

## Chambers

<u>Drawing Number</u>	<u>Item Description</u>	<u>Product Size</u> (Length X Width X Depth in mm)
VC21-20-2121-C	<b>2121 Vault</b> w/ Lid Assembly	2030 x 1210 x 1060 i.d.
VC21-25-2121-C	<b>2121 Watermeter Vault</b> w/ Lid Assembly	2030 x 1210 x 1060 i.d.
VC21-MH-2121-C	<b>2121 Vault</b> w/ MH Entry Roof Slab	2030 x 1210 x 1060 i.d.
VC21-20-2122-C	<b>2122 Chamber</b>	2030 x 1210 x 1970 i.d.
VC21-N9-2122-C	<b>2122 Chamber</b> w/ Opening for 2121 Roof Slab / Collar	2030 x 1210 x 1970 i.d.
VC31-20-3151-C	<b>3151 Vault</b> w/ MH Entry Roof Slab	3000 x 1500 x 1100 i.d.
VC31-25-3151-C	<b>3151 Watermeter Vault</b> w/ Steel Lid Assembly	3000 x 1500 x 1100 i.d.
VC31-20-ZZZZ-C	<b>3152 Chamber</b>	3000 x 1500 x 2000 i.d.
VC31-20-2121-C	<b>3152 Chamber</b> w/ Opening for 2121 Roof Slab / Collar	3000 x 1500 x 2000 i.d.
VC31-20-12BU-C	<b>3152 Chamber</b> , Burnaby Standard w/ Hatch Entry	3000 x 1500 x 2000 i.d.
VC31-20-09BU-C	<b>3152 Chamber</b> , Burnaby Standard w/ MH Entry	3000 x 1500 x 2000 i.d.
VC33-20-ZZZZ-C	<b>331822 Chamber</b>	3330 x 1830 x 2260 i.d.
VC33-20-UBC-C	<b>331822 Chamber</b> , UBC Custom Power or Comm	3330 x 1830 x 2270 i.d.
VC42-20-1000-C	<b>4211 Chamber</b> w/ Roof Slab	3940 x 2120 x 1980 i.d.
VC42-20-ZZZZ-C	<b>4212 Chamber</b> (402120)	3940 x 2120 x 1980 i.d.
VC42-20-2121-C	<b>4212 Chamber</b> (402120) w/ Opening for 2121 Roof Slab / Collar	3940 x 2120 x 1980 i.d.
VC42-20-0832-C	<b>4212 Chamber</b> (402120) w/ Opening for 832 Collar	3940 x 2120 x 1980 i.d.
VC40-20-2500-C	<b>402125 Chamber</b>	3940 x 2120 x 2500 i.d.
VC40-20-3000-C	<b>402130 Chamber</b>	3940 x 2120 x 3000 i.d.

## Chambers

<b><u>Drawing Number</u></b>	<b><u>Item Description</u></b>	<b><u>Product Size</u></b> (Length X Width X Depth in mm)
VC47-20-ZZZZ-C	<b>4712 Chamber</b> (472120)	4700 x 2125 x 2000 i.d.
VC47-20-2500-C	<b>472125 Chamber</b>	4700 x 2125 x 2500 i.d.
VC47-20-3000-C	<b>472130 Chamber</b>	4700 x 2125 x 3000 i.d.
VC47-20-3030-C	<b>473030 Chamber</b>	4700 x 3050 x 3000 i.d.
VC18-MH-ZZZZ-C	<b>181810 Chamber</b>	1780 x 1780 x 1200 i.d.
VC18-20-ZZZZ-C	<b>1818 Chamber</b>	1780 x 1780 x 2410 i.d.
VC22-N9-2221-C	<b>2221 Chamber &amp; Collar</b>	1845 x 1845 x 2085 i.d.
VC22-20-2221-C	<b>2221 Chamber</b> w/ MH Entry Roof Slab	1845 x 1845 x 2085 i.d.
VC22-MH-2221-C	<b>2221 Chamber</b> w/ MH Entry Riser Roof Slab	1845 x 1845 x 2085 i.d.
VC22-DP-2221-C	<b>2221 Chamber</b> w/ MH Entry Riser Roof Slab (Heavy Load Design)	1845 x 1845 x 2085 i.d.
VCFI-20-ZZZZ-C	<b>251815 Firemeter Chamber</b> w/ MH Entry Roof Slab	2515 x 1825 x 1600 i.d.
VCFI-20-DEEP-C	<b>251820 Deep Firemeter Chamber</b> w/ MH Entry Roof Slab	2515 x 1825 x 2000 i.d.
VCMC-20-ZZZZ-C	<b>332120 Meter Chamber</b> w/ MH Entry Roof Slab	3350 x 2130 x 1980 i.d.
VC30-25-ZZZZ-C	<b>302610 Chamber</b> w/ MH Entry Roof Slab	2970 x 2590 x 2000 i.d.
VC30-20-ZZZZ-C	<b>302620 Chamber</b>	2970 x 2590 x 2000 i.d.

## Chambers

<u>Drawing Number</u>	<u>Item Description</u>	<u>Product Size</u> (Length X Width X Depth in mm)
SVZZ-51-0243-C	<b>243 Collar &amp; Lid Assembly</b> (1270 x 660 Thru)	1500 x 890 x 150
SVZZ-51-4040-C	<b>4040 Collar &amp; Lid Assembly</b> (820 Sq Thru)	1040 x 1040 x 150
SVZZ-51-1200-C	<b>1.2m Collar &amp; Lid Assembly</b> (956 Sq Thru)	1200 x 1200 x 150
SVZZ-51-1500-C	<b>1.5m Collar &amp; Lid Assembly</b> (1234 Sq Thru)	1520 x 1520 x 150
VC17-AA-ZZZZ-C	<b>1.7m Collar &amp; Custom Hatch Cast In</b> (Up to 1220 Sq Thru)	1720 x 1720 x 175
VC21-51-2121-C	<b>2121 Collar &amp; Lid Assembly</b> (1700 x 800 Thru)	2295 x 1490 x 200
SVZZ-55-0832-C	<b>832 Comm Collar &amp; Lwt Lid Assembly</b> (2570 x 800 Thru)	2940 x 1150 x 190
VC22-51-2221-C	<b>2221 Collar &amp; Lid Assembly</b> (1500 Sq Thru)	2226 x 2226 x 203
RSLA-MB-3050-C	<b>Aluminum Ladder w/ Safety Post</b> (Ceiling or Wall Mount)	Varies
VCLA-19AL-RUNG-C	<b>Standard Aluminum Ladder Rung</b>	
VCZZ-INST-CH-C	<b>Chamber Installation Template</b>	

**Note:** If you cannot find the chamber size you require, please call the Sales Office to discuss modifications or design/build options.

Custom openings are available upon request.

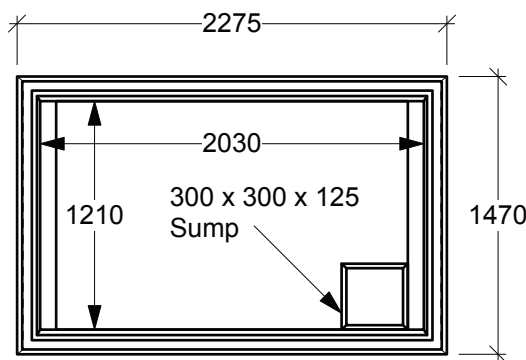
All Chambers are available with the following options:

- Xypex Waterproofing Admixture for Concrete
- Interior White Coating - Improves Lighting
- Exterior Black Damp-proofing
- Cable Support Channels & Racking
- Knock-Outs, Duct Terminators, Duct Banks or Pipe Sleeves
- Inserts
- Pulling Irons
- Custom Openings & Hatches

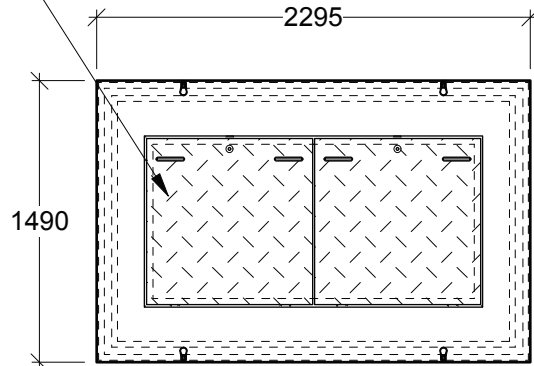
**Chamber Design:** H-20 Traffic Load Rated - **Unless Otherwise Noted**

**Checker Plate Lid Design:** Boulevard Use H-20 Static Load Rated

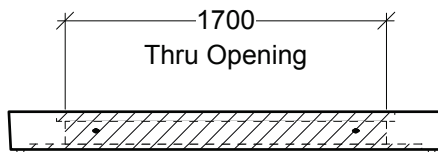
Painted Black, Boltdown, Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
 Remote Reader Holes  
 Weld Marking e.g. "ELEC"



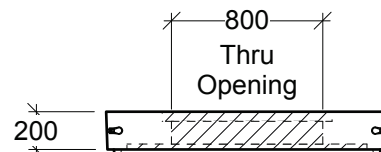
**Plan View - Chamber**



**Plan View - Collar**

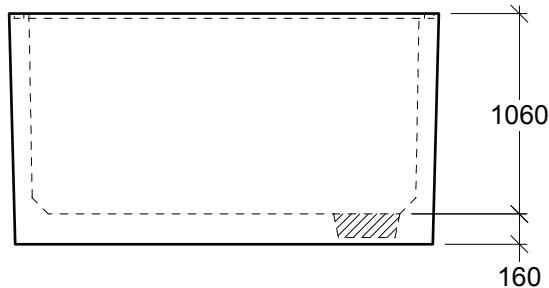


1700  
Thru Opening



800  
Thru Opening

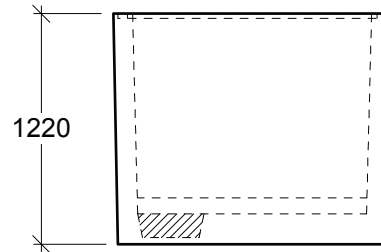
200



1060

160

**Side View**



1220

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Steel Products manufactured under CSA W47.1 in accordance to CSA W59
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
 Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
 info@aeconcrete.com

**2121 Vault w/ Lid Assembly**

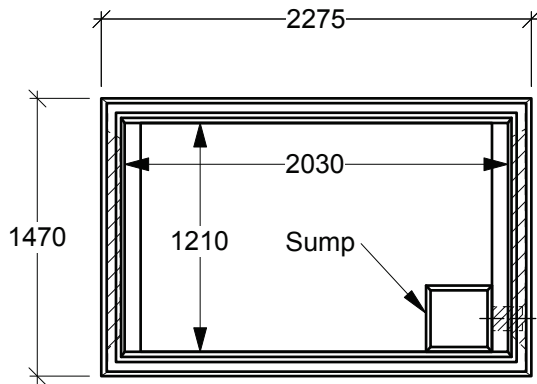
Chamber: 6,850 lbs / 3,110 kgs  
 Collar:  
 2,370 lbs / 1,080 kgs

Scale: 1:40 mm

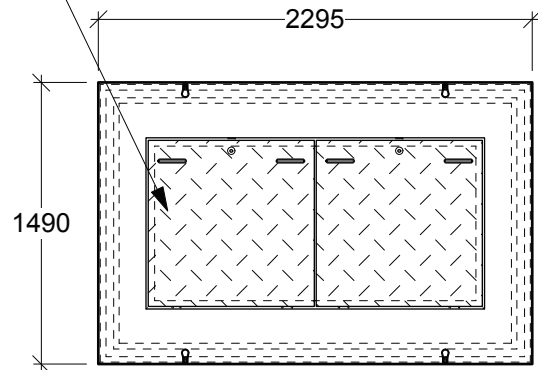
Rev: 28Jun08

Dwg#: **VC21-20-2121-C**

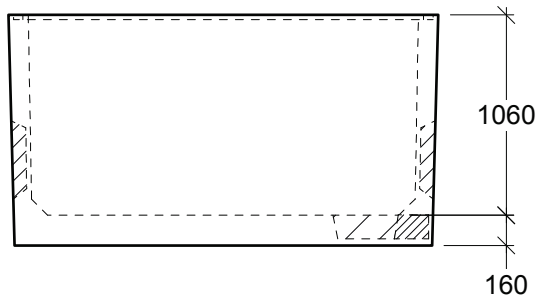
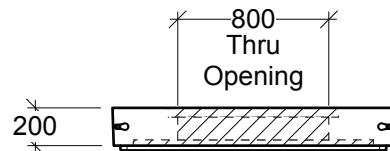
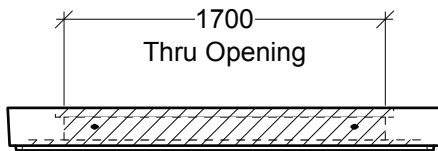
Painted Black, Boltdown, Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
 Remote Reader Holes  
 Weld Marking e.g. "ELEC"



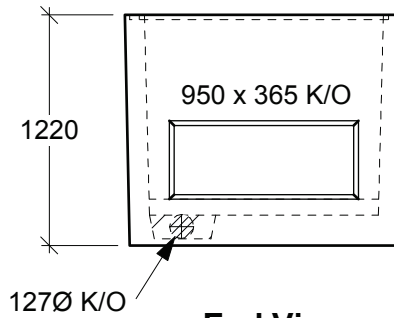
**Plan View - Chamber**



**Plan View - Collar**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Steel Products manufactured under CSA W47.1 in accordance to CSA W59
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
 Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
 info@aeconcrete.com

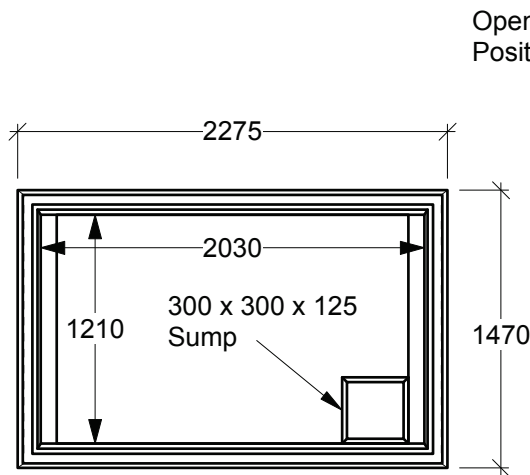
**2121 Watermeter Vault w/ Lid Assembly**

Chamber: 6,850 lbs / 3,110 kgs  
 Collar: 2,370 lbs / 1,080 kgs

Scale: 1:40 mm

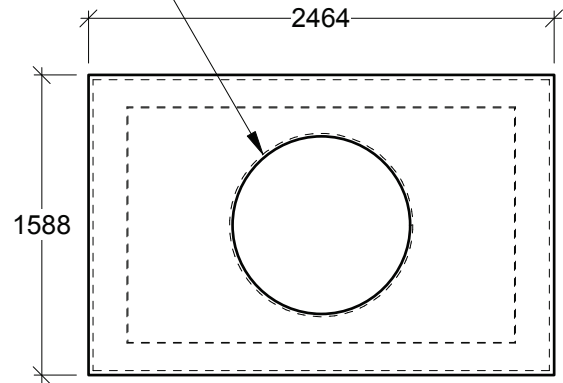
Rev: 28Jun08

Dwg#: **VC21-25-2121-C**



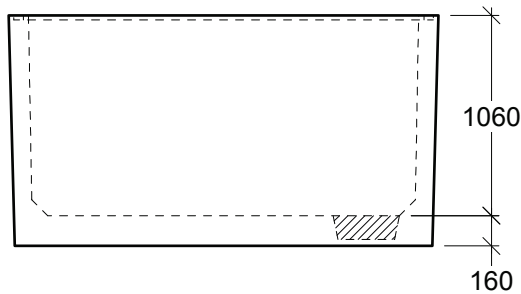
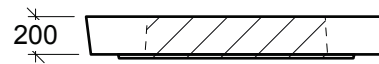
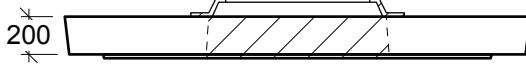
**Plan View - Chamber**

Opening Sized & Positioned to Suit

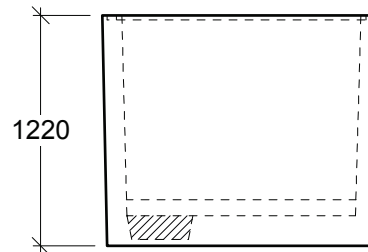


**Plan View - Roof Slab**

Cast Iron Frame & Cover  
to Suit Opening



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**2121 Vault w/ MH Entry Roof Slab**

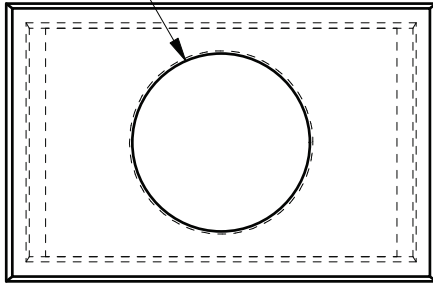
Chamber: 6,850 lbs / 3,110 kgs  
Roof Slab: 3,610 lbs / 1,640 kgs

Scale: 1:40 mm

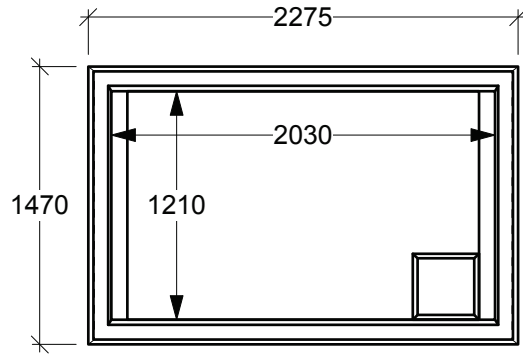
Rev: 28Jun08

Dwg#: **VC21-MH-2121-C**

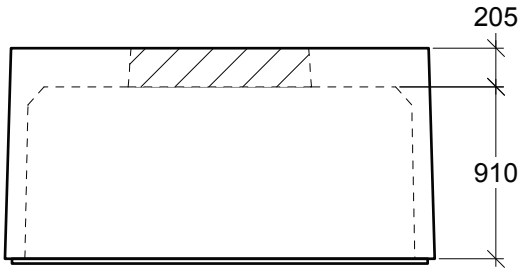
Openings Sized & Positioned to Suit



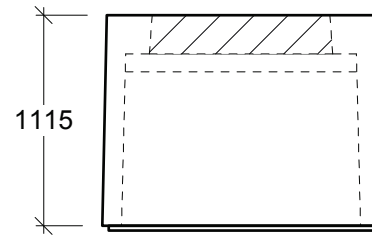
**Plan View - Top**



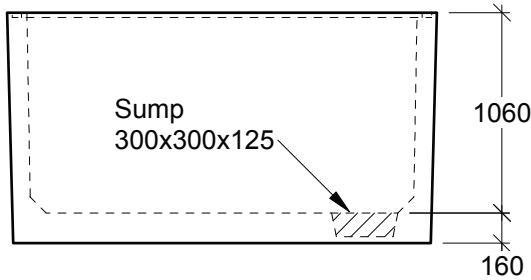
**Plan View - Bottom**



**Side View**

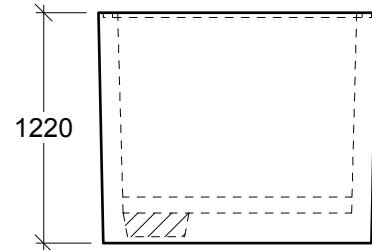


**End View**



Sump  
300x300x125

**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

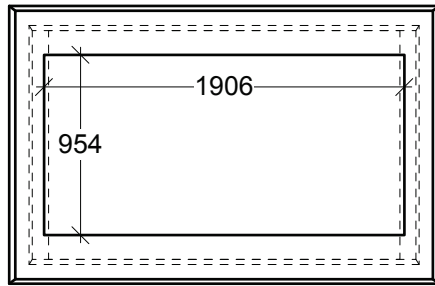
**2122 Chamber**

Top: 6,640 lbs / 3,020 kgs  
Btm: 6,930 lbs / 3,150 kgs

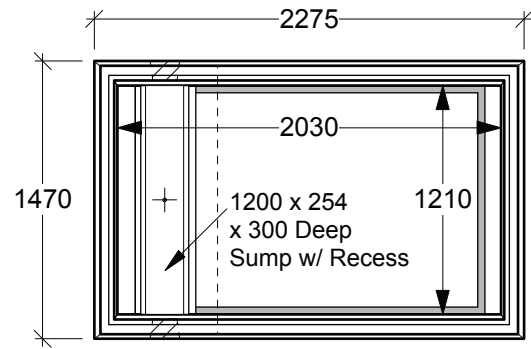
Scale: 1:40 mm

Rev: 28Jun08

Dwg#: **VC21-20-2122-C**



**Plan View - Top**



**Plan View - Bottom**

**2121 Collar**

Painted Black, Boltdown, Steel Checker Plate Lids

**Options:** Galvanizing, Padlock Recess, Remote Reader Holes, Weld Marking e.g. "ELEC"

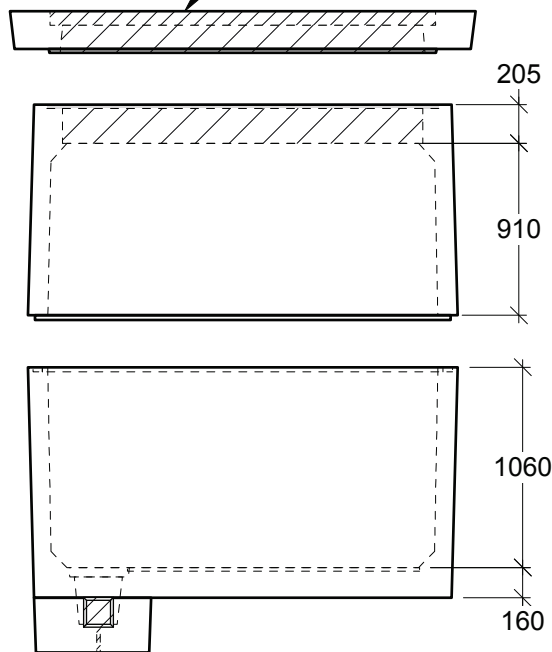
**OR**

**2121 Roof Slab Customizations Available:**

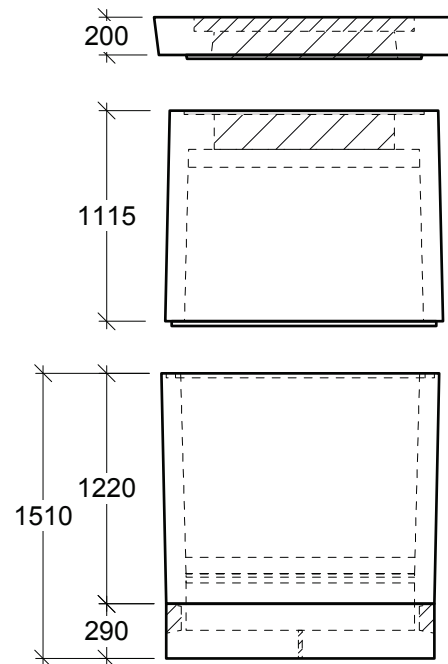
For Hatch Frame Deeper than 100mm

& or Heavy Traffic Applications up to 915x1835 Thru Opening

(Subject to Hatch Type)



