



CONSTRUCTION
SOLUTIONS
2019





OUR SOLUTIONS

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ABOUT CORDEK

Since our formation in 1973, Cordek has provided technical solutions for a wide range of construction requirements.

Innovative thinking, engineering expertise and CAD/CAM skills, combined with our in-house manufacturing capabilities, enables us to provide the best quality, value solutions supported by the highest levels of personal service.

GROUND HEAVE IS COMMONLY CAUSED BY THE REHYDRATION OF EXPANSIVE SOIL TYPES, OVERBURDEN RECOVERY RESULTING FROM DEEP EXCAVATIONS OR PERMAFROST.

The Cordek range of ground heave solutions is designed to protect suspended floor slabs, piled ground beams and pile caps from the effects associated with ground heave.

In addition to ground heave protection, the product range includes systems which incorporate permanent formwork, insulation and passive ground gas venting options.

Both standard and bespoke solutions are available to meet the specific ground heave protection requirements of the foundation design.



GROUND HEAVE SOLUTIONS INCLUDE:

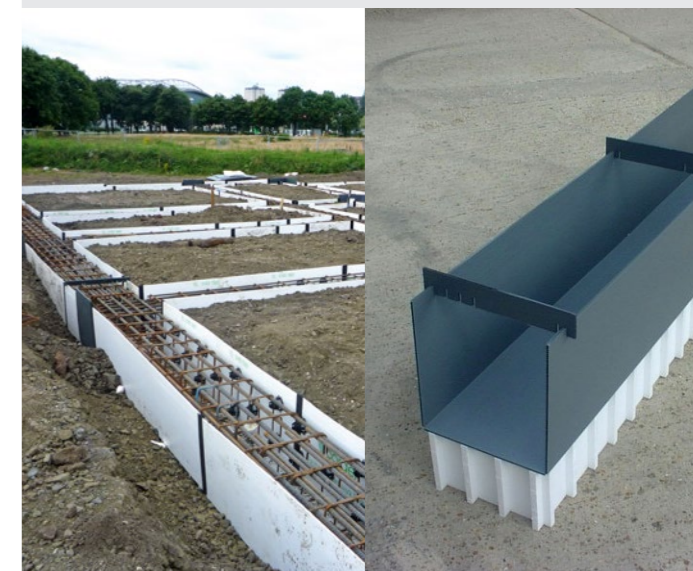
Cellcore HX S, HX B & HG

Designed to protect reinforced suspended concrete floor slabs, piled ground beams and pile caps from the upward forces associated with the effects of ground heave.



Cellform HX

Combines the benefits of Cellcore HX with an economical and simple to install permanent formwork system.



Cellcore HX Plus

Provides combined ground heave protection and integral insulation in a single product.



Heaveguard

A compressible, low density, Expanded Polystyrene (EPS) product, used to protect foundations against lateral heave. Available in both sheet and pile collar formats.



FILCOR IS INCREASINGLY BEING SPECIFIED FOR AN EVER-GROWING RANGE OF APPLICATIONS.

The most common applications include use as a lightweight structural fill alternative to more traditional materials.

Features and available options include:

