



# XStrand® H MCX24

High-Performance Reinforcements

## High Performance Roving for Long Span Pultrusion

### PRODUCT DESCRIPTION

XStrand® H roving is part of a new generation of High-Performance Reinforcements enabling significantly stronger, stiffer and lighter composite parts than traditional E-glass reinforcements.

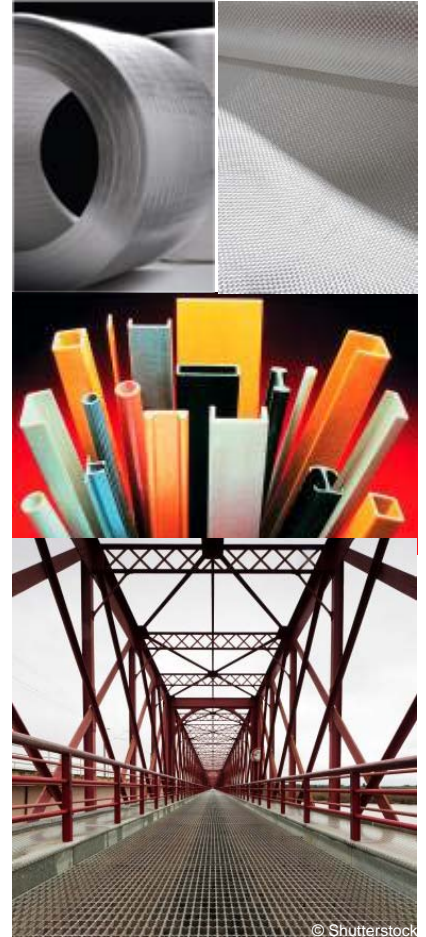
Owens Corning High-Performance Reinforcements XStrand® H are made from a boron-free glass formulation that meets R-Glass standards ISO 2078, ASTM C162 & DIN B1259-1. The glass formulation is designed for excellent mechanical properties (tensile strength and modulus) and offers significantly better thermal and corrosion resistance properties than E-glass.

### USAGE AND PERFORMANCE

XStrand® H roving consists of continuous high-performance glass filaments gathered in a single-end roving without mechanical twist and treated with specifically developed sizings. These rovings are characterized by a low level of catenary, excellent processing and handling characteristics: low fuzz, low static, complete run-out and fast wet-out.

### PRODUCT APPLICATION

XStrand® H MCX24 roving has been specifically developed for composite in demanding industrial applications requiring high modulus and long life. They are particularly suitable for the production of long span composite products by pultrusion process as ladder rails, bars, rods, grating systems and miscellaneous pultruded structural shapes in polyester, vinylester and epoxy resin systems. XStrand® H MCX24 can also be used in acrylic and polyurethane resin systems. XStrand® H MCX24 is also suitable for the production of poles and other composite elements by filament winding process.



### FEATURES AND PRODUCT BENEFITS

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Up to 15% Stiffer and to 20% Stronger glass versus conventional E-Glass</li> </ul> | <ul style="list-style-type: none"> <li>• Provides lower deformation for a given load.</li> <li>• Allows weight and cost savings (reduced amount of reinforcement and resin).</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Longer resistance to corrosion and cyclic loadings</li> </ul>                      | <ul style="list-style-type: none"> <li>• Improves sustainability for long life structures.</li> <li>• Improved reliability and lower maintenance cost.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Multi-process and multi-resin compatible</li> </ul>                                | <ul style="list-style-type: none"> <li>• For use with pultrusion process and also suitable for filament winding process.</li> <li>• Excellent adhesion with polyester, vinylester and epoxy resin systems. Also compatible with acrylic and polyurethane resin system.</li> </ul> |

## High Performance Roving for Long Span Pultrusion

### PRODUCT AVAILABILITY

<b>Tex</b>
2400, 4400

### MECHANICAL PROPERTIES

The following data was generated using production material XStrand® H MCX24 2400 tex (207 Yield)

Strand Tensile : ASTM D 2343	Tensile Strength	
	(MPa)	(Ksi)
Bisphenol-A Epoxy Vinyl Ester	2560	370
Bisphenol-A Epoxy, Amine Cured	2745	400

Interlaminar Shear Strength NOL ring : ASTM D 2344	Dry shear strength		Shear strength Retention 72 hr boil (%)
	(MPa)	(Ksi)	
Bisphenol-A Epoxy Vinyl Ester	72	10.4	94%
Bisphenol-A Epoxy, Amine Cured	63	9.1	94%

### PACKAGING

Rovings are available in a single-end internal-pull package. Each pallet weighed about 1 ton. Pallets are stretch wrapped for load stability. All doffs are wrapped with Tack-Pak or shrinkable film for protection during transport. Full doffs are available in 18 kg (40 lb.) weights and they can be packaged in bulk or Creel-Pak format. More information is available in the Customer Acceptance Standards.

### STORAGE

Unless otherwise specified, it is recommended to store glass fibre products in a cool, dry area. The packaging is not waterproof. Be sure to protect the product from the weather and other sources of water. The glass fibre products must remain in their original packaging material until the point of usage. If these conditions are maintained, the glass fibre product should not undergo significant changes when stored for one year. Beyond one year after delivery, the product might evolve, specifically if stored outside the recommended conditions.

Best storage conditions are temperatures between 22°C and 23°C, and humidity between 60% and 65%.

The product should be stored in the workshop, within its original packaging, 48 hours prior to its utilization.

#### Contact

Hpr.ocvamericas@owenscorning.com

Hpr.ocvemea@owenscorning.com

Hpr.ocvap@owenscorning.com



**OWENS CORNING**  
**COMPOSITE MATERIALS, LLC**  
 ONE OWENS CORNING PARKWAY  
 TOLEDO, OHIO 43659  
 1.800.GET.PINK™  
 www.owenscorning.com  
 www.ocvreinforcements.com

**EUROPEAN OWENS CORNING**  
**FIBERGLAS, SPRL.**  
 166, CHAUSSÉE DE LA HULPE  
 B-1170 BRUSSELS  
 BELGIUM  
 +32 267 48211

**OWENS CORNING**  
**OCV ASIA PACIFIC**  
 SHANGHAI REGIONAL HEADQUARTERS  
 2F OLIVE LVO MANSION 620 HUA SHAN ROAD  
 SHANGHAI 200040  
 CHINA  
 +86 262 489 922

This information and data contained herein is offered solely as a guide in the selection of a reinforcement. The information contained in this publication is based on actual laboratory data and field test experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any responsibility or liability arising out of its use or performance. The user agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial compounds when using this or any other reinforcement. Because of numerous factors affecting results, we make no warranty of any kind, express or implied, including those of merchantability and fitness for a particular purpose. Statements in this publication shall not be construed as representations or warranties or as inducements to infringe any patent or violate any law safety code or insurance regulation.