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Pedestrian or Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**2122 Chamber w/ Opening for 2121 Roof Slab**

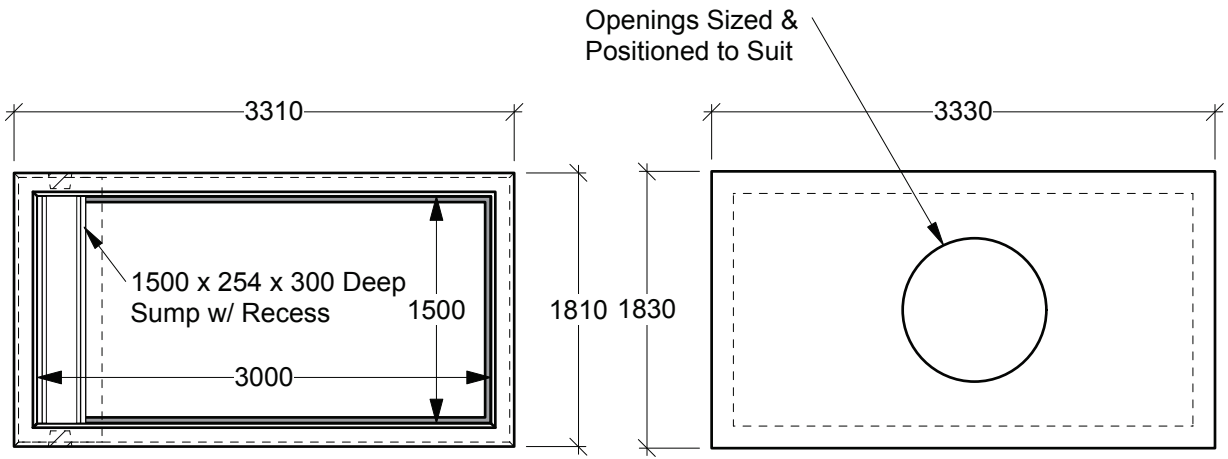
Top: 5,200 lbs / 2,360 kgs  
Btm: 8,000 lbs / 3,630 kgs

Scale: 1:40 mm

Rev: 05Jun17

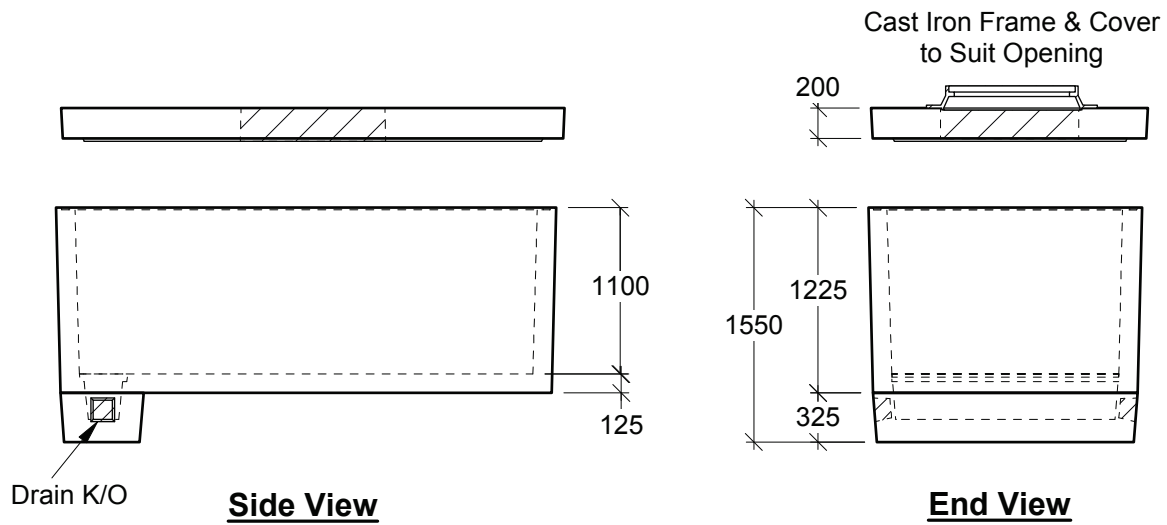
Dwg#: **VC21-N9-2122-C**





**Plan View - Chamber**

**Plan View - Roof Slab**



**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**3151 Vault w/ MH Entry Roof Slab**

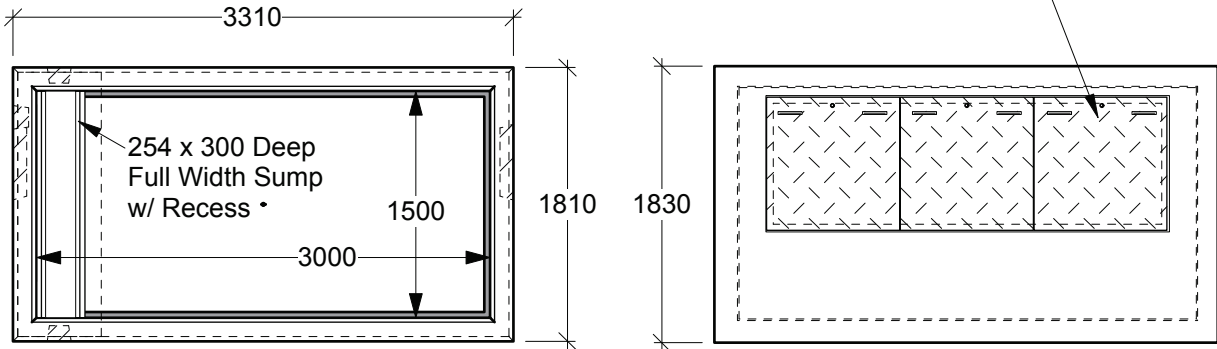
Chamber: 11,430 lbs / 5,190 kgs  
Roof Slab: 6,590 lbs / 2,990 kgs

Scale: 1:50 mm

Rev: 28Jun08

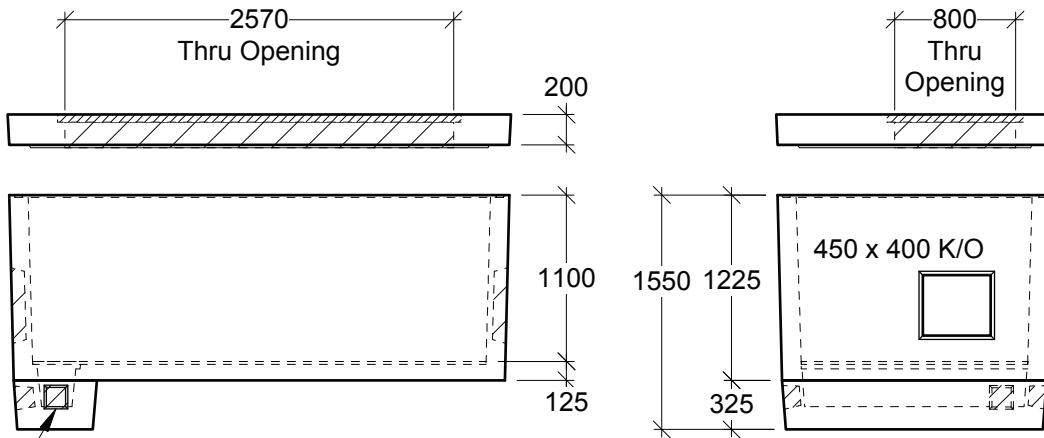
Dwg#: **VC31-20-3151-C**

Painted Black, Bolt-down, Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
 Remote Reader Holes  
 Weld Marking e.g. "ELEC"



**Plan View - Chamber**

**Plan View - Roof Slab**



Drain K/O

**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Steel Products manufactured under CSA W47.1 in accordance to CSA W59
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
 Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
 info@aeconcrete.com

**3151 Watermeter Vault w/ Lid Assembly**

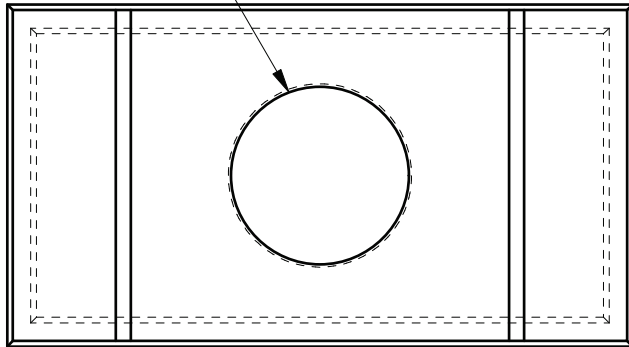
Chamber: 12,470 lbs / 5,660 kgs  
 Roof Slab: 6,580 lbs / 2,990 kgs

Scale: 1:50 mm

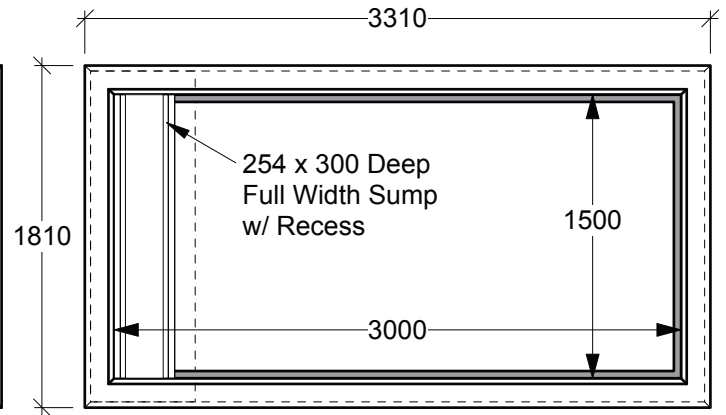
Rev: 28Jun08

Dwg#: **VC31-25-3151-C**

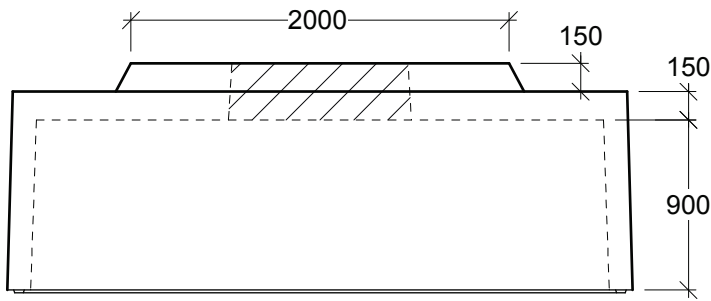
Openings Sized and Positioned to Suit



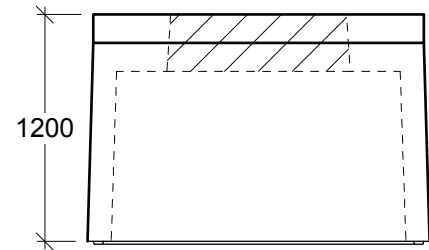
**Plan View - Top**



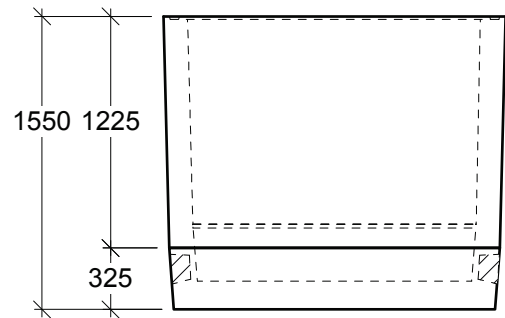
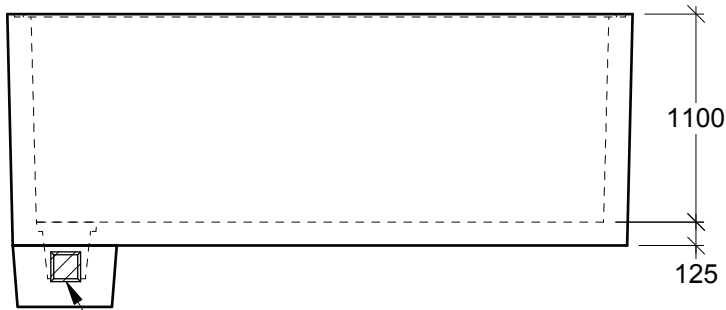
**Plan View - Bottom**



**Side View**



**End View**



**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

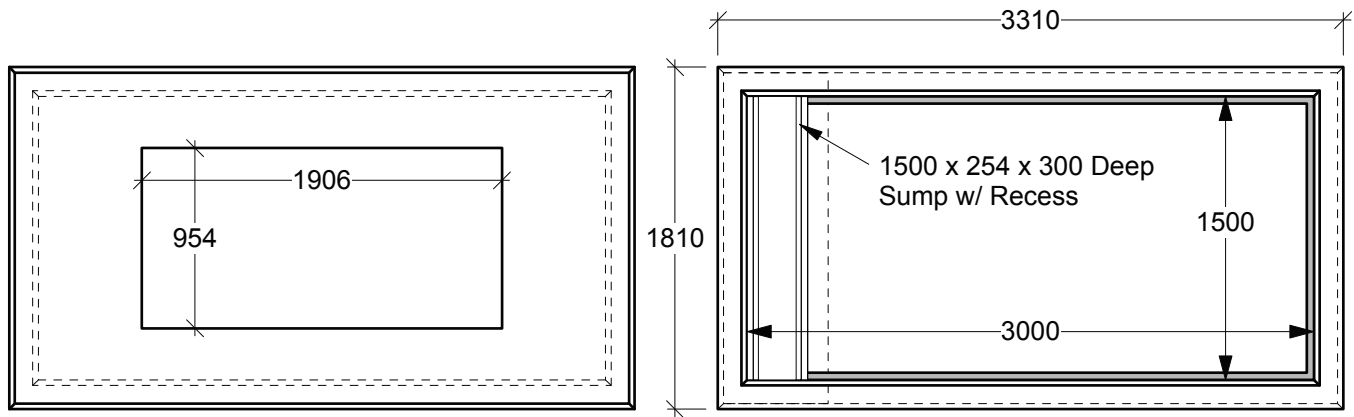
**3152 Chamber**

Top: 12,900 lbs / 5,830 kgs  
Btm: 11,500 lbs / 5,190 kgs

Scale: 1:40 mm

Rev: 28Jun08

Dwg#: **VC31-20-ZZZZ-C**



**Plan View - Top**

**Plan View - Bottom**

**2121 Collar**

Painted Black, Boltdown, Steel Checker Plate Lids

**Options:** Galvanizing, Padlock Recess, Remote Reader Holes, Weld Marking e.g. "ELEC"

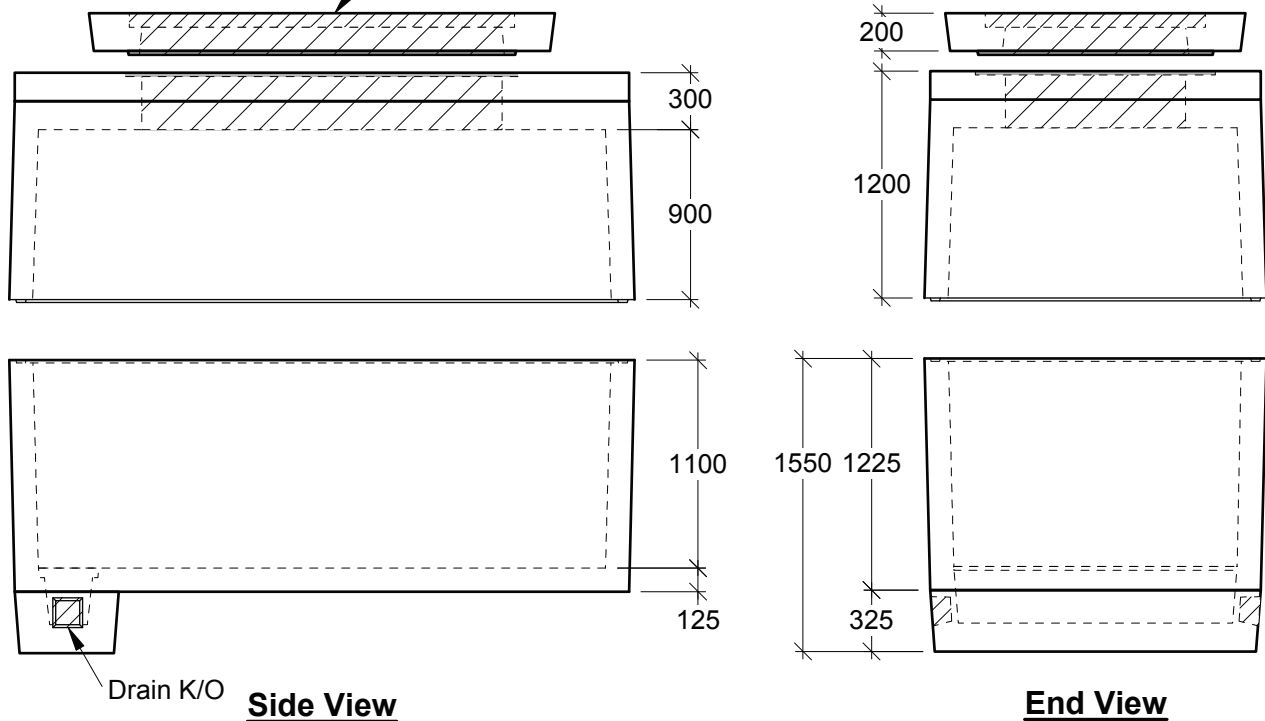
**OR**

**2121 Roof Slab Customizations Available:**

For Hatch Frame Deeper than 100mm

& or Heavy Traffic Applications up to 915x1835 Thru Opening

(Subject to Hatch Type)



**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Pedestrian or Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

