

# technical datasheet



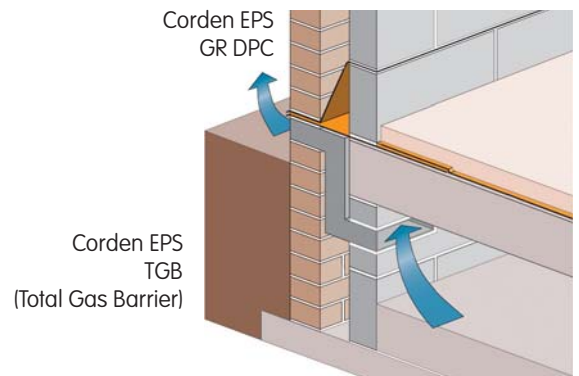
environmental protection systems

## Corden EPS TGB (Total Gas Barrier)

CORDEN EPS TGB is a high performance laminated flexible loose laid sheet barrier, specifically designed to overcome the health and safety risks associated with building on land contaminated by Methane Gas, CO<sub>2</sub> or Radon Gas.

The product will also act as a damp-proof membrane. The membrane is fully tested for methane gas transmission and a range of sealing tapes and preformed details are available to complete the system. The membrane is blue on one side and aluminum coloured on the reverse.

Corden EPS TGB is typically installed in line with common code of practice for damp-proof membrane and will also perform the same function, although extra care is required with workmanship and detailing to provide a gas tight footprint to the building. The membrane should be installed in accordance with BRE report: 414 "Construction of buildings on gas contaminated land" Useful reference can also be found in Building Regulations Approved Document Part C1992 CP102: 1973 Code of practice for the protection of buildings against water from the ground, and BRE document "Radon: Guidance on Protective Measures for New Dwellings 1999 Edition"



### Technical Data:

Roll Size:	2 x 50 metre.
Thickness:	300mu
Aluminium Foil Thickness:	12mu
Weight:	335 g/m <sup>2</sup>
Colour:	Blue/Silver
Tensile Strength	43.7N/mm <sup>2</sup> BS 2782: Part 3:320A
Tear Strength	216 N/mm BS 2782: 360B
Methane Gas Permeability	Less than 0.001 mls m <sup>2</sup> /24hr
Moisture Vapour Transmission	0.03g m <sup>2</sup> /dayBS3177

### Handling & Storage:

CORDEN EPS TGB provides excellent resistance to puncturing and tearing, particularly when compared to ordinary polythene DPM, but can nevertheless be damaged by mis-handling. Particular care should be taken near sharp objects. The membrane is non hazardous and is chemically inert therefore will not degrade in sub-soil acids or alkalis.

### Laying

The membrane should be laid on a smooth or sand blinded surface which should be free of voids and hollows, and protected from site damage as soon as possible by covering with a screed or pouring the slab. Before covering the film should be inspected for damage and any holes or tears repaired by using a piece of the membrane as a patch, with an overlap of at least 150mm, sealed with CORDEN EPS Joint Strip and taped down with aluminum gas tight CORDEN EPS Girth Tape.

Where steel reinforcement is to be used in the slab, it must not lay directly on the membrane. In this case the membrane should be first covered by a screed to protect it.

### Jointing

CORDEN EPS TGB should be overlapped by a minimum of 150mm and joined with CORDEN EPS Gas Tape. For the tape to effect a gas tight seal, the membrane should be clean and dry when applied. Joints should then be taped with girth tape to provide added security.

CORDEN EPS Gas Tape is a temperature sensitive adhesive and jointing is not recommended below 5°C. Where this is unavoidable the Joint Strip should be kept warm until used.

## Detailing

The membrane should provide continuity through the walls by sealing and jointing to a cavity tray formed by Plyload GR DPC. Preformed details are available to complement the DPC at corners etc. All laps should be joined using CORDEN EPS Gas Tape & Lap Tape. All service pipes etc. should be sealed and taped using preformed top hat details.

## Ancillary Products

CORDEN EPS Gas Tape: A butyl, double sided sealing strip to form gas tight joints. Roll size is 50mm x 30metres.

CORDEN EPS Lap Tape for sealing down the lap created as a result of joining the membrane Top Hat Details: Preformed top hat details to seal service pipe penetrations, available in a range of sizes to suit most common pipe diameters.

Plyload GR Gas resistant high performance DPC, used to form cavity trays.

Sump Units: Preformed sumps which allow depressurisation and venting of the sub-floor under concrete slabs.

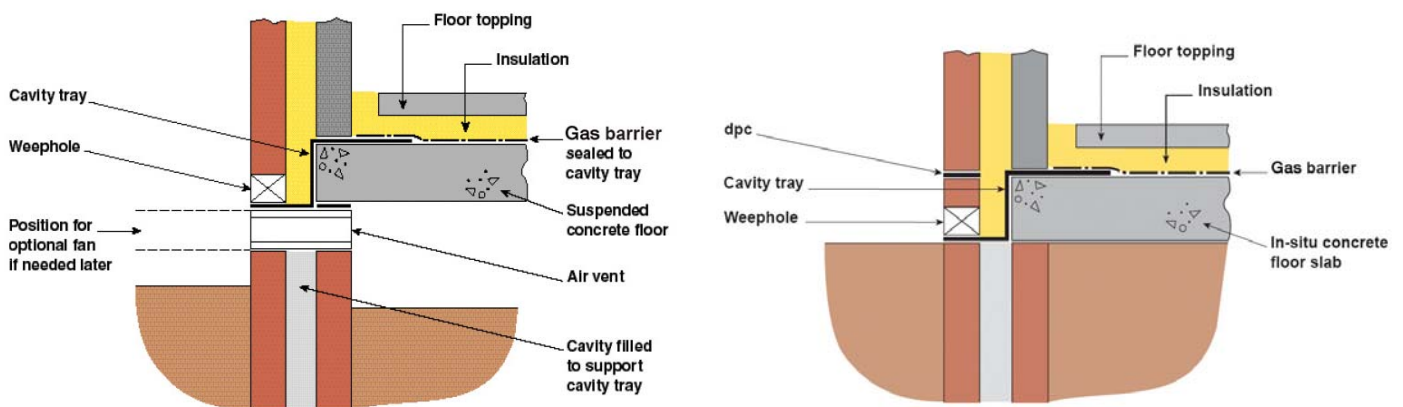
## Limitations:

The membrane is not intended for use where there is a risk of hydrostatic pressure. The membrane will ultimately deteriorate due to UV rays from the sun. This is not a problem when installed correctly but care should be taken to keep the product in its protective wrapper until required.

## Health & Safety

There are no known hazards associated with Corden EPS Total Gas Barrier in normal use.

## Typical Details



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