

Bonding Cores to Cured Laminates

PREPARE SURFACE

- 1 Grind/sand lightly surface of laminate if older than 24 hours with 24/36 grit. Clean with styrene or acetone and a lint free rag.
- 2 Drill holes in flat sheets at intervals on 100-150mm in an alternative, brick like fashion.
- 3 All surfaces must be then be cleaned, ie dust free, preferably with a vacuum cleaner.

BONDING SURFACE

- 1 Prepare work surface with tacky tape and plastic, etc
- 2 'Hot Coat' or 'Prime' surface of foam with aprox. 200-300gm/m² of resin first. This is to ensure that you get into all the open cells. This also coats the foam so that one gets little styrene entrapment when vacuuming.
- 3 Use a [Durobond P470](#) mixture to apply to laminate. One can pigment the mix with a colour to help identify the coverage.
- 4 Apply the mixture with a notched trowel (usually used in the tiling industry) . A thickness of 2-3mm is satisfactory for foam that is 10-20 mm thick.

Alternatively apply a thin standard mix of resin onto the cured laminate (400gm/m²) and then trowel on the foam the 2-3mm of Durobond

VACUUMING

The actual technique of vacuuming is assumed to be familiar with the reader, however these tips may assist him.

- 1 Prepare Vacuum plastic and Tacky tape and vacuum pump.
- 2 Organise area of foam to be vacuumed first by cutting and trimming. If foam is to rigid cut into strips to make forming easier or get a contoured sheet.
- 3 Prime foam with resin
- 4 After resin has cured . Mix Durobond and apply as per above.
- 5 Place plastic over foam and apply vacuum.

Vacuum should be applied to a rate of 0.3 to 0.4 bar.

The mix discussed above should come through the holes to assist in ascertaining the bonds success. Ensure that the vacuum is consistent by putting a vacuum dial at the furthest point away from vacuum inlet. Available from Duroplastics

Tests

- * Always make a small batch of Durobond, laminate and core and put the same thickness in a test patch , this is to check if the mixture has hardened , before releasing the vacuum bag.
- * Make a resin mix that will only last as long as you can work it. Normally 3-6 m2 ie 1-2 sheets or 1/2 hour.
- * No reference has been made of the vacuum machine, bagging film, tacky tape etc.

Note: There are various Durobond mixes to suit you application, check individual specs or ask a Duroplastics Representative.