

We guarantee

**PLEXIGLAS RESIST® SP,
PLEXIGLAS HEATSTOP® SP**

Multi-Skin Sheets and

PLEXIGLAS RESIST® WP

Corrugated Sheets

for 10 years on light transmission, hail resistance, rigidity and strength.

Product Definition

PLEXIGLAS RESIST® SP and PLEXIGLAS HEATSTOP® SP multi-skin sheets and PLEXIGLAS RESIST® WP corrugated sheets are extruded from impact-modified acrylic (polymethyl methacrylate, PMMA).

The guarantee covers PLEXIGLAS RESIST® SDP 8 and SDP 16 double-skin sheets

in grades

Clear 00721 NO DROP,
Clear 00721 C,

PLEXIGLAS RESIST® S4P 32 quadruple-skin sheets

in grades

Clear 00721 NO DROP,
Clear 00721 C,
White WA012,

PLEXIGLAS HEATSTOP® SDP 8 and SDP 16 double-skin sheets

in the grade

Opal WR004

and PLEXIGLAS RESIST, WP corrugated sheets of profiles WP 76/18, WP 130/30 and WP 177/51

in grades

Clear 0A001 Smooth,
Clear 0A001 W,
Clear 0A001 C,
Brown 8A001 W,
Brown 8A003 C.

Guarantee Statements

1. PLEXIGLAS® SP and WP retain their light transmission.

This means that the sheets are guaranteed to show the following light transmission values τ_{D65} on delivery / after 10 years:

PLEXIGLAS RESIST®
Clear 00721 NO DROP and Clear 00721 C:

SDP 8
 $\geq 83 \% / \geq 79 \%$

and SDP 16 in
 $\geq 83 \% / \geq 79 \%$,

PLEXIGLAS RESIST®
Clear 00721 NO DROP and Clear 00721 C:
White WA012:

S4P 32 in
 $\geq 72 \% / \geq 68 \%$,
 $\geq 60 \% / \geq 56 \%$,

PLEXIGLAS HEATSTOP®
Opal WR004:

SDP 8
 $\geq 60 \% / \geq 56 \%$

and SDP 16 in
 $\geq 50 \% / \geq 46 \%$

PLEXIGLAS RESIST®
Clear 0A001 Smooth:
Clear 0A001 W:
Clear 0A001 C:
Brown 8A001 W:
Brown 8A003 C:

WP in
 $\geq 88 \% / \geq 84 \%$,
 $\geq 79 \% / \geq 75 \%$,
 $\geq 86 \% / \geq 82 \%$,
 $\geq 53 \% / \geq 49 \%$,
 $\geq 73 \% / \geq 69 \%$.

The transmittance τ_{D65} is measured according to DIN 5063 on clean, polished specimens which have been conditioned to the equilibrium state in the standard climate of 23 °C / 50 % RH.

2. PLEXIGLAS RESIST® SP and WP will not be broken by hail within the guarantee period.

Breakage by hail within the meaning of this guarantee is defined as at least 5 holes at different points in the surfaces of multi-skin or corrugated sheets produced by 10 shots during the hail simulation test described below.

Hail simulation test:

Pellets of polyamide PA 6.6 with a diameter of 20 mm (weight approx. 4.5 g) are propelled against the weathered surface at a speed of 21 m/s, corresponding to a kinetic energy of 1 joule, at room temperature.

Information:

According to an expertise, a natural hailstone of 23 mm in diameter has an average impact velocity of 17 m/s and a kinetic energy of 1 joule. Furthermore, a hailstone study has established that the average frequency of hailstones of more than 10 mm in diameter, e.g. in the Stuttgart area, is only 2.9 %. Hailstones of a greater diameter are even less frequent.

3. PLEXIGLAS RESIST® SP and WP retain their rigidity.

This means that the multi-skin sheets are guaranteed to show the following modulus of elasticity E_t on delivery: ≥ 1800 MPa, after 10 years: ≥ 1800 MPa,

and the corrugated sheets:

on delivery: ≥ 2000 MPa, after 10 years: ≥ 2000 MPa.

The modulus of elasticity E_t is determined in the tensile test according to ISO 527-2/1B/1 at 23 °C as the average value measured on five specimens with parallel faces, which have been conditioned to the equilibrium state in the standard climate of 23 °C / 50 % RH.

4. PLEXIGLAS RESIST® SP and WP retain their strength.

This means that the multi-skin sheets are guaranteed to show the following values of tensile strength σ_M on delivery: ≥ 40 MPa, after 10 years: ≥ 35 MPa,

and corrugated sheets:

on delivery: ≥ 45 MPa, after 10 years: ≥ 40 MPa.

The tensile strength σ_M is determined in the tensile test according to ISO 527-2/1B/50 at 23 °C as the average value measured on 5 specimens with parallel faces, which have been conditioned to the equilibrium state in the standard climate of 23 °C / 50 % RH.

Note

All guaranteed values are established for flat specimens with parallel faces cut out of the sheets, because for reasons of testing technique the characteristic material values cannot or not accurately be measured on complex profiles.

Conditions of Guarantee

The sheets

- have to be stored, transported, fabricated and installed (or used) in a manner that suits the material;
- must not be thermoformed;
- must not be (adversely) affected by connecting, fastening and sealing elements;
- and must be protected against adverse chemical influences.

This guarantee applies throughout Europe. For guarantee questions concerning applications outside Europe, please get in touch with us.

Applicability

A complaint under this guarantee will be considered:

- (a) if caused within the guarantee period despite demonstrable observance of the conditions of guarantee,
- (b) if made in writing without delay during the guarantee period, and name and address of the buyer, the purchase date, complete product description and number of sheets purchased.

If the complaint is justified, we will replace the material free of charge ex factory.

If suitable replacement material is no longer available, the customer will be refunded with the original purchase price.

Further claims are excluded.

Guarantee Period

This guarantee commences with the date of delivery to the user and ends ten years later.

Degussa Business Unit Plexiglas

Röhm GmbH & Co. KG

Certified to DIN EN ISO 9001 (Quality)
and DIN EN ISO 14001 (Environment)

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