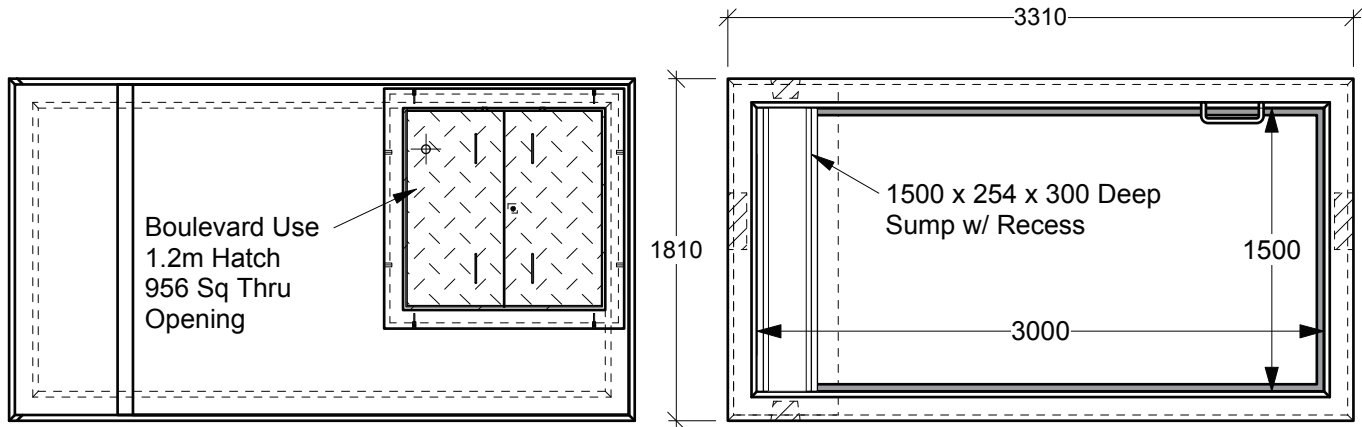
**3152 Chamber w/ Opening for 2121 Roof Slab**

Top: 12,600 lbs / 5,720 kgs  
Btm: 12,500 lbs / 5,670 kgs

Scale: 1:40 mm

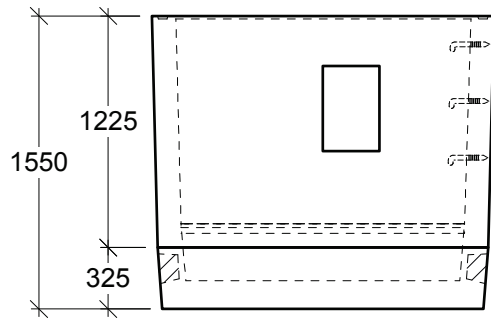
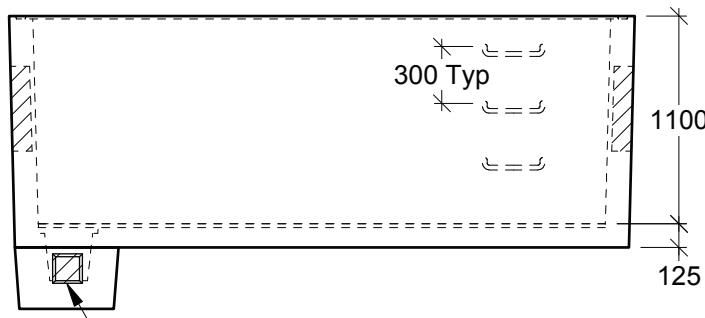
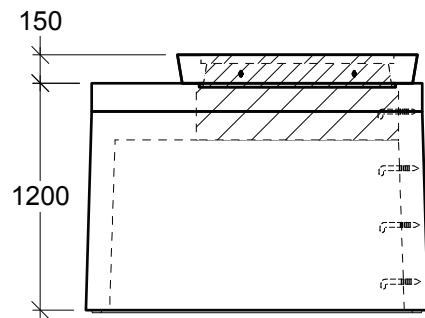
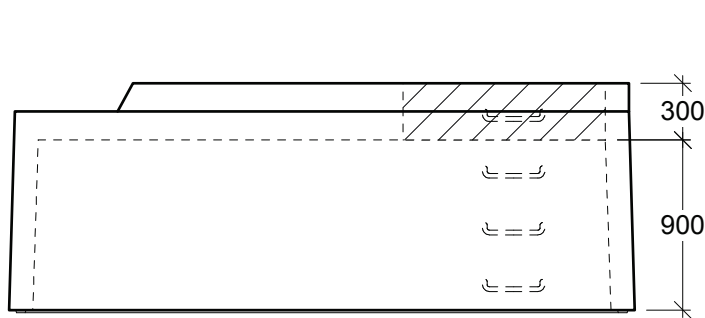
Rev: 28Jun08

Dwg#: **VC31-20-2121-C**



**Plan View - Top**

**Plan View - Bottom**



**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Steel Products manufactured under CSA W47.1 in accordance to CSA W59
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

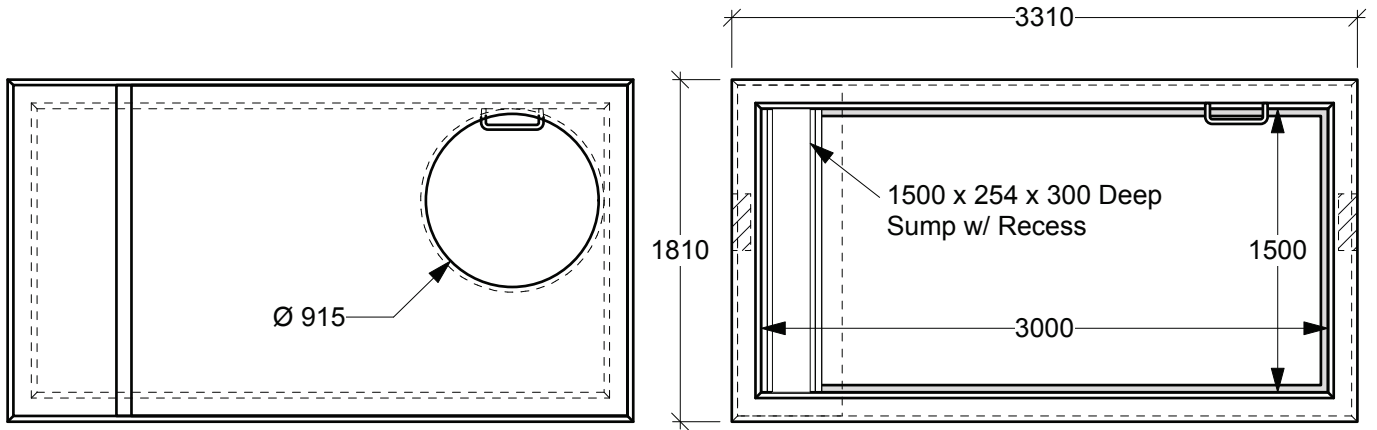
**3152 Chamber - Burnaby Std w/ Hatch Entry**

Top: 13,700 lbs / 6,220 kgs  
Btm: 12,500 lbs / 5,660 kgs

Scale: 1:40 mm

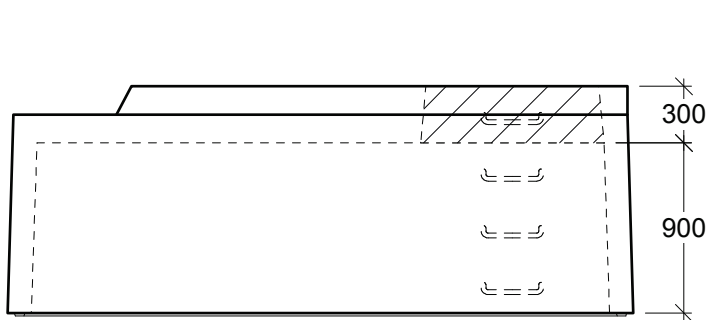
Rev: 28Jun08

Dwg#: **VC31-20-12BU-C**

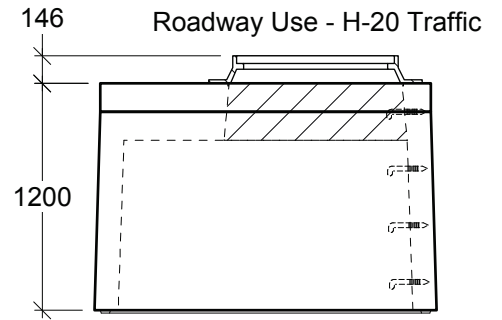


**Plan View - Top**

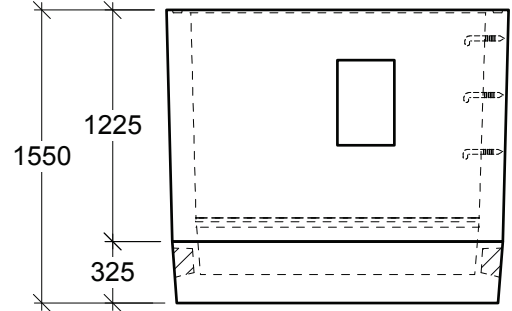
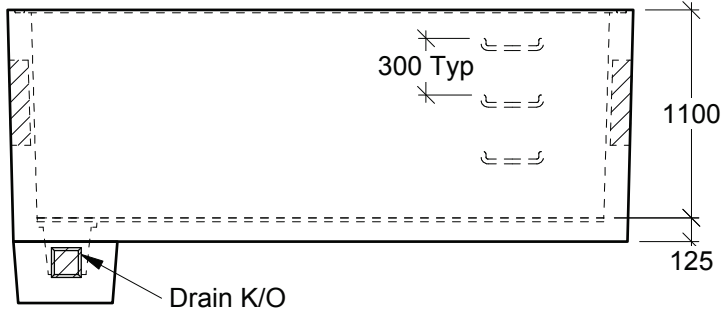
**Plan View - Bottom**



**SideView**



**End View**



**General Notes:**

- Lift Cables Provided
- Cement to CSA A-3001 Portland Cement
- Reinforcing Steel to CSA G-30.18-M Grade 400
- Minimum Concrete Strength 30 MPa @ 28 Days
- Site Installation and Backfilling are the Responsibility of Others
- Design and Provision of Thrust Blocks is the Responsibility of Others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**3152 Chamber - Burnaby Std w/ MH Entry**

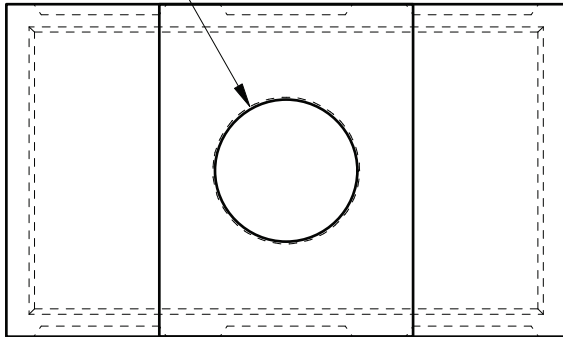
Top: 12,100 lbs / 5,480 kgs  
Btm: 12,500 lbs / 5,660 kgs

Scale: 1:40 mm

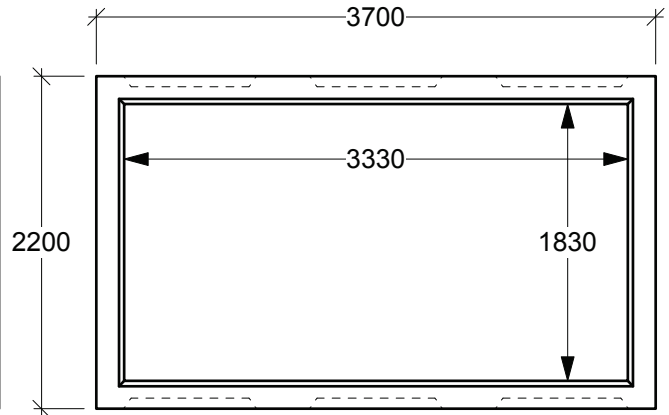
Rev: 28Jun08

Dwg#: **VC31-20-09BU-C**

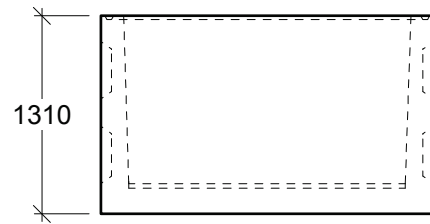
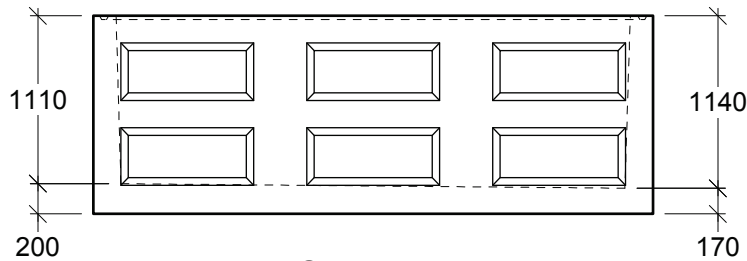
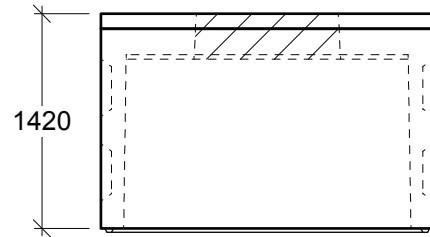
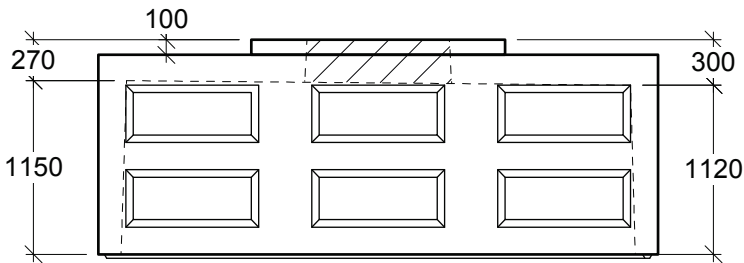
Openings Sized  
and Positioned to Suit



**Plan View - Top**



**Plan View - Bottom**



**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

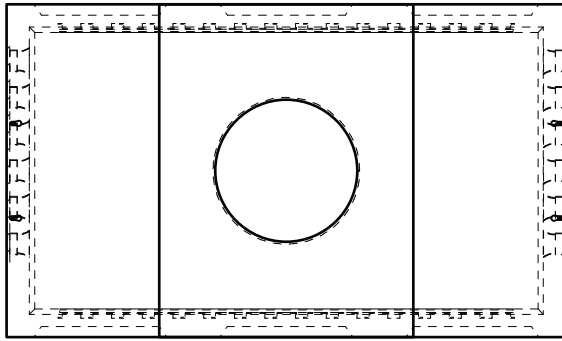
**331822 Chamber**

Top: 18,750 lbs / 8,500 kgs  
Btm: 18,800 lbs / 8,550 kgs

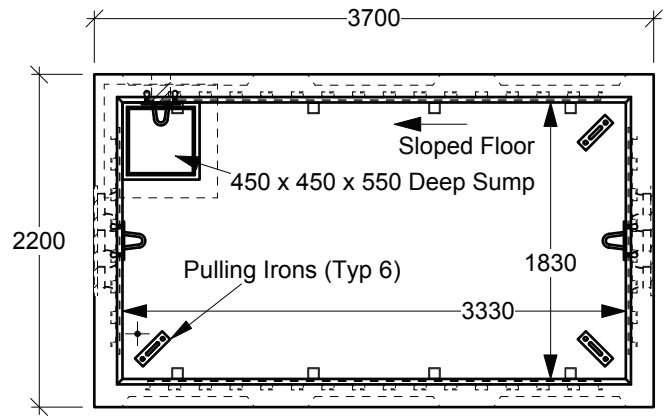
Scale: 1:50 mm

Rev: 28Jun08

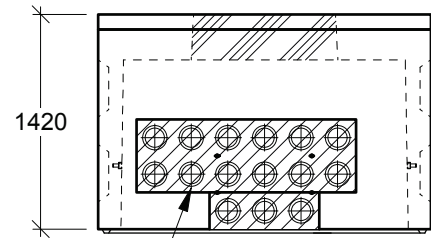
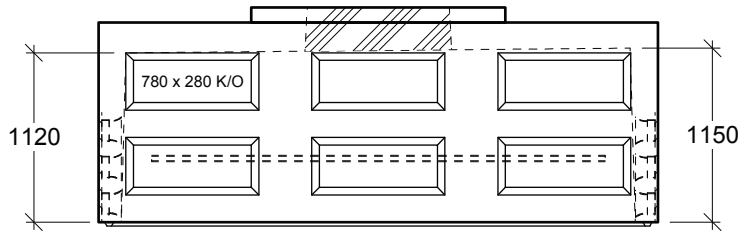
Dwg#: **VC33-20-ZZZZ-C**



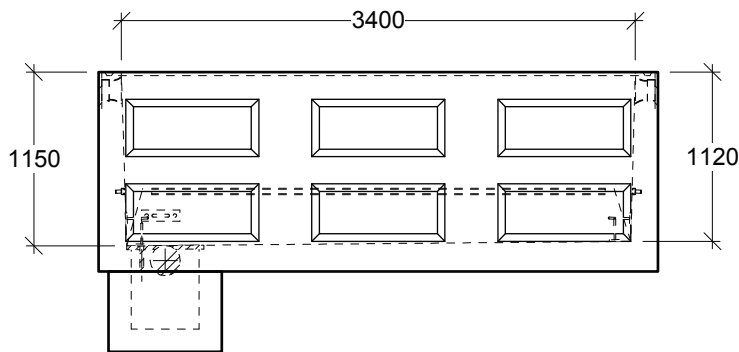
**Plan View - Top**



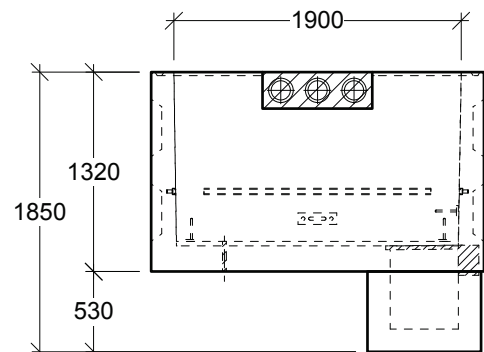
**Plan View - Bottom**



Optional Duct Bank Window w/ Dowel Bars  
(Bell Ends Supplied by Others)



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**331822 Chamber - UBC Custom Power or Comm**

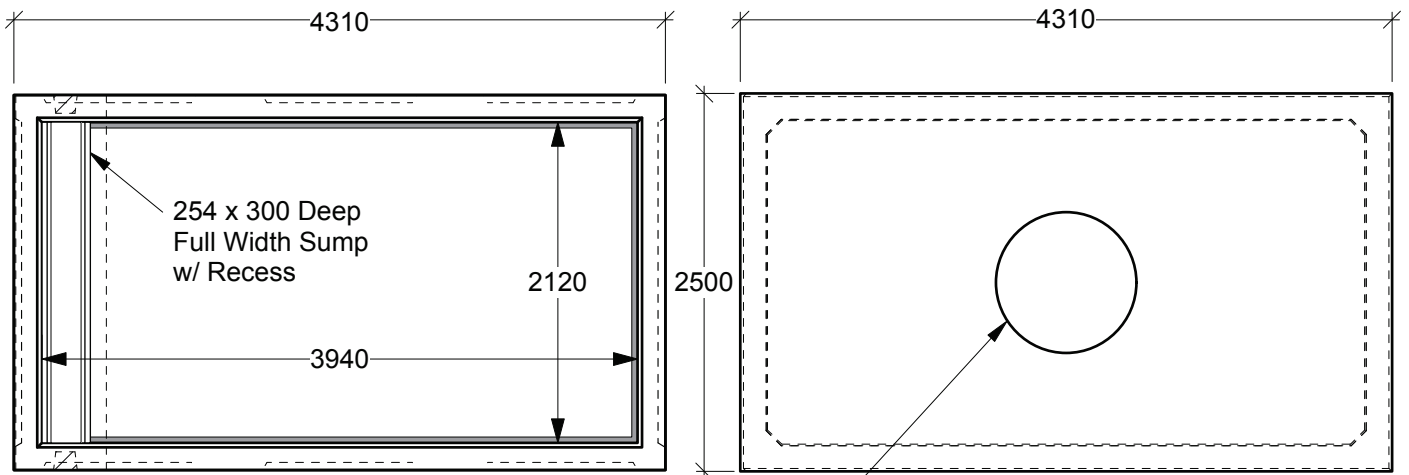
Top: 17,000 lbs / 7,715 kgs  
Btm: 16,000 lbs / 7,260 kgs

Scale: 1:50 mm

Rev: 25Nov02

Dwg#: **VC33-20-UBC-C**

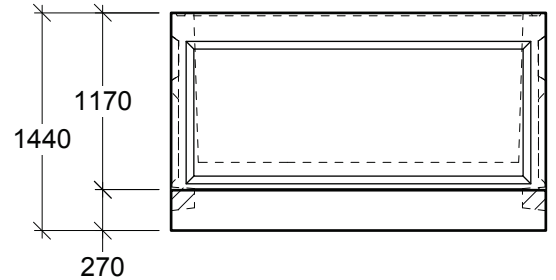
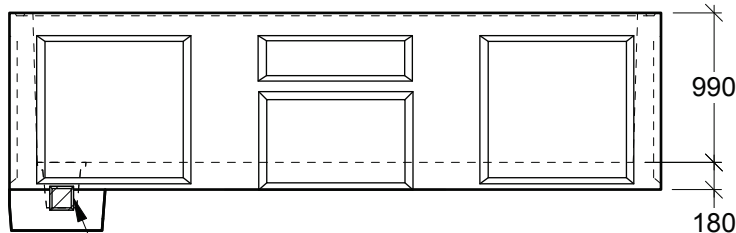
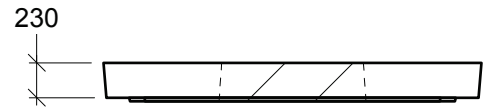




