

SERVICE SOLUTIONS SUSTAINABILITY



S3 PRECAST

PRODUCT BOOK

S3PRECAST.COM



TAL STONE FENCE
Verti-Crete® precast privacy fences and sound walls



TANKS-A-LOT
onsite water and sewage solutions

90,000 sq.ft.
CSA Certified
Automated batching
High-throughput Manufacturing



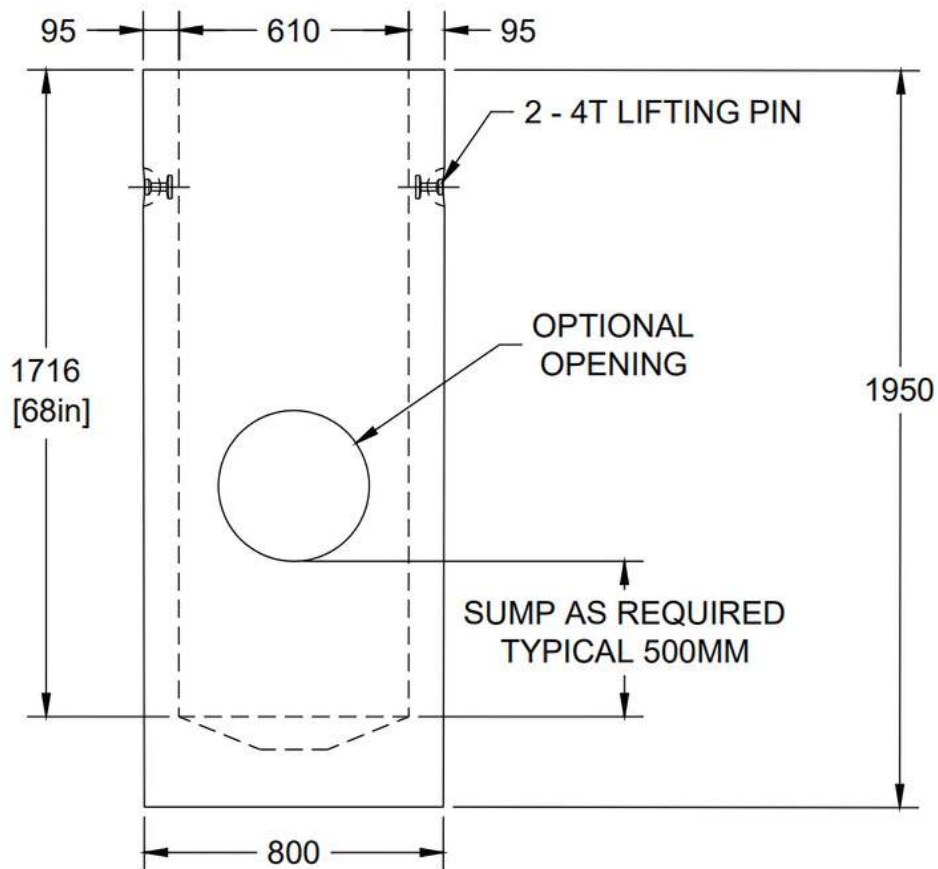
S3PRECAST

S3PRECAST

|| TABLE OF CONTENTS ||

1	600mm CATCH BASINS	-02-03-
2	900mm CATCH BASINS	-04-05-
3	1200mm MANHOLES	-06-07-
4	PREBENCHED MHs	-08-
5	LARGE DIAMETER MANHOLES	-09-
6	GRADE RINGS	-10-12-
7	BOX SECTIONS	-13-
8	VALVE CHAMBERS	-14-
8	CONTROL STRUCTURES	-15-
8	STORMWATER TANKS	-16-
9	PRECAST BARRIERS	-17-
10	PRECAST TRENCHES	-18-
11	OIL AND GRIT SEPARATORS	-19-
12	CABLE CONCRETE	-20-
13	PRECAST FENCES	-21-
14	PRECAST TANKS	-22-
15	iQ.MBBR™ FOR COMMERCIAL WASTEWATER TREATMENT	-23-24-

