

Evaluation Listing CCMC 13575-L Mule-Hide EPDM Membrane

MasterFormat: 07 53 10 **Evaluation issued:** 2013-03-05 Re-evaluated: 2016-01-20 Revised: 2018-07-18

1. Evaluation

The product conforms to CGSB 37-GP-52M-1984, Type 1, Class A.

2. Description

The product is a single-ply, non-reinforced, black, ethylene/propylene diene terpolymer (EPDM) roofing and waterproofing membrane. The product is available in thicknesses of 1.14 mm and 1.52 mm, in widths up to 15.42 m, and in lengths up to 60.69 m, but can also be cut to the desired length.

3. Standard and Regulatory Information

The product is suitable for use in exposed and non-exposed applications. Only materials recommended by the manufacturer should be in contact with the membrane. The manufacturer's installation recommendations must be followed.

See the Annex, appended to this Listing, which summarizes the product standard.

This product was evaluated to the product standard referenced in the Annex current as of 2013-02-08. Note that the Annex may have been updated since this Listing was issued to include more recent editions of the applicable product standard. Therefore this Listing may not reflect the requirements contained in any updated version of this product standard.

Listing Holder

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Ethylene-Propylene-Diene Terpolymer Sheet Used in Single-Ply Roof Membrane [Annex]

MasterFormat: 07 53 10 **Issued:** 2017-10-05

Scope

These Evaluation Listings apply to ethylene-propylene-diene terpolymer (EPDM) intended for use in single-ply roofing membranes exposed to the weather for both new construction and re-roofing. Although additional criteria—such as skid and abrasion resistance—may also be important, these additional criteria have not been included in these Evaluation Listings.

The proponent has demonstrated that the product meets the requirements of the following standard:

ASTM D 4637/D 4637M-15, "Standard Specification for EPDM Sheet Used In Single-Ply Roof Membrane"

The standard specifies that the membrane sheet shall be formulated from EPDM polymers and other compounding ingredients. EPDM shall be the principal polymer, constituting more than 95% of total polymer content.

The standard categorizes the product by type:

- Type I: non-reinforced membrane
- Type II: scrim (or fabric) internally-reinforced membrane
- Type III: fabric-backed membrane

Additional Information

If stated in the Listing, the proponent has provided information related to the following:

Fire Classification of Roof Covering

The membrane tested in accordance with the CAN/ULC S107-10, "Standard Methods of Fire Tests of Roof Coverings."

Fire-Resistance Rating

The membrane used in a roofing assembly tested in accordance with CAN/ULC S101-14, "Standard Methods of Fire Endurance Tests of Building Construction and Materials."

Wind Uplift Resistance of Membrane Roofing Assemblies

The membrane used in a roofing assembly tested in accordance with CAN/CSA-A123.21-10, "Standard Test Method for the Dynamic Wind Uplift Resistance of Membrane-Roofing Systems."

Standard

Table 1 Physical and Performance Requirements for Elastomeric Sheet Membrane Roofing

	Property	Unit	Requirement		
	ггорегцу		Type I	Type II	Type III
Measured thickness	Sheet-overall	mm	1.016	1.016	
	Coating over scrim or fabric	mm		0.38	0.76
Breaking strength		N		≥ 400	≥ 400
Tensile strength		MPa	≥ 9.0		
Dynamic puncture resistance			Pass @ 5 J	Pass @ 10 J	
Static puncture resistance			Pass @ 20 kg	Pass @ 25 kg	
Elongation ultimate		%	≥ 300	≥ 250	≥ 300
Elongation @ fabric break ultimate	$\mathbf{MD}^{(1)}$	%		≥ 15	
	$\mathbf{XD}^{(1)}$	%		≥ 15	
Tensile set		%	≤ 10		
Tear resistance		kN/m	≥ 26.27		
Tearing strength		N		≥ 45	≥ 45
Brittleness point		°C	-45	-45	-45
Ozone resistance, on cracks			Pass	Pass	Pass
Heat aging	Breaking strength	N		≥ 356	≥ 356
	Tensile strength	MPa	8.3		
	Elongation, ultimate	%	≥ 200	≥ 200	≥ 200
	Tear resistance	kN/m	≥ 21.9		
	Linear dimensional change	%	≤ ± 1	≤±1	≤ ± 1
Water absorption		mass %	≤ +8, −2 of original	≤+8, −2 of original	≤+8, −2 original
Factory seam strength		kN/m		≤ 8.8	
Weather resistance	Visual inspection		no cracks or crazing	no cracks or crazing	no cracks o
	PRFSE ⁽²⁾	%	≥ 30		
	Elongation, ultimate	%	≤ 200		
Fabric adhesion		N			525

Notes to Table 1:

- 1. "MD" means "machine direction" and "XD" means "cross-direction."
- 2. "PRFSE" means "percent retained fractional strain energy."

Labelling

The standard requires that the material shall be rolled on a substantial core and packaged in a standard commercial manner, unless otherwise specified in the contract or order. Shipping containers shall be suitably marked to clearly identify the following:

- the name of the material;
- the stock and lot numbers;
- the ASTM designation number and type;
- · the size and quantity as defined by the contract or order; and
- the name of the manufacturer or supplier.

National Building Code (NBC) of Canada

NBC References

ASTM D 4637/D 4637M-15 is not referenced in the NBC 2015; however, ASTM D 4637/D 4637M-12 is referenced in Sentence 9.13.3.2.(2) and Table 5.9.1.1. of Division B of the NBC 2015.

All products that are compliant with ASTM D 4637/D 4637M-15 are also compliant with ASTM D 4637/D 4637M-12.