

#### **SUNGLAZETM**

#### Solid Polycarbonate Architectural System

Marketing Support Dept.

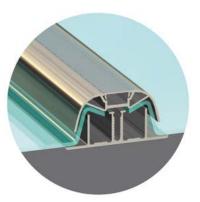


www.palram.com | Build On.

palram@palram.com

#### SUNGLAZE™ Characteristics

- Standing Seam Leak proof
- Thermal expansion / contraction free.
- UV protected on both sides.
- Allows arched design, even when used in very small radius.
- Easy to install.
- Large color range including Smart colors.





### SUNGLAZE™ Main Benefits

- Glass-like elegant appearance.
- Total Leak proof.
- Thermal expansion free.
- Caulking and silicone free.
- Withstands very high loads.
- Easy, fast and safe installation.
- Extensive color range





# SUNGLAZE™ Panel Range

600/3





600/4





800/4





SUNGLAZE™ 3/600	SUNGLAZE™ 4/600	SUNGLAZE™ 4/800
Width: 584mm (600mm system)	Width: 585mm (600mm system)	Width: 785mm (800mm system)
Height: 20mm	Height: 21mm	Height: 21mm
Weight: 3.79 Kg/m², (2.20 Kg/m)	Weight: 5.05 Kg/m², (2.94 Kg/m)	Weight: 4.98 Kg/m², (3.90 Kg/m)
Min. cold bending radius: 4.0m	Min. cold bending radius: 4.0m	Min. cold bending radius: 4.0m
System Weight: 6.14 Kg/m	System Weight: 7.40 Kg/m	System Weight: 6.73 Kg/m



# SUNGLAZE™ Load / Span Data

								Multi-Span											
Type Rafter Centers		Single Span (mm)						Mid-Span (mm) Δ Δ Δ Δ					End-Span (mm)						
		75 kg/m²	100 kg/m²	125 kg/m²	150 kg/m²	175 kg/m²	200 kg/m²	75 kg/m²	100 kg/m²	125 kg/m²	150 kg/m²	175 kg/m²	200 kg/m²	75 kg/m²	100 kg/m²	125 kg/m²	150 kg/m²	175 kg/m²	200 kg/m²
3/600	600	900	820	760	NA	NA	NA	1540	1400	1300	NA	NA	NA	1210	1100	1020	NA	NA	NA
4/600	600	900	820	760	720	680	NA	1540	1400	1300	1220	1160	1110	1210	1100	1020	960	910	870
4/800	800	820	745	690	NA	NA	NA	1400	1275	1180	NA	NA	NA	1100	1000	925	NA	NA	NA

#### Notes:

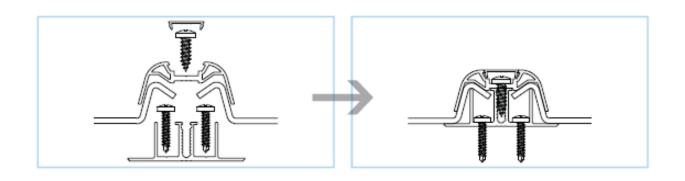
- 1. The values are based on, maximal deflection criterion of L/200 for the aluminum profiles and L/20 for the Polycarbonate panels.
- 2. The dimensions depicted do not supersede the requirements of local construction codes.
- 3. In case of installation with supports by rafters, the distance between screws should be 800 mm.

# SUNGLAZE™ Colors

Color	%Light Transmission ASTM D-1003	<b>%Haze</b> ASTM D-1003	Shading Coefficient ASTM E-424-71			
Clear	90	<1	1.00			
Bronze	20 35 50	<1	0.52 0.64 0.75			
Solar Grey	20 35 50	<1	0.51 0.64 0.75			
White Opal	28	100	0.35			
White Diffuser	80	100	1.00			
Solar Control	20	67	0.42			
Solar Olympic	20 35 50	50 35 20	0.47 0.60 0.73			
Smart Green	70	26	0.69			
Smart Blue	50	26	0.65			
Bluish Breeze	70	1	0.63			



## SUNGLAZE™ System Components







**CAP** 

**CAP PLUG** 



END CLOSURE

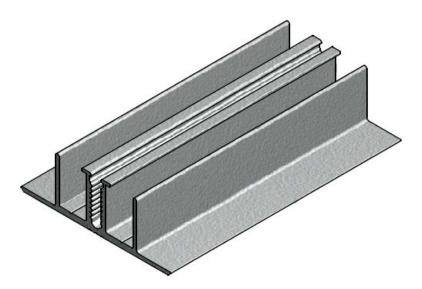


Locking Fixing screw



#### SUNGLAZE™ Aluminum Base

- Connects the system to the supporting structure using fixing screws.
- Connects every two neighboring panels.
- Available in mill or anodize finish or any color according to RAL catalogue.
- The same base is used for SUNGLAZE 3 & 4mm panels.





