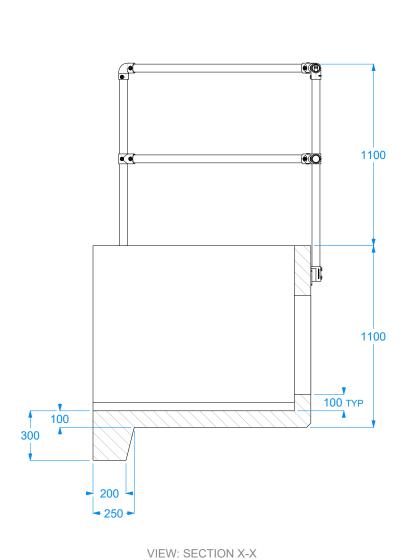
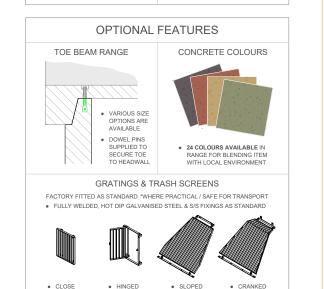


VIEW: FRONT



## STANDARD FEATURES OPENING SIZE GUIDE CUSTOM DESIGN BESPOKE SOLUTIONS ... CONCRETE Ø 720 mm STEELWORK HANDRAILS OPENING FLOW CONTROL TYPICAL MAXIMUM PIPE SIZES: PLASTIC TWINWALL I/D: Ø 600 mm CONCRETE I/D: Ø 450 mm INTEGRAL TOE CAST-IN S/S SOCKETS ACCURATE ALIGNMENT TO JOINT FITTINGS & OPTIONAL FEATURES





### FLOW CONTROL DEVICES FACTORY FITTED (WHERE PRACTICAL / SAFE FOR TRANSPORT) AS STANDARD

S/S FIXINGS & RUBBER SEALS / SEALANTS AS STANDARD

FLAP VALVES
 PENSTOCKS

# ALUMINIUM STOPLOG SYSTEM



. LOCKING BRACKETS & T-KEY KITS SUPPLIED, S/S FIXINGS & RUBBER SEALS AS STANDARD

DRAWING NOTES

- ns in mm U.O.S. All measure
- DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION Opening in back wall cast to suit outer dimension of pipe.
 Invert level of pipe can be set to your specification.

#### HEADWALL INSTALLATION

Jnits should be bedded on minimum 150mm thick well compacted Class 6N or 6K\* well graded granular material with 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

- Weight of concrete is based on 2.4 tonne/m³ +5% is recommended for sizing lifting equipment.
   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.
- Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

### REINFORCEMENT

- Reinforcement to BS EN 13369.
   Scheduling, dimensions, bends & 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 0086-CPR-650448 & BS EN 13369.
- Tolerances to BS EN 13369 clause 4.3.1.1.
- Top
   Sides
   Rear
   Rear of Backwall

   Class
   A
   A
   Self Levelled
- Marking, Units shall be indelibly marked to show Mould reference code.
- De-mould date.
- Job reference number & unique product number Unit weight (kg).

# DESIGN

Concrete structure designed to Eurocode 2.

- JKH have designed 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.

Weight of soil = 18kN/M².

Angle of internal friction = 30 Deg.

Design Life as table below \* (all cover sizes in mm).

	,				,			
Design Life	>50 years, 100mm Wall Thickness			>100 years, 150mm Wall Thickness				
Minimum Cover for All Faces	Block Size Cover	Min Size Cover	Max Size Cover	Block Size Cover		Min Size Cover	Max Size Cover	
	33	28	38	55		50	63	
*Design life of	>100 years c	an be exten	ded to >120 y	ears wi	th Bit	umen coat	ing application	
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
- Material grade is to be: BS EN 10025 S275
- Welding to IAW EN 1090-2 PARA 7.5.4 7.5.18
  All fillet & butt welds to have minimum throat thickness of
- 6mm and joints fully welded where possible.
- Ensure vertical flats fully welded both sides where possible All sharp edges and burrs are to be removed.

  Remove all weld splatter.
- Holes by punching are permitted with reaming.
  Galvanising process after fabrication to BS EN ISO1461.

#### HANDRAIL SPECIFICATION

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



NEBSITE: www.jkhltd.co.uk

PROPRIETARY & CONFIDENTIAL Information contained on this drawing is the sole property of JKH Drainage Units Ltd. Any reproduction in part or as a whole without the written permission of JKH Drainage Units Ltd is strictly prohibited.

DRAWING TITLE:

SERIES 600 HEADWALL (1100 HIGH) LEVEL WINGWALL STANDARD & OPTIONAL FEATURES

TOTAL WEIGHT (CASTINGS ONLY): 1340 kg

CONCRETE MIX DESIGN

CO<sup>2</sup> EMISSION REDUCTION ★ -50%

DRAWN: PN | ISSUE #: 01 | SHEET #: 1 of 1 | DATE: 12/2/24

600-1100-LW