# INSTALLATION GUIDE



## **CELLVENT HX**



#### **Product Identification:**

 All Cellvent HX panels are clearly labelled, confirming the product type, depth, grade and dimensions.

### **Product Selection & Suitability:**

- The suitability of Cellvent HX 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 Cellvent HX Data Sheet

#### Storage & Handling

- All products are delivered in a polythene wrapping and are clearly labelled. Both packs of Cellvent HX and individual panels can be manually handled and offloaded upon delivery, taking into account any site specific manual handling regulations.
- Due to the relatively light nature of the product, all Cellvent HX packs / panels 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.
- Cellvent HX panels 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.

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.

#### **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 Cellvent HX panels 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.
- Heavy foot traffic directly on the Cellvent HX panels, particularly the edges, should be avoided or alternatively the use of walking boards should be adopted.
- Cellvent HX panels are suitable for horizontal (flat) installation only and should not be installed vertically or on a sloping surface. If there is a requirement to form an angled thickening in the slab e.g. adjacent to a ground beam, the use of Cordek Filcor EPS fillets should be considered.
- Where there is a requirement to cut the panels, this should be undertaken using a fine-toothed saw or hot wire cutter (available for hire from Cordek). Cellvent HX panels should not be cut to a width less than 300mm to maintain stability.

#### **Preparation:**

 Cellvent HX panels should be placed upon a suitable firm and level surface. Typically, a blinding layer beneath the panels is recommended.

#### **Procedure:**

- Cellvent HX panels should be positioned with the green polypropylene board facing upward and the moulded EPS cellular structure below. Individual panels should be butted together, staggering the joints where possible, with taping of the joints using the Cordek Formwork Tape to avoid any grout loss between them.
- Where a membrane e.g. DPM is proposed, this should be positioned above the Cellvent HX panels, not beneath, to maintain its integrity should ground heave occur.

### **Venting Accessories & Outlets:**

 Prior to concrete placement, consideration should be made with regards to connecting the Venting Accessories / Perimeter Vent Outlets based upon the recommendations and specification of the Project Design Team.

# INSTALLATION GUIDE



#### **Concrete Placement:**

- Reinforcement spacers can be positioned directly upon the Cellvent HX panels 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 Cellvent HX panels. 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 Cellvent HX panels.
- Surcharging should be avoided when placing concrete on to the Cellvent HX panels. Concrete pumping equipment should not be positioned on the panels unless approval from the Project Design Team has been given.
- The depth of concrete placed above the Cellvent HX panels must not exceed that stated in the relevant product literature. If the depth of concrete proposed exceeds that stated for the panel type being used, multiple pours may be considered providing that the initial pour does not exceed the maximum permissible depth allowed and the load from subsequent pours is transferred to the foundations and not the Cellvent HX panels.
- Construction of columns, walls etc above the slab / ground beam / pile cap should not take place until the concrete has cured sufficiently to allow load transfer to the foundations below, to avoid surcharging the Cellvent HX panels and exceeding their stated safe load capacity.
- \* 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.