PRODUCT CATALOGUE

HUDSON

CIVIL PRODUCTS

The Hudson Civil Products catalogue has been designed to give you a comprehensive visual of our precast products.

Whilst the catalogue provides a significant range of product it doesn't cover the complete range or precast concrete nor demonstrate our ability to manufacture custom items – please contact us.

Hudson Civil Products is a highly recognised brand in the precast concrete market within Tasmania however we are not limited to just precast concrete, over the years Hudson Civil Products has invested in stocking a comprehensive range of civil and commercial plumbing supplies to meet the civil construction, infrastructure, plumbing, building and irrigation markets.

Please feel free to peruse the catalogue and don't hesitate to make contact with us to discuss your requirements so that we can assist in providing a solution to meet your needs.

www.hudsoncivil.com.au

HUDSON
CIVIL PRODUCTS

Index

Page	Product
1	Manhole Base Units & Pre Benched Base Units
2	Manhole Liners / Shafts
3	Manhole Surrounds
4	Precast Pits
5	Precast Heavy Duty Pits
6	Precast Lintel components
8	Concrete Frames & Surrounds
9	Pit Surrounds - grated
10	Custom Surrounds
11	Pit Trap - at source pollution control
13	Standard Wingwalls & Endwalls
14	Uni Culverts Products
16	Box Culverts (RCBC) – Traditional
18	RCBC & Base Slab Layout Sheet
19	Vertical Dry Cast Concrete Pipe (RCP)
22	Slot Drain & Embedded Pipe
23	Department of State Growth (DSG) Driveable Endwalls
24	Department of State Growth (DSG) Endwalls & Wingwalls
25	Department of State Growth (DSG) Pits
26	Department of State Growth (DSG) Lids, Surrounds, Lintels, Misc.
27	Kerb Blocks
28	Precast Traffic Islands
29	Spoon Drains, Trench Drains & Car Stops
30	Bench Seat & Table Ends & Stair Treads
31	Stock Troughs
33	Precast Concrete Stock Grids
34	Concrete Tanks / Pump Wells / Larger Manholes
36	'ULTRA' lightweight Access Covers
37	Detention Tanks – Single Units
38	HCP Uni Vault – Stormwater Detention Tanks
39	Septic Tanks – 3,500 Litre
40	Septic Tank installation Guide
41	1,500 & 3,000 Litre Triple Interceptors (Silt & Oil Traps)
42	Grease Traps– 1,500 & 3,000 Litre
43	Retaining Wall Products
45	Precast Building Structures
47	Irrigator & Pedestrian Bridges
49	Precast Concrete – Environmentally Aware
51	Water Industry Products Specialist
54	Our Vision

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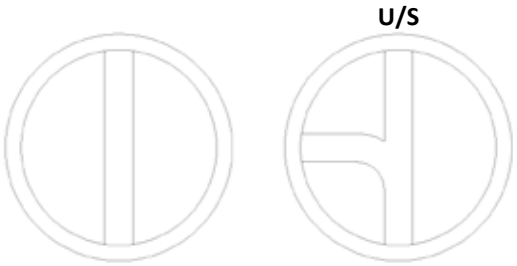
Manhole Base Units & Pre Benched Base Units

Code	Description	DIA x	Length

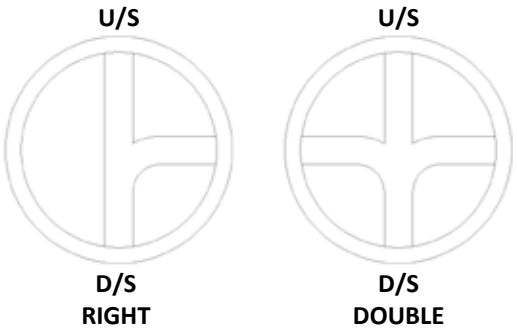
CP2326 BASE UNIT 1050mm x 600mm
CP2329 BASE UNIT 1050mm x 900mm

Base units are available in both 600mm and 900mm high. Preformed knockouts allow for quick pipe penetrations to be made on site. Step iron holes do not pass through the wall ensuring water tightness once installed. One piece construction eliminates leaks at the base / wall joint.



Code	Description	DIA x	Length

CP2326BS BASE UNIT Benched 1050mm x 600mm Straight
CP2326BL BASE UNIT Benched 1050mm x 600mm Left Hand
CP2326BR BASE UNIT Benched 1050mm x 600mm Right Hand
CP2326BD BASE UNIT Benched 1050mm x 600mm Double



Benched Base Units are also available in 600mm High units with 150mm RRJ Penetrations. Alternatively custom made to order benched manholes are also available to suit any application including HDPE liners or Epoxy Coatings (TasWater or Industrial).

Hudson Civil manhole components are available in varying diameters from 650mm to 1500mm. For larger diameters, above this, we offer a range of large shaft liners which are also available as (up to 4m I.D. typically) pump stations.

HUDSON
CIVIL PRODUCTS

Manhole Liners / Shafts

Code	Description	Dia x Length
CP2101	MANHOLE	650mm x 150mm
CP2103	MANHOLE	650mm x 300mm
CP2104	MANHOLE	650mm x 450mm
CP2203	MANHOLE	900mm x 300mm
CP2206	MANHOLE	900mm x 600mm
CP2209	MANHOLE	900mm x 900mm
CP2292	MANHOLE	1050mm x 100mm
CP2293	MANHOLE	1050mm x 150mm
CP2294	MANHOLE	1050mm x 200mm
CP2297	MANHOLE	1050mm Sloping
CP2300	MANHOLE	1050mm x 300mm
CP2306	MANHOLE	1050mm x 600mm
CP2309	MANHOLE	1050mm x 900mm
CP2312	MANHOLE	1050mm x 1200mm
CP2315	MANHOLE	1050mm x 1500mm
CP2318	MANHOLE	1050mm x 1800mm
CP23303	MANHOLE	1200mm x 300mm
CP23306	MANHOLE	1200mm x 600mm
CP23309	MANHOLE	1200mm x 900mm
CP23312	MANHOLE	1200mm x 1200mm
CP23403	MANHOLE	1500mm x 300mm
CP23406	MANHOLE	1500mm x 600mm
CP23409	MANHOLE	1500mm x 900mm
CP23412	MANHOLE	1500mm x 1200mm

JOINTING OPTIONS for Manhole components vary from 'mudding' the joints with standard render to using Butyl Mastik Tape for a faster installation. For wet areas we recommend a combination of both Gatorwrap or the use of Conseal tape. Manhole bases may also be ordered with Waterstop for a higher integrity joint when installed in wet areas.

ANCILLARY ITEMS

CP2350	MANHOLE BASE 1050mm (Cast or component)
CP2351	MANHOLE BASE 1200mm Cast on
CP2352	MANHOLE BASE 1500mm Cast on
CP2355	MANHOLE CONE 1050 x 670mm High
CP2490	STEP IRON 375mm (300mm Centres)
CP2551	Butyl Mastik Tape 17mm x 3.6m
CP2554	VOLCLAY waterstop 10m Roll
CP2555	VOLCLAY waterstop Box (45.72m)
CP255	VOLCLAY adhesive 1 Litre
CP256	GATIC grease 4KG
CP2512	Gatorwrap 150mm x 4.8m
CP2514	Gatorwrap 150mm x 15.2m

LARGER MANHOLES

1800 / 2400 / 3000mm / 4000mm Manhole Shafts also available (refer pages 32 & 33)

Manhole Surrounds

CP1150 SURROUND 750mm
1010mm Diameter, 600mm Clear opening, 150mm thick
- Class B or Class D cast iron
- Class B Grated

CP1151 SURROUND 750mm H/D (trafficable)
1010mm Diameter, 600mm Clear opening, 250mm thick
- Class D cast iron
- Class D cast iron grated

CP1165 SURROUND – Offset
1390mm Diameter, 600mm Clear opening, 150mm thick
- Class B cast iron
- Class B cast iron grated

CP1170 SURROUND Highway (trafficable)
1390mm Diameter, 600mm Clear opening, 235mm thick
- Class D cast iron
- Class D cast iron grated

CP1162 SURROUND Central
1390mm Diameter, 600mm Clear opening, 150mm thick
- Suit 1050mm & 1200mm Shaft 1390mm O/D x 150
- Class B Cast Iron & Class B Grated

CP1173 SURROUND Central or Offset opening
1830mm Diameter, 600mm Clear opening, 200mm thick
- Suit 1500mm Shaft
- Class B Cast Iron & Class B Grated

CP1174 SURROUND Central or Offset opening H/D
1830mm Diameter, 600mm Clear opening, 275mm
- Suit 1500mm Shaft
- Class D Cast Iron & Class D Grated

**Please advise for raised access covers and frames allow asphalt layer if required.*

**Custom Large Manhole shaft lid slabs also available; suit 1800-4000mm shafts.*

HUDSON
CIVIL PRODUCTS

Precast Pits

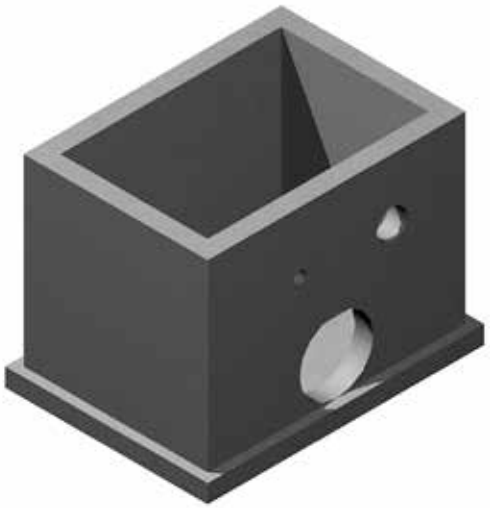
- Pits manufactured with 40MPa concrete
- One piece construction
- Swift Lift system for safe lifting
- "Knock outs" for easy pipe penetrations (where available)
- Large range of grates and covers
- Pit & riser options available

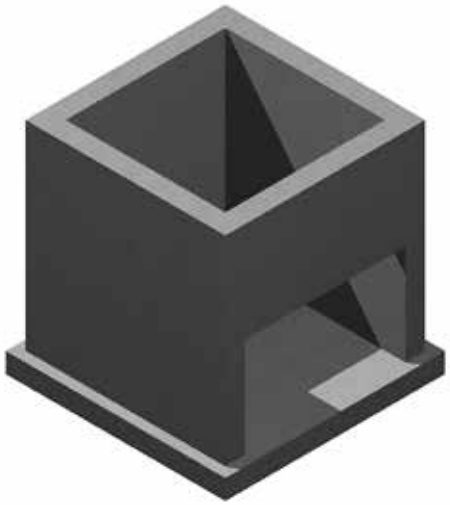
CODE	DESCRIPTION	Functional Dimensions Internal			Functional Dimensions External		
		WIDTH	LENGTH	DEPTH	WIDTH	LENGTH	DEPTH
HP106	NO 6 PIT	300	300	450	410	410	500
HP111	NO 11 Pit	450	450	520	600	600	600
HP112	NO 11 Riser	450	450	Up to 520	600	600	Up to 520
HP121	NO 12 Pit	650	650	800	800	800	900
HP123	NO 12 Riser	650	650	Up to 800	800	800	Up to 800
HP131	NO 13 Pit	750	750	900	900	900	1000
HP132	NO 13 Riser	750	750	Up to 900	900	900	Up to 900
HP151	NO 15 Pit	1260	450	900	1400	600	1000
HP161	NO 16 Pit	1225	570	550	1370	700	600
HP171	NO 17 Pit	1550	900	700	1665	1050	800
HP181	NO 18 Pit	900	900	1100	1040	1040	1200
HP182	NO 18 Riser	900	900	Up to 1100	1040	1040	Up to 1100
HP191	NO 19 Pit	800	500	830	950	650	900
HP201	NO 20 Pit	1350	900	1200	1550	1100	1300
CP3359	Side Entry Pit Riser	900	600	300	1100	800	300
CP3360	Side Entry Pit Riser	900	600	Up to 900	1100	800	Up to 900
CP3361	Side Entry Pit	900	600	900	1100	800	1000
CP3362	Side Entry Pit H/D	900	600	1000	1200	900	1100
CP3400	Side Entry Pit LCC	850	750	1100	1050	950	1200
CP3405	Side Entry Pit Riser LCC	850	750	Up to 1200	1050	950	Up to 1200
HHP1200	CM 1200sq Pit	1200	1200	Up to 1200	1380	1380	Up to 1320

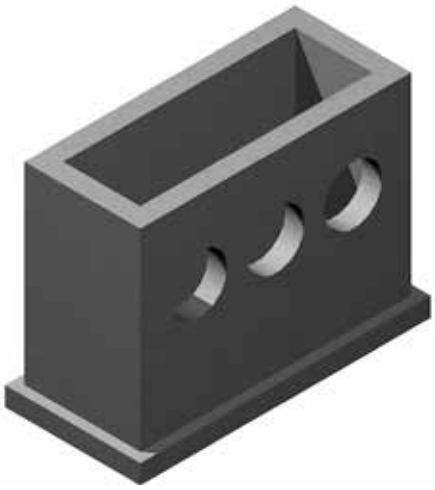
**Pit Dimensions may vary slightly due to local manufacturing preferences, mould variations etc. (e.g. CP3361) Please contact your local HCP representative for specific details if specific dimensions required.*

Precast Heavy Duty Pits

- Large pits with 150mm thick walls in various sizes
- Pits available from 600mm high up to full height 1500mm internal
- Riser units available up to 1500mm upon request
- If custom pit sizes are needed HCP will strive to meet your needs.
- Hole coring from 65Dia. - 600Dia. & larger custom block outs available upon request







Functional Internal Dimensions			
Length	Width	Depth	Weight
900	600	1350	2.18T
1200	600	1500	2.95T
900	900	1350	2.62T
1200	900	1500	3.46T
1500	900	1500	3.95T
1800	900	1500	4.44T
2100	900	1500	4.92T
2400	900	1500	5.41T
2700	900	1500	5.89T
1200	1200	1500	3.98T
1500	1200	1500	4.49T
1800	1200	1500	5.00T
2100	1200	1500	5.51T
2400	1200	1500	6.02T
1500	1500	1500	5.03T
1800	1500	1500	5.58T
2100	1500	1500	6.13T
1800	1800	1500	6.16T

HUDSON
CIVIL PRODUCTS

Lintel components

CP3212 Lintel K&C Nthn 1800mm
(Type 2 LGAT/IPWEA)

