

Section 5.6. Precipitation

5.6.1. Protection from Precipitation

5.6.1.1. Required Protection from Precipitation

(See Note A-5.6.1.1.)

- 1) Where a *building* component or assembly is exposed to precipitation, the component or assembly shall
 - a) minimize ingress of precipitation into the component or assembly, and
 - b) prevent ingress of precipitation into interior space.
- 2) Deleted.

5.6.1.2. Installation of Protective Materials

(See Note A-5.6.1.2.)

1) Except as required by Sentences (2) and (4), where protective materials are applied to assemblies to provide the required protection from precipitation, they shall be installed so as to shed precipitation or otherwise minimize its entry into the assembly and prevent its penetration through the assembly. (See Note A-5.6.1.2.(1).) (See also Clause 5.3.1.2.(1)(d).)

2) A vegetated roof assembly shall be permitted if

- a) the vegetated roof assembly conforms to the requirements of Article 3.1.14.4.,
- b) gravity loads on the *building* structure are determined by ASTM E 2397/E 2397M-19 “Standard Practice for Determination of Dead Loads and Live Loads Associated with Vegetative (Green) Roof Systems”
- c) the roof that supports the vegetated roof system is waterproof (see Note A-1.4.1.1. of Division A),
- d) the vegetated roof assembly is designed and constructed with a root barrier, or the roofing membrane is resistant to root and rhizome penetration when tested in accordance with ANSI/SPRI VR-1, “Procedure for Investigating Resistance to Root or Rhizome Penetration on Vegetative Roofs”, and
- e) the vegetated roof assembly is designed and constructed with water retention materials to support vegetative growth, and with drainage materials to convey water to roof drains.

(See Note A-5.6.1.2.(2).)

3) Flashings, drips, or overhangs shall be incorporated to deflect accumulated water from the *building* face where there are changes in planes of walls and roofs, changes in cladding material, or window or door heads or sills.

(See Note A-5.6.1.2.(3).)

4) A roof assembly shall resist the entry of water into the *building*, and where the roof assembly incorporates a membrane, the roof assembly shall be designed and constructed to conform to the requirements of Article 5.2.2.2.

5) Each material, component, or assembly, including electrical services, that penetrates through a roof assembly shall pass through a flashing that can be sealed against both air leakage and the weather, and which is suitable for its purpose.

6) Ballasted membrane roofs not subject to the requirements in Sentence 5.2.2.2.(4) shall be designed and constructed to resist wind loads.

5.6.2. Drainage, Accumulation and Disposal

5.6.2.1. Drainage

(See Note A-5.6.2.1.)

1) Materials, components, assemblies, joints in materials, junctions between components and junctions between assemblies exposed to precipitation shall be

- a) designed to shed precipitation or, where a waterproofing roof assembly is concerned, sealed to prevent ingress of precipitation, and
- b) drained to direct precipitation to the exterior.

2) Deleted.**5.6.2.2. Accumulation and Disposal**

- 1) Where water, snow or ice can accumulate on a *building*, provision shall be made to minimize the likelihood of hazardous conditions arising from such accumulation.
- 2) Where precipitation can accumulate on sloped or horizontal assemblies, provision shall be made for drainage conforming with Article 2.4.10.4. of Division B of Book II (Plumbing Systems) of this By-law.
- 3) Where downspouts are provided and are not connected to a sewer, provisions shall be made to
 - a) divert the water from the *building*, and
 - b) prevent *soil* erosion.
- 4) Junctions between vertical assemblies, and sloped or horizontal assemblies, shall be designed and constructed to minimize the flow of water from the sloped or horizontal assembly onto the vertical assembly.
- 5) Where a roof or balcony is entirely enclosed by parapet walls, there shall be a sufficient number of overflow outlets installed in the parapet walls in order to properly drain the roof or balcony in the event that any rainwater conductors become obstructed. (See Note A-5.6.2.2.(5).)
- 6) Where *roof drains* connected to a *drainage system* are used to satisfy the requirements in this Section, they shall be suitable for the type of roof assembly and shall be sealed against the weather following the requirements of Article 5.6.1.2.

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