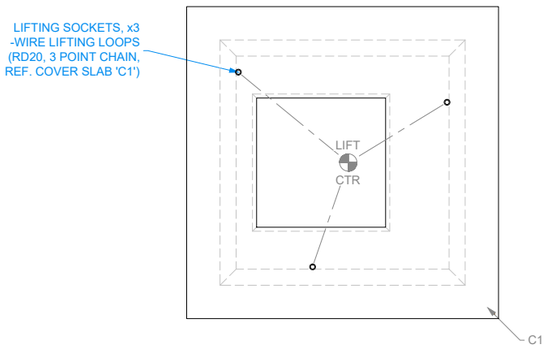
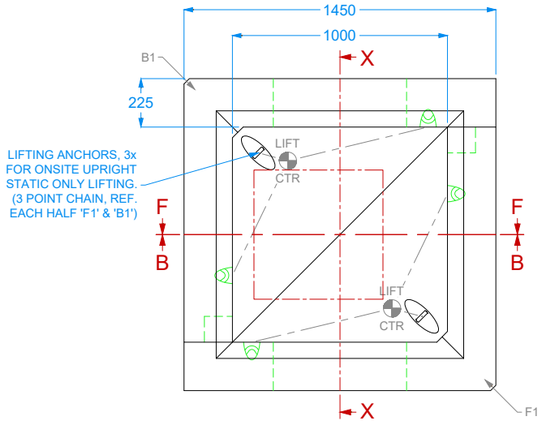
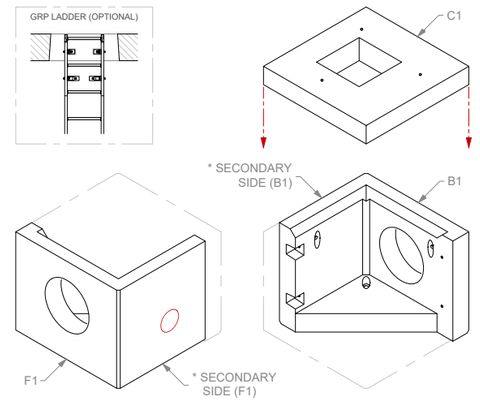


VIEW: TOP (COVER SLAB SHOWN ONLY)

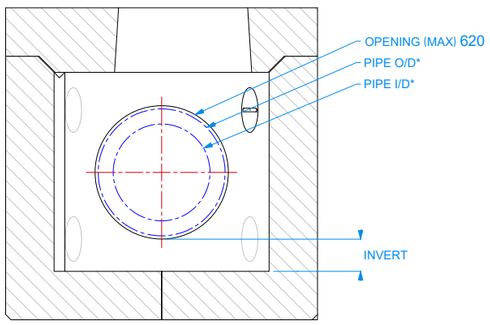


VIEW : TOP (CHAMBER SHOWN ONLY)

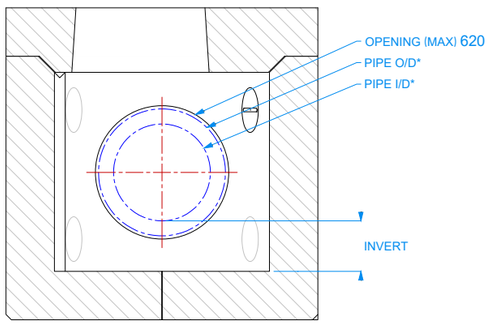
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



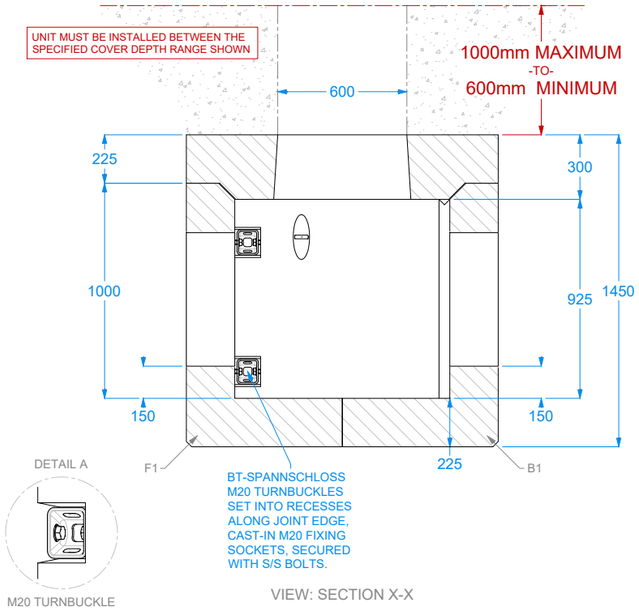
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1000x1000x1000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

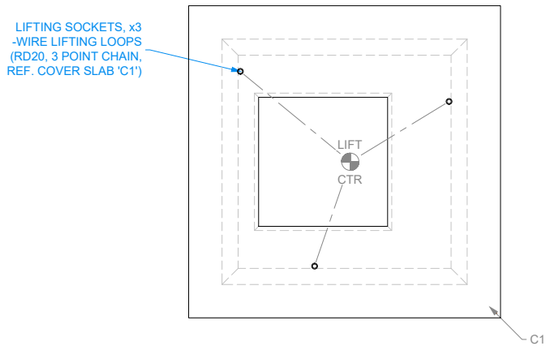
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

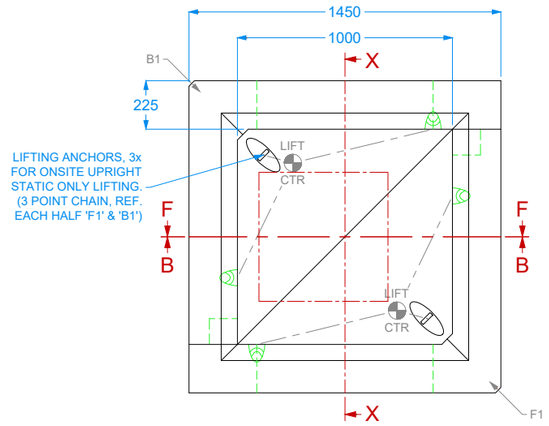
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	1865	0	0	0
B1:	1865	0	0	0
C1:	1340	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 5070

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

DRAWING #:
V.CHA-225-1000X1000X1000

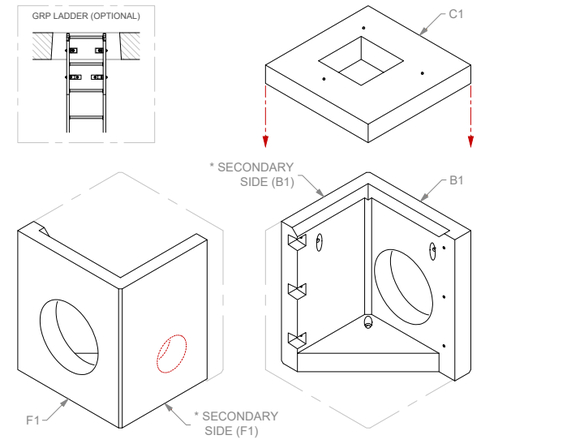


VIEW: TOP (COVER SLAB SHOWN ONLY)

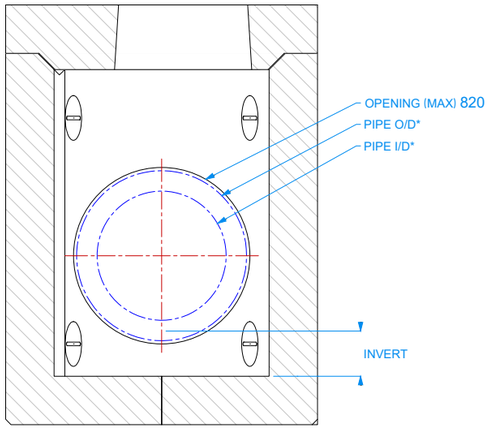


VIEW : TOP (CHAMBER SHOWN ONLY)

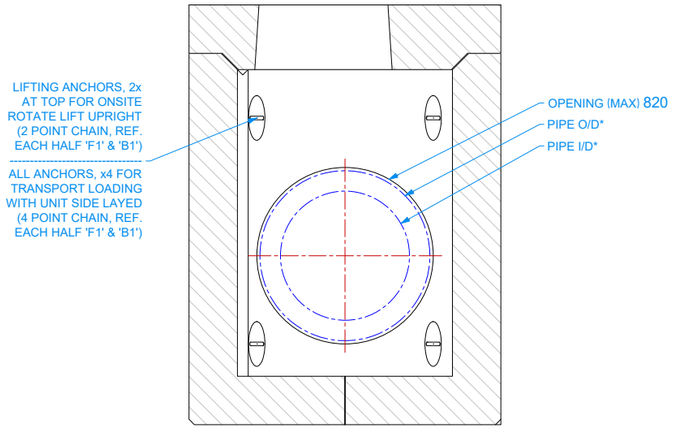
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



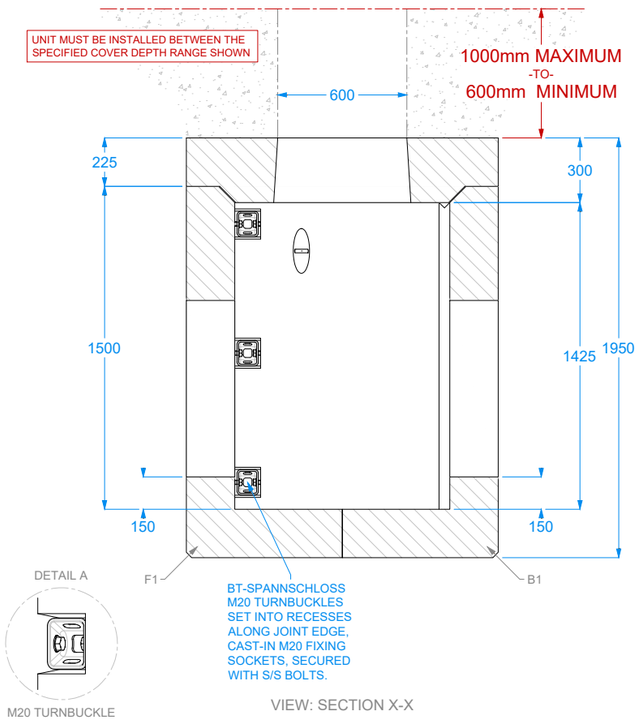
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS,
1000x1000x1500mm +PCC COVER SLAB
D400 CLASS LOADING SPECIFICATION
STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

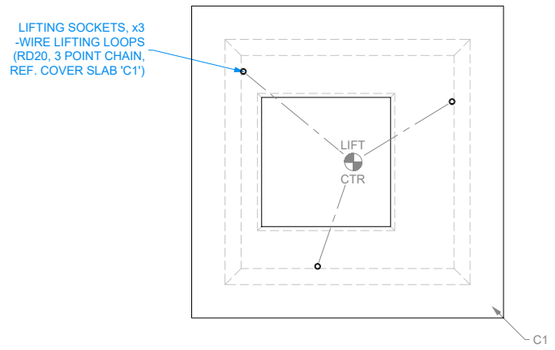
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

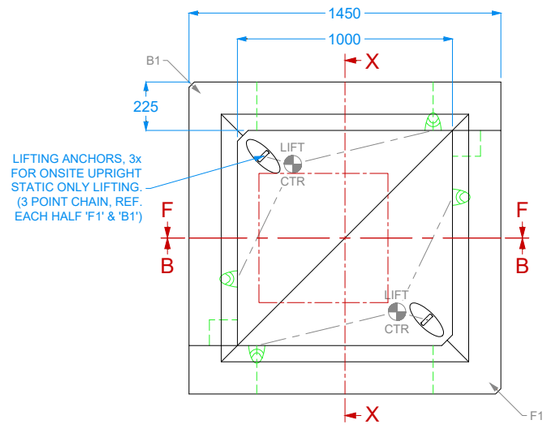
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1: 2530	0	0		0
B1: 2530	0	0		0
C1: 1340	0	0		0
0	0	0		0
0	0	0		0
TOE BEAM:	0	0	TOTAL WEIGHT: 6400	

