



## Transparent twinwall panels



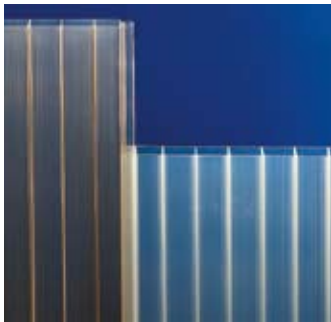
## Product overview

# guttagliss paneel

## Twinwall panels of PVC



### the inexpensive alternative for non-sash glazing panels



#### Properties

- Inexpensive
- Sturdy
- Easy to install
- Low weight
- Fire classification DIN 4102 B1
- Good insulating effect
- High noise absorption

#### Applications

- Wind beaks and privacy fences
- Window fillings
- Wall panelling for carports, pergolas etc.
- Lighting strips
- Small greenhouses
- ... and your ideas

#### The material

Choose **guttagliss paneel twinwall panels** made of PVC, when you require an inexpensive and functional solution for walls.

**guttagliss paneel twinwall panels** are used wherever screens and security are required, even though direct transparency is not wanted. Applications include, e.g. windbreaks and screens for patios and balconies or for filling in a timber pergola or carport structure. The handy panels are also highly suitable for vertical glazing panels, partitions or backlit ceilings indoors.

**guttagliss paneel twinwall panels** are exceptionally multifarious and, through their low element width and tongue-and-groove insertion system, are easy to handle and install. System compatible aluminium profiles are used for the edge sector or for reinforcement.

Other product Properties are the low weight with simultaneous high inherent rigidity and excellent insulating properties.

paneel twinwall panels are not suitable for roof cladding. For this application, we recommend our easy-click plus twinwall panels of polycarbonate for roofs and walls.

So as not to limit the service life of the panels, please comply with our installation instructions on page 10. Before installation, please read these instructions and ensure that you only use original guttagliss accessories for installation purposes.

#### Installation accessories

System compatible aluminium U, corner, H profiles and wall junctions are listed on pages 8-9.

#### Technical data

Thickness:	16 mm
Lengths:	2000 mm, 2500 mm, 3000 mm
Width:	200 mm
Weight:	ca. 2.9 kg/m <sup>2</sup>
Chamber width:	28 mm
K value:	2.8 W/m <sup>2</sup> °C
Light transmission ratio:	ca. 75 % clear * ca. 60 % bronze *
Thermal stability:	-20 to +60°
Fire classification:	DIN 4102 B1

\* The declining change in the light transmission ratio is due to the material and cannot be prevented. Mechanical influence is impossible.

#### Warranty

A warranty according to the German Civil Code is provided for our **guttagliss PVC panels**. The transparency as well as the flexibility of the panels decreases by a varying extent during the warranty period due to the effect of the weather.

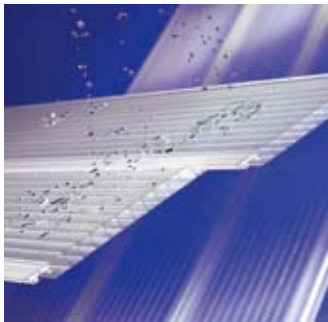
Subject to colour and size deviations, etc., within the usual tolerances. Please comply with the local building regulations. Our recommendations do not exempt you from your obligation to check the product in a responsible manner. In the event of doubt, please use the services of an expert consultant.

Subject to technical alterations.

# guttagliss easy-click plus



## Polycarbonate twinwall panels with click-lock for roofs and walls



### Properties

- Weather resistant
- Rainproof
- Hail-proof
- Costly installation profiles are not required
- Easy to install
- High insulating effect
- Fire-resistant
- Thermally stabile
- Not Splinter

### Applications

- Roof cladding from a 3° pitch (= 5.3%)
- Roof refurbishment o
- Corrugated sheeting roofs
- Canopies
- Patios, balconies
- Carports
- Greenhouses
- Conservatories
- ... and your ideas



### The material

We recommend **guttagliss easy-click plus twinwall panels** for visually attractive and durable roof cladding or wall coverings with handy elements.

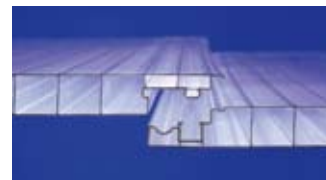
Since **guttagliss easy-click plus twinwall panels** are installed on transverse battens, they are highly suitable for the refurbishment of old, unattractive corrugated sheeting roofs. Normally, the available supporting structure can be retained.

The TV station RTL, for example, used **guttagliss easy-click plus twinwall panels** for the roof of the RTL conservatory at the IFA Berlin.

