

NOTES:

- All dimensions in mm
- All measurements ± 1mm

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/m³+5% is recommended for sizing lifting equipment.
- B. All lifting points shall be used as specified below - Anchor points 7 loops
- 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

- E. Durus S500 48mm Macro / Embossed Monofilament Modified PP

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

Finishing:

	Top	Sides	Base	Rear of back wall
Class	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/m²
- D. Weight of soil = 18kN/m³
- E. Angle of internal friction = 30 Deg.
- F. Design Life: >120 years

*For products installed in aggressive environments, bitumen coating can be requested at additional cost

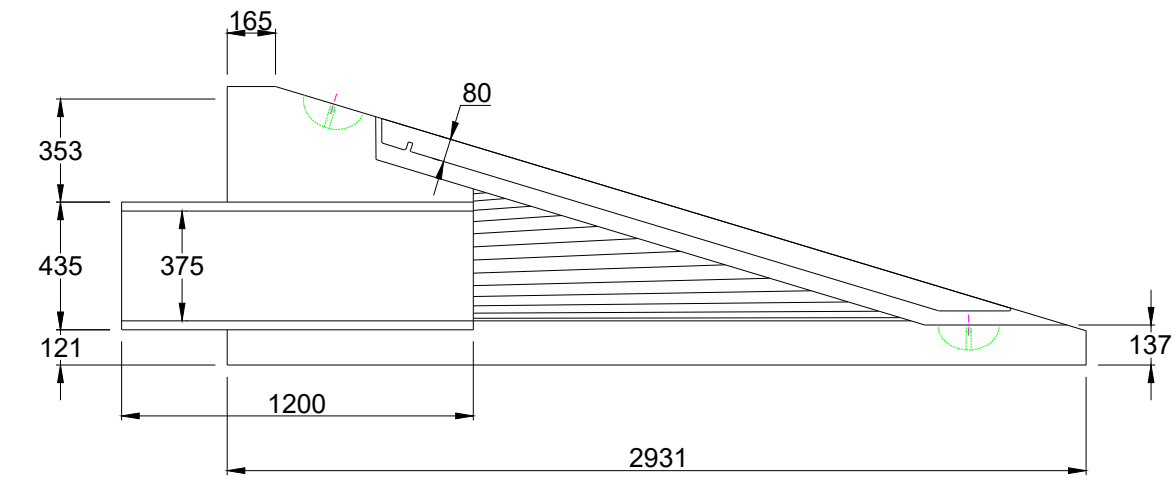
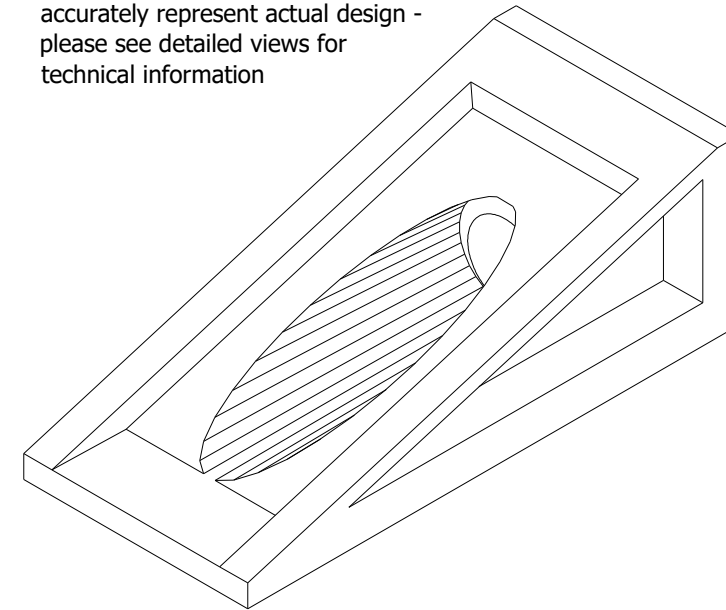
Min Cover	Cover Block Size (mm)	Min Cover Size (mm)	Max Cover Size (mm)
All Faces	55	50	63

