



## Direct Roving 312-E6 for Filament Winding, Weaving and Pultrusion

Direct Roving 312-E6 is an E6-glass roving produced by directly winding a certain number of individual fibers from the bushing without twist. It is coated with a silane-based size and is designed for the filament winding, weaving and pultrusion applications.

### SPECIFICATIONS

Type of Glass  
E6

Type of Fiberglass  
Direct Roving (DR)

Standard  
Linear Mass Densities  
275–9600  
grams per metre (Tex)

Filament Diameter  
13–31 microns

Most Common Sizes  
E6DR13-2400-312

### FEATURES

- Compatible with multiple resin systems
- Complete and fast wet-out
- Excellent acid corrosion resistance
- Good mechanical properties of woven fabrics
- Good processing properties
- Low fuzz

### RESIN COMPATIBILITY

- Epoxy (EP)
- Unsaturated polyester
- Vinyl ester

### USES

- Boats
- Chemical tanks
- Geotechnical gratings
- Wind blades

### TECHNICAL PARAMETERS

Linear Density (%)  
ISO 1889  
± 5%

Moisture Content (%)  
ISO 3344  
≤ 0.10%

Size Content (%)  
ISO 1887  
0.60 ± 0.15%

Breakage Strength (N/tex)  
ISO 3341  
≥ 0.40

### MECHANICAL PROPERTIES

Tensile Strength  
ASTM D2343  
2680 MPa

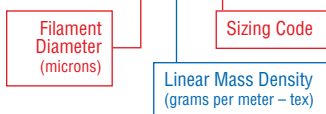
Tensile Modulus  
ASTM D2343  
80352 MPa

Shear Strength  
ASTM D2344  
68 MPa

Shear Strength Retention  
(72 hr. boiling)  
93%

### NOMENCLATURE

E6DR00-000-000



# Direct Roving **312-E6**

## for Filament Winding, Weaving and Pultrusion

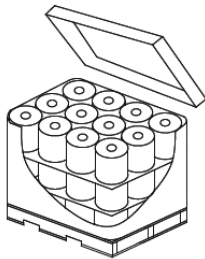
### PACKAGING

Doffs can be packed on pallets or in small cardboard boxes.



Doff

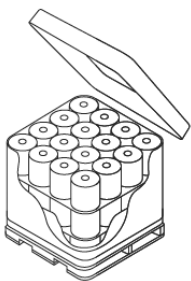
Doff:	270	310
Doff outside diameter	270 mm (10.6 in)	310 mm (12.2 in)
Doff inside diameter	160 mm (6.3 in)	160 mm (6.3 in)
Doff height	260 mm (10 in)	260 mm (10 in)
Doff weight	15.6 kg (34.4 lb)	22 kg (48.5 lb)



3-Layer Pallet  
12 doffs per Layer

### Pallet:

Number of layers per pallet	3	4	3	4
Number of doffs per layer	16	16	12	12
Number of doffs per pallet	48	64	36	48
Net weight	750 (1653.4 lb)	1000 kg (2204.6 lb)	792 kg (1746 lb)	1056 kg (2328 lb)
Length	1120 mm (44 in)	1120 mm (44 in)	1270 mm (50 in)	1270 mm (50 in)
Width	1120 mm (44 in)	1120 mm (44 in)	960 mm (37.8 in)	960 mm (37.8 in)
Height	940 mm (37 in)	1180 mm (46.5 in)	940 mm (37 in)	1180 mm (46.5 in)



3-Layer Pallet  
16 doffs per Layer

### STORAGE

Unless otherwise specified, fiberglass products should be stored in a dry, cool and moisture-proof area. Room temperature and humidity should always be maintained at 15°C – 35°C, 35% – 65% respectively.

Best used within 12 months after production date. Fiberglass products should remain in their original packaging until just prior to use.

To ensure safety and avoid damage to the product, the pallets should not be stacked more than two layers high. When the pallets are stacked in two layers, care should be taken to correctly and smoothly move the top pallet.