

CM20 Geotextile Membrane

The Wykamol CM20 Geotextile membrane is a twin layered cavity drain membrane, designed to manage water to the land drain, relieving pressure from the structure.



The dual layers comprise of the Wykamol 20mm studded HDPE membrane and a non-woven geotextile manufactured from UV stabilised, high tenacity, virgin polypropylene fibres that have been mechanically entangled to provide high strength, high extensibility, high loft and excellent abrasion characteristics. The geotextiles are also thermally treated to reduce thickness while maintaining excellent mechanical properties. Can also provide a passive venting system for gases and liquids. CM20 Geotextile Membrane is also an excellent radon barrier and has passed all the relevant tests for resistance to this gas.

ADVANTAGES

- Ideal Radon Barrier.
- Excellent flow rate.
- UV Stabilised.
- Suitable for use with all construction types.
- Drains off water before reaching the waterproof coating.
- Combined drainage and protection board.
- Easy handling and rapid installation.
- Rugged, durable construction with thermal insulation benefits.
- Filtration layers prevents silting-up.
- High compressive strength and drainage capacity.
- Allows back-filling with excavated earth.
- Withstands stress and movement in the background.
- Ideal radon barrier membrane

TYPICAL USES

- Isolate and protect external structure from surrounding soil
- Helps relieve hydrostatic pressure from the face of the structure
- Ideal for retaining walls, podium decks, external tanking and green roof applications.

TECHNICAL DATASHEET

Wykamol CM20 Geotextile Drainage board is a geo-composite drainage layer ideal for structural drainage applications on walls, roofs and podiums and under concrete slabs or structures requiring vehicular access or high volumes of pedestrian access, including motorised wheelchairs and mobility scooters. Specially designed to be compatible with structural waterproofing CM20 Geotextile provides optimum performance over the whole life of the structure.

Consisting of a high strength flexible polyethylene cusped core with a non-woven geotextile bonded onto one side. The geotextile filters a wide range of materials allowing water to percolate into the core to be efficiently drained away to a discharge point. The geotextile is bonded to the core to ensure that it does not deform into the drainage passages under the load of the backfill material allowing continuity of the drainage void.

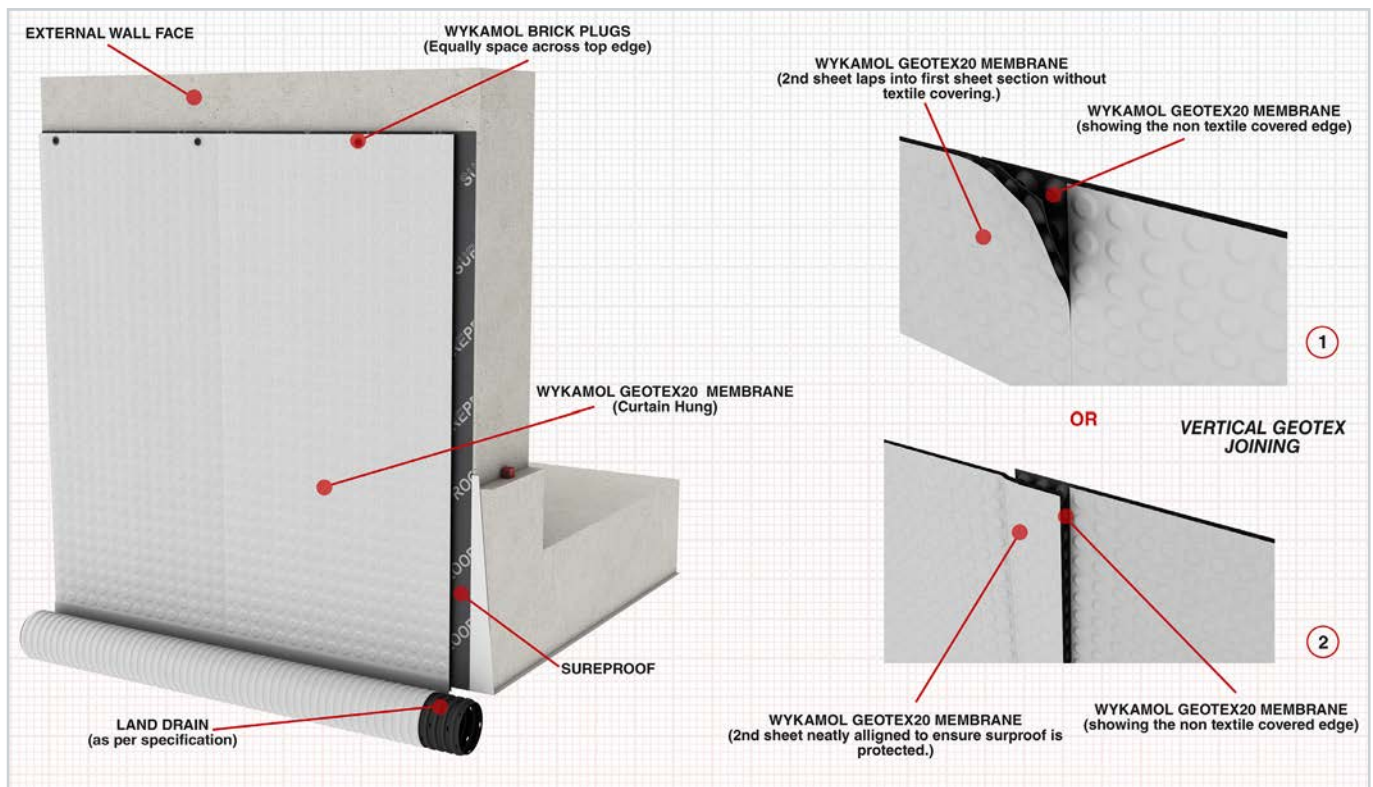
The single cusped HDPE core forms a high-performance drainage layer with clear void to allow flow in all directions. The compressive strength and creep resistance properties of CM20 Geotextile ensures that the core maintains its drainage capacity,

