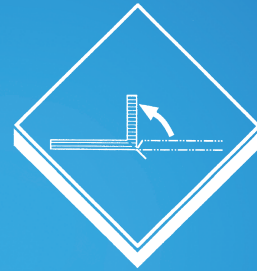




STADUR
Innovation und Systemlösungen

Made
in
Germany



Processing Instructions and Recommendations

**sawing • drilling • milling
bonding • painting • printing
glazing • storage • transport • precautions**



Attention

- The core foams are not designed to provide anchorage for screws.
- Rivets may only be used full width and with a counter washer (danger of rivets causing dents/sinking in).
- Never rivet one side only (danger of delaminating), especially when corresponding loads are expected to be placed on the boards.
- Boards cannot be used on vacuum-forming and deep drawing / moulding machinery.
- Boards cannot be folded / bevelled.
- Surfaces can be welded under certain conditions (please consult our Application Technologies Department).
- Cutting with plate shears is not possible.
- Boards up to a thickness of approx. 10 mm can be stamped under certain conditions.
- We draw your attention expressly to the fact that rounding may occur on separation.
- The foam can be deformed and destroyed at the punching site.
- When installing in profiles, the retaining strips must be screwed down and may not be nailed (wood).
- A space of 6 – 10 mm from the frame must be kept all round the perimeter.
- Boards must be installed floating, in an appropriately dimensioned rubber seal or similar such, in order to accommodate expansion.
- The foam has to be protected against UV radiation.
- To prevent frost damage, moisture must not penetrate the grooves in the foam.
- Rigid installation of the boards must be avoided, in order to allow room for expansion.
- Thickness tolerances of the production materials may be partially visible (eg at the joint site of the foam core) and do not give grounds for claims under guarantee.

Storage and Further Processing of Composite Elements with PVC Panels and Surface Protection Foils

In agreement with our suppliers of surface protection foils we have developed the following storage and processing recommendations for avoiding increased foil adhesion.

In general, none of the surface protection foils are UV-stable.

The ideal storage and processing temperature lies between +10° C and +40° C. At temperatures below 10° C the adhesive strength of the surface protection foil diminishes linearly with the temperature. At temperatures above 40° C the adhesive strength of the surface protection foil increases linearly until transfer of the adhesive to the panel occurs.

Particularly during storage, and/or with panels installed coated with surface protection foil, which are subjected to UV-rays (Sun), the surface temperature can easily exceed 40° C.

Ideally, panels coated with a surface protection foil should be stored inside (also avoiding UV-rays near doors and windows).

When installed panels (inside and outside) are subjected to UV-rays the surface protection foil must be removed immediately.

The protective foil of Panels coated with surface protection foil that are not subjected to UV-rays must be removed within 6 months of production (see label, only pallets are marked).



Bonding

- The raw surface must be clean, dry and oil-free.
- Full-surface bonding is possible.
- Ensure that the raw surface is suitable for bonding.
- Always follow the instructions of the adhesive manufacturer.
- Use only solvent-free contact adhesives for foams.
- Allow sufficient evaporation time for single-component adhesives before bonding.
- Always mix two-component adhesives exactly according to the manufacturer's instructions.
- Carry out appropriate trials on samples before use.
- Adhesives may not be used for structural purposes.
- Check silicones for compatibility.
- When using silicone, the raw surface must be primed with bonding primer etc, according to the manufacturer's instructions.
- Edges are only suitable for bonding to a limited extent.
- When edge-bonding, foams do not provide high adhesive or shear strength.
- Bonding of SKS: see special processing recommendation



Painting Printing

- PVC can only be painted in shades of white due to reasons relating to thermal behaviour.
- All other boards can be manufactured for painting on request.
- Subsequent powder-coating of composite elements is not possible.
- When wet painting, check foams for compatibility with the paint (solvent-free!).
- Cover edges with masking tape.
- With wood, use only solvent-free paints and varnishes.
- Prepare raw surfaces according to the paint manufacturer's instructions and treat with bonding primer if necessary.
- Always follow the instructions of the facing material manufacturer.
- PVC is suitable for printing.
- Generally, avoid dark colour shades outdoors.
- PVC, laminate and aluminium may only be painted subject to prior consultation; otherwise any claim under guarantee is void.



Drilling

- Use spiral drill bits with plastic-cutting angles
Clearance angle approx. 8-10°
Cutting angle approx. 3-5°
Tip angle approx. 80-110°
- With large-diameter holes, use a centre drill.
- Observe the corresponding DIN/EN and VDI guidelines.



Milling

- In view of idle time, use diamond-tipped or carbide-tipped tools.
- RPM and feed speed lie between 3.000-24.000 rpm and 1-30 m/minute, depending on the material and choice of tools.



Storage Transport Packing

- Generally, all boards must be stored laid flat on pallets.
- When boards are delivered on pallets, a layer of approx. 10-20 mm thick extruded foam panels is placed on top.
- This is not only as protection against scratches etc. but also serves as a thermal barrier against the ambient climate.
- This plays a significant role in preventing the facing panels of the uppermost boards exhibiting different climatic properties to those stacked lower down. Furthermore this prevents a warping of the panels.
- The pallets are covered with a light PE foil.
- Caution: cannot be stored outdoors!
- The pallets must be covered with a UV-resistant foil after opening.
- After opening a pallet of composite elements, the top board must additionally be weighted down appropriately over the entire surface area.
- The boards must always be carried vertically (to prevent sagging).
- Individual boards must be lifted off the pile and not pulled off over the edges.
- During transportation, it should generally be ensured that boards are stored laid flat (exception: vertical pallets).
- Glass panels are an exception; they should be transported stood upright as far as possible.
- With glass and all other panels it must also be ensured that direct sunlight is avoided during storage. In case of non-observance every reclamation will be disclaimed.
- All products must be checked for visible transport damage immediately on receipt of delivery. This must then be recorded on the delivery note.
- Concealed transport damage discovered subsequently must be reported to Stadur in writing, at latest within six days of delivery (digital photos are helpful).
- Claims made after installation of the products will not be accepted.
- Special laminated panels must be appropriately climatically conditioned prior to processing.
- Remove the protective surface foil immediately after installation!
- Always wear protective gloves, as the board edges can be very sharp.