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

DRAWING #:
V.CHA-225-1000X1000X1500

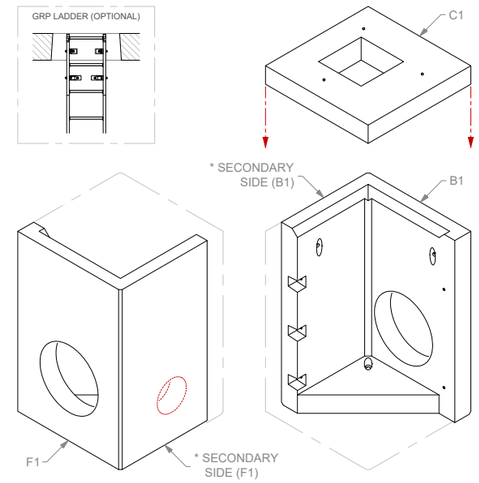


VIEW: TOP (COVER SLAB SHOWN ONLY)

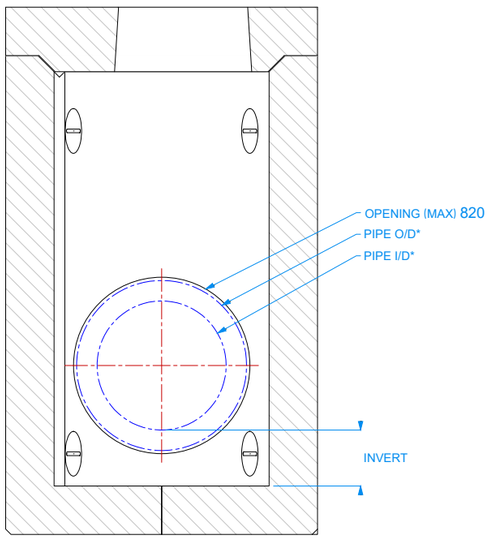


VIEW : TOP (CHAMBER SHOWN ONLY)

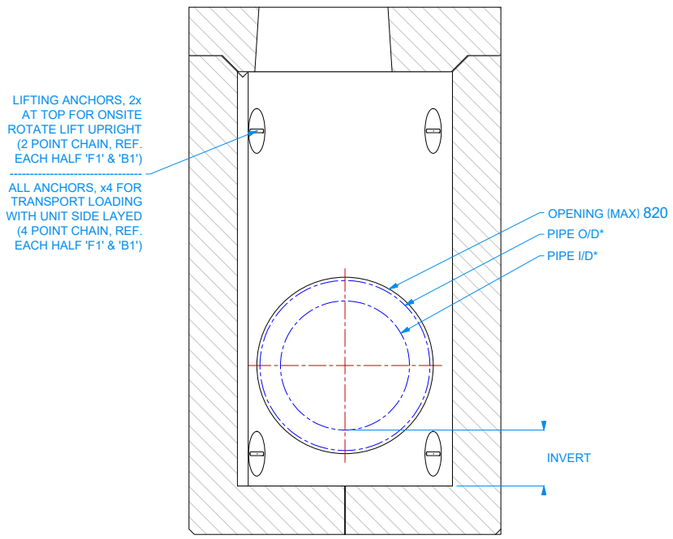
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



VIEW: ISOMETRIC

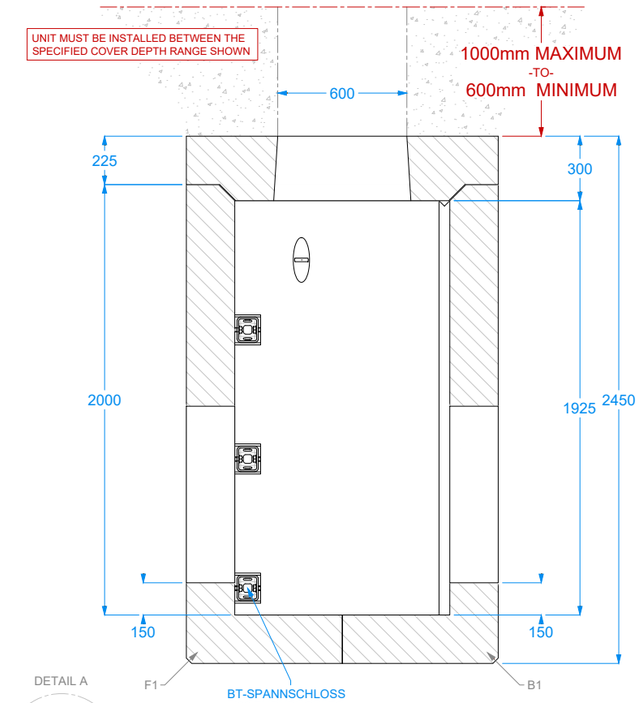


VIEW: SECTION F-F



VIEW : SECTION B-B

UNIT MUST BE INSTALLED BETWEEN THE
SPECIFIED COVER DEPTH RANGE SHOWN



DETAIL A

M20 TURNBUCKLE

VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
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TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1000x1000x2000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

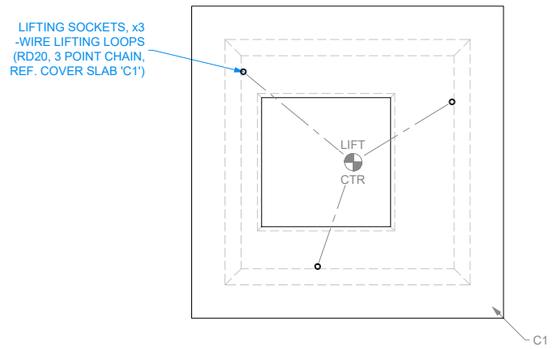
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

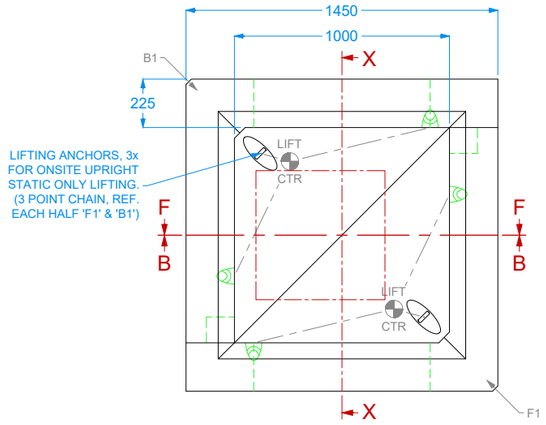
			0		1
CHAMBER, MULTIPLE-PIECE:					1
F1:	3185	0	1		1
B1:	3185	0	1		1
C1:	1340	0	1		1
	0	1	1		1
	0	1	1		1
TOE BEAM:		1	1	TOTAL WEIGHT:	7726

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

DRAWING #:
V.CHA-225-1000X1000X2000

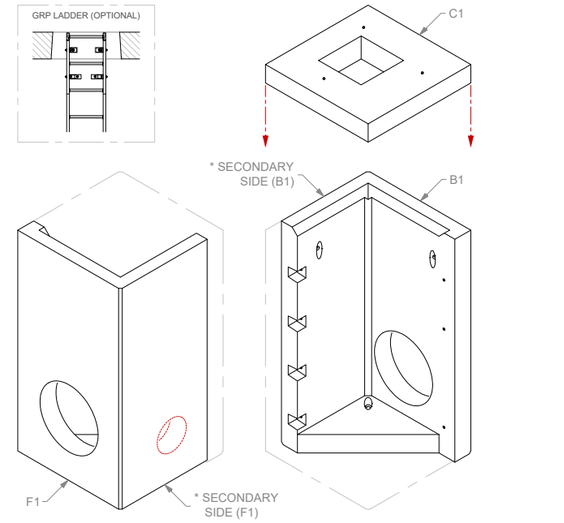


VIEW: TOP (COVER SLAB SHOWN ONLY)

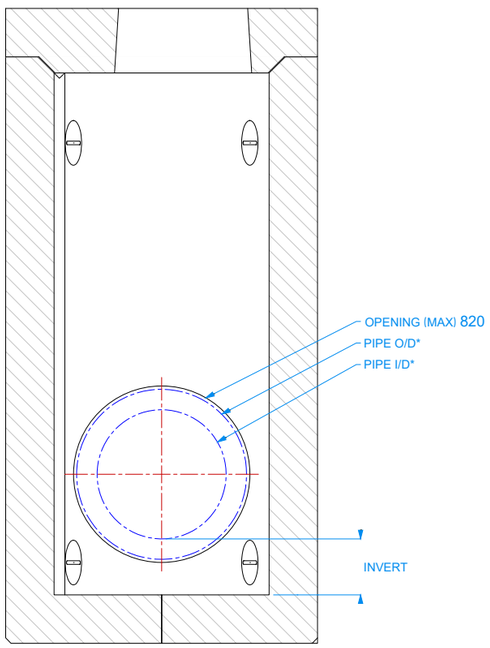


VIEW : TOP (CHAMBER SHOWN ONLY)

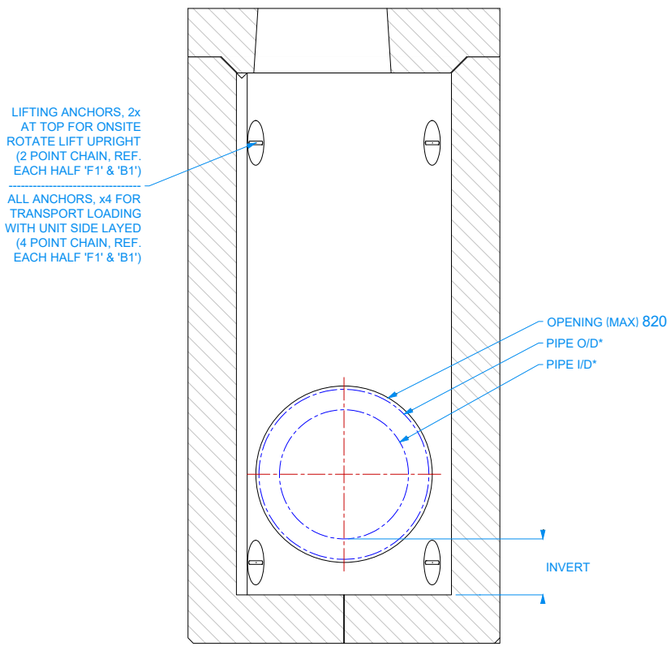
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



VIEW: ISOMETRIC

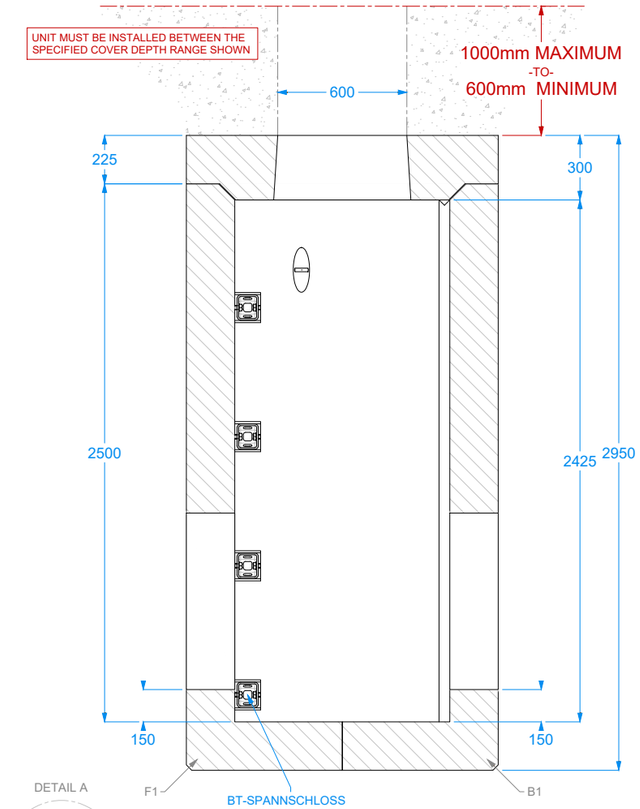


VIEW: SECTION F-F



VIEW : SECTION B-B

UNIT MUST BE INSTALLED BETWEEN THE
SPECIFIED COVER DEPTH RANGE SHOWN



DETAIL A

M20 TURNBUCKLE

VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following:
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1000x1000x2500mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

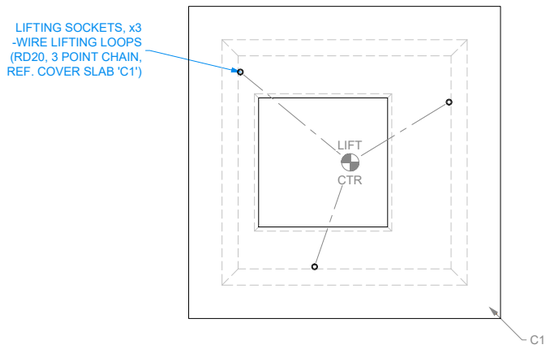
WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

