



**SPECIAL PROVISIONS
FOR
EPDM WATERPROOFING MEMBRANE**

**Clayton County
BHM-CHBP-2315(607)--NA-22**

**Effective Date
March 16, 2021**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

152038.01 GENERAL

- A.** This section covers the furnishing of all labor, materials, tools, equipment and performance of all work and services necessary or incidental of the installation of a waterproofing membrane with granular top and bottom protective layers beneath new concrete pavement. The purpose of this waterproofing membrane is to block and intercept drainage that penetrates the pavement.
- B.** This work includes the installation of a protective sand layer, the Ethylene Propylene Diene Terpolymer Membrane (EPDM), and a topping protective sand layer as shown in the plans and as specified by the Engineer. Installation shall include joint seaming, membrane edge terminations and any other accessories necessary for a complete watertight installation.
- C.** Submit a complete list of materials and equipment for approval before any equipment or materials are ordered. Submit manufacturer's information for all items related to installation.

152038.02 PRODUCTS

- A.** Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified, or approved equal.

1. Carlisle SynTec Incorporated.
 2. Firestone Building Products Company.
 3. Versico Inc.
- B.** EPDM Roofing Membrane: ASTM D 4637, Type I, nonreinforced uniform, flexible sheet made from EPDM, and as follows:
1. Thickness: 60 mils, nominal.
 2. Exposed Face Color: Black.
- C.** General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.
1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.
- D.** Sheet Flashing: 60 mil thick EPDM, partially cured or cured, according to application.
- E.** Bonding Adhesive: Manufacturer's standard bonding adhesive.
- F.** Seaming Material: Single-component butyl splicing adhesive and splice cleaner or manufacturer's standard synthetic-rubber polymer primer and 3 inch wide minimum, butyl splice tape with release film.
- G.** Lap Sealant: Manufacturer's standard single-component sealant, color to match roofing membrane.
- H.** Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.
- I.** Metal Termination Bars: Manufacturer's standard predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch thick; with anchors.
- J.** Fasteners: Factory-coated steel fasteners and metal or plastic plates with corrosion-resistance provisions designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.
- K.** Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, in-seam sealants, termination reglets, cover strips, and other accessories.
- L.** Protective Granular Layers: Sand meeting the requirements of PCC concrete fine aggregate, Gradation No. 7 of the Aggregate Gradation Table.

152038.03 CONSTRUCTION

- A.** Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of the waterproofing membrane system:
1. Verify subgrade surfaces are smooth, flat, clean, dry, and free of sharp stones, loose materials or foreign materials that may damage the membrane.

- B.** Proceed with installation only after unsatisfactory conditions have been corrected.
- C.** Place 2 inch sand layer over prepared base to provide a protective cushion to provide and support EPDM membrane. Use caution when installing directly on limestone arch stones.
- D.** Install EPDM membrane over area to receive membrane according to membrane roofing system manufacturer's written instructions. Unroll roofing membrane and allow to relax before installing.
- E.** Accurately align membrane and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- F.** Adhere and mechanically fasten roofing membrane securely at terminations, penetrations, and perimeter according to manufacturer's instructions and contract documents.
- G.** Apply membrane with laps shingled with slope of pavement.
- H.** Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement, and firmly roll side and end laps of overlapping membranes according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of membrane terminations.
 - 1.** Apply a continuous bead of in-seam sealant before closing splice if required by membrane system manufacturer.
- I.** Tape Seam Installation: Clean and prime both faces of splice areas, apply splice tape, and firmly roll side and end laps of overlapping roofing membranes according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of membrane terminations.
- J.** Repair tears, voids, and lapped seams in membrane that does not meet requirements.
- K.** Install flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.
- L.** Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- M.** Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
- N.** Clean splice areas, apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of sheet flashing terminations.
- O.** Terminate and seal top of membrane and flashings and mechanically anchor to substrate through termination bars.
- P.** Install protective layer of 2 inch of sand over installed membrane.
- Q.** Correct deficiencies in or remove membrane system that does not comply with requirements; repair substrates; and repair or reinstall membrane system to a condition free of damage and deterioration.

152038.04 METHOD OF MEASUREMENT

EPDM membrane shall be measured on a square yard basis for the surface area of the membrane. No separate measurement shall be made for seams, flashings, termination bars or protective sand layers

152038.05 BASIS OF PAYMENT

Payment shall be at the unit price per square yard for EPDM Membrane System, and shall include all labor, materials, and equipment necessary. The membrane system shall include the two 2 inch protective sand layers placed below and on top of the membrane; all flashing, termination, jointing and seaming.