|| CATCH BASINS - 600MM



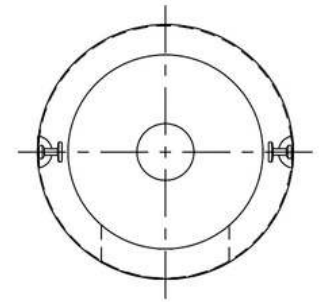
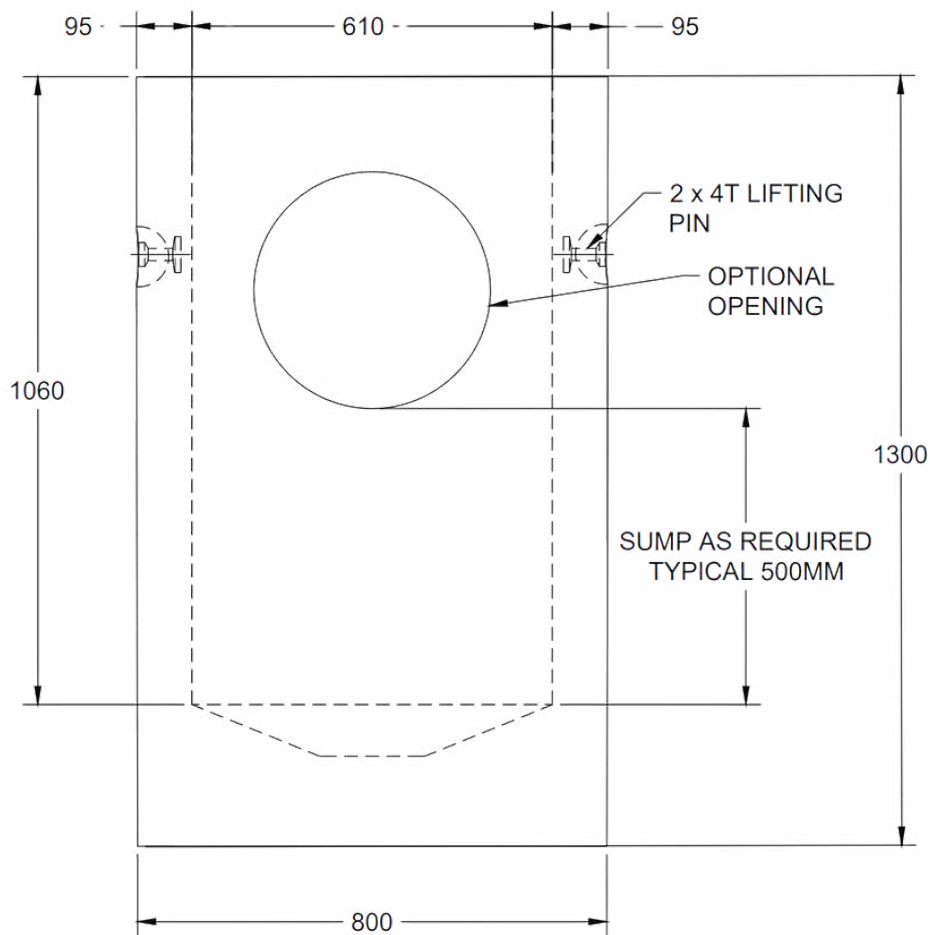
ITEM	WEIGHT (KGS)
600MM X 1.95M CB W/ MONOLITHIC BASE	1010

NOTES

- 600MM CBS DESIGNED TO HAVE GRADE RINGS SIT DIRECTLY ON BARREL
- 600MM MATERIAL REQUIRES 2 - 4T LIFTING CLUTCHES TO PROPERLY LIFT AND ASSEMBLE
- CBS/MHS MANUFACTURED TO CSA A257.4 STANDARDS



|| CATCH BASINS - 600MM LID CB ==

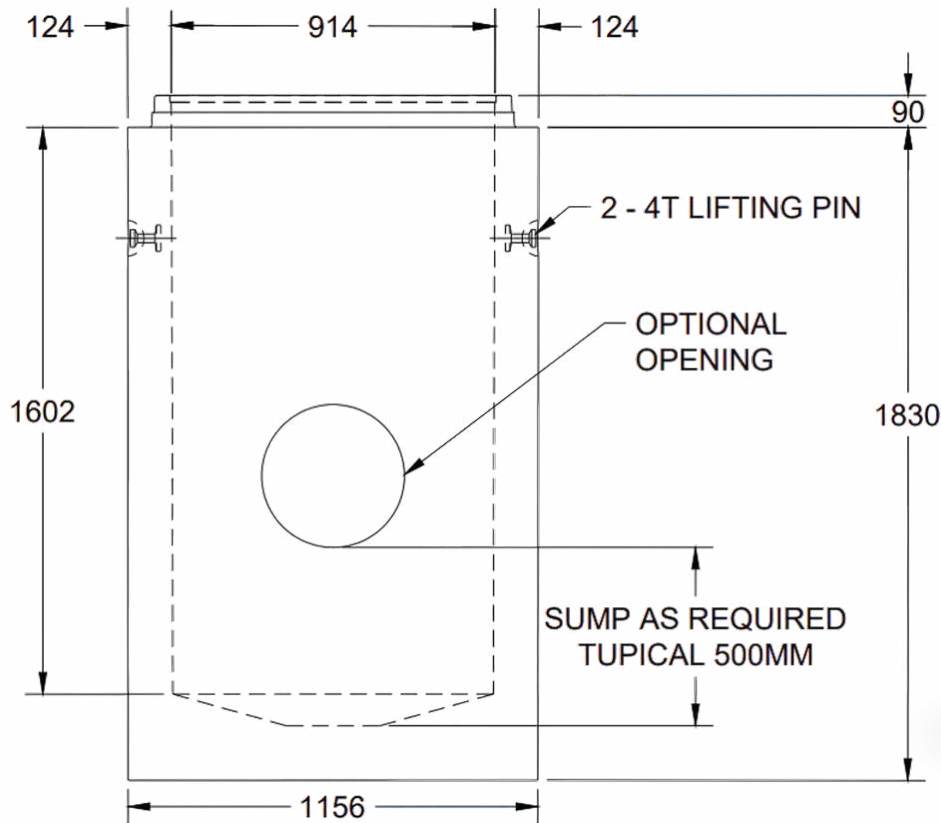


ITEM	WEIGHT (KGS)
600MM X 1.30M LID CB W/ MONOLITHIC BASE	630

NOTES

- 600MM CBS DESIGNED TO HAVE GRADE RINGS SIT DIRECTLY ON BARREL
- 600MM MATERIAL REQUIRES 2 - 4T LIFTING CLUTCHES TO PROPERLY LIFT AND ASSEMBLE
- CBS/MHS MANUFACTURED TO CSA A257.4 STANDARDS
- SHORTER HEIGHT STRUCTURES ARE AVILABLE UPON REQUEST