even when subjected to compressive loads. CM20 Geotextile is durable and sufficiently robust to resist the mechanical stresses imposed during installation and throughout the design life. Use of CM20 Geotextile will eliminate the need for further protection of the waterproofing.

Application: Unroll over waterproofing membrane or protection fleece overlapping side and end laps by one cusplate. The Wykamol CM20 Geotextile membrane is a twin layered cavity drain membrane, designed to manage water to the land drain, relieving pressure from the structure.

The dual layers comprise of the Wykamol 20mm studded HDPE membrane and a non-woven geotextile manufactured from UV stabilised, high tenacity, virgin polypropylene fibres that have been mechanically entangled to provide high strength, high extensibility, high loft and excellent abrasion characteristics.

The geotextiles are also thermally treated to reduce thickness while maintaining excellent mechanical properties. Ideal for Green roof systems, Horizontal drainage systems, Vertical drainage systems, Gas venting.



CM20 GEOTEXTILE MEMBRANE

SUBSTRATE PREPARATION

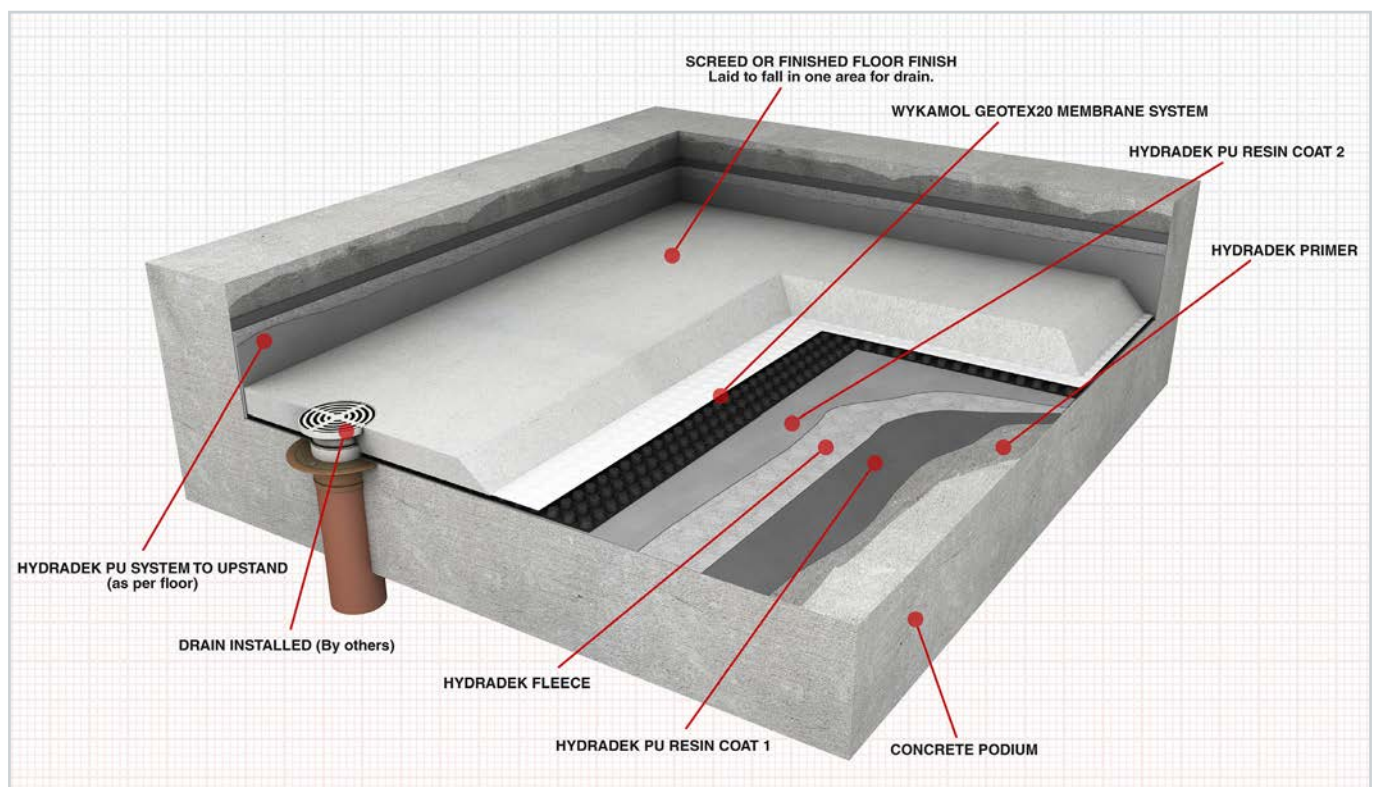
1. Prior to application of CM20 Geotextile, consideration needs to be given to the soil composition and at what depth the water table is. We would recommend this investigation be carried out by a Geotechnical Engineer to determine the potential risks.
2. Ensure all surfaces are free from any sharp protrusions and in reasonably sound condition. Using Wykamol's Universal Mortar, provide a triangular mortar fillet at any point of the wall where it is necessary to smooth out angles between the vertical and horizontal elements of the structure.