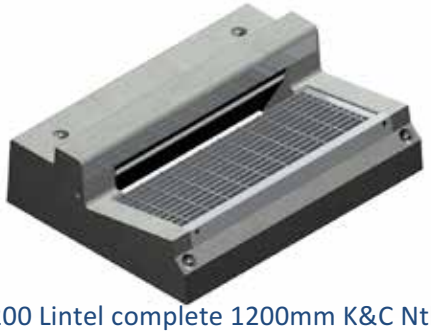
CP3211 Lintel K&C Nthn 1200mm
(Type 1 LGAT/IPWEA)

CP3215 Hinged gully grate
1060mm x 450mm

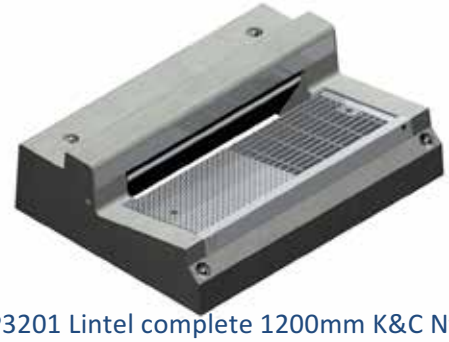
CP3218 Hinged gully grate (LCC)
1060mm x 450mm

CP3206 Lintel complete 1200mm KCM Nthn

CP3208 Lintel complete 1200mm B1 Waratah



CP3200 Lintel complete 1200mm K&C Nthn
(Type 3 LGAT/IPWEA)



CP3201 Lintel complete 1200mm K&C Nthn
(Type 1 LGAT/IPWEA)

CP3202 Lintel complete 1200mm K&C Nthn 300mm Grate
(Narrow Channel)

Lintel components

CP3150 B1 Sthn Lintel 1200mm

CP3145 Lintel Complete B1 Sthn 1200mm
(Type 3)

CP3140 Lintel Complete Rollover Sthn 1200mm

CP3190 Double Deflector B1 L/H & R/H 2400mm

CP3170 Grated Deflector B1 R/H 2400mm
CP3175 Grated Deflector B1 L/H 2400mm
(Similar Type 4 LGAT/IPWEA)

CP3180 Deflector B1 R/H 2400mm
CP3185 Deflector B1 L/H 2400mm

CP3195 Double Grated B1 2400mm

CP3224 3600mm High Flow Lintel

HUDSON
CIVIL PRODUCTS

Concrete Frames & Surrounds

CODE	DESCRIPTION*
CP3421	FRAME S/Entry 1200 x 900 x 150mm
CP3421L	FRAME S/Entry 1200 x 900 x 150mm c/w Steel Lintel
CP3422	FRAME S/Entry 1200 x 1200 x 150mm
CP3422L	FRAME S/Entry 1200 x 1200 x 150mm c/w Steel Lintel

**Ductile (Solid tops) now standard*
***Concrete infill covers by request*

CODE	DESCRIPTION
CP3423	FRAME S/Entry 1200 x 750 x 100mm
CP3424	FRAME S/Entry 900 x 750 x 100mm
CP3430	LID Side Entry 750 x 500mm

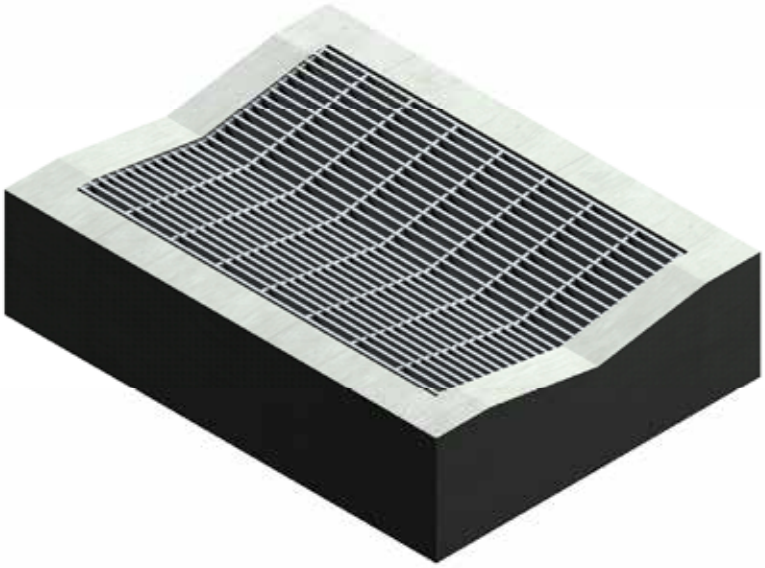
CODE	DESCRIPTION
CP34250	FRAME Concrete 1000 x 1000 x 150mm
CP34251	FRAME Concrete 1000 x 1000 x 250mm
CP3426	FRAME Concrete 1200 x 1200 x 250mm
CP3427	FRAME Concrete 1300 x 1300 x 250mm
CP3428	FRAME Concrete 1500 x 1400 x 250mm
CP3429	FRAME Concrete 1200 x 1000 x 300mm Lintel Surround
HP117	FRAME Concrete 600 x 600 x 150mm
HP129	FRAME Concrete 800 x 800 x 150mm
HP135	FRAME Concrete 900 x 900 x 150mm
SP300	FRAME Concrete 508 x 508mm
SP310	FRAME Concrete 356 x 356mm

Grate free 'Southern Lintel Assembly'
installed with CP3429 & CI Access Cover

These Frames have no fixed inner mould and therefore may be tailored to suit your needs, be it cast with a grated inlet or GATIC type access cover.

Any custom designed concrete frame can be manufactured by Hudson Civil.

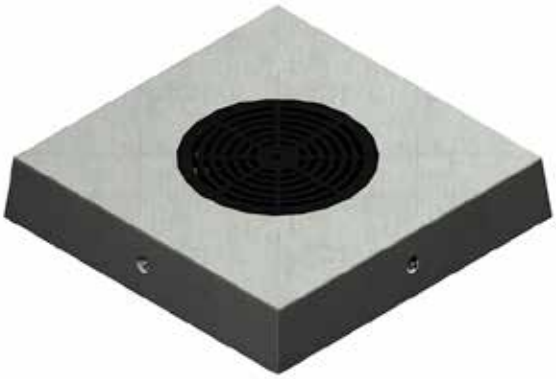
Pit surrounds - grated



CODE	DESCRIPTION	LENGTH	WIDTH	HEIGHT	DEPTH OF V
CP3368	V GRATE 900mm x 600mm	1200	870	300	45
CP5118	V GRATE DIER P 15-3 900mm x 600mm	1200	900	265	135

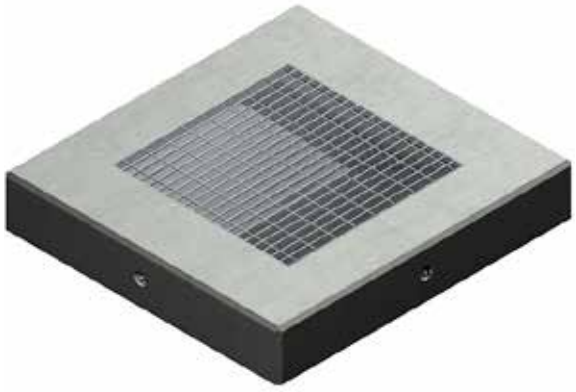
HUDSON
CIVIL PRODUCTS

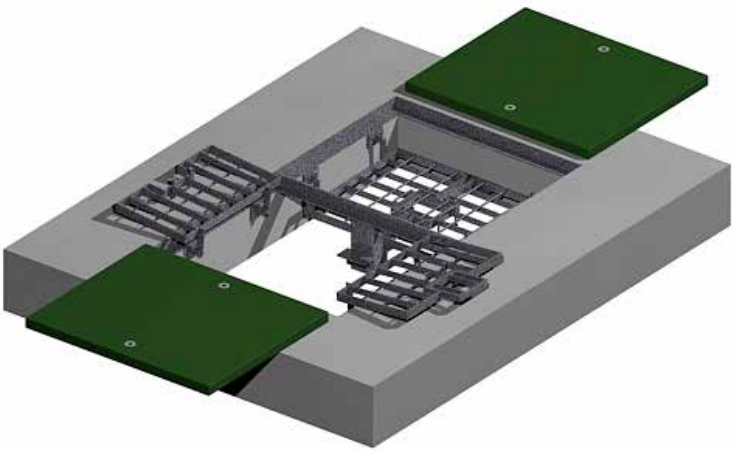
Custom Surrounds



Hudson Civil manufactures custom lid slabs, grates and access covers to almost any size for a range of applications.

- **Made to customer requirements/design**
- **External design & certification assistance available if required , at cost**
- **Grates, covers, access/safety installations all available**





**HCP "ULTRA" Lightweight covers & frames - refer page 34.*

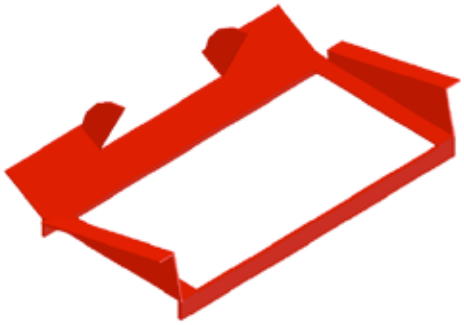
Pit Trap - at source pollution control

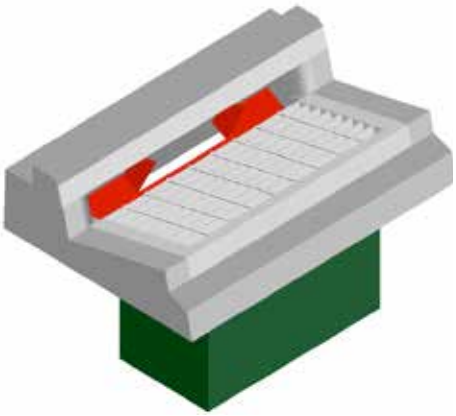
Hudson Civil has launched its ***'Pit Trap'*** into the Tasmanian market to expand our range of stormwater quality improvement devices to include '*at source'* to complement our range of '*end of line*' devices.

The ***'Pit Trap'*** is manufactured in Tasmania and is available off the shelf to suit Hudson Civil Products precast kerb and grate units. We can also manufacture one off traps to be retrofitted on site for existing pits.

Benefits of a 'Pit Trap'

- Our basket is fabricated from corrosion resistant lightweight Aluminium allowing the capture of pollutants above 4mm
- Optional Polyester liner for the capture of finer particles down to 1mm and smaller.
- Captured materials remain in a dry state eliminating odours, mosquitos and reducing the weight of the basket for cleaning purposes.
- Baskets supplied in a 'mechanical empty only' design without handles to eliminate employees removing the trap by hand with the associated risks of strain injuries.
- Our Polyester liner comes with stainless steel fixings and penetrations are made with stainless steel eyelets. This liner is then attached to the aluminium basket to alleviate any strain on the liner when being emptied or manhandled.
- Built in bypass on top of the large surface area of the basket allows high flows to enter the drainage system without the remobilisation of pollutants.
- Large capacity basket holds 0.15 m^3 when full.





A simple design for a simple problem

The ***'Pit Trap'*** design is based on a common sense approach to the problems of gross pollutants entering the stormwater system and therefore our creeks and estuaries. Our design simply consists of a robust aluminium sub frame which is positioned in the grate seat into which an aluminium basket is lowered into position. This basket in its basic form will collect all pollutants larger than 4mm. Items that fall into this category are cigarette butts, plastic drinking bottle caps and large type aggregates. For additional performance to collect pollutants above 1mm, we offer an additional welded polyester liner that is simply fitted inside the aluminium basket. These baskets can be cleaned by either hi-ab truck or pump trucks. We do not encourage the use of handles as the force and location of the lift is potentially very dangerous.

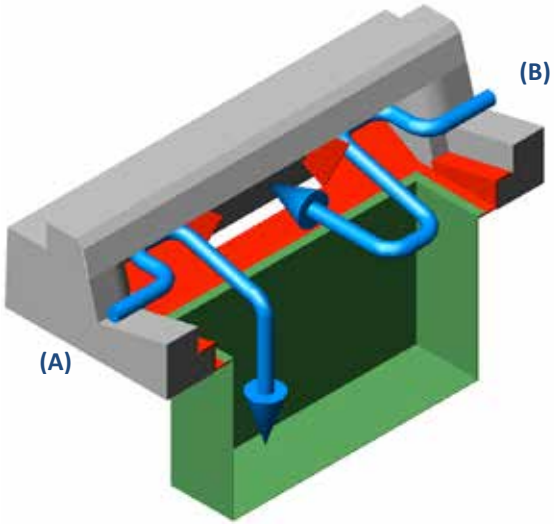
**Pit trap baskets also available to suit square/custom pits.*

Pit Trap - at source pollution control

Why use a rigid basket?

Hudson Civil is a locally owned business specifically targeting the Tasmanian market. We do not have the problems that large mainland and multinational company's face when trying to cover a market the size of Australia.

Basically, a rigid frame makes sense unless you are freighting them large distances like across Bass Straight and the Nullarbor as the costs are prohibitive. As we are not affected by these cost restrictions, we have the ability to design products that are constructed from the most suitable designs and materials.



When bypass occurs **(B)**, the deflectors induce a flow that prevents remobilisation of pollutants previously captured **(A)**.

Maintenance

When the basket is full, excess water is diverted through the bypass at the back of the pit (a large amount of water will still pass through the basket even when full). ALL baskets when full will allow the remobilisation of some pollutants so an adequate maintenance regime must be put in place to ensure the correct operation of the baskets.

Construction site filters

We also provide filter fabric liners for installation when site works produce an increased amount of fine particles. These liners are disposable one use items and are both more cost effective and reliable than traditional 'silt socks'.

