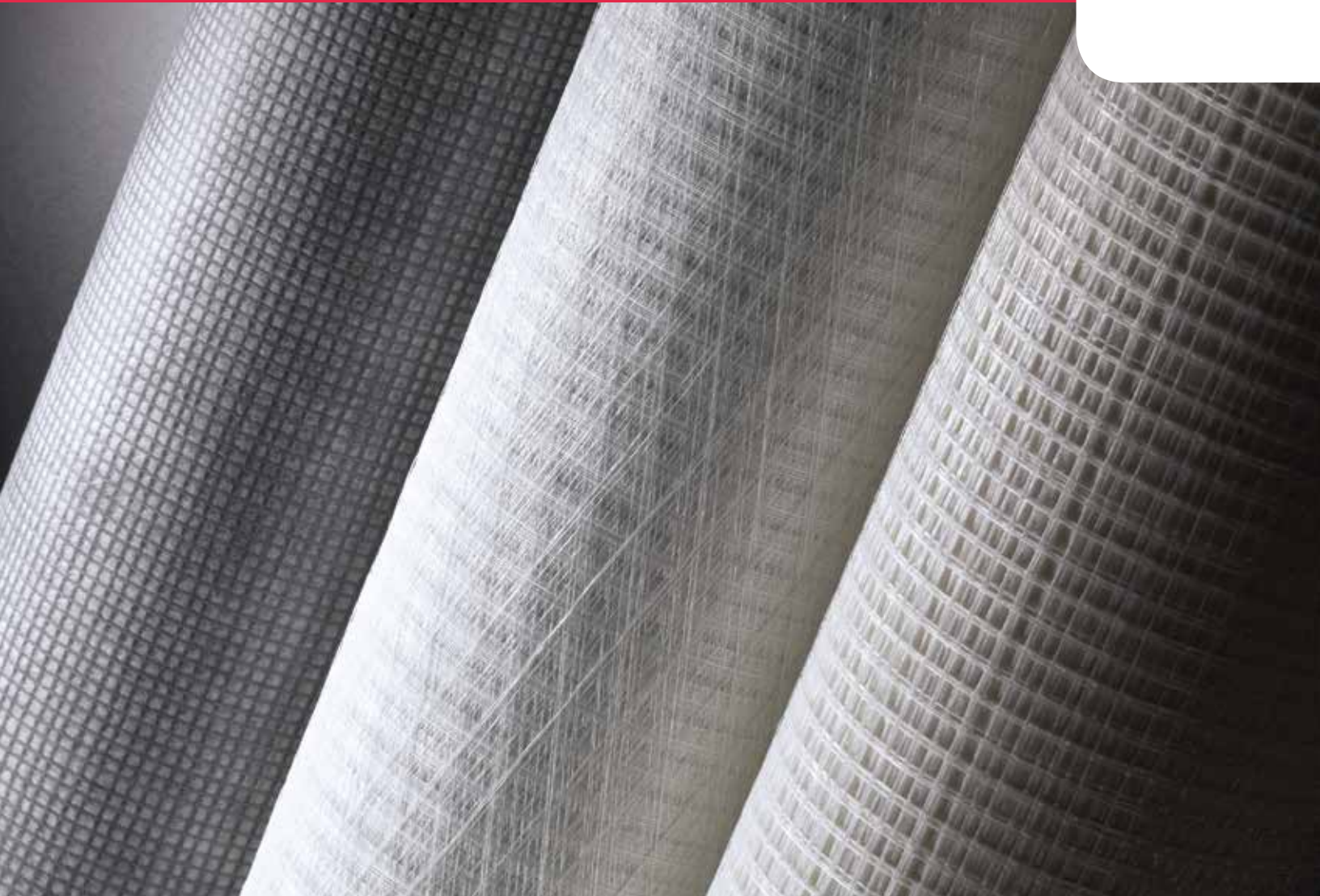


**ADFORS**

Industrial Fabrics



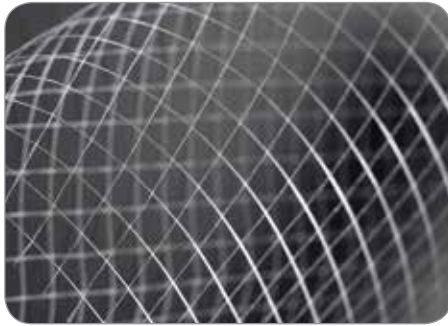
Your partner for innovative technical textiles



