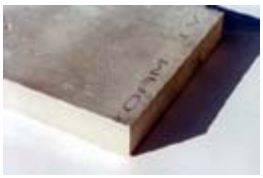
# SarnaTherm Extruded Expanded Polystyrene (XPS)

SarnaTherm XPS is a polystyrene CFC and HCFC free thermoset cellular plastic insulants, extruded to create a rigid closed cell structure. Supplied to Sarnafil Ltd by Kingspan Insulation Ltd, SarnaTherm XPS is manufactured to BS EN 13164 “Thermal Insulation products for buildings - factory made extruded polystyrene foam (XPS)”.



SarnaTherm XPS is available in two variants – standard SarnaTherm XPS and SarnaTherm XPS-P. SarnaTherm XPS is an unfaced extruded polystyrene thermal insulant, suitable for use in mechanically fastened, adhered, warm ballasted, inverted ballasted and SarnaVert green roofing systems.

SarnaTherm XPS-P is an extruded polystyrene thermal insulant faced with a 10mm thick polymer fibre reinforced hydraulic cement, suitable for use in warm ballasted and inverted ballasted systems.

## Specification

- 0.038 W/mK thermal conductivity (Lambda 90/90).
- CFC/HCFC free.
- Zero ODP (Ozone Depletion Potential).
- Typical Density of 33 kg/m3.
- Compressive strength 300 kPa at 10% yield.
- Withstands freeze/thaw cycling.
- Closed cell structure minimises water absorption.
- Provides reliable long term thermal performance over the lifetime of the building.

## Attachment to Substrate

SarnaTherm XPS can be attached to the substrate (deck or suitable vapour control layer) by mechanically fastening with SBT tubes and SBIW-70x70 pressure plates, or by bonding in Sarnacol 2162 cold bonding adhesive. When mechanically fastening Sarnafil S/TS or adhering Sarnafil G/TG over mechanically fastened SarnaTherm, a project specific fastening pattern will be provided by Sarnafil Ltd, in accordance with BS 6399:Part 2:1997 “Code of Practice for Wind Loads”. SarnaTherm XPS and XPS-P can be loose laid if sufficient ballast weight is provided to resist wind uplift pressures.

Sarnafil do not recommend the use of hot bitumen bonding compound for the attachment of EPS to the substrate or vapour control layer.