

Features & Benefits

- Toughened
- Very high strength
- Ideal when bonding dissimilar materials
- Improved fatigue life
- WRAS listed for contact with wholesome (potable) water

Description

Permabond® F201 is an anaerobic adhesive which has been developed to give excellent resistance to peel and impact forces. This toughening, combined with good adhesion to aluminium and copper alloys, makes it the first choice where relatively thin or lightweight components are being bonded which may be subject to “distortion” in service. It is also capable of resisting the thermal stresses that may be generated when bonding dissimilar surfaces. Permabond F201 is also suitable for contact with potable water.

Physical Properties of Uncured Adhesive

Chemical composition	Acrylic
Appearance	Brown
Viscosity @ 25°C	2 rpm: 9,000mPa.s (cP) 20 rpm: 2,500mPa.s (cP)
Specific Gravity	1.0
UV fluorescence	No

Typical Curing Properties

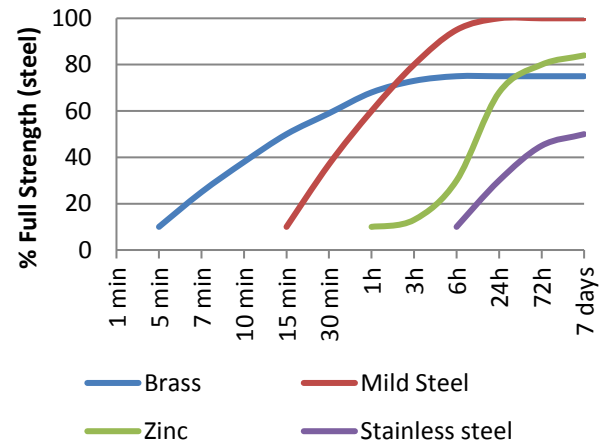
Maximum gap fill	0.2 mm 0.008 in
Maximum thread size	M20 ¾"
Time taken to reach handling strength (M10 steel) @23°C	15 minutes*
Time taken to reach working strength (M10 steel) @23°C	1 hour
Full strength (M10 steel) @23°C	24 hours

*Handling time at 23°C / 73°F. Copper and its alloys will make the adhesive cure more quickly, while oxidised or passivated surfaces (like stainless steel) will reduce cure speed. To reduce curing time, use Permabond activator A905 or ASC10. Alternatively, increasing the curing temperature will reduce curing time.

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Strength Development



*Cure times are typical at 23°C. Copper and its alloys will follow the faster cure while oxidised or passivated surfaces like stainless steel will tend towards the slower curve. Lower temperatures or large gaps will tend to extend the cure time. To reduce the cure time the use of Permabond A905, ASC10, or heat can be considered.

Typical Performance of Cured Adhesive

Torque strength (M10 steel ISO10964)	Break 28 N·m 250 in.lb Prevail 30 N·m 260 in.lb
Shear strength (steel collar & pin ISO10123)	30 MPa 4400 psi
Coefficient of thermal expansion	90 x 10 ⁻⁶ mm/mm/°C
Dielectric strength	11 kV/mm
Thermal conductivity	0.19 W/(m.K)