The panels are co-extruded on one side (additional, durable surface protecting layer against UV radiation). This side is protected by a protective film, which must be removed after installation. The panels are available in clear and in bronze.

**guttagliss easy-click plus twinwall panels** are manufactured from high impact resistant polycarbonate. By means of the twinwall they provide good thermal insulation.

Apart from being used for wall glazing, the click connection with overlapping lip permits use on roofs with a pitch in excess of 3°.



**So as not to limit the service life of the panels, please comply with our installation instructions on page 10. Before installation, please read these instructions and ensure that you only use original guttagliss accessories for installation purposes.**

### Preconditions

#### Roof pitch

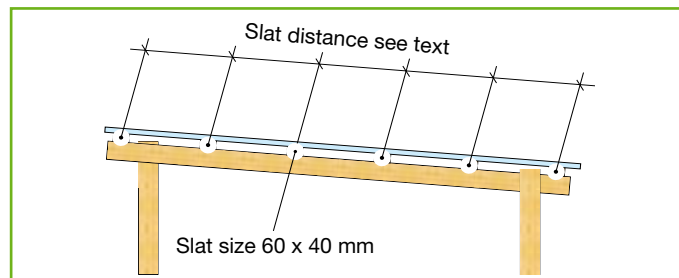
Minimum roof pitch 3° = 5.3% (increase 5.3 cm per metre)

#### Strapping

Timber, where possible warp-free glued truss or also metal.

Transverse battens min. 60 x 40 mm. The batten spacing depends on the roof pitch and the expected snow loads; for a snow load of 75 kg/m<sup>2</sup> these are at least:

from	a 3° roof pitch (5.3%)	80 cm
from	a 10° roof pitch (17.6%)	90 cm
from	a 15° roof pitch (26.4%)	100 cm



Paint the rafter surfaces white or laminate with reflecting **guttagliss adhesive tape silver**, so as to prevent the accumulation of heat, which can cause cracking and deformation. Timber preservatives/impregnations must be allowed to thoroughly dry and ventilate, since discolouration will otherwise be possible.

### Expansion/shrinkag

The length of the panels changes due to the effect of the temperature. This must be noted in the design. The pertinent data is provided in the table of "Technical data".

### Condensate

Condensation may briefly occur in the hollow chamber in specific types of weather. This is due to the design. This will not have any effect on the material and function of the panels.

### Rear ventilation

In accordance with DIN 4108, adequate provision must be made for ventilation from the rear. No special action is required for open structures, e.g. carports, pergolas, etc.

### Seal

If additional sealing is required, use **gutta special silicone** (Art. No.: 3410251), since this is neutrally cross-linked and is thus plastic compatible.

Technical data	
Lengths:	2000, 2500, 3000, 3500, 4000, 5000, 6000 mm
Covering width:	200 mm
Element width:	230 mm
Thickness:	16 mm
Colours:	Clear and bronze
Weight:	2.5 kg/m <sup>2</sup>
Coefficient of expansion:	0.065 mm/m°C
Charpy impact resistance:	No breakage at 23 °C
U value:	2.7 W/m <sup>2</sup> (K value)
UV transmission ratio:	0 %
Light transmission ratio:	ca. 71 % (clear) ca. 45 % (bronze)
Fire classification:	Fire resistant DIN 4102 B1
Thermal stability:	from -40°C to +120°C

## Warranty

The warranty starts upon delivery of the **guttagliss easy-click plus twin-wall panels** and ends after 10 years. It is not prolonged by a replacement delivery supplied under the warranty.

### The warranty ensures the following data:

- The light and colour fastness of **guttagliss easy-click plus polycarbonate twinwall panels** is measured by means of the transmission ratio according to DIN 5036, and should not decrease by more than 8%.
- The imperviousness of the **guttagliss easy-click plus twinwall panels** for applications with a minimum roof pitch of 3° (= 5.3%).
- The modulus of elasticity (measured according to DIN 53457 in a tensile test at 23°C) E-module > 2100 N/mm<sup>2</sup>.
- The resistance to weather induced mechanical damage and damage due to hail: Damage due to hail applies according to our warranty, when simulation of 10 bombardment tests at various points produces at least 5 holes in the surface of the panel. Polyamide spheres with a diameter of 20 mm (weight 4.5 g) are shot at a velocity of 20 m/s at room temperature against the weathered surface.

### Preconditions:

- Only the UV protected side is exposed to the weather.
- Use of the components in Europe. Transportation, storage, cleaning, processing and installation to be in line with the state-of-the-art and the latest technical documents such as the installation and maintenance instructions.
- The application is not subject to any detrimental chemical effects and an accumulation of heat is prevented by the design.
- Installation is carried out exclusively with original **guttagliss easy-click plus** accessories.
- Complaints must be submitted to us together with the original invoice via the dealer from which the panels were purchased.

