

# ALT R230 Membrane Waterproofing Specification (planters box applications)



## Technical Data Sheet

PART 1 GENERAL	
<b>System:</b>	New cold liquid-applied reinforced waterproofing membrane integrally colored, and all other ancillary work including but not limited to installation of insulation, protection board, penetration flashings, sealants and metal work as specified.
<b>Weather Restrictions:</b>	Do not apply membrane during or with the threat of inclement weather. Application of cold liquid-applied reinforced membrane may proceed while air temperature is between 32° F (0° C) and 95° F (35° C) for ALT primers & finish or 23° F (-5° C) and 95° F (35° C) for ALT R230 membrane, providing the substrate is a minimum of 5 degrees above the dew point temperature, clean and dry.
<b>Warranty:</b>	Manufacturer's Warranty: Provide manufacturer's standard flashing warranty under provisions of this section.

PART 2 PRODUCTS	
<b>Waterproofing Membrane:</b>	Cold liquid-applied membrane with non-woven reinforcing fabric, for a finished dry film membrane thickness of .080 inch nominal per ply; integral color finish as selected by owner from manufacturer's standard palette of colors; conforming to ASTM C 836. Subject to compliance with requirements, provide ALT R230 resin for use in an adhered membrane waterproofing system.
<b>Accessories:</b>	Proprietary resin primers, additives, surfacing topcoats, and accessory products as required or recommended by the Membrane Manufacturer.
<b>Protection Layer:</b>	Acceptable pre-engineered drainage composite, 1/8" to 1/4" (3.2 to 6.4 mm) asphalt hardboard or approved XEPS insulation as required or recommended by the Membrane Manufacturer. Insulation installed as a protection layer shall be minimum 1" thick closed-cell extruded expanded polystyrene (XEPS) board meeting ASTM C578, Types IV, VI or VII physical properties with natural skin surfaces; with minimum compressive strength of 40 psi, nominal 1.8 pcf density, maximum water absorption of <0.1% per ASTM C272; using non-HCFC hydrocarbon blowing agents.
<b>Drainage Course:</b>	Aggregate fill, clean, washed, dry density of not less than 95 pounds per cubic foot, crushed stone or crushed gravel with an angular particle size not less than 1/8 inch or more than 3/4 inch conforming to ASTM D 448.
<b>Filter Fabric:</b>	Lightweight water-resistant polyester fiber mats or polypropylene- polyethylene, non-woven, non-biodegradable landscape fabric mats.
<b>Soil/Topsoil:</b>	Topsoil fill material with plant nutrients, organic matter (humus), and acid/alkaline balance (pH) as required. The soil should also be free of free of stones, sand, silt, weed seeds, and debris. For rooftop planters provide soil with approximately 75-80% inorganic (i.e., expanded slate or crushed clay) to 20-25% organic (humus + topsoil) to provide essential drainage and soil air capacity, and sufficient organic nutrients for the shallow-rooted plants.

PART 3 EXECUTION	
<b>Preparation:</b>	<p>All substrates must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and/or resin to the substrate. Some surfaces may require scarifying, sandblasting or grinding to achieve a suitable substrate.</p> <p>Substrate shall have maximum moisture content of six (6) percent or 75% relative humidity, and be prepared as required to provide adhesion of the membrane to substrate with minimum bond strength of 116 psi (0.8 N/mm<sup>2</sup>) for waterproofing applications. Determinations of bond strength and moisture content shall be performed periodically by the Contractor throughout the course of work.</p>