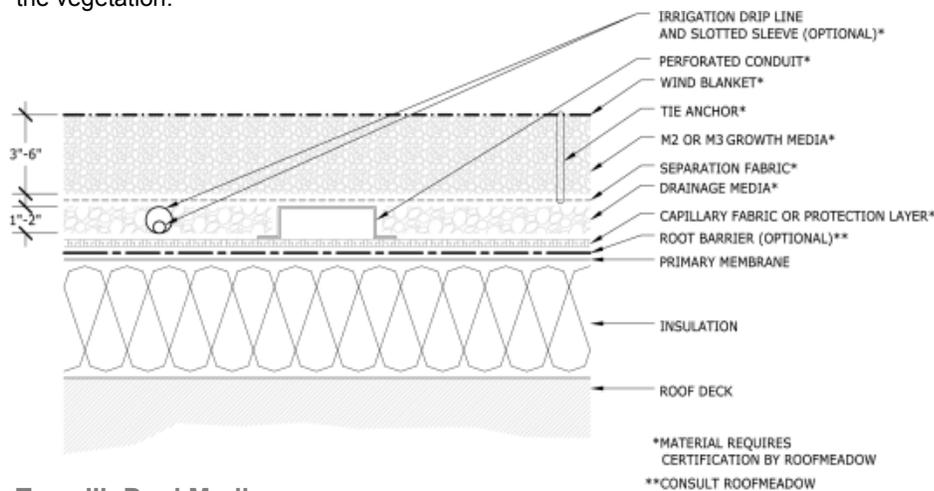


## Roofmeadow® Type III Data Sheet

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 III: Dual Media

The dual media Type III assembly utilizes a granular mineral drainage media layer beneath a lightweight, fine-grained growth media. A root-permeable separation fabric separates the media layers and keeps the growth media fines from mixing with the granular media. The permeable granular media base provides several advantages; it 1) absorbs moisture, 2) provides additional hospitable volume for root growth, and 3) moderates the rate at which water is discharged from the green roof. This assembly best approximates the natural conditions associated with shallow soil over shale bedrock. Assembly thicknesses typically range from 4 to 8 inches (10 to 20 cm). Compared to Type II assemblies of a comparable thickness, Type III assemblies are significantly more drought tolerant and accommodate a broader plant palette, even supporting turf in many climates. Type III green roofs promote strong plant growth by draining and distributing water efficiently and concentrating root mass in a stable temperature and moisture zone. If irrigation is required, then highly efficient base capillary irrigation introduces water at the root level, an approach that minimizes water loss from evaporation and promotes deep root development.

The profile of a Type III assembly is as follows:

- Wind Erosion Stabilization System
- Growth Medium
- Root-permeable Separation Fabric
- Light-weight Granular Drainage Media
- Protection Fabric (for un-irrigated systems)
- Capillary Fabric (for irrigated systems)
- Root Barrier Membrane (when required)
- Waterproofing System