			0		1
CHAMBER, MULTIPLE-PIECE:					1
F1:	3845	0	1		1
B1:	3845	0	1		1
C1:	1340	0	1		1
	0	1	1		1
	0	1	1		1
TOE BEAM:		1	1	TOTAL WEIGHT:	9046

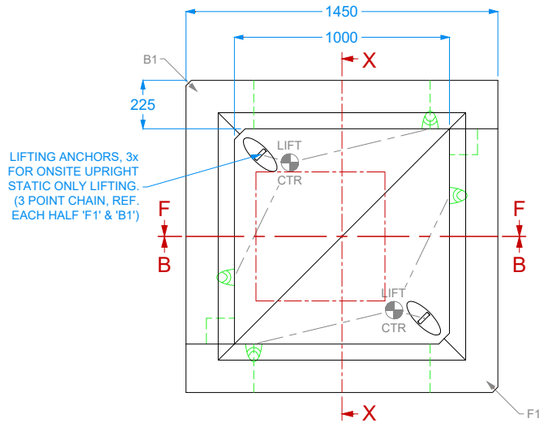
DRAWN: PN | ISSUE #: 01 | SHEET #: 1 | DATE: 12/2/24

DRAWING #:

V.CHA-225-1000X1000X2500

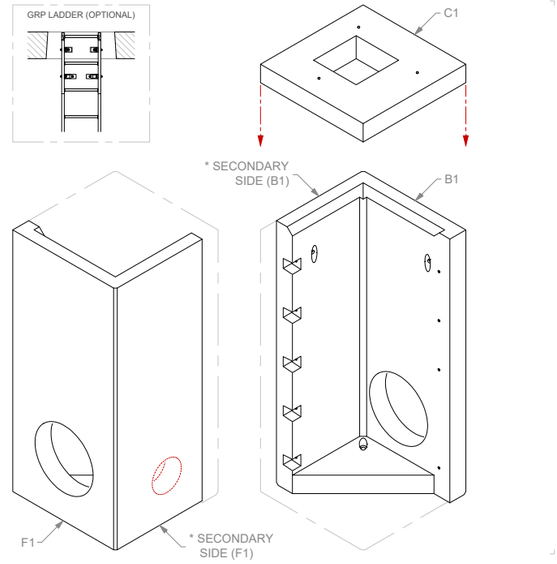


VIEW: TOP (COVER SLAB SHOWN ONLY)

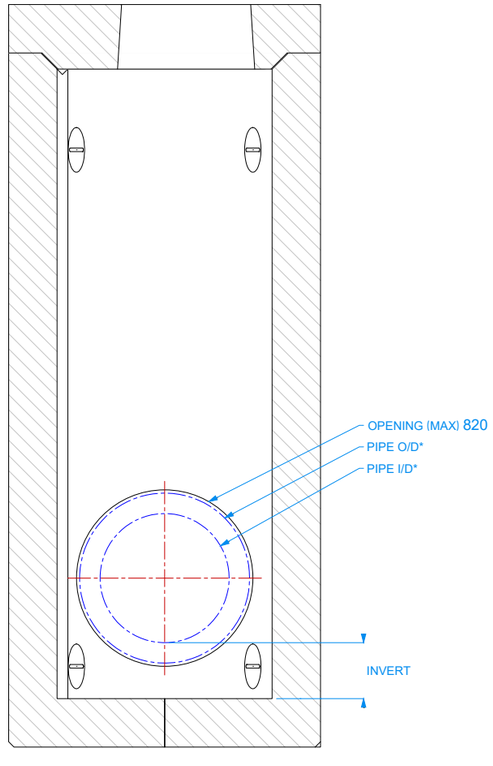


VIEW : TOP (CHAMBER SHOWN ONLY)

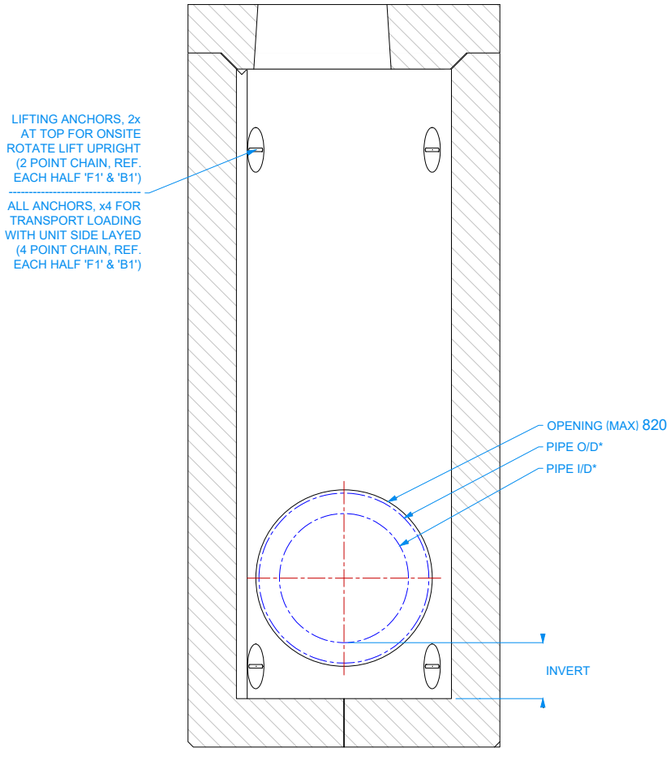
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



VIEW: ISOMETRIC

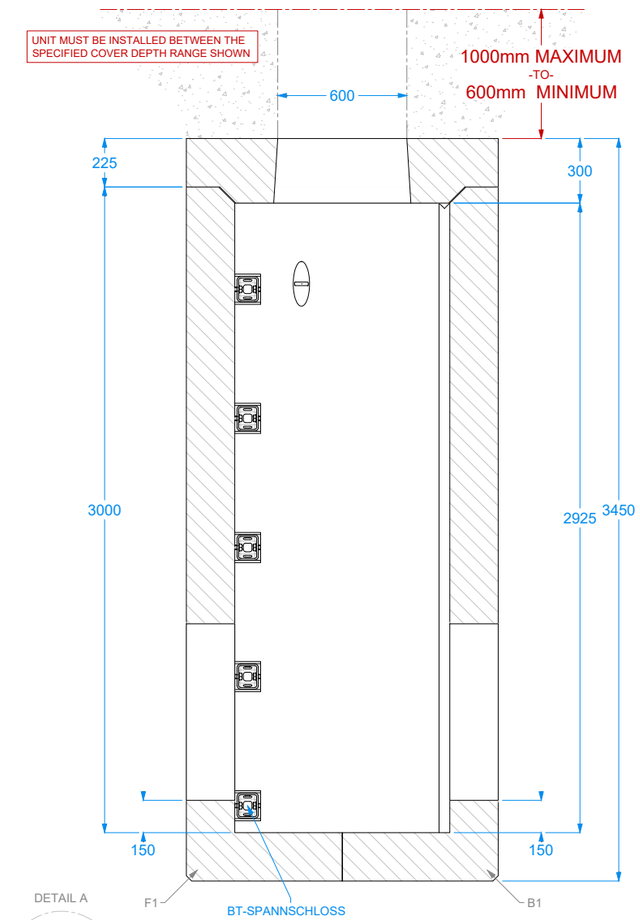


VIEW: SECTION F-F



VIEW : SECTION B-B

UNIT MUST BE INSTALLED BETWEEN THE
SPECIFIED COVER DEPTH RANGE SHOWN



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

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DRAWING TITLE:

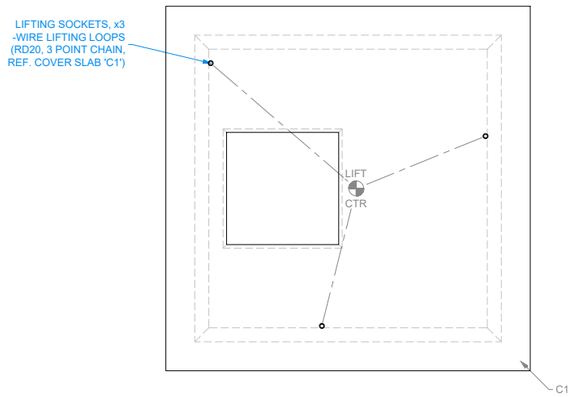
V CHAMBER 225mm WALL THICKNESS,
1000x1000x3000mm +PCC COVER SLAB
D400 CLASS LOADING SPECIFICATION
STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -
WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

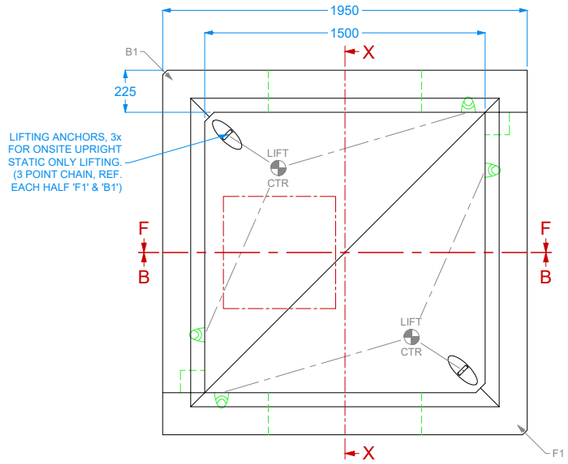
				0	1
CHAMBER, MULTIPLE-PIECE:					1
F1:	4505	0	1		1
B1:	4505	0	1		1
C1:	1340	0	1		1
	0	1	1		1
	0	1	1		1
TOE BEAM:		1	1	TOTAL WEIGHT:	10366

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

DRAWING #:
V.CHA-225-1000X1000X3000

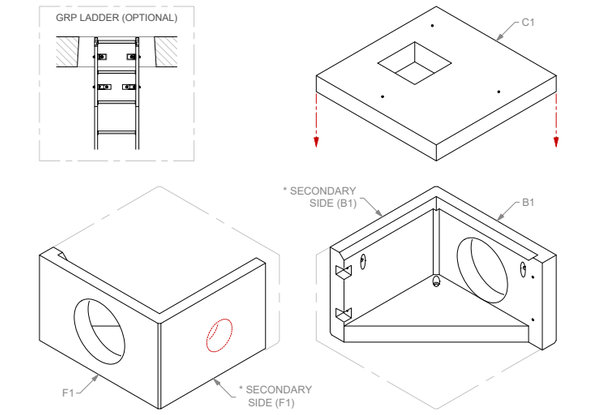


VIEW: TOP (COVER SLAB SHOWN ONLY)

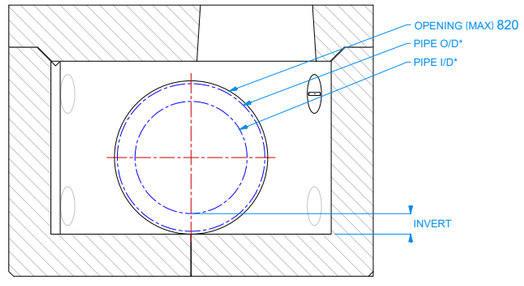


VIEW : TOP (CHAMBER SHOWN ONLY)

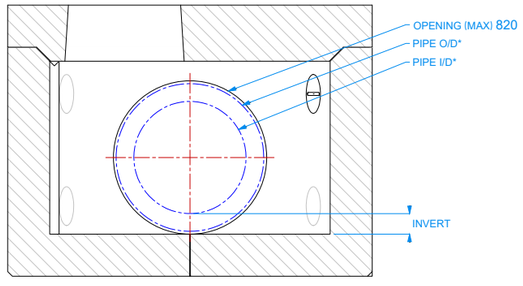
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



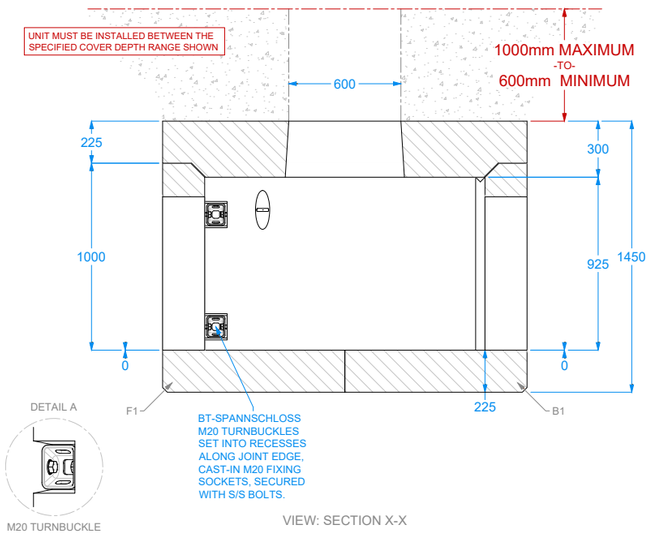
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1500x1500x1000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

