

SECTION 32 97 00
VEGETATED ROOF ASSEMBLIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Vegetated roof assemblies.

1.2 DEFINITIONS

- A. Captured Water: Water that is retained in the drainage layer of a vegetated roof assembly after new water additions have ceased and that cannot escape the roof except through evaporation or plant transpiration.

1.3 SUBMITTAL

- A. Product Data: For each vegetated roof assembly and each component, including each growing medium.
- B. Shop Drawings: For vegetated roof assembly. Include roof plans and drain locations; details of vegetated roof assembly; depth of growing media; and attachments to other work.
- C. Samples: For each exposed product and for each color and texture specified.
- D. Product certificates.
- E. Product test reports.
- F. Warranty: Sample of special warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified vegetated roof assembly Installer, approved, authorized, or licensed by membrane roofing manufacturer, whose work has resulted in successful establishment of vegetated roofs.
- B. Source Limitations: Obtain vegetated roof assembly components from single source from single manufacturer.
- C. Pre-installation Conference: Prior to work, hold a pre-installation conference arranged by the Contractor and attended by the Material Manufacturers Technical Representative and the COR.

1.6 WARRANTY

- A. Special Warranty for Vegetated Roof Assembly: Installer agrees to repair or replace vegetated roof assembly and components that fail in materials or workmanship within specified warranty period.
 - 1. Failure includes, but is not limited to, ponding water or prolonged wetness of the growing medium caused as a result of failure of the assembly to properly drain.
 - 2. Warranty Period: Five years from date of Planting Completion.

1.7 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Provide maintenance by skilled employees of vegetated roof assembly Installer. Maintain as required in Part 3. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than the following maintenance period:
 - 1. Maintenance Period: 12 months from date of Planting Completion.

PART 2 - PRODUCTS

2.1 VEGETATED ROOF ASSEMBLY COMPONENTS

- A. Moisture-Retention and Drainage Products:
 - 1. Moisture-Retention Mat: Manufacturer's standard water-retaining fabric manufactured from synthetic fibers.
 - 2. Molded-Sheet Drainage Panels: Manufacturer's standard drainage board formed from geotextile-faced, molded-plastic sheet with a geotextile face and "cups" of the molded sheet facing upward like small reservoirs to retain water while allowing excess water to drain away below the board.
- B. Root Barrier: Manufacturer's standard black plastic sheet manufactured from polyethylene or polypropylene plastic; formulated to resist root growth and bacteria.

2.2 VEGETATED ROOF ASSEMBLIES

- A. Continuous Vegetated Roof Assembly: Continuous-coverage assembly consisting of manufacturer's standard vegetated roof assembly components for installation over membrane roofing.
 - 1. Assembly Depth, Nominal: Manufacturer's standard for required plantings, including growing medium.
 - 2. Assembly Weight: Maximum 28 lb/sq. ft. (137 kg/sq. m), including growing medium and plants and saturated with captured water, but not including weight of roofing system.

3. Plantings: Sedum as selected by Architect from manufacturer's standard varieties.

2.3 MANUFACTURED GROWING MEDIA

- A. Growing Medium: Vegetated roof assembly manufacturer's lightweight, manufactured soil mixture.

2.4 ACCESSORIES

- A. Protection Board: As recommended by membrane roofing manufacturer.
- B. Access Boxes: Manufacturer's standard plastic boxes with removable, rigid covers for accessing drains, valves, and switches beneath the finish elevation of growing medium; secure each cover with four noncorrosive screws.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Examine each area to receive vegetated roof assembly.
1. Verify that perimeter and other flashings are in place and secure along entire lengths where they will be covered by vegetated roof assembly.
- B. Protection Course: Cover membrane roofing with protection board with butted and fully taped joints before membrane roofing is subject to vegetated roof assembly installation work.
- C. Install vegetated roof assembly according to manufacturer's written instructions.

3.2 PLANTING

- A. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in the growing medium within a planting area.

3.3 SOIL-RETAINER INSTALLATION

- A. Install soil retainer where indicated according to manufacturer's written instructions.

3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage membrane roofing manufacturer's authorized service representative to provide inspection of vegetated roof assembly installation and prepare inspection reports.
- B. Correct deficiencies in work that do not comply with requirements.

3.5 PLANT MAINTENANCE

- A. General: During maintenance period, maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing devices, resetting plants to proper elevations or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.
- B. Replace growing medium that becomes displaced or eroded because of settling or other processes.
- C. Use only products and methods acceptable to membrane roofing manufacturer.

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