### Other specifications

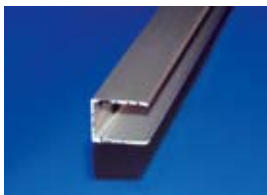
- All measurements are carried out on cleaned, scratch-free panels. Damage on Scheckrecht panels is not covered by the warranty.
- Manufacturing tolerances for the transparency, colour and dimensions are considered to be normal within the industry and are not the object of the warranty.
- In the event of a justified damage report received within the warranty period, a free-of-charge replacement of the defective panels will be supplied. Further claims are excluded.

Subject to colour and size deviations, etc., within the usual tolerances. Please comply with the local building regulations. Our recommendations do not exempt you from your obligation to check the product in a responsible manner. In the event of doubt, please use the services of an expert consultant.

Subject to technical alterations.

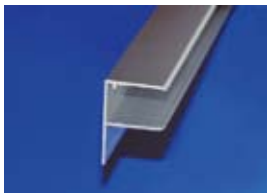


## Installation accessories for twinwall panels



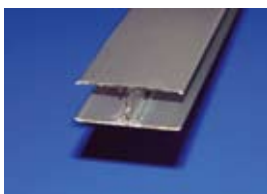
**Alu-U-profile 16 mm**  
for panel ends  
silver anodized  
length 2 to 6 m

Art.-No.: 3440683 ff



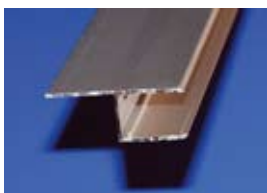
**Aluminium U profile 16 mm**  
Fixing strap, transverse, for side fastening and as an end profile with weather groove, silver anodized, length 2 to 6 m

Art.-No.: 3440723 ff



**Aluminum H profile 16 mm**  
for panel connections in the wall  
silver anodized, 2 to 6 m length

Art.-No.: 3440743 ff



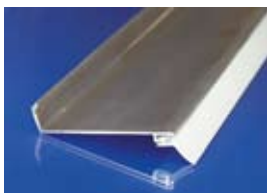
**Aluminium U profile 16 mm**  
with fixing strap, longitudinal, for fastening mainly on the wall or for assembly frames, silver anodized, length 2 to 6 m

Art.-No.: 3440703 ff



**Aluminium corner profile 16 mm**  
for corner joints on the wall, silver anodized, length 2 to 6 m

Art.-No.: 3440763 ff



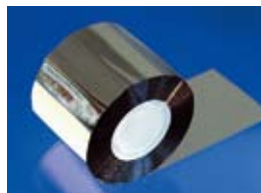
**Aluminium wall junction profile**  
for wall junctions from 8° to 18°  
bright, length 2 to 6 m  
with light grey sealing lip

Art.-No.: 3440823 ff



**easy-click plus screws**  
for screwing the panels on, as well as the aluminium profiles, galvanized 4.0 x 40 mm

Bag of 20 Art. No. 3410413  
Bag of 100 Art. No. 3410416



**Adhesive tape, silver**  
for application to the transverse battens self-adhesive, roll 60 mm x 50 m

Art.-Nr.: 3410401



**Edging tape**  
for closing the hollow chambers self-adhesive, roll 38 mm x 15 m silver with membrane

Art.-Nr.: 3410403



**Plastic washer**  
to be used as a spacer for the side end profile, inner dia. 6 mm, outer dia. 16 mm

Bag of 100 Art. No. 3410076

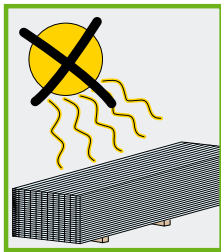
## Recommended tools

Use a handsaw or circular saw bench and mitre saw with fine-toothed saw blade. As an alternative, use a jigsaw with a special plastic saw blade, for example T-101A, as well as a metal saw blade for the aluminium profiles.

Phillips screwdriver or powered screwdriver with suitable bits (PZ2 and PH1).

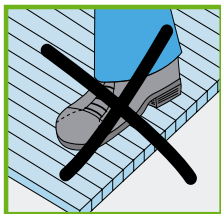
Metric rod, knife, screw clamps as well as ladder or scaffolding. Power drill with HSS drills for the profiles.

## Processing instructions



### Storage

Do not store in direct sunlight. When storing in a stack there is a risk of deformation in the event of direct solation. Store the panels flat and protect them from fouling and mechanical strain. A white foil or thick cardboard is suitable as a covering.



### Accessibility

Access is only permitted with planks that are at least 50 cm wide (see the pertinent, local safety at work regulations). The planks should be upholstered, so that the surface is not scratched!