|| CATCH BASINS - 900MM



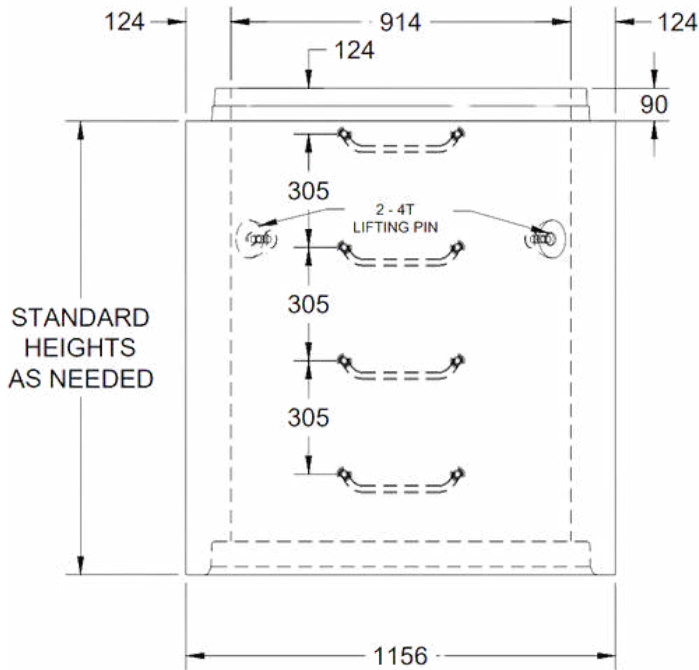
ITEM	WEIGHT (KGS)
900MM X 1.83M CB W/ MONOLITHIC BASE	2020
900MM X 1.22M CB W/ MONOLITHIC BASE	1440
900MM X 1.83M CB EXTENSION BARREL	1750
900MM X 1.22M CB EXTENSION BARREL	1170
900MM X 0.61M CB EXTENSION BARREL	590

NOTES

- 900MM MATERIAL AVAILABLE WITH (MH) OR WITHOUT (CB) STEPS
- 900MM MATERIAL REQUIRES 2 - 4T LIFTING CLUTCHES TO PROPERLY LIFT AND ASSEMBLE
- CBS/MHS MANUFACTURED TO CSA A257.4 STANDARDS



|| CATCH BASINS - 900MM ==



900MM CB/MH EXTENSIONS

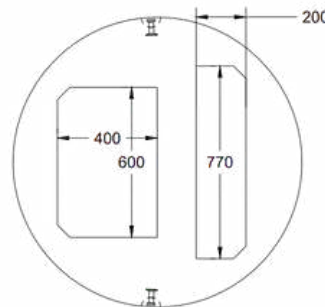
ITEM	WEIGHT (KGS)
900MM X 0.30M	290
900MM X 0.61M	580
900MM X 1.22M	1160
900MM X 1.83M	1750

NOTES

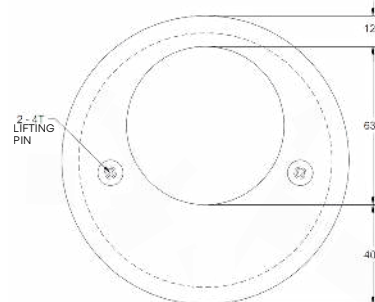
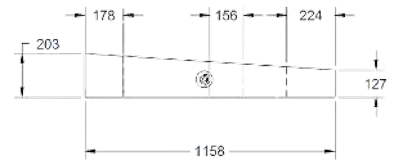
- MHS MANUFACTURED WITH STEPS
- CBS MANUFACTURED WITHOUT STEPS

900MM TOPS

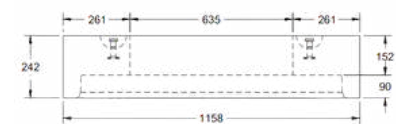
ITEM	WEIGHT (KGS)
900MM TEE TOP	230
900MM SLAB TOP W/ 635MM OPENING	310
900MM SLAB TOP W/ 910MM OPENING	190



900MM TEE TOP



900MM SLAB TOP W/ 635MM OPENING

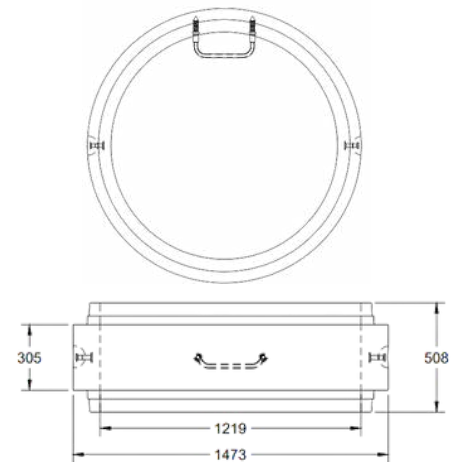


1200MM MANHOLES

ITEM	WEIGHT (KGS)
1200MM BASE SLAB	690
1200MM X 0.30M BARREL	390
1200MM X 0.41M BARREL	530
1200MM X 0.81M BARREL	1040
1200MM X 1.22M BARREL	1570
1200MM X 1.0M CONE TOP	1370
1200MM SLAB TOP W/ 635MM OPENING	670
1200MM SLAB TOP W/ 910MM OPENING	530
1200MM SPIGOT-TO-SPIGOT OR BELL-TO-BELL ADAPTOR	340

