



TOOLBOX™

Description

Toolbox™ is a hybrid moisture curing adhesive and sealant with high green strength for use in a wide variety of critical adhesive and sealing applications. Toolbox™ cures to form a tough, water resistant seal and will adhere to a wide range of substrates. Its versatility means it can replace most water based and solvent based construction adhesives, polyurethane adhesive and sealants as well as silicones in construction, marine, transport and industrial assembly applications.

Benefits

- Primerless adhesion to wide range of surfaces
- Paintable with most water based paints (Refer painting for alternative systems)
- Resistant to salt and chlorinated water
- Interior / exterior – High UV resistance
- Heat resistant to 100°C.
- Rapid skinning and curing
- High hardness Shore A: 55±5. Increased vandal resistance compared to typical construction joint sealants with low hardness Shore A values.
- Solvent and isocyanate free
- Trafficable sealant
- High bond strength - suited to Professional and DIY, construction, marine and automotive environments.
- No staining of natural stone, blue stone, granite
- Mould resistant
- Safe on mirrors, except PE backed mirrors

Uses

- Sealing lap joints in box guttering
- Sealing air-conditioning ducts
- Adhesive for fixing wall panels to studs, floor boards to joists
- Refixing loose ceramic tiles
- Multiple high performance bonding and sealing applications in transport applications – trains, buses, special purpose vehicles, caravans, 4 wheel drive trailers etc.
- Adhering and sealing acrylic/ABS shower units
- Adhering end-caps to retaining walls
- Sealing gaps and expansion joints in concrete, brick, mortar, metal and stonework
- Toolbox meets the requirements of LEED Certification: Indoor Environmental Quality – Credit 4.1 (Low-Emitting Materials: Adhesives and Sealants). See MSDS for VOC value.

Coverage

420g cartridge will give approximately 15 lineal metres of a 5mm bead.

Compatible Substrates

Aluminum	Ceramic
Glass	Steel
Galvanized iron	Polystyrene/Styrofoam
Plasterboard	Cement render
Timber	Fiberglass
Most plastics (pretest)	ceramics
FRP	GRP
Rubbers (Pretest)	Coatings/ finishes(Pretest)

Our Focus is Clear. Perfecting Adhesives.

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Service Temperature

Toolbox™ can withstand temperatures between -40°C and 100°C.

Limitations

- Maximum gap 30 mm and maximum movement of 20%
- Not suitable for permanent immersion, e.g. swimming pools or water tanks
- Not suitable for white marble due to potential staining
- Not recommended for acetone sensitive mirror backing
- Not suitable for glazing or external window sealing

Surface Preparation

All surfaces must be clean, dry, sound and free of dust, oil, old sealant or other contamination. Lightly contaminated surfaces should be wiped with Isopropyl Alcohol (IPA) using the 2-rag wipe method. Apply IPA to a clean lint-free cloth and wipe onto the surface to be cleaned to solubilise and remove the majority of the contaminant. A clean dry cloth should then be applied to remove remaining contamination and dry the surface. Ensure wet cleaner is not allowed to dry on surface. For more heavily contaminated surfaces or where the IPA does not remove the contaminant, a generic wax and grease remover should be applied using the same 2-rag wipe method. Once this has been completed the surface should be given a final clean with IPA using the 2-rag wipe method to ensure the surface is adequately prepared. Adhesion to metals and some surface finishes can be further improved by light abrasion prior to cleaning with IPA using the 2 rag-wipe method. For glazing applications IPA should be used to clean and prepare the surface.

Manufacturers of plastics should be consulted about suitable cleaning solvents. Adhesion to plastics should be pre-tested.

Mask either side of joint to produce a neat finish.

Use a suitable sized foam backing rod or polyethylene bond breaker tape to prevent three sided joint contact impeding the free and even deformation of the sealant in a cyclic joint.

