# **Greenroof-Roofscapes**®



## Short Form Application Overview

## 1. Ram-Tough (RT) 250 Membrane

• The installation procedure for the RT 250 waterproofing membrane starts with preparing the deck surface, priming of substrates and installation of perimeter and penetration flashings.

• On the horizontal deck surfaces a 90 mil base coat of RT 250 bitumen is applied with a squeegee. Into the base coat embed one ply of Poly-Felt 125 reinforcement, with 3 inch side laps and 6 inch end laps, followed with a squeegee applied 125 mil top coat of RT 250 waterproofing. The specified protection course is installed while the top coat is still warm and tacky. Seal side and end seams with RT 250 waterproofing.

• Flood or electric capacitance testing is used to detect potential voids in the installation prior to proceeding with next element of Greenroof.

#### 2. Insulation

• The density of the extruded polystyrene is determined by the anticipated weight of the overburden. Compressive strength specifications can vary from 40-100 psi.

• Loose-lay the insulation over the protection course with all joints tightly butted. Orient the drainage channels along the long sides of the boards to facilitate drainage of water that reaches this level of the assembly.

• Install aeration course over insulation, if specified.

#### 3. Ram-Tough Root Barrier

• Loose-lay the primary root barrier directly over the insulation or aeration course. The sheet must be laid flat without fishmouths, wrinkles or folds.

• Ram-Root Barrier shall cover all horizontal and vertical membrane surfaces. Excess material can be trimmed after the soil and vegetation installation.

- Fit the root barrier tightly around all penetrations, but it is <u>not</u> be extended under drain clamping rings. Seal root barrier to penetrations and walls with approved tape.
- Lap all sheets of root barrier a minimum 12 inches, in all directions. Seal and probe test seams.
- Temporary ballast may be required to hold the insulation and root barrier in place until the overburden is installed.

# 4. Drainage Course

- Low Profile systems; Ram-Drain 1241 or Ram Drain 36R (growth media of 6 inches or less).
- High Profile systems; Ram-Drain 2451, (growth media of more than 6 inches).
- Clean substrate of any loose debris.
- Install Ram-Drain as required for water drainage and/or retention Cut panels to fit tightly around the penetrations.
- Start panels so that the edge with the fabric lap is facing the perimeter condition. Seal the lap to the perimeter.

• Place adjacent panels so that the cores are butted-together. Lay the 4 inch fabric lap onto the adjacent panel. Secure the flaps at 3 inch intervals with adhesive or approved tape. Join roll ends by peeling back the fabric and cutting off 4 inches of the core. Place panel ends so that the cores are butted together. Glue or tape overlap in place at 3 inch intervals.

#### 5. Final Details

• Finish perimeter detailing including two feet wide perimeter paths of pavers or ballast, without vegetation.

• Install drain extensions, inspection ports, raised concrete pavers, stone ballast, soil retention tees, irrigation system and other components which may be specified or required prior to the installation of the growing media.

• Install specified growing media and vegetation, with quality control supervision as may be required. Provide high profile planting anchors, erosion control geotextile and other accessories required to complete the project

• Provide Building owner with specific maintenance requirement