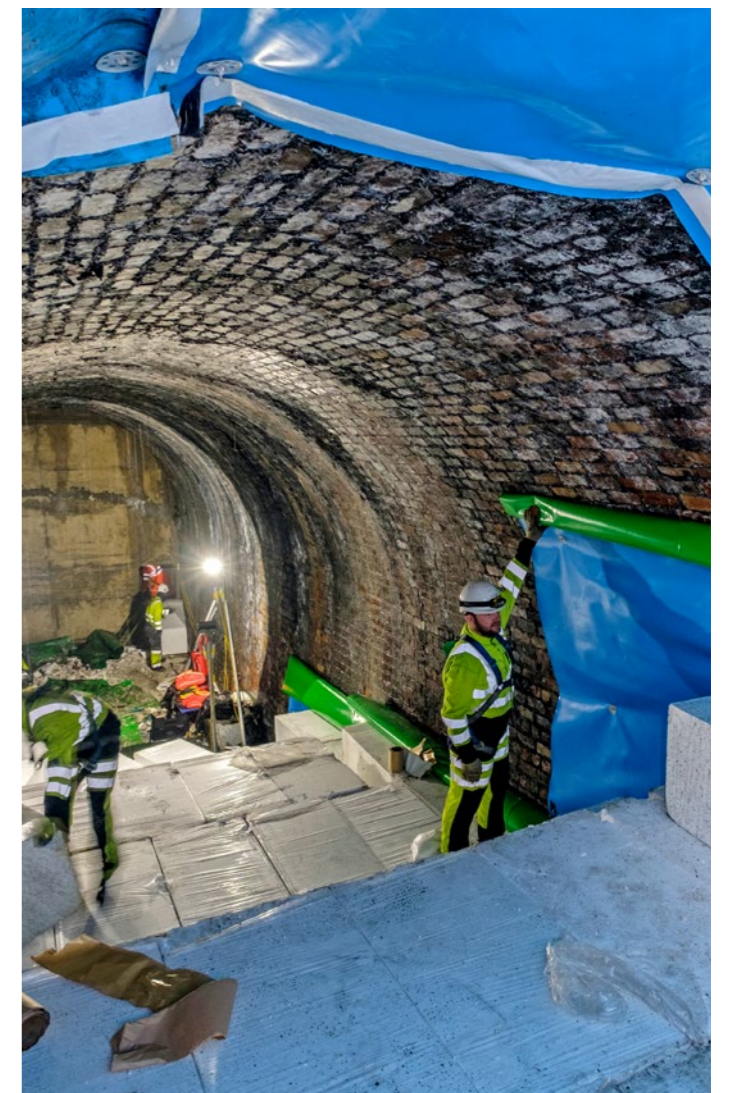
- A wide range of compressive strengths
- Lightweight and easy to handle
- Available as standard sheets or blocks
- Can be profiled to project specific requirements
- Provides a high degree of insulation
- Flame retardant
- Hot Wire Cutter hire service offered

Common applications for which Filcor can be considered include:

- Road embankments & widening
- Bridge abutments
- Retaining walls
- Rail platforms
- Access solutions
- Protection of below ground utilities & services
- Landscaping
- Auditoriums & stadia



STRUCTURAL FILL SOLUTIONS:



FILCOR IS COMMONLY USED AS A LIGHTWEIGHT MATERIAL FOR FORMING AND FILLING VOIDS WITHIN CONCRETE STRUCTURES.

