



Direct Roving 310 for Filament Winding and Pultrusion

310 Direct Roving is coated with a silane-based sizing compatible with epoxy resins and designed for filament winding and pultrusion applications. 310 is suitable for use in insulation rods, hollow insulation bushings, and insulation stanchions, and is widely used in power generation, transmission, and distribution systems.

SPECIFICATIONS

Type of Glass
E-Glass (E)

Type of Fiberglass
Direct Roving (DR)

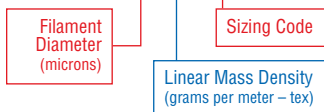
Standard
Linear Mass Densities
1200, 2400, 3000
grams per metre (Tex)

Filament Diameter
17, 24 microns

Most Common Sizes
EDR17-1200-310
EDR17-2400-310
EDR17-3000-310
EDR24-1200-310
EDR24-2400-310
EDR24-3000-310

NOMENCLATURE

EDR00-000-000



FEATURES

- Complete and fast wet-out
- Good integrity
- Good mechanical properties
- Good moisture resistance
- Good processing
- Good ribbonization
- High fiber strength
- Low fuzz

RESIN COMPATIBILITY

- Epoxy (EP)

USES

- Hollow insulation bushings
- Insulation Rods
- Insulation Stanchions
- Power generation, transmission and distribution systems

TECHNICAL PARAMETERS

Linear Density (%)
ISO 1889
± 5

Moisture Content (%)
ISO 3344
≤ 0.10

Size Content (%)
ISO 1887
0.60 ± 0.10

Breakage Strength (N/tex)
ISO 3341
≥ 0.40 (≥ 2400tex)
≥ 0.50 (< 2400tex)

MECHANICAL PROPERTIES

Tensile Strength
ASTM D2343
1900-2100 MPa

Tensile Modulus
ASTM D2343
78000-82000 MPa

Direct Roving 310 for Filament Winding, Pultrusion

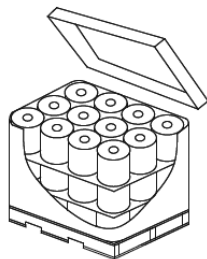
PACKAGING

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



Doff

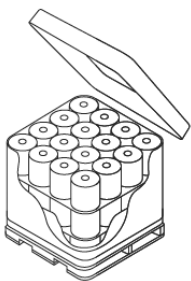
Doff:	275	310
Doff outside diameter	275 mm (10.8 in)	310 mm (12.2 in)
Doff inside diameter	160 mm (6.3 in)	160 mm (6.3 in)
Doff height	260 mm (10 in)	260 mm (10 in)
Doff weight	15.6 kg (34.4 lb)	22 kg (48.5 lb)



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.