



M-8643 (next U543)

Unifilo® Continuous Filament Mat for Pultrusion

PRODUCT DESCRIPTION

This is a continuous filament mat designed for pultrusion processes. It has been treated with a suitable bonding resin and coupling agent. The product has good handling properties and good weight uniformity. M-8643 is produced using Advantex® glass fiber. Advantex® glass fiber combines the electrical and mechanical properties of traditional E-glasses with the acid corrosion resistance of E-CR glass. Advantex® glass meets the requirements stated of both E and E-CR glass in both ISO 2078 and ASTM D578.

PRODUCT APPLICATION

M-8643 mat is designed primarily for the reinforcement of pultruded shapes. The mat has very fast wet-through, good wet-out, good conformability and good surface smoothness. Because of its strength, fast pultruding speeds can be used.



PRODUCT AVAILABILITY

PRODUCT	WEIGHT *		TRIMMED WIDTH *		APPROX. ROLL WT (LBS)	APPROX. ROLL LENGTH (FT)
	(OZ./SQ. FT.)		(INCHES)			
	STANDARD	NON-STANDARD	STANDARD	NON-STANDARD		
M-8643	0.75				3.82 x inches of mat width	955
	1.00	0.75	50	36-39 (1/4 inc.)	3.70 x inches of mat width	702
	1.25				3.76 x inches of mat width	550
	1.50	1.25	68	48-49.5 (1/2 inc.)	3.76 x inches of mat width	476
	1.75				3.76 x inches of mat width	398
	2.00	1.75	72	73, 73.5, 76	3.64 x inches of mat width	344
	3.00				3.59 x inches of mat width	223

* All combinations of non-standard weights and widths may be available only with prior approval of the product engineer.

VISUAL CHARACTERISTICS OR POSSIBLE DEFECTS

The continuous filament mat shall meet requirements as set forth in the visual standards maintained by OCV™ Reinforcements. The maximum number of imperfections allowed per roll is six (6).

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TECHNICAL CHARACTERISTICS

WEIGHT PER SQ FT (OUNCES)	WEIGHT NOM. IND. (GRAMS)	TOLERANCE	OC TEST METHOD
0.75	21.3	+/- 3.02	W-01Fc-T
1.00	28.4	+/- 2.98	
1.25	35.4	+/- 5.30	
1.50	42.5	+/- 4.56	
1.75	49.6	+/- 7.40	
2.00	56.7	+/- 6.29	
3.00	85.1	+/- 8.59	

Mat weight includes glass binder and is measured on a 12" x 12" piece.

WEIGHT PER SQ FT (OUNCES)	EDGE WEIGHT NOM. IND. (GRAMS)	TOLERANCE	OC TEST METHOD
0.75	3.6	+/- 1.6	W-01Fc-T
1.00	4.8	+/- 1.4	
1.25	6.0	+/- 1.8	
1.50	7.0	+/- 2.2	
1.75	8.2	+/- 2.4	
2.00	9.4	+/- 2.8	
3.00	14.2	+/- 4.2	

Values stated are grams per 2" x 12" sample.

WEIGHT PER SQ FT (OUNCES)	LOSS ON IGNITION (%) MIN. IND.	LOSS ON IGNITION (%) MAX. IND.	OC TEST METHOD
All	2.25	6.75	W-05Ec-T

WEIGHT PER SQ FT (OUNCES)	WIDTH NOMINAL	TOLERANCE	OC TEST METHOD
All	As specified	+/- 1/8"	D-03Aa

WEIGHT PER SQ FT (OUNCES)	TENSILE (POUNDS)* MIN. IND.	TENSILE (POUNDS)* MAX. IND.	OC TEST METHOD
0.75	15	86	S-01AG-T
1.00	20	86	
1.25	20	89	
1.50	20	92	
1.75	20	105	
2.00	20	118	
3.00	20	215	

Values stated are based on 3" x 12" test specimens.

COLOR TARGET	MAX. IND.	MAX. AVERAGE (5 INDIVIDUALS)	OC TEST METHOD
22 or less	30	28	HUN.QA.820.COLOR (Yellowness Index ASTM Y1 D1925)

PACKAGING

The mat is wound on a 4" inside diameter paper tube, having a length the same as the mat width with the following tolerances:

- For rolls 68" and greater, the tube length tolerances are plus 0", minus 1/2"
- For rolls less than 68", the tube length tolerances are plus 0", minus 1"

The mat will be so wound that the maximum length of mat telescoping will not exceed 1/2".

The rolls are manufactured to an outside diameter of 19" to 22". Each pallet may contain a maximum of one roll with an outside diameter under 19" but not less than 9". All rolls will be continuous, one-piece lengths with no wrap-ins permitted.

Each roll is protected with a polyethylene film and delivered 6 rolls per pallet. The pallet size is 66" x 44" with a minimum height of 3 1/2". The load is fixed to the pallet with a stretch or a shrink film at Owens Corning option. A content label shall adequately identify each roll.

STORAGE

Unless otherwise specified, it is recommended that glass fiber products be stored in a cool dry area. Temperature should not exceed 35°C and the relative humidity should be kept below 75%. Glass fiber products must remain in their packaging material until just prior to their use. If these conditions are respected, glass fiber products should not undergo significant changes when stored for extended periods of time.

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