APPLICATION

Described below is the typical application process for Geotextile Membranes. For any variations on this application please contact the Wykamol Technical Department.

CM20 Geotextile can be applied vertically or horizontally, as required. The product should be applied to the outer face of the structure, with the geotextile fabric facing outwards.

1. Use Wykamol Overseal Tape to seal all joints at the overlap.
2. Ensure the CM20 Geotextile Membrane extends to, or just below the level of drainage channels and the channels are fully encapsulated in a granular infill and placed below the internal floor level.



TECHNICAL DATASHEET

CONDITIONS & LIMITATIONS

Take care when running CM20 Geotextile around internal and external corners to ensure the sheet is fixed tight to the angle.

When doubt exists, always contact the Wykamol Technical Department, to ensure applications of this product are in line with BS8102:2009, particularly for new build structures.

FINISHING

We advise that the drainage pipes are checked to ensure they will carry water away from the footings either passively (taking advantage of natural gradients) or actively, using a sump & pump.

Pipes should have a jetting detail so pipework can be flushed at regular intervals. Back-filling should be carried out with care to minimise the risk of physical damage to the membrane and prevent tears around the fixings.

Technical Data	Result	Test Standards
Material	HDPE and Geotextile fabric	N/A
Total Unit Weight	1 Kg/m ²	N/A
Total Sheet Thickness	1mm	EN 149-2
Stud Height	20mm	N/A
Colour	Black	N/A
Water tightness,60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	180kN/m ²	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1:2007+A1:2009
Type of Application	Type V	N/A
Life Expectancy	Lifetime of Structure	N/A

