RDT
Chamber Solutions
A Division of Mitras Composites (UK) Ltd






Part of the Moorland Composites Group

*Rapid*STACK™

Substantial chamber solution for D400 & B125 applications

*Rapid*STACK™ Chambers are a superior alternative to traditional class B engineering brickwork, block work or re-enforced cast insitu concrete. *Rapid*STACK™ is extremely quick to install, there is no need for a concrete surround and is available in a wide range of sizes. The system is cost effective, resulting in significantly lower labour, plant and road closure costs.

*Rapid*STACK™ is lightweight and conforms to HSE regulations for `one man lift` manual handling regulations. The chambers are independently tested to EN124 / B125 to D400 loading, and certified by recognised UKAS accredited test facilities.

*Rapid*STACK™ access Chambers are moulded from high strength glass reinforced polymer material and are designed for all underground network applications. Using easy handle, lightweight and strong 150mm deep sections, a finished chamber is produced by simple stacking the units to the required depth followed by backfill and reinstatement. The sections can be supplied either pre-assembled for ease of use or flat-pack for maximum efficiency

Clear Opening	Loading
450 x 450	D400/B125
450 x 600	D400/B125
600 x 600	D400/B125
675 x 675	D400/B125
900 x 450	D400/B125
900 x 600	D400/B125
900 x 900	D400/B125
1220 x 450	D400/B125
1220 x 600	D400/B125
1220 x 675	D400/B125
1220 x 900	D400/B125
1220 x 1220	D400/B125
610 x 610	B125
1310 x 610	B125
1310 x 1310	B125

Depth 150mm

Large duct chamber

Example shows a RapidSTACK™ chamber 1500mm x 1500mm D400 loading - complete with 268mm x 176mm galvanised steel RSJ.

Key Features

Independently tested to the vertical load requirements of BS EN124:1994 B125, D4000 & E600.

The modular sections are bolted together in the corners and interlock to form the complete chamber.

No concrete surround or bracing is require when constructing the chamber.

Easily configured to any size and depth.

No need for lifting and plant on site.

Wide operational temperature range-40 to 140°c.

Chambers are easily drilled on site for duct and service entries.

Resistance to aggressive soils and water.

Conforms to manual handling regulations.

range available 450mm - 250mm B125 and D400.

** Bespoke sizes are available up to 2500mm, contact our sales office for more information. Extended delivery lead times apply.*

Example of corbelled installation

- The modular design allows chambers to be corbelled
- Corbelling eliminates the need for large access opening or reducing slabs, thus minimising both the size and cost of the cover & frame and overall construction time.
- Please contact our sales office for more information regarding your corbelling requirements

*Rapid*STACK™ - Design

Design

The *Rapid*STACK™ access chamber design consists of four modular panels that are bolted together in the corners to form an easy to handle, robust 150mm deep chamber ring. Simply stacking the rings to the required depth produces a finished chamber. The ribbed structure design improves chamber performance through efficient material usage and resists both vertical and lateral applied loads. The *Rapid*STACK™ provides a full 76mm width-bedding area for the access cover and frame as stated in the Highways Agency Design Manual for Roads and Bridges – HA104/02

The Material

*Rapid*STACK™ access chambers are manufactured in DMC (dough moulding compound) and SMC (sheet moulding compound) which are a mixture of thermoset resins, glass fibre and fillers. These materials can be up to five times stronger than typical thermoplastic alternatives and are resistant to acids, alkalis and aggressive water and soil.

Independently tested

DMC raw material

The Assembly

Whilst *Rapid*STACK™ is of a comparable cost to that of traditional methods such as concrete or brickwork, the overall project cost saving is considerable. The chambers can be built by non-specialist labour, require no lifting equipment on site, are full strength from the moment of installation, and conform to manual handling 'one man lift' Health & Safety regulations. A typical installation of a 1220 x 675 x 900 mm deep, carriageway chamber will take no longer than one hour, including backfilling and reinstatement.

*Rapid*STACK™ – Examples of typical installations

District heating

Deep water main

Gas pressure reducing valve

Corbelled water main

Multiple duct lines

PRV installation

Rail chamber

Hinged ductile iron C&F