NOTES

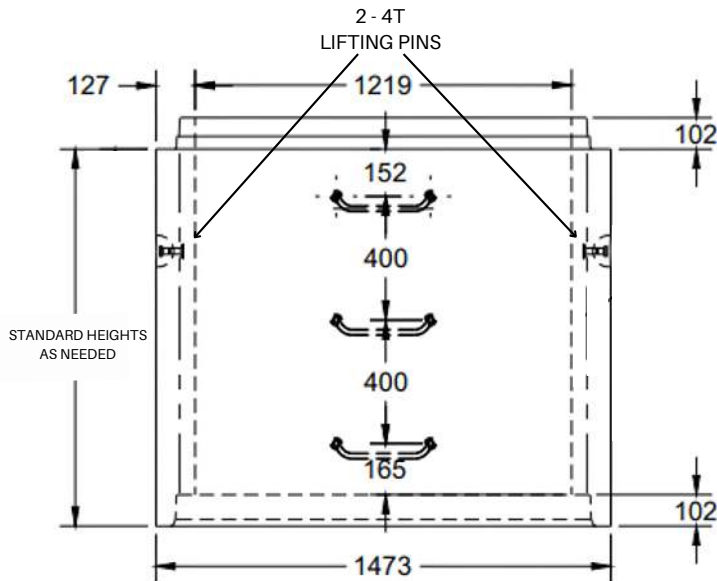
- ALL BARRELS COME WITH SELF-LUBRICATING GASKETS
- 1200MM MATERIAL REQUIRES 2 - 4T LIFTING CLUTCHES TO PROPERLY LIFT AND ASSEMBLE
- MHS MANUFACTURED TO CSA A257.4 STANDARDS



1200MM SPIGOT-TO-SPIGOT ADAPTOR



1200MM MANHOLES

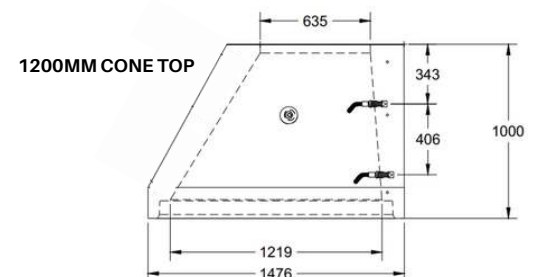
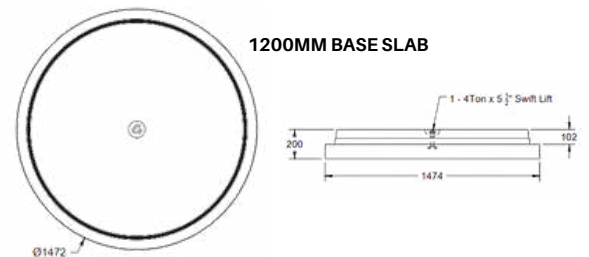
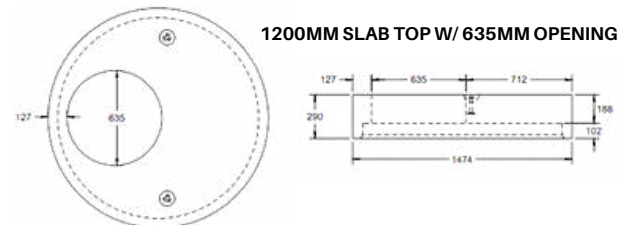


1200MM BARRELS

ITEM	WEIGHT (KGS)
1200MM X 0.30M BARREL	390
1200MM X 0.41M BARREL	530
1200MM X 0.81M BARREL	1040
1200MM X 1.22M BARREL	1570

1200MM TOPS AND BASES

ITEM	WEIGHT (KGS)
1200MM BASE SLAB	690
1200MM SLAB TOP W/ 635MM OPENING	670
1200MM SLAB TOP W/ 910MM OPENING	530



NOTES

- MHS MANUFACTURED TO CSA A257.4 STANDARDS
- CUSTOM TOPS WITH CAST-IN HATCHES OR OTHER FITTINGS AVAILABLE

|| PRE-BENCHED MHs

Pre-benched manhole bases come with a factory-poured base, channels, and cored openings suited to the pipe dimensions. Pre-benched manholes save time and money compared to traditional cast-in-place benching on site.

Our dedicated coring machine is able to churn out a large quantity of cored barrels with core sizes ranging from 4" to 54" (100mm to 1350mm). Larger size openings are also available; please call for availability. We provide connections for multiple pipe types, including:

- Flexible boot gaskets for smooth wall PVC pipe
- Cast-in compression gaskets typically used for large (e.g. 1350 and 1500mm) diameter, smooth-walled plastic pipe
- Link-Seal connections
- Scarred openings, typically used for rigid pipe connections (e.g. concrete pipe)

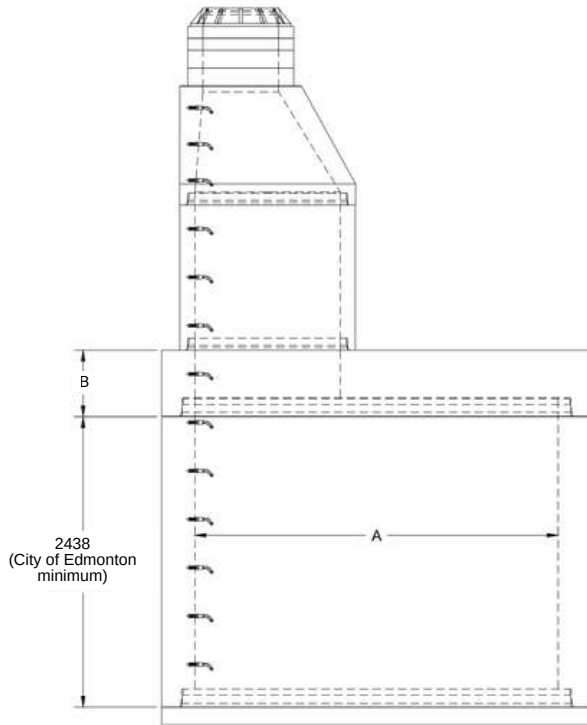


NOTES

- MHS MANUFACTURED TO CSA A257.4 STANDARDS
- CUSTOM TOPS WITH HATCHES OR OTHER FITTINGS AVAILABLE (CAST-IN OR BOLTED)