Standard Wingwalls & Endwalls

SUBSOIL END WALL		WIDTH	LENGTH	HEIGHT
CP6100	SUBSOIL ENDWALL 100mm	325	350	355
CP6105	SUBSOIL ENDWALL 150mm	325	350	355
CP6110	SUBSOIL ENDWALL 225mm	325	350	355
CP6115	SUBSOIL ENDWALL SUIT 150 STRIPDRAIN	325	350	355

*Strip Drain Other Blockout available if required

MINI HEADWALL		WIDTH	LENGTH	HEIGHT
CP6170	MINI HEADWALL 225mm	750	200	750
CP6175	MINI HEADWALL 300mm	750	200	750

WINGWALLS (Municipal Style)		WIDTH	LENGTH	HEIGHT
CP6135	HEADWALL 225mm	1950	695	800
CP6140	HEADWALL 300mm	1950	695	800
CP6145	HEADWALL 375mm	1950	695	800
CP6150	HEADWALL 450mm	1950	695	800
CP6155	HEADWALL 525mm	2340	810	960
CP6160	HEADWALL 600mm	2340	810	960
CP5010E	P14-2 HEADWALL 750mm *	2000	1250	1240
CP5008A-C	P14-2 HEADWALL 900 - 1200mm *	2810	2000	1650

*Page 24 shows details of these Headwalls (Refer DSG Products)

"RURAL" WINGWALLS		WIDTH	LENGTH	HEIGHT
CP6120	RURAL HEADWALL 225mm	1260	650	525
CP6125	RURAL HEADWALL 300mm	1260	650	525

Uni Culvert Products

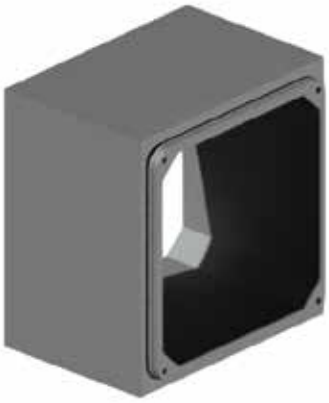
Hudson Civil recently acquired new Uni Culvert formwork out of Europe, providing the market with precise quality products in a large range of sizes for a wide range of applications

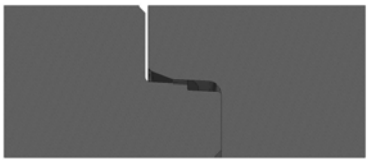
Uni Culverts can be vertically stacked for pit structures or horizontally laid similar to conventional box culverts & custom applications to suit your requirements. Culverts come standard with the rebate & spigot joint. Units can also be supplied with the proprietary Nitrile rubber ring joint system. Culverts can be supplied with grout tube conduits for post tensioning if required

HCP can provide preliminary concept design & full structural certification by an external engineer, designed & certified in accordance with the relevant Australian Standards & Project Specifications

Recent Uni Culvert projects by HCP include:

- Boags Brewery 2100mm x 2100mm Vertical Uni Culverts – Square Pump Station Pits
- Tas Irrigation 3600mm x 2400mm Vertical Uni Culverts – Duck Irrigation Inlet Structures
- Tas Irrigation 3600mm x 1800mm Vertical Uni Culverts – North Esk Irrigation Inlet Structures
- Hobart City Council 2700mm x 1800mm Uni Culverts – Maypole Creek Stormwater Upgrade





SPAN (mm) Internal	MIN LEG (mm) Internal	MAX LEG (mm) Internal	LENGTH
900	900	4200	1000 – 2440
1200	900	4200	1000 – 2440
1500	900	4200	1000 – 2440
1800	900	4200	1000 – 2440
2100	900	4200	1000 – 2440
2400	900	4200	1000 – 2440
2700	900	4200	1000 – 2440
3000	900	4200	1000 – 2440
3300	900	3000	1000 – 2440
3600	900	3000	1000 – 2440
3900	900	3000	1000 – 2440
4200	900	3000	1000 - 2440

Spans & Leg heights – 300mm Increments
Length infinitely adjustable from 1000mm – 2440mm functional length
with rebate, shorter custom lengths can be provided with no rebate

Uni Culvert Products

Box Culverts (RCBC) – Traditional

Inverted crown & lid

Standard crown & base

Multicell arrangement with link slabs

SPAN (mm)	MIN LEG (mm)	MAX LEG (mm)	LENGTH
300	300	1200	2440
600	300	1200	2440
900	300	1200	2440
1200	300	1200	2440
1500	300	1200	2440
1800	300	2400	1220
2100	300	2400	1220
2400	300	2400	1220
2700	300	2400	1220
3000	300	3600	1220
3300	300	3600	1220
3600	300	3600	1220

- Precast slabs & crowns
- Link slabs
- Precast panel wing walls
- MASSBLOC, LOCKBLOCK, ROCKBLOCK optional wing walls
- Checked link slabs & multi cell units
- Keyed joints & connected units available

HUDSON CIVIL offers a full design & construct option for RCBC units – manufactured to your requirements and applications with fully certified designs in accordance with relevant standards. RCBC units can be provided for full traffic (sm1600) loadings, or to suit custom higher or varied loadings including DSG, industrial, etc.

HUDSON
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HUDSON CIVIL PRODUCTS - The Market Leader!

Hudson Civil supplies the highest quality Box Culverts (RCBC) to the Tasmanian construction market, at the best prices.

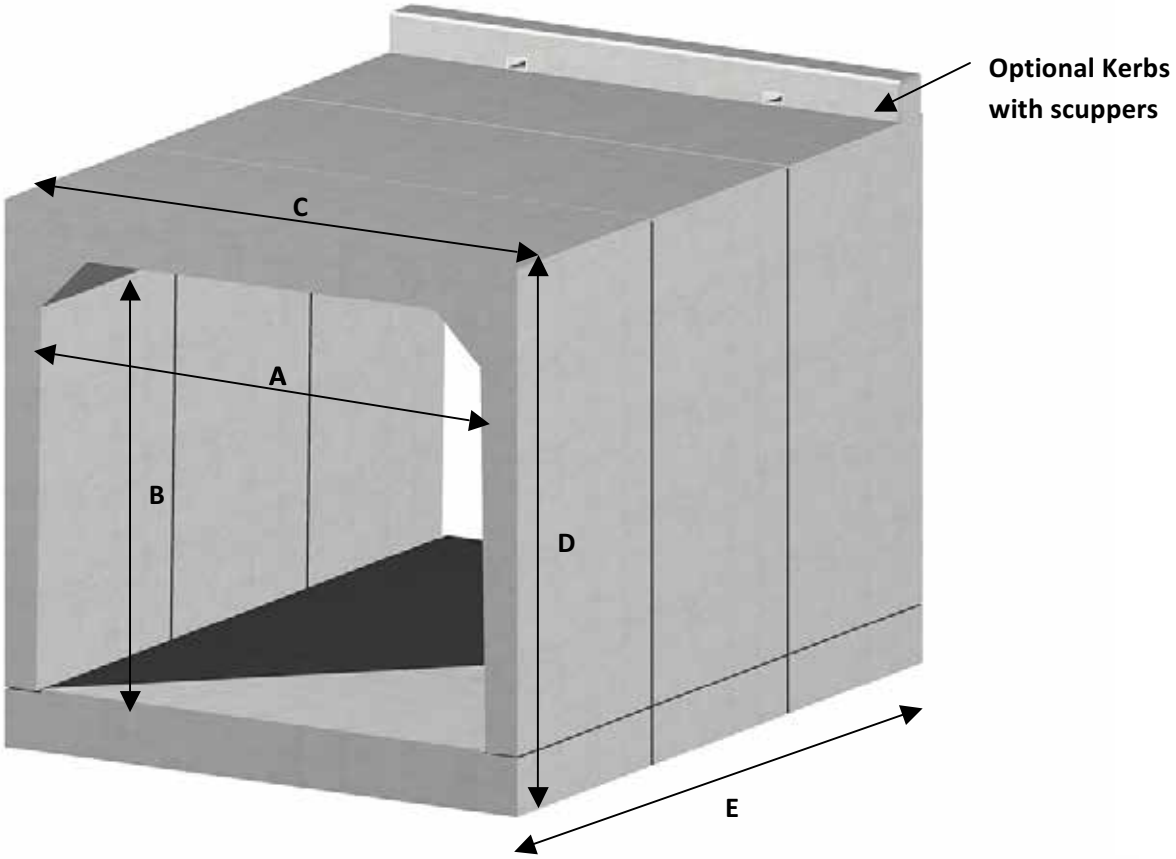
Off the shelf models & custom designed, we supply RCBC units along with link or base slabs as required, in sizes right up to 3600mm x 3600mm (internal span x internal leg height) as standard products, and larger or custom sizes on request.

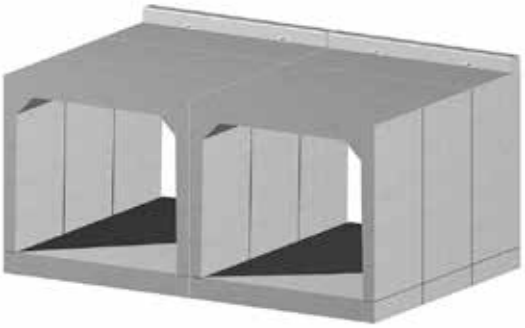
Recent RCBC projects by HCP include:

- Glenorchy City Council 3600mm x 1800mm RCBC & base slabs
- Latrobe WW Storage tank 3600mm x 2400mm RCBC
- MVC Osmaston Rd Dual RCBC & Bases 3000mm x 2000mm
- Waratah-Wynyard Blackfish Creek RCBC & Bases 3600mm x 1500mm
- ABM Mine Site RCBC 3600mm x 3600mm
- TEMCO Blast Furnace False Floor (range up to 3300mm x 2000mm)
- Dilston bypass 3600 x 3600 stock underpass & Wingwalls
- Lyell Highway 3000 x 1200 post tensioned RCBC
- St Peters Pass (DSG-VICROADS)
- Perthlinks Frog culverts (DSG-VICROADS)
- Powranna 4m x 3.6m RCBC (DSG-VICROADS)

RCBC & Base Slab Layout Sheet

Functional Dimensions Internal		Functional Dimensions External			Optional Kerbs
A	B	C	D	E	Yes/No





Dual Cell Arrangement

Inverted Arrangement

HUDSON CIVIL PRODUCTS

Vertical Dry Cast Concrete Pipe (RCP)

Vertical Dry Cast Concrete Pipe has recently been embraced by Australia and we join the remainder of the world in using this technology to create high durability, cost effective concrete pipe. Tasmania now has access to this new pipe technology thanks to a considerable investment by Hudson Civil. We have installed a modern Schlosser Pfeiffer Dry Cast machine and are producing pipe from 300mm right up to 1600mm on this one machine. We will over time be exiting the spun pipe method of production and all pipes will be eventually cast in this manner.

The Variant pipe making machine combines the outstanding compacting qualities of Schlosser Pfeiffer's propriety vibration technology with a wide range of sizes.

Machine construction follows stringent quality control guidelines ensuring all equipment used in the manufacture of pipe is of the highest quality.

Vertical Drycast Concrete - Key Facts:

V.D.C. or Vertical Concrete Pipe is the most advanced process in the world today resulting in:

- Highest quality design
- Best performance
- Dense concrete created from a modern production process
- Greater overall durability
- Greater collar durability
- Less damage from site handling
- More cover to reinforcing than spun pipes

Additional benefits from modern pipe casting include:

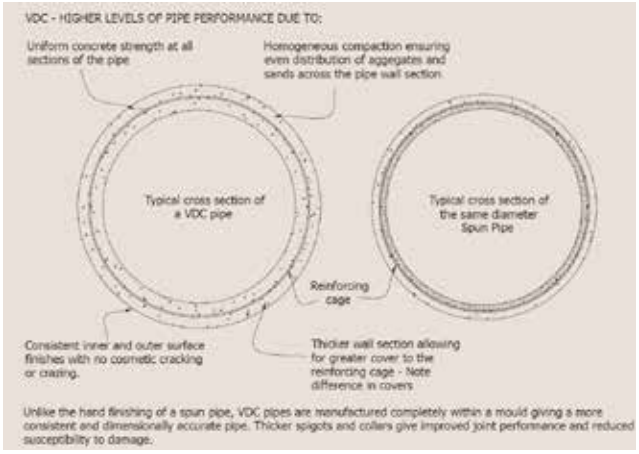
- Jacking Pipes
- PVC or PE Lined pipes
- No reduction in bore for higher pipe classes

HUDSON CIVIL PRODUCTS

Vertical Dry Cast Concrete Pipe (RCP)

	Internal Dia (mm)	Effective Length (m)	Overall Length (m)	OD Pipe (mm)	OD Collar (mm)	Avge wall thickness (mm)	Lifting anchor position 1	Lifting anchor position 2	Mass (kg)	Nominal Joint Gap (mm)
300	300	2.5	2.6	406	530	53			414	5
375	375	2.5	2.6	489	645	57			568	5
450	450	2.5	2.6	576	715	63			720	5
525	525	2.5	2.61	671	800	73			960	5
600	600	2.5	2.61	756	910	78			1166	5
750	750	2.5	2.61	916	1100	83	800	2000	1544	5
900	900	2.5	2.62	1086	1280	93	790	1990	2070	5
1050	1050	2.5	2.62	1266	1380	108	750	1950	2590	5
1200	1200	2.5	2.62	1446	1676	123	790	1990	3730	5
1350	1350	2.5	2.62	1626	1800	138	760	1960	4480	5
1600	1600	2.5	2.62	1926	2050	163	740	1940	6060	5

PLEASE NOTE THAT DUE TO OPERATIONAL ISSUES CHANGES MAY BE MADE WITHOUT NOTICE



MBK Cage Technology

Hudson Civil has invested in an MBK Cage Machine to enhance the offering of our concrete pipe. This is the most modern machine in the world right now and accepted as the world's best cage machine.

Advantages of Vertical Pipe production

- True 100 year design life
- Consistent wall thickness
- Even distribution of aggregates throughout the pipe cross section
- Tighter tolerances due to inner and outer moulding process
- Thicker walls generating larger cover to reinforcing
- Thicker spigots and collars leading to less damage on site and during installation
- OHS improvements with 'Swift lift' pins typically installed on all pipes above 450mm Dia

Safe installation and handling of concrete pipe

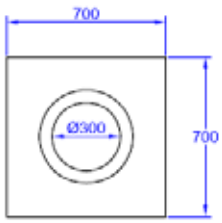
- At all times, lifting devices are to be tested, tagged & appropriate for the task. A soft sling or chain may be used to pick up the pipe.
- It is important that the bedding is prepared correctly. After the levelling of the bedding material, a small amount is removed for where the sling/chain will be positioned along with where the collar on RRJ pipes will be located. Failure to allow room for the sling/chain will make it difficult to remove and the pipe will move & rotate when the sling/chain is pulled out requiring realignment to the laser. If the collar is not housed in the bedding then the pipe may bridge between collars and will not be supported by the bedding. This may crack the pipe and result in unwanted settlement of the trench backfill.
- The sling/chain should be located in the center of the pipe so it hangs level. It will make laying difficult if this is not the case.
- Place the rubber ring on the spigot. It should be stretched evenly around the pipe, near to the end of the spigot. No lubrication is required for the rubber ring.
- Lower the pipe to meet the socket ensuring the pipe is level with the previous pipe with some weight still being taken by the sling/chain. When the pipe is flush to the socket, use a piece of timber and crow bar to push the pipe home.
- Lower the remainder of the way down and align to the laser light.
- Hold on to the pipe and remove the sling/chain.
- Check to make sure the pipe hasn't moved, and is pushed home.
- A small amount of back fill should be placed on the pipe to prevent movement when pushing home future pipes if possible.
- Larger pipes (>450mm) typically have "swift-lift" pins installed for easier handling - only use approved lifting equipment/clutches and ensure you are trained & competent to use these items.

