# INSTALLATION GUIDE



# **FILCOR**



### **Product Identification:**

 All Filcor sheets / blocks are clearly labelled, confirming the product type and dimensions.

# **Product Selection & Suitability:**

- The suitability of Filcor EPS for the application it is intended should be based upon the recommendations and specification of the Project Design Team and in accordance with the following:
  - > NHBC guidance (where applicable)
  - > Cordek Filcor EPS Data Sheet

## Storage & Handling

- All Filcor sheets are delivered in a polythene wrapping and are clearly labelled, however larger blocks are usually delivered without any external packaging and have product information relating to grade and dimensions applied directly to the product. Both Filcor sheets and blocks can be manually handled and offloaded upon delivery, taking into account any site specific manual handling regulations. Larger blocks of high density Filcor may require mechanical handling if their weight exceeds manual handling guidelines.
- Due to the relatively light nature of the product, all Filcor sheets / blocks should be weighted down or secured should they be stored outside prior to installation. No further storage requirements are needed as the product is unaffected by both UV light and water.
- Filcor should be stored in ventilated areas.
- Filcor sheets must not be exposed to flame or ignition. Careful consideration should also be given to the management of fire risk when in storage; detailed guidance is given in the Material Safety Data Sheet packaged with the product.

### **INSTALLATION**

#### **General:**

- The excavations for the foundations must be carried out generally in accordance with BS 6031:2009 paying particular attention to any site specific safety procedures or requirements.
- Installation of the Filcor should be undertaken from outside the excavation where possible unless appropriate measures are in place to allow safe entry. Precautions should be taken to ensure the sides of the excavation do not collapse during installation of the product, for example using shoring. For additional advice on the installation of Filcor in unventilated, confined and or subterranean applications please contact the Cordek Technical Department.
- Where there is a requirement to cut the Filcor, this should be undertaken using a fine-toothed saw or hot wire cutter (available for hire from Cordek). Filcor sheets should not be cut to a depth less than 25mm thick to prevent damage occurring during handling and installation.

# **Preparation:**

 Filcor should be placed upon a suitable firm and level surface. Typically, a blinding layer comprising of either sand or concrete beneath the panels is recommended. Where the ground conditions do not provide a suitably firm surface, a geotextile layer can be placed on top of the soil before placing the blinding course.

# **Procedure:**

- The Filcor sheets / blocks in each layer should be 'butt jointed', positioned with staggered joints without vertical or horizontal joints running through the installation. There is no need to compact the blocks during installation and the coefficient of friction ( $\mu$ ) between adjacent blocks can be assumed to be 0.5 which is normally sufficient to prevent any slippage or movement. When required, Filcor sheets /blocks can be restrained using reinforcing bars driven through the various layers to aid stability.
- Any voids between the Filcor and the adjacent face of the excavation, should be filled with a suitably sized, granular fill. This procedure should be carried out as each layer of sheets / blocks is installed to ensure any voids are filled sufficiently.

For further guidance on product selection and suitability, please consult the Cordek Technical Team on 01403 799600, techsupport@cordek.com or visit our website at www.cordek.com.

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- The Filcor should be protected from possible contact with petroleum, solvents or hydrocarbons (if this is considered to be a risk) using the Cordek Puraflex VOC Membrane, installed with welded joints – please see the Puraflex VOC Membrane data sheet for further information.
- Engineering fill should be placed over the Filcor taking care not to damage any membranes or geotextiles protecting them. A minimum cover of 200mm of suitable fill material is required prior to any construction plant being driven across or placed on the Filcor. It is recommended that vibratory compaction equipment should not be used within 500mm vertically, or 2000mm horizontally, of the exposed Filcor.
- Consideration should be made to providing adequate drainage / the depth of fill placed above the Filcor installation layer to prevent flotation.

#### **Concrete Placement:**

- Reinforcement spacers can be positioned directly upon the Filcor or on the concrete blinding, where required\*.
- The number, type and frequency of the reinforcement spacers should be selected to achieve adequate load spread from the reinforcement and site traffic on to the Filcor sheets / blocks. Further guidance on the use of reinforcement spacers can be found in the relevant Cordek data sheets and in BS 7973-1 (2001).
- Reinforcement or other construction materials should not be stockpiled on top of the Filcor. Concrete pumping equipment should not be positioned on the sheets / blocks unless approval from the Project Design Team has been given.
- \* The use of a 50 mm thickness of concrete blinding should be considered where heavy reinforcement is proposed or where the reinforcement will be subjected to significant point loads from foot traffic or other imposed loading.

DISCLAIMER: Information contained within this 'Installation Guide' is for guidance only, and it is intended for experienced construction industry workers. It contains summaries of aspects of the subject matter and does not provide comprehensive statements of construction industry practice. As conditions of usage and installation are beyond our control we do not warrant performance obtained. Please contact us if you have any doubt as to the suitability of application. The information provided within this document is based on data and knowledge correct at the time of printing.