Product Application – Adhesive

Cut tip off cartridge. Angle cut nozzle to desired size. Screw nozzle onto cartridge. Apply product to one surface to be bonded. Before product skins, mate with other surface. When bonding a sheet or panel to a large, flat surface, apply 5mm diameter beads every 30-40cm along the entire length. Press into position and brace until set.

Any flooring application must be fully bonded, that is a full layer of adhesive over entire area (spot gluing or bead application is not recommended).

Temporary or mechanical fixing may be required depending upon substrates. Bond will develop dependant upon thickness of adhesive, and ambient conditions. Higher humidity and warmer temperatures will hasten bond development. Minimum width for bonding application is approx 1mm.

Product Application - Sealant

Cut tip off cartridge. Angle cut nozzle to desired size. Screw nozzle onto cartridge. Apply product in a steady, continuous flow by pushing the sealant ahead of the nozzle so that it completely fills the joint and is in contact with both sides. Immediately after application, tool the sealant using a spatula. Avoid contact with alcohol or other solvent cleaners during cure. Remember to remove masking tape before the sealant skins.

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TECHNICAL DATA SHEET

技术资料

A good joint design is imperative if a sound, durable seal is to be achieved.

Joint Design: In general, joints should be designed to be at least 4 times as wide as the anticipated movement. Joint width and depth should not be less than 6 mm and depth should never exceed width.

Joint Depth to Width Ratios

Joint Width	Joint depth
< 10 mm	Depth = Width
10mm-30mm max	10 mm - 15 mm

Cure Time

Toolbox™ will form a tack free skin in 15 minutes depending upon conditions. Cure rate is 2-3mm per day depending upon temperature and humidity.

Performance Summary

S.G.	1.47 g / mL
Skin Time	10-15 minutes at 22 degrees,
Reposition Time	25 minutes @ 20°C
Set Through	2-3mm per day
Tear Strength DIN 53504	3.2MPa
Elastic recovery	75%
Modulus of Elasticity DIN 53504 @100%	1.6MPa
Elongation at break DIN 53504	400%
Maximum Deformation	±20%
Hardness Shore A	55±5

Modwood Specification

Toolbox™ is approved for use with ModWood decking and the Klevaclip concealed fixing System. For bonding of Modwood, bonding to Modwood, or installing a board without the use of a Klevaklip, then the Modwood surface

must be primed with HBF primer 790G prior. Failure to use primer will result in bond failure.

As a sealant for lap joints

Apply Toolbox™ to one surface as a bead then rapidly assemble the components. For best results, use mechanical fastening. Pre-drill all holes. Toolbox™ will be touch dry in approx 5 minutes (depending on temperature) and is repositionable for up to 10 minutes (again depending on temperature and moisture).

Toolbox™ is designed as a sealant for wide and active joints with movement of less than ±20%.

Painting

Toolbox™ may be painted wet on wet or after it has cured with most WB paint systems. Direct over coating with Solvent-Based paint systems is not recommended. A WB primer must first be used to over coat Toolbox™ before any application of Solvent-Based paint. Test if unsure, especially when industrial grade coatings are used, to ensure that: The coating bonds to Toolbox satisfactorily The coating does not affect the curing of Toolbox (e.g. allows moisture to reach the Toolbox surface if applied over a non porous surface)

That Toolbox does not affect the cure of the coating (e.g. result in a sticky surface) The coating does not craze after application over Toolbox

Clean Up

Clean up uncured adhesive with mineral turpentine . Cured material can be removed by trimming with a knife or scraper .

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**Safety Information**

Toolbox is not classified as hazardous according to criteria of Worksafe Australia. A Material Safety Data Sheet is available from the H.B. Fuller representative your state, HB Fuller Australia customer service, or downloadable from the HB Fuller web site, www.hbfuller.com.au

Disclaimer

This technical data sheet summarises at the date of issue to the best technical knowledge of HB Fuller Australia. Since HB Fuller Australia cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this technical data sheet in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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