Sawing Cutting

- Use wood or metal-working machines, eg wall-mounted saws, bench and hand-held circular saws, band and electric jig saws.
- Carbide-tipped saw blades
- Do not use cooling fluids
- Hand-held, power circular saws
- Bench circular saws
- Board dimensioning saws (check pressure of clamps: max 1-1.5 bar)
- Band saws
- Jigsaws (medium teeth and slow feed)

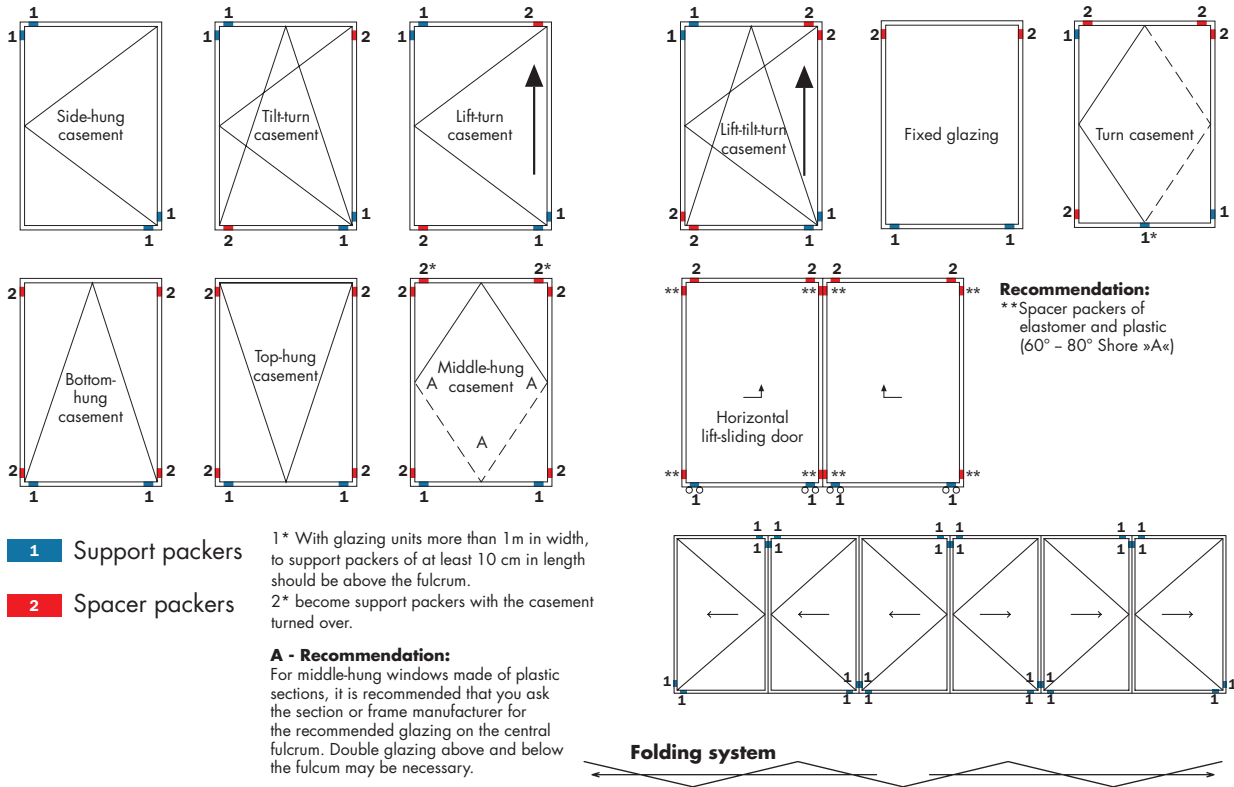
As recommended by our saw-blade supplier!

- Generally speaking, trapezoidal-tooth saw blades are best suited, but if a perfect edge is required, hollow-tooth saw blades should be used. The idle time of hollow-tooth saw blades is however lower than with trapezoid-toothed saw blades.
- Manufacturer: Leitz
eg for a Striebig wall mounted saw
300 x 3.2 x 30 Z96 pos T2/F2 IDENT No. 059951.

eg for a Homag pressure beam saw
370 x 3.8 x 60 Z96 pos. T2/F2 IDENT No. 059867.
- RPMs and feed speeds:
They lie between 3.000-6.500 rpm and 5-30 m/minute, depending on the material and the diameter of the saw blade.

In general it should be noted that, due to the cutting speed, the diameter of the saw blade and the RPM chosen have to be coordinated.

Glazing



This schematic representation is the recommendation of Gluske/BKV (abstract of »The glazing guide«). An important factor in the correct functioning of a door/window is the interaction of the frame profile with the door infill panel/sandwich element/glazing. In that respect, correct glazing is a decisive factor. It is extremely important that the guidelines offered by the profile manufacturer are followed exactly. Further information available on request.



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