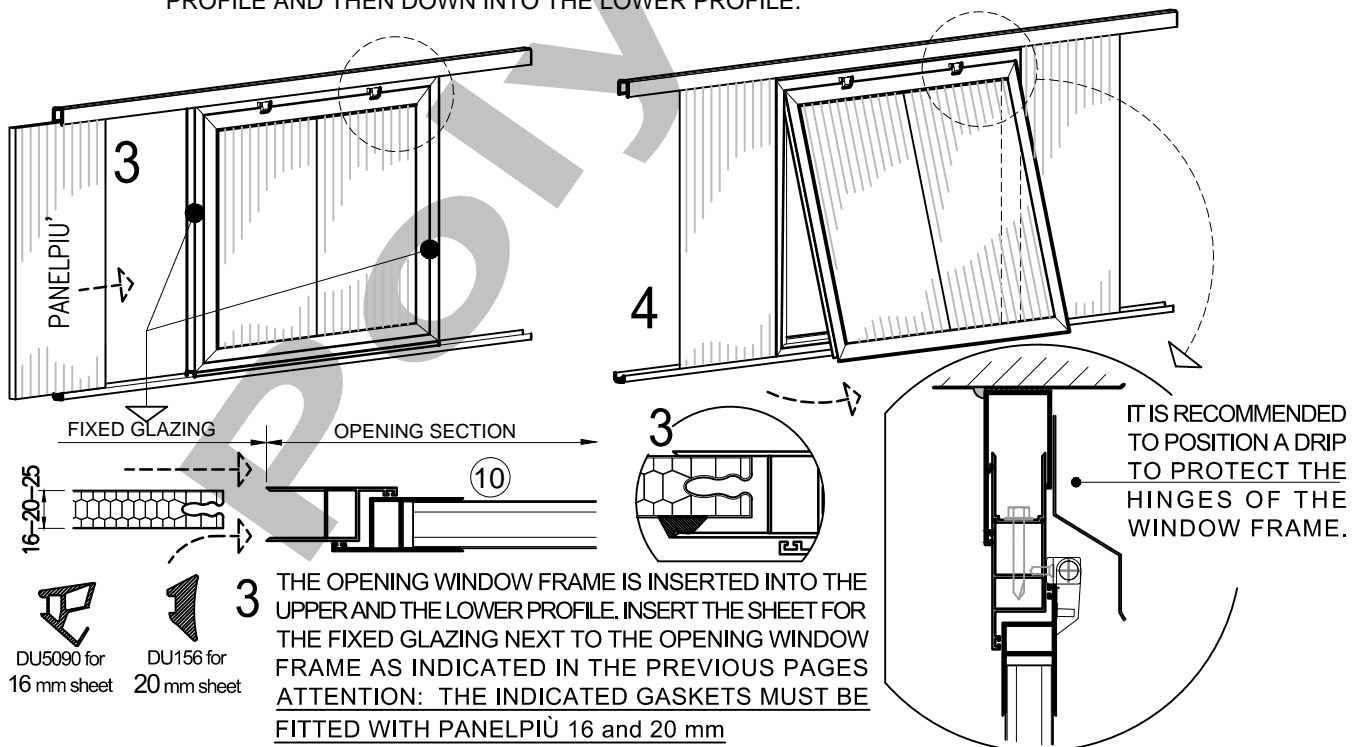
* NOTE: THE WINDOW FRAME IS SUPPLIED PRE-ASSEMBLED AND COMPLETE WITH POLYCARBONATE SHEETS



POSITION, FIX AND SILICONE THE UPPER AND THE LOWER PROFILES AS SHOWN IN THE GUIDE SECTION FOR THE FIXED VERTICAL GLAZING (PAGES 14 & 15)

1 - 2

POSITION THE WINDOW FRAME (SHUT) AS SHOWN BELOW BY SLIDING IT UP INTO THE UPPER PROFILE AND THEN DOWN INTO THE LOWER PROFILE.



NOTES

RESPONSIBILITY CLAUSE:

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