The DuFLEX® Z-Press Z3000 was developed to offset the individual size of DuFLEX® composite panels, by allowing the builder to quickly join panels pre-machined with a Z-Joint, to any required length. The press applies heat and pressure to cure the epoxy adhesive used to bond the Z-Joint, producing a join that is structurally effective, and has a smooth and fair surface profile.

Transporting Hire Unit to & from the project

Prior to use

• Turn the main switch on. Set the control dial between 30-40
• Allow 30 minutes for the Z-Press to achieve approximately 60°C. *Note: The jaws/plattens of the press should be closed during heating.*

Open the jaws to a sufficient height to insert the DuFLEX panels.

Pressure should be set at 800psi for balsa cored panels and 600psi for foam or paper honeycomb cored panels.

Preparation of panels for joining

• Carefully remove approximately 25mm of peel ply from the outside edge of the male scarf with a Stanley knife, taking care not to damage the laminate. Peel ply has already been removed from the female scarf during machining.
• Scarfs should be brushed with a clean brush to remove any contamination – dust, etc – that would inhibit adhesion.

ATL Composites specify the following high density epoxy adhesives for joining DuFLEX Z-Joints:

• Techniglue R60 – 2:1 cartridge dispensed epoxy adhesive
• WEST SYSTEM® 105 Resin/205 or 206 Hardener thickened with 413 Microfibre Blend

• If using the Techniglue cartridge system, apply a bead to the scarf and the end grain of the panel. Use enough adhesive to make a thin glue film on all surfaces of the glue joint when spread out with a short-haired brush. Apply to the edges of both panels.

• If using WEST SYSTEM® 105 Resin /205 or 206 Hardener mixed with 413 Microfibre Blend, apply the adhesive mixture with a short haired (20mm) paint brush, to the scarf and the end grain of the panel. Use enough adhesive to make a thin glue film on all surfaces of the glue joint.

Spacer Blocks

A pair of square spacer blocks are supplied for each panel type and marked to correspond with the labels on the panels – e.g., DF1025ZX4

One block is placed under the hinge and static height adjusted, so the block is firmly clamped. The other block is placed at the jack end of the press. This will give the required pressure on the Z-Joint when the hydraulic jack is activated.

• Slide the DuFLEX panels together, lift and place - DO NOT PUSH - them under the jaws/plattens of the Z-Press, ensuring the joint is in the middle of the jaws.

• Before closing the jaws, the panels should be pushed together by sliding them back and forth to make a tight join of no more than 1mm.

• You can now start to apply epoxy adhesive to the next set of Z-Joints.

For winter conditions using Techniglue- leave the joint in the Z-Press for approximately 10-20 minutes to cure. Ambient temperature, type of resin and hardener, core type and thickness of the panel will affect the length of this time.

By checking the "squeeze-out" on the joint until it has become rubbery, you will be able to determine when the jaws can be opened to proceed with the next joint.

Please DO NOT push or slide the panels over the platten film on the jaws. Release the panels with the lifting roller (if fitted), and then support them to move through.

Drums, or a purpose-built receiving stand, should be set up to support the full sized panel being joined.

Once joined, the tabs can be cut to remove the full size parts.

Care & Clean-up

• Care should be taken to avoid any adhesive contact with any part of the Z-Press.

** Please DO NOT try to remove cured epoxy from the platten film with solvents **

• Turn off in readiness for transportation.

Order Code	Description
Z3000	DuFLEX Z-Press

HIRE UNITS

Hire units are available from ATL Composites. Pre-booking is recommended. ***The Z-Press must be returned to ATL Composites in good order to obtain a refund of the deposit.***

Health and Safety

• Use with good ventilation and adequate safety equipment, including impervious gloves and safety glasses.

• If skin contact occurs, remove contaminated clothing immediately, and wash the affected area thoroughly with water, avoiding the use of solvents except in the case of massive contamination.

• If eye contact occurs, immediately wash for fifteen (15) minutes with running water and seek medical advice.

• If swallowed:
Resins - DO NOT induce vomiting, and contact a doctor or the Poisons Information Centre.
Hardeners - DO NOT induce vomiting, give plenty of milk or water and contact a doctor or the Poisons Information Centre.

ATL composites

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