|| LARGE DIAMETER MHS



NOTES

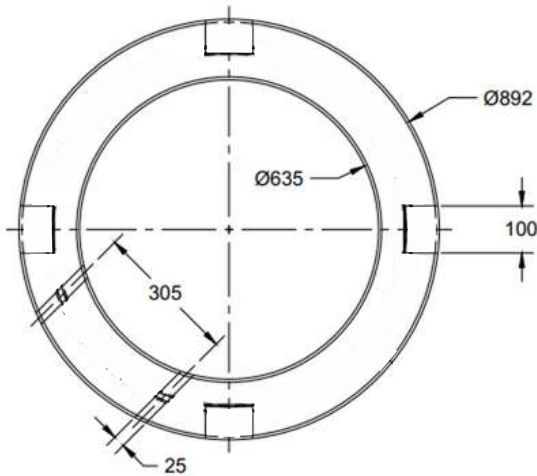
- ALL BARRELS COME WITH SELF-LUBRICATING GASKETS
- LARGE DIAMETER MATERIAL REQUIRES LARGER LIFTING CLUTCHES TO PROPERLY LIFT AND ASSEMBLE. REFER TO TABLE BELOW
- STANDARD HEIGHTS RANGE BETWEEN 0.30M TO 2.44M
- ROUGH CUT OPENINGS TO BE CUT ON SITE ONLY AFTER BARREL IS IN ITS FINAL POSITION
- MHS MANUFACTURED TO CSA A257.4 STANDARDS
- CAST-IN COMPRESSION GASKETS AVAILABLE FOR LARGE DIAMETER PIPE (E.G.1050-1500MM) OR SMALLER SIZES AS REQUIRED

ITEM	WEIGHT (KGS)	ID (MM) 'A'	WALL (MM)	OD (MM)	HEIGHT (MM) 'B'	LIFTING PINS
1500MM BARREL	1916/m	1524	152	1828	-	3-4T
1500MM BASE/ADAPTOR/SLABTOP	1750/1194/1753	1524	-	-	427	3-4T
1800MM BARREL	2681/m	1829	178	2185	-	3-8T
1800MM BASE/ADAPTOR/SLABTOP	2450/2087/2641	1829	-	-	427	3-8T
2100MM BARREL	3564/m	2134	203	2540	-	3-8T
2100MM BASE/ADAPTOR/SLABTOP	3344/3552/4210	2134	-	-	493	3-8T
2400MM BARREL	4557/m	2438	229	2896	-	3-8T
2400MM BASE/ADAPTOR/SLABTOP	5320/5230/5945	2438	-	-	502	3-8T
3000MM BARREL	6963/m	3048	279	3606	-	4-8T
3000MM BASE/ADAPTOR/SLABTOP	7200/9173/9946	3048	-	-	552	4-8T



II GRADE RINGS

635MM DIAMETER (ID)



HEIGHT	WEIGHT (KGS)
2" GRADE RING	40
3" GRADE RING	60
4" GRADE RING	80
6" GRADE RING	110

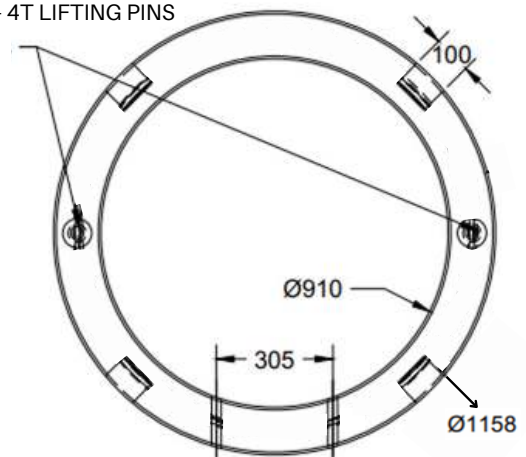
NOTES

- GOES WITH F36, F39, F38, F33, F80, 2A, 4A, 6A & 8 FRAME AND COVER
- AVAILABLE WITH HAND HOLES AND GASKET GROOVE

910MM DIAMETER (ID)

