

## ❖ Before fabricating this product, please consider the following important information

### TECHNICAL LEAFLET EGGER LAMINATE W1001



As part of the ZOOM® Distributor Collection, EGGER introduced for the first time a “solid” or “colour core” laminate. In the production of this type of laminate, different papers and resins are employed and the product characteristics are therefore significantly different to those of the EGGER stock range laminate quality MED.

#### Material Description / Application Recommendations

The main objective of the W1001 “colour core” laminate is the potential to create uniform, unbroken colour solutions without the involvement of a postforming process. Other design solutions specifically incorporate the laminate edge as a focal feature. The colour core effect of the W1001 laminate is achieved by fusing several impregnated decorative papers. In contrast to all the other laminate decors in the ZOOM® Distributor Collection, special synthetic resins are used in the manufacture of EGGER Laminate W1001 ST9 and therefore, it is not suitable for postforming applications.

In accordance with EN 438:2005, W1001 is classified as an HGS grade laminate (Horizontal General-purpose Standard), which is intended for horizontal applications without postforming requirements. W1001 laminate does not fulfil the requirements of the Marine Equipment Directive (MED), as the necessary tests have not been carried out.

#### Transport / Storage

##### TRANSPORT

When transporting stacks of sheet laminate, adequately sized, flat and rigid pallets should be used. The sheets in the stacks must be secured to prevent movement. Any person involved in transporting or handling laminates should wear personal safety equipment such as gloves, safety shoes and suitable work wear, etc.

##### STORAGE

W1001 Laminate must be stored in enclosed, dry areas at approximately 18 °C to 20 °C and a relative humidity of approximately 55 % to 65 %. After removing the original packaging, the laminate sheets should be stacked horizontally on a flat base of equal or greater dimension, with their edges flush. The decorative face side of the uppermost sheet of laminate should be facing down and the laminates should be covered with a protective board of equal or greater dimension (see illustration 1).

Abrasion between decorative faces should be avoided. Sheets of laminate should be lifted up or, if necessary, pulled over one another with two reverse sides facing. W1001 can also be supplied in rolled-up format in a cardboard box, but it is imperative that the laminates be unrolled on receipt and stored flat as described above.

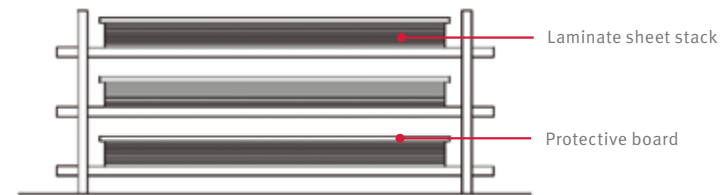


Illustration 1

#### Fabrication

Essentially, the “EGGER Laminate Processing Instructions” also apply for the fabrication of W1001, however, the following special characteristics are to be taken into account.

##### CONDITIONING

Climatic changes can cause slight dimensional movement in W1001 laminate, which, compared to standard laminate, exerts greater stress on the glue line. This can also influence the flatness of elements, particularly whilst drying. For standard performance requirements it is therefore recommended that W1001 laminates be stored together with the substrates for at least 8 days at 20 °C and 60 % relative humidity, but never a damp environment. Experience has proved the method of conditioning W1001 together with the substrates to be very successful. A special pre-conditioning process is necessary in situations where continued exposure to very low relative humidity or dry heat is expected over long periods of time - such as where they will have a close proximity to heat sources. In these cases, a conditioning period of 16 hours at 60 °C or 24 hours at 50 °C is recommended. Where continued exposure to very high relative humidity is expected over long periods of time, it is not necessary to carry out a pre-drying process.

##### CUTTING

The special synthetic resins used in the manufacturing process reduces the flexibility of W1001 laminate. This product characteristic is to be taken into account during the individual processing steps, such as sawing, milling, drilling, etc. and specifically requires the use of sharp, carbide or diamond tipped saw blades and the selection of an appropriate feed rate. A good cutting result depends on a variety of factors, such as decorative face side up, saw blade projection, feed rate, tooth shape, tooth pitch, rotational and cutting speeds. Tooth shapes such as the Duplovit tooth with a hollow tooth face or the trapezoidal flat tooth have produced excellent results.

