



How to seal your benchtop joins using TECHNIGLUE

TECHNIGLUE® is an industrial / commercial grade product of high strength and waterproofing characteristics when applied correctly.

Product information and safety instructions from the manufacturer are supplied on the attached pages. Please read the TECHNIGLUE® Product information in conjunction with this guide.

Sealing the benchtop joins is a technical process and must be done by a competent person.

What you will need:

1. **Part A** epoxy resin (the glue)
2. **Part B** hardener
3. Utensils – one for mixing the glue and another suitable to spread glue on the joins. (Use the laminate sample swatches provided)
4. A clean flat disposable surface (to mix TECHNIGLUE® on), you can use the packaging as a mixing container as well as a container to catch any overrun as you apply
5. Thinners and a couple of clean rags (If you don't have thinners, warm water will work just fine)
6. Rubber Mallet
7. Any personal protective equipment recommended by the manufacturers of the above materials

How to join and seal your benchtop joins

Please keep in mind once the TECHNIGLUE® has cured you will NEVER be able to separate the join without damaging your bench tops.

There is enough Techniglu® to complete 2 x 900 joins or 3 x 600 joins with a little to spare.

1. Plan your job! If more than one join, which join will you need to do first. Ensure you are confident you have enough time to complete your joins within 40 minutes (this is a safe workable time for the mixed resin). If not, mix the resin in 2 or 3 batches as and when you need it.
2. For each mix ALWAYS use a clean mixing surface.
3. Mix 2-parts of **PART A** (epoxy glue) with 1-part **PART B** (hardener) on a disposable clean flat surface. Mix thoroughly until pale yellow and fully combined – there should be no lumps.
4. With a clean new spreading utensil, spread the combined mixture over both surfaces of the join evenly **ensuring a complete thin coverage of the entire surface area of the join.**

Failure to seal the entire surface area of the join especially along the top may result in water penetrating the join and causing damage!

5. Bring the joins together, rub gently in a back and forth motion a couple of times and then bolt the joins together firmly using toggle bolts – the Techniglu® should ooze out a little.
6. If necessary, **gently** tap the surface with the rubber mallet to achieve a smooth flat surface join
7. Clean any TECHNIGLUE® from the benchtop with thinners and a clean rag or warm water.
8. **REPEAT STEP 7** to ensure **ALL** TECHNIGLUE® is thoroughly removed because once it cures you will **NEVER** remove it.

TECHNIGLUE R60 is a solvent free, epoxy resin, specifically formulated for use with TECHNIGLUE hardeners to cure at room temperature, and produce high-strength, waterproof bonds. The thixotropic nature of the adhesive provides good gap filling and hold-up, on vertical surfaces.

TECHNIGLUE H60 hardeners are available with two different curing rates - Fast and Slow - allowing working times to be adjusted according to the job size and working temperature.

TECHNIGLUE R60 is suitable for bonding structural elements fabricated from wood, concrete, fibreglass, stone & marble, pottery, metal (ferrous and non-ferrous) and some plastics.

MIX RATIO

1 part hardener to 2 parts resin by volume

Take care to assure that the components are thoroughly mixed to a uniform colour before applying.

It is easier to judge the proportions by placing three equal quantities side by side (two of resin and one of hardener).

Note: Care should be taken when dispensing and mixing. Do not attempt to control the cure time by altering the hardener ratio. Contact ATL Composites for specific information.

Independently tested by FORAY Industries - NATA Accreditation 1231 - using the SCAQMD Test Method 303-91 Determination of Volatile Organic Compounds in Various Materials Rule 1168, Techniglu R60 has recently gained approval for VOC compliance under the specification of the Green Building Council of Australia / Green Star Office Design V3IEQ-13, for the Multipurpose Construction Adhesive Category. June 2012.

UNCURED PROPERTIES

| | R60 | H60F - Fast | H60S - Slow |
|-----------------------------|-----------------------|-----------------------|-----------------------|
| Physical State | White thixotropic gel | Amber thixotropic gel | Amber thixotropic gel |
| Viscosity mPas@ 25°C | 420,000 | 600,000 | 600,000 |
| Specific Gravity g/ml@ 25°C | 1.12 | 1.01 | 1.00 |

CURE CHARACTERISTICS

| | H60F - Fast | H60S - Slow |
|--------------------------------|-------------|-------------|
| Pot Life -100g @ 25°C (in air) | 20 minutes | 40 minutes |
| Cured to a solid state @ 25°C | 8 hours | 12 hours |
| Mix viscosity mPas @ 25°C | 280,000 | 175,000 |
| Shore D Hardness -1 day | 81 | 68 |
| - 2 weeks | 85 | 83 |
| Glass Transition temperature: | | |
| after 24 hours @ 25°C | 33°C | 21°C |
| after 2 weeks @ 25°C | 49°C | 43°C |
| 24hours @25°C | | |
| +16 hours @ 50°C | 65°C | 52°C |
| + 8 hours @ 80°C | 68°C | 57°C |

| | H60F - Fast | H60S - Slow |
|--|-------------|-------------|
| Tensile Strength (ASTM D638-97) | 67 MPa | 55 MPa |
| Tensile Elongation at Break (ASTM D638-97) | 6 % | 7 % |
| Flexural Strength (ASTM 790-03) | 95 MPa | 80 MPa |
| Flexural Strain (ASTM 790-03) | 4 % | 5 % |
| Compressive Strength (ASTM 695-96) | 55 MPa | 51 MPa |
| Compressive Load (ASTM 695-96) | 10630 N | 9819 N |
| Tensile Strength (ASTM D3528) | 20 MPa | 24 MPa |
| Tensile Lap Shear Strength (ASTM D1002) Aluminium | 13 MPa | 13 MPa |
| Tensile Lap Shear Strength (ASTM D1002) Mild Steel | 20 MPa | 24 MPa |

APPLICATION

The surfaces to be bonded should be dry and free from any contaminants such as oil or dust. Fibreglass, timber, painted, or metal surfaces should be thoroughly sanded to provide a good key. Concrete surfaces should be wire brushed to remove laitance.

Apply sufficient mixed epoxy to one or both of the surfaces to assure intimate contact between the bonding surfaces. Excessive clamping pressures should be avoided. Components need only be held firmly to avoid movement during the curing process.

COVERAGE

Depending on porosity and surface roughness, one litre of mixed TECHNIGLUE R60/H60 will cover approximately three square metres.

CLEAN UP

Uncured TECHNIGLUE R60 resin and H60 hardener mixture can be cleaned up with warm water.

STORAGE

TECHNIGLUE R60 resin and H60 hardeners will keep for 2 years, if kept in original containers at room temperature (15°C to 32°C), and out of direct sunlight. Containers should be tightly sealed to prevent moisture absorption.

HEALTH AND SAFETY

TECHNIGLUE R60 resin and H60 hardeners have moderate sensitising potential, and should be kept out of the eyes and off the skin.

- 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 flush with running water for at least 15 (fifteen) minutes 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.

PACK SIZES

| Order Code | Order Code | PACK |
|------------|--------------------|---------------|
| Resin | Hardener | |
| RA60 | 500 ml HA60F | 250 ml 750 ml |
| RB60 | 1L HB60F | 500 ml 1.5 L |
| RC60 | 4L HC60F HC60S | 2L 6L |
| RD60 | 20L HD60F HD60S | 10L 30L |

NOTE: Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty of merchantability or fitness, nor is protection from law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages. 23.1.18



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