HEIGHT	WEIGHT (KGS)
3" GRADE RING	70
4" GRADE RING	100
6" GRADE RING	150

2 - 4T LIFTING PINS

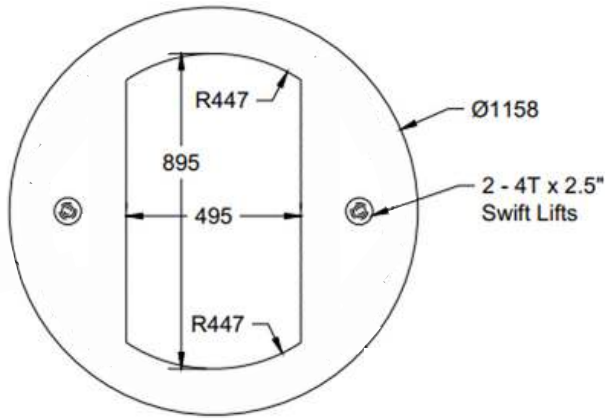


NOTES

- GOES WITH F41 FRAME AND COVER
- AVAILABLE WITH HAND HOLES AND GASKET GROOVE

II GRADE RINGS

DK7 RINGS



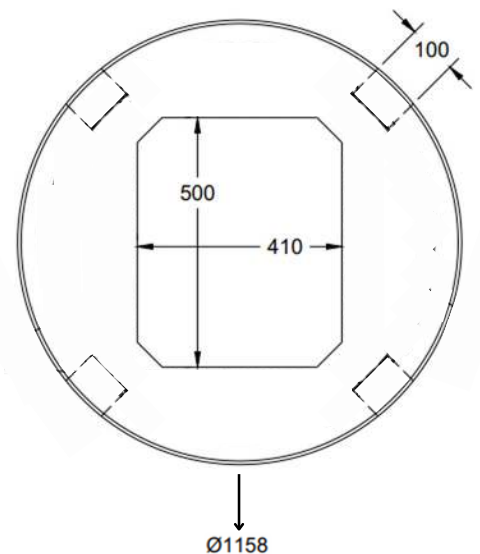
HEIGHT	WEIGHT (KGS)
3" GRADE RING	110
4" GRADE RING	150
6" GRADE RING	220

NOTES

- GOES WITH DK7, K7 (DOUBLE) AND K2 FRAME AND COVER
- AVAILABLE WITH GASKET GROOVE

K7 RINGS

HEIGHT	WEIGHT (KGS)
3" GRADE RING	80
4" GRADE RING	100
6" GRADE RING	150

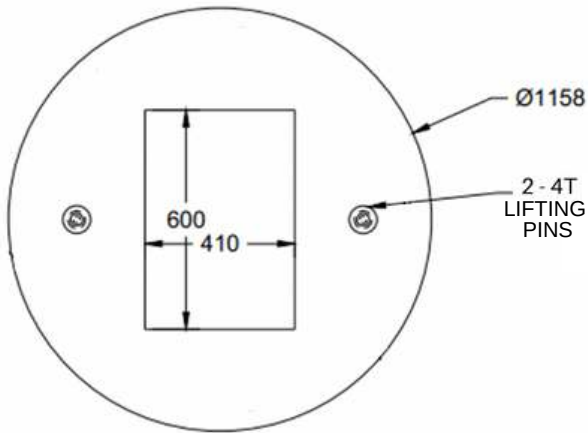


NOTES

- GOES WITH K7 FRAME AND COVERS
- AVAILABLE WITH HAND HOLES AND GASKET GROOVE

II GRADE RINGS

K3 RINGS



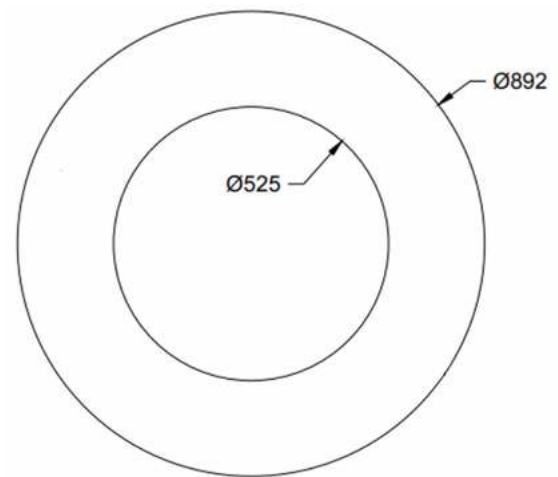
HEIGHT	WEIGHT (KGS)
3" GRADE RING	140
4" GRADE RING	190
6" GRADE RING	290

NOTES

- GOES WITH F51 GRATE & TK1 FRAME AND COVERS
- AVAILABLE WITH GASKET GROOVE

525MM RINGS

HEIGHT	WEIGHT (KGS)
3" GRADE RING	40
4" GRADE RING	50
6" GRADE RING	80



NOTE

- REQUIRED FOR CITY OF EDMONTON PROJECTS ON 2A-STYLE FRAME AND COVERS



|| BOX SECTIONS ==

Precast box sections are 4-sided concrete pieces applicable to a wide range of applications:

- Control structures
- Animal or pedestrian crossings
- Stormwater storage structures
- Valve chambers
- PRV (pressure reducing valve) chambers
- Lift stations
- Meter Chambers
- Vaults
- Manholes
- Culverts



Our box sections are designed and manufactured in accordance with the requirements of ASTM C-1433 and CSA A23.4 standards. With our Universal Form (UF), we have incredible flexibility in offering a range of sizes suited to your project's needs.



FEATURES AND BENEFITS

- Flexible design with an industry-leading range of available sizes
- Ability to dig wider for shallow bury applications and maintain volume requirements
- Wide range of applications

|| VALVE CHAMBERS ||

Precast Concrete Valve Chambers are durable, high-performance solutions that are used for potable water distribution projects.

Designed as single, pre-packaged structures that can be installed with a one-time lift, they allow for rapid deployment which reduces installation time and costs. Customizable openings ensure seamless pipe integration, providing a reliable, watertight structure tailored to engineering needs.

We manufacture reinforced valve chambers to house any valve or pump. They are delivered as fully equipped, ready-to-install packages, or as singular precast components that have the ability to integrate the internal mechanical components on site.