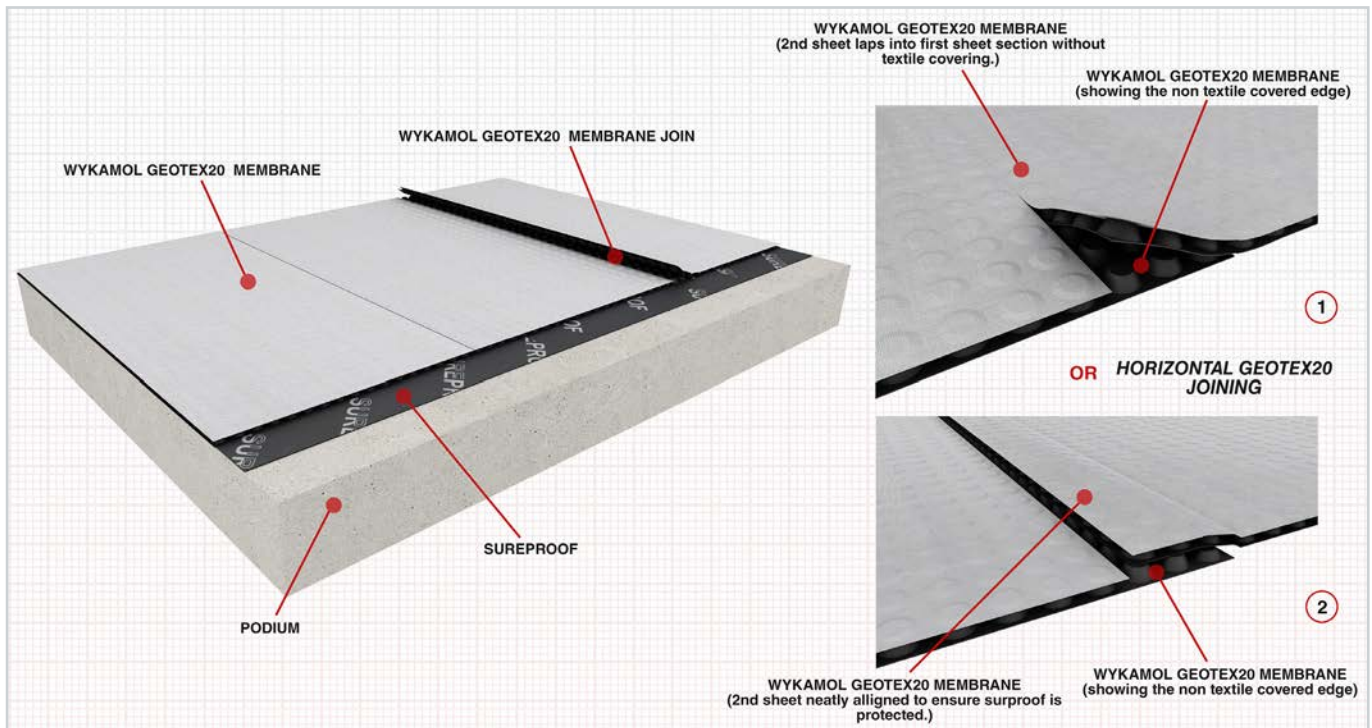
Hydraulic properties	Test standard	Means values
In plane water flow test (soft/soft) 20 kPa L/m/s	BS EN ISO 12958	7.40 7.25

Geotextile Mechanical Properties	Results	Test Standards
CBR Puncture Resistance	1.27 kN	EN ISO 12236
Tensile Strength (M)	8 kN/m	EN ISO 10319
Tensile Strength (CMD)	8.5 kN/m	EN ISO 10319
Tensile Elongation (MD)	50%	EN ISO 10319
Tensile Elongation (CMD)	60%	EN ISO 10319
Dynamic Perforation	35 mm	EN ISO 13433

Geotextile Hydraulic Properties	Results	Test Standards
Pore Size (O90)	100 µm	EN ISO 12956
Permeability (H50)	79 l/m ² /s	EN ISO 11058

Geotextile Physical Properties	Results	Test Standards
Mass per unit area	0.11 Kg/m ²	EN ISO 9864
Thickness	0.52 mm	EN ISO 9863-1

CM20 GEOTEXTILE MEMBRANE



AFTERCARE

Wykamol CM20 membranes provide a dry, warm and habitable living space in basements and other areas suffering from chronically damp conditions.

However, it is equally important that areas which lack natural ventilation are provided with adequate means of condensation control, especially in wet areas such as kitchens, bathrooms etc.

This is best achieved through the provision of an effective mechanical ventilation system. Please consult the Wykamol Technical Department for further advice.

STORAGE & SHELF LIFE

Store in an upright position, under cover and away from high temperatures and open flames. Shelf life is the lifetime of the structure, when stored and installed in line with the datasheet recommendations.

HEALTH AND SAFETY

No specific hazards are likely to arise while using any Wykamol Waterproofing Membranes or ancillaries neither are classified as hazardous in respect to CHIP II Regulations 1999. However, general precaution should be exercised in the use of drill etc. taking particular note of the special risk associated with working in confined spaces (basements) with restricted access/egress. The Wykamol Group always advise the use of appropriate PPE, including gloves, hard hat, goggles, high visibility jackets and steel toe cap boots. For further information and advice, please contact the Wykamol Group Technical Department.

PACK SIZE AND COVERAGE

Product Code	Pack Size	Coverage
CM20GEOTEXT	2m x 20m	40m ²

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