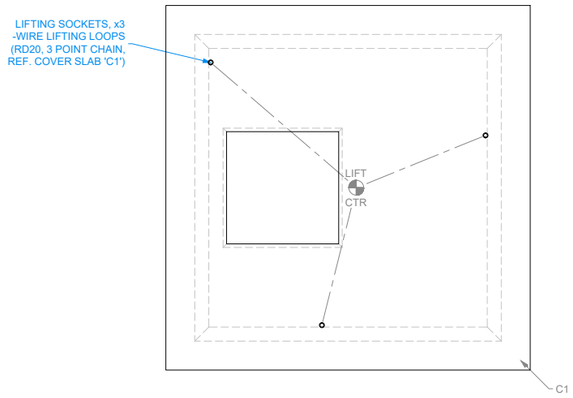
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

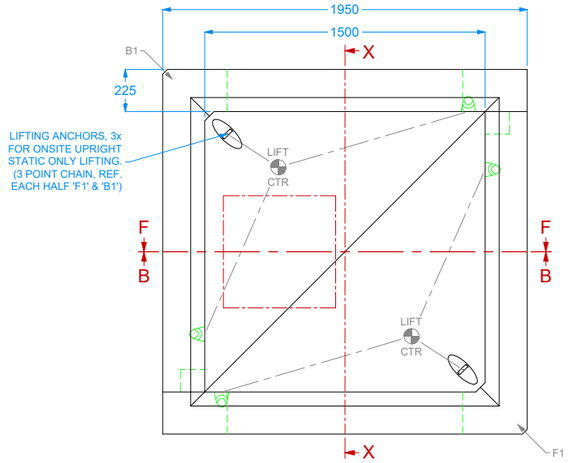
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	2855	0	0	0
B1:	2855	0	0	0
C1:	2495	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 8205

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

DRAWING #:
V.CHA-225-1500X1500X1000

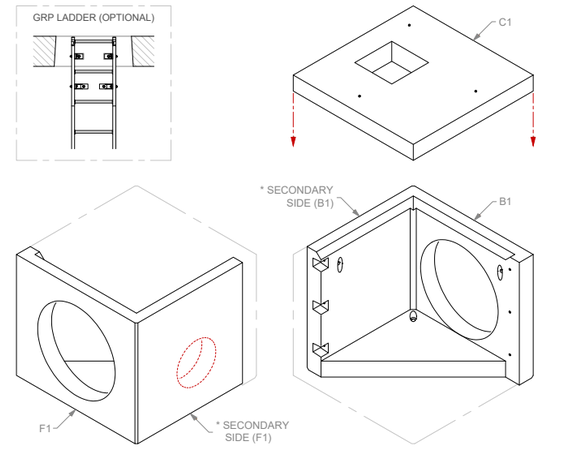


VIEW: TOP (COVER SLAB SHOWN ONLY)

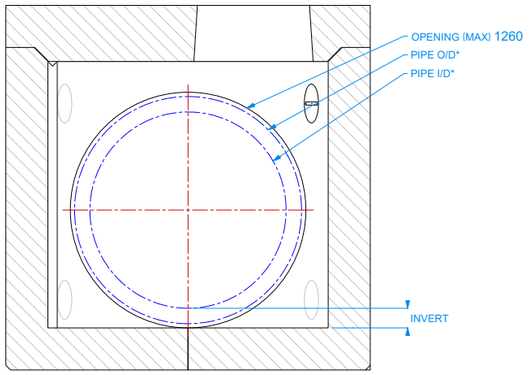


VIEW : TOP (CHAMBER SHOWN ONLY)

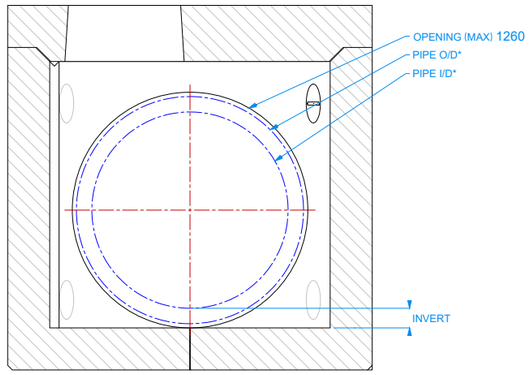
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



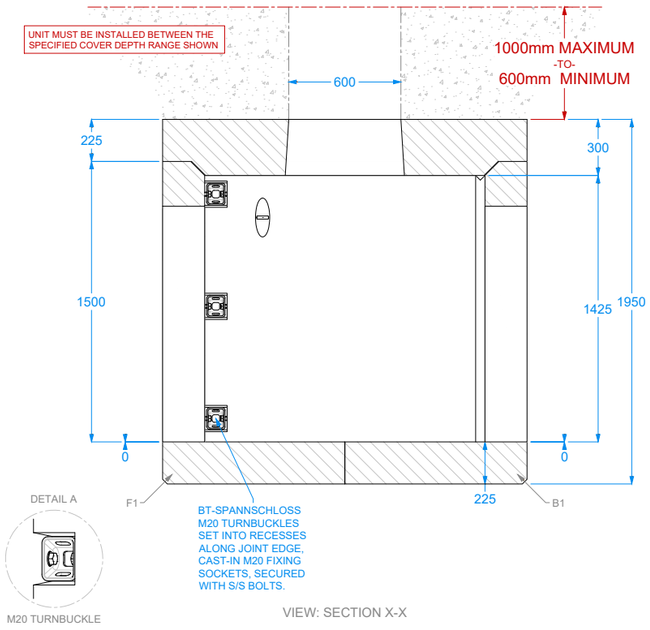
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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
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B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure to be machine tied with steel wire.

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B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
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C. Units are designed to withstand a vertical live load surcharge of 10kN/M².
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1500x1500x1500mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

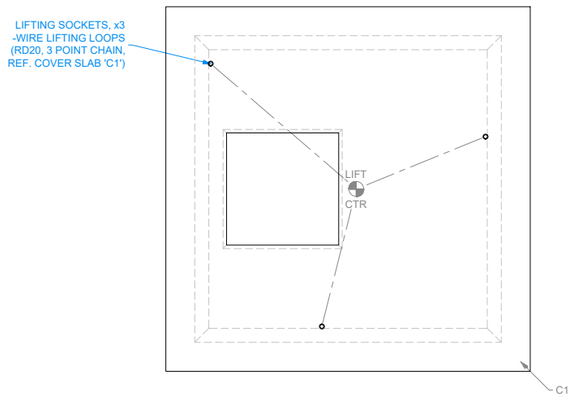
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

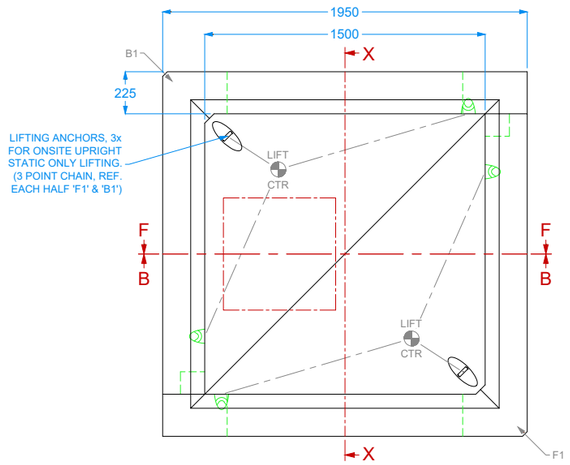
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	3790	0	0	0
B1:	3790	0	0	0
C1:	2495	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 10075

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

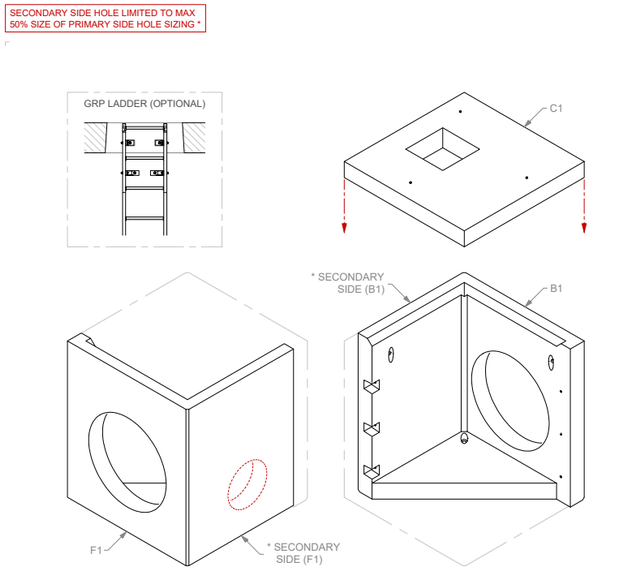
DRAWING #:
V.CHA-225-1500X1500X1500



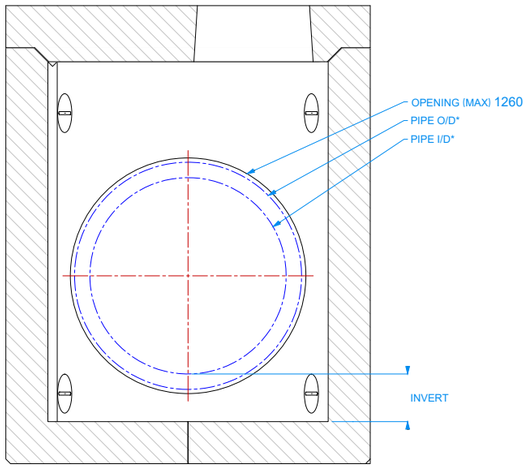
VIEW: TOP (COVER SLAB SHOWN ONLY)



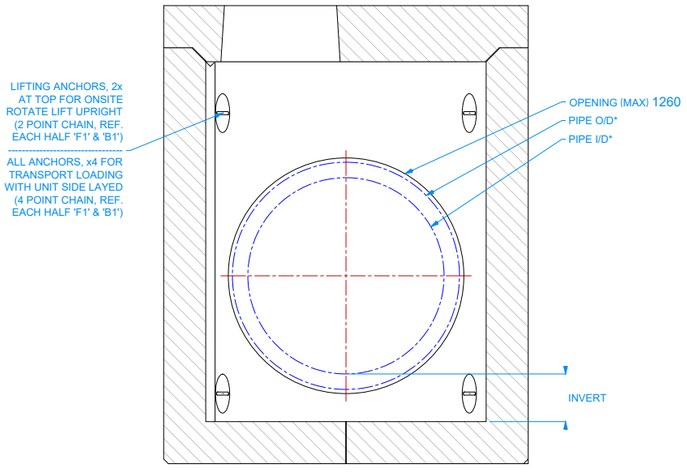
VIEW : TOP (CHAMBER SHOWN ONLY)



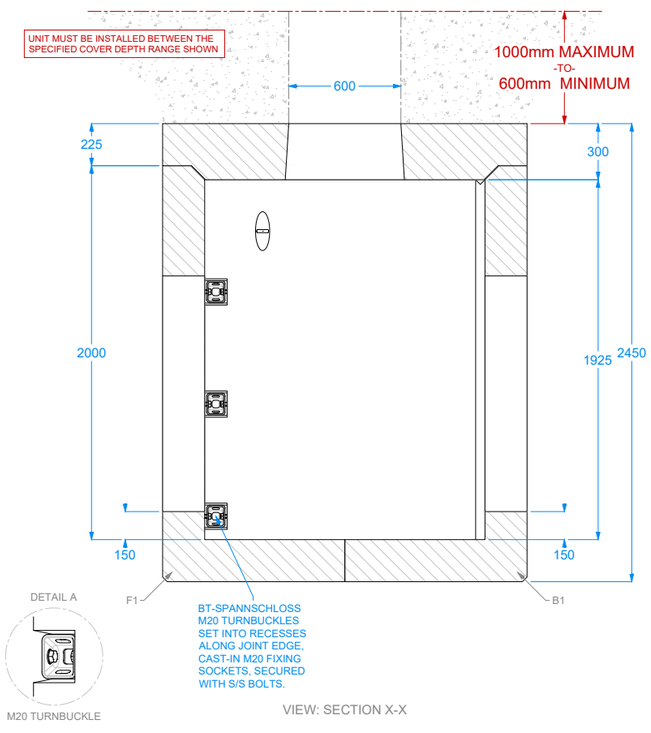
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1500x1500x2000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

