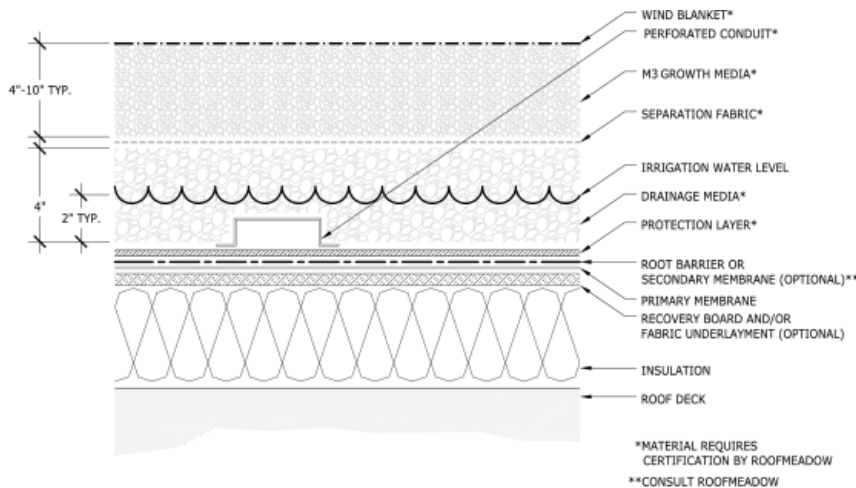


Roofmeadow® Type IV Data Sheet

Our experience demonstrates that the most efficient designs for the vast majority of American green roofs can be derived from five basic green roof types (Type I, II, III, **IV**, V). Roofmeadow® has developed assemblies for each of these types.

The selected assembly depends in part on project conditions including climate, desired plant community, performance requirements, and load bearing capacity of the building. All assemblies will include the following elements: 1) protection of the waterproofing membrane from root and biological attack, 2) protection of the waterproofing membrane from physical abuse and accident, 3) a base drainage layer, 4) a separation layer to prevent fine-grained engineered soils from fouling or clogging the drainage layer system, and 5) an engineered soil to support the vegetation.



Type IV: Dual Media With Flood Irrigation

This three-course assembly involves a layer of growing media over two layers of a granular mineral drainage media. A root-permeable separation fabric separates the growth media from the granular media layers and keeps the growing media fines from mixing with the granular media. The roof drains and pitches are manipulated to pond water in the lower layer. The depth to which water may accumulate in this zone is typically 1 to 3 inches (2.5 to 8 cm). During the growing season, a constant water level is maintained by an automated valve. The retained rain or irrigation water performs just as a perched water table does in nature. The upper granular layer (above the water storage layer) facilitates drainage. Typical assembly thicknesses range from 6 to 10 inches (15 to 26 cm). Type IV assemblies are ideal for supporting turf and biodiverse meadow and woodland landscapes. Type IV green roofs promote strong plant growth by draining and distributing water efficiently and concentrating the root mass in a stable temperature and moisture zone. Irrigation is provided by a highly efficient flood system that introduces water at the root level, an approach that minimizes water loss due to evaporation and promotes deep root development.

The profile of a Type IV assembly is as follows:

- Wind Erosion Stabilization System
- Growth Medium
- Root-permeable Separation Fabric
- Light-weight Granular Drainage Media (water storage layer)
- Protection Fabric
- Root Barrier Membrane (when required)
- Waterproofing System