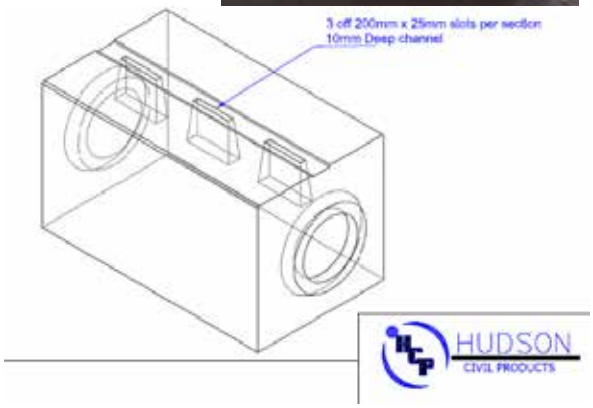
Visit this link for industry guidelines on installing Reinforced Concrete Pipe, provided by CPAA (Concrete Pipe Association of Australasia: *https://www.youtube.com/watch?v=UDr7ap90a7s*

Slot Drain & Embedded Pipe

Solutions for low cover, heavy loads, and with integrated surface drainage!

- Designed to be trafficked by heavy loads (including Rail 300LA and highway traffic, at or near surface)
- Integrated drainage slots available for use as surface drainage, including bike safe & profile options
- Compatible with HCP pipe culvert systems and custom option solutions available





DoSG Driveable End Walls

Code and Description		WIDTH	LENGTH	HEIGHT
CP50001	P35 Driveable Endwall 300mm type 1	700	1900	750
CP50003	P35 Driveable Endwall 375mm type 1	700/775	1900	750/813
CP50006	P35 Driveable Endwall 450mm type 1	775	1900	813
CP50008	P35 GRATE (suit 450mm)			

300 & 375Ø

450Ø

Code and Description		WIDTH	LENGTH
CP50010	P35 Driveable Endwall Side Entry	700	2900

Code and Description		WIDTH	LENGTH	HEIGHT
CP50014	P36-1 Driveable E/wall 300mm type 2	2100	1440	580
CP50016	P36-1 Driveable E/wall 375mm type 2 *	700/775	1900	750/813
CP50018	P36-1 Driveable E/wall 450mm type 2 *	775	1900	813

*NOTE: The 300mm Ø P36-1 is the only product to come with wings, 375 & 450mm Ø Endwalls comes as a P35 however is supplied along with dowels so as to tie the INSITU wings together on site, as per DSG Requirements.

HUDSON
CIVIL PRODUCTS

DSG Endwalls & Wingwalls

FLAT ENDWALLS			WIDTH	LENGTH	HEIGHT
CP5003	P24--2	TO SUIT 300mm PIPE	1170	230	1,020
CP5004	P24--2	375mm PIPE	1540	230	1,100
CP50045	P24–2	450mm PIPE	1540	230	1,100
CP5005	P24--2	TWIN 450	To DSG specifications generally		
CP5006	P24--2	525 DIA	To DSG specifications generally		
CP5007	P24--2	600 DIA	To DSG specifications generally		

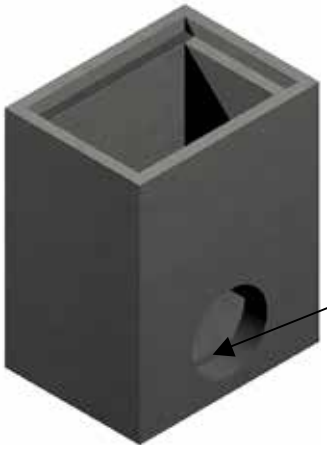
LARGE WINGWALLS (DSG/DIER Standard Drawings Generally)		WIDTH	LENGTH	HEIGHT
CP5010E	P14-2 WINGED H/WALL up to 750mm (various pipe sizes)	2000	1250	1240
CP5008A-C	P14-2 WINGED HWALL 900mm - 1200mm	2810	2000	1650
CP5011	P16 TWIN H/WALL Max 600mm	VARIES	1250	1240
CP5012	P16 TWIN H/WALL Max 900mm	VARIES	2000	1650

*P16 Headwalls are cast in two halves, for insitu stitch by contractor onsite.

Please Refer to DSG requirements & seek approval for these products

Precast DSG Pits

- Pits available to suit DSG (DIER) Standard Drawing arrangements
- Pits manufactured with VR compliant concrete as required
- Pits available from 600mm high up to full height 1500mm
- Shop drawings assistance/templates available
- Riser units available up to 1500mm upon request
- If custom pit sizes are needed HCP will strive to meet your needs.



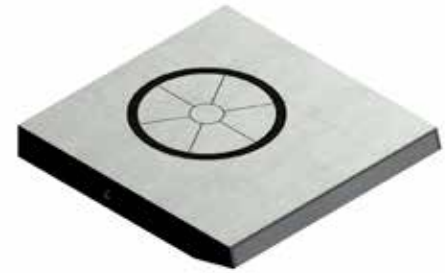
65mm Dia. – 600mm Dia.
Hole coring available.
(Custom Block outs >600Dia. available upon request)

	CODE	Wall & Base Thickness	Functional Dimensions Internal			Functional Dimensions External		
			WIDTH	LENGTH	DEPTH	WIDTH	LENGTH	DEPTH
Standard DSG Pits	CP5120	150	900	600	1350	1200	900	1500
	CP5121	150	900	600	1500	1200	900	1500
	CP5130	150	900	900	1350	1200	1200	1500
	CP5132	150	900	900	1500	1200	1200	1500
Custom Pits, DSG Style	HP31206	150	1200	600	1500	1500	900	1500
	HP31209	150	1200	900	1500	1500	1200	1500
	HP31212	150	1200	1200	1500	1500	1500	1500
	HP31506	150	1500	600	1500	1800	900	1500
	HP31509	150	1500	900	1500	1800	1200	1500
	HP31512	150	1500	1200	1500	1800	1500	1500
	HP31515	150	1500	1500	1500	1800	1800	1500
	HP31806	150	1800	600	1500	2100	900	1500
	HP31809	150	1800	900	1500	2100	1200	1500
	HP31812	150	1800	1200	1500	2100	1500	1500
	HP32106	150	2100	600	1500	2400	900	1500
	HP32109	150	2100	900	1500	2400	1200	1500
	HP32406	150	2400	600	1500	2700	600	1500

HUDSON
CIVIL PRODUCTS

DSG Products - Lids, Surrounds, Lintels, Misc.

CODE	DESCRIPTION
CP5300	M1 DSG Surround & Class D lid (P24-4) 1300mm x 1355mm x 170mm



CODE	DESCRIPTION
CP5305	B1 DSG surround & Class D lid (P25-4) 1300mm x 1370mm x 170mm

DSG Surrounds may be used with precast pits

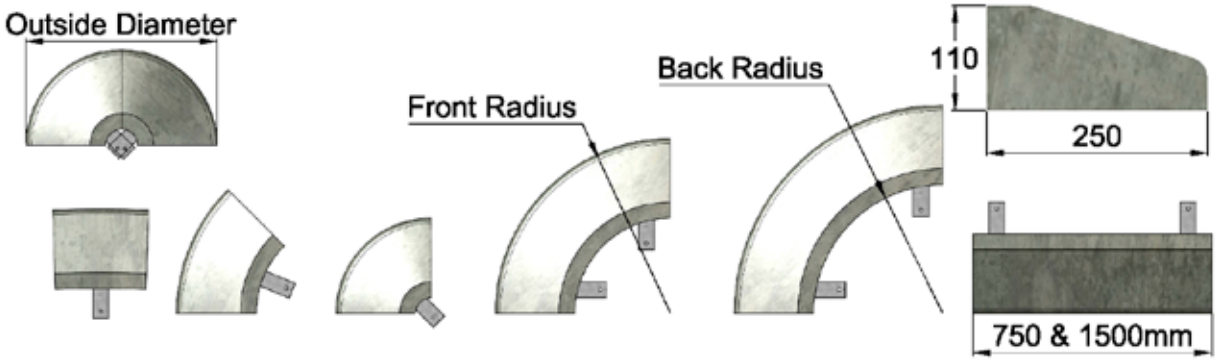
CP5130	*DSG PIT 900 x 900 x 1350mm*
CP5132	*DSG RISER 900 x 900*

CODE	DESCRIPTION
CP5123	M1 DSG Surround & Class D Gully Grate (P26-2) 1200mm x 940mm x 500mm

CODE	DESCRIPTION
CP5124	B1 DSG Surround & Class D Gully Grate (P27-2) 1200mm x 990mm x 375mm

CODE	DESCRIPTION
CP3440	Water deflector 900mm x 450mm (Left & right handed)
DC902	Batter Channel 565mm coverage
CP5340	P39-2 B1 DSG Kerb scupper 1500mm x 150mm x 200mm
CP5341	P39-2 Steel Lintel Only
CP5350	DSG Flushing Point Cover
CP5121	P28-2 Top Complete (L or R)
CP5122	P29-1 Top Complete (L or R)

Kerb Blocks



CODE	DESCRIPTION (Low profile kerbs)	RADIUS mm		OUTSIDE DIAMETER
		FRONT	BACK	
DC465	KERB - Island L/P 300mm	5000	4750	10000
DC470	KERB-Island L/P 45D Large	530	280	1060
DC475	KERB-Island L/P 90D Small	300	50	600
DC480	KERB-Island L/P 90D Med	560	310	1120
DC485	KERB-Island L/P 90D Large	700	450	1400
DC455	KERB - Island L/P 1500mm	Straight section		
DC460	KERB - Island L/P 750mm	Straight section		

DC450

DC520

DC525

DC526

CODE	DESCRIPTION	BLOCK DIMENSIONS mm		
		Width	Height	Length
DC450	KERB - Island H/P 1500mm	230	160	1500
DC520	KERB - Island E1 1200mm	100	200	1200
DC525	KERB - Island M2 750mm	305	270	750
DC526	KERB - Island M3 750mm	305	110	750
DC527	KERB - Island B3	140	115	1200
DC530	KERB - Island B2 900mm	150	250	900
DC600	EDGE STRIP-Boundary 1.2m	150	90	1200

DC527

DC530

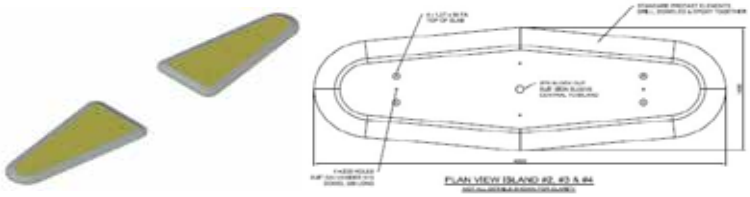
DC600

HUDSON
CIVIL PRODUCTS

Precast Traffic Islands

EASY INSTALL - EFFICIENT & SAFE

- High Strength Concrete for longevity and durability
- Reduced time on site for enhanced safety & traffic efficiency
- Coloured and textured finishes to client requirements
- Manufactured in the factory in a controlled environment
- Precision manufactured, mass concrete construction
- Stock HCP designs or custom client layouts
- Modular for flexibility and customisation



HCP Traffic Islands take the hassle out of working under traffic for set up and pour of traffic islands – prepare a base and lift into position, and you're complete in record time. No waiting, less site work and reduced risk for contractor, workers, and the public.

- *Reduced traffic impact on site – faster with less work under traffic management*
- *No messy and complicated site pours, with pin conduits on a mortar bed base to install*
- *Enhanced Safety for workers, the travelling public and pedestrians during install*
- *Quality construction, high strength concrete, and fully reinforced*

The best in the business – HCP precast **offering superior strength, finish and quality** for pre-fabricated complete traffic island solutions for the Tasmanian Market.

sales@hudsoncivil.com.au
www.hudsoncivil.com.au

Spoon Drains, Trench Drains & Car Stops

SPOON DRAINS 1200mm long

CODE	DESCRIPTION	WIDTH O/D	WIDTH I/D	HEIGHT O/D	HEIGHT I/D
DC165	SMALL	150	85	80	40
DC160	MEDIUM	200	130	120	70
DC155	SHALLOW	300	230	100	50
DC150	LARGE	320	230	165	115

HCP TRENCH DRAINS

CODE	DESCRIPTION (LENGTH)	WIDTH O/D	WIDTH I/D	HEIGHT O/D	HEIGHT I/D
DC225	MEDIUM 1200mm H/D	240	140	150	80
DC220	MEDIUM 3000mm H/D	240	140	150	80

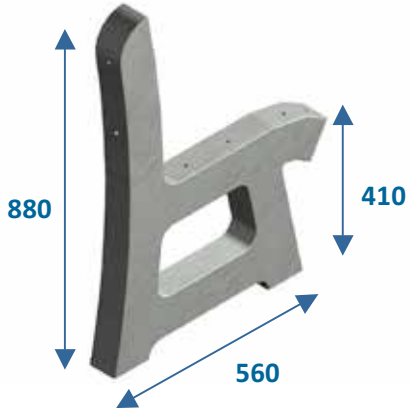
ORCA TRENCH DRAIN / SURFACE DRAINAGE Refer www.orcacivil.com.au

