

INTRODUCTION

Quick notes:

- Structural adhesive for thin line bonds.

PRO-BOND 101 is a two-component epoxy adhesive for structural thin bond lines on wood, GRP and FRP. It is highly viscous, contains the correct load of fillers and strengtheners for structural bonding and offers high wetting and impregnation of porous and non-porous substrates and reinforcing fabrics.

USE

- Bonding timber on wooden decks, hulls, spars and other structures,
- bond and filleting bulkheads and other joints,
- stitch and glue construction.

APPLICATION METHOD

Apply using filling knife or batten.

SUITABLE SUBSTRATES

- Wood,
- GRP,
- FRP.

FEATURES

- Two-component,
- contains high load of fibrous and non-fibrous reinforcing fillers,
- contains humidity barring flake fillers,
- offers high impregnation of the substrate,
- a 100% solids no compromise adhesive,
- for high strength thin line bonds.

LIMITATIONS

Quick notes:

- Minimum working temperature 15 °C.

PRO-BOND 101 contains a high M.W. base resin. As such, workability is affected by temperature:

- In temperatures below 15 °C (60 °F), ease of mixing and tooling diminishes. Store in warmer space for a couple of days prior to application.
- In temperatures below 10 °C (50 °F), crystallization of part A should be expected. This is easily reversed by warming the component to 30 °C (90 °F) for about one hour.

PRODUCT DATA

PRO-BOND 101: Pre-cure properties.	
Application temperature range, °C	15-30
Mix ratio, by volume	1:1
Mix ratio, by weight	1:1
Colour of mixture	light brown
Specific weight of mixture <i>approx., ISO 2811, kg/lt</i>	0.9
Viscosity of mixture <i>Brookfield, approx., ASTM D4287, @ 25 °C, cP</i>	28,000
Solids <i>internal, %</i>	100
Shelf life (in controlled environment) <i>years</i>	2
Packaging, <i>comp. A+B, lt</i>	1

PRO-BOND 101: Post-cure properties.	
Tensile strength <i>Approx., EN-ISO-527-3, @ 23 °C, MPa</i>	15
Max elongation <i>Approx., EN-ISO-527-3, @ 23 °C, %</i>	3.5

CURING SPEED

PRO-BOND 101: Curing speed.			
	10 °C / 50 °F	20 °C / 68 °F	30 °C / 86 °F
Pot life / working time / bonding window, hrs	2	1	0.5
Earliest de-mold / de-clamp time, hrs	9	6	4
Working hardness / sandable, hrs	15	10	7

SURFACE PREPARATION

Quick notes:

- Temperature 15-25 °C, humidity < 65%,
- abrade and clean application area.

The ideal conditions for application are 15-25 °C and humidity less than 65%. We recommend pre-warming the 2 components and the application surface to within the above temperature range.

Have your clamping setup ready. Devise a system which will keep the parts to be bonded aligned, i.e. stop them from slipping when clamped or loaded with weight.

Prepare the application surface by abrading with a medium grade paper, remove dust and clean using PRO-CLEAN X. Note:

- Wood: Sand across grains. Degrease oily woods using PRO-CLEAN X and allow to dry. Resinous wood should be etched with a 2% caustic soda solution, cleaned and dried.
- PE/VE laminates should be fully cured before bonding.

APPLICATION

Quick notes:

- Mix thoroughly,
- place thin layer on both sides,
- clamp.

PRO-BOND 101

STRUCTURAL EPOXY ADHESIVE



TECHNICAL DATA SHEET

Place equal volumes or weights from each component on a non-porous mixing plate. Use a batten and take your time to mix thoroughly until a uniform colour and consistency is achieved. Ensure no unmixed components are left on the sides of the mixing plate or on the batten.

Apply a thin layer on both faces of the application area making sure they are fully covered. Bring the faces together and apply pressure gradually. Clean any adhesive coming out of the sides.

PACKAGING

1 lt (0.5 + 0.5) tins.

STORAGE & SHELF LIFE

Two years from the date of manufacture in its original sealed packaging. Store away from excessive heat and humidity.

SAFETY

Use personal protection. Avoid any physical contact with the uncured substance.

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