

# HYDROFLOW HP

### **CAVITY DRAIN MEMBRANE SYSTEM**

#### DESCRIPTION

HYDROFLOW HP is a cuspated HDPE drainage membrane suitable for installation on internal walls and floors. It is designed to provide a free-draining void for the collection and control of water that permeates through a concrete or masonry sub-structure. The void created by the cuspated sheet allows the water to free flow to a drainage channel or sump. HYDROFLOW HP is available in two thicknesses. The 8mm thick membrane is typically used for application to vertical substrates or for the control of light water ingress.

The 20mm membrane is typically used for application to horizontal or floor constructions or where the control of higher volumes of water ingress is a consideration. The membrane is chemical resistant and does not support bacteria and fungi growth, therefore providing an effective barrier to water for the life time of the structure to which it has been installed.

#### **USES**

HYDROFLOW HP is used to control water ingress and create a Grade 3 environment in accordance with BS 8102/2009. Structures include habitable basements, carparks, tunnels and vaults.

#### **ADVANTAGES**

- Rapid and easy installation to concrete and masonry substrates.
- Minimal surface preparation required prior to installation.
- High compressive loading stability.
- Effective method of creating entirely dry conditions in high risk areas.

#### **COMPLIANCE**

HYDROFLOW HP is certified by the British Board of Agrément.

| Property             | Value                  |                       |
|----------------------|------------------------|-----------------------|
| Cuspate Depth        | 8 mm                   | 20 mm                 |
| Mass                 | 500g/M <sup>2</sup>    | 1 Kg/M <sup>2</sup>   |
| Compressive Strength | 200 kN/M <sup>2</sup>  | 150 kN/M <sup>2</sup> |
| Drainage Volume      | 5.3 ltr/M <sup>2</sup> | 14 ltr/M <sup>2</sup> |

Structural Waterproofing | Gas Protection | Concrete Repair
Technical Grouts | Joint Sealants | Protective Coatings | Admixtures

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#### **PROCEDURE**

Surface Preparation: Ensure the substrate is free from excessive surface undulation and if required carry out repairs using a suitable PREMCRETE REPAIR MORTAR. Ideally a rebate should be formed at the base of every vertical wall ready to accept the HYDROCHANNEL which is the most effective means of providing a maintainable conduit to conduct the water to the sump/pump. In situations where the formation of the rebate is not possible then the floor slab should have sufficient falls created to drainage gullies or sumps. It is recommended to seal concrete substrates with the use of HYDROSEAL SEALER to prevent the build-up of lime deposits which may prevent free passage of water in the void created by the membrane.

Instillation: HYDROFLOW HP should be fixed to the wall or to the vertical face using HYDROFLOW QS PLUGS at 600mm fixing centres. The membrane should be drilled using an 11mm diameter masonry drill and HYDROFLOW QS PLUGS should be hammered into the hole to secure the membrane. The selvedge, along the length of the HYDROFLOW HP8, should lap onto the adjacent sheet andis sealed using HYDROFLOW BUTYL TAPE. The sheet should run into the rebate that has been formed in the floor slab, but leave 50mm short from the base of the channel before installing the HYDROCHANNEL onto the face of the wall membrane. If HYDROCHANNEL is not used, then the sheet should be cut 20mm short of the floor substrate which will allow for the free passage of water into the void created by the floor membrane.

Once the HYDROFLOW HP8 has been installed to the vertical walls then installation of the HYDROFLOW HP20 floor membrane should commence. HYDROFLOW BUTYL TAPE should be applied between first and second row of cuspates. The adjacent sheet should then interlock by two cuspates with the HYDROFLOW BUTYL TAPE forming an effective seal between the two sheets. The junction between the wall and floor membrane should be taped using HYDROFLOW CORNER TAPE. The same tape should also be used to effectively seal where the membrane may terminate such as at the soffit junction. Where the HYDROFLOW CORNER TAPE is to be taped to a porous substrate it is important to prime the substrate using HYDROPRUFE PRIMER prior to application of the tape. Any service penetrations through the membrane should be sealed using HYDROFLOW CORNER TAPE. Upon completion of the cavity drain installation the entire system should be flushed through with clean water and the sump pump should be tested to ensure functionality.

# GUIDANCE ON MAINTENANCE OF HYDROCHANNEL.

Once the installation is complete it is important to ensure that a cavity drain maintenance package is in place for the on-going maintenance of the system. It is recommended that the HYDROCHANNEL is flushed through 6 months after installation. Subsequent cleaning should be carried out every 12 months or more frequently if required.



# GUIDANCE ON MAINTENANCE OF SUMP PUMP.

Servicing of the sump pump which services the cavity drain system is crucial and it is important to ensure that the pumps are in good working order. The chamber should be inspected regularly to monitor silt build-up, which should be removed. The sump pump should be inspected every 3 months for the first year of operation and once annually for all years after.

#### **PACKAGING**

HYDROFLOW HP is supplied in 2M x 20M rolls.

#### **ANCILLARY PRODUCTS**

**HYDROSEAL SEALER 5 ltr** 

HYDROFLOW CORNER TAPE 150mm x 15M

HYDROFLOW BUTYL TAPE 30mm x 30M

HYDROPRUFE PRIMER 5 ltr.

**HYDROCHANNEL 2M** 

HYDROCHANNEL OUTLET PIECE

HYDROCHANNEL FLUSHING POINT

HYDROFLOW QS PLUGS box of 100

HYDROPRUFE DPC.

#### **STORAGE & SHELF LIFE**

Store in cool dry conditions away from direct sunlight.

#### **HEALTH & SAFETY**

See separate material safety datasheet.



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www.premcrete.com | 02380 276166 | sales@premcrete.com | 44 Macadam Way, West Portway, Andover, Hampshire, SP10