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## **High Performance UDG Urban Drainage Geomembrane System**













UILDING PRODUCTS





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**NSSPlus** 

- Suitable for various demanding geomembrane applications
- Conforms to Appendix C of CIRIA C697 & C753
- High resistance to puncture
- **Excellent welding characteristics**
- Extremely flexible in cold weather conditions

### Description

Using the latest Zedex technology, Visqueen High Performance Urban Drainage Geomembrane is flexible, has high puncture resistance and suitable for non-smooth surfaces and factory prefabrication to optimise on site installation. The product is black in colour, 1mm thick and supplied in an easy to handle roll size of 1.4m x 50m. Visqueen High Performance Urban Drainage Geomembrane is a catagory 2 impermeable membrane under BS 7533 part 13.

### **Application**

Visqueen High Performance UDG is a robust weldable geomembrane suitable for attenuation tank encapsulations, porous sub-base installations, containment and cut-off trenches.

Visqueen High Performance UDG is a chemically inert membrane offering designers and specifiers a range of critical properties that meet the needs of today's demanding geomembrane applications including high water table sites.

### **Additional System Components**

- Visqueen UDG Double Sided Jointing Tape (100mm x 15m roll) for bonding the membrane at overlaps
- Visqueen GR Single Sided Lap Tape (150mm x 10m roll) for securing the laps of the membrane
- Visqueen Preformed Top Hat Unit preformed pipe sleeve unit for sealing around pipe penetrations
- Visqueen TreadGUARD1500 HDPE board for protecting the membrane from damage after installation
- Visqueen TreadGUARD300 woven PP fleece for protecting the membrane from damage after installation

## Installation

Visqueen High Performance UDG exhibits superior welding properties, making it ideal for on-site welding of joints. In certain applications the sealing of laps can be achieved using the Visqueen UDG Jointing Tape System. In these instances Visqueen UDG Double Sided Jointing Tape is applied approximately 50mm from the edge of the membrane. The next width of Visqueen High Performance UDG should then be overlapped. For effective jointing all laps should be a minimum of 150mm. The lap should be secured with Visqueen GR Single Sided Lap Tape. When ambient temperatures drop below 10°C, the components of the Visqueen Jointing Tape System should be kept in a warm, dry place until needed. Membrane installation using this technique is not recommended below 5°C. Always ensure that the membrane lap area is clean, dry and free from dust or contamination at the time of jointing.

Visqueen High Performance UDG should be installed on a blinded or smooth











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surface, free from sharp protrusions. Avoid areas of unsupported membrane. Adequate protection, such as Visqueen TreadGUARD1500 or 300, should be applied over the membrane to prevent damageafter installation.

### Storage and Handling

Visqueen High Performance UDG is classified as non-hazardous. It is chemically inert and is not affected by acids and alkalis that may be present in the subsoils. The material is not recommended for uses where it will be exposed to long periods of outdoor weathering, such as exposure to ultraviolet light that will embrittle the product. Care should be taken to avoid accidental damage when handling the membrane on site. When the weather is cold all jointing tapes should be kept in a warm and dry place until needed. Installation is not recommended below 5°C. The rolls weigh 65 kilos and care should be taken when handling.





















# **High Performance UDG Urban Drainage Geomembrane System**

**Product Data** 

| roduct Data |   |             |       |                     |                   |
|-------------|---|-------------|-------|---------------------|-------------------|
| ding        | Characteristic                                    | Test method | Units | Compliance criteria | Value or Statemer |
|             | Colour  |             |       |                     | Grey              |
|             | Length  | EN 1848-2   | m     | -0/+10%             | 50                |
|             | Width   | EN 1848-2   | m     | -0/+10%             | 1.4               |
|             | Thickness   | EN 1849-2   | mm    | +/-20%              | 1                 |
|             | Mass  | EN 1849-2   |       | -12%/+12%           | 974               |
|             | Tensile Strength - MD                             | EN EN12311  | N/mm2 | >MLV                | 22                |
|             | Tensile Strength - CD                             | EN EN12311  | N/mm2 | >MLV                | 20                |
|             | Tensile Elongation - MD                           | EN EN12311  | %     | >MLV                | 799               |
|             | Tensile Elongation - CD                           | EN EN12311  | %     | >MLV                | 848               |
|             | Joint Strength                                    | EN12317-2   | N     | >MLV                | 515               |
|             | Watertightness - 60kPa                            | EN 1928     | -     | Pass/Fail           | Pass              |
|             | Resistance to impact                              | EN 12691    | mm    | >=MLV               | 600               |
|             | Resistance to static loading                      | EN 12730    | kg    | MLV                 | Pass-20           |
|             | Resistance to Nail tear - MD                      | EN 12310-1  | N     | >=MLV               | 705               |
|             | Resistance to Nail tear - CD                      | EN 12310-1  | N     | >=MLV               | 745               |
|             | Durability-Heat ageing                            | EN 1296     | -     | Pass/Fail           | Pass              |
|             | Durability-Chemical resistance                    | EN 1847     | -     | Pass/Fail           | Pass              |
|             | Resistance to Low temperature                     | EN 495-5    |       | MDV                 | Pass at - 40oC    |
|             | Water vapour transmission - resistance            | EN 1931     | MNs/g | MDV                 | 1171              |
|             | Water vapour permeability                         | EN 1932     |       | MDV                 | 0.11              |
|             | Reaction to Fire                                  | EN 13501-1  | Class | MDV                 | F                 |
|             | Chemical Resistance - Acids                       | EN 14414-A  | -     | Pass/Fail           | Pass              |
|             | Chemical Resistance - Alkalies                    | EN 14414-B  | -     | Pass/Fail           | Pass              |
|             | Chemical Resistance - Organic Solvents            | EN 14414-C  | -     | Pass/Fail           | Pass              |
|             | Chemical Resistance - Visual Defects              | EN 14414    | -     | Pass/Fail           | Pass              |
|             | Resistance to Leaching - Hot Water                | EN 14415-A  | -     | Pass/Fail           | Pass              |
|             | Resistance to Leaching - Aqueous alkaline liquids | EN 14415-B  | -     | Pass/Fail           | Pass              |
|             | Resistance to Leaching - Organic alcohols         | EN 14415-C  | -     | Pass/Fail           | Pass              |
|             | Resistance to Leaching - Visual Defects           | EN 14415-A  | -     | Yes/No              | No                |























Appendix A

## **High Performance UDG Urban Drainage Geomembrane System**







## **Visqueen Building Products**

Visqueen is the market leader in the manufacture and supply of structural waterproofing and gas protection systems. Visqueen offers the complete package - a proven, reliable range backed by a technical support service that goes unmatched in the market - everything you would expect from a reputable and ethical company.

## **System Accessories**

To ensure full waterproofing protection please use the following certified system components:

- Visqueen High Performance (HP) Tanking Primer
- Visqueen TreadGUARD1500
- Visqueen Protect&Drain
- Visqueen Top Hat Unit

### **Downloads Library**

- · Technical Datasheet
- Declaration of Performance
- · Visqueen's Guide to CE Marking

#### Find your local stockist

Search our directory of Visqueen specification Stocking Centres to locate your nearest Visqueen Partner.

### **Distributor Support**

Our specification Stocking Centres can access a free library of sales support tools, bespoke catalogues and more, click here.

### Technical support throughout your project

We are specialists in our field and can help you specify the correct solutions with the necessary performance levels, in accordance with building regulations.

- · Nationwide site support team
- Specification advice
- Installation guidance & project sign off
- · System design including CAD details

















