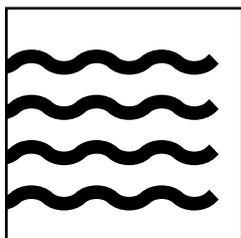


## Processing directives

### **R.GLAS® Welle 3,0 mm**



#### Properties

 **R.GLAS® Welle** corrugated sheets are extruded from high impact modified acrylic-glass. Acrylic-glass has an outstanding high durability and weather-resistance and shows even after long lasting natural weathering no yellowing or reduction of mechanical properties.

The design of  **R.GLAS® Welle** provides high stiffness at low own weight.

The one-side extruded grains combine high light-transmission with visual cover and give a pleasant and non-glare light-diffusion.

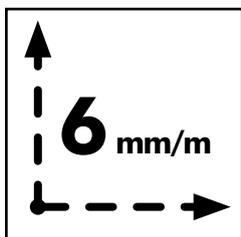
Different coloring of the sheets like bronze or opal white adds good sun-protection and the option to install decorative glazing.



#### Storage

 **R.GLAS® Welle** corrugated sheets have to be stored dry and on flat underground. Unpacked sheets are not allowed to be stored in direct sunlight (burning-glass-effect). Do not store the material in hot air or near sources of heat. Avoid water and heat-accumulation in the surrounding.

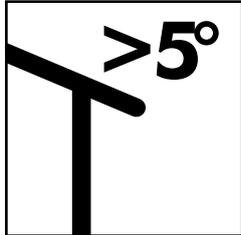
 **R.GLAS® Welle**-sheets should be stored inside, on flat grounds and covered by white PE-film. Maximum stack-height is three pallets.



#### Expansion

Expansion of the material by heat and humidity is to expect with approx. 6 mm/m and has to be taken account with during installation.

Maximum installation-length is 4000 mm.



### Sub-construction

The sub-construction can be made in steel, aluminium or wood, that is free of distortions. The sheets should be installed overlapping and on top of load-bearing structures (purlins or crossbars) in downgrade or stream direction.

Purlins have to be installed in distances that correspond with the needed and given wind- and snowload in the surrounding country. Wherever the sheets overlap sidewise and edgewise, the corners have to be cut out to avoid a 4-fold overlapping. The corners of the middle sheets need to be cut that way, the sheets can lay side by side. Between the bias cutting edges a margin of 5-10 mm is recommended.

### Purlin spacing (max. support distance):

Roofing at 75 kg/m<sup>2</sup> wind-/snowload: max. 850 mm

Cladding (closed buildings): max. 1.000 mm

### Horizontal overlap:

At roof pitch 5°-15° = min. 200 mm

At roof pitch over 15° = min. 150 mm

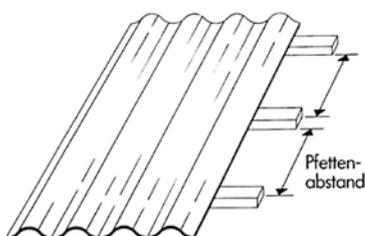
Wall area: 100 mm

To avoid cracking of the sheets the painting of the sub-construction must be complete dry. (Attention: Solvent-containing colors take up to six weeks until being complete dry).

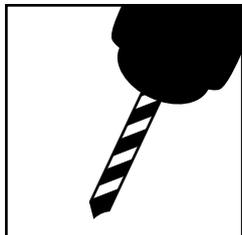
 **R.GLAS® Welle** corrugated sheets have to be installed with a roof-pitch of at least 5° (complies 9 cm/m).

At higher roof-pitch the self-cleaning effect of the sheets is higher as well.

Sheets with structured surface need to be installed with the structured side face down. Fastenings for  **R.GLAS® Welle** corrugated sheets in roof applications are placed at top of the waves. Only in vertical glazing, fastenings at bottom of the waves are possible.

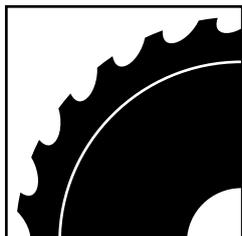


To allow the thermal expansion of the sheets sufficient bigger drill-holes for the fixing screws are highly recommended as well as a good sealing of the screw fitting. To screw  **R.GLAS® Welle** corrugated sheets on the sub-construction we recommend wood-screws or hook-clamps in combination with sealing washers and rain-cones. Fixing with calottes is recommended as well.



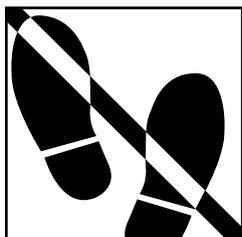
### Drilling

For drilling of  **R.GLAS® Welle** corrugated sheets use twist or conical drills.  
To avoid stress-cracking at the drill-holes, smooth drill edges are needed.  
Diameter of the drill-hole should be 1,5 time of the screw diameter.



### Sawing

To saw the sheets use high-speed circular-saws (rotational speed > 4000 U/Min.) and saw blades unset, fine-toothed and with hart metal fitted teeth.  
 **R.GLAS® Welle** corrugated sheets need to be cut with depth guard and on plane surface. While sawing, care must be taken that the sheets are secured against flutter and vibration.



### Roof access

Step on  **R.GLAS® Welle** corrugated sheets is only allowed on people load bearing elements of the sub-construction in order to avoid damage of the sheets.



### Cleaning

For cleaning, water and a mild soap-solution are recommended.  
Abrasive agents are not to use to avoid scratches.  
All washing and cleaning agents need to be tested for acceptance before use.



### Fire protection-classification

The construction-regulations for the use of flammable building-materials according to DIN 4102-B2 and EN 13501-1 should be respected.



### Warranty

We provide a 30-year-warranty to the UV-resistance of  **R.GLAS® Welle** corrugated sheets. For light-transmission and hailstone-resistance of  **R.GLAS® Welle** corrugated sheets, we provide a 10-year-warranty according to our warranty-conditions.