FEATURES AND BENEFITS

- Fast & Cost-Effective Installation – Precast design reduces on-site labor and time.
- Customizable Pipe Connections – Compatible with concrete, metallic, plastic and clay pipe.
- Easy Access & Maintenance – Access from surface with enough room around internal components for personnel and equipment.
- Off-Site Manufacturing – Enhances quality control and minimizes on-site disruptions (including traffic).
- Versatile Applications – Suitable as Pressure-Reducing Valve (PRV), water meter or typical butterfly valve chambers



|| CONTROL STRUCTURES ==

Precast water control structures provide durable and effective solutions for managing water flow in various applications, including flood control, irrigation, and wastewater treatment.

Made from high-quality concrete, these structures offer long-term performance, efficiency, and adaptability to different water management needs.

The precast manufacturing process ensures precision, consistency and cost-effectiveness, making them a preferred choice for modern infrastructure projects.



FEATURES AND BENEFITS

- Customizable Design - Engineered to meet specific site conditions, flow rates, and operational requirements.
- Time and Cost Efficiency - Manufactured off-site for faster installation and reduced labor costs.
- Low Maintenance: Requires minimal upkeep, leading to long-term cost savings.
- Versatile Applications: Suitable for flood control, irrigation, and wastewater treatment systems.

|| STORMWATER TANK

Modern life offers many advantages, but its roads, driveways, parking lots, and other artificial surfaces prevent rain water and snow melt from soaking into the earth. This greatly increases the volume of runoff water created during storms and spring thaws.

Stormwater tanks work by capturing stormwater that can then be slowly released to the system. This prevents our critical infrastructure from being overwhelmed during major rainfall events.

The captured stormwater can also be re-purposed on site to reduce water usage. In contrast to a storm pond, these tanks allow the land above them to still be utilized for development.



FEATURES AND BENEFITS

- Modular design allows flexibility in working within site constraints
- Retains valuable land above the structure
- Our 4-stage sealing methodology ensures a watertight seal
- Onsite expertise in assembly offers peace of mind



|| PRECAST BARRIERS ==

Precast concrete barriers are a cost-effective and highly durable solution for a variety of needs.

Whether you need barriers for traffic control, building berms or protection for above-ground fuel tanks, S3 Precast offers a variety of concrete barriers to suited to your project's needs.

Our barriers are manufactured to the latest CSA specifications. Our fleet of picker trucks are available to deliver concrete barriers when and where required.

From standard jersey barriers to custom-shaped 'Y' barriers and more, rest assured we have the scale, throughput and expertise to meet your project's needs.



|| PRECAST TRENCHES ||

Precast trenches are a versatile and dependable solution for applications such as surface drainage, water conveyance, and the safe housing of critical buried infrastructure.

Our trenches are manufactured in a controlled environment to CSA standards and feature a flexible design that can accommodate heavy traffic loading.

We have partnered with **Trenwa Precast Trench Solutions**, a leading manufacturer of precast concrete trenches, to offer a full range of precast trenches.

With a wide range of sizes, these trenches can meet the capacity needs of almost any customer.



FEATURES AND BENEFITS

- Flexible design. 12" - 72" depths & 10"-96" widths available
- 3m (10 foot) max lengths for quick installation
- Multiple lid options – concrete, steel, FRP or grated tops
- Accessories – pipe, strut for cable supports, weld plates, etc.
- Openings and bottom drain holes available
- Designed for a variety of loading conditions with high strength concrete

|| OIL & GRIT SEPARATORS

Oil and grit separator (OGS) units are vital in protecting our valuable waterways from unwanted pollutants. S3 Precast has partnered with **NEXT Stormwater Solutions** to offer the SDD3.

Designed and manufactured in Canada, the SDD3 by NEXT Storm is an ETV-certified, hydrodynamic oil and grit separator that utilizes both gravitational and centrifugal forces to capture and retain suspended sediments, floating particles and oils from stormwater runoff.

The SDD3 unique design ensures optimal storm water treatment during light and heavy rainfall events.



FEATURES AND BENEFITS

- Can be installed in series or in parallel because of its bypass system
- Strong and durable structure made in reinforced concrete able to support CL-800 loads
- Easy installation and maintenance from surface
- Double vortex to maximize the performance
- Internal aluminium components with low maintenance and excellent corrosion resistance
- Designed with high strength concrete
- Designed to prevent re-suspension or scour of captured pollutants

|| CABLE CONCRETE ==

Cable Concrete® is one of the most advanced engineering technologies available for soil erosion control today.

This Articulating Concrete Block (ACB) system, linked by cables, allows each block to flex and adapt to the ground's natural contours. This interconnected block system is available in four different thicknesses to provide the required stability for each project economically.

It has gone through extensive testing by engineering departments at three different universities: The University of Windsor, Ontario; The University of Colorado; and The University of Minnesota.



FEATURES AND BENEFITS

- Large concrete mats delivered to the jobsite for fast and economical installation
- Made with air entrained concrete for durability and freeze-thaw fracture resistance
- Cables are looped on all mat edges to provide for mat-to-mat connection and optional anchoring
- There is up to 20-40% open area to provide water permeability and vegetation growth
- The pyramidal block shape allows for articulation, ranging from 20° to 60° – depending upon the block size chosen

|| PRECAST FENCES ==

We produce and supply beautiful precast concrete walls through our **TAL Stone Fence** division. We are the exclusive licensee in Northern Alberta for Verti-Crete precast privacy fence and noise walls. These masonry-pattern walls combine the strength and durability of precast with the beauty of architectural stone.

