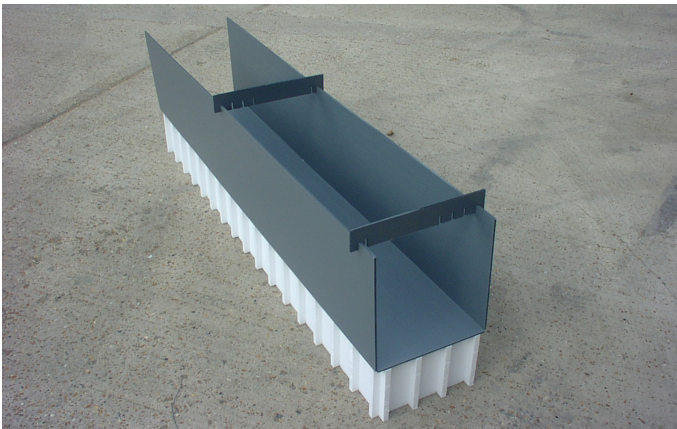


## CELLFORM HX



### Product Identification:

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

### Product Selection & Suitability:

- The suitability of Cellform 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 Cellform HX Data Sheet

### Storage & Handling

- All products are delivered in a polythene wrapping and are clearly labelled. Both packs of Cellform 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 Cellform 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.
- Cellform 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.

## INSTALLATION

### General:

- The excavations for the ground beams 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 Cellform 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.
- Cellform HX panels are suitable for horizontal (flat) installation only and should not be installed vertically or on a sloping surface.
- 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).

### Preparation:

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

### Procedure:

- Individual Cellform HX panels should be butted together, jointed using the Cellform HX connectors and staple clips, with taping of the joints using the Cordek Formwork Tape to avoid any grout loss between them.
- For piled ground beams, the top of each pile should be trimmed so that it extends slightly above the proposed underside of the ground beam. Each pile should penetrate the Cellform HX panel to allow for an approximate 50mm thickness of concrete blinding on top where applicable\* and a keying depth into the ground beam based upon the project specific design.
- When installing Cellform HX adjacent to piles, the use of Heaveguard pile collars should be considered. Pile collars are available in various depths to match that of the Cellform HX panels, with an internal void to suit the diameter of the pile.
- Where a membrane e.g. DPM is proposed, this should be positioned above the Cellform HX panels, not beneath, to maintain its integrity should ground heave occur.

For further guidance on product selection and suitability, please consult the Cordek Technical Team on 01403 799600, [techsupport@cordek.com](mailto:techsupport@cordek.com) or visit our website at [www.cordek.com](http://www.cordek.com).

## Connecting Cellform HX Panels:

- **Step One:** Connectors should be attached to the vertical ends of the permanent formwork.
- **Step Two:** The adjoining panel should be positioned so that the vertical ends of the formwork locate in the open side of the connectors.
- **Step Three:** Staple clips should be used to secure the connection between the adjoining Cellform HX panels by being positioned over the connector and pushed down into the panels on either side.
- **Step Four:** Install form braces by slotting over vertical formwork.

## Inter-connecting beams:

- **Step One:** Cut the vertical formwork to allow it to open towards the perpendicular connecting beam.
- **Step Two:** Position perpendicular Cellform HX panel with vertical formwork on the outside of the opened formwork in the connecting panel.
- **Step Three:** Apply Cordek Formwork Tape to secure the vertical formwork from the two connecting panels together.

## Corner Detail:

- **Step One:** If required a Heaveguard pile collar should be positioned around the pile, prior to installation of the pre-formed corner unit.
- **Step Two:** Connectors should be fixed to the pre-formed corner unit prior to connection of the perpendicular Cellform HX panels.
- **Step Three:** The adjoining panels should be positioned so that the vertical ends of the formwork locate in the open side of the connectors.
- **Step Four:** Staple clips should be used to secure the connection between the Cellform HX panel and the pre-formed corner unit by being positioned over the connector and pushed down into the panels on either side.

## Pile Detail:

- **Step One:** A pile collar should be positioned around the pile.
- **Step Two:** Cellform HX Infill Panels should be positioned to the sides of the pile collar, prior to connection to the adjoining Cellform HX panels.
- **Step Three:** The adjoining Cellform HX panel should be positioned so that the vertical ends of the formwork locate in the open side of the connectors.
- **Step Four:** Staple clips should be used to secure the connection between the adjoining Cellform HX panels by being positioned over the connector and pushed down into the panels on either side.

## Concrete Placement:

- Reinforcement spacers can be positioned directly upon the Cellform 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 Cellform 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 Cellform HX panels.
- Surcharging should be avoided when placing concrete on to the Cellform 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 Cellform 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 Cellform HX panels.
- Construction of columns, walls etc above ground beam should not take place until the concrete has cured sufficiently to allow load transfer to the foundations below, to avoid surcharging the Cellform 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.