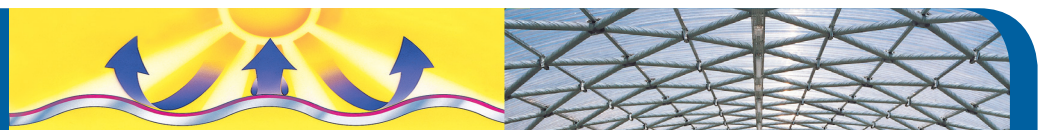


▶▶ Rhenoplast® translucent panels

DATA SHEET
2018



Rhenoplast translucent panels

Rhenoplast translucent panels are made of highly modified rigid PVC and are subject to rigorous internal and external quality criteria and control. They are coated with a special surface finish at the weather-exposed side. The coated surface side is marked.

Due to its precise shape and dimensional accuracy, a perfect connection is ensured to all standard large-size roofing materials such as corrugated slabs, steel and aluminium trapezoidal sheets and special system-related profiles. Profiles and slab widths meet standard industrial dimensions.

Rhenoplast light dispersing (LS)

Rhenoplast LS has the same positive material properties as all Rhenoplast translucent panels. Due to its special formula, Rhenoplast LS translucent panels provide an extreme light dispersion which eliminates almost all dazzling effects and cast shadows.

Range of application

The transparent or translucent panels are used where much natural light through the roof and walls and a permanent rot-proof weather protection is required, e. g. for:

- industrial buildings
- warehouses
- arm sheds
- ready-built and system halls
- sport halls
- stables
- canopies

Supplied lengths

Any length up to 15 m according to project request. Other lengths on request.

Technical data

Property	Value	Unit	Standard/Test method
Density/specific gravity	1.35	g/cm ³	EN ISO 1183-1
Light transmission transparent	≥ 85	%	Ulbricht globe
Light transmission LS	≥ 80	%	Ulbricht globe
Building material class	B1 hardly inflammable		DIN 4102-1
Fire characteristics	flame retardant, no dripping of burning material		DIN 4102-1
Tensile stress at yield	53	N/mm ²	EN ISO 527-1-3
Elongation at yield	5	%	EN ISO 527-1-3
Modulus of elasticity	2800	N/mm ²	EN ISO 178
Impact strength	no breaks	kJ/m ²	EN ISO 179
Coefficient of linear expansion	80 x10 ⁻⁶	K-1	DIN 53752
Vicat/heat distortion temp.(VST/B/50)	77	°C	EN ISO 306
Thermal conductivity	0.17	W/K x m	double plate method
Water absorption 24 h/23°C+	< 0.1	%	EN ISO 62
Chemical resistance	resistance specification		DIN 16929

