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FibArm Resin 230+

Two-component epoxy system for impregnation and bonding.

Use for structural reinforcement in construction



Application	<ul style="list-style-type: none"> • Structural adhesive with high wettability, suitable for bonding tapes and fabrics of carbon, glass, aramid, basalt fiber, pultruded and high resistance steel plates • Suitable for application on vertical or overhead • Limitation for fabrics and tapes by areal weight – up to 300 g/m²
Processing	Mechanical mixing at low speed or manual mixing until complete homogenization of the two components. Application by roller or brush. The treatment with a primer is not necessary, but the surfaces must be properly prepared by removing all the unstable parts and appropriately regularized. Do not use on wet surfaces.
Description	Two-component epoxy filled system, medium viscosity. Easy to use 2:1 ratio by weight and by volume. After mixing the two components gives a thixotropic system with excellent vertical hold. The coloration in contrast allows to easily highlight the correct mixing. The system cure even at low temperatures (still above 10°C) and presents no surface oiliness.
EN 1504-4	FibArm Resin 230+ meets the performance requirements of legislation EN 1504-4 for bonding and structural reinforcement.
Features	<ul style="list-style-type: none"> • composition with improved mechanical characteristics • Easy application and mixing - the ratio of 2:1 by volume and weight • Designed specifically for the FibArm system • High mechanical properties • High adhesion to different surfaces: concrete, masonry, metal, wood, stone • Convenient for impregnating tapes and fabrics manually • Does not require a primer • Solvent free

System specification		Resin	Hardener
	Colour	White-Ivory	Dark grey
	Viscosity (25°C), mPas	65 000-110 000	45 000-85 000
	Density (25°C), g/ml	1,27-1,31	1,25-1,29
	Mixing ratio (Wt/Wt)	2	1
	Pot life (200 ml; 50mm), min	20-25	
	Compressive strength (EN 12190), MN/m ²	65-97	
Typical system characteristics	Mix viscosity	Thixotropic	
	Maximum applicable thickness (EN 1799), mm	9	
	Open time of bonding (EN 12189), min	65-105	
	Working time (6 kg of mixed system on 4cm of thickness) EN ISO 9514, min	+10°C: 85-95 +20°C: 35-40 +30°C: 20-25	
	Suggested application temperature	10-35°C	
	Curing time, days	+10°C: 15 +20°C: 5 +30°C: 3	
	Waiting time for over-application with chemical adhesion, hrs	+10°C: 12-24* +20°C: 6-18* +30°C: 3-12* *Working times are influenced by site conditions	
Properties determined on standard specimens cured 7 days at room temperature	System colour	Light grey	
	System density (25°C), g/ml (ASTM D792)	1,28-1,35	
	Flexural Modulus of Elasticity (25°C), MPa (EN ISO 178 / ASTM D790)	2500-3100	
	Shear strength (snatch, plate-plate steel, 25°C), MPa (EN 12188)	>14	
	Glass transition temperature (ASTM D3418)	54-60°C	
	Maximum using temperature in continuous	45-50 °C	
	Total shrinkage for structural system, % (EN 12617-3)	<0,1	
Sales Package	System is sold in packs Component A: 18 kg Component B: 9 kg		
Instructions	Add the appropriate amount of hardener to the resin and mix thoroughly by hand or machine in low speed, using waterproof gloves and goggles. The product reacts more rapidly in mass, therefore it is recommended after mixing of the sales packages to transfer the product into a wide basin to increase, if necessary, the working time. Apply with roller or spatula.		
Requirements for tapes and fabrics	Apply with a roller or trowel on the surface to be strengthened, properly prepared and not wet. Applying the reinforcement tape or fabric, taking care to arrange the fibers taut and wrinkle free, protect hands with waterproof gloves. Roll the surface with spiked rollers ensuring the proper impregnation. Install a second resin layer to complete		



	<p>saturation and incorporation of the reinforcement. Repeat several times stratification as defined in the project. Do not exceed recommended maximum thickness provided for this product. Any overlap must be carried out on partially hardened system within the times reported in this TDS to ensure chemical bond between the two layers. Where it's necessary to adhere to the cured reinforcement system with plaster or other building systems, add dusting granulated quartz (0,7-1,2 mm) to the system surface when is not completely hardened.</p>
Precautions	<p>Consult the safety precaution and comply with the provisions relating to industrial hygiene and waste disposal</p>