# Reinforcement technology

Saint-Gobain ADFORS is the only company to offer all of the following technology platforms from one source, providing a complete range of thoroughly engineered, highly innovative, customized solutions for the OEM market.

## LAID SCRIMS



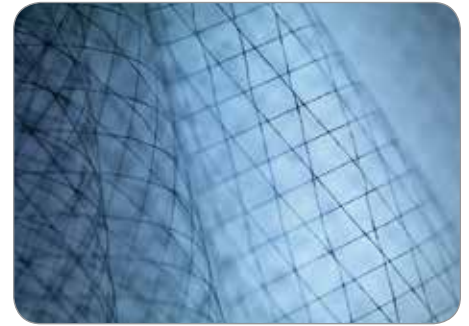
*Bi-directional pattern*

### Benefits

- Cost-effective (economical) reinforcement
- Excellent tear resistance
- Specialty coatings
- Wide variety of design options

### Markets and applications

- Cement board
- Modified bitumen roofing
- Insulation facing
- Industrial wipes
- Industrial packaging
- Geomembranes
- Nonwoven reinforcement
- Medical wipes
- Flooring



*Tri-directional pattern*

## ESF FABRICS



*Carbon fiber +/- 45 degree scrim*

### Benefits

- Off-angle dimensional stability

### Markets and applications

- Sailcloth
- Recreational boards
- Aerospace
- Composites



*Aramid off-axis open construction*

## LAMINATE FABRICS



### Benefits

- High strength resistance
- Puncture and tear resistance
- Excellent wet-out properties
- Nonwovens that ADFORS can laminate to include: Glass mat, Spun bond polyester, Point bond polyester, Tissue, Craft paper and films.

### Markets and applications

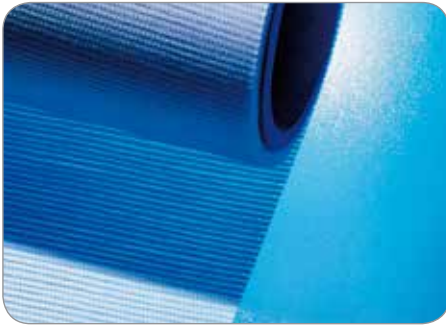
- Modified bitumen roofing
- Carpet underlayment
- Cement board







## WOVEN FABRICS



Roofing fabric

### Benefits

- Outstanding strength with uniform construction and compatible coating
- High quality aspect
- High thermal stability

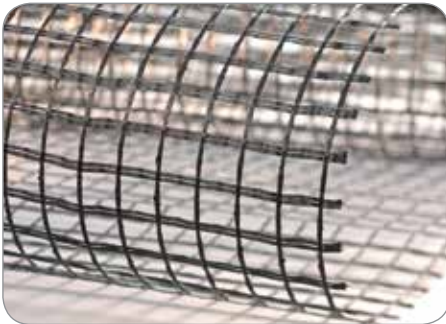
### Markets and applications

- EIFS
- Stucco
- Foam Shapes
- Mosaic tiles
- Water proofing
- Industrial roofing
- In-floor heating
- Composite core
- Thermal insulation



Open mesh

## KNITTED FABRICS



GlasGrid® asphalt reinforcement

### Benefits

- Polyester stitch yarn 'ties' glass yarns together for excellent dimensional stability
- High strength grids can be produced
- Open grid construction allows for excellent bonding to surrounding areas

### Markets and applications

- Asphalt reinforcement
- Concrete reinforcement
- Modified bitumen roofing
- Drywall tape



