

# 1.2.1.3/1

## Translucent Building Elements

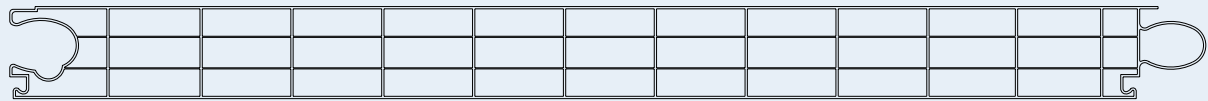
Product properties - Physical properties

Stand: 10/10

System PC 1540-4 | PC 2540-4 | PC 3540-4

### Up-Value from 1.30 to 1.50 W/m<sup>2</sup>K

Depending on horizontal or vertical installation situation as interior and exterior application according to DIN EN ISO 6946:2008 / DIN EN ISO 10077-2:2008



#### Flammability classifications:

PC 1540-4  
PC 2540-4  
PC 3540-4

fire class B 1 according to DIN 4102  
fire class B 2 according to DIN 4102  
fire class B, s 2 - d 0 according to DIN EN 13501

Building width:

500 mm +/- 1 %

Thickness:

40 mm +/- 1 %

Weight:

approx. 4.00 kg/m<sup>2</sup>

Number of layers:

4 layers / 3 chambers

Modulus of elasticity:

2,400 N/mm<sup>2</sup>

Coefficient of linear expansion:

0,065 mm/m/°C

UV admission:

> 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

Length - 0/+ 15 mm (at room temperature)

Flection: +/- 0.5 %

#### Versions:

Standard:

Colours: crystal and opal antiblind

BiColor:



Two coloured versions of the translucent building elements.

The BiColor version can be delivered with a minimum quantity of 150 m<sup>2</sup> without separate surcharges for the standard colour combinations - Nonstandard combinations beginning from 300 m<sup>2</sup>.

Standard colours:

crystal/RAL 1023 - yellow

crystal/RAL 5015 - pazific blue

crystal/RAL 2009 - orange

crystal/RAL 6027 - petrol

crystal/RAL 3020 - red

crystal/RAL 6029 - verde

crystal/RAL 4006 - viola

crystal/opal

crystal/RAL 5002 - ultramarin blue

Please consider that the specification of RAL colour tones for transparent building materials is only on the basis on the RAL card usable. Please request samples when needed.

#### Up-values:

Isotherm- and temperature pattern from -10 °C outside and 20 °C inside at vertical assembly



Isotherm:

Red: 13 °C

Blue: 10 °C

Black: 0 °C

#### Installation situation interior:

Up-value 1.30 W/m<sup>2</sup>K vertical

Up-value 1.40 W/m<sup>2</sup>K horizontal

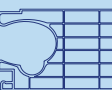
#### Installation situation exterior:

Up-value 1.40 W/m<sup>2</sup>K vertical

Up-value 1.50 W/m<sup>2</sup>K horizontal

Sound insulation:

approx. 24 dB Rw



# 1.2.1.3/2

## Translucent Building Elements

### Physical properties

Stand: 10/10

**Transmission:**

Standard:

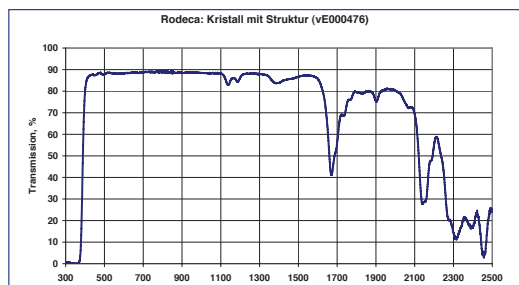
Colour: crystal                    66 % TNO  
 Colour: opal antiblind         48 % TNO

BiColor:

Depending on colour combinations and Level of opalization

For example colour combination

Crystal / opal antiblind        approx. 66 %  
 Heatbloc S / petrol            approx. 45 %  
 Crystal / pacific blue         approx. 51 %



The measurement of the transmission values was carried out with application of a natural day light lamp of 20,000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50,000 LUX) exemplarily on a 1 mm thick PC.

**Solar gain values g**

Standard:

Colour: crystal                    0.68 TNO  
 Colour: opal antiblind         0.56 TNO

BiColor:

Depending on colour combinations and Level of opalization

For example colour combination

Crystal / opal antiblind        approx. 0.66  
 Heatbloc S / petrol            approx. 0.45  
 Crystal / pacific blue         approx. 0.51

(The g-values were partially tested at TNO. The values without TNO declaration are interpolated g-values on the basis of testing results of the TNO or rather tests of the technical university of Berlin. Please consider that the g-values differ depending on sun incidence angle.)

The general German Building Approval Z-10.1-327 is currently in the final extension phase and will be soon available. All following information to stability are based on assembly testings carried out in line of the German building approval procedure. Flammability classifications don't have influence to the aspects of stability

The aforesaid information and our application technological advice in words, written and through tries, are carried out to the best of one's knowledge. This information is non-binding advice even in regards to property rights of third party. Our advice does not release you from your responsibility to proof self dependently our current advices - especially our safety data sheets and technical information - and to test our products regarding to applicability for the intended system and use. Application, use and handling of our products - produced based on our application technological advice - take place out of our control and therefore you are solely responsible. The sales of our products is effected at our current general sales and delivery conditions.