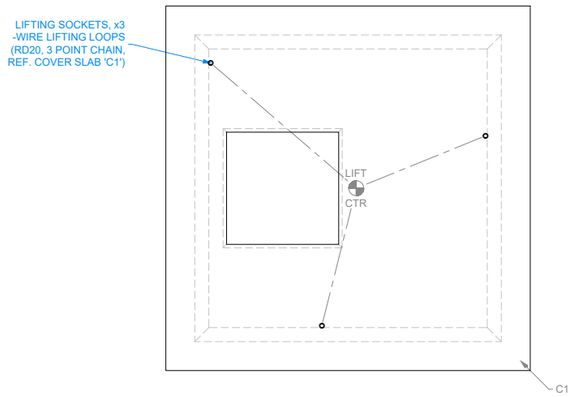
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

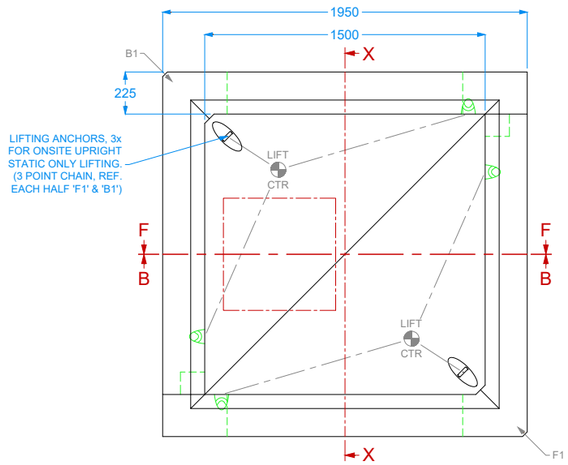
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	4720	0	0	0
B1:	4720	0	0	0
C1:	2495	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 11935

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

DRAWING #:
V.CHA-225-1500X1500X2000

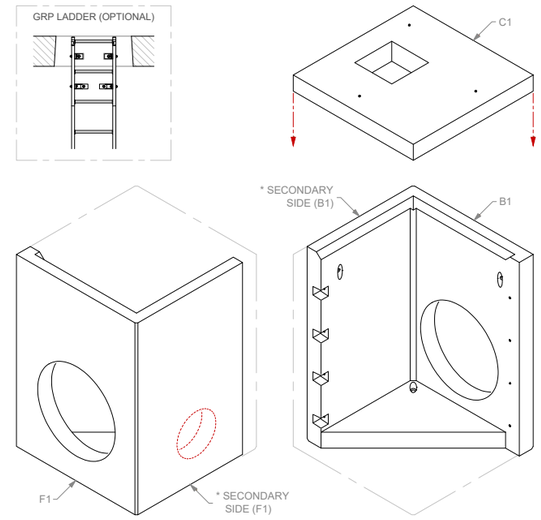


VIEW: TOP (COVER SLAB SHOWN ONLY)

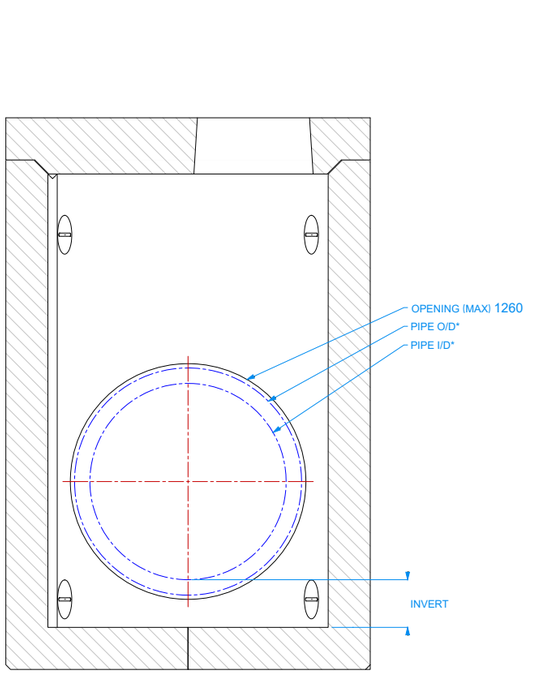


VIEW : TOP (CHAMBER SHOWN ONLY)

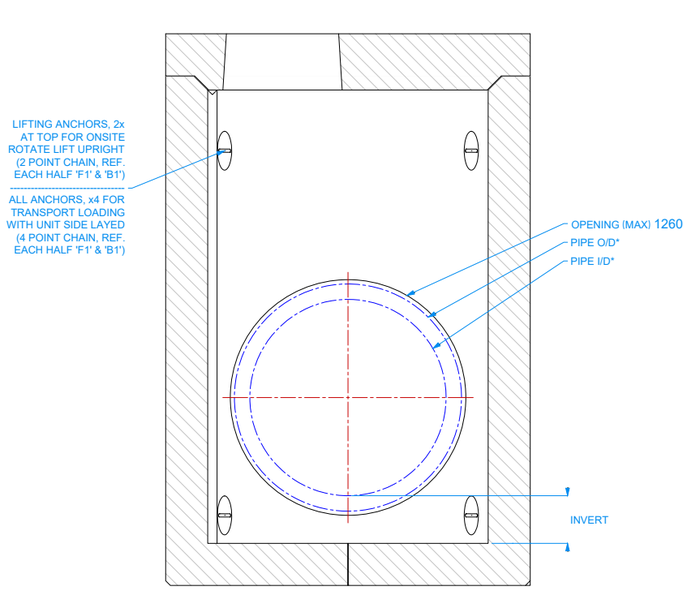
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



VIEW: ISOMETRIC

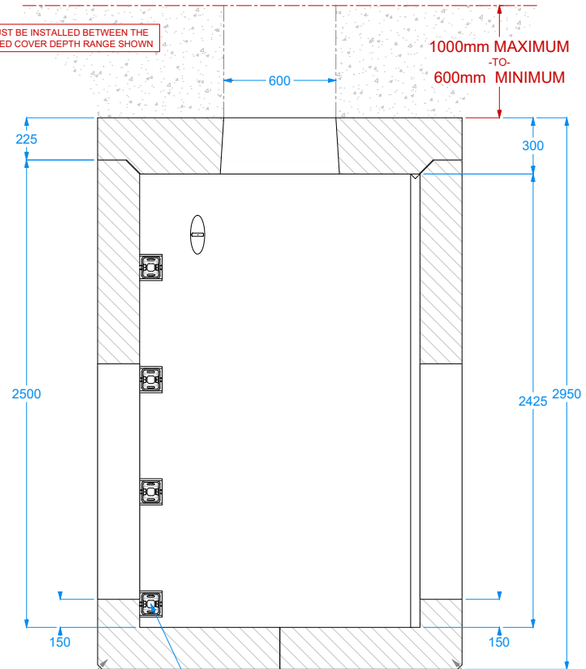


VIEW: SECTION F-F



VIEW : SECTION B-B

UNIT MUST BE INSTALLED BETWEEN THE
SPECIFIED COVER DEPTH RANGE SHOWN



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1500x1500x2500mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

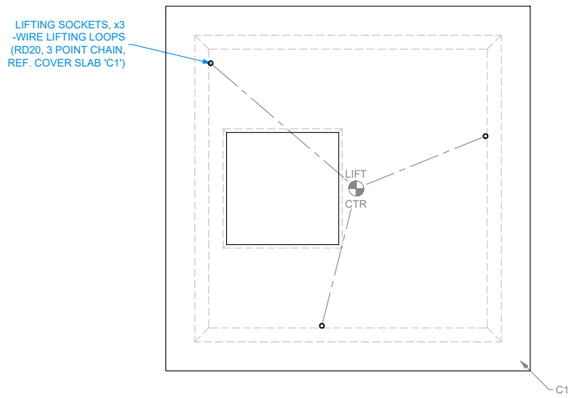
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

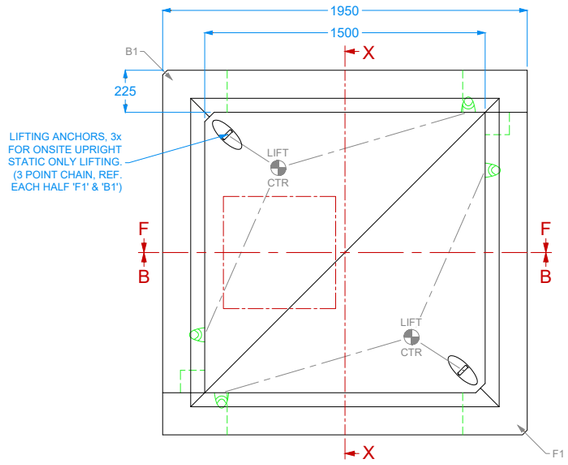
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	5645	0	0	0
B1:	5645	0	0	0
C1:	2495	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 13785

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

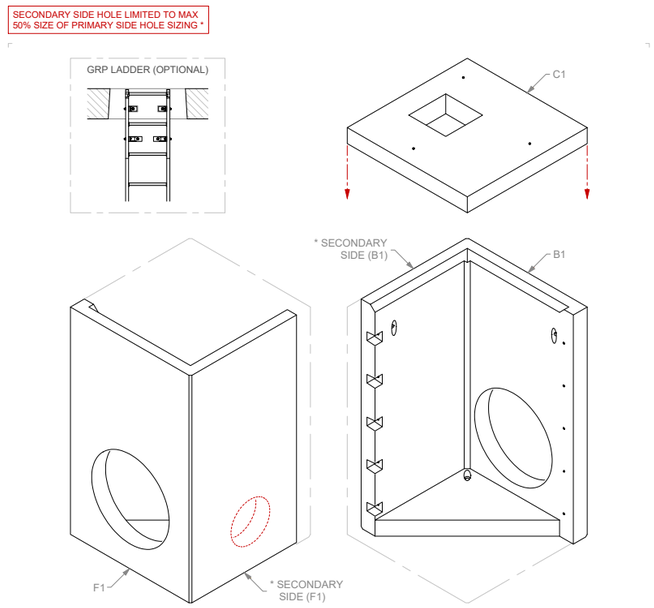
DRAWING #:
V.CHA-225-1500X1500X2500



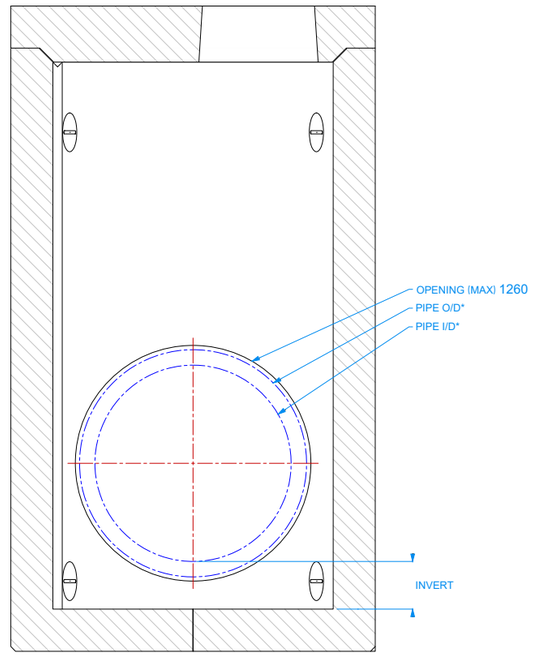
VIEW: TOP (COVER SLAB SHOWN ONLY)



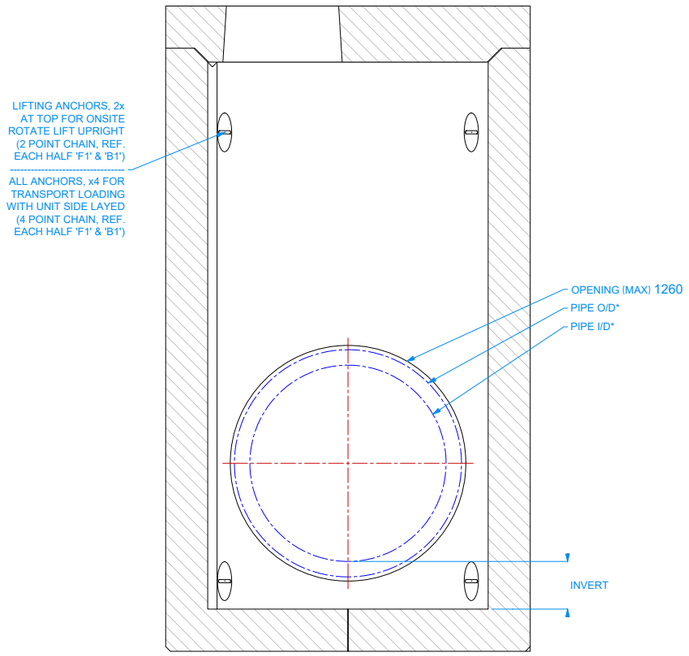
VIEW : TOP (CHAMBER SHOWN ONLY)



