

NovaWeld Flex 3HT & 6HT are two-part structural methacrylate adhesives formulated for applications intended for the powder coating process. Sharing common chemistry, they differ only in the functional cure-speed, allowing diversity of applications.

Both grades offer a high functional tensile shear strength after the initial cure, that further increases following an additional heat cure process (30 min@180°C / 20 min@200°C). This unique chemistry allows these grades to not only maintain a high functional strength through the powder coating process, but actually improve in all aspects of functional strength performance.

Applications

NovaWeld Flex 3HT & 6HT are very versatile, and can bond a wide variety of substrates without the need for surface primers or conditioners. Typical examples shown below:

- Bonding mild steel straps on structural sheet work
- Sealing weld seams
- Bonding stainless and aluminum letters and signs
- Bonding mild steel

Instructions for Use

- 1. Consult the material safety data sheet (MSDS) before using for the first time.
- 2. Carry out surface preparation where required.
- Remove nut and repeatedly press the gun trigger until both parts are dispensing before attaching mixer nozzle.
- 4. This ensures you mix equal amounts of adhesive and activator.
- 5. Apply the mixed adhesive to one surface.
- 6. Assemble components carefully and clamp if required.
- 7. Take care not to over-tighten you need to leave some adhesive between the joint.
- 8. Remove any excess adhesive at this point, before the structural glue starts to cure.
- 9. Use a suitable cleaner such as **NovaBond Surface Cleaner**.
- 10. Allow the adhesive sufficient time to achieve handling strength (working time is dependent on grade used and the environmental conditions) before moving or unclamping.

Properties of Uncured Material

Property	Parameter	
Resin	Methyl Methacrylate	
Colour	Off White/Black	
Appearance	Thixotropic gel	
Viscosity Brookfield T Bar	200,000- <mark>280,000cps</mark>	
Cure System	Non peroxide	
Open Time	2 - 4 Minutes @20C (NovaWeld Flex 3HT)	
Open Time	4 - 6 Minutes @20C (NovaWeld Flex 6HT)	
Fixture Time	6 -10 Minutes @20C (NovaWeld Flex 3HT)	
Fixture Time	12 - 15 Minutes @20C (NovaWeld Flex 6HT)	

Properties of Cured Material (Pre-Heat & Post Heat)

Property	Parameter (Pre-Heat)	Parameter (Post Heat)
ASTM D1002 Lapshear (Aluminium)	16.09 Nmm2	18.00 Nmm2
ASTM D1002 Lapshear (Galvanised Steel)	15.92 Nmm2	16.40 Nmm2
ASTM D1002 Lapshear (Stainless Steel)	15.5 Nmm2	16.20 Nmm2
ASTM D1002 Lapshear (Mild Steel)	15.02 Nmm2	19.60 Nmm2
ASTM D1002 Lapshear (GRP)	5.80 Nmm2	N/a
Gap Fill	4mm	
Temperature Range	-55°C to 125°C	
Shore Hardness	70 Shore D	
Tensile Strength at Break (ISO 527 1A)	8.35 Nmm2	
%age Elongation at Break (ISO 527 1A)	6%	
UV Stability	Excellent	

Disclaimer