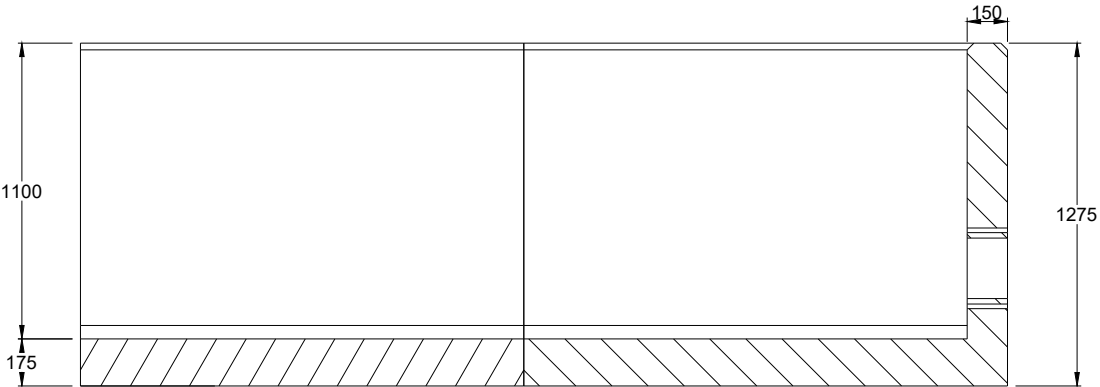
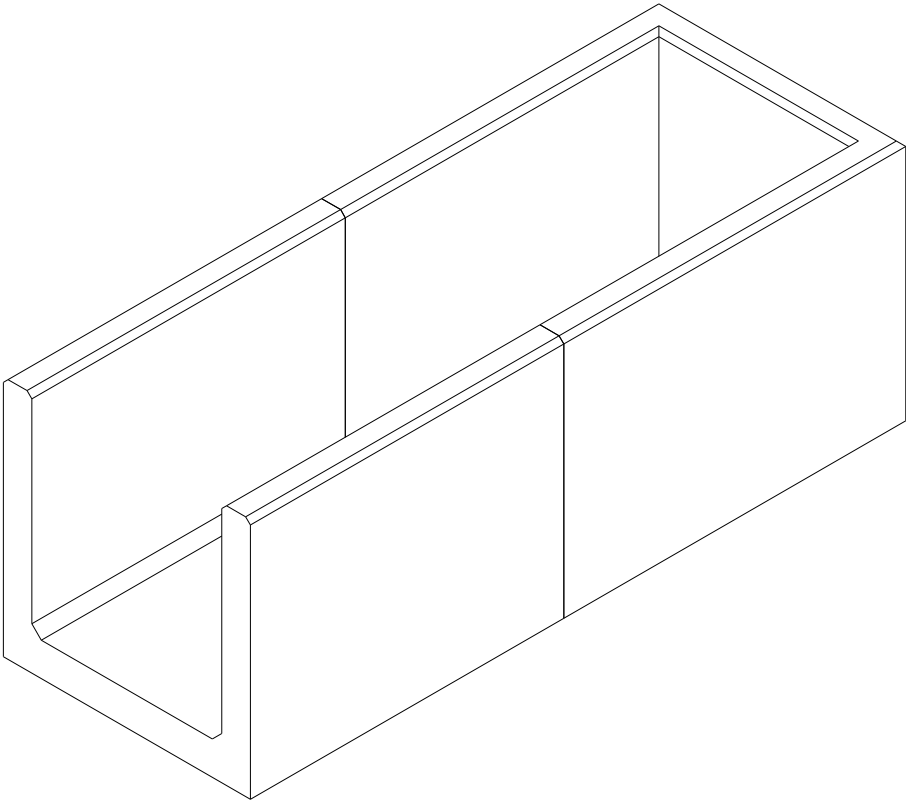
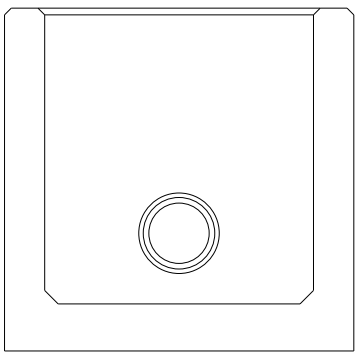
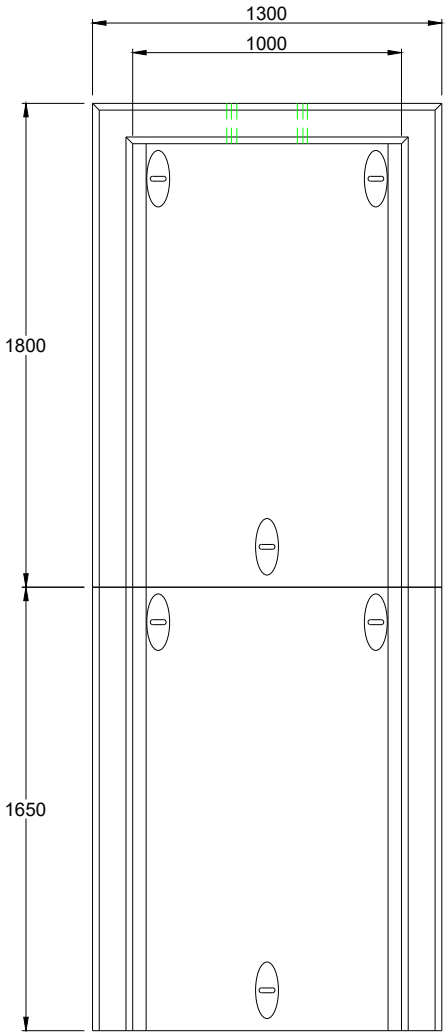


