

## Product Description

**Hybon™ 2028** roving is a continuous filament, single-end strand roving designed to achieve enhanced mechanical properties with reinforced polyester, polyurethane, vinyl ester and epoxy resin products in pultrusion. Typical end-use applications include ladder rails, sucker rods, structural beams, angles, cable trays, and pultruded pipe. It offers excellent processing free of catenary with very low fuzz and processing tension. *HYBON 2028* roving consists of multiple filaments of glass fiber coated with a multi-compatible sizing formed into a single, splice-free strand. Each package is in a wrap film with each pallet stretch wrapped to protect the fiber glass roving from dirt and moisture.

## User Benefits

- Excellent composite mechanical properties.
- Multi-compatible with polyester, vinyl ester, polyurethane, and epoxy resins.
- Complete and consistent wet out and saturation.
- Superior abrasion resistance. Minimal to no fuzz generation. Catenary free.
- Extremely low processing / payout tension.
- Product maintains robust integrity in resin or dry processing environment.
- Supported by NEG's extensive technical resources.
- Manufacturing facilities operate quality management systems that comply with ISO 9001:2015 requirements.

Type of Fiber	E-Glass (ASTM D 578-05, Section 4.2.2)			
Type of Sizing	Silane			
Roving Tex, nominal (g/km)	1984	2400	4400	8856
Roving Yield, nominal (yd/lb)	250	206	113	56
Average Fiber Diameter (µm)	24	17	24	34
Other Tex/Yield options are available upon request.				

## Storage

These products should be stored in a cool and dry area. Protect product from all sources of water at all times. A First-in-First-Out (FIFO) stock control system is recommended to minimize the influence of storage conditions. Prior to use, products should be conditioned in the work area for a minimum of 24 hours. If contents of a package unit are partially used, the unit should be closed until the next use. With proper storage, there are no known limitations on the shelf life of the product. To ensure optimal performance, retesting for mechanical properties and feeding behavior is recommended for products stored more than two years from the original production date. To avoid the possibility of potential injury, maintain column stability by limiting pallet stacking to two (2) high as noted on individual shipping containers.

## More Information

<https://www.neg.co.jp/inquiry/>

<https://www.neg.co.jp/en/inquiry/>

NEG reserves the right to modify this document without prior notice.

**NOTE:** This data is offered for informational purposes only in the selection of a composite reinforcement.

Hybon™ is trademark of Electric Glass Fiber America, LLC.

## Mechanical Properties

### Impregnated Strand Tensile Testing

#### (ASTM D2343)

Tensile Strength (MPa/ksi) = 2765/401

Glass Content by Weight (%) = 67.7

### Interlaminar Shear Strength (ASTM D2344)

#### Anhydride Cured Epoxy

Horizontal Shear Dry (MPa/ksi) = 69.6/10.1

Horizontal Shear Wet\*(MPa/ksi) = 69.6/10.1

Strength Retention (%) = 100%

#### Unsaturated Polyester

Horizontal Shear Dry (MPa/ksi) = 51.7/7.5

Horizontal Shear Wet\*(MPa/ksi) = 51.7/7.5

Strength Retention (%) = 100%

\*6 Hour water boil conditioning

## Packaging

- 48 packages/pallet
- 20 kg (44 lbs.) /package.
- Pallet area: 50 in. x 38 in. (127 x 97 cm)
- Average pallet weight: 2,112 lb. (958 kg)