Drywall tape

## GLASS MATS



Wet laid

### Benefits

- Excellent dimensional stability
- Fire-resistant
- Moisture/mildew resistant
- Customized weight and physical characteristics

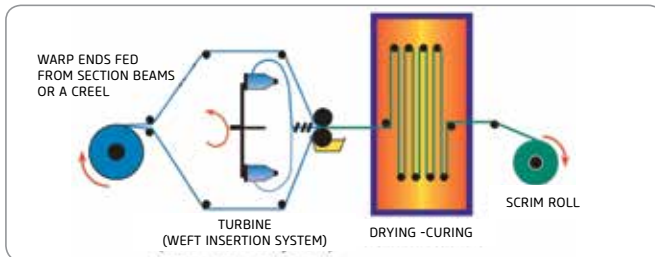
### Markets and applications

- Roofing & Waterproofing
- Facer
- Insulation
- Flooring reinforcements
- Drywall tape
- Wall reinforcements



Wall reinforcement

### 1. Laid scrim process



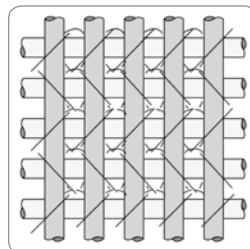
Scrim is a reinforcing fabric made from continuous filament yarns. The laid scrim manufacturing process chemically bonds the warp yarns (machine direction) and the weft yarns (cross direction) together in an open mesh structure. The construction of the laid scrim can vary between: "side by side" warp yarn, "over/under" warp yarns or tri-directional construction with two axes of weft yarns.

### 2. ESF process

ESF (Engineered Specialty Fabric) is made using a light weight laid scrim to carry high performance yarns such as aramid, carbon, and UHMW high tenacity thermoplastic fibers in specified off-axis constructions where multiple fiber types and multiple angle orientations are required.

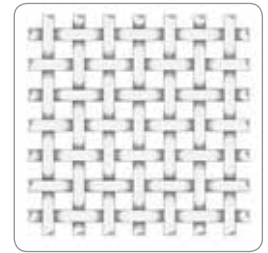
### 3. Knitting process

Three different yarn sources are used to form a fabric. There are warp (machine direction) yarns, weft (cross direction) yarns and a stitch polyester yarn that is used to tie the warp and weft yarns together.

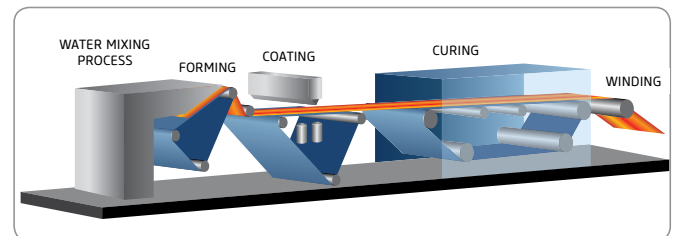


### 4. Weaving process

Warp and weft yarns are woven together on a traditional weaving loom, in various patterns (primarily plain and leno weave).



### 5. Glass mat process



Wet chopped glass fibers are dispersed in a water based solution. The solution is poured onto a moving wire mesh belt. The damp mat passes under a binder applicator where liquid resin binder is applied. The mat then passes through an oven to be dried.

### 6. Laminating process

Two or more substrates are combined via wet or thermal processing to form a hybrid fabric.

### 7. Binders

ADFORS binders are all made in house to meet each customers application needs. General binders include: PVA, PVC Latex, SBR and Acrylic.

SAINT-GOBAIN ADFORS America, Inc.  
1795 Baseline Road  
Grand Island, NY 14072 - USA  
Phone: 800-762-6694  
Fax: 716-775-3902

[www.adfors.com](http://www.adfors.com)

Follow us on:



ADFORS designs and produces innovative textile solutions for reinforcement in the construction & industrial markets. With an experience over 50 years, ADFORS benefits from a strong expertise in glass fiber technology through its VETROTEX® business, an extended knowledge in weaving & coating and a wide offering of fabrics.