## SUNGLAZE™ Aluminum Cap Profile

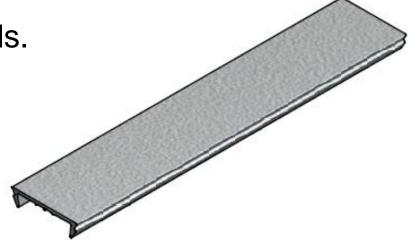
- Connects the panels with the base profile using
- Connects every two neighboring panels.
- Available in mill or anodize finish or any color according to RAL catalogue.
- The same profile is used for SUNGLAZE 3 & 4mm panels.
- Connects to the supporting structure using locking screws.





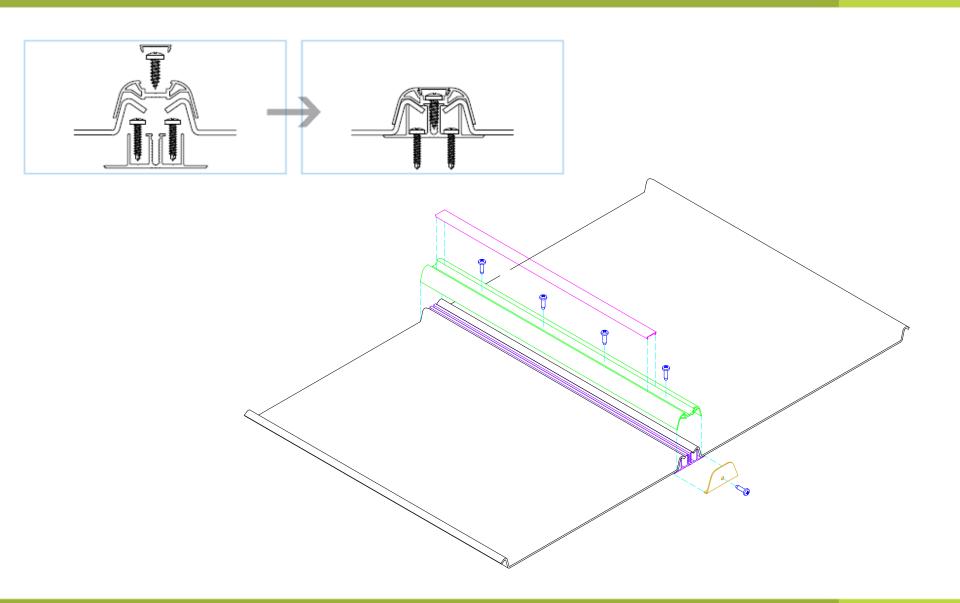
## SUNGLAZE™ Aluminum Cap Plug

- Esthetic closure for the cap profile.
- Clicked into the Alu Cap Profile.
- Available in mill or anodize finish or any color according to RAL catalogue.
- The same plug is used for 3 & 4mm SUNGALAZE panels.





## SUNGLAZE™ - How to Connect?



#### SUNGLAZE™ Purlin Installation

- Purlins are perpendicular to the aluminum profiles / slope.
- Purlin distance is determined according to project design load and panel thickness (Load / Span table).
- The panel is connected to the structure at each purlin using two fixing screws.
- The installation is cost efficient since less structural steel is required.
- View from beneath Criss-cross (small rectangles / squares).

#### SUNGLAZE™ Rafter Installation

- Rafters are parallel to the aluminum profiles / slope.
- Every aluminum profile is supported along its entire length by the rafter.
- Structural stability is achieved by the panel lateral direction.
- Distance between rafters is determined according to the panel width (600 or 800mm).
- Screws fix the base profile every 500mm.
- View from beneath Long and narrow rectangles.



### SUNGLAZE™ Arched Installation

- Suitable for both rafter and purlin installation.
- Arched installations increase the structural performance of the panels.
- When radius is inconsistent along the arch, it is recommended to narrow the spans for minimal affect on expansions / contractions.
- Aluminum profiles should be roll-formed.
- Panels can be cold bent.
   Minimum cold bending radius is 4.0m

### SUNGLAZE™ Benefits vs. PALSUN®

- Leak-proof regardless of the quality of installation or EPDM gaskets.
- Thermal expansion / contraction free allows to install long panels (up to 12m).
- Higher load capacity compared to the panel thickness.
- Simple installation no screws penetrating the panels.



## Projects: Hangzhou Airport, China





# Projects: Residential Pergola, Israel





# Projects: Industrial Awning, Israel





## Projects: Restaurant, Australia



## SUNGLAZE™ Project Considerations

- Maximum panel length is 12m, since they cannot be folded inside a container.
- Longitudinal overlap currently connected using gutter or step.
- Drain direction is always along the aluminum profiles. In flat roof drain works 360°.
- Dome structures.
- Pyramid structures.





#### ООО «Торгово-Строительная Компания Империя»

109382, Россия, г.Москва, ул.Нижние поля, 31 +7(495)646-81-65 info@tbc-empire.ru www.tbc-empire.ru

#### **LLC TBC Empire**

109382, Russia, Moscow, Nizhniye polya,31 +7(495)646-81-65 info@tbc-empire.ru www.tbc-empire.ru