PROCESSING INFORMATION

ELEMENTS

SUBSTRATE PREPARATION FOR BONDING

The substrate must be free of loose parts, dry, smooth, and free of dust, dirt, grease, wax and silicone. Never mount Elements panels on uneven surfaces, as this results in a loss of visual quality.

In the case of convex and concave substrates, mechanical mounting the edges is absolutely necessary.

Check Surface:

Simply drop a waterdrop onto the surface - if it doesn't soak in, it's a non-absorbent surface.

Non-absorbent substrate:

To achieve maximum adhesion, always clean non-absorbent surfaces with alcohol (ethanol, isopropyl alcohol). Self-adhesive panels are best suited for non-absorbent surfaces such as coated MDF/chipboard, glass, metal, plastic, etc.

Absorbent substrate:

For absorbent substrates such as raw chipboard, MDF, plasterboard or smoothed brickwork, a solvent-free adhesive must be used, which is suitable for both the substrate and the polystyrene (carrier material).

BONDING OF SELF-ADHESIVE DESIGN PANELS

Our self-adhesive panels have a strong adhesive layer on the back of the decorative panel - made of high-quality acrylates or synthetic rubber - and can therefore be attached quickly and easily to non-absorbent surfaces.

The self-adhesive design panels are glued directly to the substrate, taking into account an expansion joint - without additional adhesive.

With self-adhesive products from the Wall-Paper Line, the expansion joint can be omitted.

With self- adhesive sheets - pull off adhesive cover step by step, do not touch the adhesive surface and press as firmly as possible onto the subsurface. Avoid the formation of bubbles (air pockets).

For large areas, it is best to use a medium- hard rubber roller with a width of approx. 170 mm. The final adhesion is reached after 24 hours at room temperature.

Self-adhesive panels are not suitable for ceiling applications. Alternative processing options are available upon request.

Materials inc

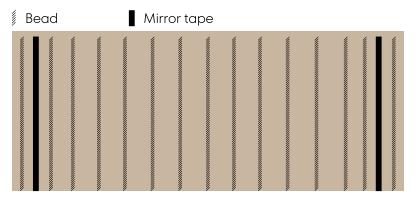
BONDING WITH SILICON OR MS POLYMER HYBRID ADHESIVE

Suitable for use with our wallcovering backed sheets.

Strand bonding:

On the reverse side of the sheet: vertical positioning of a bead at a distance of 10 mm from the edge of the sheet or the profile leg, then position a mirrored adhesive tape at a distance of 10 mm.

Apply vertical beads of adhesive to the reverse side of the sheet at intervals of approx. 10 mm to the mirrored adhesive tape. (Depending on the underlying surface, the beads should have a height of at least 4 mm.) Apply the other beads at a distance of 60 mm.



The illustration does not show the entire length of the panel.

Bring the sheet into position without any drying time and then press it down onto the prepared surface by means of vertical strokes with a soft wallpaper roller.

The gluing can also be done without mirror adhesive tape.

Advantage: The sheet can be positioned much easier.

Disadvantage: The sheet has to be temporarily attached until the silicone beads have cured in order to prevent the sheet from moving.

2



PRESS DECORATIVE PANELS WITH WHITE GLUE (PVA GLUE)

DESCRIPTION - STRUCTURE



PRE-TREATMENT OF THE LAMINATE BACKED SHEETS

The back of the decorative panel should be roughened using an orbital sander or random orbital sander. We recommend sandpaper with an 80 grit.

APPROPRIATE BALANCING SHEET

So that the finished pressed panel remains fiat and distortion free, it is necessary to choose a suitable balancing balancing sheet that matches the decorative panel according to it's material characteristics and thickness.

On request, we can offer balancing sheets.

If the balance sheet has not been pressed within 2 months, we recommend a check of the surface tension on the reverse side and if required, pre-treatement.

APPLY WHITE GLUE

• Lay the acclimatized decorative sheets, balancing sheet and wood substrate next to each other on a straight, clean and sufficiently large working table.

• The wood substrate should be 1/4" larger than the design sheet/balancing sheet.

• Apply the PVA glue on the back of the design and balancing sheet using a glue roller - evenly and over the entire surface.

• Then both sheets should be positioned in the center of the wood substrate. Do not apply glue on the wood substrate, only to the sheets.

• Then the combined sheets and substrate can be pressed.

3

PRESSING IN THE PLATE PRESS

Do not over press.

If the guidelines for the pressing time of the PVA glue differ, the basic rule is: add 1 minute of pressing time per mm of material thickness or additional enclosure such as foam rubber.

TEXTURED SHEETS

Guideline: The press force should be around 2 kg/cm^2 (0.2 N/mm²), the temperature around 45°C and the pressing time approx. I5 minutes.

During the pressing process a medium-hard foam rubber mat with a thickness of approx. 5 mm must be put between the pressing sheet and the decorative side of the sheet.

It achieves an even pressure distribution and at the same time it avoids unwanted pressure marks caused by dirt particles between the press plate and the design panel.

FLAT SHEETS

Guideline: The press force should be around 2 kg/cm2 (0.2 N/mm2), the temperature around 45°C and the pressing time approx. 15 minutes.