**Plan View - Chamber**

Openings Sized & Positioned to Suit

**Plan View - Roof Slab**



Drain K/O

**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

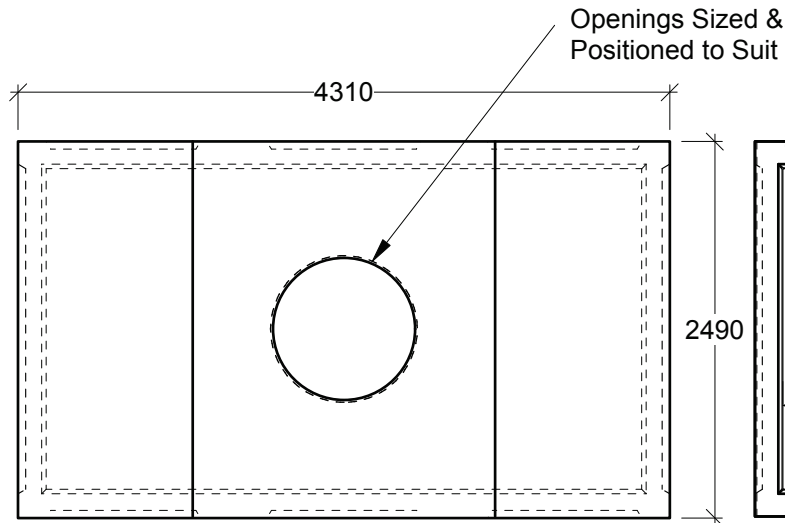
**4211 Chamber w/ Roof Slab**

Chamber: 19,000 lbs / 9,030 kg  
Roof Slab: 13,890 lbs / 6,310 kgs

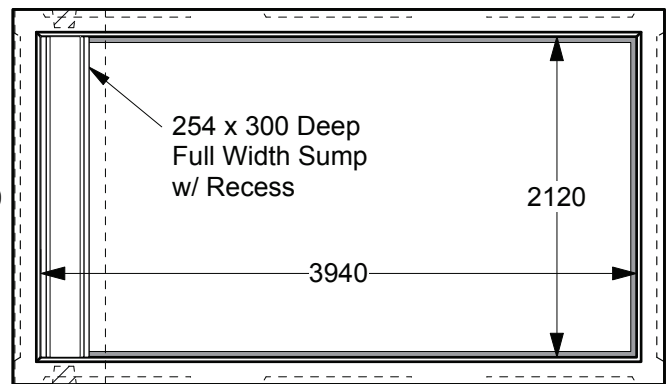
Scale: 1:50 mm

Rev: 11Mar16

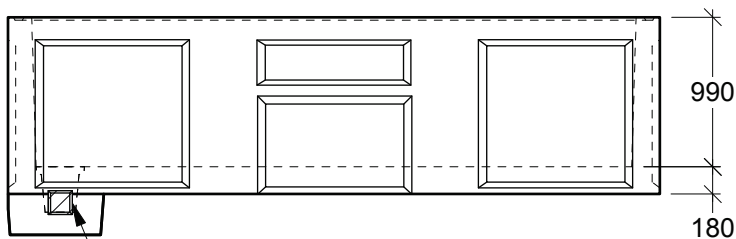
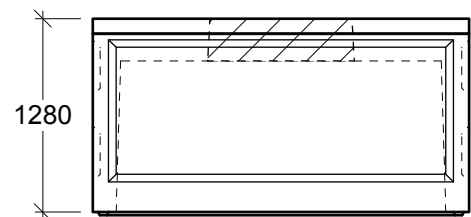
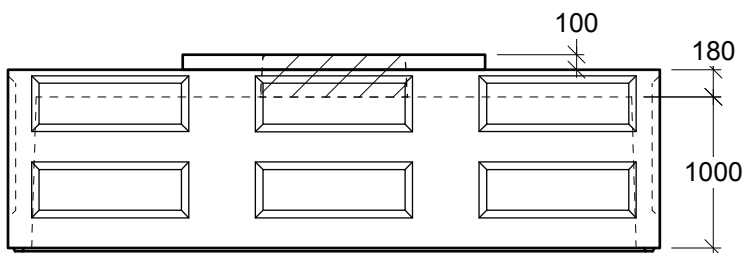
Dwg#: **VC42-20-1000-C**



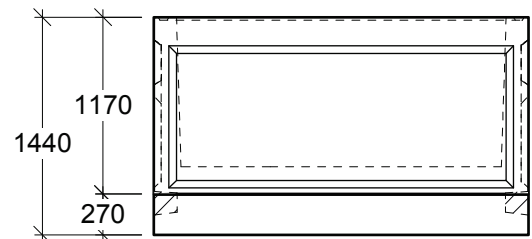
**Plan View - Top**



**Plan View - Bottom**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

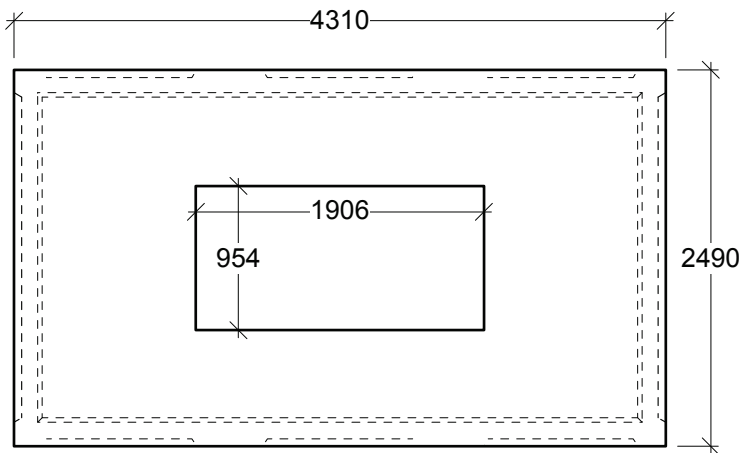
**4212 Chamber**  
(402120)

Top: 22,100 lbs / 10,025 kgs  
Btm: 21,200 lbs / 9,620 kgs

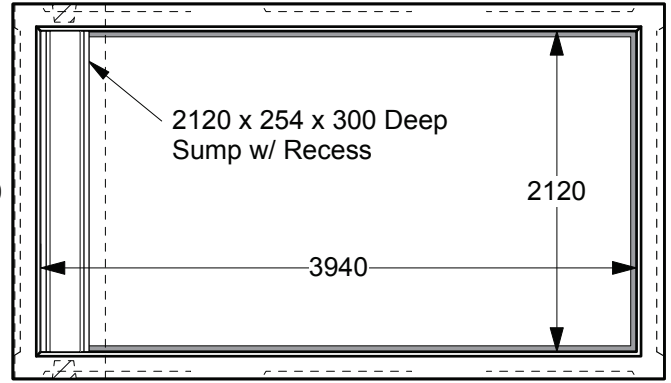
Scale: 1:50 mm

Rev: 28Jun08

Dwg#: **VC42-20-ZZZZ-C**



**Plan View - Top**



**Plan View - Bottom**

**2121 Collar**

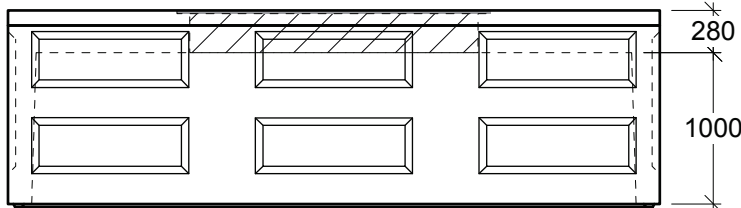
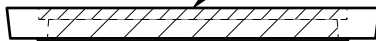
Painted Black, Bolt-down, Steel Checker Plate Lids

**Options:** Galvanizing, Padlock Recess, Remote Reader Holes, Weld Marking e.g. "ELEC"

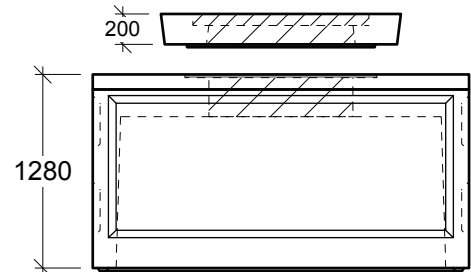
**OR**

**2121 Roof Slab Customizations Available:**

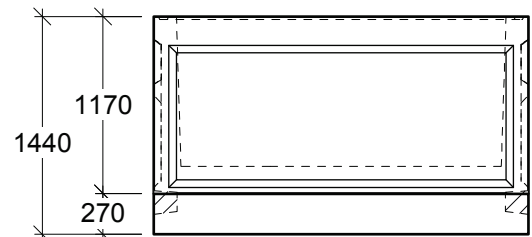
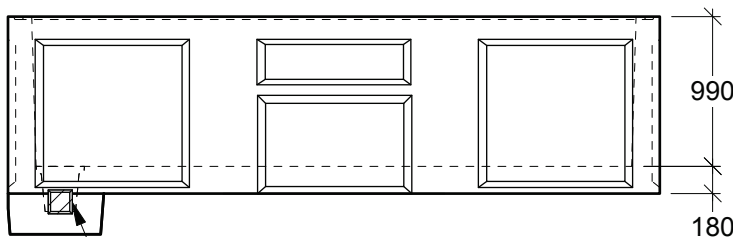
For Hatch Frame Deeper than 100mm  
& or Heavy Traffic Applications up to 915x1835 Thru Opening  
(Subject to Hatch Type)



**Side View**



**End View**



**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Pedestrian or Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

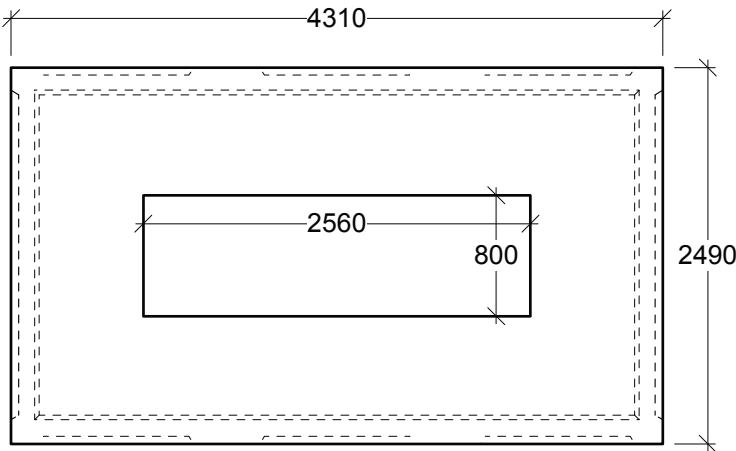
**4212 Chamber w/ Opening for 2121 Roof Slab**  
(402120)

Top: 23,900 lbs / 10,845 kgs  
Btm: 21,200 lbs / 9,620 kgs

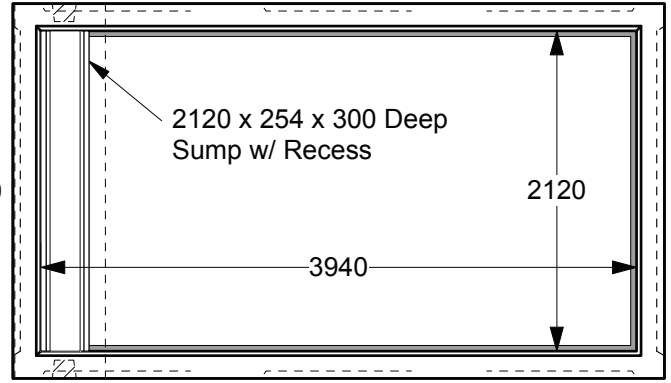
Scale: 1:50 mm

Rev: 28Jun08

Dwg#: **VC42-20-2121-C**



**Plan View - Top**

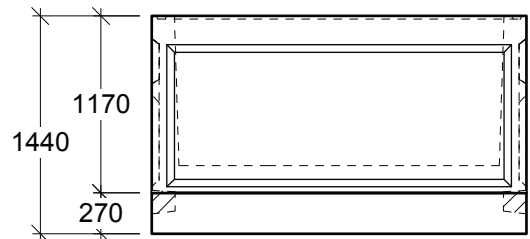
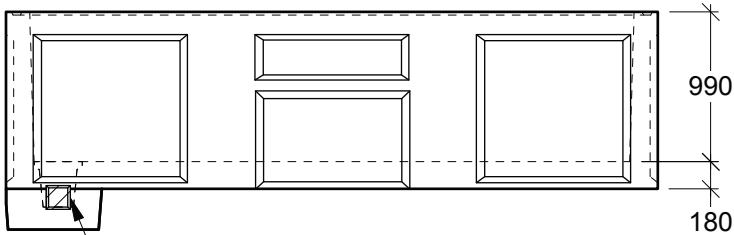
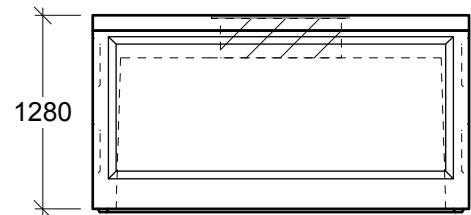
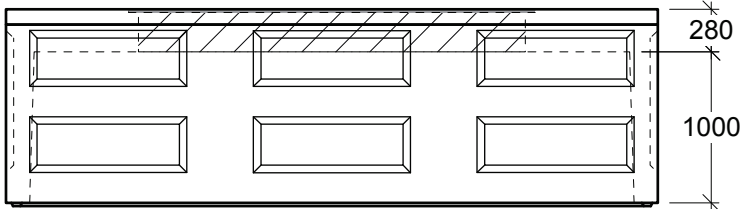


**Plan View - Bottom**

**832 Collar**

Painted Black, Boltdown, Steel Checker Plate Lids

**Options:** Galvanizing, Padlock Recess, Remote Reader Holes, Weld Marking e.g. "ELEC"



Drain K/O

**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Pedestrian or Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

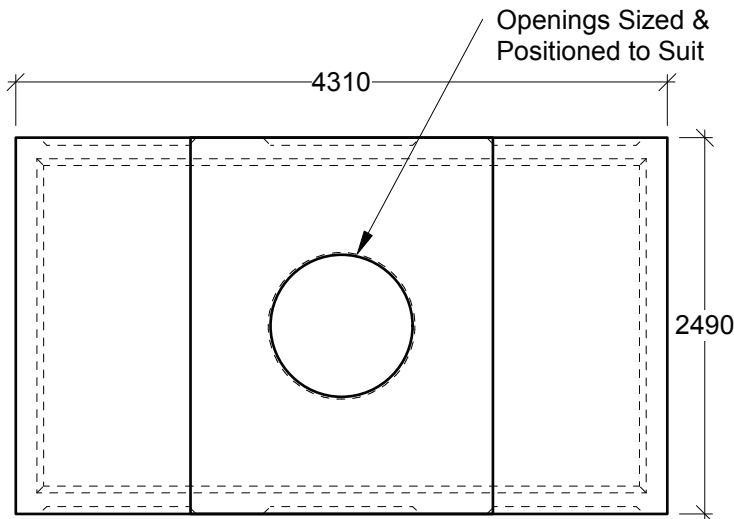
**4212 Chamber w/ Opening for 832 Collar**  
(402120)

Top: 23,600 lbs / 10,705 kgs  
Btm: 21,200 lbs / 9,620 kgs

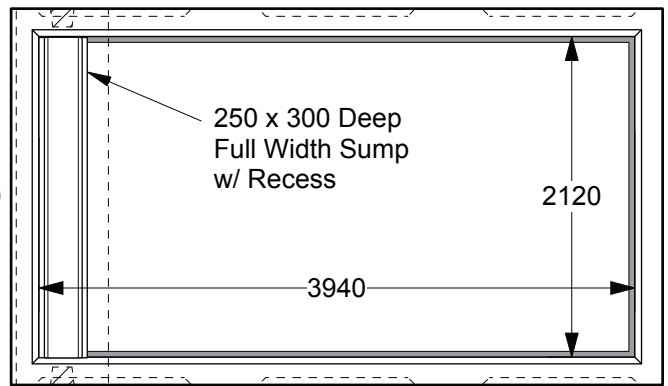
Scale: 1:50 mm

Rev: 28Jun08

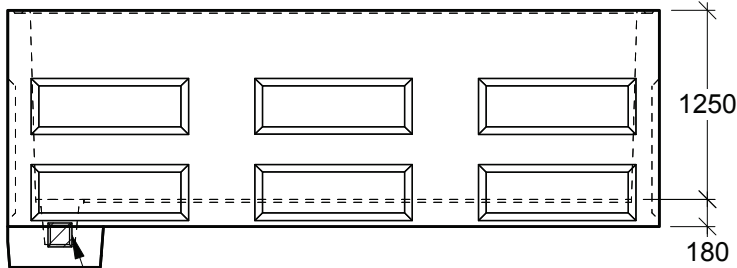
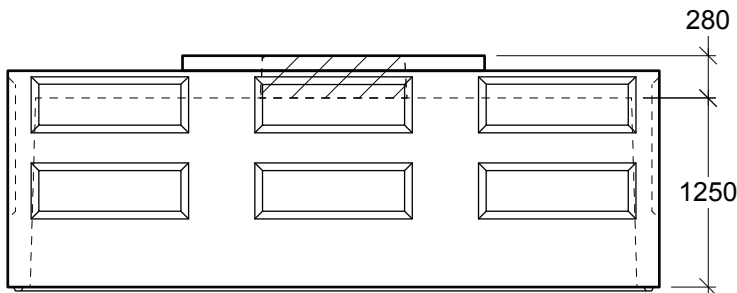
Dwg#: **VC42-20-0832-C**



**Plan View - Top**

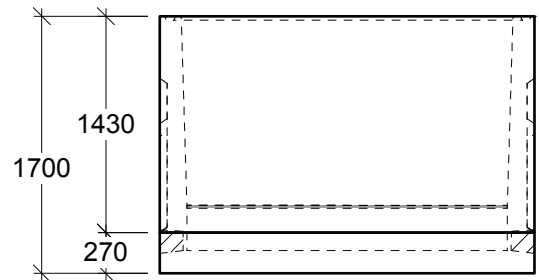
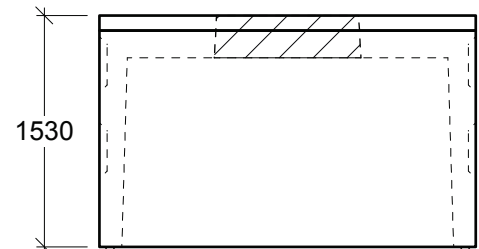


