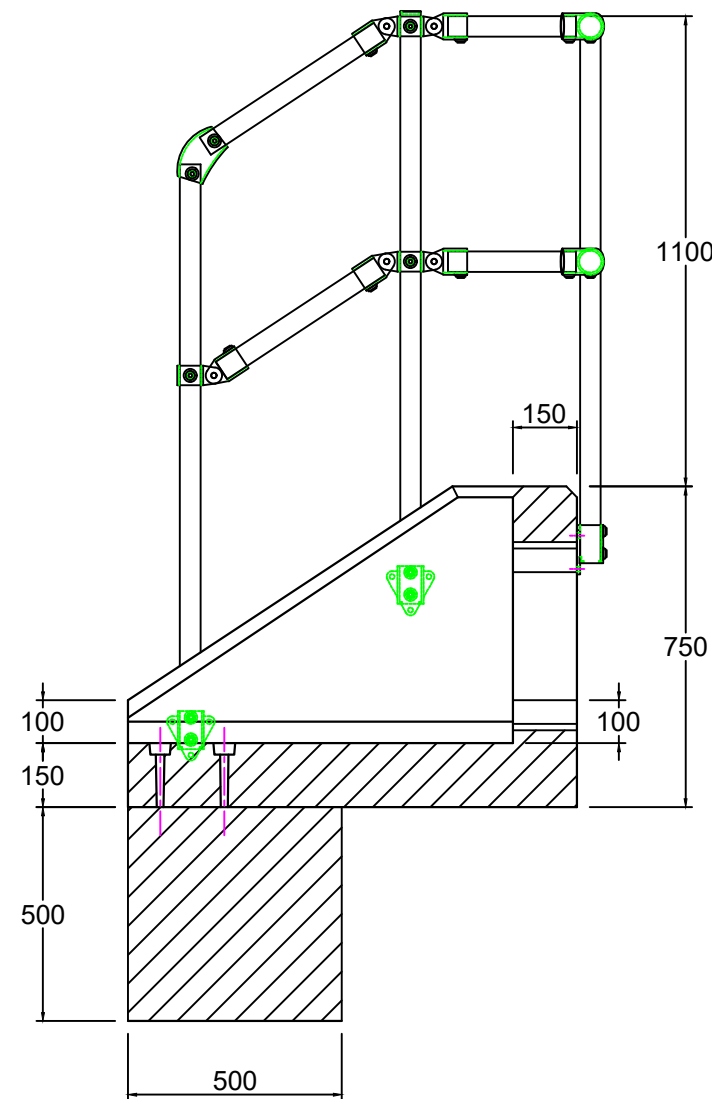
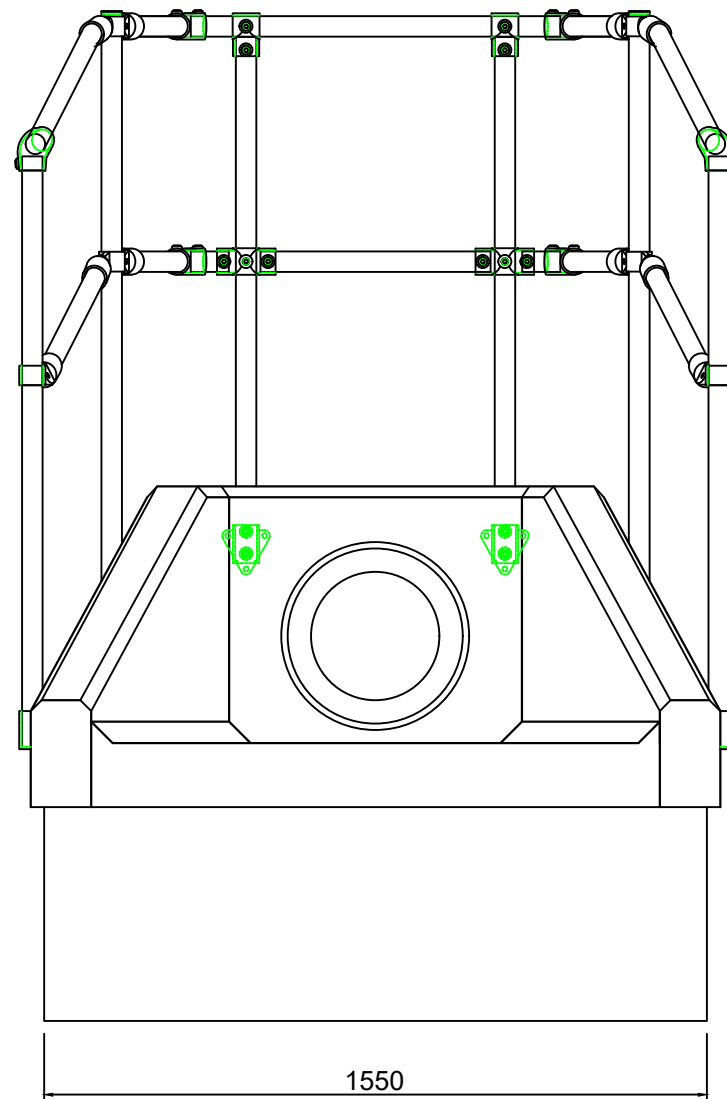
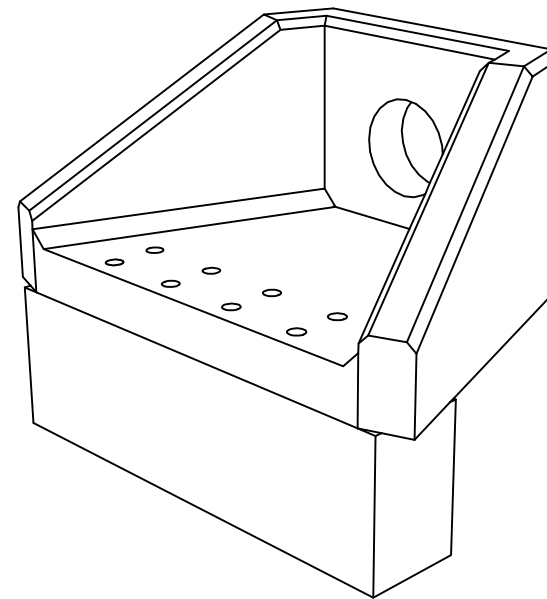


Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information



DO NOT SCALE DRAWING

NOTES:

- All dimensions in mm
- All measurements ± 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 200mm thick well compacted Class 6A* selected well graded granular material.
 *Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov.09).
 Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.

Handling

- A. Weight of concrete is based on 2.4 tonne/m³+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/mm²
- C. Characteristic 28 day cube strength = 50N/mm²
- 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 | Self - Levelled |
| All Faces | 55 | 50 | 50 | 60 |
- 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/m²
- D. Weight of soil = 18kN/m³
- E. Angle of internal friction = 30 Deg.
- F. Design Life: >100 years

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

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

PROPRIETARY & CONFIDENTIAL

The information contained in this drawing is the sole property of Althon Limited. Any reproduction in part or as a whole without the written permission of Althon Limited is strictly prohibited.

DRAWING TITLE / PROJECT:
SFA6A Headwall
500 x 500mm Toe
3 Sided Kee Klamp

| | | | |
|------------------------|-----------|--------------------|--------------------|
| CLIENT: | | | |
| SCALE: NTS | PAPER: A3 | SHEET NO: 01 OF 01 | DATE: 10 - 10 - 18 |
| HEADWALL WEIGHT: 941kg | | TOE WEIGHT: 930kg | |
| PRODUCT NAME: SFA6A | | | |
| DRAWING No: | | | |

