



EMULSION BONDED M 705 MAT FOR CONTACT MOULDING

1. PRODUCT DESCRIPTION

M 705 mat is made of chopped glass strands bonded in mat form with an emulsion binder. It is a thin, porous, well bonded mat which maintains its integrity during the impregnation process and provides an uniform wet-through rate.

M 705 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® meets the requirements stated of both E and E-CR glass in both ISO 2078 and ASTM D578-98.

M 705 mat is manufactured in conformity with ISO 2559, NF B38301 and DIN 61853 standards.

M 705 mat (300, 450 & 600 g/m²) is approved by the Lloyd's Register of Shipping and by Det Norske Veritas.

2. USE

M 705 mat is designed as a reinforcement medium for polyester resins used in contact moulding processes.

Typical applications are in laminates requiring good translucency and/or good ageing characteristics.

Major mat characteristics are : good drapability, rapid wet-through and wet-out, good laminate translucency, good mechanical properties.

3. AVAILABLE STANDARD PRODUCTS

a) Weight (g/m²)

300 - 375 - 450 - 600 & 900

b) Width (cm)

Standard widths : 95 and 125 cm - 1 side trimmed.

The width specified on the order for one side trimmed mat shall be the width as measured from the trimmed side up to the other side (untrimmed) at point where the mat becomes coherent.

4. PRODUCT ACCEPTANCE LIMITS AND TEST METHODS

Property	Mat Weight (g/m ²)	Specification			Test method
		Min ind	Nom	Max ind	
Weight uniformity (g/1000 cm ²) (1) (2)	300	24.3	30.0	35.7	TM-MT-02-PP
	375	30.3	37.5	44.7	
	450	36.4	45.0	53.6	
	600	48.6	60.0	71.4	
	900	72.9	90.0	107.1	
Average weight uniformity (%) (4)	All	- 10 %	Nom	+10 %	
Ignition loss (%) (2) (3)	All	2.9	-	6.0	TM-MT-04-PP
Tensile strength (N) (2)	300	70	-	-	TM-MT-06-PP
	375	80	-	-	
	450	90	-	-	
	600	100	-	-	
	900	110	-	-	
Width (cm) 1 side trimmed	All	-0.0	Nom	+3.0	TM-MT-08-PP

- (1) Mat weight includes glass and binder.
- (2) Limits are valid for widths of 32 cm and over. When mat is supplied in width less than 32 cm wide, the customer may request certification that the acceptance limits have been met before the product was slit
- (3) The ignition loss includes essentially the binder, the sizing on the filaments and a very small percentage of moisture which will not exceed 0.2 %
- (4) Average of the 1000 cm² specimens taken across the mat width. Valid for widths of 95 cm and over.

5. VISUAL PROPERTIES

Colour The mat shall be white to off white

Holes Holes over 50 mm in diameter are not allowed.

Foreign matters (dirt spots, binder spots, unsplit fibers ...)
Foreign matters above 25 mm are not allowed.

Long fibers Long fibers above 30 cm are not allowed.

6. PREPARATION FOR SHIPMENT

A. Roll-up

The mat is wound on a 7.5 cm inside diameter carton tube to an overall outside diameter of approximately 30 cm (full roll).

B. Wrap-ins rolls

On occasion it will be necessary to wrap-in two or three lengths of mat (none less than 10m) in order to reach a full roll diameter. Rolls containing wrap-ins are marked accordingly.

C. Rolls length and weight

Nominal mat weight	Nominal full roll length (30 cm diam)	Approx. full roll weight (125 cm width)	Approx pallet net weight (125 cm - full rolls)
300 g/m ²	135 m	51 kg	612 kg
375 g/m ²	115 m	54 kg	648 kg
450 g/m ²	100 m	56 kg	672 kg
600 g/m ²	75 m	56 kg	672 kg
900 g/m ²	50 m	56 kg	672 kg

D. Standard packaging method

The mat is packed in polyethylene prior to insertion in corrugated cartons of sufficient strength to protect the content during shipment and storage. The cartons are palletized 12 per pallet. Pallet size : 127 x 97 cm. Cartons are fixed to the pallet by stretch wrapping.

E. Storage conditions

Unless otherwise specified, it is recommended to store glass fiber products 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 packaging material until just prior to its use. If these conditions are respected, glass fiber products should not undergo significant changes when stored for extended periods of time.