**Plan View - Bottom**



Drain K/O

**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

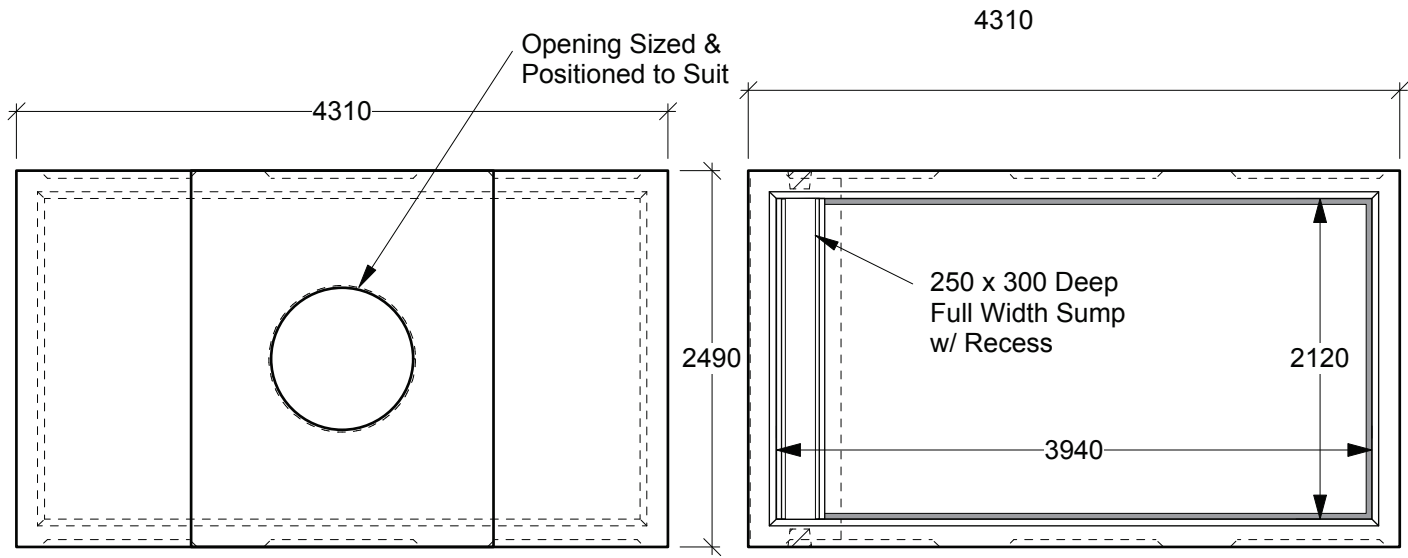
**402125 Chamber**

Top: 25,200 lbs / 11,430 kgs  
Btm: 23,600 lbs / 10,680 kgs

Scale: 1:50 mm

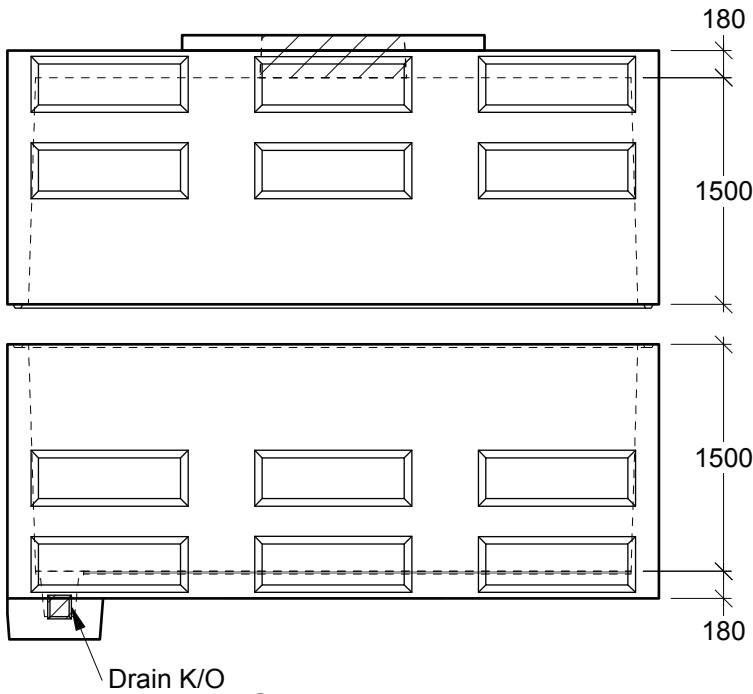
Rev: 16Jun13

Dwg#: **VC40-20-2500-C**

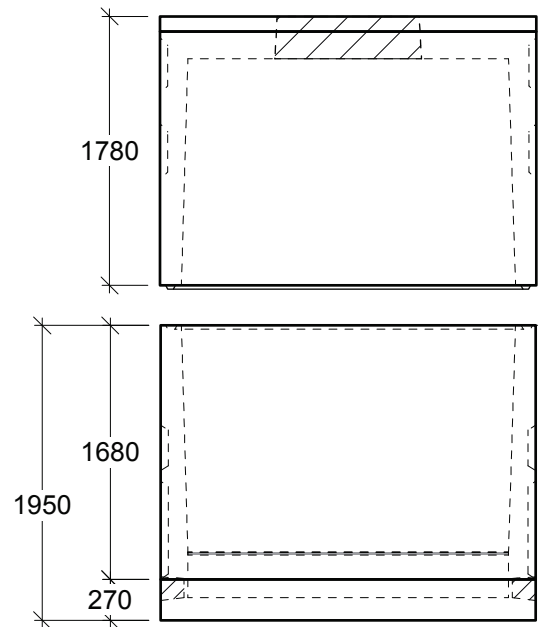


**Plan View - Top**

**Plan View - Bottom**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

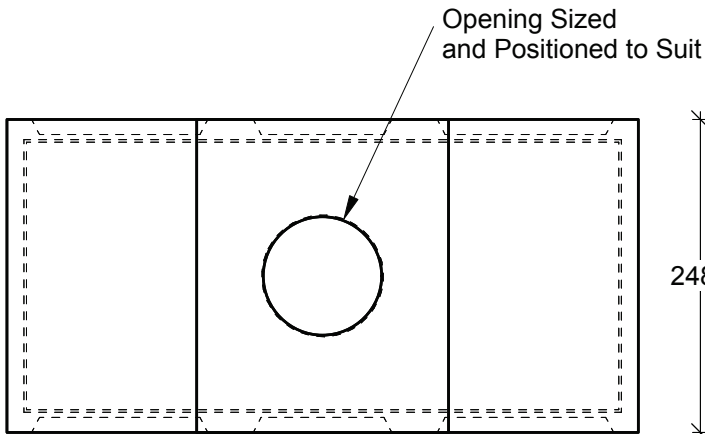
**402130 Chamber**

Top: 28,900 lbs / 13,120 kgs  
Btm: 12,400 lbs / 27,250 kgs

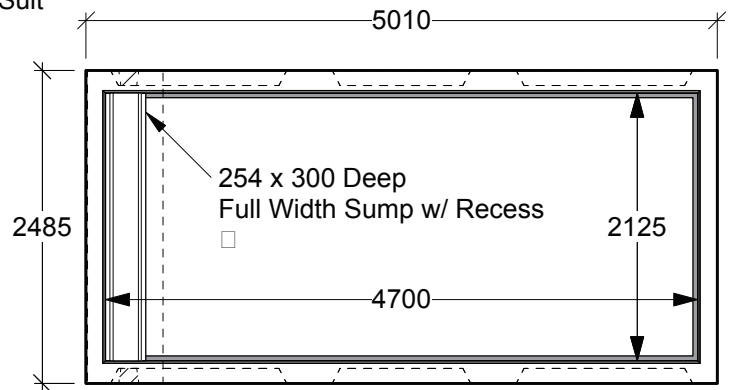
Scale: 1:50 mm

Rev: 15Jun13

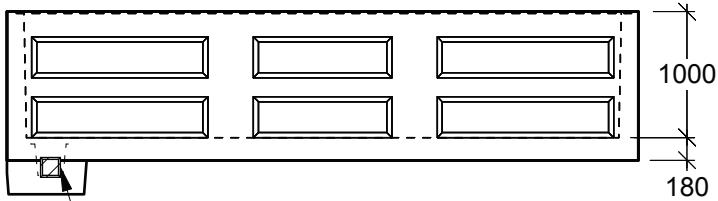
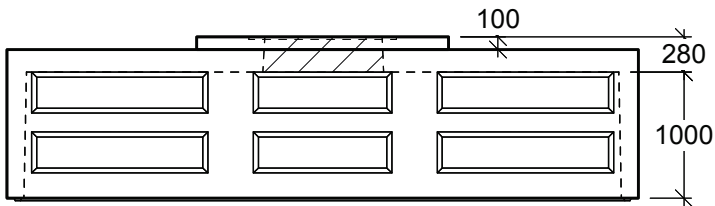
Dwg#: **VC40-20-3000-C**



**Plan View - Top**

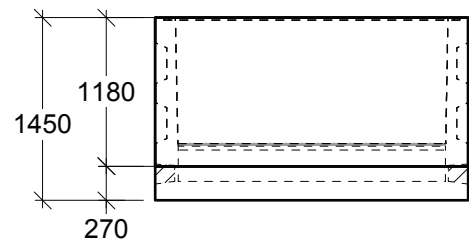
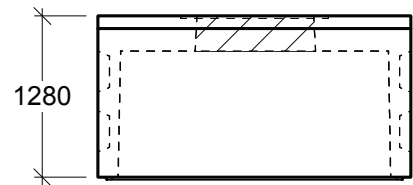


**Plan View - Bottom**



Drain K/O

**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

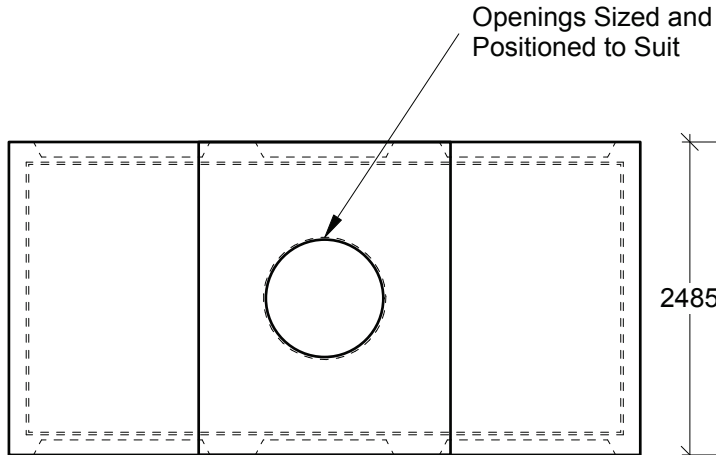
**4712 Chamber**  
(472120)

Top: 24,200 lbs / 11,000 kgs  
Btm: 23,700 lbs / 10,300 kgs

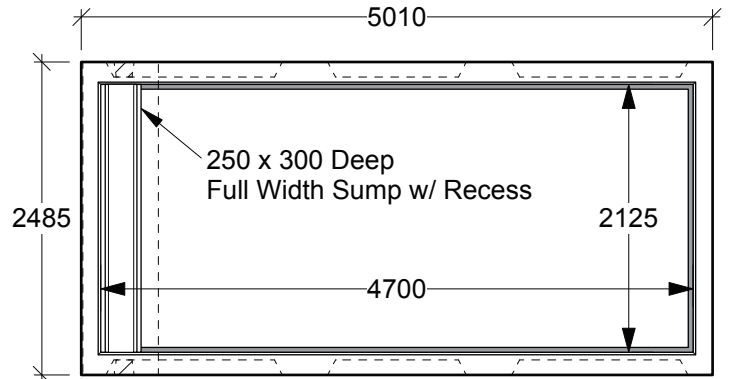
Scale: 1:60 mm

Rev: 28Jun08

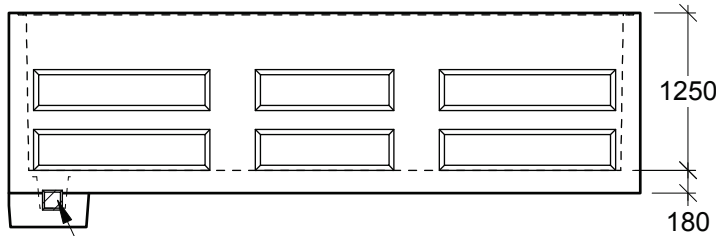
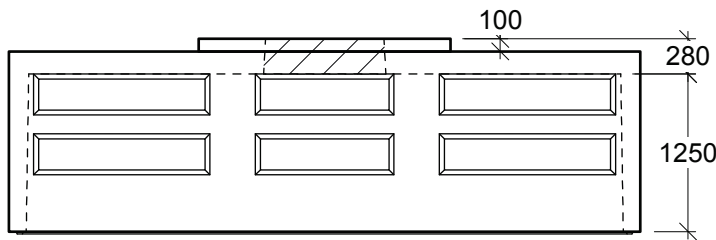
Dwg#: **VC47-20-ZZZZ-C**



**Plan View - Top**

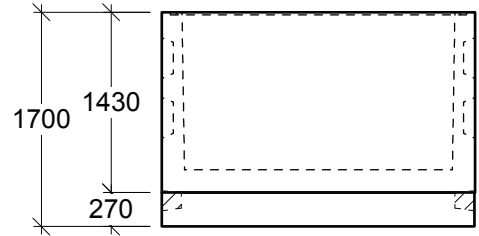
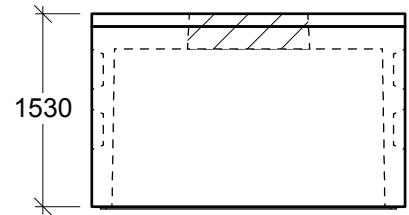


**Plan View - Bottom**



Drain K/O

**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**472125 Chamber**

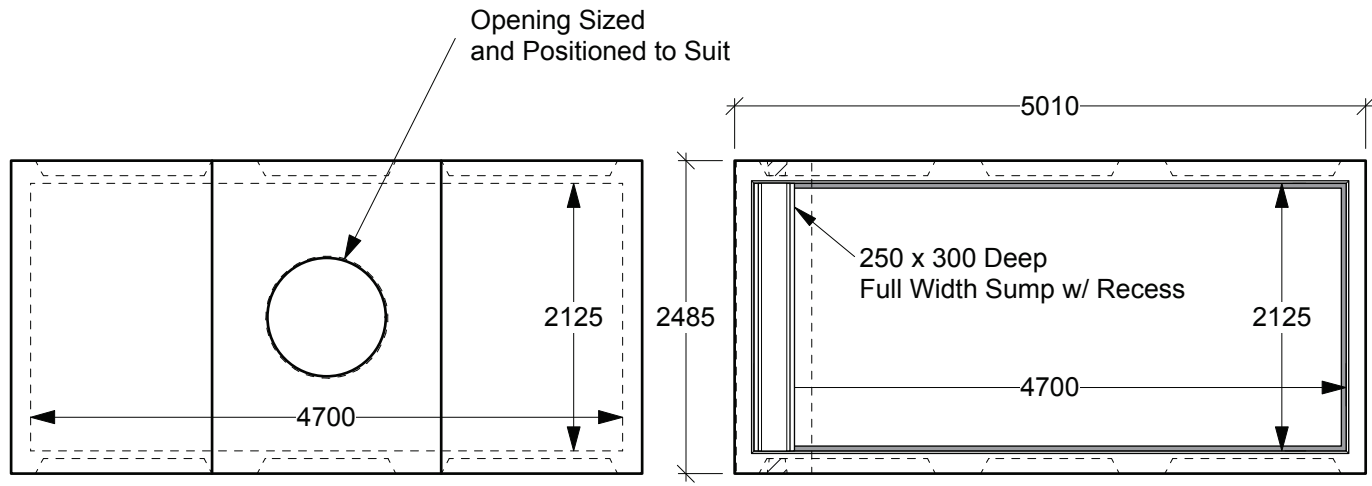
Top: 27,000 lbs / 12,240 kgs  
Btm: 25,300 lbs / 11,500 kgs

Scale: 1:60 mm

Rev: 28Jun08

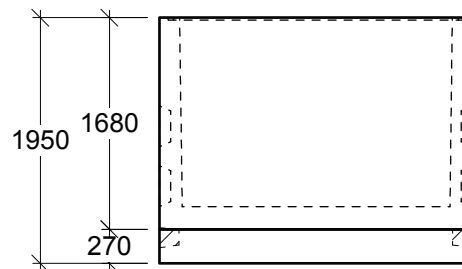
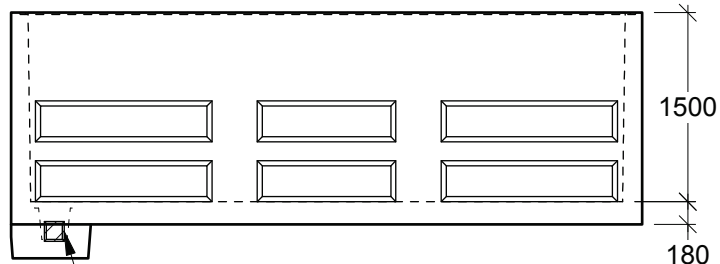
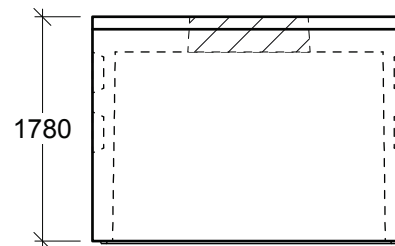
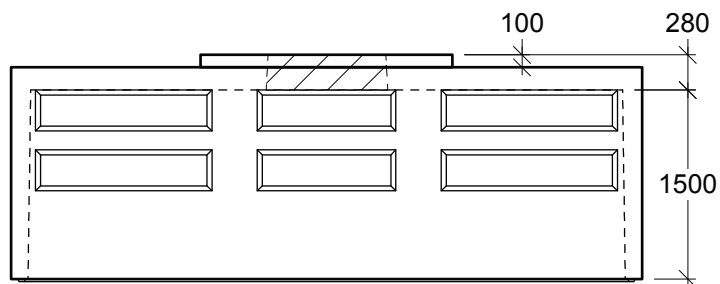
Dwg#: **VC47-20-2500-C**