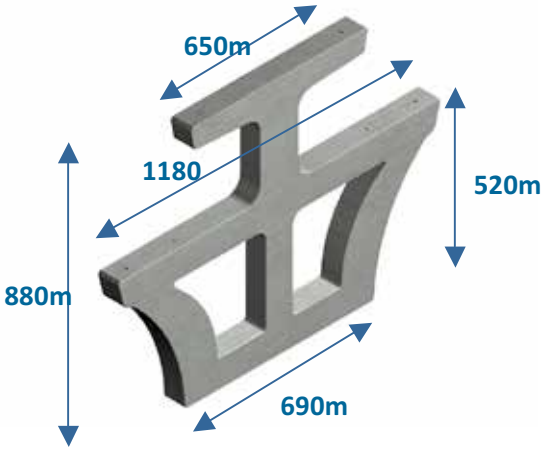
CAR STOPS

DC650	Car Stop 2000mm x 135mm Thick
DC655	Car Stop 2000mm x 100mm Thick
DC656	Car Stop 1650mm x 100mm Thick
NF1154	Spike - Deck 200mm Long
DC660	CAR STOP PEGS N16 180mm
DC665	CAR STOP PEGS N16 300mm
DC850	Gutter Crossing

HUDSON
CIVIL PRODUCTS

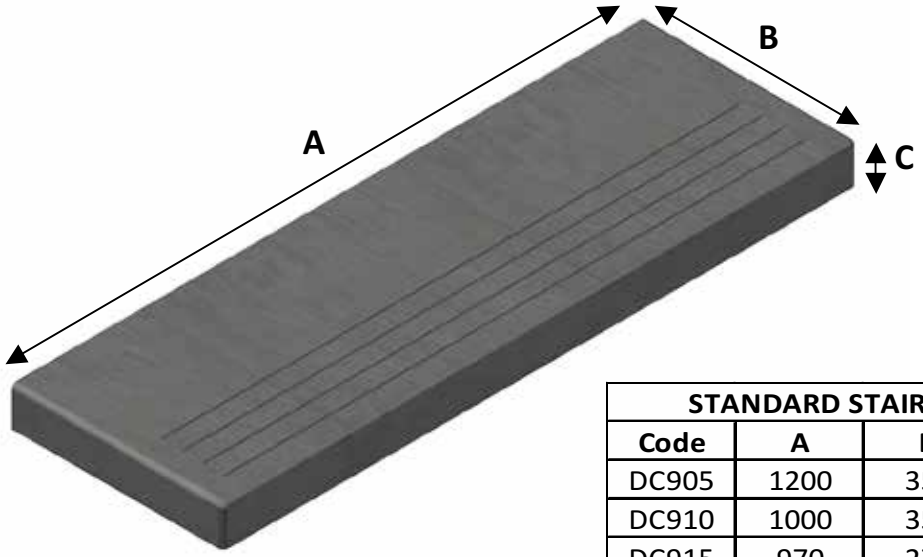
Bench Seat & Table Ends





Code	Description
HA612	Bench Seat Ends (Set)
HA610	Table & Seat Ends (Set)

Stair Treads



STANDARD STAIR TREADS			
Code	A	B	C
DC905	1200	350	65
DC910	1000	350	65
DC915	970	270	70
DC920	1200	400	75

Stock Troughs

HCP Stock Troughs offer superior strength, finish and quality over any competitor's trough in the Tasmanian market.

Manufactured in our Launceston factory and available from various rural resellers, our troughs are built to cope with both the damage inflicted by stock and weather.

- Our precast concrete troughs are manufactured in one pour so that means no weak joints. – one piece moulding
- High strength concrete is used in all troughs
- Quality reinforcement is used in all troughs – No chicken mesh
- Certified lifting points ensure safe lifting for years – No rusty & dangerous wire
- Quality brass inlet and outlet – No cross threaded plastic threads
- Largest range in Tasmania
- All accessories & fittings available, plus parts & spares (floats, plugs, etc.)

CIRCULAR TROUGHS							
Code and Description		DIAMETER	DEPTH	CAPACITY	INLET	OUTLET	WEIGHT
DT090	NO. 9 TROUGH	560 mm	350 mm	55 L 12 G	20 mm	N/A	140 kg
DT110	NO. 11 TROUGH	1200 mm	500 mm	450 L 100 G	25 mm	50 mm	500 kg
DT120	NO. 12 TROUGH	1500 mm	475 mm	810 L 180 G	25 mm	50 mm	650 kg
DT130	NO. 13 TROUGH	1800 mm	600 mm	1360 L 300 G	25 mm	50 mm	1130 kg
DT131	NO. 13 SQUAT	1800 mm	475 mm	1000 L 220 G	25 mm	50 mm	890 kg
DT140	NO. 14 TROUGH	2100 mm	700 mm	2270 L 500 G	25 mm	50 mm	1300 kg
DT141	NO. 14 SQUAT	2100 mm	475 mm	1250 L 275 G	25 mm	50 mm	1070 kg
DT150	NO. 16 TROUGH	2400 mm	700 mm	2700 L 600 G	25 mm	50 mm	1640 kg

HUDSON
CIVIL PRODUCTS

Stock Troughs

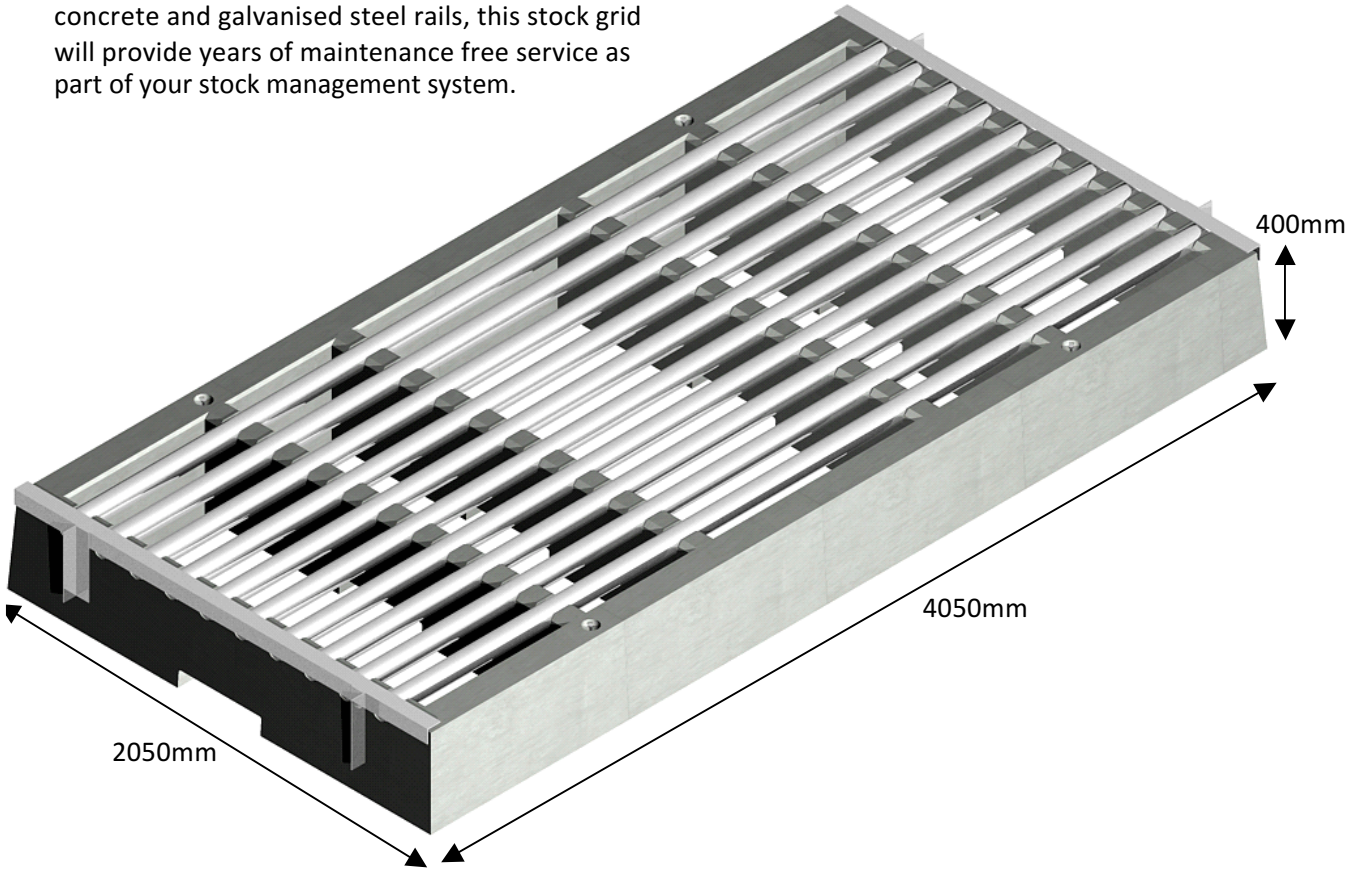
RECTANGULAR TROUGHS							
Code and Description		WIDTH	DEPTH	CAPACITY	INLET	OUTLET	WEIGHT
DT010	NO. 1 TROUGH	2400 x 650	400 mm	360L 80G	25 mm	50 mm	400 Kg
DT020	NO. 2 TROUGH	2140 x1220	370 mm	800L 175G	25 mm	50 mm	1060 Kg
DT025	NO. 15 TROUGH	2470 x 1400	770 mm	2000L 500G	25 mm	50 mm	1800 Kg

DOG BOWLS		
Code and Description		SIZE
DT070	DOG BOWL SMALL	180mm Dia. x 70mm Deep
DT071	DOG BOWL MEDIUM	245mm Dia. x 100mm Deep
DT072	DOG BOWL LARGE ROUND	360mm Dia. x 140mm Deep
DT080	DOG BOWL LARGE RECTANGULAR	300mm x 400mm x 170mm Deep

Precast Concrete Stock Grids

The Hudson Civil stock grid answers the call for a stock grid that meets all the expectations of land owners

Constructed from a combination of durable concrete and galvanised steel rails, this stock grid will provide years of maintenance free service as part of your stock management system.



You may expect all grids to perform the same but this grid provides unequalled performance:

- Durable high strength concrete
- Durable galvanised steel rails
- Removable rails for easy clearing of grid if required
- Smooth and quiet ride for vehicles
- Stops stock crossing the grid
- Drainage slots along the entire unit to remove stormwater
- Can be installed below ground or build up an existing roadway
- Threaded inserts allow posts to be bolted to grid for connecting any type of farm fence

HUDSON
CIVIL PRODUCTS

Concrete Tanks / Pump Wells / Larger Manholes

Hudson Civil can supply precast shafts suitable for pump stations and storage tanks. We manufacture a large range of small tanks, shafts and pits along with large diameter tanks.

Precast Tank Range		
Internal Diameter	**Height (Length)***	**Wall Thickness**
1800	2400	100
2400	2400	125
3000	1500 & 3000	175
4000	2400	150
6500**	1200	250

*Custom risers are available up to the heights shown above however, they will not have a rebate on the top section.

** 6500 requires custom installation & comes in two halves for onsite stitch

We also provide steel fabrication services through our association with HB Engineering. We offer fabrication of stainless steel, aluminium, and mild steel.

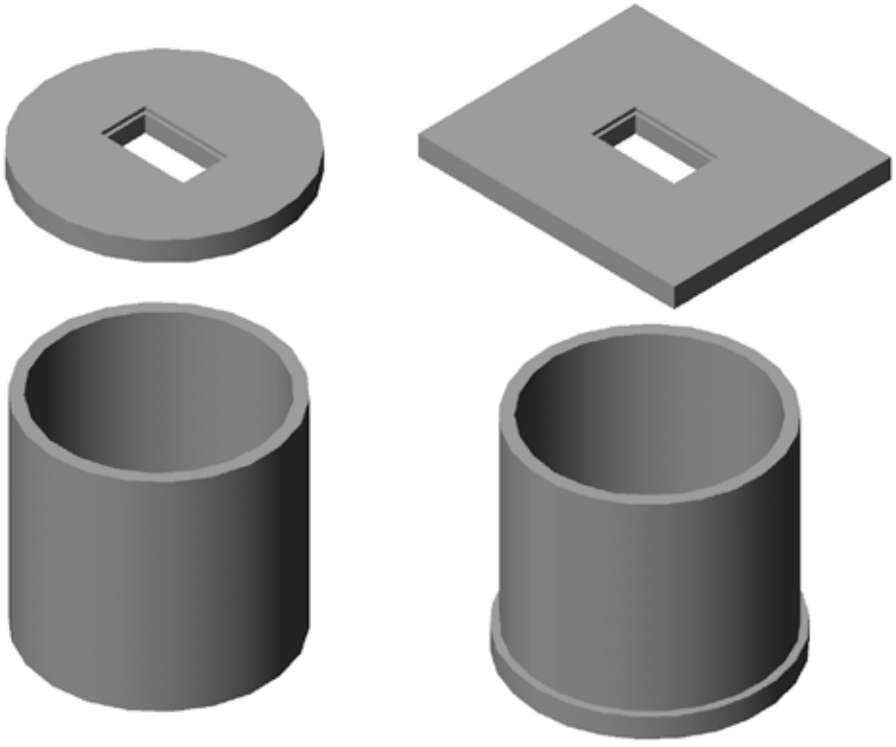
Our large range of precast shafts and pits also allows for valve pits to be quickly installed or to be pree plumbed (above left) prior to delivery

Concrete Tanks / Pump Wells / Larger Manholes

The most cost effective design (below left) is a tank with a base cast internally with a close fitting round surround. This may require some additional insitu concrete buoyancy control and can cause a loss of capacity due to the base reducing the height of the tank.

Other options (below right) include an external base and rectangular surrounds. Hudson Civil can manufacture any shape surround that may be required however thought to transportation should be kept in mind when designing surrounds for large diameter tanks. The extra cost of the external base may be beneficial when compared to on site buoyancy control measures. This external 'flange' may be manufactured to any width with thought once again given to transportation along with the additional weight of the tank when completed.

Epoxy or HDPE coatings may also be included as part of our service.



Class '2' RCP is often incorrectly used to design pump wells. Class '2' pipe is designed as a pipe, NOT as a pump well.

Our entire range has been designed for ine ground applications and is available for trafficked areas.

- Strong, smooth offe form finish
- 40mm cover to reinforcing (min)
- No laitenance inside the well to remove prior to applying coatings
- 'Swift Lift' lifting devices in all products, certified lifting designs available
- Engineering certification & design support available for all products

Pump well ancillary items product selector

Product	Aluminium	Galvanised mild steel	FRP (Fibre Reinforced Polymer)	Fibreglass	Stainless Steel
Access covers	Yes	Yes	Yes	Yes	No
Safety grates	Yes	Yes	Yes	No	Yes
Ladder	No	Yes	Yes	No	Yes
Pipe brackets	No	Yes	No	No	Yes

Other fabricated elements, valves, pipework, well washers, etc. also available.
Complete TasWater & industrial pump station options can be supplied – Please ask!

