

Polythene Sheets

Introduction

Polythene sheet is a plastic sheet made of polymers of ethylene. These sheets find widespread use in various construction and industrial applications. Polythene sheets produced by CCT serve a special purpose application, to serve as a damp-proof membrane (DPM) or vapor-barrier membrane (VBM) within building floors, ceilings and walls.

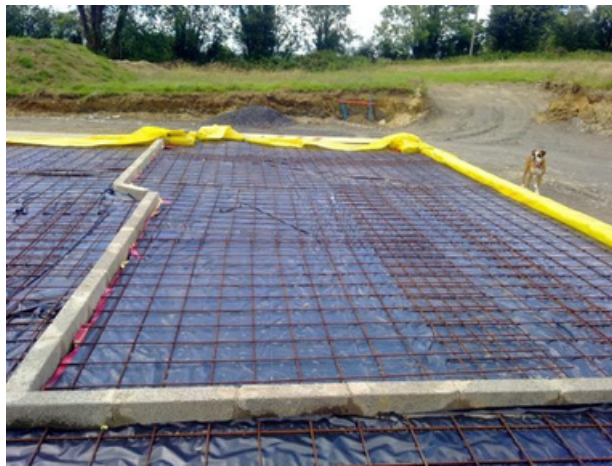
Why use polythene sheets?

Polythene sheets are used during building construction to prevent structural damping that occurs when warm, moist air penetrates inside a concrete slab, wall, roof or floor structure, reaches the dew point and then condenses into liquid water. The warm, damp air may penetrate a wall from the inside of a heated building in a cold climate or from the exterior of an air-conditioned building in a warm climate. This condensation may allow mold growth, rotting of timber, corrosion of metal components and reduction in the thermal insulation's effectiveness. The resulting structural damage may occur without visible indications until significant damage has occurred. Most building materials are permeable so the common method of controlling damping is to control indoor moisture at its source.



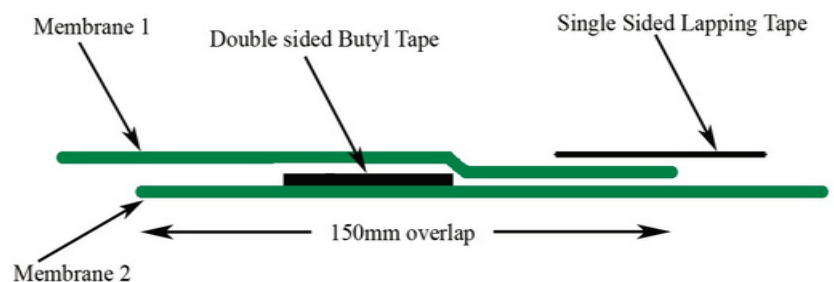
The most effective method of controlling damping is using an impervious vapour barrier on the warm side of the structure. Water permeability is reported in Perms, a measure of the rate of transfer of water vapour through a material. Vapour barriers are tested for water permeability in accordance with the ASTM-E96 standard.

Polythene sheets are one of the most effective materials used as a vapour barrier for damping prevention. It has an extremely low water permeability rating of typically 1.7 SI Perms. They can be used in between the insulation material and structure surface to act as a damp-proof membrane. Oversite concrete slabs employ a 1000-gauge (250 microns) polythene sheet laid underneath the concrete to prevent moisture from being absorbed. The general standard employed for the testing and verification of polythene sheets for use as a vapour-barrier is the ASTM-4397.



How to use?

When jointing, a minimum of 150mm is to be joined using a double-sided Butyl Tape between membranes and a 75mm single-sided lapping tape to seal the outer edge and provide a continuous bond.



C|C|T

CONSTRUCTION TECHNOLOGIES L.L.C

Inquire at:

Whatsapp: +971 50 537 0102 | Cell: +971 50 179 7175

Email: info@cctconstructiontechnologies.com

Web: www.cctconstructiontechnologies.com

Why CCT?



CCT is a well-known name in the UAE when it comes to polythene sheets. We use reliable production processes and the toughest polymers for our sheets. Our sheets are tested and verified in accordance with ASTM-4397 standards for use as a vapour- barrier under concrete slabs, floors and walls. In addition, our sheets are approved and relied upon by a large number of contractors (approvals available on request). Furthermore, we provide on-time site deliveries and reliable customer service at all times. At the same time, we keep an open ear to customer suggestions and complaints to further improve our services.



C|C|T

CONSTRUCTION TECHNOLOGIES L.L.C

Inquire at:

Whatsapp: +971 50 537 0102 | Cell: +971 50 179 7175

Email: info@cctconstructiontechnologies.com

Web: www.cctconstructiontechnologies.com

Technical Datasheet

Physical Properties				
Thickness (micron / Gauge)		125 micron (500 Gauge)	250 micron (1000 Gauge)	300 micron (1200 Gauge)
Roll Width		4 meter	4 meter	4 meter
Roll Length		50 meter	25 meter	25 meter
Colour		Clear / White / Black	Clear / White / Black	Clear / White / Black
Roll weight		23 kg	23 kg	27 kg
Technical Data				
Tensile Strength	(ASTM D 882)	16.95 N/mm ²	21.79 N/mm ²	24.30 N/mm ²
Elongation at break	(ASTM D 882)	713 %	1126.12 %	1348.36 %
Tear Strength	(ASTM D 1922)	> 76 N	> 95 N	> 105 N
Mass Per Unit Area	(BS EN 12311-1)	0.115 g/m ²	0.23 g/m ²	0.27 g/m ²
Water Vapour Transmission Rate	(EN 1931)	1.19 g/m ² /day	0.68 g/m ² /day	0.29 g/m ² /day



CONSTRUCTION TECHNOLOGIES L.L.C

Inquire at:

Whatsapp: +971 50 537 0102 | Cell: +971 50 179 7175

Email: info@cctconstructiontechnologies.com

Web: www.cctconstructiontechnologies.com