**Plan View - Top**

**Plan View - Bottom**



**Side View**

**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

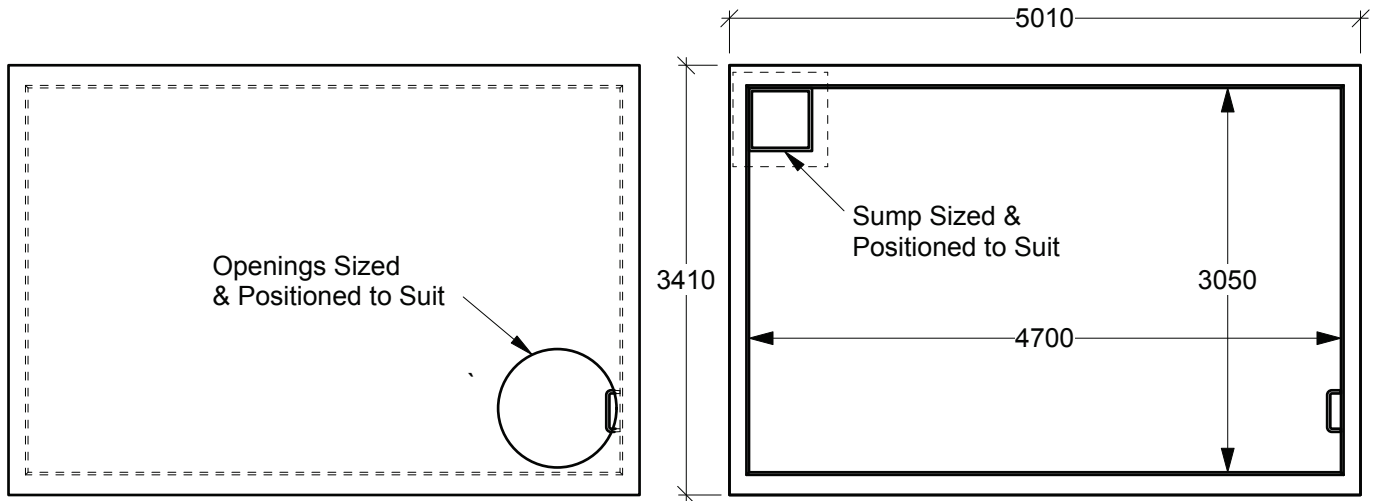
**472130 Chamber**

Top: 30,100 lbs / 13,700 kgs  
Btm: 28,500 lbs / 12,900 kgs

Scale: 1:60 mm

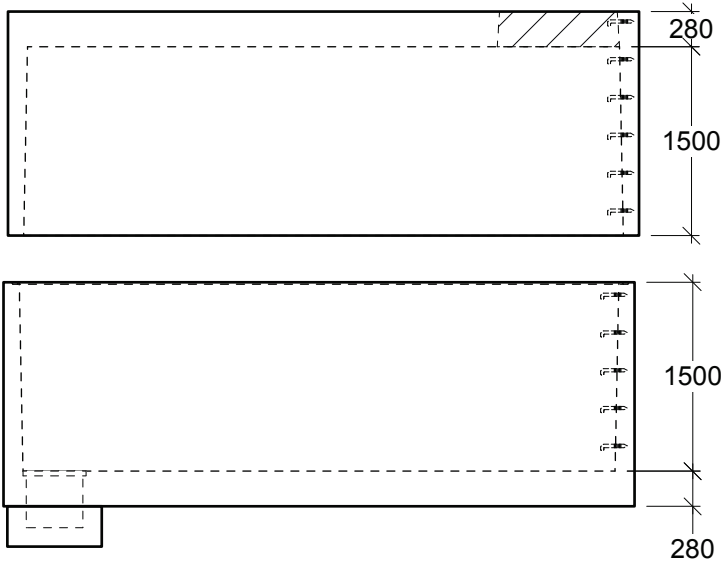
Rev: 28Jun08

Dwg#: **VC47-20-3000-C**

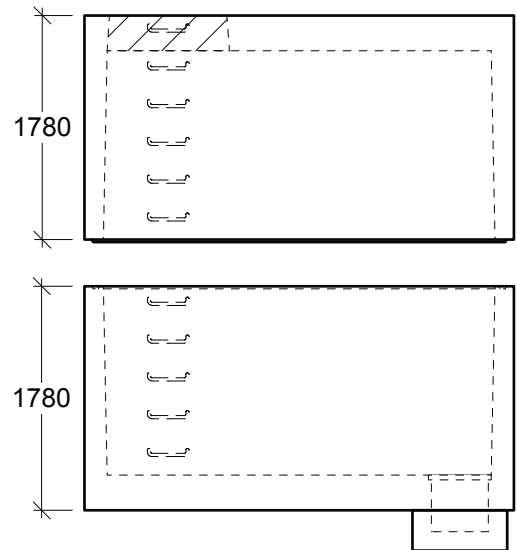


**Plan View - Top**

**Plan View - Bottom**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

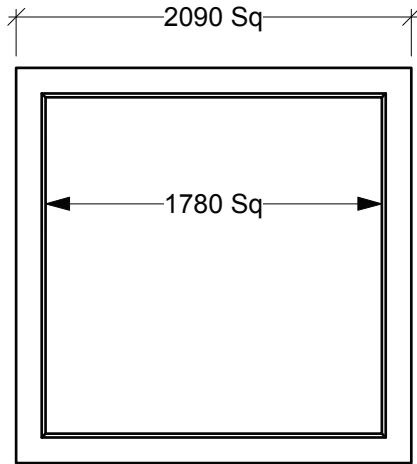
**473030 Chamber**

Top: 46,600 lbs / 21,140 kgs  
Btm: 48,300 lbs / 21,910 kgs

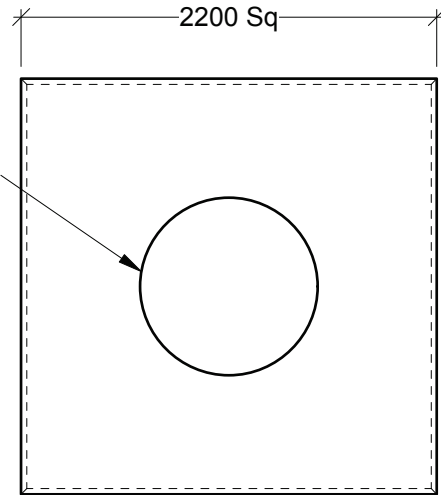
Scale: 1:60 mm

Rev: 27May16

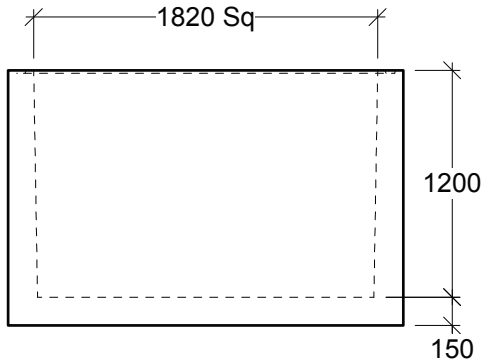
Dwg#: **VC47-20-3030-C**



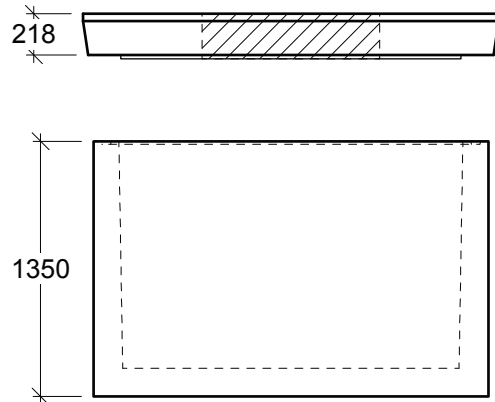
**Plan View - Chamber**



**Plan View - Roof Slab**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**181812 Chamber**

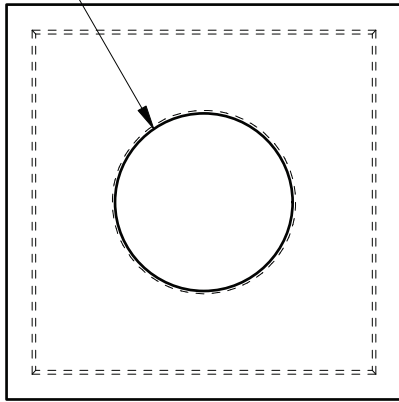
Roof Slab: 6,100 lbs / 2,770 kgs  
Vault: 11,180 lbs / 5,080 kgs

Scale: 1:40 mm

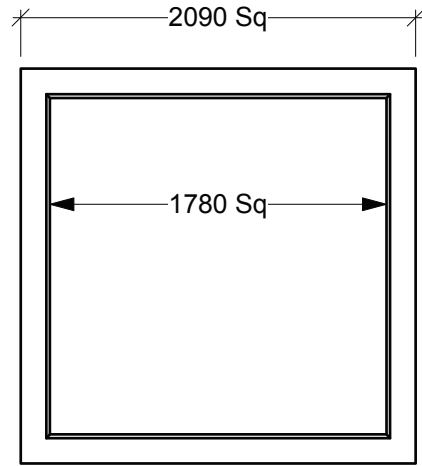
Rev: 08May17

Dwg#: **VC18-20-1200-C**

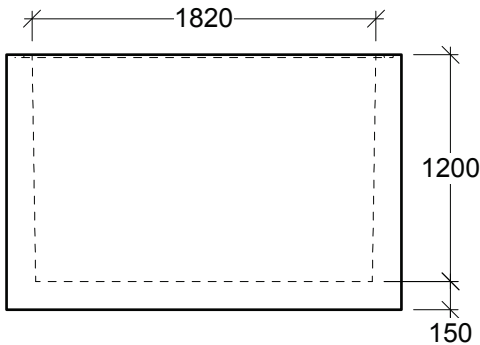
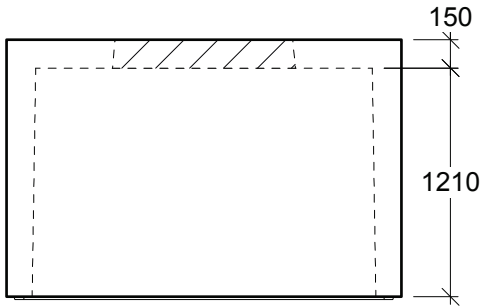
Openings Sized & Positioned to Suit



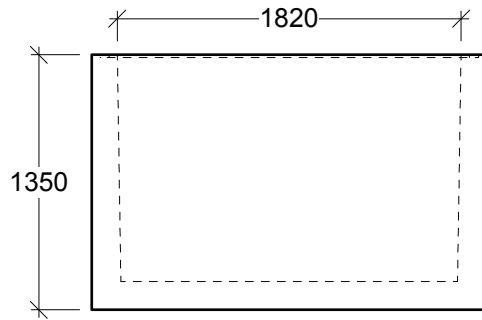
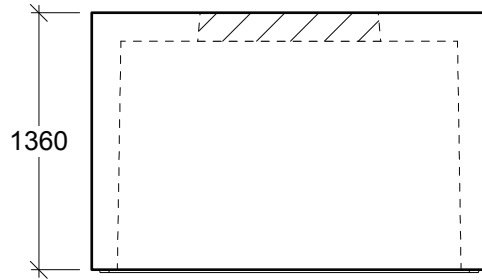
**Plan View - Top**



**Plan View - Bottom**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

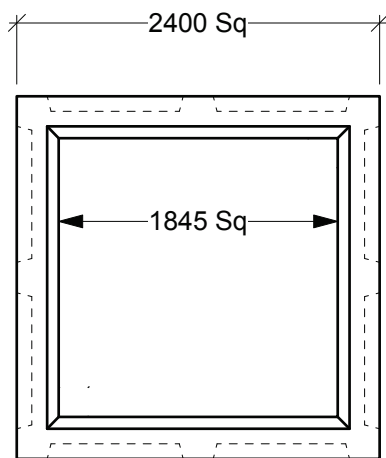
**181824 Chamber**

Top: 10,670 lbs / 4,840 kgs  
Btm: 11,180 lbs / 5,080 kgs

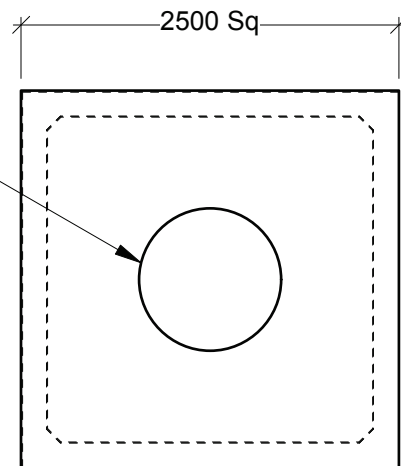
Scale: 1:40 mm

Rev: 08May17

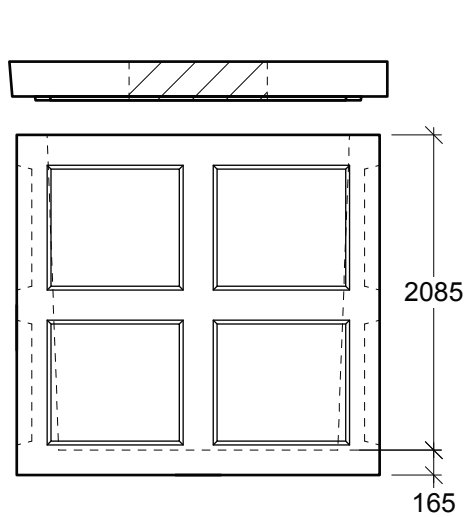
Dwg#: **VC18-20-ZZZZ-C**



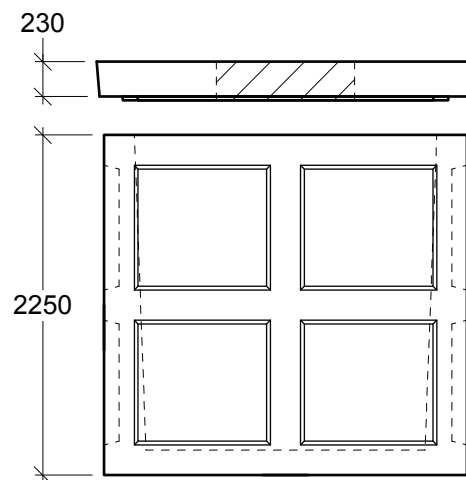
**Plan View - Chamber**



**Plan View - Roof Slab**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

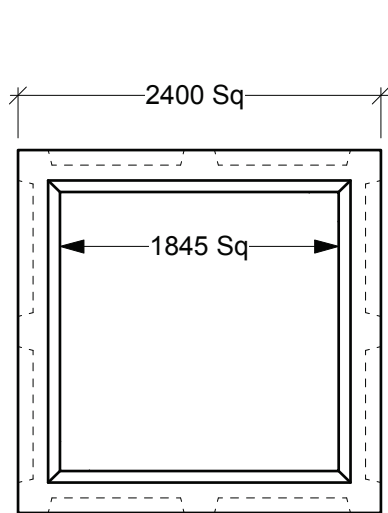
**2221 Chamber w/ MH Entry Roof Slab**

Chamber: 23,000 lbs / 10,430 kgs  
Roof Slab: 7,530 lbs / 3,420 kgs

Scale: 1:50 mm

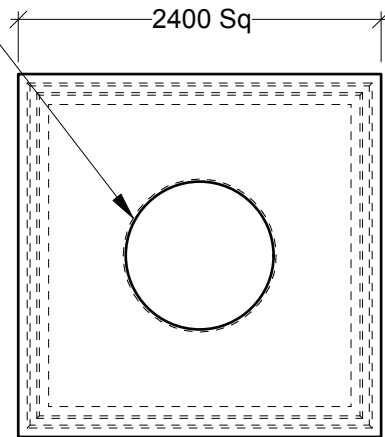
Rev: 28Jun08

Dwg#: **VC22-20-2221-C**

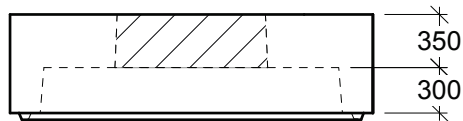


**Plan View - Chamber**

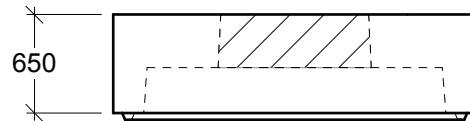
Opening Sized and Positioned to Suit



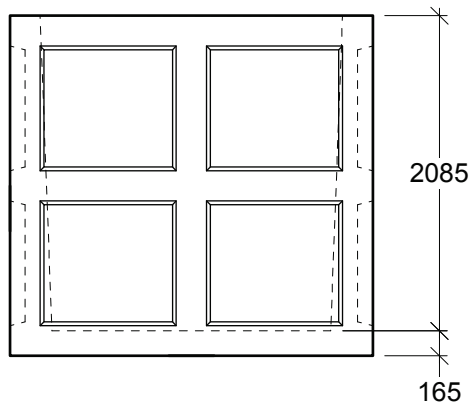
**Plan View - Roof Slab**



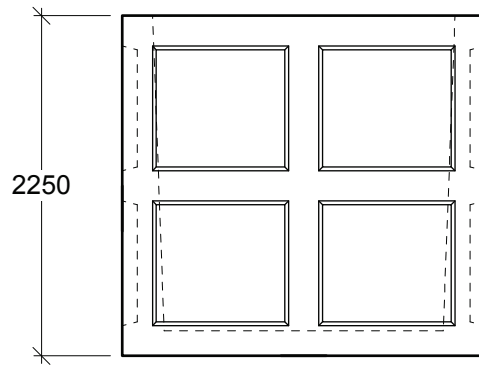
**End View**



**End View**



**End View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

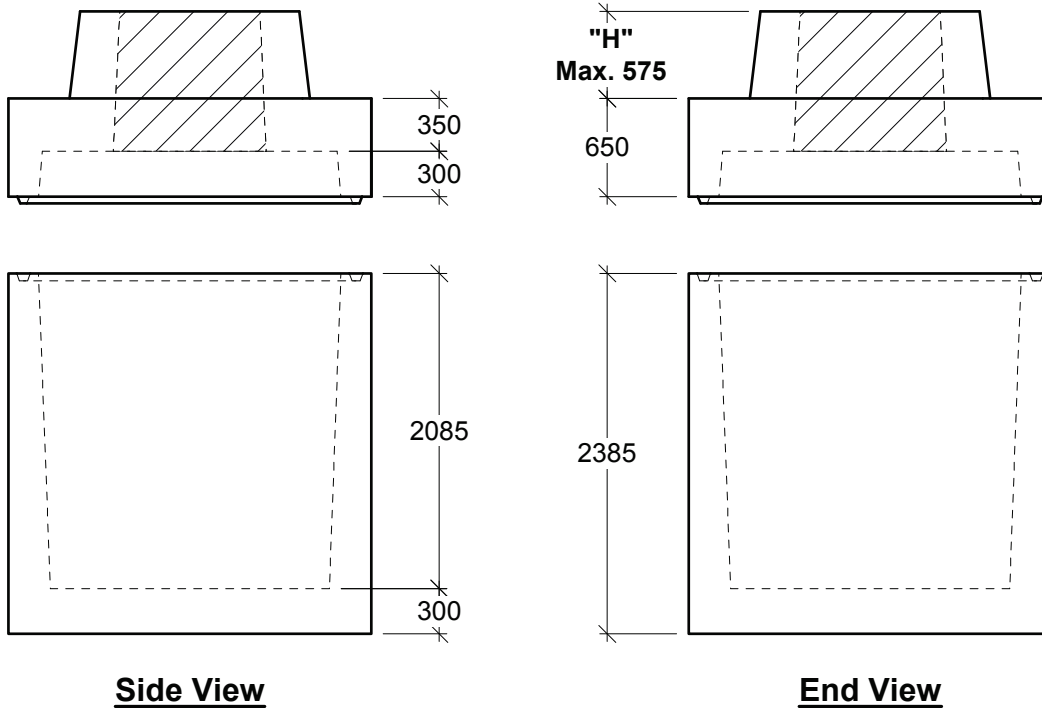
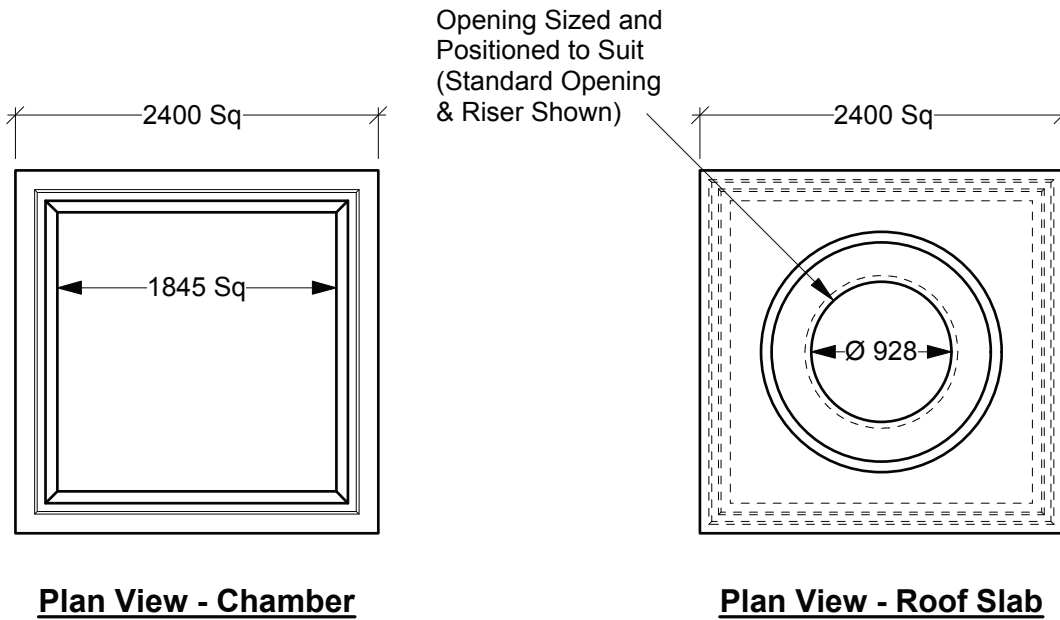
**2221 Chamber w/ MH Riser Roof Slab**

Chamber: 23,000 lbs / 10,430 kgs  
Roof Slab: 16,500 lbs / 7,480 kgs

Scale: 1:50 mm

Rev: 28Jun08

Dwg#: **VC22-MH-2221-C**



**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- **Heavy Wheel Load Design:** 125,000 lbs on 32"x32" Footprint
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

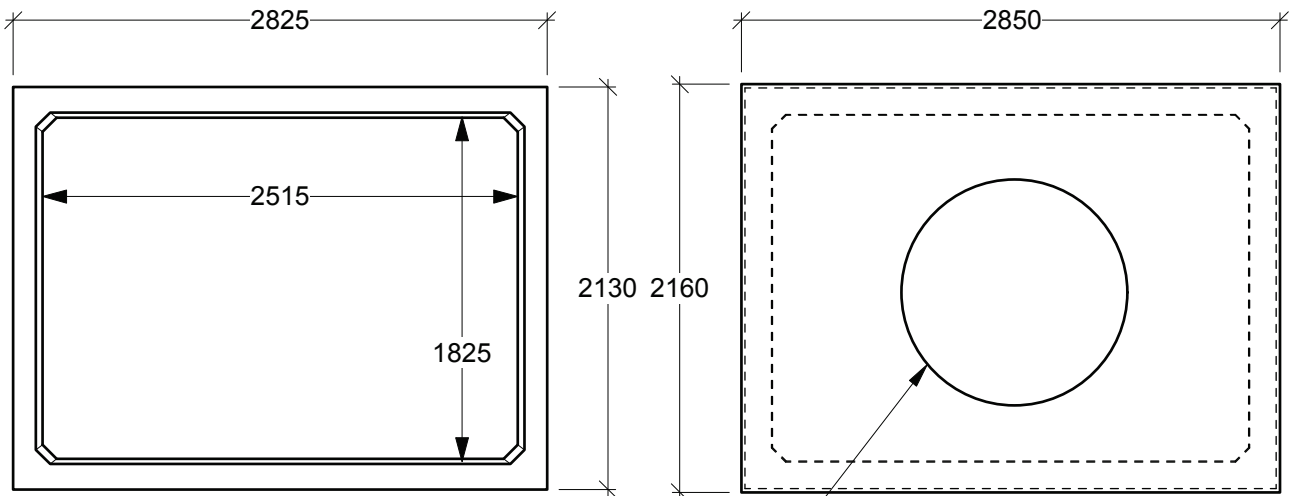
**2221 DP Chamber w/ MH Riser Roof Slab**

