PRODUCT

Formoa® 017FE is a very high performance hybrid polymer adhesive engineered for commercial vehicle and mass transportation applications. It has a high bond strength, high grab and fast strength build up.

FE 017 Formoa

Fw Forgeway

Fo Formoa

Hs High Strength

Characteristics

- High performance mechanical properties.
- High bond strength.
- Quick build-up of end strength.
- High shear strength after full cure.
- Does not contain isocyanates, silicone or solvents.
- Can be sanded after full cure.
- Flexible elastic rubber, movement accommodation up to 20%.
- Suited for application in warm, humid climates.
- No bubble formation within sealant.
- Very easy to tool and finish.
- Colour stable and UV resistant.
- Can be painted wet-on-wet in paint trains with most industrial paints.
- Withstands all climatic conditions.
- Minimal health and safety considerations.
- Easy to extrude.

Applications

- Structural elastic bonding between metal, composite, painted surfaces, and many plastics (not PE, PP or Teflon).
- Structural bonding applications in the car, coach, caravan, marine, train and aerospace industries.
- Bondings which pass through paint tunnels. Structural bonding in vibrating constructions. Connection joints in sheet metal fabrication.

Technical characteristics

Base Material	MS Polymer
Consistency	Stable Paste
Curing System	Moisture
Through Cure Rate (mm/24hrs)	4
Density (Kg/l)	1.46
Elasticity Modulus at 100% (N/mm²) ISO 37	>1
Elongation at Break (%) ISO 37	>300
Tensile Strength (N/mm²) ISO 37	2.7
Max Open Time (mins)	20
Shear Strength (N/mm²) ASTM D1002 - rate - 6mm/min	>2.5
Shore A Hardness ±5	65
Skin Over Time (mins)	10
Viscosity C&P @ 0.6 s-1 (Pa.s)	2700
Volume Alteration (%)	<1
UV Resistance ASTM G154 (CIELab - ΔE)	<1

(*) These values may vary depending on environmental factors, such as: temperature, moisture and type of substrates.

Packaging

Colour	White or grey.
Contents	290ml cartridge, 600ml foil pack, 200L on request.
Shelf life	12 months in unopened packaging, in a cool and dry storage place at temperatures between +5°C and +25°C.

Substrates

Nature	Clean, dry, free of dust and grease.
Priming	We recommend the use of Formoa® Surface Activator on non-porous surfaces. We recommend preliminary compatibility tests prior to application.

Bonding

Formoa® 017FE has excellent adhesion on many surfaces. The following metal surfaces have been tested: Steel, AlMgSi1, Brass, Electrogalvanised Steel, AlCuMg1, Fire retardant galvanised Steel, Steel ST1403. Excellent adhesion as well on many plastics: Polystyrene, Polycarbonate (MarcolonR, LexanR), PVC, ABS, Polyamide, PMMA, GRP, Fibre Reinforced Epoxy and Polyester. Please remove protective films from plastic surfaces, prior to application of Formoa® 017FE. No adhesion on: PE, PP, and PTFE (Teflon).

Bonding layer

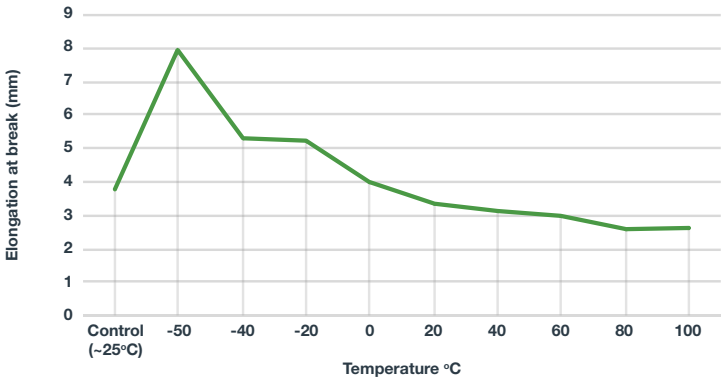
We recommend a bonding layer of at least 2mm.

Resistance to chemical agents

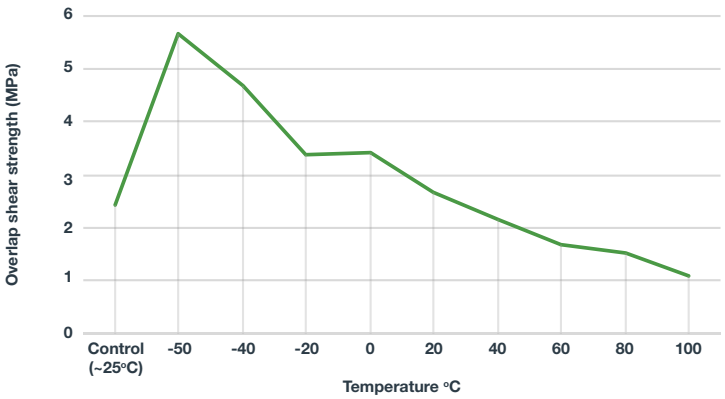
Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis. Poor resistance to aromatic solvents, concentrated acids and chlorinated hydrogen's.

Elongation at break (ASTM D1002)

25mm overlapped joint



Base temperature resistance (ASTM D1002)



Remarks, Disclaimer & Health and safety

Remarks - Formoa® 017FE may be overpainted with most types of lacquer used in industrial applications. However, due to the large number of paints and varnishes available, we strongly advise a compatibility test before application. The drying time of alkyd resin based paints may increase. Formoa® 017FE can be applied to a wide variety of substrates. Due to the fact that specific substrates, such as plastics, polycarbonates, etc. may differ from manufacturer to manufacturer, we recommend preliminary compatibility tests. The directives contained in this document are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments.

Disclaimer - The variability of materials, substrates and conditions of use is such that no warranty of their functionality for a specific application can be deducted from this information, written recommendation or any other type of suggestion offered. Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by Forgeway, of its products, services, recommendations and suggestions for the specific application need, and must accomplish sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end user.

Health and safety - Refer to Safety Data Sheet (SDS) for further information. Apply the usual industrial hygiene.

Reviewed October 2018

Fw Forgeway | Fo Formoa | Hs High Strength | FE 017 Formoa

Forgeway Ltd, Collett Way, Newton Abbot, Devon TQ12 4PH, UK.
+44 1626 367070 / forgeway.com