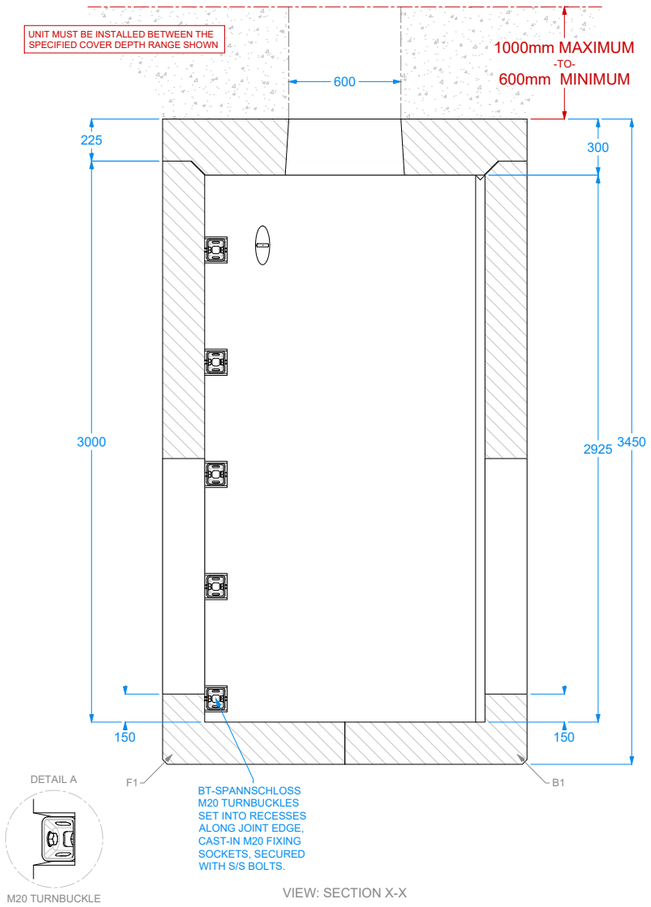
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
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TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 1500x1500x3000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

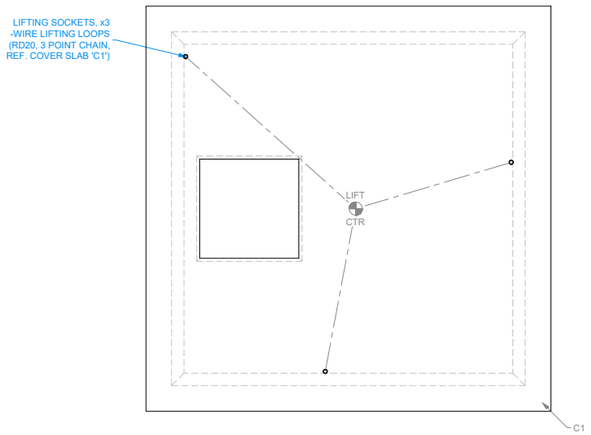
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

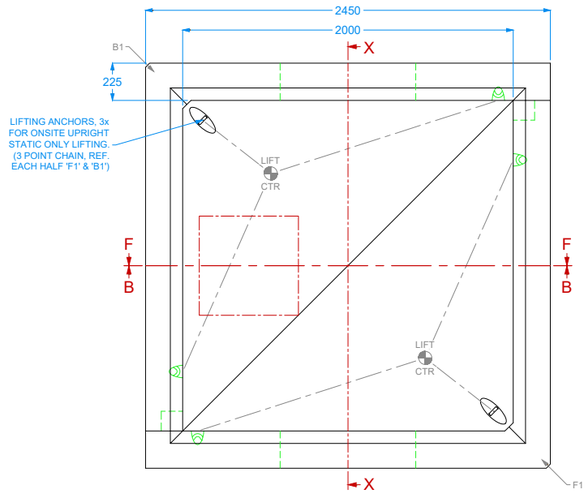
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	6575	0	0	0
B1:	6575	0	0	0
C1:	2495	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 15645

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

DRAWING #:
V.CHA-225-1500X1500X3000

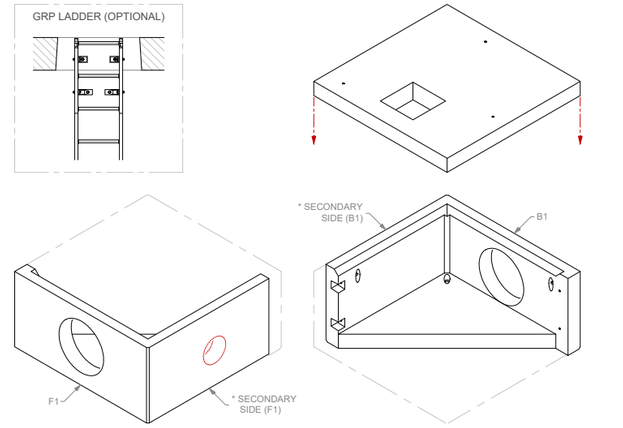


VIEW: TOP (COVER SLAB SHOWN ONLY)

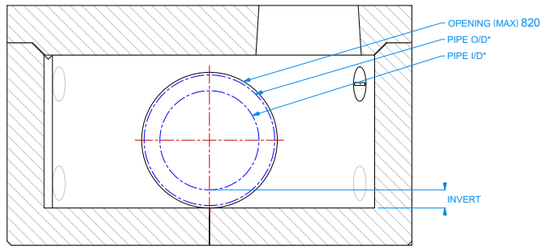


VIEW : TOP (CHAMBER SHOWN ONLY)

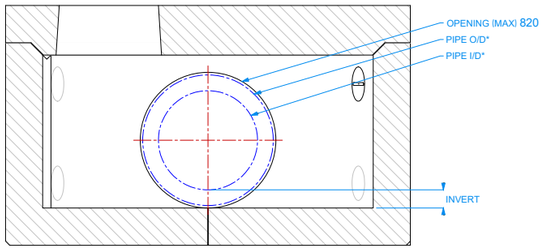
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



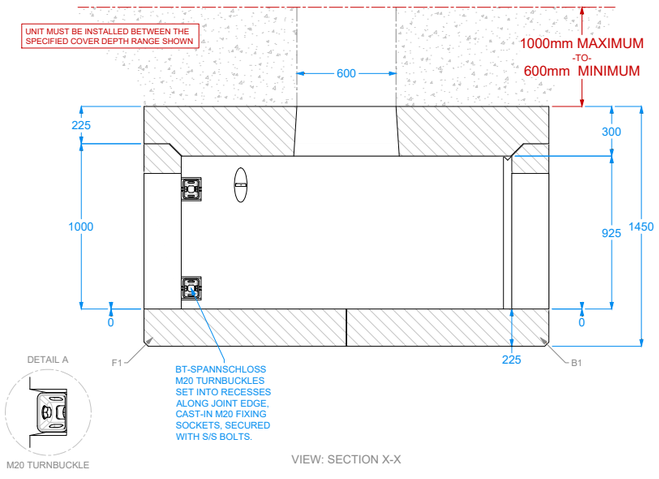
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
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MATERIAL
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B. Lifting strength based on 2 cubes = 20N/mm².
C. Characteristic 28 day cube strength = 50N/mm².
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REINFORCEMENT
A. Reinforcement Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 2000x2000x1000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

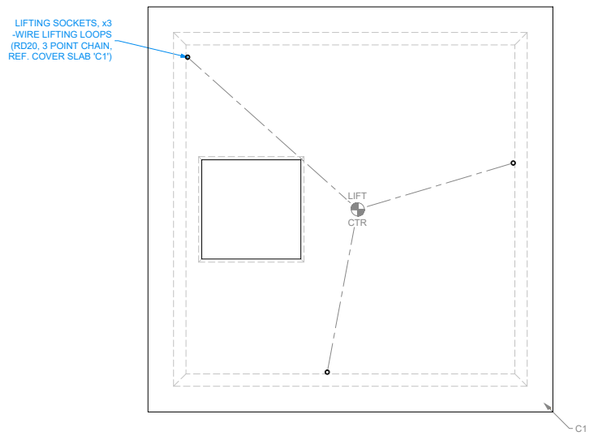
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

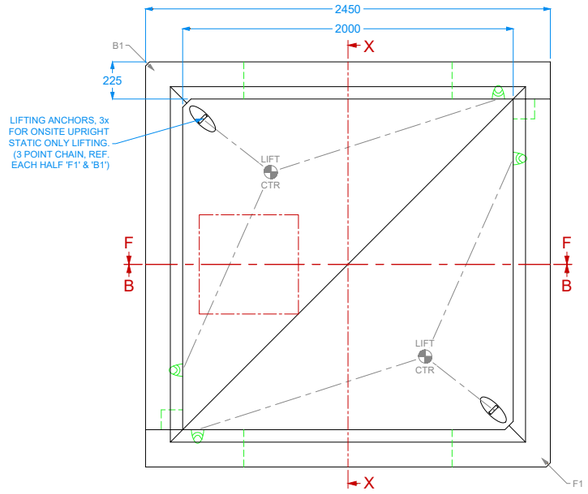
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	3985	0	0	0
B1:	3985	0	0	0
C1:	4010	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 11980

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

DRAWING #:
V.CHA-225-2000X2000X1000

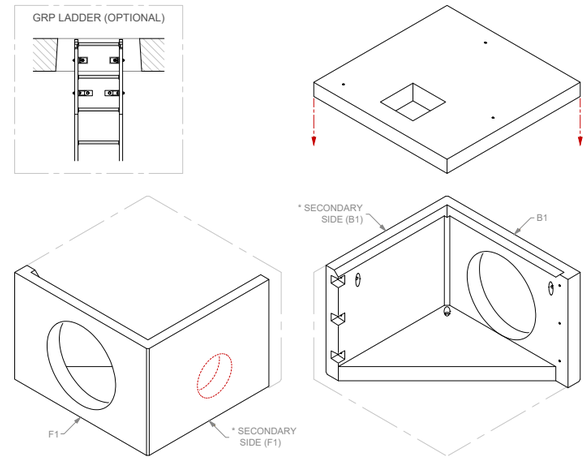


VIEW: TOP (COVER SLAB SHOWN ONLY)

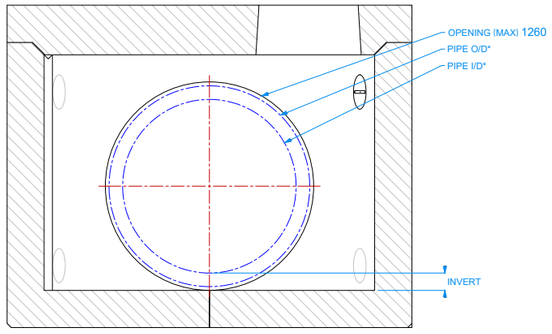


VIEW : TOP (CHAMBER SHOWN ONLY)

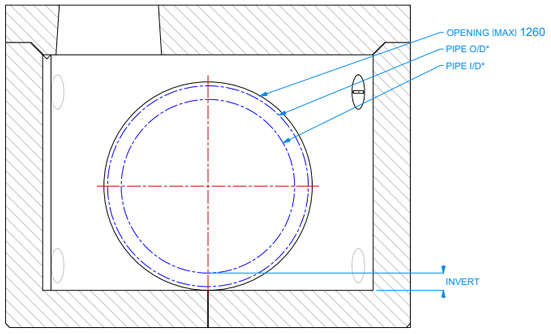
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