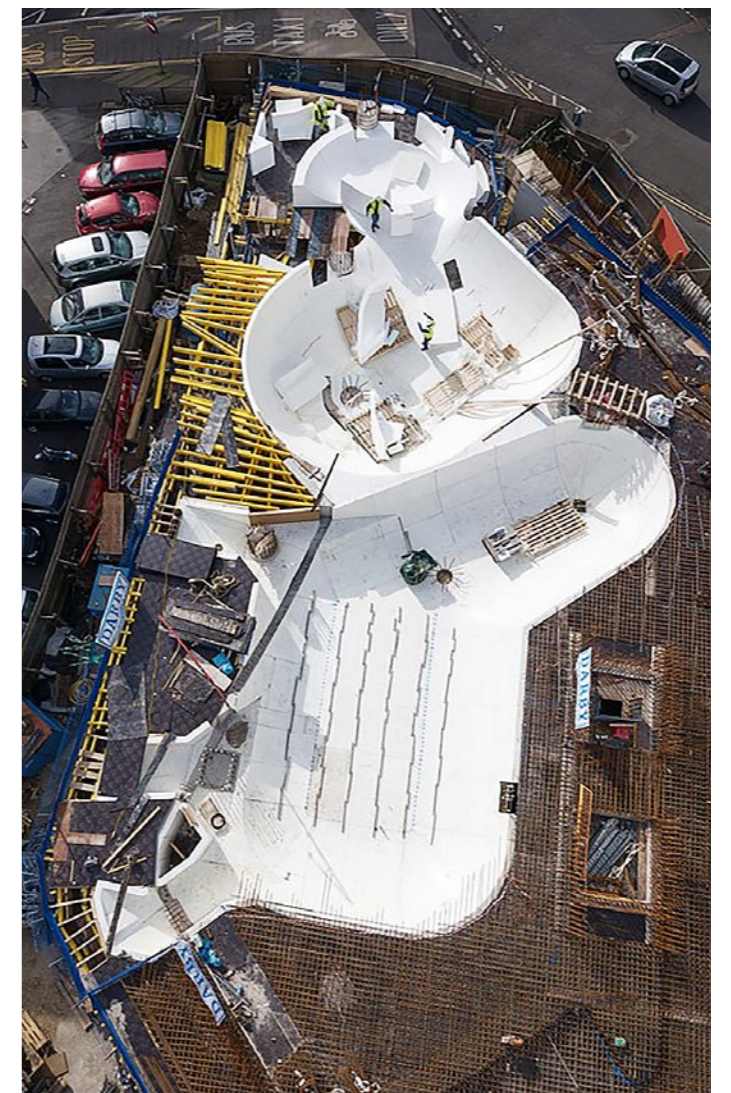
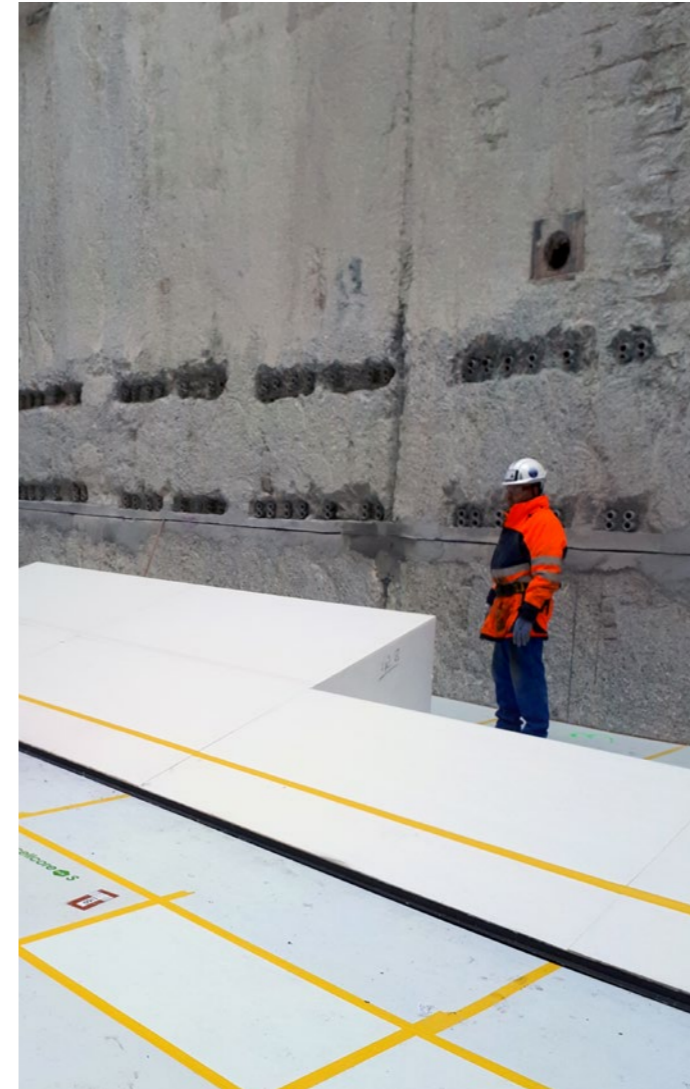
The use of Filcor reduces the weight of the structure when left in-situ or alternatively can be used for temporary applications as part of a formwork system.

Features and available options include:

- A wide range of compressive strengths
- Lightweight and easy to handle
- Can be profiled to project specific requirements utilising CAD/CAM conversion
- Available with a range of robust surface finishes
- Flame retardant



VOID FORMERS SOLUTIONS:



THE RISKS ASSOCIATED WITH VOLATILE ORGANIC COMPOUNDS (VOCs) AND GROUND GASES HAS LED TO AN INCREASING NUMBER OF CONSTRUCTION PROJECTS REQUIRING THE USE OF A SUITABLE PROTECTION SYSTEM TO SAFEGUARD BOTH THE DEVELOPMENT AND ITS OCCUPANTS.

Cordek is at the forefront of VOC and Ground Gas Solutions, having developed a range of venting and protection systems which have evolved through extensive research and development.