Chamber: 33,550 lbs / 15,220 kgs  
Roof Slab: 16,470 lbs / 7,480 kgs

Scale: 1:50 mm

Rev: 28Jun08

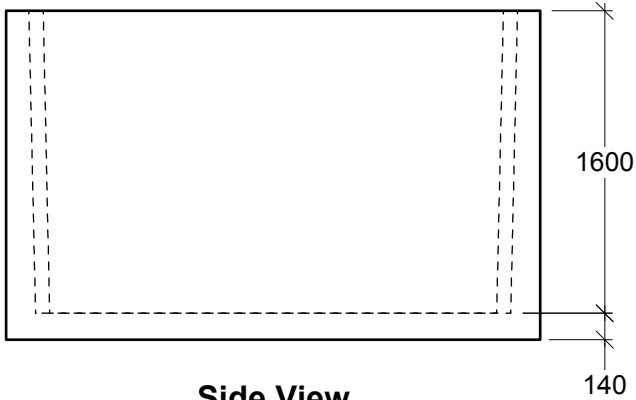
Dwg#: **VC22-DP-2221-C**



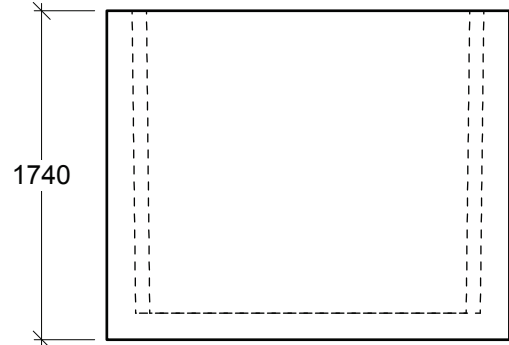
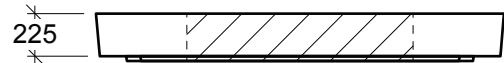
**Plan View - Chamber**

Opening Sized and  
Positioned to Suit

**Plan View - Roof Slab**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**251815 Firemeter Chamber w/ MH Entry Roof Slab**

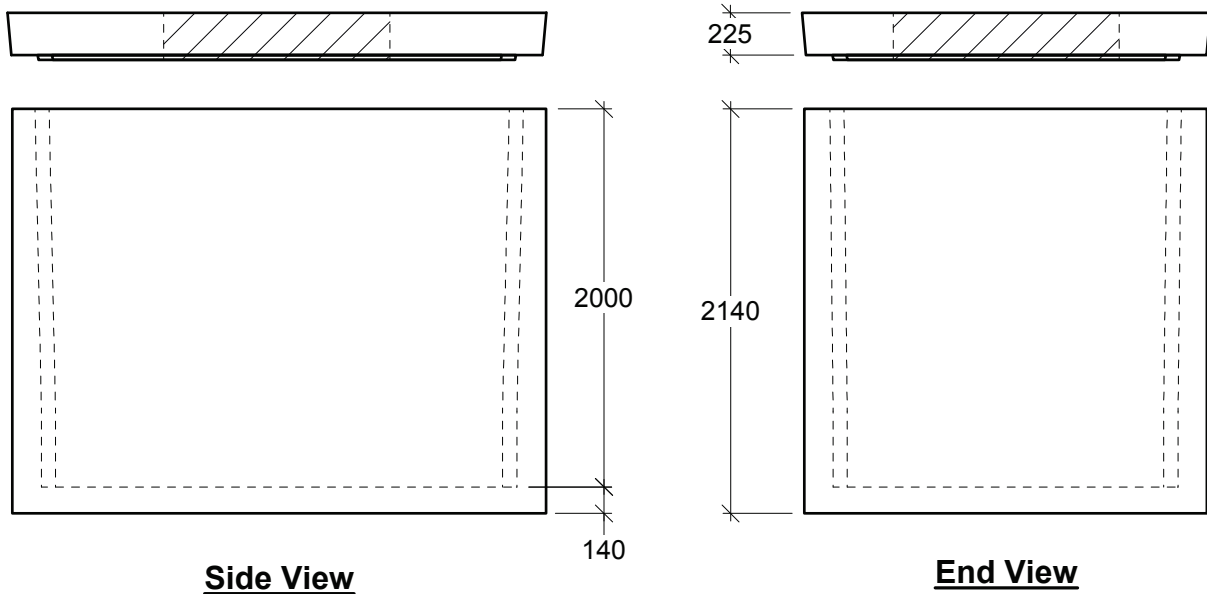
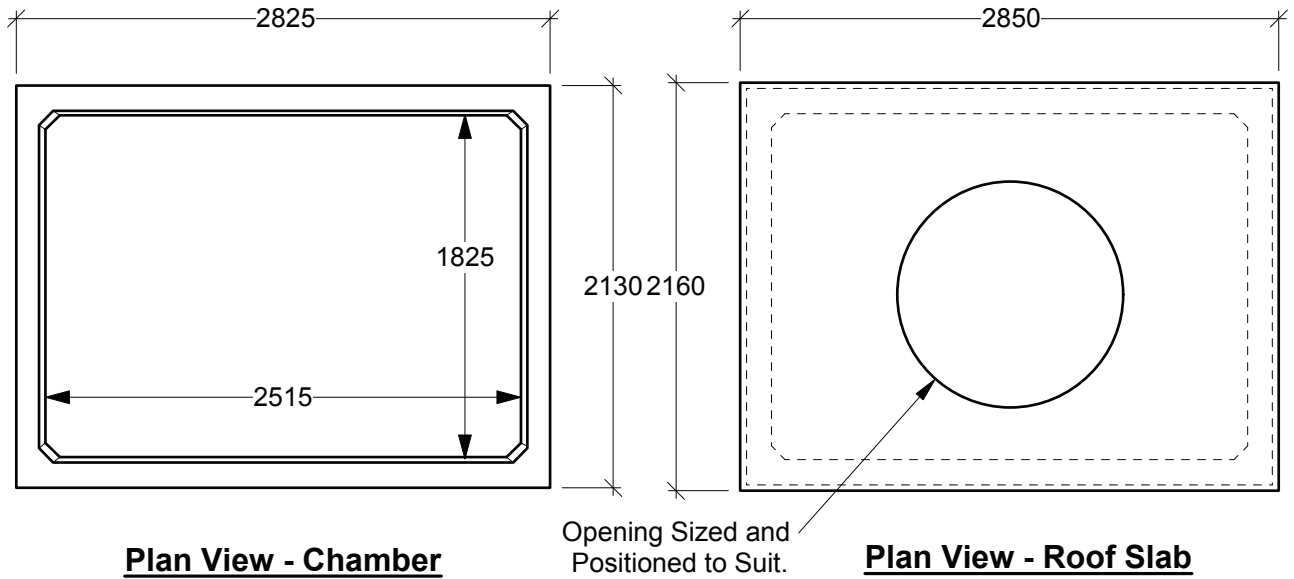
Chamber: 16,600 lbs / 7,540 kgs  
Roof Slab: 8,240 lbs / 3,740 kgs

Scale: 1:40 mm

Rev: 28Jun08

Dwg#: **VCFI-20-ZZZZ-C**





**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

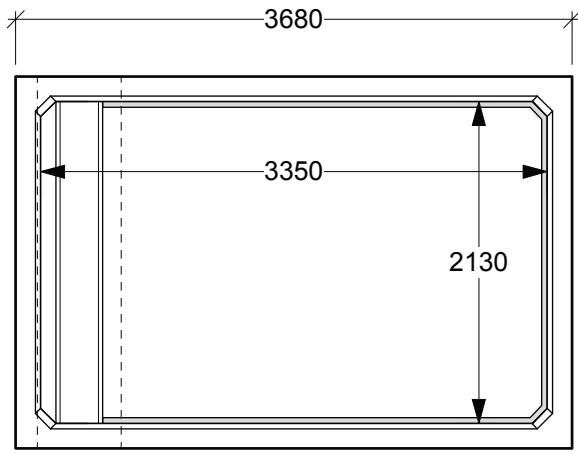
**251820 Deep Firemeter Chamber**

Chamber: 19,600 lbs / 8,880 kgs  
Roof Slab: 8,240 lbs / 3,740 kgs

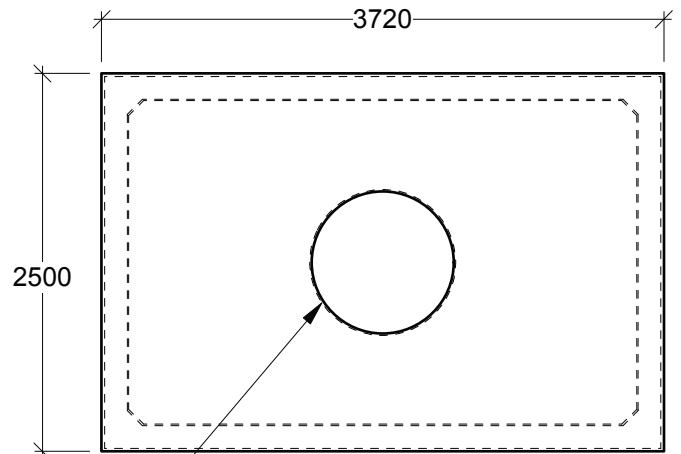
Scale: 1:40 mm

Rev: 28Jun08

Dwg#: **VCFI-20-DEEP-C**

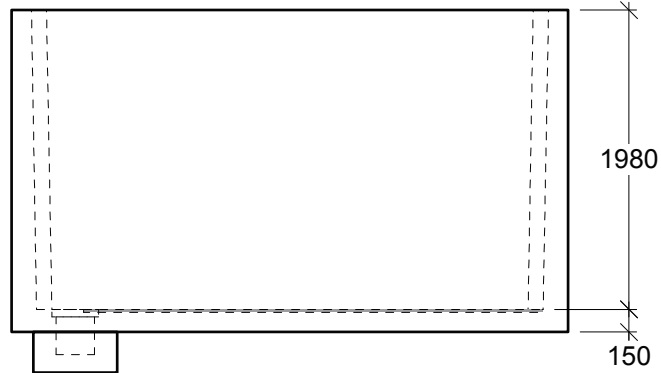
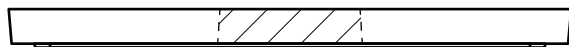


**Plan View - Chamber**

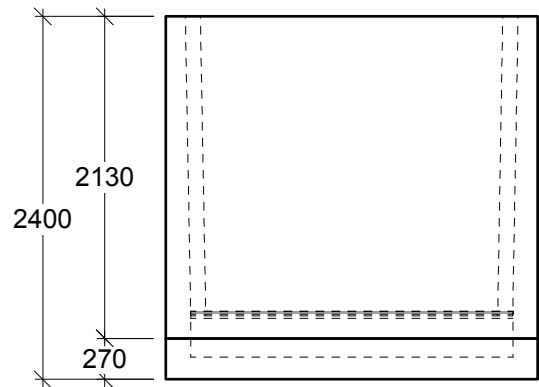
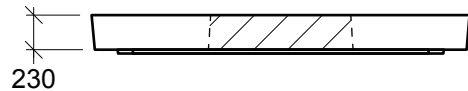


**Plan View - Roof Slab**

Openings Sized and Positioned to Suit



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

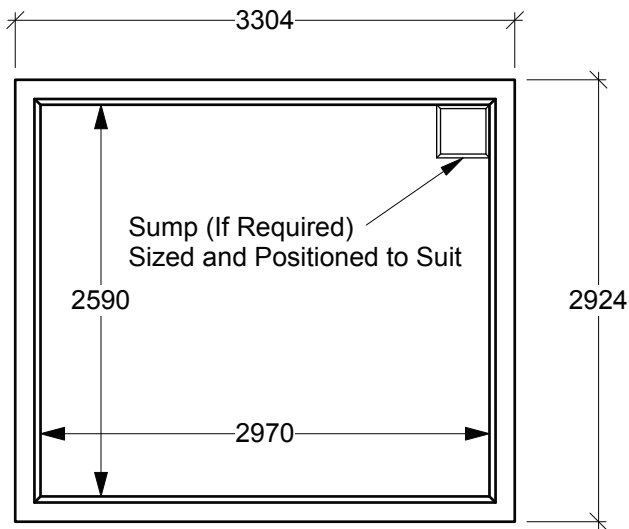
**332120 Meter Chamber**

Chamber: 26,700 lbs / 12,100 kgs  
Roof Slab: 11,800 lbs / 5,370 kgs

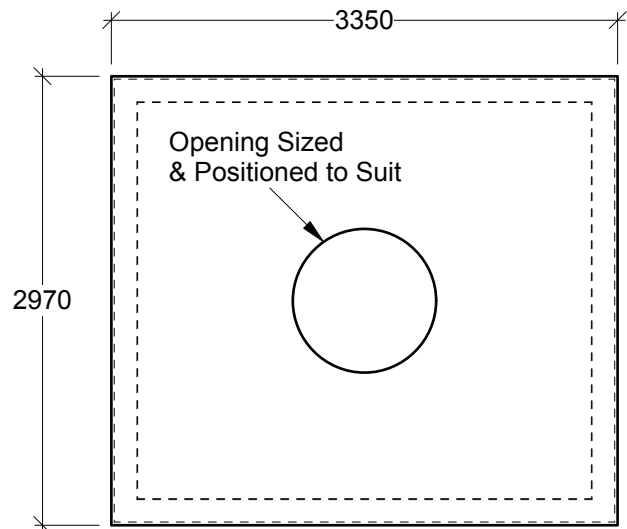
Scale: 1:50 mm

Rev: 28Jun08

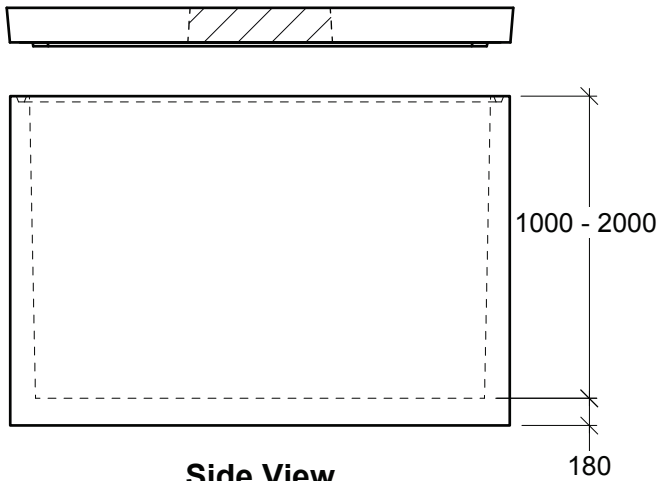
Dwg#: **VCMC-20-ZZZZ-C**



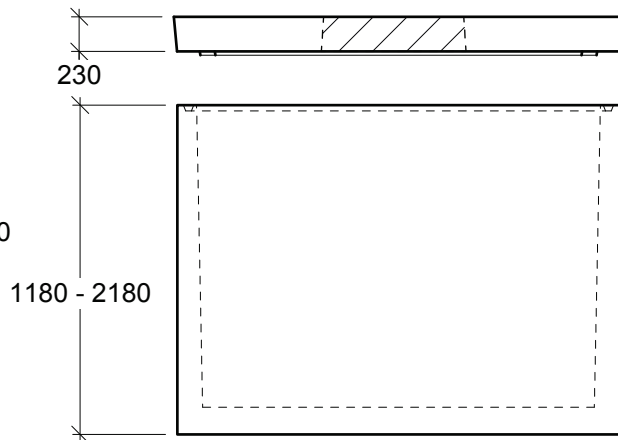
**Plan View - Chamber**



**Plan View - Roof Slab**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



**302610 Chamber**

19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

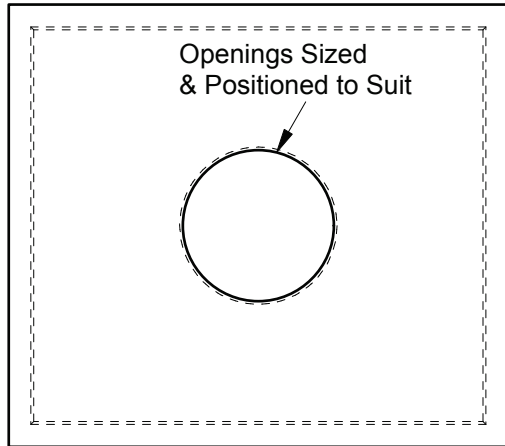
Tel (604) 576-1808  
info@aeconcrete.com

Chamber: 29,100 lbs / 13,200 kgs  
Roof Slab: 12,100 lbs / 5,850 kgs

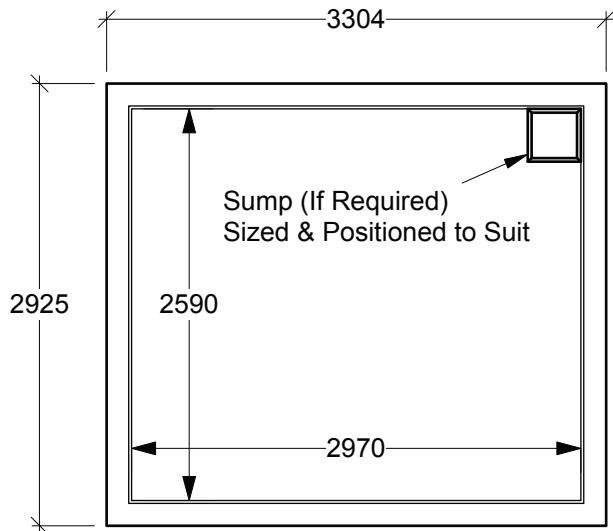
Scale: 1:50 mm

Rev: 28Jun08

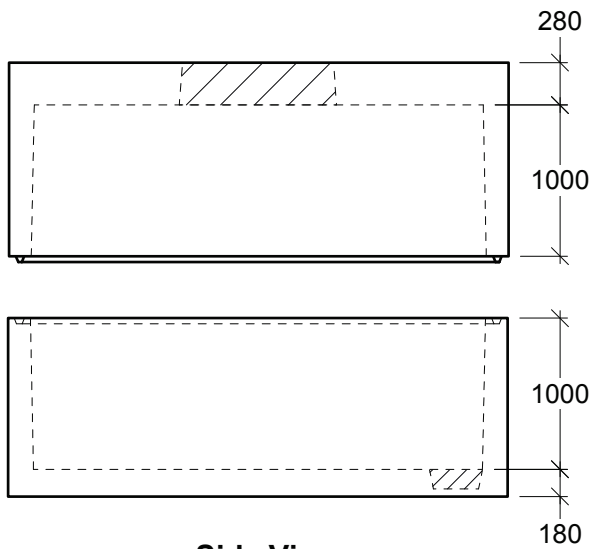
Dwg#: **VC30-25-ZZZZ-C**



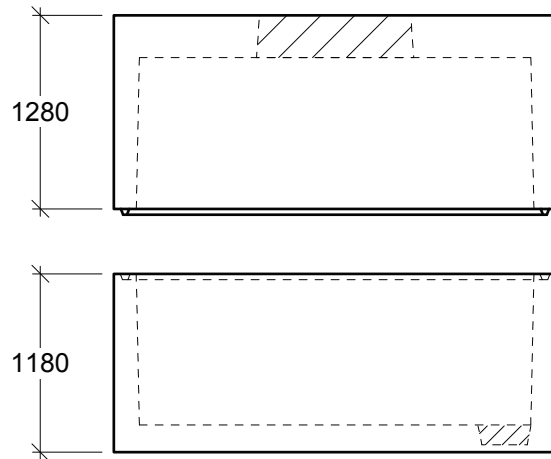
**Plan View - Top**



**Plan View - Bottom**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



**302620 Chamber**

19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

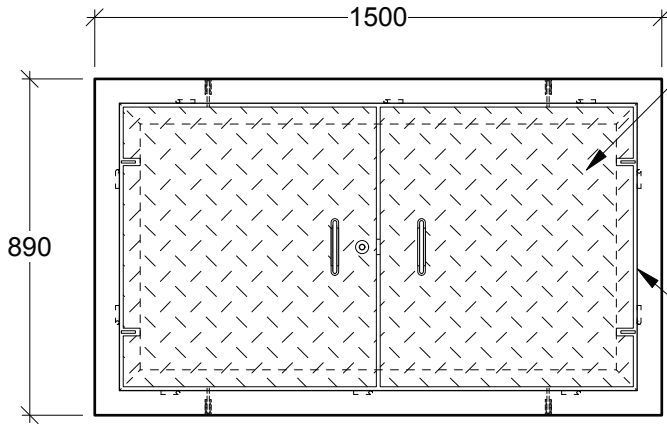
Tel (604) 576-1808  
info@aeconcrete.com

Top: 20,900 lbs / 9,470 kgs  
Btm: 20,000 lbs / 9,090 kgs

Scale: 1:50 mm

Rev: 28Jun08

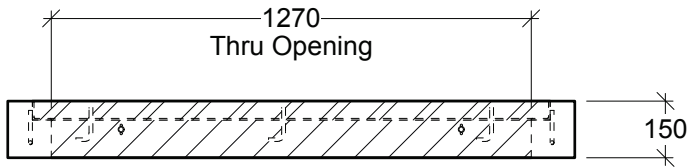
Dwg#: **VC30-20-ZZZZ-C**



Painted Black, Bolt-down, Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
 Remote Reader Holes  
 Weld Marking e.g. "ELEC"

