



Installation Guide



Fortress is manufactured in 150mm deep sections that stack one on top of each other to reach desired depth. Each ring section is castellated to positively interlock with the unit above and below.

Footway – Min. 20mm mortar Grass or loose surfaces - 100mm fillet around the chamber Roadway - 25mm resin bedding mortar

Max. Chamber Depth 2100mm

Excavation Depth =

Depth of frame and cover + bedding material + depth of chamber + depth of base material

Duct spacing

At least half the width of the duct Calculation:

- 1. Add up all duct widths
- 2. Divide by total surface length of the chamber around the outside
- 3. Multiply by 100
- 4. You should not get a value greater than 20

Base material

A15 - 50mm compacted stone

B125 - 100mm compacted stone

C250 - 150mm lean mix concrete (C40)

D400 - 150mm lean mix concrete (C40) reinforced with A393 mesh

Ducts cannot be in top or bottom ring or within 50mm of inner corner

Excavation footprint

· · · · · Bedding

- A15 100mm* compacted stone, or as dug material if of a granular type
- B125 100mm* Compacted MOT1 stone or lean mix concrete
- C250 150mm* min. 150mm C40 concrete
- **D400** 200mm* min. 200mm C40 concrete

*or width of compaction device

Bottom ring is to be pushed 10mm into base material (if no preformed base is fitted)

Bedding mortar

Backfill

Base material

No duct drilling

Ground

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This guide addresses the acceptable methods and details for installation of STAKKAbox™ Fortress. The purpose is to serve as a guideline, and is not intended for any specific construction project. Cubis Systems reserves the right to alter these guidelines and encourages contact with the factory or its representatives to review any possible modification to these notes prior to installation.

Assemble Ring



Layout parts



Put parts together



Fix parts together using bolts supplied

Excavate



Mark area of excavation



Excavate area to required depth

Lay and compact base material



Level and compact base



Pour required base material and compact



For more information on installation and technical documentation visit www.cubis-systems.com

Assemble Chamber



Lay first ring and ensure it is level



Stack additional rings ensure there is no space between

Duct entries & furniture



Drill duct entries using a core drill



Slot cable management brackets into wall



A CRH COMPANY

Fix steps onto wall using provided M12 bolts

Backfill



Use bracing if chamber is bigger than 610



Lay backfill material in 150mm layers, compacting between layers to top edge of chamber

Frame and Cover



Place frame onto chamber (bracing can then be removed)



Add beam, covers and bolt down covers



Reinstate



Reinstate surface up to frame edge



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Driven by Innovation

Innovation is the engine that has driven Cubis Systems to its position as global leader in the design and manufacture of access chambers and

Inspired by innovation, we have developed quality products that replace traditional construction materials like bricks and concrete. Our lightweight plastics, incorporating intelligent design features, are used in the construction of infrastructure networks for the rail, telecoms, water, construction and power markets worldwide. Cubis products can be installed much faster than traditional methods and therefore save our customers both time and money.

Cubis manufactures the preformed STAKKAbox™ network access chamber systems, the AX-S™ access covers range, a MULTIduct™ multiple duct system and the PROtrough cable troughing system at sites throughout the UK and Ireland. These innovative products are exported to more than 25 countries throughout the world.

At Cubis we are committed to ongoing innovation and dedicated to delivering absolute product quality, detailed technical customer support and the highest levels of customer satisfaction.