Fixing a granite benchtop to a timber carcase

Canonical: https://www.selleys.com.au/ask-an-expert/adhesives/granite-to-timber/

Details:

Which Liquid Nails product fixes a granite benchtop to a timber cabinet carcase?

We do not nominate one. With this application it is important to check the manufacturer's directions , and that is the substance of the answer rather than a way of avoiding it.

Mechanical fasteners are often required for fixing a stone benchtop, and stone suppliers are usually very specific about where and how they can be applied. The manufacturer will also be able to recommend whether any adhesive should be used, and if so what type. Get that guidance before you buy anything.

Why the stone supplier decides this and not the adhesive maker

It is worth understanding what is going on, because it explains why a benchtop is treated differently from every other bonding question in this section.

The slab is heavy and brittle. A stone benchtop concentrates a large mass onto a small number of support points. Where and how it is restrained determines where the stresses go, and stone fails suddenly rather than gradually. Suppliers specify fixing points for that reason.

Stone and timber move differently. A timber carcase takes up and gives off moisture with the seasons and changes dimension as it does. Stone essentially does not. Anything that rigidly locks the two together transfers that seasonal movement straight into the slab — which is why a fixing method that allows a little movement is often specified rather than one that resists it.

It is a warranted item. An engineered or natural stone benchtop is usually supplied with a warranty conditional on the installation method. Using an adhesive the supplier has not approved, in a position they have not approved, can void it — and a cracked slab is an expensive way to discover that.

Cut-outs are the fragile bits. Around a sink or a cooktop the slab is at its narrowest and weakest. Fixing detail near those cut-outs is exactly what suppliers are specific about.

None of that is knowable from a general adhesive data sheet. The supplier who fabricated your slab knows its thickness, its material, its span and its cut-outs, and their instructions come first.

Safety: what the construction adhesives on this page need

If your supplier approves one of the products listed above, the hazard classification is worth reading before you buy, because these adhesives are not equivalent on safety even where they are close on performance.

Product	Classification

Liquid Nails Heavy Duty	Danger — H225 highly flammable liquid and vapour; H315 skin irritation; H319 serious eye irritation; H336 may cause drowsiness or dizziness
Hold Up , Liquid Nails Exterior , Mirror & Metal	Warning — H317 may cause an allergic skin reaction; H319 serious eye irritation. No flammability classification
Liquid Nails Fast Grab	Warning — H317 only
Liquid Nails Flex	Warning — H319 only

Liquid Nails Landscape's Australian SDS version 7.0, 16 November 2023 , lists Danger: H227, H317 and H318 — combustibility, allergic skin reaction and serious eye damage. Follow the matching pack and SDS for protection, handling and first aid.

What to ask the supplier

Are mechanical fasteners required, and if so what type and at what spacing?

Is any adhesive permitted, and if so what class of product — silicone, hybrid, construction adhesive?

Where may adhesive be applied, and where must it not be? Cut-out margins in particular.

Does the slab need to sit on a continuous substrate, packers or battens?

Does the fixing method need to allow for movement between the stone and the timber?

Does the installation method affect the warranty?

Take their answers, then choose a product that matches the class they have specified.

Related jobs we do have an answer for

Some of the work around a stone benchtop is straightforwardly answered.

Sealing the joint between a glass splashback and a stone benchtop. A neutral cure product is what you want, so the cure chemistry does not affect the stone — see silicone between a glass splashback and a Caesarstone benchtop .

Removing old silicone from a benchtop. Covered in how to remove old silicone in a benchtop .

Bonding stone to stone. For a broken edge or a repair within the slab itself, we recommend an epoxy — see granite to granite .

What that means when you are under a benchtop

H225 is the one that changes where you can work. Fixing a top to a carcase means working inside the cabinet — head and shoulders in a box, face up, with almost no air movement. Solvent vapour is heavier than air and settles, so a carcase is a place it collects rather than clears. In a kitchen the ignition sources are at exactly that height: a gas cooktop pilot, an oven, a nearby hot water unit. If you are using Heavy Duty, get air into the room and shut the gas off at the appliance first. H336 — drowsiness and dizziness — is the same exposure telling you the air in that cabinet has stopped being adequate.

H317 is permanent, and this job builds it. Skin sensitisation is not irritation that passes; it is the immune system learning to react, after which much smaller exposures set it off. Reaching blind into a carcase to press a bead home is bare-handed contact you cannot see. Wear nitrile gloves.

H319 matters because you are underneath. Anything squeezed from a bead above a face goes towards eyes. Safety glasses, every time you gun overhead.

If ventilation is the constraint, Flex and Exterior carry no flammability classification at all — check their own substrate lists against what your supplier has approved. Poisons Information Centre — 131 126 in Australia, 0800 764 766 in New Zealand.

The Liquid Nails range, for context

If your supplier does approve a construction adhesive and names a type, these are the products in the Liquid Nails range and what each is built for. This is background, not a recommendation for your benchtop.

Liquid Nails Mirror & Metal — a translucent neutral cure silicone for mirrors, metals and glass, normally requiring support for 72 hours while it develops strength.

Liquid Nails Heavy Duty , Fast Grab , Flex and Exterior — general construction adhesives for panel and fixture work.

Hold Up — for mounting and bonding on timber, concrete, MDF, particleboard, plasterboard, metals, glass, masonry, tiles and ceramics, curing over at least 48 hours.

Whichever is approved, the general rule across the range still applies: adhesive supplements the mechanical fixing, it does not replace it.

Which Liquid Nails should I buy for the benchtop?

First obtain the benchtop manufacturer’s fixing and adhesive instructions. We do not nominate a product without that guidance.

Can adhesive replace all mechanical fasteners?

Do not omit the manufacturer’s specified fixings. Mechanical fasteners are often required and their locations and installation method can be specific to the benchtop.

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Why the stone supplier decides this and not the adhesive maker?

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What should I know about safety?

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What to ask the supplier?

Take their answers, then choose a product that matches the class they have specified. Are mechanical fasteners required, and if so what type and at what spacing?; Is any adhesive permitted, and if so what class of product — silicone, hybrid, construction adhesive?; Where may adhesive be applied, and where must it not be? Cut-out margins in particular; Does the slab need to sit on a continuous substrate, packers or battens?; Does the fixing method need to allow for movement between the stone and the timber?; Does the installation method affect the warranty?.

What should I know about related jobs we do have an answer for?

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