ATTENTION: When pressing mirror or high-gloss products, an undamaged, clean pressing plate is required.

- As soon as the sheets are removed from the press, they must be stored flat in stack pressure.
- A really even base is important for the flatness of the bonded panel.
- Cover the stack with 19 mm chipboard so that the top board can also be laid out flat.
- Let the panels cool down in the stack after the pressing process preferably overnight (for at least 12 hours).

A second option for small quantities is to press the panels in the machine overnight at around 20 °C. This type of processing does not require stack pressure afterwards.

PROCESSING OF THE PRESSED DESIGN PANEL

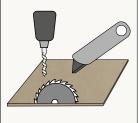
Glued and pressed panels can be processed simply with most of the standard woodworking machines and woodworking tools.

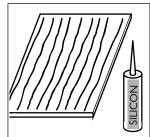
During the process, the protective film must remain on the surface. The use of suitable and well-cutting tools prevents damage. Ideal machine parameters, tool design and cutting speeds have to be observed individually with a sample production before the manufacture.

The finished pressed panels can be easily cut with a saw and then then be provided with commerical edges made of plastic, aluminium or wood.

4

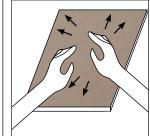
WALLCOVERING can be bonded edge to edge and therefore does not require expansion joints. WALLCOVERING can be cut to size by using standard cutting-tools. Processing to be executede from the patterned side. Readjustment on any surface is no problem when using a neutral freely cross-linked silicone or MS polymer hybrid adhesive on all substrates.



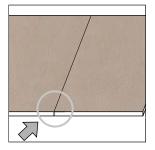


Processing to be executed Apply beads of silicone from the patterned side. vertically (1 cm from the

Apply beads of silicone vertically (I cm from the edge and with 6cm-spaces between the individual beads).



Press the sheet onto the wall and then adjust it.



Bonding butt to = O mm expansion joint.

PROCESSING WALLPAPER

Preparation:

Bonding of the self-adhesive WALLPAPER product panels without expansion gaps on all substrates.

The substrate must be dry, smooth of loose parts, dust, dirt, grease, wax and silicone.

Mechanical processing:

Must always be done from the decor surface. The products can be easily cut with a wallpaper knife on site.

Bonding:

• Remove the adhesive cover step by step, avoiding contact with the adhesive surface and press as firmly as possible onto the subsurface. (Absolutely avoid the formation of bubbles / air pockets)

• For large areas, it is best to use a medium-hard rubber hand roller with a width of approx. 170 mm.

• The final adhesion is reached after 24 hours at room temperature.



Easy format customization.



Processing without expansion gaps.



Processing without expansion Thin and dimensionally stable.

The following must be taken into account:

• The sheets should stored flat, rolled packed sheets should be unpacked and laid out flat and - if necessary - subjected to additional weight to improve flatness (Use carton underlay and weigh down the entire sheet in order to prevent damage.)

- Store the uppermost sheet in the pile with decor side down.
- Protect ELEMENTS products from UV rays.
- Do not expose ELEMENTS products to moisture or humidity.

TRANSPORT

In general, for the transport of the products pay attention to protect them from dirt, UV radiation, moisture and mechanical damages.

• Use stable, flat pallets with carton bedding, the pallet should be longer than the design sheets.

• Place the uppermost design sheet on the pallet with the decor side face down. This uppermost design sheet should be protected in addition by a carton and a board (e.g., chipboard, HDF.).

- The design sheets should be protected from shifting.
- The edges and sides must be also protected.

• Protect material from dirt, dust and mechanical damages.

• A permanent storage of more than 3 months at a temperature less than 32 °F or more than +60 °F may impact the quality of the sheets and should be avoided.

- Avoid temperatures below 31 °F or more than + 122 °F.
- Structured sheets to be transported on pallets with the patterns running in same direction.
- \bullet The products must be acclimatized prior to processing; ideal processing temperature is approx. + 50 °F to 86 °F.

• Before any processing of the design sheets read the attached processing instructions which you can also find on the Materials Inc website.

- \bullet The sheets should not be stored below + 41 °F and must be protected from frost during transportation.
- Rolled packable Information in the technical Table for the respective product

CLEANING

Do not use abrasive cleaners, solvent cleaners or pure alcohol!

FLAT, TEXTURED, WALLPAPER, WALLCOVERING in case of light dirt by means of soft cleaning cloth (it should be free of dust and free of dirt). In case of heavy dirt by means of standard plastic or window cleaner (do not spray cleaners directly on the product). TEXTILES: Clean leather surfaces by means of standard liquid soap and then remove the soap with a damp cloth.

Stains caused by oil, greases and ink must be removed immediately. Vacuum the surface in case of low pollution; in case of heavy pollution, dab the stain with an absorbent cloth, then wipe it off with mild soapy water.

DISPOSAL

Keeping our environment healthy is a priority. All raw materials used demonstrate environmental compatibility. Because not everyone has its own plastic disposal container, we pay special attention in development of new products to use only highquality materials which can disposed safely with the domestic waste.

WALLPAPER: The panels can be disposed and recycled via waste paper and therefore environmentally friendly beyond their life cycle.