

SURFACE BONDING OF ADVANC3™ 3MM

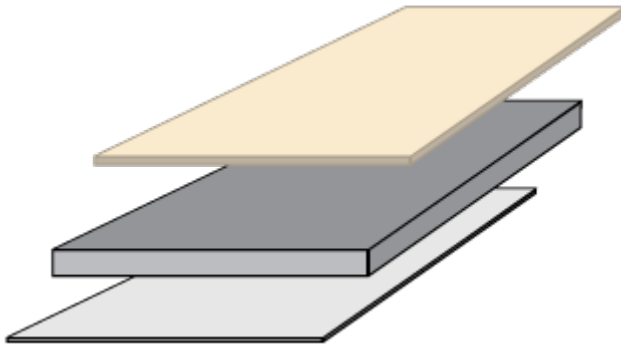
Franklin Quickset 1000 DEV can be used for bonding ADVANC3™ 3MM surfaces (face) and backer (reverse side). Quickset 1000 DEV can be applied by spraying, by mechanical roller spreader or on small parts, by fine-toothed trowel. Coverage should be uniform across the entire surface to be laminated, and should be spread at 190 to 230 g/m². Spread should be the same on both sides of the sheet, for face and backer gluing. Always use a backer sheet so that both face and back side of panel are covered with a moisture barrier to maintain flatness.

Open time: should not exceed 5 minutes at 20° C

Compression temperature: Ambient—take care to allow core sheet to acclimate to room temperature before gluing.

Press: Pressure should be 3.5 kgf/cm² (50 PSI)

Compression time: Press 30 minutes minimum. Transport horizontally, do not allow parts to bend or flex or the bond will be irreversibly disrupted. Allow laminated parts to rest a minimum of one hour before further processing so adhesive can postset.



ADVANC3™ 3MM ONLY PRE-BONDED PANEL BONDING PROCESS: ADHESIVE APPLICATION

Bonding ADVANC3™ 3mm with Cold Press PVAc Adhesive

ADVANC3™ 3mm can be bonded with cold press PVAc adhesives under specified conditions and with the recommended equipment. The approved procedures are listed below. In all cases, the substrate should be limited to Industrial grade HMR particleboard or MR MDF.

To ensure proper bond of ADVANC3™ 3mm to substrate, reference the technical data sheet for adhesive being used. A proper time frame for material handling is critical for optimum glue line performance.

Adhesive may be applied using a glue spreader. The spreader should be configured to apply an adhesive with a viscosity of approximately 2,000 cps to a wet film depth of 0.15 to 0.22 mm.

A pinch roller may be used to laminate ADVANC3™ 3mm face to core sheet with pre-bonded backer.

- Apply adhesive on raw side of pre-laminated sheet using glue spreader.
- Index the ADVANC3™ 3mm face to the substrate.
- Pass the assembly through the pinch roller as soon as possible but not longer than one minute after the adhesive has been applied.
- Place the laminated material on a flat surface for at least two hours before moving the assembly in any manner that could result in the panel flexing and disrupting any portion of the developing bond.
- NOTE: Lifting of the sheet that causes flexing before the glue has set will irreversibly separate the bonded materials resulting in a bond failure.

COLD PRESS LINE

- The cold press pressure should be adjusted to 3.5 kgf/cm² (50 PSI) across the panel surface.
- The panel should be pressed for 60 minutes. Panels can be removed from the press and handled after pressing.
- The adhesive should reach full strength in 24 hours. For best results, machining should occur after this interval.

PRE-BONDED PANEL BONDING PROCESS: PERFORMANCE TIPS

- “Open time” is the interval between the time the adhesive is spread and the time when the over-laminate is laid onto the adhesive. Allowable open time should not exceed 5 minutes at ambient temperatures with a spread of 190-230 g/m². Check the adhesive technical data sheet for open time limits.
- Both substrate and ADVANC3™ 3mm should be stored indoors at room temperature for at least 48 hours before lamination. Storage or assembly in other conditions may later cause these materials to expand or contract.
- For best results, bonded materials should be installed in enclosed structures brought to room temperature.
- If ADVANC3™ 3mm adhesives are used properly, they will provide strong bonds. Improper techniques can cause bonds to fail.
- Please review Safety Data Sheets for proper handling instru ..

PRE-BONDED PANEL BONDING PROCESS: QUALITY CONTROL

Adhesive Bond Line

The adhesive bond line should be measured on every press load. The glue line should be measured and recorded on the end, middle and opposite end of the panel. Panels should be tested on the bottom, center and top of the press load. The wet thickness specifications listed in the Adhesives Technical Information will assist the panel laminator in applying the correct amount of adhesive to the panel. The panel laminator might consider recording the results and forwarding them along with each press load shipment.

Moisture Content of Substrate

Most panel bonding stations have moisture content meters that measure the moisture content of substrates. This test can help minimize warping of panels. The results of this test might be recorded and shipped with each press load.

Press Time and Dead Stack Time

This information is critical to the success of the adhesive bond and could affect the glue bond line strength if a panel is removed from the press or handled prematurely. This could result in failure of an installation. The result for each press load should be recorded and filed with the panel laminator and/or reseller.

Warping Issues

Each pre-bonded panel should be measured for warping. Place the bonded panel on a flat table and inspect the ends of the panel. Next, measure the height from the table top to the bottom edge of the panel. This test should be done periodically to assure that a laid-up panel will stay flat in your market.

IMPORTANT NOTICE TO CUSTOMER:

The recommendations and data contained in for use of this product are based on information Franklin believes to be reliable. They are offered in good faith without guarantee, as conditions and methods of use of our product by Customer are beyond Franklin's control. Customer must determine the suitability of the product for a particular application before adopting it on a commercial scale. All orders for Franklin products shall be subject to Franklin International, Inc.'s Standard Terms and Conditions of Sale which may be found at http://www.franklini.com/Terms_and_Conditions.aspx ("Standard Terms"). © Copyright 2013. All rights reserved. Franklin International. Revised 10/15/13.