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WEST SYSTEM 403 Microfibre Blend

Introduction

WEST SYSTEM 403 is a mixture of short-fibre cotton and colloidal silica. It has largely replaced pure Colloidal Silica and pure Microfibre as thickening agents for WEST SYSTEM liquid resins.

Addition of cotton flock has served to substantially reduce the tendency of the Colloidal Silica to float around in the air and made the mixing into resin much easier. Furthermore, the Colloidal Silica serves to offer an added degree of thixotropy to the Microfibre and substantially improves the spreading and working properties of the adhesive mix.

Because such small quantities must be added in terms of weight, the effect of WEST SYSTEM 403 on the cured resin properties is negligible, but dispersion of the powder in to the resin must be thorough for optimum results.

Typical Usages

- General bonding
- Filleting
- coving
- Fairing compounds
- Prevent runoff on vertical and overhead joints

Mix Instructions

General Purpose Adhesive: add equal volume (dry bulk) of WEST SYSTEM 403 to the volume of mixed epoxy resin and hardener. Stir in thoroughly by hand using a broad spatula.

Large Gap filler: add approximately 1.0 to 1.5 volume (dry bulk) of WEST STEM 403 to the volume of mixed epoxy resin and hardener.
Note: Pre-saturation of the gluing faces must be carried out with straight resin/hardener mix before the thickened glue is applied. Pre-saturation is also recommended when carrying out critical structural scarf joints.

It is advised that end-users should carry out tests to determine for themselves the suitability of WEST STEM 403.

Physical Properties

	Value
Appearance	White Powder
Dry Bulk Density	0.10 – 0.11g/cc

Adhesion Properties

	Typical Formula
WEST SYSTEM Z105 Resin	100ml
WEST SYSTEM Z205 Hardener	20ml
WEST SYSTEM 403 Microfibre blend	120ml
Cure Schedule	7days @ 20°C

	Value	Method
Average of 10	3.5kN	BSS1204
Minimum	3.1kN	BSS1204
Wood failure	100%	BSS1204

Joints must give at least 2.2kN when pulled on a tensometer

By comparison, Resorcinol Formaldehyde adhesive (under the same conditions)

	Value	Method
Average of 10	2.5kN	BSS1204
Wood failure	30%	BSS1204

Joints must give at least 2.2kN when pulled on a tensometer

Storage

WEST STEM 403 will keep for 2 years if kept in original unopened packaging at room temperature (15°C – 32°C) and out of direct sunlight. Opened packaging should be tightly sealed in air tight containers to limit moisture absorption.

Health & Safety

Adhesive Technologies NZ ltd provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, storage, use and disposal information.
Direct skin contact should be avoided, WEST STEM 403 should not be ingested; in an unlikely event WEST STEM 403 is ingested see your nearest physician immediately.

- Use with good ventilation and adequate safety equipment including gloves.
- If skin contact occurs, wash with lanolin based hand-cleaner and water.
- If eye contact occurs, immediately wash for 15 minutes with running water.
- If swallowed:
  Resins - DO NOT induce vomiting, and contact a doctor or the Poisons Information Centre.
  Hardeners – DO NOT induce vomiting, give plenty of milk or water and contact a doctor or Poisons Information Centre.