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

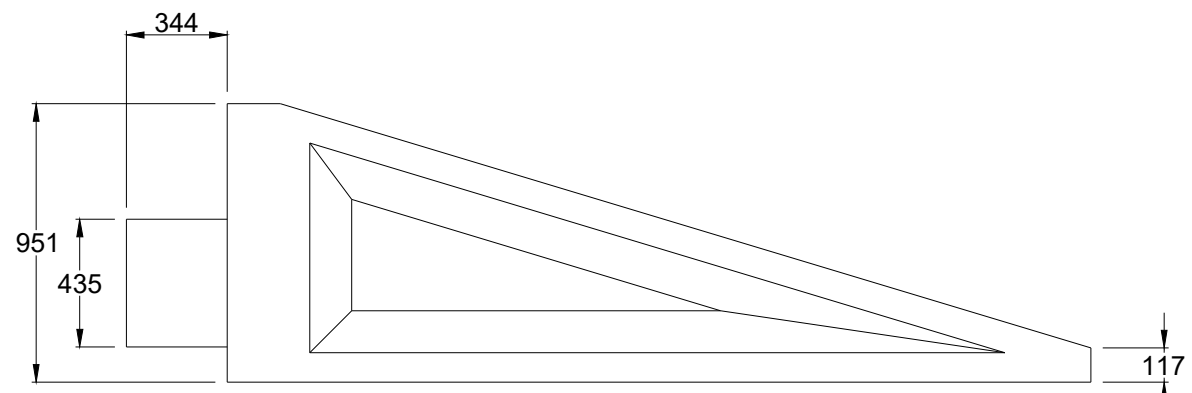
Fabrication Specification

- 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

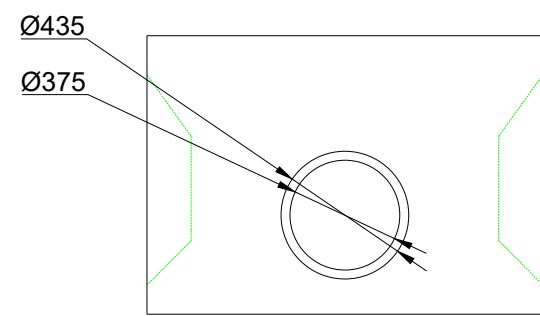
Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information



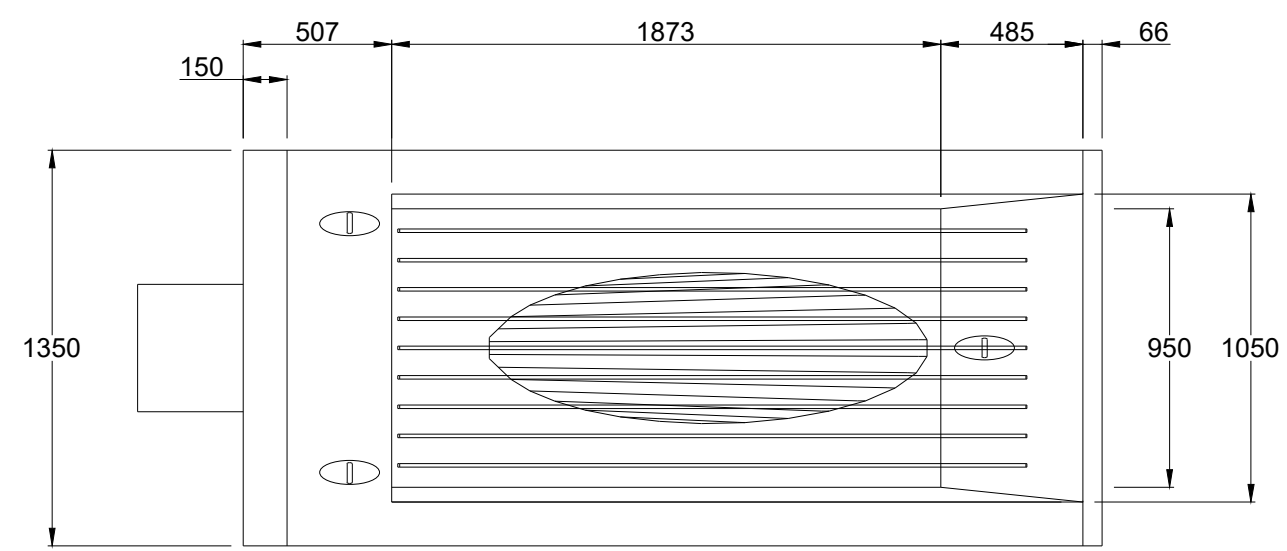
Section



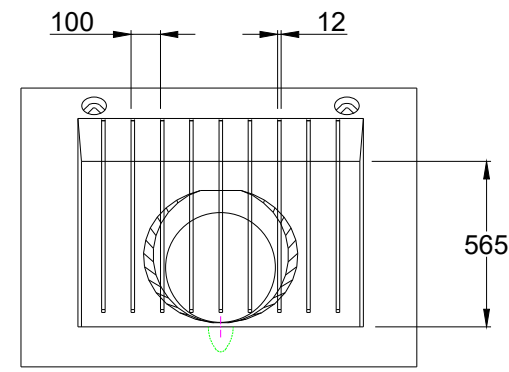
Side view showing rebate in side



Rear View



Plan View



Front View

DO NOT SCALE DRAWING

REV NO	DATE	DESCRIPTION



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DRAWING TITLE / PROJECT:

**400 Mitred Headwall
Fixed Grating**

CLIENT:

SCALE:	PAPER:	SHEET NO:	DATE:
NTS	A3	01 OF 01	04.11.2024

HEADWALL WEIGHT:	TOE WEIGHT:
3650kg	N/A

MISC WEIGHT:	GRATING WEIGHT:	DRAWN BY:
N/A	150kg	JW

DRAWING No: