# Sheet Pile Infills Data Sheet



Sheet Pile Infills are designed as a quick, economical and lightweight solution to infilling the open pans in an exposed sheet pile wall.

Manufactured to order from Filcor (Expanded Polystyrene), they are available in a range of profiles and densities to suit customer requirements.

Each infill unit is accurately cut on a CNC machine to suit the exact profile of the sheet pile system being used and they are typically supplied in 1.2 metre lengths.

# **Key Features**

- Aids the extraction of the sheet piles following construction of the concrete retaining wall
- Provides a flat profile for the installation of construction membranes or an in-situ concrete wall
- Removes the need for backfilling in a confined space

#### Installation

Starting at the bottom of the sheet pile wall, each infill unit should be positioned within the recess of the sheet pile. There are several methods of retaining including using mechanical fixings, a suitable adhesive or the placement of a construction membrane over the infill units.

Once the lowest infill unit is in position, further units should be positioned above it, with all joints closely butted together, until the recess in the sheet pile is filled to the required level.

Should any of the infill units require cutting, this can be carried out using a fine tooth saw or hot wire cutter (available for hire from Cordek – please contact our sales team on 01403 799600).

# **Storage & Handling**

All products are delivered in a polythene wrapping and are clearly labelled. Individual units 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 materials should be weighted down or secured if they are stored outside prior to installation. No further storage requirements are needed as the product is unaffected by both UV light and water.

For further information on the full range of Cordek's Piling Products, please contact the Cordek technical team on 01403 799600, techsupport@cordek.com or consult our website at www.cordek.com.



Piling Products Data Sheet

#### **Product Sizes**

Each sheet pile infill is typically manufactured in 1.2m and to the profile of the specified sheet pile type. CAD data for common sheet pile types are held on file by Cordek or alternatively bespoke profiles can be created upon request.

### **Physical Properties**

GRADE									
	Filcor 20	Filcor 45	Filcor 70	Filcor 90	Filcor 100	Filcor 120	Filcor 140	Filcor 160	Filcor 190
Manufactured BS EN 13163:2012									
Physical Properties									
Nominal Density (kg/m³)	15	20	25	30	35	40	45	50	55
Compressive Strength at 1% Strain (kPa)	20	45	70	90	100	120	140	160	190
Compressive Strength at 10% Strain (kPa)	70	100	150	200	250	300	350	400	500
Other Data									
Max Depth of Concrete (assumed 25kN/ m³ to not exceed Compressive Strength at 1% strain (m)	0.8	1.8	2.8	3.6	4.0	4.8	5.6	6.4	7.6
Max Depth of Concrete (assumed 25kN/ m³ to not exceed Compressive Strength at 10% strain (m)	2.8	4.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0

## **Design Notes**

- The grade of Filcor used to manufacture the Sheet Pile Infills should be based upon the maximum height of the concrete pour rather than the overall height of the structure being constructed.
- Where the use of a waterproof and / or gas protection membrane is proposed, it is suggested that the maximum depth of the concrete pour does not exceed that suggested for Compressive Strength at 1% strain as indicated in the table above.
- For applications that do not require the use of a waterproof and / or gas protection membrane, it is suggested that the maximum depth of the concrete pour does not exceed that suggested for Compressive Strength at 10% strain as indicated in the table above.
- Please consult with the Cordek technical team on 01403 799600 if further advice is required.

Issued: 10/2020

DISCLAIMER: Information contained within this 'Technical Data Sheet' 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.

#### Cordek Ltd

Spring Copse Business Park, Slinfold, West Sussex RH13 OSZ, United Kingdom

Telephone (+44) 1403 799600 Fax (+44) 1403 791718 E-mail\_info@cordek.com