Precast fence applications include:

- subdivision boundaries
- commercial separation (e.g. multi-unit developments and shopping plazas)
- transportation and transit noise walls or noise barriers
- privacy fences
- public utility and industrial walls



St. Albert Trail



'Meandering River' pattern for Yellowhead Trail Freeway Conversion

FEATURES AND BENEFITS

- Visually stunning
- Range of textures, patterns and colours available
- Strength and durability of precast
- Long service life
- Excellent noise attenuation

|| PRECAST TANKS ||

Tanks-A-Lot has a rich history of supplying quality precast tanks to the Northern Alberta residential and commercial markets since 1982.

We carry septic tanks, water cisterns and holding tanks in a range of sizes:

- **Cisterns and Holding Tanks** - 750 gallons up to 5000 gallons
Cisterns are used to hold water for household use, also known as “potable” water.
Holding tanks have a single compartment for raw sewage and require frequent emptying by a vacuum truck.
- **Septic Tanks** - 2 bedrooms - 6 bedrooms
Used in conjunction with a septic field, pressurized mound or municipal pressure collection system.
- **WSB Clean Treatment System** - up to 7 bedrooms
Sewage treatment plants use aerobic bacteria to break down the organic content of sewage and produce a clear, odorless effluent.



FEATURES AND BENEFITS

- Concrete or plastic (Ultra-Rib) extensions available
- Industry-leading treatment plant offering with extremely low maintenance
- Low profile tanks available for shallow bury (reducing excavation requirements)
- One-stop-shop for accessories - fittings, pumps, screens, alarms, etc.

II IQ.MBBR™ FOR COMMERCIAL WASTEWATER TREATMENT

In partnership with Bergmann North America, we are proud to introduce iQ.MBBR™ - the next generation of Moving Bed Biofilm Reactor technology (wsb® inside) which combines robust, efficient design with smart iQ.CONTROLS™ - intelligence + quality.



1. Sludge storage / 2. Primary Clarifier

This stage provides primary treatment like a septic tank, the difference being integration with the secondary process using sludge recirculation and combined concentration of primary and secondary sludge. For small plants, the Sludge Storage is inline with the process but can be designed offline for larger plants. The Primary Clarifier is designed to remove any settleable solids from the sludge supernatant.

3. / 4. Aerobic Bioreactors

The iQ.MBBR™ secondary treatment system uses a moving bed biofilm reactor (MBBR) process containing specially designed plastic carrier media. Microorganisms attach to the carrier media and consume the organic material in the wastewater, with Bioreactor 1 adapted primarily to carbon oxidation, and Bioreactor 2 to ammonia conversion (nitrification). Oxygen is supplied by air blowers and distributed

5. Secondary Clarifier

The Secondary Clarifier separates the biological solids (sludge) generated in the bioreactors by simple gravity settling into hoppers, and sludge is pumped to Sludge Storage (Stage 1).

6. Effluent Discharge

Most onsite systems discharge via effluent pump tank to subsurface infiltration but may also direct discharge to surface waters. As standards become more stringent, advanced wastewater treatment is becoming increasingly important, most commonly with respect to nitrogen and phosphorous removal, or disinfection of the effluent. The iQ.MBBR™ can be designed with a variety of modular treatment units to address higher

The **iQ.MBBR™** systems offer a custom designed solution which can be installed in a small footprint with low energy and operating costs. Advantages include:

- Exceptional treatment of varying hydraulic, organic and nutrient loads
- Reliable pure biofilm process with minimal operational requirements
- Comprehensive remote monitoring and control = optimum system management



With the **iQ.CONTROLS™** powered by the click+clean® platform, we provide a unique control unit for the power and automatic control of the wastewater treatment system

- Each control panel comes standard with GPRS remote monitoring and data logging
- Instantly receive alarm notifications and remotely adjust the settings

FEATURES AND BENEFITS

- Suitable for country residential clustered wastewater treatment
- Suitable for RV campgrounds, mobile home parks and commercial developments
- May be used to leverage other municipal facilities
- Custom process design for high strength sewage



S3PRECAST

9 TONS
MAR 8 2024
MH 2400 X 2440
CUSTOM
CSA A257.4
HS
SHERWOOD PARK

MH 2115

1914 3



S3PRECAST

OUR TEAM

Amir Azizi, MBA, P. Eng.	President	amir@s3precast.com	780-245-5849
Justin Goertzen, P. Eng.	VP, Sales & Marketing	justin@s3precast.com	780-977-2843
Shawn Innes	VP, Manufacturing	shawn@tanks-a-lot.com	780-977-3345
Mike Irwin	Business Development	mike@tanks-a-lot.com	780-953-2012
Paul Tanguay	Business Development	paul@tanks-a-lot.com	780-720-7489
Vincent Tat, EIT	Estimator/Project Manager	vincent@s3precast.com	780-940-2628
Zak Cooper	Estimator/Project Manager	zak@s3precast.com	780-977-3094
Vincenzo Yumul	Estimator/Project Manager	vincenzo@s3precast.com	780-242-4239
Matthew Mair	Supply Chain Strategist	matt@tanks-a-lot.com	780-472-8265
Emily Ponce, PCI-Certified Inspector	Quality Control Manager	emily@tanks-a-lot.com	780-977-3142
Jeff Jones, CPA	Controller	jeff@tanks-a-lot.com	780-220-1563



S3 PRECAST

#100 – 53251 RR232
Sherwood Park, AB T8A 4V2