VOC & GROUND GAS PROTECTION SOLUTIONS INCLUDE:

Ventform

Moulded EPS panels designed to provide a combination of sub-floor venting and insulation to ground bearing or suspended slabs.



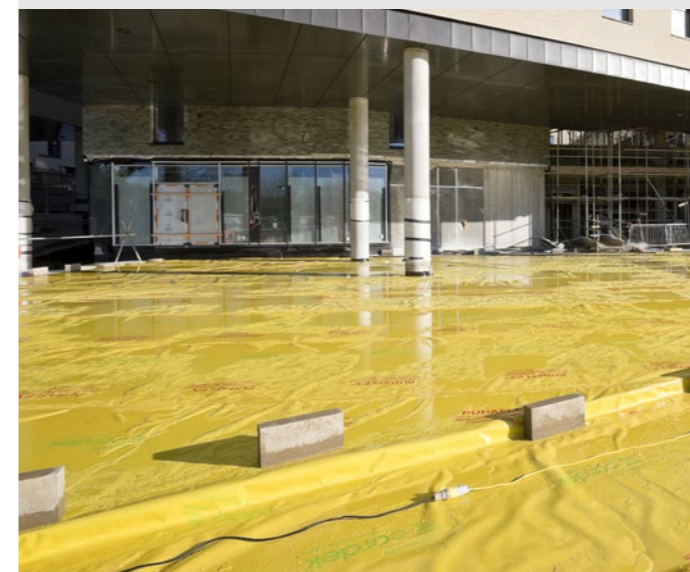
Cellvent HX

Provides combined ground heave protection and sub-floor venting capabilities in a single product.



Membranes & DPCs

VOC & hydrocarbon barriers, ground gas resistant membranes and DPCs.



Venting & Membrane Accessories

A range of accessories to provide a complete VOC and/or gas protection system.



THE PRODUCTS WITHIN THE CORDEK PILING RANGE PROVIDE SOLUTIONS TO COMMON ISSUES ASSOCIATED WITH PILED FOUNDATIONS.

These include accurate construction of concrete guide walls and infilling of sheet piles. Additionally, our piling range can help to create voids in piles to enable a reinforcement connection and aid in the trimming down of piles.

Manufactured from Filcor (Expanded Polystyrene), these products have been used extensively within piled constructions due to their ease of use and cost effectiveness when compared to traditional methods.



PILING PRODUCT SOLUTIONS INCLUDE:

Guide Wall Formers (Sacrificial or Reusable)

For accurately forming in-situ concrete guide walls.



Sheet Pile Infills

An economical and lightweight solution to infilling the open pans in an exposed sheet pile wall.



Pilecor

Simplifies the process of forming a structural connection between a bored pile and a basement slab.



Corbreak

A unique system to aid the trimming down of large diameter piles.



06 / PERMANENT FORMWORK FOR GROUND BEAMS & PILE CAPS

CORDEK OFFERS A RANGE OF FORMWORK SOLUTIONS FOR THE CONSTRUCTION OF IN-SITU GROUND BEAMS AND PILE CAPS.

For all of the permanent formwork systems, a complete service from initial site consultation and material scheduling, through to quotation and delivery is provided.

Corgrid

This system comprises a steel mesh, fully encapsulated in heat shrunk polythene, which is supplied in a pre-formed shape to suit project requirements.



Groundform/Sideform

Manufactured from twin wall polypropylene sheets which can be supplied pre-formed to project specific requirements or as standard sheets for fabrication on site.



Reinforcement Spacers

Designed to support the steel reinforcement used within reinforced concrete structures to maintain the specified concrete cover.



07 / RIBBED SLAB FORMWORK

CAST IN-SITU, RIBBED CONCRETE FLOORS ARE AN EFFICIENT DESIGN SOLUTION FOR CONCRETE FRAME CONSTRUCTION; BENEFITS OF USING THIS TECHNIQUE INCLUDE LONGER FLOOR SPANS AND REDUCED WEIGHT OF THE STRUCTURE.

Cordek's trough and waffle moulds can be used for the construction of both one-way and two-way spanning ribbed floors and are cost effective formwork systems designed for multiple uses.

Depending on the choice of materials they can also provide a consistent and high-quality finish for exposed soffits.

