Summary
Weicon Wood Repair Sticks are the fast, simple and easy way to make permanent repairs to all kinds of timber and timber-derived (e.g. MDF, plywood) materials. They come in a single tube and have a putty-like consistency so they can be easily moulded and shaped. This special grade has even been made so that its density resembles wood (i.e. it floats).

Once applied, wood repair sticks bond with high strength and will cure to form a solid mass that will be light beige in colour. Wood Repair Sticks require no special tools; just cut off the amount you want from the tube, knead and apply.

View This Product

Applications

- Filling cracks, repairing and re-attaching windows and door frames
- Fixing veneers
- Filling holes, cracks and bonding timber boards and planks
- Fixing wooden toys and objects
- Anywhere repairs need to be made to wooden components

Preparation of the Surface

To ensure that the Wood Repair Stick bonds well and achieves its full potential it is very important that you ensure the surface to which it will be applied is clean and dry. Adhesion to very smooth surfaces will be enhanced if you are able to roughen the surface slightly before applying the repair stick as this will increase the available bonding area. Just make sure you clean away any dust generated by this roughening if you do.

Application

Remove the putty from the tube and cut off the amount you want to use. Mix the cut off portion by kneading it until it has a single, homogenous colour to it. At that point, all that is left to do is apply.

Weicon Wood Repair Sticks can cover gaps up to 15mm in size. Pot life starts once you mix portion together. For this grade, you can expect a pot life of about 15 minutes if you mix 25 grams or putty at room temperature. If larger quantities are used, the curing time will be faster due to the typical reaction heat of epoxy resins (exothermic reaction). Similarly, higher ambient temperatures shorten the cure time (as a rule of thumb, every 10ºC increase above room temperature will halve working time and cure time). Temperatures below +16ºC will extend working time and cure time considerably while below around +5ºC no reaction will occur.

Physiological properties / health and safety at work

Weicon Repair Sticks, when properly handled and completely cured, are toxicologically harmless. When using these adhesives, the physical, safety, technical, toxicological and ecological data and regulations in the SDS must be observed.

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Technical Details

General Surface Compatibility

Metal (e.g. stainless steel, brass, cast iron, aluminium)	+
Hard Plastics* (e.g. epoxy laminates, rigid PVC)	+
Wood (e.g. oak, beech, spruce, balsa)	++
Derived Timber Products (e.g. plywood, MDF)	++
Fibre Reinforced Materials (e.g. GFRP, CFRP, Fibreglass)	+
Glass, Ceramics	+
Stone (e.g. granite, brick, concrete, marble)	+
Rubber Elastomers	-

++ = Highly Compatible + = Compatible - = Not Compatible
*Performance will vary depending on the exact type of plastic being bonded. Generally, low surface energy plastics will be much harder to bond to then high surface energy (such as rigid PVC).

Properties

Basis	Epoxy Resin with Mineral Fillers
Nature	Putty
Density	0.9 g/cm³
Maximum Gap Covering Power**	15mm
Pot Life for 25g of Material @ 20°C	15 Minutes
Processing Temperature	+10°C to +40°C
Curing Temperature	+6°C to +40°C
Colour After Curing	Light Beige
Handling Strength (35% of Final) When Curing @ 20°C	45 Minutes
Mechanical Strength (50% of Final) When Curing @ 20°C	1 Hour
Final Strength (100%) When Curing @ 20°C	24 Hours
Temperature Resistance (Continuous)	-50°C to +120°C
Temperature Resistance (Short-Term, 2 Hours Max.)	+150°C
Pressure (DIN 52381-83)	75 N/mm²
Shore Hardness	70 Shore D
Average Tensile Shear Strength After 7 Days at 20°C (as per DIN 52383)	6.2 N/mm² on Sanded Beech Wood
Thermal Conductivity (ASTM D527)	0.3 W/m·K
Linear Shrinkage While Curing	<1%
Electrical Resistance (ASTM D257)	$5 \cdot 10^{11}$ Ω/cm
Dielectric Strength (ASTM D149)	3 kV/mm
Thermal Expansion Coefficient (ISO 11359)	30-40 x 10^{-6} k-1

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Weicon Wood Repair Stick Chemical Resistance

Acetic Acid Dilute (<5%)	+	Hydrochloric Acid (<10%)	+
Acetone	O	Hydrochloric Acid (10-20%)	+
Alkalis (Basic Minerals)	+	Hydrofluoric Acid Dilute	O
Amyl Acetate	+	Hydrogen Peroxide (<30%)	+
Amyl Alcohols	+	Impregnating Oils	+
Anhydrous Ammonia (25%)	+	Magnesium Hydroxide	+
Barium Hydroxide	+	Maleic Acid	+
Butyl Acetate	+	Methanol (Methyl Alcohol, <85%)	O
Butyl Alcohol	+	Milk of Lime	+
Calcium Hydroxide (slaked lime)	+	Naphthalene	-
Carbolic Acid (Phenol)	-	Naphthene	-
Carbon Disulphide	+	Nitric Acid (<5%)	O
Carbon Tetrachloride	+	Oils, Vegetable and Animal	+
Caustic Potash Solution	+	Oxalic Acid (<25%)	+
Chlorinated Water	+	Paraffin	+
Chloroacetic Acid	-	Perchloroethylene	O
Chloroform	O	Petrol (92-100 Octane)	+
Chromic Acid	+	Phosphoric Acid (<5%)	+
Chroming Baths	+	Phthalic Acid	+
Creosote Oil	-	Phthalic Acid Anhydride	+
Cresylic Acid	-	Potassium Hydroxide (Caustic Potash, 0-20%)	+
Crude Oil	+		
Crude Oil Products	+	Soda Lye	+
Diesel Fuel Oil	+	Sodium Bicarbonate (Sodium Hydrogen Carbonate)	+
Ethanol < 85% (Ethyl Alcohol)	O		
Ethyl Alcohol	O	Sodium Carbonate (Soda)	+
Ethyl Benzole	-	Sodium Chloride (Cooking Salt)	+
Ethyl Ether	+	Sodium Hydroxide (Caustic Soda, <20%)	O
Exhaust Gases	+		
Formic Acid (>10%)	-	Sulphur Dioxide	+
Glycerine	+	Sulphuric Acid (<5%)	O
Glycol	O	Tannic Acid Dilute (<7%)	+
Grease, Oils and Waxes	+	Tetralin	O
Heating Oil, Diesel	+	Toulene	-
Humic Acid	+	Trichloroethylene	O
Hydrobromic Acid (<10%)	+	Turpenetine Substitute (White Spirit)	+
Hydrocarbons (Aliphatic)	+	Xylene	-
Hydrocarbons (Aromatic)	-		

+ = Resistant O = Resistant for a Limited Time - = Not Resistant

Storage

When stored unopened and in normal climatic conditions (20ºC) Weicon Wood Repair Stick has a minimum shelf-life of 18 months. Storage in direct sunlight should be avoided.

Available Sizes

Weicon Wood Repair Sticks are available from Swift Supplies in 28gm and 56gm tubes.

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