Data sheet | Rhenoplast® translucent panels



Purlin and crossbar spacing		Purlin spacing in m				Crossbar spacing in m			
		Snow load 0,68 kN/m ²		Snow load 0,88 kN/m ²		Building height up to 8 m Wind zones		Building height 8 m to 20 m 1 and 2	
profil	thickness mm	centre span	end span	entre span	end span	centre span	end span	centre span	end span
Standard profiles									
70/18	1.2	0.75	0.58	0.68	0.54	0.85	0.70	0.75	0.60
76/18	1.2	0.75	0.58	0.68	0.54	0.85	0.70	0.75	0.60
177/51	1.2	1.29	1.01	1.19	0.93	1.50	1.20	1.30	1.00
177/51	1.5	1.39	1.09	1.28	1.00	1.60	1.25	1.40	1.10
Trapezoidal profiles									
207/32	1.5	1.15	0.90	1.06	0.83	1.30	1,05	1.15	0.90
207/35	1.5	1.21	0.95	1.12	0.87	1.40	1.10	1.20	0.95
183/40	1.5	1.56	1.22	1.43	1.12	1.80	1.35	1.50	1.20
333/45	1.5	1.28	1.01	1.18	0.93	1.50	1.15	1.25	1.00
250/49	1.5	1.63	1.28	1.50	1.18	1.90	1.50	1.60	1.30
280/83	1.5	1.75	1.52	1.65	1.40	2.00	1.60	1.80	1.50
Individual profiles									
30 KD	1.5	0.97	0.76	0.90	0.70	1.10	0.85	0.95	0.75
75/20	1.2	0.81	0.64	0.75	0.59	0.95	0.75	0.80	0.65
100/40	1.2	1.43	1.12	1.32	1.03	1.70	1.30	1.45	1.15
124/29	1.5	1.07	0.84	0.99	0.77	1.25	1.00	1.05	0.85
125/20	1.5	0.90	0.71	0.83	0.65	1.05	0.80	0.90	0.70
150/30	1.5	1.10	0.87	1.02	0.80	1.30	1.00	1.10	0.85
150/45	1.5	1.45	1.14	1.34	1.05	1.70	1.35	1.45	1.15
150/50	1.5	1.65	1.29	1.52	1.19	1.90	1.50	1.65	1.30
153/30	1.5	1.12	0.88	1.03	0.81	1.30	1.00	1.10	0.85
167/40	1.5	1.37	1.07	1.26	0.99	1.60	1.25	1.35	1.05
167/50	1.5	1.73	1.35	1.59	1.25	2.00	1.55	1.70	1.35
177/55	1.5	1.39	1.09	1.28	1.00	1.60	1.25	1.40	1.10
180/50	1.5	1.68	1.32	1.55	1.22	1.95	1.55	1.65	1.30
183/39	1.5	1.56	1.22	1.43	1.12	1.80	1.35	1.50	1.20
200/30	1.5	1.04	0.82	0.96	0.75	1.20	0.95	1.05	0.80
200/45	1.5	1.56	1.22	1.43	1.12	1.75	1.40	1.50	1.20
212/80	1.5	1.75	1.52	1.65	1.40	2.00	1.60	1.80	1.50
250/42	1.5	1.30	1.02	1.20	0.94	1.50	1.20	1.30	1.00
250/50	1.5	1.53	1.18	1.40	1.10	1.75	1.35	1.50	1,15
333/39	1.5	1.10	0.87	1.02	0.80	1.30	1.00	1.10	0.85



The purlin and crossbar spacings as listed in the table apply to closed buildings without internal pressure, up to 20 m high, and with multiple span girder in wind zones 1 and 2 according to DIN EN 1991-1-4, edition Dec. 2010. The listed max. support spacings result from the permissible span deflection of L/150. Due to building regulation provisions (model administrative regulation Technical Building Regulations MVV TB), at the roof area in individual cases smaller purlin spacings may be required. In case of higher loads, e. g. at building heights over 20 m, buildings in exposed positions or tower-style, detached buildings, open buildings, buildings in snow areas, single-span girder constructions or in case of installation of the translucent panels at the perimeter and corner areas of the building etc. please ask for the required purlin and crossbar spacings.

FDT legal notice

We refer emphatically to the fact, that all details mentioned, especially the application and utilisation recommendation for the products and their system accessories, have been developed under normal conditions, and based on our knowledge and experience. Appropriate storage and usage of the products are assumed. A warranty or reliability of a finished project cannot be deduced because of varying materials, substrates and differing work conditions, neither by any indications nor from verbal statements, irrespective of any legal positions. For the possible accusation that FDT acted intentionally or grossly negligent, the user has to supply evidence that they provided FDT with all information and details necessary for an appropriate and correct evaluation through FDT in written form, immediately available and complete. The user is responsible for ensuring that the products are suitable for the given application. It is FDT's right to change product specifications without notice. Property rights of third parties are to be considered. In addition our particular sales and delivery terms are valid. The latest version of our product data sheet is obligatory, which can be requested directly through FDT.

All information as well as all technical and drawing data comply with current technical standards and are based on our experience. National standards and regulations must be observed.

Technical changes reserved. As of Juni 2018. © 2018 FDT FlachdachTechnologie GmbH & Co. KG, Mannheim, Germany

Customer support

Light systems:
 Phone +49-6 21-85 04-3 01
 Fax +49-6 21-85 04-3 08
 E-Mail lichtsysteme@fdt.de

FDT FlachdachTechnologie GmbH & Co. KG

Eisenbahnstraße 6-8
 68199 Mannheim
 Germany

Tel. +49-6 21-85 04-0
 Fax +49-6 21-85 04-2 05
www.fdt.de