### Separating/cutting

Use a high speed handsaw or circular saw bench fitted with a fine-toothed carbide tipped saw blade. Ensure good material support and work with a stop.



### Cleaning

Only use a mild soap solution, a sponge and plenty of water.

**The protective foil should only be removed after processing.**

## Installation of easy-click plus twinwallpanels



1) Apply the reflective adhesive tape to the top of the transverse battens or paint these white.



2) Cut the panels to the required length. Take into account an eaves overhang of about 5 – 10 cm. Remove sawdust from the hollow chambers with compressed air or a vacuum cleaner. Tip: For a small additional charge, you can order the specific length you require as a consignment delivery.



3) Prepare the initial panels by cutting off the overlap. Both the top webs should overlap by about 2 mm.



4) The first side fastening profile is then prepared. Mitre cut the corner joints. For this, use a mitre saw with a graduated scale and fixable swivel range.



5) Then push the prepared panels into the aluminium profile. Both the protruding webs should have uniform contact along the complete length. The first element is then placed on the supporting structure, precisely on the bracket, **in the direction of water flow!** - aligned and fixed with screw clamps. On the side, the aluminium profile must protrude sufficiently that at least 2 washers can be used as spacers (drip edge). Use washers to compensate for different batten lengths.



6) Fasten the aluminium profile to each transverse batten. The 4 mm dia. drilled holes must be positioned so that the washers can be inserted without protruding. Do not drill too far above!



Use **guttagliss easy-click plus screws** and the associated spacer washers when screwing on.



7) As shown, the panels are then screwed on every transverse batten. Only use **original guttagliss easy-click plus screws**. Their special design ensures the function and seal of the click joint. Screw in until initial slight deformation of the panels occurs. Pilot drilling is not required.



8) Place the subsequent **guttagliss easy-click plus twinwall panels** in the joint and push these in bit-by-bit. There must be an audible click! It is essential to check on the correct, continuous joint before you continue to screw the panels on.



9) Cut the final panel to the required length. When determining the width, take into account the overlap and the insertion in the aluminium profile. Click the panels in and then push on the aluminium profile that has already been cut to size. Fastening takes place as specified under paragraph 6.



10) Shorten the final profile to the required length. Remember to take into account the mitre! Drill 3 mm dia. holes at a distance of 10 cm along the groove on the underside of the profiles. These are intended for the improved drainage of condensate.



11) Insert the profile from the side starting at the edge of the panel and work along it bit-by-bit with gentle knocks (rubber mallet). Avoid tilting and force.





12) Now continuously apply the edge closure tape to the top end of the roof cladding. The tape prevents the ingress of dust, dirt and insects, whilst simultaneously allowing through ventilation of the hollow chambers.



13) Where necessary, fit the wall junction profile now. Shorten the profile to the required length and insert the sealing lip. Place the profile with the curved side towards the wall on the completed roof. Fix the profile at a distance of 30 cm to the wall. Ensure full contact of the rubber lip on the roof surface. After being screwed on, the protruding section of the curve, which is against the wall, is liberally pointed with permanently elastic sealing compound.



14) Now check the finished roof. All connections, joints and screw unions must be correctly executed as specified so as to ensure the lasting function of the roof.



Wall installation is carried out in the same way as roof installation. Our multifarious profile system provides you with great design possibilities, such as corner structures, lighting cut-outs, sliding doors, individual elements that can be combined, and much more besides.



## Product range

In addition to our **guttagliss twinwall panels**, we also have many other useful products for buildings, gardens and DIY applications.

- **guttagliss twinwall sheets** made of polycarbonate and acrylic resin with good insulating characteristics and matching installation systems of plastic or aluminium.
- **guttagliss system roof**. The professional complete solution to build by yourself. For terrace, balcony, carport and pergola.
- **guttagliss corrugated sheets** of polyester, PVC, polycarbonate and acrylic resin in various corrugations with matching installation accessories.
- **guttagliss flat sheets** from polystyrene or acryl, smoothly or structures for different areas of application, inside and outside.
- **guttanit** and **guttagliss corrugated bitumen sheets** for roofs and walls in many different styles and colours.
- **guttatec bitumen shingles** with numerous possible applications in various shapes and colours.
- **guttagarden gartentec aluminum greenhouses, garden accessories**, a copious range of planters, lawn edging, rain-water butts, garden foils, garden tiles, etc.
- **guttabeta star dimpled membranes** for improved safety when protecting foundation walls, base courses, etc.

Please ask for our comprehensive informative material !

**Brochure no.: 9501131**



Gutta Werke GmbH  
Bau- und Heimwerkerprodukte

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