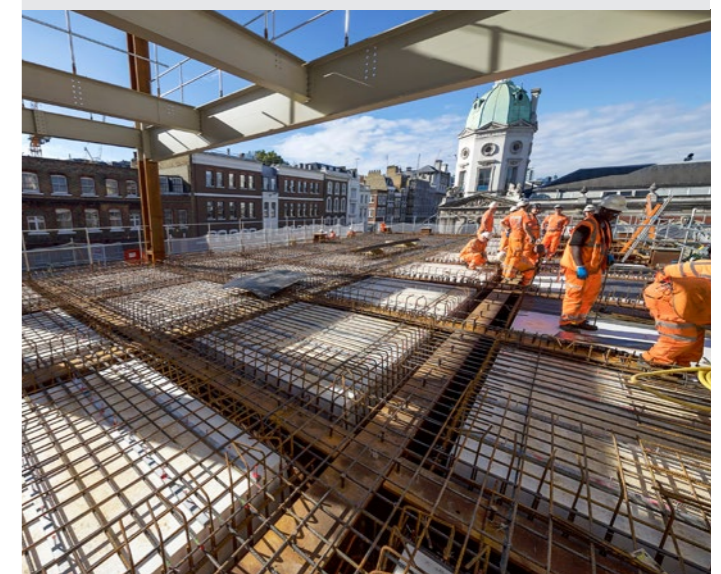
Trough Moulds

Formwork solutions for the construction of one way spanning, ribbed concrete floor slabs.



Waffle Moulds

Formwork solutions for the construction of two way spanning, ribbed concrete floor slabs.

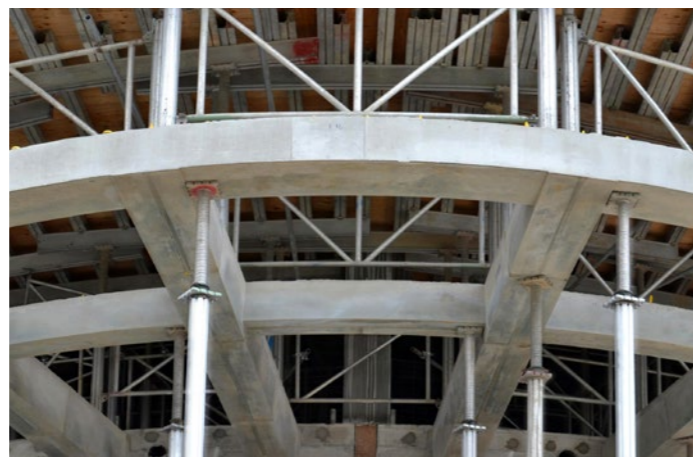
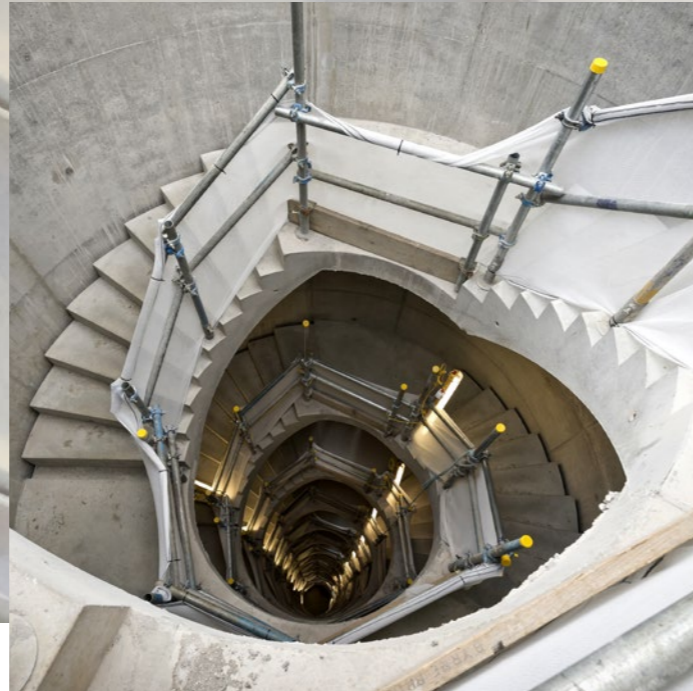


WHEN CONSTRUCTING COMPLEX, CURVING PROFILES USING IN-SITU CAST CONCRETE, THERE IS OFTEN THE REQUIREMENT TO CONSIDER A BESPOKE FORMWORK SOLUTION.

