

### DESCRIPTION

ULTRA 20 is a high quality, high density polyethylene (HDPE) membrane. ULTRA 20 is used primarily as a cavity drainage floor membrane providing an air gap, which allows any free water to run underneath it. ULTRA 20 is impermeable and provides an effective vapour barrier.

Due to the 20mm stud depth ULTRA 20 is the highest drainage capacity membrane in the ULTRA range giving a void volume of 14 litres. ULTRA 20 should be used where knowledge of the ground conditions including the water table is unclear. It is ideal in situations where the quality and integrity of the existing slab or raft is in question and there is a possibility for water to pass through cracks in a poorly constructed floor.

When used as floor membrane, insulation, under floor heating, screed (50mm) and floating floors can all be accommodated.

In basements it is essential that ULTRA 20 is used in conjunction with a suitable sump and pump facility (unless passive drainage is available on one side of the building) and that this is maintained throughout the lifetime of the installation. To comply with BS8102, it must be assumed that the structure will be subjected to water ingress at some time. Please refer to Sump and Pump data sheets.

If ULTRA 20 is used in conjunction with a drainage channel and sump system it is suitable for use in accordance with BS8102:2009 to provide Type 'C' drained protection to structures below ground providing a Grade 3 dry environment suitable for domestic or commercial use.

With a compressive strength of 180kN/m<sup>2</sup> internal walls can be built directly off ULTRA 20 Floor membrane.

ULTRA 20 can be used as the primary PM or above green concrete to accelerate the contract program. The concrete will continue to cure below the dry membrane surface allowing for floor finishes to be laid above the membrane much quicker than normal.

When new slabs are laid, it is necessary to lock in free limes present with a silicification treatment.



### KEY BENEFITS

- Damp proofing floor solution for both domestic and commercial projects
- Little to no damage to existing structure.
- No delays to final floor finish being installed.
- Waterproof, vapour barrier, salt resistant, root resistant, contaminant resistant.
- Low and High temperature tolerance.

### PRODUCT DATA

**Material:** HDPE

**Stud height:** approx. 20 mm

**Colour:** Black

**Roll size:** 2m x 20m (40 m<sup>2</sup>)

**Drainage Volume:** 14ltrs/m<sup>2</sup>

**Weight:** approx. 950 g/m<sup>2</sup>

**Load bearing:** 180kN/m<sup>2</sup>

**Chemical properties:** resistant to chemicals, rot-resistant, resistant to root penetration, biological resistant to properties bacteria and fungus

**Temperature range:** -30°C to + 80°C

**Flammability rating:** B2 (DIN-4102)

# ULTRA MEMBRANE SYSTEMS

## ULTRA 20 20MM CAVITY DRAIN MEMBRANE

### SURFACE PREPARATION

The floor must be cleared of oil and loose material. Sharp edges and large depressions should be levelled out; this is particularly important when a timber floor is preferred. Remove all timber/organic material to prevent risk of fungal or bacterial growth behind the system. Any existing moulds or fungi should be treated with an appropriate wash fungicidal wash. (Nvirol Masonry Biocide).

The drainage design should be agreed, implemented and tested prior to laying membrane. When fixing to flat soffits, ensure a free fall to create proper drainage and prevent ponding.

### FLOORS AND WALL/FLOOR JOINTS

ULTRA 20 can be rolled out stud to the floor and cut to fit the room. The flanged edge (strip of membrane running along the edge with no studs) should overlap the previous width of membrane. No mechanical fixings are required. Joints should be sealed with ULTRA Double Tape. Ensuring membrane is free from dust/dirt apply ULTRA Double Tape to first laid width leaving the backing tape in place. Check alignment so the flange covers the backing paper then starting in the middle of the joint remove backing paper and press firmly to seal. Alternatively ULTRA Corner Tape can be applied on top of the joints to seal. At wall/floor junctions the membrane can be cut flush and the gap sealed with ULTRA Corner Tape. Where no wall membrane is being fitted, the floor membrane can be returned up the wall and cut flush with the top of the finished floor.

### SERVICES

To seal services in walls and floor, ULTRA 20 can be cut and trimmed around them and the gap filled and sealed using ULTRA Rope and ULTRA Corner Tape.

### FLOOR FINISHES

Ensure that when laying the specified floor finish directly over the membrane, that no fixing used puncture through the floor membrane. When a timber floor finish is preferred allowances must be made for the provision of an expansion gap around the wall edge. This should be in accordance with the floor manufacturer specification and guidance.

### STORAGE

ULTRA 20 and ancillary products should be stored in dry conditions, avoiding sharp objects, direct sunlight and high temperatures.

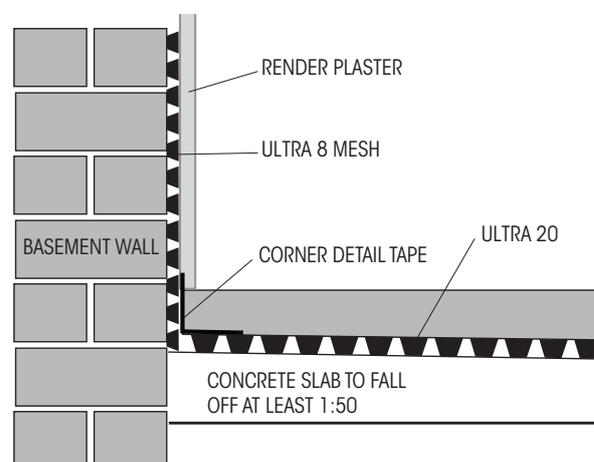
### HEALTH & SAFETY

ULTRA 20 cavity drain membrane has no specific hazard specification, neither do the ancillary plugs and tape. However general precautions should be taken in the use of associated equipment such as drills and hammers etc. and working in confined spaces.

### TECHNICAL

The information in this data sheet is intended to guide professional contractors and specifies in the use of ULTRA 20 to ensure successful basement tanking or damp proofing. If further information is required please contact our technical department.

INSTALLATION DIAGRAM -  
ULTRA 8 MESH WITH ULTRA 20 FLOOR TO NEW SLAB WITH FALL



## ULTRA MEMBRANE SYSTEMS

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