HUDSON
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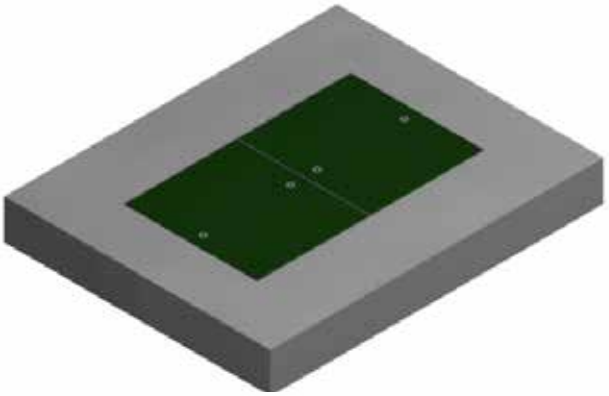
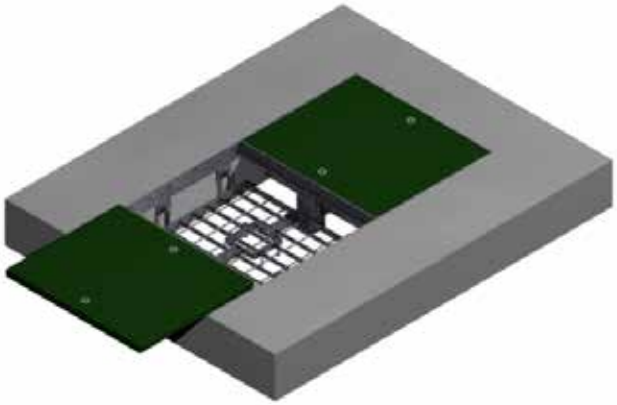
'ULTRA' ACCESS COVERS

Hudson Civil Products along side HB Engineering have developed class rated aluminium access covers as an alternative to current composite ply wood/fibreglass covers.



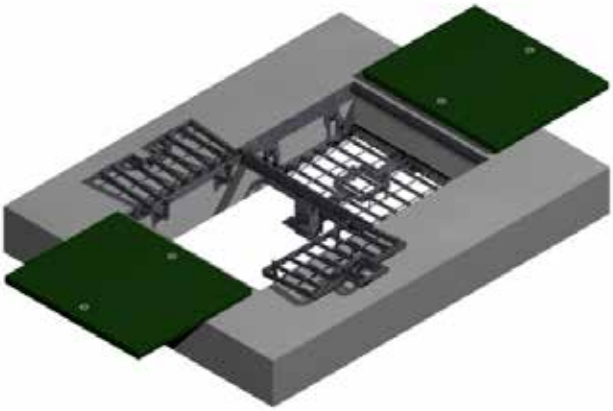
Covers are designed, manufactured & tested in accordance with as3996, available in load classes A, B & C.

All components are locally manufactured reducing cost & lead times, improving project construction programs.



Covers have been developed with stainless steel locking mechanism utilising the standard lift key.

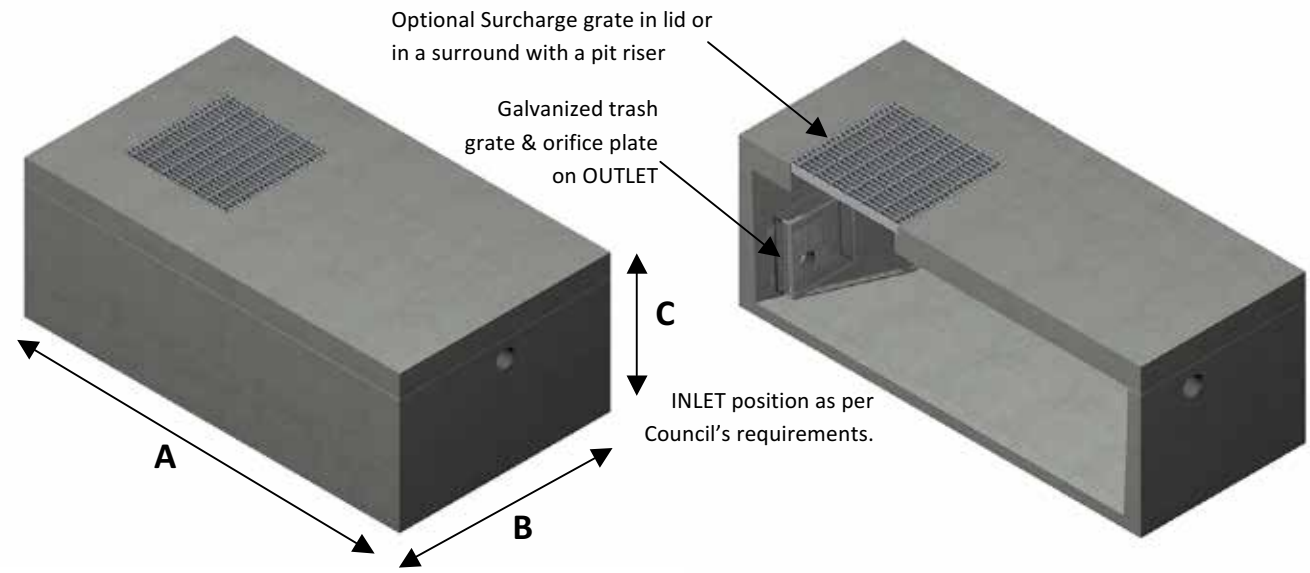
Covers are epoxy coated green with luxa floor aggregate granules for non slip as standard. Alternative colour & coatings can be applied to suit specific requirements.



Optional separate aluminium or stainless steel safety grates conforming to taswater standard drawings.

Detention tanks – single units

Precast concrete detention units offer fast, cost effective installation combined with the strength and durability benefits of precast concrete. Available in 800 and 2,000 Litre capacities, they are simply installed online quickly with a minimum of fuss. If a larger storage is required then multiple tanks can be closee coupled to create purpose built storage systems.



CODE	CAPACITY	A	B	C
ST650	800	2100	1200	600
ST670	2000	2512	1412	920

*Dimensions are for non-trafficable. (Trafficable required custom lid slabs)

Design considerations should take into account some basic information to help choose the model that is best suited to your requirements:

Depth to invert of the outlet from ground level is greater than 550mm?	**YES**	A 2,000 litre tank is suitable for installation
	NO	Due to depth restrictions, 800 litre tanks may be necessary to ensure tanks are situated below ground.
Are you permitted to divert excess water to Councils storm water system after the design capacity has been reached?	**YES**	A "Top hat" restrictor may be installed to allow a bypass of high flows into the councils mains
	NO	An "Orifice Plate" must be fitted over the outlet, constantly restricting the flow.
If installing an Orifice Plate, do you wish the excess flood water to be discharged directly above the storage Unit?	**YES**	A surcharge grate may be installed in the lid of the unit or precast risers supplied so the grate may be adjusted on site by your plumber when landscaping has been completed.
	NO	Your Plumber will need to ensure that the excess storm water is allowed to overflow from your system in a safe location until floodwaters subside.
Has your design stipulated the size of the orifice (hole) on the outlet of the structure?	**YES**	We will supply and fit either the Top hat or Orifice Plate with this size opening
	NO	You will need to obtain this information for us to complete the tank prior to delivery.

HCP Uni-Vault – SW Detention

Hudson Civil Stormwater UNI-VAULT

The **HCP UNI-VAULT** system is a modular, buried stormwater detention storage option, and can be used for infiltration/soakage or groundwater recharge purposes if required. With flexibility and ease of precast concrete modular construction, the **HCP UNI-VAULT** system allows large storage volumes with variable footprint and depths as well as providing excellent access to enable maintenance to be performed safely and efficiently.

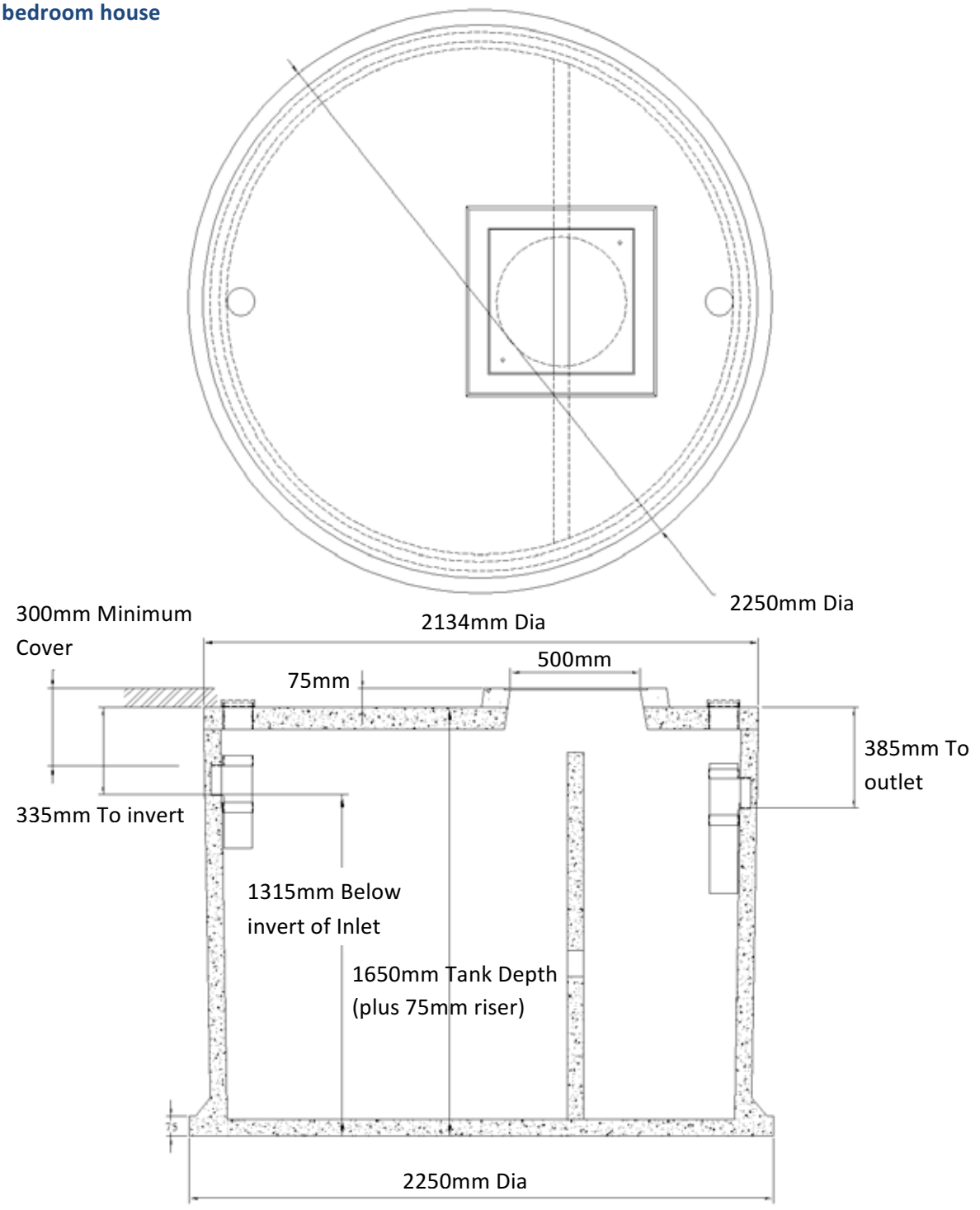
The **HCP UNI-VAULT** system is a below ground structure produced by connecting individual precast concrete modules into a configuration that suits site and project specific requirements. A range of design and installation benefits make the **HCP UNI-VAULT** system a competitive solution for any residential, commercial or industrial project.

Multiple configurations are available to suit site footprint, depths to invert, multi-location or multi-cell runs, and other site or construction limitations – our team works with the client, contractor and designers to ensure that site and project specific requirements are achieved to provide an optimal bespoke solution for large volume stormwater detention on difficult and challenging sites.

- *Modular components, multiple configuration*
- *Precast concrete for longevity and durability*
- *Tanks can be trafficable or non-trafficable*
- *Construction advice and shop drawings available*
- *Access and working space for maintenance*
- *Large volume storage for footprint and depth*
- *Fast installation on site*
- *Safe, tidy worksite limiting insitu concrete works*

3,500 Litre Septic Tank

- **New design conforming to AS1546**
- **3,500 Litre capacity suitable for a 4 bedroom house**



Maximum fill over lid not to exceed 100mm.

Septic Tank Installation Guide

This document has been produced to assist you with the installation of a Hudson Civil Precast Concrete Septic Tank. This guide is designed to ensure that your septic tank has been installed in such a way as to offer untroubled service for years to come.

Location of Tank: When plans have been approved by Council, they still should be checked by your Builder/Plumber that the following points have been considered:

1) Suitable access for crane truck noting the tank weighs 3.2 Tonnes
2) Water supply is located near by.
3) The location is such that the tank will not be subjected to any construction loads or cars / trucks upon completion of building works.
4) Tanks should be located so as the bottom of the excavation is no closer than an angle of 45 Degrees from the bottom of the footings.
5) Ensure any surface water is directed away from the tank and that the site, if a high water table is present, is adequately drained of ground water.

Installation Once the location of the tank has been determined and excavation has been completed, the following points should be checked prior to installation:

1) Pipe levels have been confirmed and the tank dimensions and pipe work depths are suitable.
2) Suitable bedding (7mm Blue metal x 75mm Thick) has been placed in a uniform layer and screeded level. Any protruding rock must have a minimum of 75mm bedding to the underside of the tank. If the bedding is not of a uniform thickness then compaction by vibrating plate or similar must be used and then a final screeding to ensure a flat and level base.
3) Use all lifting points (Proprietary 'Swift Lift' lifting devices) and spreader bar to install the precast tank. If the correct lifting equipment is not on site Do not improvise. These tanks are very heavy and if lifted incorrectly could cause serious damage to both people and property.
4) Upon installation of the tank, fill with water immediately to prevent uplift.
5) Backfill around tank with select fill and compact to avoid any subsidence.
6) If risers are required, ensure both joints are sealed with Epoxy Mortar or similar to ensure a watertight joint. PVC extensions should be made with appropriate Glue and Primer.

