

**Note:**  
To all Builders

# Isowall Group

## Energy Saving Legislation

SANS 10400-XA: 2010 Energy usage in buildings, stipulates that all new buildings and building extensions as per the building occupancy classes specified in the regulations require thermal insulation to be installed.

The objective and primary intent of energy efficiency standards is to reduce the operational energy use of new and altered buildings without reducing comfort.



**Members of  
Expanded Polystyrene  
Association of South Africa**

Expanded Polystyrene (EPS) manufactured by the Isowall Group is fast becoming recognized as the insulation material of choice by specifiers of "Bills of Quantities". This comes largely as a result of our technical knowledge backed up by years of experience in the building and construction industry.

## Healthy Building with EPS

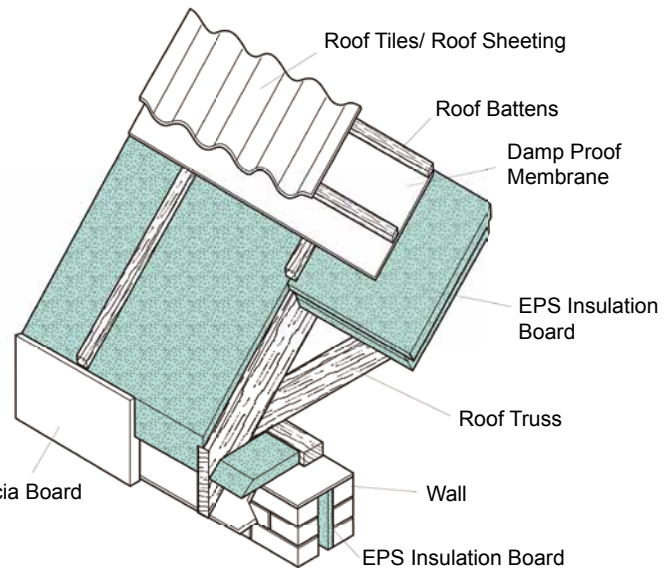
Isolite (EPS) is a material which is used extensively in the building and construction industry as insulation, and has many attributes, not least of which is its proven safety record during all stages of its life cycle – from production, during use, through to re-use or recycling. It is not surprising that health and safety take top priority in the building and construction industry and the one material that performs well is EPS, whose physical properties make it ideal for specification.

## Characteristic uses of Isolite EPS – Insulation

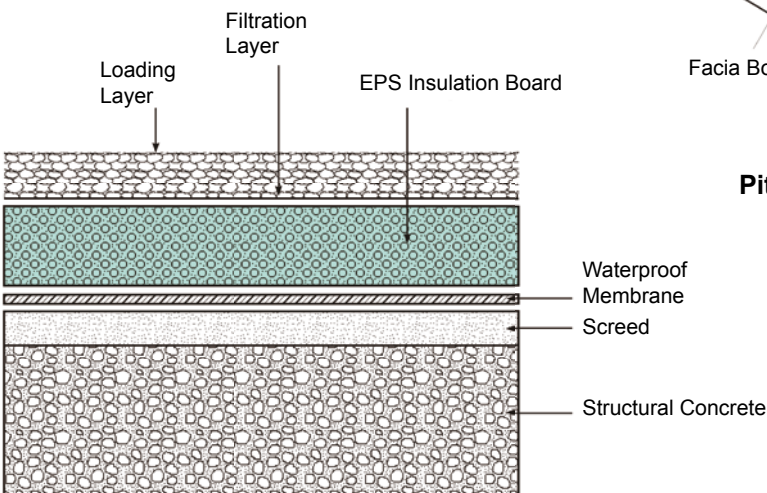
### ROOF INSTALLATIONS

EPS is moisture resistant and retains its thermal properties.

EPS styFRene™, as specified by EPSASA, contains a Flame Retarding Additive, which is specially formulated to restrict the extent of burning. Unfaced EPS styFRene™ is classified B/B1/2/HV by SANS 428 when tested, in accordance with SANS 10177 Part 11 test method.



