

## G5 FIVE MINUTE ADHESIVE



This epoxy composition has been developed for adhesive applications where an extremely fast setting time is required. The flexibility of the cured resin permits the bonding of materials with different coefficients of thermal expansion with the minimum of stress in the glue line. Both resin and hardener are medium viscosity liquids producing an almost colourless mix.

An easy to use two part "five minute epoxy" system, ideal for quick repairs and general bonding around both the boat and house. Particularly suited for spot applications to hold component parts in position whilst bonding is completed with WEST SYSTEM epoxy.

Most materials, except thermoplastics, can be bonded with this system, including:

Steel	Aluminium	Glass reinforced polyester
Phenolic	Wood	Concrete
Stone	China	Glass
Copper	Cast Iron	Unglazed ceramic

### **Surface Preparation**

All surfaces to be bonded must be degreased with a solvent such as acetone or WEST SYSTEM 850 Cleaning Solvent, and abraded. Remove all sanding dust and debris with a clean brush. Another final wipe with a clean cloth soaked in fresh solvent will remove the last traces of grease and dust. Glass may be washed in detergent flushed with clean water and air dried.

### **Mix Proportions**

Resin	G/5 Part A	1 part by weight or volume
Hardener	G/5 Part B	1 part by weight or volume

### **Gelation**

100g mass at 25°C	4 minutes
Thin film at 25°C	5 minutes
Thin film at 7°C	20 minutes

### **Application Instructions**

Mix thoroughly equal parts of the resin (PART 'A') and hardener (Part 'B') using a clean dry container and a spatula or flat stick. Very small quantities may be mixed on a non-absorbent flat surface. Do not mix more than can be used in two minutes.

Immediately after mixing apply a thin film to both prepared surfaces. Press both surfaces together excluding all air and hold in position until the resin has set. At normal room temperature the strength of the bond will continue to develop for about seven days. The application of gentle heat will accelerate this development of maximum strength.

**Typical bond strengths**

	<b>30 minutes</b>	<b>1 day</b>	<b>7 days</b>
Mild steel/mild steel	21 kg/cm <sup>2</sup> 300lbf/in <sup>2</sup> 2.07 MPa	35 kg/cm <sup>2</sup> 500 lbg/in <sup>2</sup> 3.45 MPa	56 kg/cm <sup>2</sup> 800 lbf/ in <sup>2</sup> 5.52 MPa
Copper/Copper	49 kg/cm <sup>2</sup> 700 lbf/in <sup>2</sup> 4.83 MPa	63 kg/cm <sup>2</sup> 900 lbg/in <sup>2</sup> 6.21 MPa	85 kg/cm <sup>2</sup> 1200 lbf/ in <sup>2</sup> 8.28 MPa
Wood/Wood	28 kg/cm <sup>2</sup> 400lbf/in <sup>2</sup> 2.76 MPa	35 kg/cm <sup>2</sup> 500 lbg/in <sup>2</sup> 3.45 MPa	60 kg/cm <sup>2</sup> 850 lbf/ in <sup>2</sup> 5.86 MPa
Aluminium/Aluminium	49 kg/cm <sup>2</sup> 700lbf/in <sup>2</sup> 4.83 MPa	60 kg/cm <sup>2</sup> 850 lbg/in <sup>2</sup> 5.86 MPa	60 kg/cm <sup>2</sup> 850 lbf/ in <sup>2</sup> 5.86 MPa
Glass/Glass	No breakdown in bond after 16 hours immersion in cold water.		
(detergent wash)	No breakdown in bond after 7 hours immersion in boiling water		

**Note:** G/5 Five Minute Adhesive is not recommended for long-term bonds subject to high loads or moisture

**Industrial Hygiene****Equipment Cleaning**

Mixing equipment, tools and brushes can be cleaned with acetone cellulose thinners or similar solvents before the resin hardens. Once the resin has hardened, solvents are ineffective and the resin must be chipped or ground off. (Due precautions for handling inflammable and/or volatile solvents should be taken).

**Protection and cleaning of workers' hands**

Avoid contact with resin, hardeners, mixed epoxy and sanding dust. Wear protective gloves and clothing when handling WEST SYSTEM materials. WEST SYSTEM 831 Barrier Cream provides additional protection for sensitive skin and allergies. DO NOT use solvents to remove epoxy from the skin. Immediately after skin contact with resin, hardeners, sanding dust from epoxy and/or solvents, use WEST SYSTEM 820 Resin Removing Cream for the initial clean-up, followed by a wash with soap and warm water.