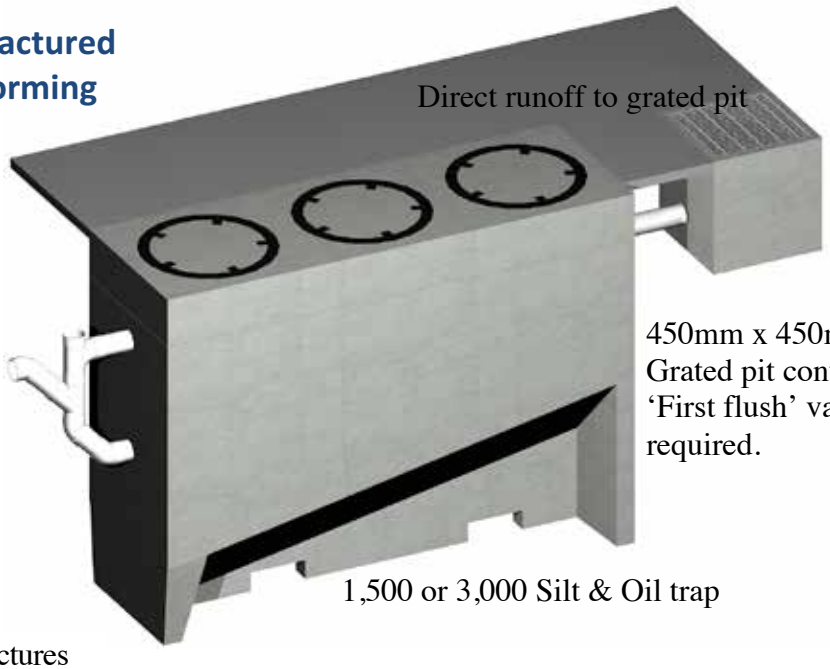
Maintenance

Your septic tank should be pumped out every four years or as required. Ensure the tank is filled with water immediately after pumping out has finished.

Please note that any requirements or directions from Council staff override any advice that may be offered in this installation guide.

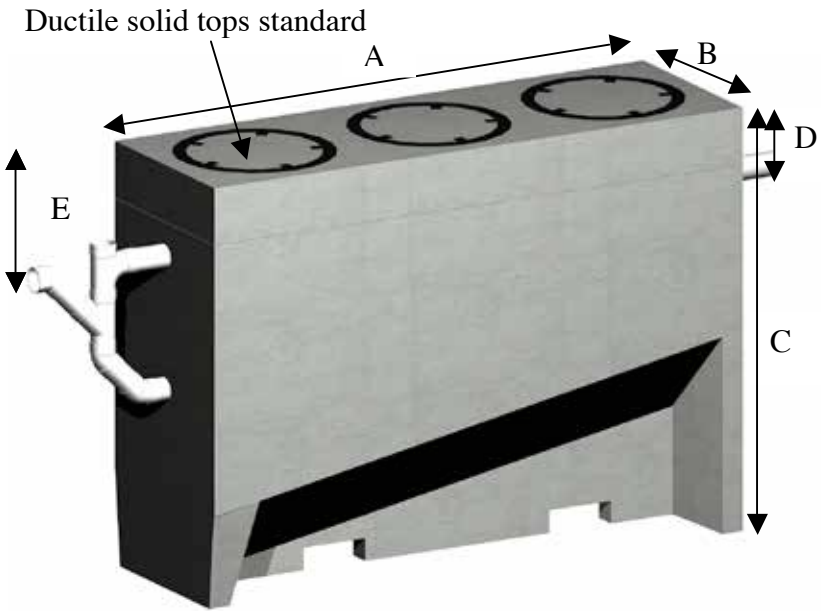
1,500 and 3,000 Litre Triple Interceptors

- **Locally manufactured**
- **AS 3500 Conforming**



Hudson Civil manufactures two silt & oil trap models, 1,500 litre and 3,000 litre. Both tanks come as a standard unit with 3 off 600mm Dia clear opening gas tight covers. The external pipe work is supplied by plumber onsite to local requirements, any additional piping or I.O's is the responsibility of the plumber.

THESE TANKS MAY FLOAT. We recommend backfilling with concrete be considered in damp conditions or where high water tables may exist.



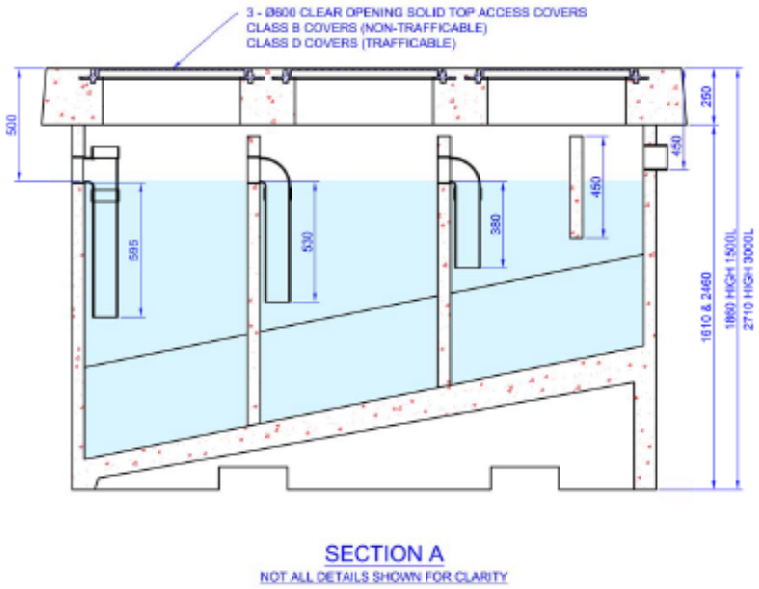
MODEL	CAPACITY	LENGTH 'A'	WIDTH 'B'	HEIGHT 'C'	INLET 'D'	OUTLET 'E'	SURROUND
ST-2-1500	1,500 Litres	2580	885	1860	450	500	250mm thick CL (B) or (D)
ST-2-3000	3,000 Litres*	2580	885	2710	450	500	250mm thick CL (B) or (D)

**Note – Special transport frame required (available from Hudson Civil Products to borrow)*

Grease Trap

1,500 and 3,000 Litre Grease Traps

- **Locally manufactured**
- **AS 3500 Conforming**

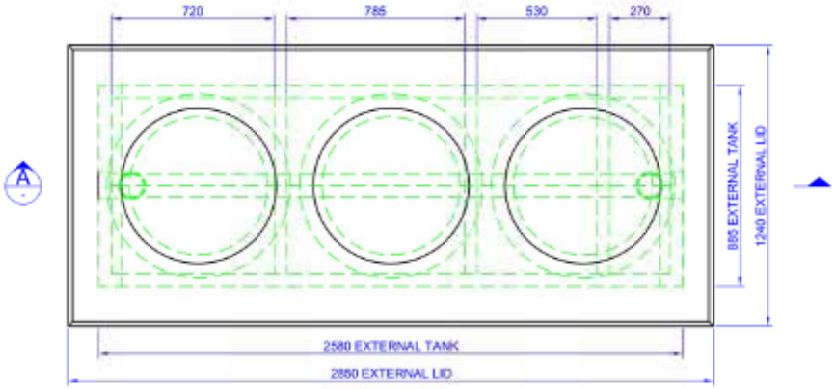


SECTION A
NOT ALL DETAILS SHOWN FOR CLARITY

Hudson Civil manufactures two grease trap models, 1,500 litre and 3,000 litre.

Both tanks come as a standard unit with diameter 600mm clear opening gas tight covers. The external pipe work is supplied by the plumber to meet TasWater requirements, any additional piping or I.O's is the responsibility of the plumber/ installer, please refer to TasWater guidelines.

THESE TANKS MAY FLOAT. We recommend backfilling with concrete be considered in damp conditions or where high water tables may exist.



PLAN VIEW
NOT ALL DETAILS SHOWN FOR CLARITY

MODEL	CAPACITY	LENGTH 'A'	WIDTH 'B'	HEIGHT 'C'	INLET 'D'	OUTLET 'E'	SURROUND
ST-1-1500	1,500 Litres	2580	860	1860	450	500	3 x Class (B) or (D) 600ø covers
ST-1-3000	3,000 Litres*	2580	860	2710	450	500	3 x Class (B) or (D) 600ø covers

**Note – Special transport frame required (available from Hudson Civil Products to borrow)*

**600L & 1000L Grease Traps also available*

RETAINING WALL PRODUCTS

Hudson Civil Products have a range of retaining wall systems to suit any application, and are happy to provide our expertise to help you select the right system for your site based on your specific needs. We also provide options for retaining wall design, to provide concept and certified designs for your application. Some of our options include:

- MASSBLOC
- LOCK BLOCK
- ROCK BLOCK
- STEEL BEAM & PRECAST PANELS/SLEEPERS COMPOSITE SYSTEMS
- L-WALLS & CUSTOM PRECAST PANELS
- CRIB LOCK WALLS, SEATING / PLANTER WALLS AND PANELS
- REINFORCED EARTH SYSTEMS (GEOGRIDS)

OPTIONS TO SUIT ANY APPLICATION & DESIGN

The **ROCLA MASSBLOC** system has been proven across Tasmania for many years as the ultimate big block solution – the permeable no-fines concrete blocks, with their speed of installation and large coverage make them ideal for large scale sites and heavy loading applications. For speed and simplicity, the ROCLA MASSBLOC is hard to beat.

- Base and Riser blocks, half blocks and custom
- Full block mass, approx. 1.85T, with 1.2m^2 face
- Permeable no-fines concrete, improves drainage
- Corners, angles and slopes accommodated
- Concept assistance & certified designs available
- The super-efficient, easily installed big block wall

HCP ROCKBLOCK is a new attractive retaining wall solution in Tasmania – making retaining structures simple and easy with a stunning rock face finish – perfect where highly visible or heritage needs require a sensitive and at

- Designed and made in Tasmania
- Built to last with a typical 100 year life design in mind
- Quality products with simple blocks – no complex arrangements or multiple block types and different sizes to negotiate
- Colours available including Sandstone and Bluestone – ability to match to your custom heritage colours

The architectural solution - **superior rock profile, simplicity and ease of construction** for any rock wall alternative or as a bespoke retaining structure solution

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RETAINING WALL PRODUCTS

Hudson Civil manufacture custom **precast panels for custom walls** where particularly requirements are needed during design – examples include blast panels at transformer yards, waste transfer station sites and more – we can build to your requirements.

HCP LOCK BLOCK

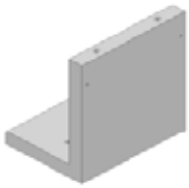
LOCK BLOCKs are a modular block system that is easily installed and has a multitude of uses.

Designed and manufactured in Tasmania. Fast, Durable, Modular, Transportable/ Rebuildable – these blocks are highly efficient!

Simple construction, with vertical face (no set back).

L-Walls, Crib Walls, Retaining Panels, Seating, Planters

and more are solutions we have provided for various projects in the past – we may have something to suit or you may wish to design a bespoke solution for your project needs. Please contact us to discuss your next project and where we can assist

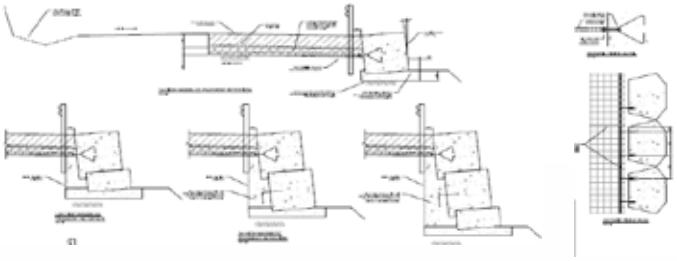


Concept Advice and Design Services

Hudson Civil has the in house expertise and experience to provide advice on options and preferences to best suit your needs.

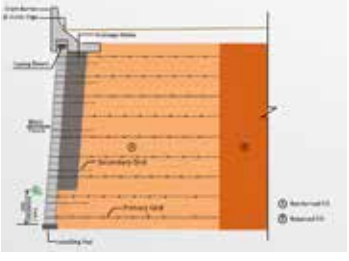
- Concept Design
- Optioneering and Budget Costings
- Formal Engineering Design if required

HCP options allow you to choose the system that best suits your needs – constructability / methodology assistance available.

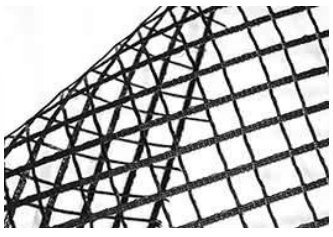


Composite Solutions, Custom Designs

- Rock or block facing (formliners)
- Panels with H-Columns
- Replacements for Timber retaining walls
- Piers and column options
- Pipe penetrations
- Bespoke Designs



GEOGRID & REINFORCED EARTH SYSTEMS can be used with various HCP options – as part of a typical precast solution or on their own with green walls, bent mesh, RE walls and other custom solutions – please contact us for installation options, specification assistance and options that may be available



PRECAST BUILDING STRUCTURES

HCP Precast Buildings - Built to Last!

- High Strength Concrete for longevity and durability
- Modular for flexibility and customisation
- Fire resistant and vandal unfriendly for remote locations
- Precision finishes from custom European Moulds
- Manufactured in the factory in a controlled environment
- Stock HCP designs or custom builds
- Structural Certification & BCA design services available
- Options to provide complete factory fit-out for any application

HCP Precast Buildings take the hassle out of building on-site – prepare a base and lift into position, and you're complete in record time – no waiting, less site work and lower risk, fully kitted out if needed, and built to withstand just about anything….

- *Designed to resist vandals, fire and the harshest of weather*
- *Bare shells or fitted out to your requirements – elec, plumbing, cladding, blockouts, doors, etc.*
- *Quality construction, high strength concrete and fully reinforced*
- *High-end accessories & fittings available – designed to go the distance*

The best in the business – HCP precast **offering superior strength, finish and quality** for pre-fabricated and complete buildings and structures for the Tasmanian Market.

HUDSON
CIVIL PRODUCTS

PRECAST BUILDING STRUCTURES

Generic designs available:

- Food & Beverage services / kiosks
- Works & Services Secure Storage
- Electrical, monitoring or services sheds for field locations
- Remote site storage lock-ups
- High risk fire sites or frequently vandalised locations
- Garages and modular homes

Custom design options a specialty – build to your requirements

HUDSON CIVIL PRODUCTS are your first port of call for ANY Precast Structure - we design and manufacture to YOUR requirements - please contact us for options, set up and installation requirements, full specs and any discussion on options. **We're here to help!**

PRECAST MODULAR TOILET

Hudson Civil Products worked closely with designers and clients to create a **PRECAST MODULAR TOILET BLOCK** built in Tasmania, completely fitted out with electrical and plumbing services prior to delivery - a fantastic option with the benefits of solid concrete construction, premium finishes and exceptional durability

Providing suitable crane and truck access can be made available, these units placed on a prepared base and with simple service connections available **can be installed in just a matter of hours…**a faster way to deliver a fully functioning public toilet facility would be hard to find!

