

Section 07310

EPDM fully adhered roof

Section Includes

- A. Preview
- B. Quality Assurance
- C. Delivery, Storage and Handling
- D. Materials
- E. Examination/Preparation
- F. Removal
- G. Installation
- H. Warranty

Preview

- A. Building permits and contractor licenses must be obtained by contractors as required by all applicable codes and ordinances, and laws before work begins. Consequences of failure to do so fall completely on the Contractor.
- B. Verify dimensions and construction conditions at the site and perform all work to complete the Project under this Contract, regardless of variations that may be found, without additional cost to the Owner.

Quality Assurance

- A. EPDM shall be black and 60mil single ply roofing material
- B. Materials and installation shall comply with all laws, codes and regulations of Federal and State authorities having jurisdiction over this part of the work.
- C. Installer: A firm with not less than five years of experience in installation of EPDM fully adhered roofs and related work required for this project and which is acceptable to/or licensed by manufacturer of primary roofing material.
- D. Sheet metal flashing and trim shall conform to the following: Recommended practices contained in "Architectural Sheet Metal Manual" Sheet metal and Air Conditioning Contractor's National Association, Inc. (SMACNA) latest edition.
- E. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this Section.

Deliver, Storage and Handling

- A. Make no deliveries to the Project until ready to install or until approved storage is provided. Where this provision is neglected, and materials are delivered to the Project site prior to the Owner's being able to receive them, such materials shall be

- properly stored elsewhere at the expense of the Contractor with adequate insurance coverage provided for the off-site storage.
- B. Deliver materials in original, unopened containers and rolls with labels intact and legible.
 - C. Provide above-grade platform storage for materials, and supports for equipment, that will protect the materials from moisture damage and minimize damage to ground surfaces. Use tarpaulins to provide protection of stored materials. Factory wraps alone are not acceptable.
 - D. Handle all materials in a manner which will not damage them. Store rolled goods on end.
 - E. Store materials to prevent damage to existing or new construction, and to prevent overloading the buildings structural system.
 - F. Immediately report damage to existing construction to the owner and necessary substrate work shall be done before proceeding with EPDM roofing membrane.
 - G. Rubber membrane must be installed on dry and cleaned surfaces. EPDM must be installed in temperatures above 40 degrees F. Membrane must be opened to relax for a minimum of 30 min before installation, more if it's colder outside.
 - H. All perimeter and penetration flashing should be removed.
 - I. Mechanical fasteners- use a pull-out test to check deck conditions.
 - J. Apply roof only under dry conditions

Materials

- A. EPDM 60mil for fully adhered roofs such as
- B. Use products that manufacturer will warranty for 20 years
- C. Flashing colors as selected by Owner.
- D. Work to avoid seams where possible.
- E. Adhesive used must be appropriate for substrate- solvent based.
- F. Use anchor discs or high load plates for mechanically fastened perimeter
- G. Use reinforced termination strips with tape for adhered fastened perimeter
- H. Seaming of laps-use seam tape stored at 75degrees
- I. Use tape Primer and splice cleaner for seaming
- J. Use peel and Stick tape for seaming
- K. Metal drip edge: Minimum .024" prefinished sheet aluminum, brake-formed to provide 3" roof deck flange, and 1 ½" fascia flange with 3/8" drip at lower edge. Furnish 8' or 10' lengths. Color to be selected by owner.
- L. Prefinished aluminum .024" sheet or coil materials, factory primed and finished, "Una-Clad" (Copper Sales, Inc.); "Pre-Clad" (Peterson Aluminum Corporation); "Color-Klad" (Vincent Metals, Inc.). Color to be determined by owner.
- M. Provide color-matched fasteners, where fasteners are exposed to view.
- N. Provide color-matched touch-up paint.

Examination/Preparation

- A. Examine the surface condition of the substrates to receive roofing and associated work, and notify the owner in writing of unsatisfactory conditions. The contractor

- upon approval shall replace any damaged and/or rotted wood boards on roof before installation of new roofing.
- B. The installer shall examine the areas and conditions under which flashing and sheet metal work is to be installed and notify the owner in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected. Photos are required to document conditions before and after corrections.
 - C. Surfaces to which EPDM membrane are to be applied shall be uniform, smooth, sound, clean, dry and free of irregularities. Contractor shall notify owner immediately of any condition that would impede work and reduce finished quality.
 - D. Replace existing fasteners for materials exposed but left in place that are loose, deformed, damaged, or corroded.

Removal of Existing Roofing

- A. Contractor shall protect building exterior walls, windows and site vegetation from damage of tear-off. All debris from this work shall be cleaned and removed from site daily.
- B. Contractor shall remove all existing roofing material, shingles, felt, nails, old membrane and flashing in such a manner as not to damage the existing substrate. Clean substrate of any projections and substances detrimental Rubber membrane material. Cover knotholes or other minor voids in substrate with sheet metal flashing secured with roofing nails. Note: Any damage to building, windows, screens, vegetation, etc. resulting from roof removal should be repaired at no cost to the owner.
- C. All safety measures needed to protect the safety of MPHA residents are the responsibility of the contractor.

Installation/ Application

- A. All flashing needs to be replaced on the entire house.
- B. Provide metal 'reglet' flashing adhered and sealed to masonry with Vulcum caulk or approved equal (Stucco or brick) at specified locations. All Chimneys shall be flashed on the 'high' side with a metal 'saddle' (cricket) or MPHA approved equal in conjunction with the 'reglet'. (No flat flashing will be acceptable at this location). See detail.
- C. Securely fasten all materials to substrate to provide rigid installation.
- D. Use manufactured approved sealants where called for.
- E. Use solvent based adhesive for adherence and use all manufacturers guidelines
- F. Use peel and stick pipe boots
- G. A slip sheet may be used under the membrane to provide a smooth surface.
- H. Insulation maybe used as a separator.
- I. Bituminous materials are not allowable.
- J. Decks sloping less than 4:12 will be roofed with fully adhered 60 mil EPDM.
- K. All membranes, substrates to be adhered must meet manufacturers approval for 20 yr. warranty.

- L. All surfaces must be clean, smooth and dry, compatible and free of contaminants, grease and oil.
- M. All fasteners but be properly seated, plates flush.
- N. Unroll membrane and let rest for 30min plus before applying adhesive.
- O. Make sure the membrane is positioned for an appropriate overlap for seaming.
- P. When using, adhesive make sure it is fully stirred and is uniform in color and all solids are dispersed.
- Q. Must use termination bars- extruded aluminum.
- R. Perimeter fastening strip.
- S. Sealants- single ply sealing mastic and EPDM lap caulk.
- T. Roll adhesive on to substrate and EPDM.
- U. When adhesive is set roll membrane on to substrate, apply even pressure with a roller- min of 75lbs.
- V. Make sure all laps are shingled and do not buck water.
- W. Edges must lap at least 3" depending on type of installation up to 6".
- X. Laps should be at least 3' apart from each other to ensure a 20yr warranty.
- Y. Have membrane go up a minimum of 4" up the wall with a termination bar and counter flashing into a reglet.

WARRANTY

- A. The contractor shall warrant the EPDM roof's installation to be free of faults and defects for 2 years. The warranty shall be in writing and shall be signed by the contractor.
- B. Manufacturer's Warranties: Prior to acceptance of work, furnish roof system manufacturer's written 20-year no-dollar-limit total system warranty, and the roof system manufacturer's written 20-year membrane warranty.
- C. Contractor's Warranty: Prior to acceptance of the Work, furnish written two (2) year warranty covering all roofing work specified herein, using the form at the end of this Section.