

TECHNICAL INFORMATION 1.1.1

PC



Glazing Elements

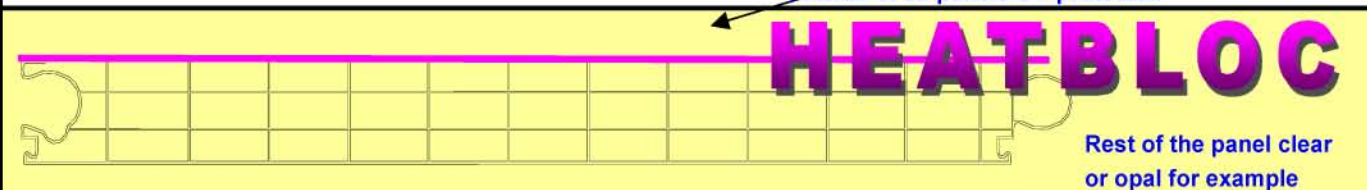
PC-coex-Glazing Elements (GE)

Design line for elegant, decorative and creative facades
10 year limited guarantee*

DECO-COLOR



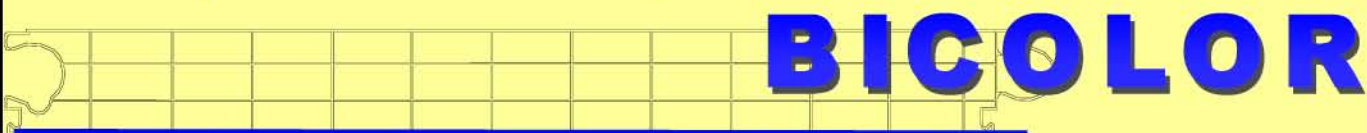
Outside of all panels UV-protected



HEATBLOC

Rest of the panel clear or opal for example

PC 2540-4 building width 500 thickness 40mm U-value 1,45 W/m² K



BICOLOR

PC 2540-4 building width 500 thickness 40mm U-value 1,45 W/m² K

Inside



Reflexa + Luna

Rest of the panel clear or opal

PC 2540-4 building width 500 thickness 40mm U-value 1,45 W/m² K

Produktbeschreibung wie 1.1.0

- Many interesting effects are possible due to this patented production line. The complete inner and outer wall are fully pigmented
- The **HEATBLOC** surface can block up to 60 % of the infrared rays.
- **BICOLOR** allows for facades with different optical effects according to the weather, the point of view and the daylight. (3-dimensional effect)
- A co-extruded UV protection-layer on the outside secures the positive material characteristics
- 10 years guarantee according to guarantee declaration
- The **Reflexa** surface consists of silver- or gold-coloured pigments for a reflecting surface. It is translucent and has a different optical effect during the day than at night
- **Luna** is a brandnew design line with a phosphorized surface glowing in the dark. This can be interesting for special facade applications or for interior use in order to find one's way without any light. There's no limit for creativity !
- Advantages: **daylight-energy saving-security unlimited planning creativity**

Technical data

	PC**	PC	PC	PC - HI	Unit
Fire classification B 1 (DIN 4102)	1540-4	1540-4	1540-4	High Impact	
Fire classification B 2 (DIN 4102)	2540-4	2540-4	2540-4	2540-4	
Building width	500 ± 1%				mm
Thickness	40 ± 1%				mm
Weight max.	4,0	4,0	4,0	4,3	ca. Kg/m²
Length available	up to 11 m or customer request				
Noise insulation	22	22	22	22	ca. dB
U-Value	1,45	1,45	1,45	1,45	W/m² K
Modulus of elasticity	2400				N/mm²
Expansion coefficient	0,065				mm/m°C
Fire classification	B1 or B2	according to		composition	DIN 4102
Temperature stability	short		long		
	130				° C
	minus 40 to plus 115				° C
Transmission	depending on the design please ask			=-0 to 65 %	ca. %
Total energy transmission for opal	up to 0,35 depending on colour, bicolour and Heatbloc				
UV-transmission up to 380 nm	0				%
Joint permeability during beating rain	ca. 90% under DIN value				m³/h m²
Ball impact	no damage through soccer, hand, medicine and hockey ball				
Puck impact	no breakage by 130 km/h				
Hail impact	no breakage by 40 mm thick balls with the speed of 17 m/sec (61 km/h)				

Tolerance: Length: - 0 +(according to length) up to 15 mm, Thickness: ± 1 %, Curvature in length direction ± 0,5 % the length

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Mounting areas
Glazing where no joining profiles are needed for roof and facade

Industry halls and warehouses
tennis and sport halls,
agriculture buildings, animal housing

Halls with strong vibrations
For constructions, which cannot support a large weight

Buildings with explosion hazard
or areas with extreme hail

Frame system and accessories
Rodeca can deliver for almost all mounting situations corresponding alu frame system with EPDM sealing gaskets and air hatches also for Iso-glass.
Our systems are practical and proven.