**Pitched Roof Installation**

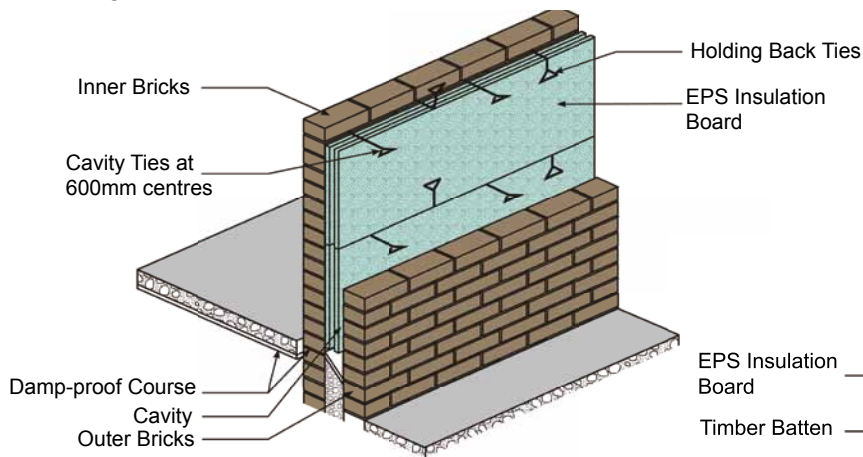


**Flat Roof Installation**

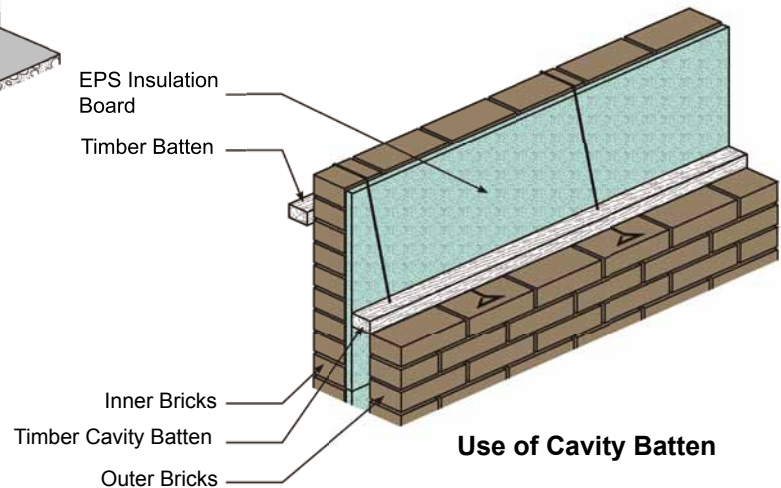
Expanded Polystyrene (EPS) insulation when installed is effective in reducing the thermal transmittance in the flat and pitched roof applications.

## WALL INSTALLATIONS

### Cavity Wall Insulation



**First run of boards**



**Use of Cavity Batten**

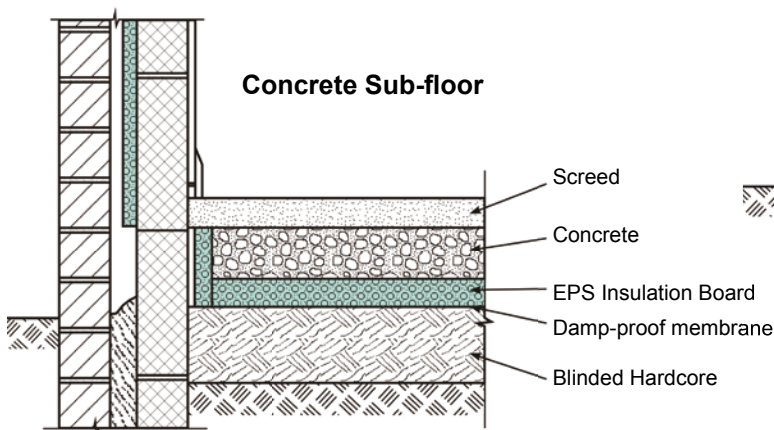
EPS is compatible with cement, concrete, brick, masonry, mortars, plaster and bitumen based damp proof membranes.

EPS is rot proof and durable. When installed as recommended, EPS will remain effective as an insulant for the life of buildings and structures.

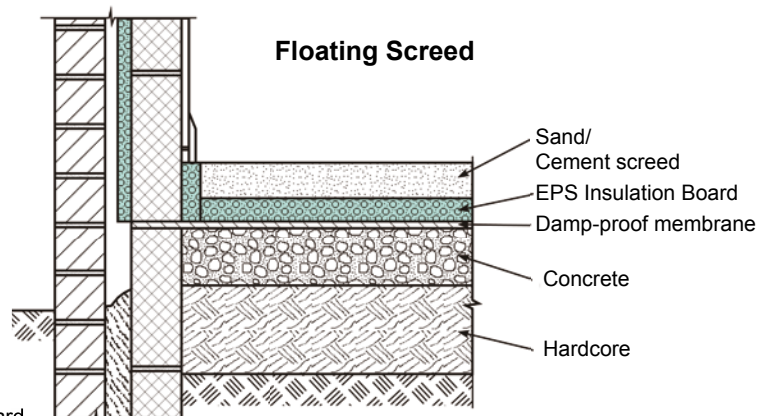
Construction:

In the construction business, EPS sheets and boards are used for thermal insulation in walls, roofs and on floors, while loose beads can be used as an aggregate in lightweight concrete, plasters and renderings. Other uses include under floor heating systems, drainage boards, permanent formwork, foundation and prefabricated walls.

## FLOOR INSTALLATIONS



**Concrete Sub-floor**



**Floating Screed**

A substantial amount of heat is lost through an un-insulated slab, resulting in cold, uncomfortable floors.

The most common EPS insulation is used on a concrete sub-floor or as a floating screed.

The overlay to the EPS Boards should be:

1. A cement-based floor screed laid in accordance with the relevant clauses of SANS 10109 Part 2.
2. A concrete slab in compliance with SANS 1879 Precast concrete suspended slabs.

The Isowall Group also manufactures other EPS products that can be used in the building industry, which includes: Expansion joints, EPS Decking blocks, Roof insulation, Building blocks, Insulated panels, Cavity Wall Insulation, Under Floor Insulation, Isocornice Decorative Cornice and Isowood skirting boards and dado rails.

For any further technical information, kindly contact our offices or visit our website at [www.isowall.co.za](http://www.isowall.co.za) or Isowall Pretoria: [neil@isowall.co.za](mailto:neil@isowall.co.za) or (012) 804 3564

OR

[www.epsasa.co.za](http://www.epsasa.co.za)