These units are **designed and manufactured in Tasmania**, with all structural design certification, including BCA compliance, available for building permit stages.

Various options/installations avail ex-factory to suit your needs – use our specialists to assist

- Blockouts for doors & windows, cast in frames
- S/S fire rated, DDA or standard doors fitted
- Electrical or plumbing fit out options
- Roller door and PA doors
- Solar & Battery Supply, Lighting (Affiliates)
- Full range of public facilities/DDA plumbing accessories

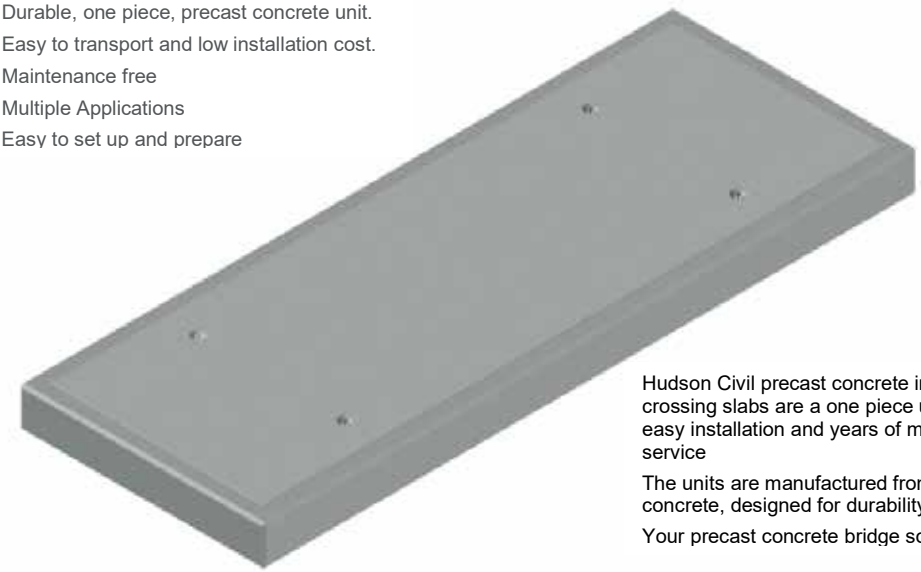
IRRIGATOR & PEDESTRIAN BRIDGES

HUDSON CIVIL PRODUCTS – BRIDGE DECK SLABS

- Designed for use as irrigator bridges – specific load rated for typical pivot irrigators in Tasmania
- Also applicable for motorbike and pedestrian bridges on farms, parks, public spaces, reserves
- Simple installation and handling – limited site prep required
- Standard designs in 4m and 6m length (or custom if required)
- Creeks, drainage lines, wet area, crossings – cost effective and heavy duty

Product Attributes

- Durable, one piece, precast concrete unit.
- Easy to transport and low installation cost.
- Maintenance free
- Multiple Applications
- Easy to set up and prepare



Hudson Civil precast concrete irrigator (wheel) crossing slabs are a one piece unit designed for easy installation and years of maintenance-free service

The units are manufactured from high strength concrete, designed for durability and longevity.

Your precast concrete bridge solution!

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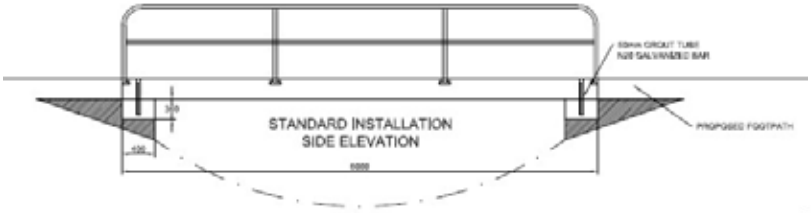
CIVIL PRODUCTS

IRRIGATOR & PEDESTRIAN BRIDGES

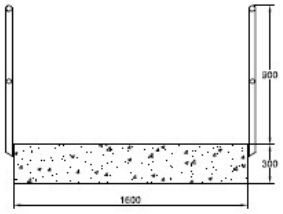


- Optional Handrails and kerbs available
- Multi-span units available if required
- Pier and Footing Block units available

Applications

Ideal for providing an unobstructed path for Irrigator wheels in undulating or rough ground conditions, as well as small creeks and streams.

Also suitable as a pedestrian or farm bike crossing bridge, with optional kerbs and/or handrails as required for this type of application.



Design

- Designed for Typical Irrigator Wheel Set (2 wheels), total load 4000kg
- Maximum wheel load 2000kg per wheel
- Wheel spacing 4500mm
- Place on well compacted ground with min. 100 kPa safe soil bearing capacity
- Minimum of 300 mm deck bearing depth required at each end (maximum clear span as below)
- Provision made for 2x Ø50 mm x spiral duct tubes for locating dowels to be driven through each end of the unit, with footing blocks as required

Product Key Details

- Length: 4000mm, 6000mm or Custom
- Clear Span: 3400mm, 5400mm or Custom
- Width: 1500 mm typically, or by request
- Thickness: 250 mm (4m) , 300mm (6m)
- Mass: 3.75 tonnes (4m), 6.75 tonnes (4m),

PRECAST CONCRETE – ENVIRONMENTALLY AWARE

How Green is my Concrete?

Even when it's grey, concrete is green.

Precast concrete's environmentally friendly features make it a building material of choice for sustainability.... meeting present needs without compromising the ability of future generations to meet their own needs. Whilst the manufacture of cement and concrete materials can contribute to greenhouse gas emissions, concrete is recognised as a material that is around for the long haul – tens if not potentially hundreds of years. Whilst it may have an "upfront" cost in carbon, over a longer life when other materials may get pulled down and rebuilt several times (and be sent to waste/landfill), concrete just keeps on keeping on. We also strive to make sure your precast concrete is made as efficiently as possible, locally and with minimal waste in the process, and with environmental and efficiency benefits realized wherever possible.

Hudson Civil Products embrace the use of local products to minimize transport, undertakes various recycling and reuse projects as part of our waste stream management process, and have found solutions in a variety of other potential waste products being re-used and diverted for our use.

Hudson Civil are continually looking for ways to improve the efficiency of our processes, recycle materials and even use industrial waste to produce eco-friendly concrete, including:

1. Source and use of appropriate local aggregates and materials to create suitable local-benefit concrete
2. Use local materials wherever possible, minimizing mixes with a minimum of "travel miles" to lower carbon emissions through reduced transport inputs, or both components and finished products.
3. Recycled concrete and aggregates can be used to make eco-friendly concrete.
4. Waste and wash water from the mixing process can be re-used to make concrete or for other site purposes like wash-down and dust mitigation, reducing the drain on potable water supplies
5. Collection of rainwater from site for reuse in the manufacturing process to be pursued where available
6. Reduction in cement input and use of supplementary cementitious materials including industrial waste products such as fly ash and silica fume where available. Fly ash is a waste material produced by coal-burning power plants. It usually ends up in landfills, but can be used to make concrete as a supplementary cementitious material. Blast furnace slag or silica fume are also waste materials. Concrete containing silica fume can have very high strength and can be very durable.
7. Complete energy audits & pursue renewable energy where possible, including solar generation on HCP sites

PRECAST CONCRETE FAST FACTS

Concrete is fully recyclable, through the use of reclaimers and by being broken into its constituent parts at the end of life

Unlike many inferior building materials, concrete is non-toxic and as a waste stream is generally inert

Concrete goes the distance – when other products are being pulled down or taken out, concrete is likely to still be around for years to come, durable and in service for decades or more

Hudson Civil manufactures precast concrete locally in Tasmania with a minimum of travel miles for components and our finished products - no long distance imports of finished products from the mainland or overseas and the associated carbon emissions.

HCP concrete batching uses some of the latest technology in Tasmania, with maximum efficiency, reusing materials - pursuing best practise sustainable principles wherever possible

HUDSON
CIVIL PRODUCTS

PRECAST CONCRETE – ENVIRONMENTALLY AWARE

Concrete can be considered a sustainable building material with regard to the energy consumption during its production compared to its characteristics during its useful life – thermally efficient, strong and durable, and here for the long haul.

Concrete is a natural building material and 100% recyclable

Concrete consists of water, sand, gravel and cement. Water, sand and gravel naturally exist in our environment. For the production of cement, the raw materials limestone, clay, sand and iron ore are kilned, gypsum is added and afterwards the mixture is finely ground.

At the production of precast concrete in the plant, the recycling of the fresh concrete which has not been used is a big priority. Fresh concrete is concrete which is not yet cured. The fresh concrete which has not been used is returned into the production cycle and can therefore be recycled to almost 100% or diverted into other waiting moulds.

Reduced consumption of energy, water and building material

Modern precast concrete plants are controlled and monitored by a master computer. The master computer exactly calculates the necessary amounts of cement, construction steel, water etc. and therefore allows for an optimal utilization of materials with little waste generated additionally. On site elements are designed to size and shape, and there is limited wastage during installation through cutting, shutting and modification.

Not only during the production of precast concrete elements are savings possible. The positive characteristics of the building material also take effect during the utilization of a precast concrete building, structure or precast element.

Minimum waste output in the production process and reduction of packaging material

Very little waste is produced in the production process of precast concrete elements because all the materials are optimally used due to the computer-operated production. In addition to that, the amount of packaging material is reduced because precast concrete elements are stored and transported to the building site without packaging, wrapping, minimal binders, strapping and so on.

Re-use of precast concrete elements after the demolition of a building

After the demolition of a precast concrete building, the concrete and the reinforcement can be recycled and used for the construction of a new building or for road construction.

Environmental safety of precast concrete

Precast concrete elements are absolutely safe for the construction of housing, any other building or in the field of water storage. Concrete does not dispense any harmful substances to the surrounding air or water. In addition to that, precast concrete elements can be used for the storage or transport of toxic substances because they cannot get out through the precast concrete elements.

Compare your concrete supplier or other building materials……..

RECYCLED CONTENT & WASTE DIVERSION:

Very little waste is produced in the production process of precast concrete elements because all the materials are optimally used due to the computer-operated production. Fresh concrete which has not been used is returned into the production cycle to almost 100%, or diverted to other nearby waiting moulds – no dumping like on site concrete,. In addition to that, the amount of packaging material can be reduced because precast concrete elements are stored and transported to the building site without packaging, wrapping or covers.

LOCAL MATERIALS INCLUDE:

- Sand from Beauty Point Tasmania (47km)
- Aggregates from BIS at Breadalbane, Tasmania (12km)
- Australian cement from BORAL CEMENT
- Australian reinforcing
- Local potable water from TasWater plant at Prospect, Tasmania, rainwater harvested on site, and recycled content recovered from wash-down and process

WATER INDUSTRY PRODUCTS SPECIALIST

PITS
Standard concrete pits, broad range
Large custom Pits (1200x1200 and larger)

MANHOLE COMPONENTS
Manhole shafts
Manhole surrounds and lid slabs
Base units (with knockouts)

SURROUNDS & COVERS
Concrete lid surrounds
Custom lid slabs
Valve surrounds

CONCRETE PIPE
SRCP (DN300-DN2700)
RRJ and FJ available
FRCP

HEADWALLS/ ENDWALLS
Outlet & inlet headwalls
Dissipating headwalls
Driveway crossings
DIER products
Custom headwalls and screens
Double & triple cell options, etc.

PUMP STATIONS /TANKS
HCP package pumping stations
Large shafts & Tanks (range 1.8 - 4.0m diam)
Valve pits to suit any size/depth
Custom pump stations & overflow storages

ACCESS COVERS & GRATES
Gatic-style access covers and lids
Multi-part covers
FRP Covers - Nextep Miyama, Terra Firma
Grates - standard or custom built

WATER SPECIAL PRODUCTS
Thermal Marking Asset ID (arrows)
Rapid SS Repair Clamps (316 SS)
NOVA SIRIA repair fittings
Smith Blair restraint & custom fittings
Spill kits & De-chlorination
Under-pressure tapping
ROADFIX coldmix asphalt
Water main tools

PIPE
PVC- oPVC & mPVC; uPVC
HDPE (Poly)
DICL & MSCL
Blackmax & Stormpro (PP)

DUCTILE IRON FITTINGS
Tees, Bends, Blank Ends
Gibault Joints, couplings & connectors
Uniflanges, Soc-Fl & Spi-Fl Adapters
Valves: Sluice/Butterfly/Knife Gate
Air valves; control valves
Non-return & Pressure Reducing Valves
Repair Clamps (SS) & tapped/FL SS clamps
Tapping Bands & accessories
Brassware, valves & fittings
Flowmeters, water meters & more

HOPE FITTINGS & ACCESSORIES
Stub flanges & backing rings
Plasson fittings
Restraint fittings
Custom made fabricated fittings

PVC FITTINGS
DWV fittings and accessories
Pressure pipe fittings (SWJ)
Junctions, bends, caps (full range on shelf)

CIVIL & TRADE PLUMBING SUPPLIES
Plumbing tools & components
Consumables & repair items
EF welding machine available
Tracker/warning tape
Valve keys, lifting tools, repair seals

STEEL FABRICATION / STAINLESS / ALUMINIUM
Custom built steel, aluminium & SS products
Handrails & ladders
Davits & Gantries
Access covers & safety grates

ENVIRONMENTAL PRODUCTS
Detention tanks & treatment trains
Septic tanks & accessories
Grease traps & Triple Interceptors

HUDSON
CIVIL PRODUCTS

NOTES

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NOTES

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Our Vision:

"To be the leading manufacturer and distributor of civil construction supplies, infrastructure, and pipeline solutions"

The Industry Leader

Hudson Civil Products (HCP) has been synonymous with civil construction and supply in Tasmania for many years, supplying major customers in a broad range of industries, delivering quality products and exceptional service. Our goal is simple - **excellence** – both in service and product.

We also pride ourselves on our ability to deliver on time and on budget, and provide technical advice that is accurate, timely and reliable. Our key strengths are our experienced and knowledgeable staff, our range of more than 6,000 products as well as our ability to deliver innovative solutions and custom-built items for any infrastructure project in the water and wastewater industry.

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