

Zenolite[®] 2 & 4 mm PUR Lamination Guide.

Zenolite[®] 2mm & 4mm can be integrated into many vertical surfaces for furniture and joinery applications.

Applications

PUR (polyurethane) reactive hot melt adhesive systems are suitable for the lamination of Zenolite to melamine finished MDF for all residential and commercial joinery applications up to a maximum finished installed size of 1.5 square metres (16 square feet).

Doors and panels

Zenolite laminated to MDF is for interior applications only. A Zenolite laminated panel may react to changes in humidity and temperature. A curvature of up to 1.5mm / 1000mm (1/16" per 40") may occur in some extreme environmental conditions. Excessive curvature can be minimized by avoiding long narrow panels and by ensuring adequate hinging and fixing support is provided.

Specifications

Maximum laminated panel length is 2400mm (96").
Fixing at no greater than 350mm (14") centres.
Doors under 600mm (24") high should use 2 hinges.
Doors 600mm to 1200mm (24" to 48") should use 3 hinges.
Doors 1200mm to 1800mm (48" to 72") should use 4 hinges.
Doors 1800mm to 2400mm (72" to 96") should use 5 hinges.
Laminated panel mass is 18kg/m² (12 ounces/sq ft).
6mm (1/4") air gap is required adjacent to ovens & all other heat sources.



Materials

Zenolite – All 2mm (5/64") and 4mm (5/32") colors are suitable for lamination PUR reactive hot melt
Substrate – Select grade 16mm (5/8") (min. thickness) moisture resistant medium density fiberboard with satin melamine finished both sides will provide best results. Melamine finished particle board can also be used as an alternative.
Adhesive – Kleiberit 706.0 & Jowat 609.2 applied in the correct manner are suitable.
Edge Banding – Use ABS or Acrylic edge banding secured with clear or white EVA or PUR hot melt adhesives.



CAUTION

Correct handling and safety procedures should be followed at all times.



Processing

PUR reactive adhesive systems require specialized equipment and expertise. EGR or your Distributor can provide a list of laminators in your region.

Both Zenolite and substrate material should be allowed to normalize under the same storage conditions for at least 12 hours prior to Lamination.

Laminated panels can be cut using typical woodworking techniques and machinery. Use only high speed very sharp carbide tools and blades at a moderate feed rate. Panels should be cut to size soon after lamination.

Hand polishing, specialist diamond polishing equipment or diamond faced router cutters should be used if a high gloss exposed edge is required.



Cautions

The use of single sided melamine faced board is not recommended as the substrate may not be flat. Do not store laminated panels greater than 1.5sqm (16sq ft) for any extended period. Do not store or transport laminated panels in direct sunlight at anytime.

Edge Banding



1. Apply edge band with Zenolite face down using suitable machine and clear or white colored EVA based hot melt adhesive. Use mineral turpentine sparingly to clean off any excess adhesive.



2. Scrape off all excess adhesive immediately after edging.



3. Carefully file or sand edge band to a flush finish.



WARNING

Do not use - PVC edge banding, solvent based adhesives or aggressive solvent based cleaners.



Arised edge with contrasting edge banding.



Flush edge with contrasting color matched edge banding.



Exposed flat edge with aluminum edge banding.

Statements and recommendations provided by EGR, either written or verbal are based on our experience gained to date. Laminated panel performance may vary due to application methods, substrate variations and environmental conditions. Users should consult the adhesive and substrate suppliers technical data and complete their own tests to determine the suitability of our product for each application. No liability may be derived from these statements nor from our free technical advice. All images and colors are to be used as a guide only. Individual results may vary.