Our in-house Project Design Team is experienced in providing cost effective formwork solutions for creating distinctive architectural features, finishes and shapes.

Common applications for which bespoke formwork solutions are used include:

- Complex columns
- Spiral staircases
- Arches & domes
- Complex concrete frames
- Tunnel linings/openings
- Architectural features
- Ceiling soffits
- Parapets & copings
- Feature walls
- Balconies
- Street furniture/landscape features



BESPOKE FORMWORK SOLUTIONS:



09 / TEMPORARY ACCESS & PROTECTION

TEMPORARY ACCESS

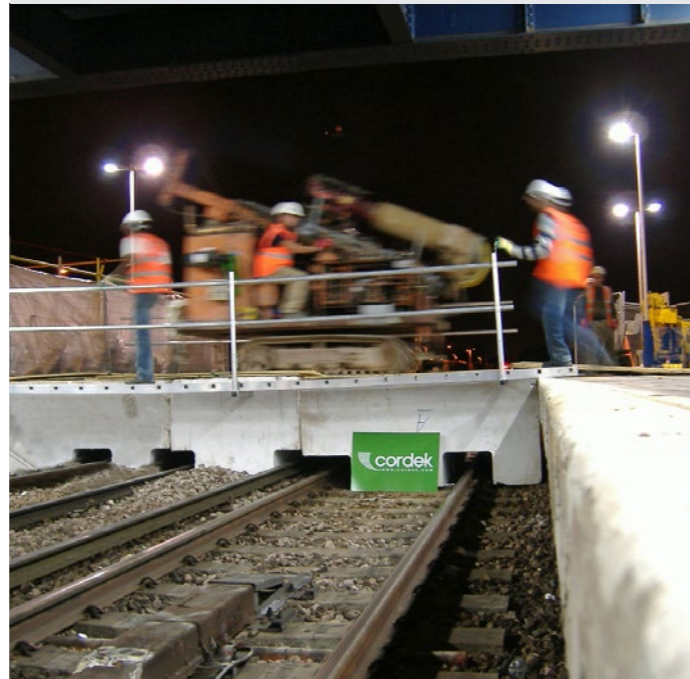
CORDEK OFFER SOLUTIONS FOR TEMPORARY ACCESS IN THE FORM OF RAMPS AND PLATFORM CROSSINGS, COMMONLY USED DURING THE REFURBISHMENT OF EXISTING BUILDINGS AND RAILWAY STATIONS.

Each temporary access solution is manufactured from lightweight Filcor to meet the project specific requirements.

Features and available options include:

- Bespoke profiles & dimensions
- Lightweight – manually handleable
- Practical assembly – removal and storage
- Range of robust surface finishes available

Temporary Platform Crossings



TEMPORARY PROTECTION

THERE ARE A NUMBER OF SITUATIONS ON A CONSTRUCTION SITE WHERE THE SAFEGUARDING OF FIXTURES, MATERIALS AND FINISHES ARE NECESSARY.

Correx is the original, twin wall fluted, polypropylene protection board and has become the industry standard for most temporary protection applications.

Features and available options include:











- Lightweight, durable & impact resistant
- Range of thicknesses, colours & sizes
- LPS1207 accredited & anti-static options
- Range of compatible jointing tapes available

Correx



TECHNICAL SUPPORT SERVICES

If you are looking for something specific then visit our technical library at www.cordek.com/technical-library for the following tools and resources:

 Data Sheets	 Standard Details
 Policies	 Declaration of Performance
 MSDS Data Sheets	 Certification, Approval & Guidance
 NBS Clauses	 BIM Library
 Brochures	 Installation Guides

Cordek also offers a range of comprehensive Continuing Professional Development (CPD) Seminars for Architects, Contractors, Designers and Engineers. Please contact us for more information.



Our team of experienced Technical Advisors can help at any stage during your project, from specification to on-site installation guidance. Please contact us or visit our website for more information:

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☎ 01403 799600

📱 www.cordek.com