Example: circular bench saw

- No. of teeth: approx. 50 – 60
- Cutting speed: approx. 40 to 60 m/sec.
- Rotational speed: approx. 3,000 to 4,000 rpm.
- Feed rate: approx. 5 to 10 m/min (manual feed)

**GLUING**

The rigidity of W1001, combined with the aesthetic requirement for barely visible glue joints necessitate the selection of special glues. It is therefore recommended that individual applications be discussed with an adhesive manufacturer. In general, W1001 is bonded to chipboard substrates in view of their homogeneity. **Do not use blockboards and veneer boards** as these are made of veneer and/or solid wood. A flat and stress-free substrate is a prerequisite for the subsequent processing of W1001.

To achieve dimensional stability, it is absolutely essential that exactly the same product, i.e. W1001, is bonded to the front and reverse of an element. Furthermore, it is absolutely essential to ensure that the laminates to be bonded to the front and the back of an element are laid up following the same original production direction (direction of sanding lines on laminate reverse). To avoid the risk of distortion or the appearance of cracks, elements should not exceed a maximum width of 700 mm. A cold lamination process is recommended without exception to achieve a bond as free from stress as possible. In preference, thermoplastic glue systems such as PVAc glues should be applied. Recommended glue application: 120 – 150 g/m<sup>2</sup>.

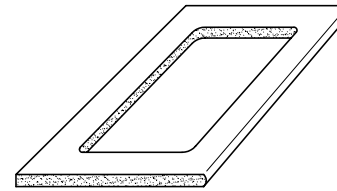
Please follow the instructions provided by the machine manufacturer and adhesive supplier.

**CUT-OUTS**

The corners of cut-outs must always be radiused (**minimum radius ≥ 5 mm**), as sharp edges have an adverse effect on the material and can lead to the formation of tears. For internal apertures or corner cut-outs with side lengths of > 250mm, it is necessary to increase the radius in stages as the side lengths of the aperture are increased. This particularly applies to applications where, due to frequent heat influence, increased shrinkage tension arises through the drying out of the laminate. In addition, all edges must be clean cut and chip free. The cut-outs should preferably be made using a portable hand router or CNC milling machine. When using jigsaws, the cut-out corners should be pre-drilled with an appropriate radius – see illustration above – and the cut-out sawn out from radius to radius. The edges should be finished by means of sandpaper, filing or manual top milling to eliminate cracks due to chipping.

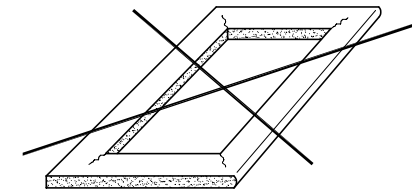
Cut-outs are not usually made until after the laminate has been bonded to a carrier substrate. Before further processing, attention must be given that the composite elements are securely positioned so that no damage occurs during the sawing, milling or drilling work. In particular, narrow areas surrounding large apertures can easily break or lead to crack formation unless the board is fully supported during machining. The board cut-outs should also be secured so that they cannot break or fall out in an uncontrolled way and thereby cause injury to individuals or damage property.

Please specifically observe the instructions and installation templates supplied by the respective manufacturer!

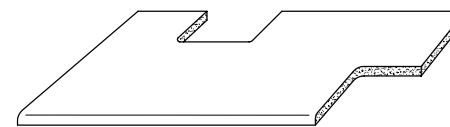


Correct

Illustration 2

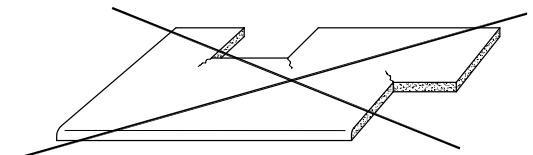


Incorrect



Correct

Illustration 3



Incorrect

**Quality Characteristics / Technical Data**

Property	Test procedure acc. to EN 438-2	Unit	Value	Class
Resistance to surface abrasion	10	Revolutions	≥ 350	3
Scratch resistance	25	Degrees	3	3
Resistance to impact by small diameter ball	20	Newtons	≥ 20	3

Further details can be found in the care leaflet entitled “EGGER Laminates – Cleaning and Maintenance Instructions” as well as the leaflet “EGGER Laminates Structure ST9 Perfect Matt”.

The information contained within this data sheet is based on practical experience as well as in-house tests and reflects our current state of knowledge. It is intended for information only and does not constitute a guarantee in terms of product properties or their suitability for specific applications.

Unless otherwise stated, our General Terms and Conditions apply.