WEST SYSTEM®

Technical Data Sheet

Specialty Epoxies

G/flex

G/flex® Epoxies

General description

G/flex Epoxies are toughened, resilient two-part epoxies engineered for a superior grip to metals, plastics, glass, masonry, fiberglass, and wet and difficult-to-bond woods. G/flex Epoxies are available in two consistencies. G/flex 650 Epoxy is a liquid epoxy with a honey-like consistency. G/flex 655 Epoxy Adhesive is pre-thickened with a consistency similar to gel toothpaste. Both have an easy-to-use 1:1 mix ratio. G/flex provides a relatively long open working time, yet it cures quickly and can be used in cool temperatures.

G/flex Epoxies are toughened to make them resilient and impact resistant, giving them the ability to make structural bonds that can absorb the stresses of expansion, contraction, shock, and vibration. With a modulus of elasticity of 150,000 psi, G/flex is more flexible and can deflect further before breaking than WEST SYSTEM 105/205, while being much stiffer than typical adhesive sealants.

G/flex adheres tenaciously to difficult-to-glue hardwoods, both tropical and domestic varieties. It can be used to bond metals, plastics, glass, masonry, and fiberglass. G/flex is ideal for repairs to aluminum boats and polyethylene and ABS canoes and kayaks. It can also be used to wet out and bond fiberglass tapes and fabrics. G/flex 650 can be modified with WEST SYSTEM fillers and additives and added to other WEST SYSTEM epoxies to improve their toughness and flexibility.

Handling characteristics

Mix ratio by volume	1 :1
by weight	1.2 :1
Mix viscosity G/flex 650 (at 72°F) ASTM D-2393	15,000 cps
G/flex 655	gel
Pot life (100g at 72°F)	45 minutes
Working time	75 minutes
Initial Cure	3 to 4 hours
Workable cure*	7 to 10 hours
Minimum recommended temperature	40°F (4°C)

**Wait 24 hours before subjecting to high loads.*

Physical properties of cured epoxy

Specific gravity	1.11
Hardness (Shore D) ASTM D-2240	75
Compression yield ASTM D-695	5,268 psi
Tensile strength ASTM D638	3,440 psi
Tensile elongation ASTM D-638	32.7%
Tensile modulus ASTM D-638	1.44E+05
Flexural strength ASTM D-790	5,192 psi
Flexural modulus ASTM D-790	1.56E+05
Heat deflection temperature ASTM D-648	127°F
Onset of Tg by DSC	138°F
Ultimate Tg	154°F

Storage/Shelf life

Store at room temperature. Keep containers sealed when not in use to prevent contamination. With proper storage, resin and hardener should remain usable for several years.

Manufactured for WEST SYSTEM by:

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