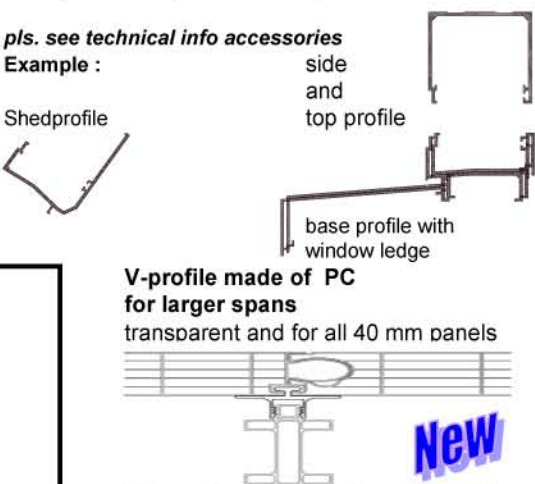
pls. see technical info accessories

Example :

Shedprofile

side and top profile

base profile with window ledge



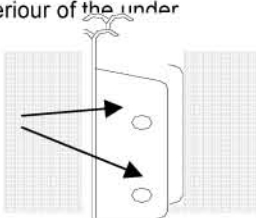
V-profile made of PC for larger spans
transparent and for all 40 mm panels

New

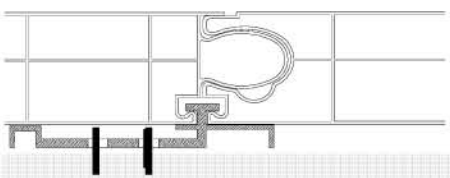
This profile increases the span and the load capacity for all applications.
No more horizontal supports are necessary in the corner area of the building.

Steel fastener

The steel fastener allows for a secure and gliding attachment to the under construction. Different types of steel fasteners may be applied according to the situation and panels. The steel fastener shown here is for mounting on the interior of the under construction.
Always use 2 screws for fastening !



Flat steel fastener



Ideal for fastening the panel onto the under construction as it allows for an optimal distance to the under construction allowing for air circulation.

B 1 Quality - DIN 4102
Article no. PC 1540-3 instead of 2540-3
Through the use of a special **flame retardant PC raw material** the transparency and colouring is slightly different than B2 quality

The 3-wall 40 mm thick panels are also available as **non-burning drip**.

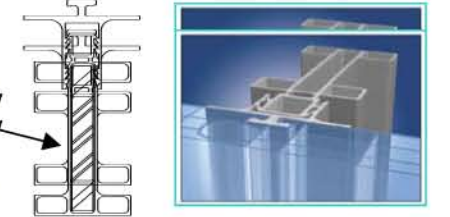
Allowed span distances

The mentioned data are valid for closed buildings and according to the fact that the wind speed does not exceed the DIN 1055 T 4 norms.

Height from ground		Pressure N/m ²		Wind Speed		Closed Buildings			One side open	
						Middle area		Corner Area	Middle Area	Corner Area
						Pressure	Suction			
0 - 8 m	500	28,3	101,88	0,50	0,25	1,00	0,75	1,40		
8 - 20 m	800	35,8	128,88	0,80	0,40	1,60	1,20	2,24		
20- 100 m	1100	42,0	151,2	1,10	0,55	2,20	1,65	3,08		

By buildings in coastal or windy areas and buildings with one side open (also by large doors), the span width must be reduced.

For closed buildings											
Acceptable span widths (distance between purlins/facit)											
Vertical Glazing											
Height from ground	40 mm panel										
	Single Facit		Multi Facit		Multi Facit With PC-V Profile		PC-V Profile + reinforcing inlay				
	M	C	M	C	M	C	Single facit		Multi facit		
0 - 8 m	2,40	1,80	2,00	0,80	2,90	2,30	4,75	3,50	5,50	3,90	
8 - 20 m	2,00	1,60	1,45	0,50	2,60	2,00	3,90	2,80	4,35	3,10	
20 - 100 m	1,70	1,30	1,10		2,00	1,60	3,30	2,35	3,70	2,65	
M = Middle Area C = Corner Area											
Roof glazing sloped ⁻⁴⁾											
Height 0 - 20 m											
0,75 kN/m ² according to DIN 1055 16 - 50 °		2,00		1,85		2,70		3,30		3,70	
1,00 kN/m ² according to DIN 1055 16 - 50 °		1,75		1,65		2,45		2,90		3,30	



Important : in corner areas of buildings (2m or b/16) suction force is increased and must be calculated. Either the span distance decreasing, a travers profile or an alu covering profile must be mounted.

For the validity of the given span distances is the use of the special frame systems and accessories as well as the mounting instructions

⁴⁾ The data are valid for snow load of 750 N/m² and in connection with pressure and suction stress as well as temperature implied in order to avoid snow sack build up.