



PRODUCT DATA SHEET

Edition 12.2017/v1
CSC Master Format™ 09 96 00
HIGH-PERFORMANCE COATINGS

Sika® Duochem F.R. Mesh

GLASS-FIBRE BASED, EMBEDDING FABRIC FOR Sikagard® Duroplast EPOXY RESIN F.R.S. (FABRIC REINFORCED SYSTEMS) FOR WALLS AND CEILINGS

Description	Sika® Duochem F.R. Mesh is a plain weave patterned embedment fabric. It is used in conjunction with Sikagard® Duroplast epoxy resin-based wall and ceiling coatings on various interior substrates, to increase impact resistances and durability.
Where to Use	<ul style="list-style-type: none"> Used in conjunction with Sikagard® Duroplast epoxy resin based F.R.S. (Fabric Reinforced Systems) on interior walls and ceilings. Used to improve long term durability in heavy service and demanding environments, such as hospitals, pharmaceutical facilities, laboratories, clean rooms, animal holding areas, commercial kitchens, food and beverage facilities, service corridors, locker rooms and shower areas.
Advantages	<ul style="list-style-type: none"> Easy to install, simple placing and embedment. Weave pattern allows resin to encapsulate the fabric. Proven use with Sika® resin systems.

Technical Data	
Packaging	1 m x 50 m (3.2 ft x 164 ft) roll (+/- 1 %)
Colour	White
Shelf Life	Indefinite
Weave Pattern	Plain
Weight	100 g/m ² (2.9 oz/yd ²)
Composition	100 % coated glass fibre
	Warp: 680 (+/- 10 %) Silionne Glass
	Weft: 510 (+/- 15 %) Glass Sliver
Fire Resistance	CAN/ULC S102-03 Class A
	ASTM E84-05 Class A
Oeko-Tex® Standard 100 Certification	Class 1 (does not contain substances hazardous to human health or the environment).

HOW TO USE

Surface Preparation Sika® Duochem F.R. Mesh must be placed into Sikagard® Duroplast-100 epoxy while the resin is ‘wet’. Typically it is introduced into what is termed a ‘bed’ coat which is applied at suitable wet film and must be in a condition where it will hold the fabric.

Application Fibre Reinforced Systems

Step One

Starting at the outside edge of the application area, mix and apply a bed coat of Sikagard® Duroplast-100. Apply the material uniformly with a roller to the wall following the project specification for applied mil thickness.

Step Two

Lay up the first panel of Sika® Duochem F.R. Mesh into the wet bed coat taking care not to entrap air behind the panel. Do not twist the fabric; it must lay flat against the wall. Apply the next panel edge to edge with the adjacent panel. Over lapping the fabric and cutting is typically not required when panels are correctly installed to be straight. Do not use a seam roller on the edges.

Step Three

Smooth out the panels with a wallpaper smoother or an aluminium-finned (“air-out”) roller to ensure complete contact with the wet resin. Work from the center of the panel to the edge to force out any entrapped air taking care to remove any surface irregularities. Ensure that the fabric is pressed firmly into corners to avoid hollow areas. Trim and remove excess fabric at the ceiling and base with a sharp knife.

Step Four

Mix and apply a saturant coat of Sikagard® Duroplast-100 before the bed coat has hardened. Apply the material uniformly with a roller to the wall following the project specification for applied mil thickness. Saturation is complete when all of the glass-fibre mat has lost its whiteness, appearing slightly translucent and completely embedded in epoxy resin.

Step Five

Allow overnight cure (minimum 12 hours at 20 °C). Lightly sand the surface where required to remove high points, projections or any other imperfections using 120 -220 grit sandpaper. Vacuum and wipe surface to remove all residual traces of sanding dust before the application of the next layer.

Step Six

Mix and apply a sealing and smoothing coat of Sikagard® Duroplast-100 following the project specification for applied mil thickness. Allow overnight cure (minimum 12 hours at 20 °C). Lightly sand the surface where required to remove high points, projections or other imperfections using 120 - 220 grit sandpaper. Vacuum and wipe surface to remove all residual traces of sanding dust before the application of the next layer. At the completion of Step Six, the Sika® Duochem F.R. Mesh weave pattern should not be visible.

Step Seven

Mix and apply one or two finish coats of either Sikagard® Duroplast-100 or Sikagard® Duroplast-150 following the project specifications for applied mil thickness. The completed surface of the Sikagard® Duroplast F.R.S. coating system should have a uniform, smooth glaze like appearance, free of surface irregularities.

Curing	Curing applies to the particular resin being used in the F.R.S. Please refer to the relevant Product Data Sheets and Specification Guides.
Clean Up	The fabric is supplied in sheet form, so off-cuts and surplus material require disposal in accordance with governing regulations for glass-fibre. Guidance as to the clean up of resins is supplied in the respective Product Data Sheets, which should be available on-site.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

The Information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

SIKA CANADA INC.**Head Office**

601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9

Other locations

Toronto
Edmonton
Vancouver

1-800-933-SIKA
www.sika.ca

Certified ISO 9001 (CERT-0102780)
Certified ISO 14001 (CERT-0102791)

