



GENERAL DESCRIPTION

Hydroguard RE consists of extruded polystyrene foam insulation topped with a 3/8 in. or 15/16 in. latex modified concrete finish. The concrete is surfaced with a highly reflective white coating. Hydroguard is manufactured in 2 ft. X 4 ft. panels that weigh 4.5 lb./sq.ft. (standard) or 11.0 lb./sq.ft. (heavy) and has tongue and groove edges along the long sides of the panels.

BASIC USE

Hydroguard RE is ideally suited to provide both thermal insulation and lightweight ballasting to a roof system. Hydroguard RE, installed above the roof membrane (IRMA), also provides protection to the membrane from mechanical abuse and environmental extremes. The white surface of the panels has been designed to provide an E.P.A. Energy Star® certified reflective roof surface. Hydroguard RE must be installed in strict accordance with Hydrotech’s Hydroguard installation guidelines.

ADVANTAGES

- Protection to Membrane from Abuse and Environmental Extremes - Provides Both Insulation and Ballast to Roof
- Lightweight, Moisture Resistant Insulation
- E.P.A. Energy Star® Certified
- High Reflectance Decreases the Roof Temperature Assisting in Mitigation of the Urban Heat Island Effect

LIMITATIONS

- Hydroguard is designed to accept light foot traffic. Walkway pads or concrete pavers must be provided where continuous or excessive foot traffic is anticipated.
- Hydroguard’s foam should be shielded from direct sunlight when stored outdoors for extended periods of time.

TECHNICAL SPECIFICATIONS

PROPERTY	TEST METHOD	RESULT
THICKNESS (in.) foam		2, 3
THICKNESS (in.) concrete topping		3/8 std.; 15/16 heavy
THERMAL RESISTANCE (R/in.)	ASTM C518	5.0 @ 75°F; 5.4 @ 40°F
WATER ABSORPTION (% by volume, max.)	ASTM C272	0.1
WATER VAPOR PERMEANCE (perm, max.)	ASTM E96	0.8
SOLAR REFLECTANCE [†] – initial (typ.)	ASTM E903	0.84 [†]
SOLAR REFLECTANCE – 3-year aged (typ.)	D&S SSR (version 5.0) compared against ASTM E903	0.65
EMITTANCE [†] (typ.)	ASTM E408	0.94 [†]

MAINTENANCE AND SOLAR REFLECTIVITY Excess dirt, dust and other foreign material may build up on the coated surfaces and, along with normal aging and weathering, reduce solar reflectance. The coated surfaces may be cleaned with a water and mild detergent solution by hand or low-pressure spray equipment. Rinse thoroughly. It is recommended that the coated surfaces be cleaned every two to three years to maximize and maintain the solar reflectance values.

[†] For L.E.E.D. Credit 7.2 Heat Island Effect, L.E.E.D. version 2.2 requires an SRI of greater than 78 – SRI of Hydroguard RE = 106