

## Membrane Waterproofing System

### 3757.1 SCOPE

This Specification covers a membrane waterproofing system to be used for waterproofing below-grade joints in concrete structures, tunnels and other below grade applications on concrete structures.

### 3757.2 REQUIREMENTS

#### A General Requirements

The approved membrane waterproofing system shall consist of a primer, a rubberized asphalt membrane on a cross-laminated polyethylene carrier film, mastic and protection layer.

**Only Mn/DOT Membrane Waterproofing Systems shall be allowed for use. The Approved Product List can be accessed on the Office of Materials website.**

#### B Specific Requirements

1. Primer- The primer shall be a solvent-based primer specially formulated for use with approved waterproofing system. The primer shall meet EPA VOC Standards for Architectural Coatings.

2. Membrane

Property	Specification	Test Method
Thickness, mils	56+	ASTM 3767-Method A
Tensile Strength, MPa (PSI)	1.7 (250)+	ASTM D-412 Die C
Elongation, %	300+	ASTM D-412 Die C
Composition	Rubber Asphalt	Infrared Scan

3. Carrier Film

Property	Specification	Test Method
Thickness, mils	4+	ASTM 3767-Method A
Composition	Polyethylene	Infrared Scan

4. Composite Membrane

Property	Specification	Test Method
Pliability, 180° bend, 25 mm (1 inch) mandrel @ -32°C (-25°F)	Unaffected	ASTM 146
Permeance, Perms	.05 -	ASTM E96, B
Peel Adhesion, kg/mm (lbs/inch)	5+	ASTM D 903 Modified
Water Absorption, %	0.1-, 72 hours	ASTM 1970

### 3757.3 INSPECTION, SAMPLING AND TESTING

The manufacturer shall submit a one square foot sample of the membrane along with a letter of certification and test results stating that the membranes meets the requirements of this specification. Other components of the waterproofing system do not need to be sampled for testing.

The manufacturer shall also submit detailed technical data sheets for all components of the membrane waterproofing system.