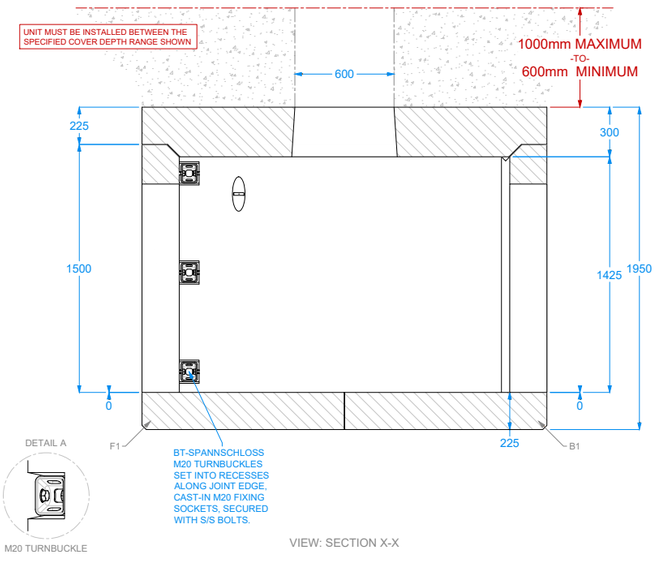
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES

A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION

A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION

Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING

A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL

A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION

A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

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TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 2000x2000x1500mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

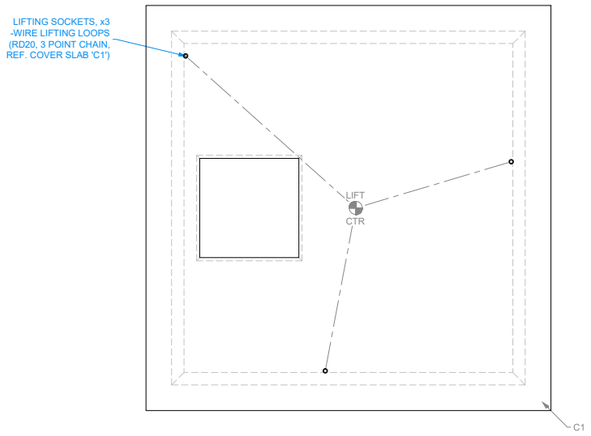
WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	5285	0	0	0
B1:	5285	0	0	0
C1:	4010	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 14580

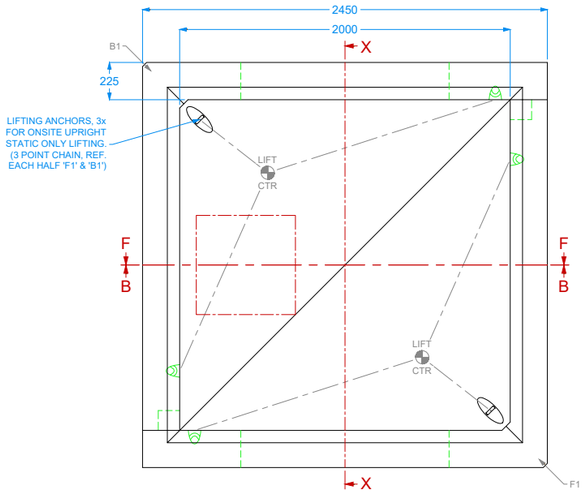
DRAWN: PN | ISSUE #: 01 | SHEET #: 1 | DATE: 12/2/24

DRAWING #:

V.CHA-225-2000X2000X1500

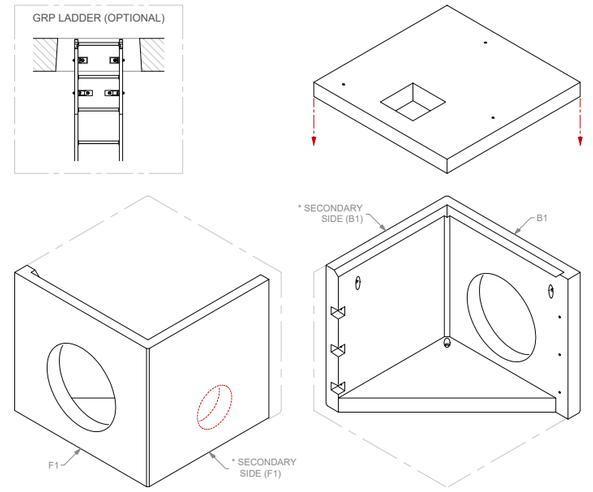


VIEW: TOP (COVER SLAB SHOWN ONLY)

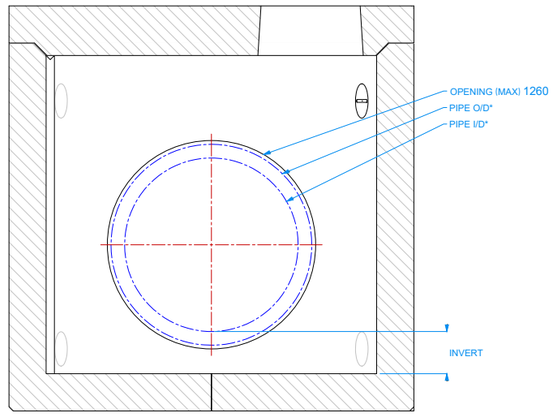


VIEW : TOP (CHAMBER SHOWN ONLY)

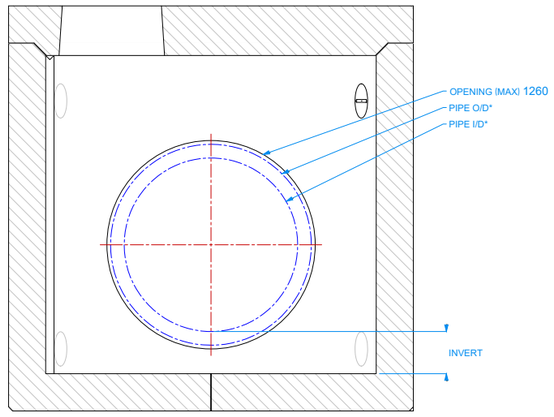
SECONDARY SIDE HOLE LIMITED TO MAX
50% SIZE OF PRIMARY SIDE HOLE SIZING *



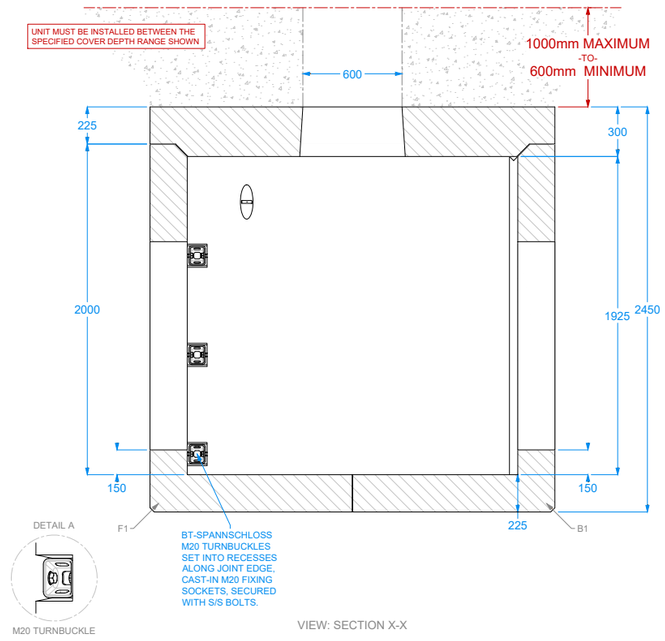
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M³.
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 2000x2000x2000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

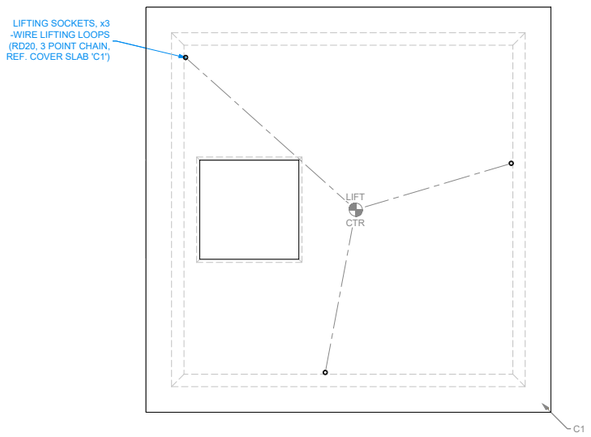
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

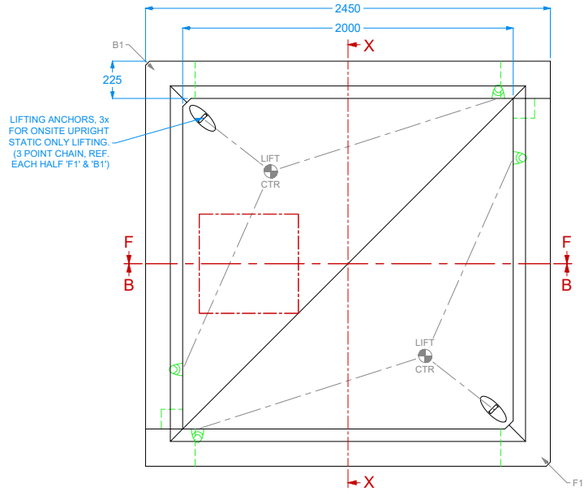
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	6385	0	0	0
B1:	6385	0	0	0
C1:	4010	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 16780

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

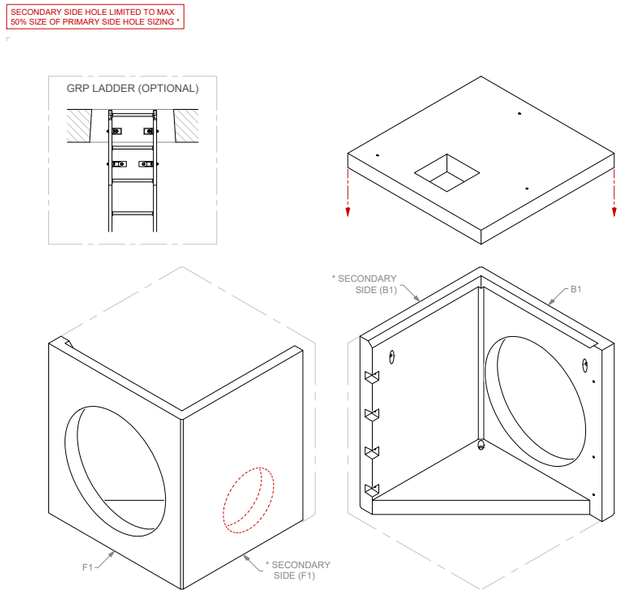
DRAWING #:
V.CHA-225-2000X2000X2000



VIEW: TOP (COVER SLAB SHOWN ONLY)



VIEW : TOP (CHAMBER SHOWN ONLY)



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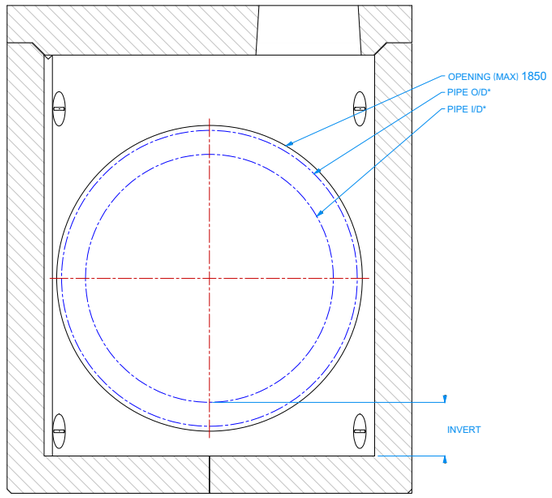
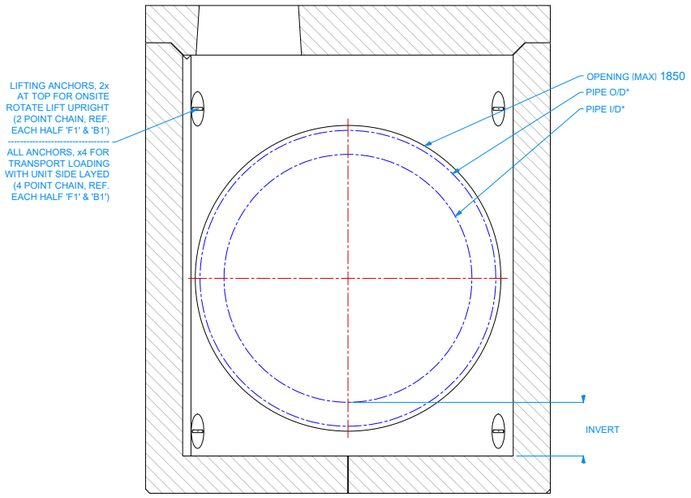
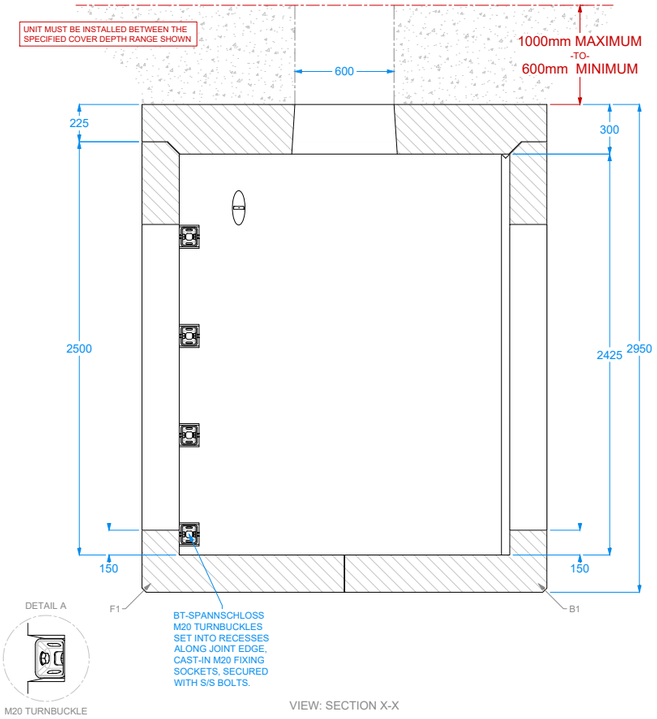


VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 2000x2000x2500mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

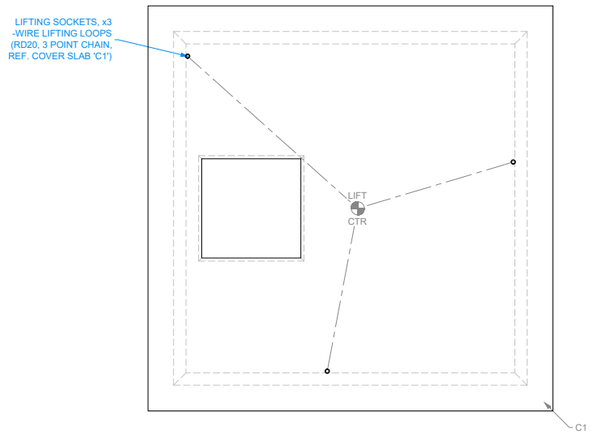
CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

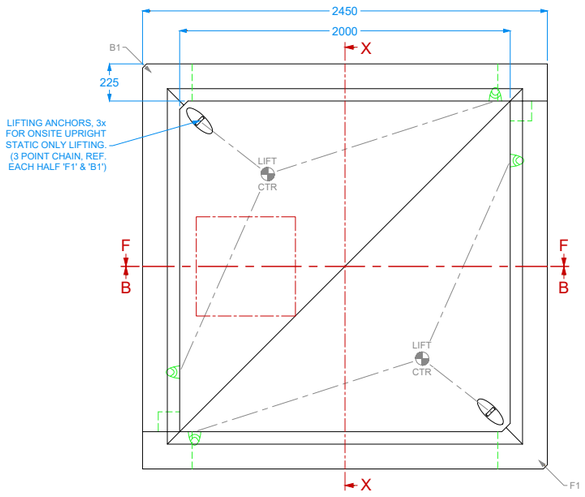
			0	0
CHAMBER, MULTIPLE-PIECE:				0
F1:	7580	0	0	0
B1:	7580	0	0	0
C1:	4010	0	0	0
	0	0	0	0
	0	0	0	0
TOE BEAM:		0	0	TOTAL WEIGHT: 19170

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

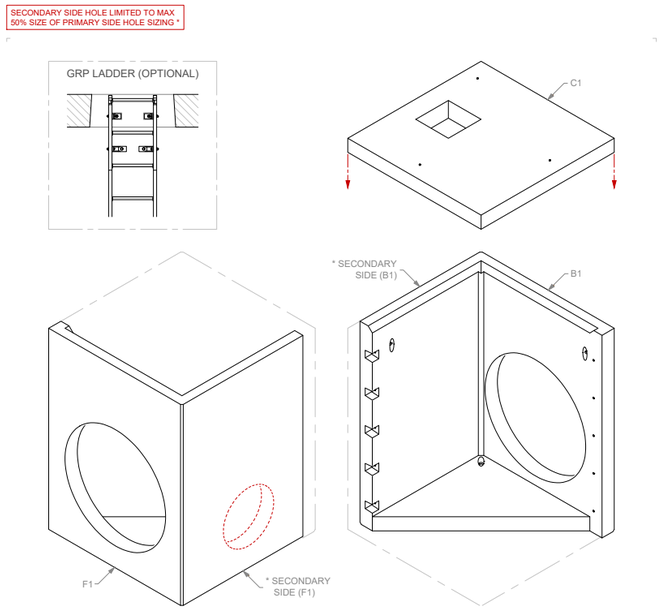
DRAWING #:
V.CHA-225-2000X2000X2500



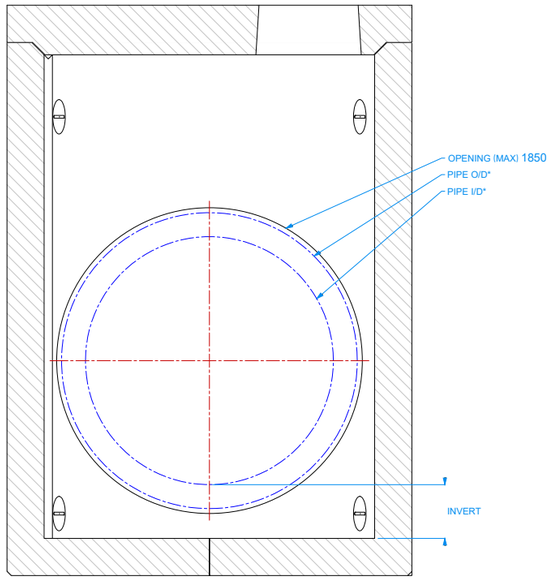
VIEW: TOP (COVER SLAB SHOWN ONLY)



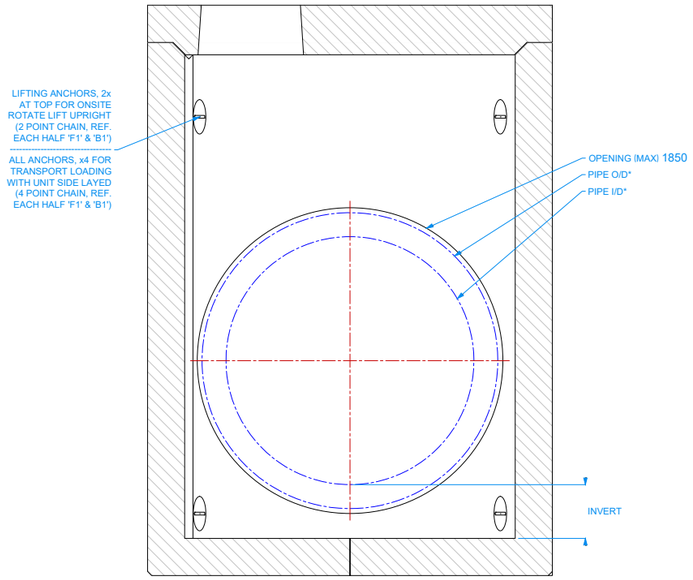
VIEW : TOP (CHAMBER SHOWN ONLY)



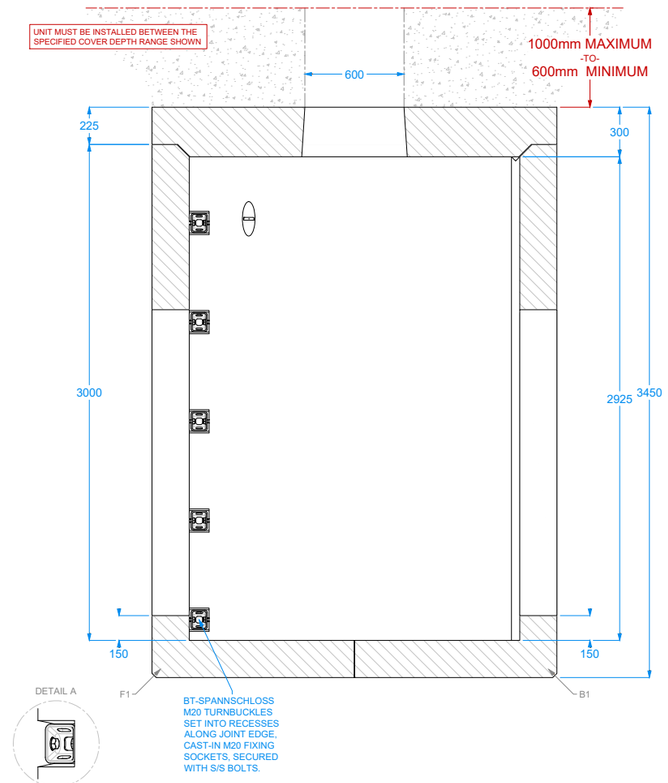
VIEW: ISOMETRIC



VIEW: SECTION F-F



VIEW : SECTION B-B



VIEW: SECTION X-X

GENERAL DRAWING NOTES
A. All dimensions in mm U.O.S.
B. All measurements ±1mm.
C. DO NOT SCALE DRAWING.

SPECIFICATION INFORMATION
A. Openings sized to suit outer dimension of pipe.
B. Invert level of pipe can be set to your specification.

PRECAST UNIT INSTALLATION
Units should be bedded on minimum 100mm thick layer GEN1 concrete base to ensure units are level and stable.

HANDLING
A. Weight of concrete is based on 2.4 tonne/m³, +5% is recommended for sizing appropriate lifting equipment.
B. Unit to be lifted as per drawing / available lifting guide.

MATERIAL
A. Self-compacting Reinforced Cement Concrete DC4/DS4.
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 Wire structure to BS EN 13369.
B. Scheduling, dimensions, bends & cutting to BS8666.
C. Reinforcing Wire structure 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.
B. Tolerances to BS EN 13369 clause 4.3.1.1.
C. Surface Finishing:

	Top	Sides	Rear	Rear of Backwall
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 structure designed to Eurocode 2.
B. 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.
D. Weight of soil = 18kN/M².
E. Angle of internal friction = 30 Deg.
F. Design Life as table below * (all cover sizes in mm).

Design Life	>50 yrs, 100mm Thickness			>100 yrs, 150mm+ 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 yrs can be extended to >120 yrs with Bitumen coating application.

Exposure Class	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 to IAW EN 1090-2 PARA 7.5.4 - 7.5.18.
D. All fillet & butt welds to have minimum throat thickness of 6mm and joints fully welded where possible.
E. Ensure vertical flats 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 process after fabrication to BS EN ISO1461.

D400 CLASS LOADING SPECIFICATION
A. Unit designed to D400 class loading specification for heavy duty site applications (400kN / 40 ton load rating). Design limitations in place to meet D400 specification as following;
B. Secondary side hole diameter is limited to maximum of 50% size of primary side hole diameter, as indicated on drawing.
C Unit must be installed between the specified cover depth range detailed as follows, with the top of the cover slab set down between 1000mm maximum -to- 600mm minimum below the site surface level as indicated on drawing view.

ADDRESS: JKH LIMITED
CHISWICK AVENUE
MILDENHALL
IP28 7AY
WEBSITE: www.jkhltd.co.uk
EMAIL: sales@jkhltd.co.uk
TEL: 01638 713795

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DRAWING TITLE:

V CHAMBER 225mm WALL THICKNESS, 2000x2000x3000mm +PCC COVER SLAB D400 CLASS LOADING SPECIFICATION STANDARD & OPTIONAL FEATURES

CONCRETE MIX DESIGN, NAME / CODE #: ECO1 / DS4

CONCRETE CO^2 EMISSION (ESTIMATE) kg: -

WEIGHT BREAKDOWN BY TYPE - All FIGURES IN kg UNITS:

				0	0
CHAMBER, MULTIPLE-PIECE:					0
F1:	8785	0	0		0
B1:	8785	0	0		0
C1:	4010	0	0		0
	0	0	0		0
	0	0	0		0
TOE BEAM:		0	0	TOTAL WEIGHT:	21580

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

DRAWING #:

V.CHA-225-2000X2000X3000