

Real wood. Reshaped.

3D-Veneer

Processing
instructions



Processing instructions for 3D-Veneer

01 GENERAL INFORMATION

Store covered; handle with care.

02 TOOLING FOR MOLDED PART PRODUCTION

- **Prototypes:** Plywood press tooling for cold bonding (2- or 3-piece design, i.e., die, punch, and draw ring if required)
- **Series production:** Heated aluminum press tooling (2- or 3-piece design, i.e., die, punch, and draw ring if required)
- Depending on the shape, the use of a vacuum bag may also be possible.

03 TOOLING FOR COATING

- Vacuum bag / membrane press, possibly in combination with a draw ring
- Special press tooling similar to that used for molded part production (see section 02)

04 BONDING DURING MOLDED PART PRODUCTION

Use adhesives commonly used in the molded-parts industry, including formaldehyde-free adhesives, with either hot- or cold-curing systems.

Examples for hot bonding (95°C / 203°F):

Option A:

- Kaurit 390 powder (100 parts) + Hardener 70 (10 parts) + Bonit extender (10 parts)

Option B:

- Kaurit 234 (100 parts) + Hardener 70 or 500 (10 parts) + Bonit (20 parts)

Cold bonding (at room temperature):

- Kaurit 234 (100 parts) + Hardener 30 (10 parts) + Bonit (20 parts)

05 BONDING DURING COATING

Wood-based substrate:

- Standard UF adhesives (hot- or cold-curing), PVAc adhesives

Plastic or metal substrate:

- Specialty adhesives, possibly in combination with barrier layers

06 PROCESSING

- Do not moisten the face veneers, or do so only with great care; do not apply adhesive to the face veneers.
- The thread side of the first inner layer (= the layer directly beneath the face veneer) must not face the outer face veneer.
- Press the prepared veneer layup promptly (within a maximum of 2 minutes). Adhesive spread: approx. 130 g/m²
- Press temperature: according to the adhesive manufacturer's specifications (e.g., 95°C / 203°F)
- Pressing time: according to the adhesive manufacturer's specifications
- **Specific pressing pressure:**
 - With wooden tooling: approx. 1.5 MPa = 15 bar = 217.6 psi = 15.30 kp/cm²
 - With aluminum tooling: approx. 2.0 MPa = 20 bar = 290.1 psi = 20.39 kp/cm²

07 MACHINING OF 3D-MOLDED PARTS

- For thin-walled molded parts, ensure the best possible vibration-free clamping of the parts to be machined by applying a full-surface vacuum extending all the way to the edge of the molded part.
- Preferably use climb milling with a compression cutting tool.