Opening in back wall cast to suit the outside diameter of the pipe at invert height required.



DO NOT SCALE DRAWING

**NOTES:**

- All dimensions in mm
- All measurements  $\pm 1$ mm

**Specification Information**

- Opening in back wall cast to suit outside diameter of the pipework
- Invert level of pipe can be set to your specification

**Headwall Installation**

Units should be bedded on minimum 150mm thick well compacted Class 6N or 6K\* well graded granular material with a 50mm topping of fine material (Class 6L\*) to ensure units are level and stable.

\*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov 09).

**Handling**

- A. Weight of concrete is based on 2.4 tonne/m<sup>3</sup>+5% is recommended for sizing lifting equipment.
- B. All lifting points shall be used as specified below
- C. Unit to be lifted as per lifting diagram

**Concrete**

- A. Mix ref: Self-compacting DC4/DS4 Mix
- B. Lifting strength based on 2 cubes = 20N/mm<sup>2</sup>
- C. Characteristic 28 day cube strength = 50N/mm<sup>2</sup>
- D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

**Reinforcement**

- A. Reinforcement to BS EN 13369
- B. Scheduling, dimensioning, bending & cutting to BS8666
- C. Cage to be machine tied with steel wire

**Manufacture**

- A. Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0086-CPR-650448 & BS EN 13369
- B. Tolerances to BS EN 13369 clause 4.3.1.1
- C. Finishing:

| Class | Top | Sides | Base | Rear of back wall |
|-------|-----|-------|------|-------------------|
| A     | A   | A     | A    | Self - Levelled   |

- D. Marking: Units shall be indelibly marked to show:
  - Mould reference code
  - De-mould date
  - Job reference number & unique product number
  - Unit weight (kg)

**Design**

- A. Concrete design to EC2
- B. Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
- C. Units are designed to withstand a vertical live load surcharge of 10kN/M<sup>2</sup>
- D. Weight of soil = 18kN/M<sup>2</sup>
- E. Angle of internal friction = 30 Deg.
- F. Design Life: >120 years

| Min Cover | Cover Block | Min Cover | Max Cover |
|-----------|-------------|-----------|-----------|
| Size (mm) | Size (mm)   | Size (mm) | Size (mm) |
| All Faces | 55          | 50        | 60        |

| Exposure       | Exposure induced | Corrosion induced | Freeze/thaw | Chemical |
|----------------|------------------|-------------------|-------------|----------|
| Classification | by Carbonation   | by Chloride       | attack      | attack   |
| All Faces      | XC3/4            | XD3               | XF4         | XA3      |

**Fabrication Specification**

- A. Manufacture IAW EN 1090-2 EXC CLASS 1
- B. Material grade is to be: BS EN 10025 S275
- C. Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
- D. All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
- E. Ensure vertical flats are fully welded both sides where possible.
- F. All sharp edges and burrs are to be removed.
- G. Remove all weld splatter.
- H. Holes by punching are permitted with reaming.
- I. Galvanising is carried out after fabrication to BS EN ISO 1461

**Handrail Specification**

- A. Kee Klamp® Galvanised Size 8 Fittings
- B. Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255
- C. 360N/m Design Load at stated in BS 8118, BS 6180, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.60 Handrails & Balusters & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 105 7th Edition Factory Stairways, Ladders and Handrails
- D. Other design loads available on request
- E. GRP/FRP Handrails also available

| REV NO | DATE | DESCRIPTION |
|--------|------|-------------|
|--------|------|-------------|



ADDRESS: ALTHON LIMITED  
VULCAN ROAD SOUTH  
NORWICH  
NR6 6AF

TEL: 01603 488700  
FAX: 01603 488598  
EMAIL: sales@althon.co.uk  
WEBSITE: www.althon.co.uk

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DRAWING TITLE / PROJECT:

RCH10B Channel Headwall

CLIENT:

| SCALE: | PAPER: | SHEET NO: | DATE:        |
|--------|--------|-----------|--------------|
| NTS    | A3     | 01 OF 01  | 02 - 03 - 21 |

| HEADWALL WEIGHT: | TOE WEIGHT: | GRATING WEIGHT: |
|------------------|-------------|-----------------|
| 5014kg           | N/A         | N/A             |

PRODUCT NAME: RCH10B

DRAWING No:

