

**Sarnafil Inc.** 100 Dan Road, Canton, MA 02021  
781-828-5400 Fax 781-828-5365 800-451-2504  
Email: webmaster@sarnafilus.com

**Sarnafil**

## **ROOFING TECHNICAL BULLETIN**

**#07-06**

Date: November 10, 2006

To: Authorized Roofing Applicators  
Sarnafil Sales Staff & Sales Representatives  
Sarnafil Regional Technical Staff  
Sarnafil Customer Service Staff  
Sarnafil Services Staff

From: Technical Services Department

Re: Sarnatherm LightGuard and HeavyGuard

---

Sarnafil is expanding our line of roof insulation products with the introduction of Sarnatherm LightGuard and HeavyGuard, extruded polystyrene insulation boards with a modified concrete top surface. This protected membrane roof system has interlocking tongue and groove joints that offer maximum protection for the roof membrane while providing wind uplift securement. Typically, the roof membrane is loose laid over a smooth acceptable substrate. A continuous air barrier or air seals at all deck openings is required. An overlayment or separation product is required between the Sarnafil membrane and extruded styrene base of the Sarnatherm LightGuard or HeavyGuard. This overlayment may be Sarnavap 10, Sarnafelt or polyethylene sheeting with a minimum thickness of 6 mils. Prior to the installation of the Sarnatherm LightGuard or HeavyGuard, the T. Clear Corporation will arrange with the roofing contractor for monitoring of the air barrier or seals. When T. Clear approves the air seals and Sarnafil is satisfied with the roof membrane application, the installation of the Sarnatherm LightGuard or HeavyGuard may begin.

Sarnatherm LightGuard and HeavyGuard are ideal choices when roofing high humidity buildings such as paper mills, textile plants and natatoriums. With the roof membrane located very close to or on the deck, the dew point is raised above the membrane. With this system, condensation will not occur within the building envelope on these types of facilities.

Sarnatherm LightGuard and HeavyGuard should also be considered on projects with heavy roof top traffic, hail prone areas or when the roof system may be exposed to numerous impacts.

Sarnatherm LightGuard and HeavyGuard are 2 feet by 4 feet (0.6 meters by 1.2 meters) with either 2 or 3 inches (50.8 or 76.2 mm) of extruded polystyrene insulation. The insulation has an R-value of 5 per inch. The product comes in two thicknesses for the concrete top surface, 3/8 inch (9.5 mm)(LightGuard) or 1 inch (25.4 mm)(HeavyGuard). The weight for these two products are 4.5 lbs./sq.ft (22 kg/sq.m.) and 11 lbs./sq.ft. (53.7 kg/sq.m.). The completed roof system may add up to 12 lbs./sq.ft. (58.5kg/sq.m.) or more to the dead load of the building. A structural analysis of the building deck is needed to ensure the building structure can safely support the system load.