Galvanized Steel Frame

**Plan View**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Site Installation, Backfilling, Suitability for Use and Engineering Design Approval is the responsibility of others



19060 - 54th Avenue  
 Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
 info@aeconcrete.com

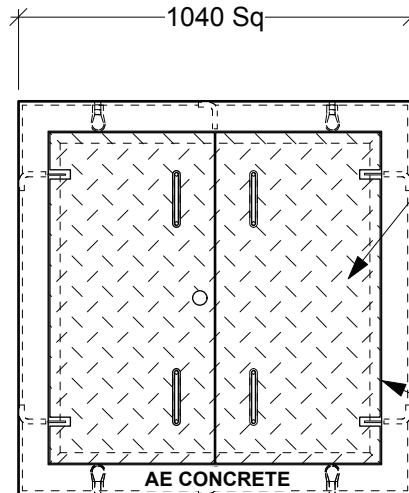
**243 Collar & Lid Assembly**

Collar & Lid: 610 lbs / 280 kgs

Scale: 1:20 mm

Rev: 22Jul13

Dwg#: **SVZZ-51-0243-C**



Painted Black, Bolt-down,  
Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
Remote Reader Holes  
Weld Marking e.g. "ELEC"

Galvanized Frame

**Plan View**



**Side View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Steel Products manufactured under CSA W47.1 in accordance to CSA W59
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

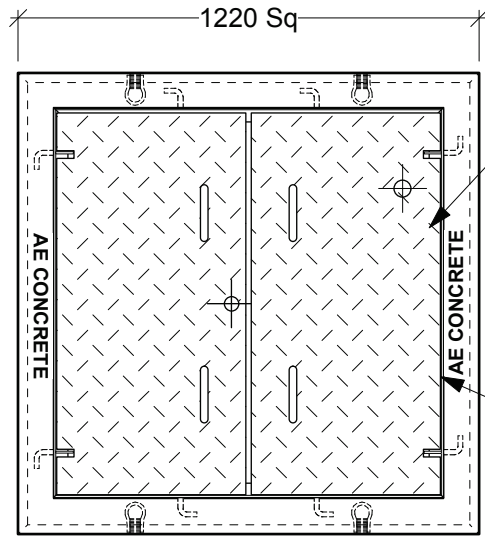
**4040 Collar & Lid Assembly**

Collar & Lid: 480 lbs / 220 kgs

Scale: 1:20 mm

Rev: 22Jul13

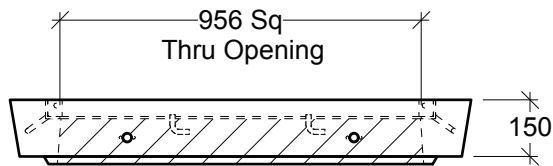
Dwg#: **SVZZ-51-4040-C**



Painted Black, Bolt-down,  
Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
Remote Reader Holes  
Weld Marking e.g. "ELEC"

Galvanized Frame

**Plan View**



**Side View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

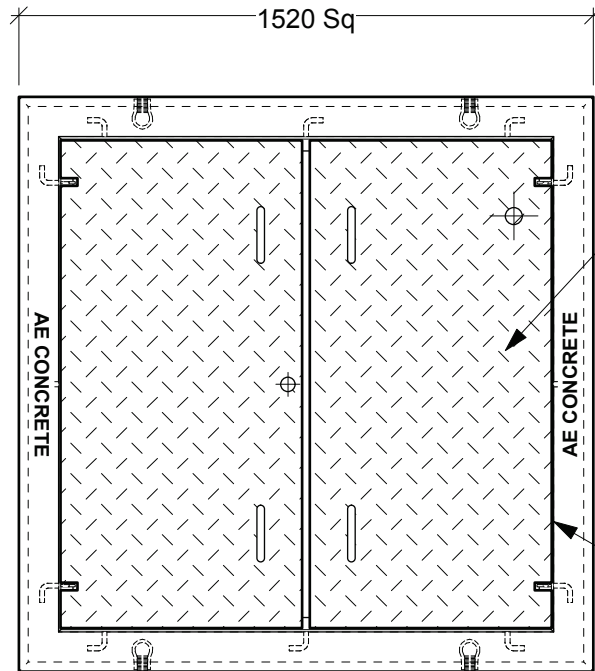
**1.2m Collar & Lid Assembly**

Collar & Lid: 485 lbs / 220 kgs

Scale: 1:20 mm

Rev: 28Jun08

Dwg#: **SVZZ-51-1200-C**

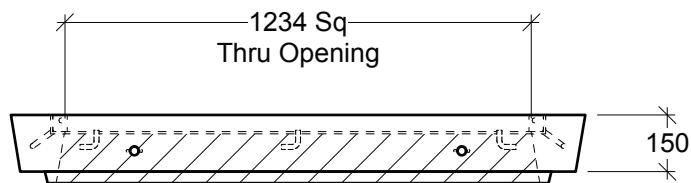


Painted Black, Bolt-down,  
Steel Checker Plate Lids

**Options:** Galvanizing, Padlock Recess  
Remote Reader Holes  
Weld Marking e.g. "ELEC"

Galvanized Frame

**Plan View**



**Side View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**1.5m Collar & Lid Assembly**

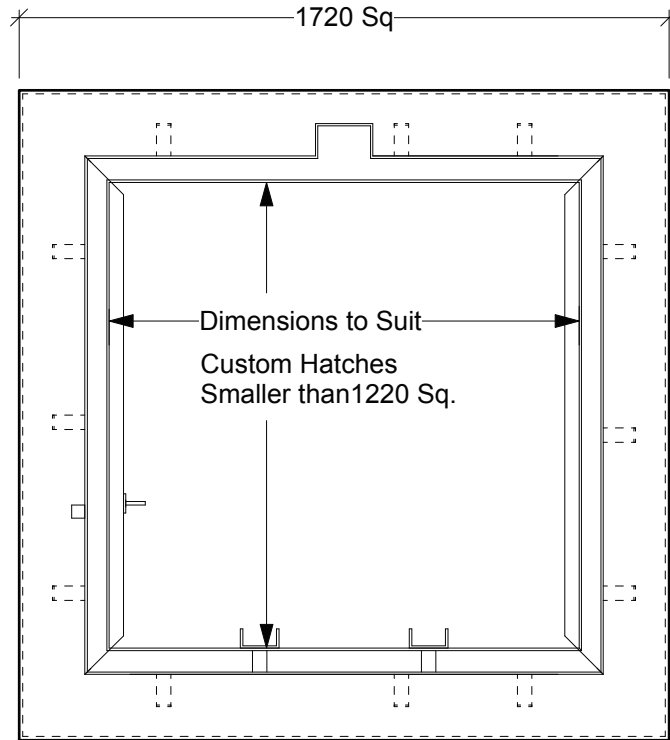
Collar & Lid: 930 lbs / 430 kgs

Scale: 1:20 mm

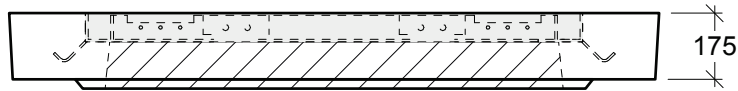
Rev: 16Jul15

Dwg#: **SVZZ-51-1500-C**





**Plan View**



**Side View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Site Installation, Backfilling & Suitability for Use is the responsibility of others

**Customizations Available:**

For Hatch Frame Deeper than 100mm & or Heavy Traffic Applications.



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

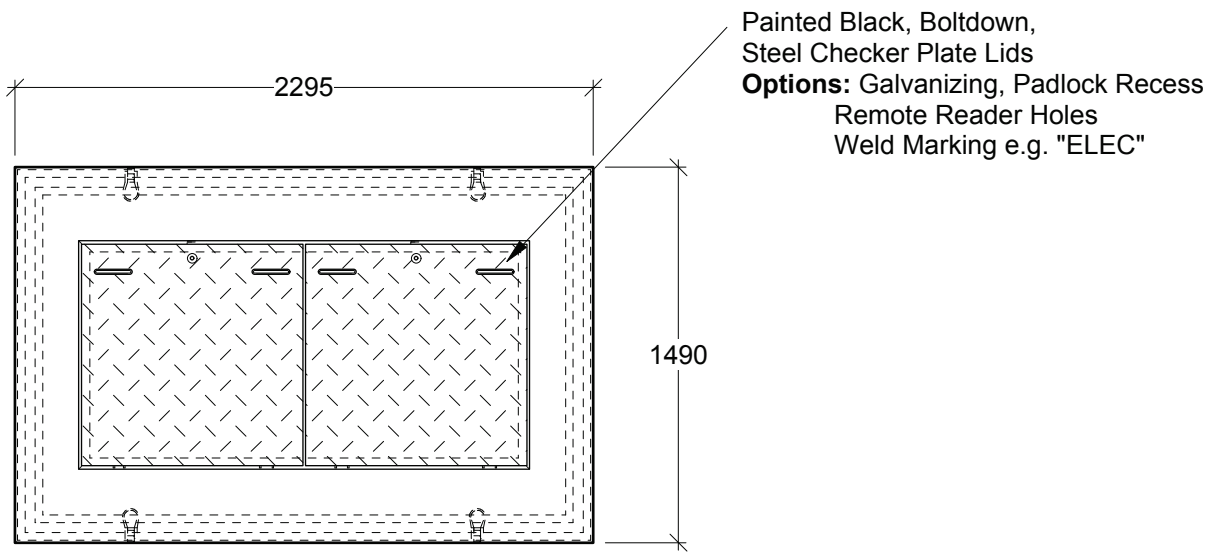
**1.7m Collar w/ Hatch Cast In**

Roof Slab (Solid): 3,110 lbs / 1,420 kgs  
Roof Slab (w/ Opening): 1,500 lbs / 690 kgs

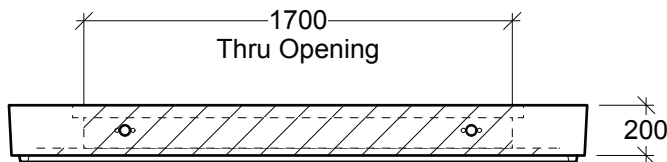
Scale: 1:20 mm

Rev: 28Jun08

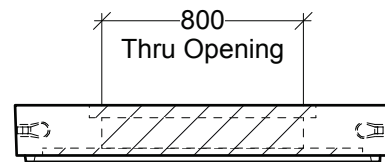
Dwg#: **VC17-AA-ZZZZ-C**



**Plan View**



**Side View**



**End View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

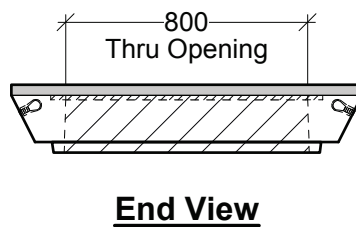
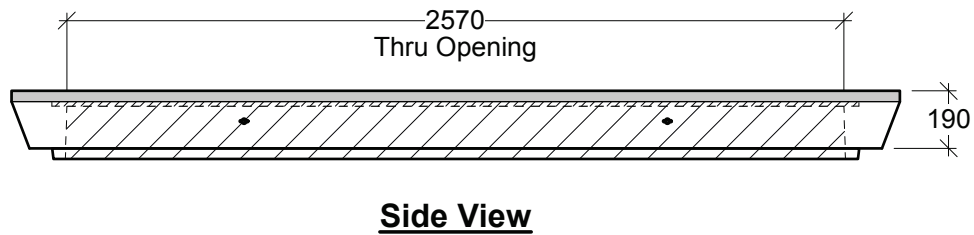
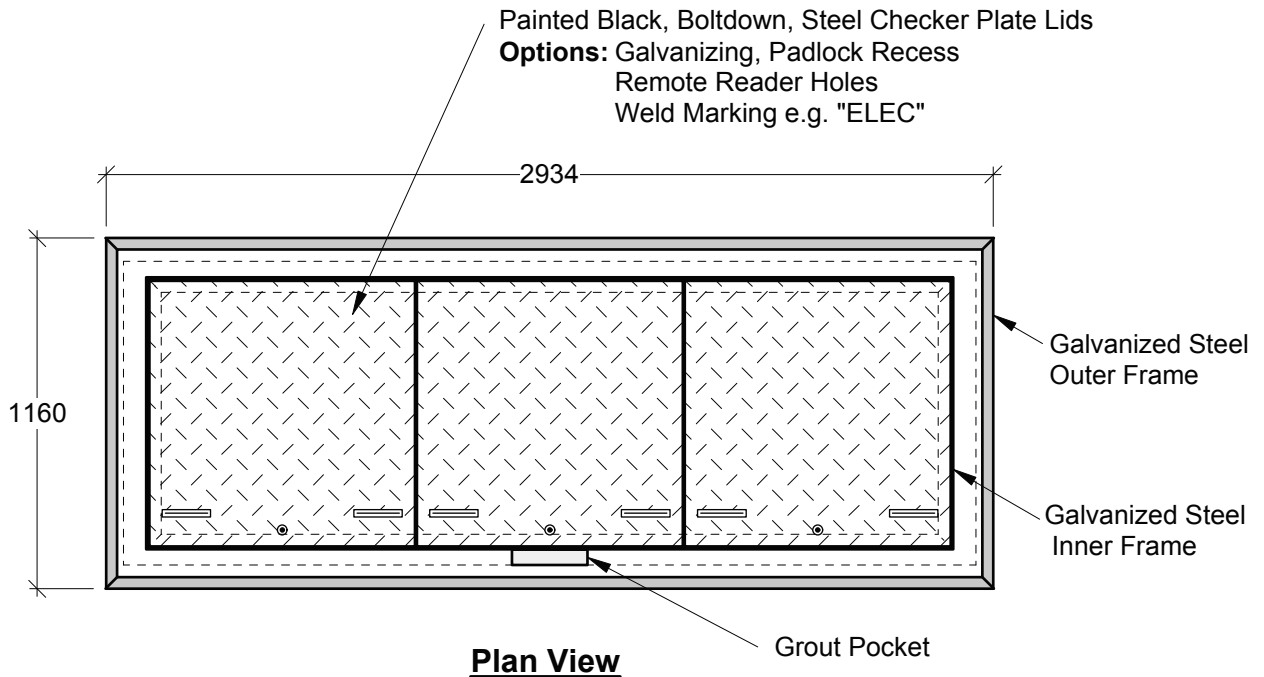
**2121 Collar & Lid Assembly**

Collar & Lid: 2,500 lbs / 1,145 kgs

Scale: 1:30 mm

Rev: 28Jun08

Dwg#: **VC21-51-2121-C**



**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Boulevard (Off-Road) Use - H-20 Static Loading
- Steel Products manufactured under CSA W47.1 in accordance to CSA W59
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
 Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
 info@aeconcrete.com

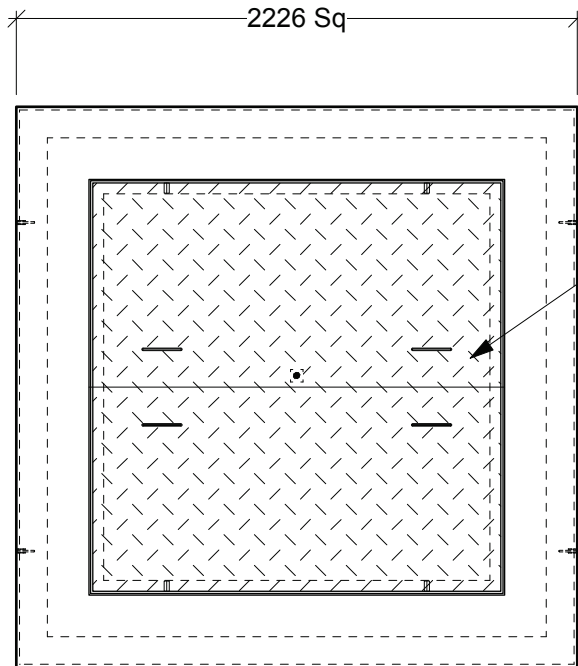
**832 Comm Collar & Lwt Lid Assembly**

Collar & Lid: 1,720 lbs / 790 kgs

Scale: 1:25 mm

Rev: 28Jun08

Dwg#: **SVZZ-55-0832-C**



Painted Black, Bolt-down,  
Steel Checker Plate Lids  
**Options:** Galvanizing, Padlock Recess  
Remote Reader Holes  
Weld Marking e.g. "ELEC"

**Plan View**



**Side View**

**General Notes:**

- Product manufactured in accordance with CSA A23.4
- Lift Points Provided (See Shop Drawing for Quantity & Locations)
- Designed for Roadway Use - H-20 Traffic Loading
- Design and Provision of Thrust Blocks is the responsibility of others
- Site Installation, Backfilling & Suitability for Use is the responsibility of others



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**2221 Collar & Lid Assembly**

Collar & Lid: 3,150 lbs / 1,430 kgs

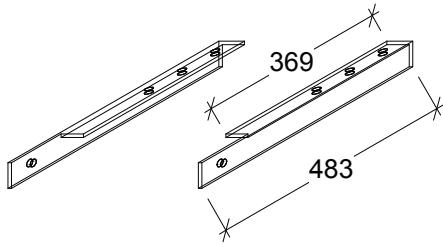
Scale: 1:30 mm

Rev: 20Mar14

Dwg#: **VC22-51-2221-C**

**Ceiling Mount Brackets**

- Shipped Loose



Top Two Rungs are Reinforced For Safety Post

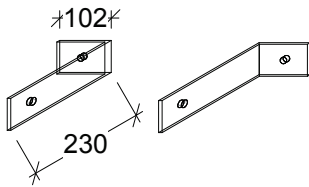
**Safety Post**

Extends and Locks 915mm Above Ladder

155 Standard Offset

**Wall Mount Brackets**

- Contractor Can Specify Custom Length
- Bracket can be Welded to Ladder at Specified Location
- Typically Shipped Loose
- MH Mount Brackets Available upon Request



Standard Dimensions

**General Notes:**

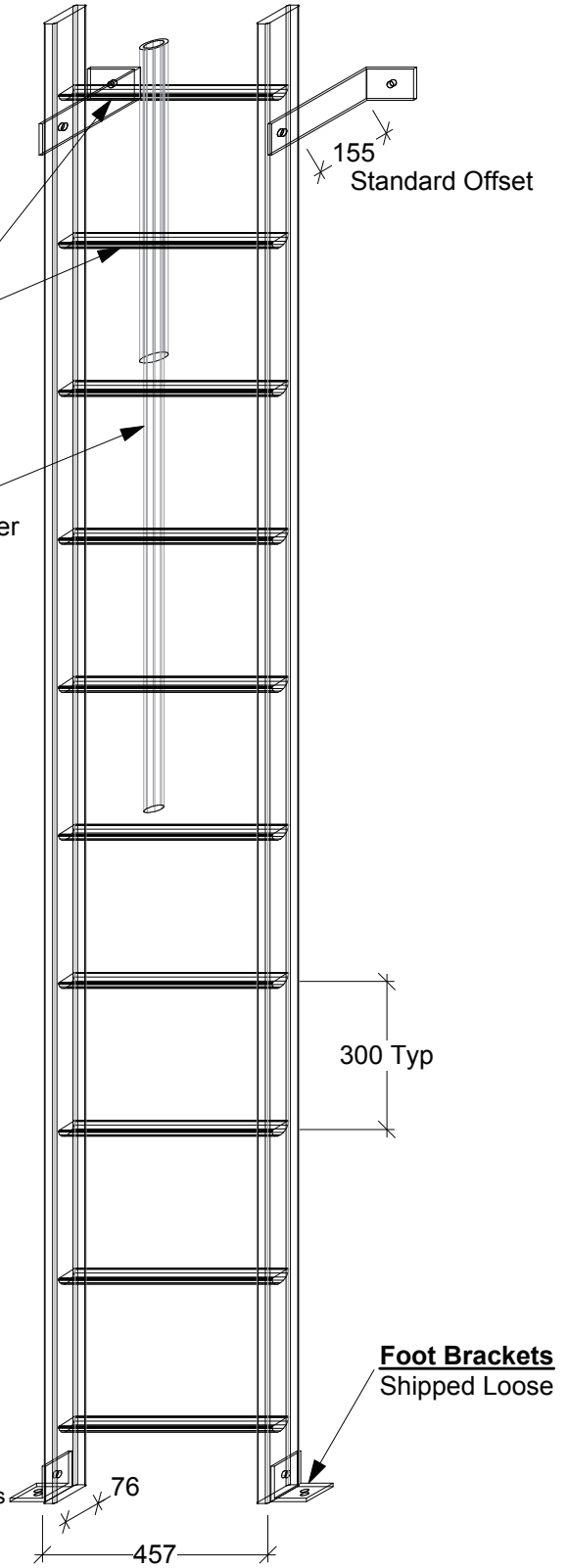
- Meets or Exceeds CSA Grade 1 Heavy Duty , ANSI Type 1A & OSHA (WLL: 300 lbs)
- Standard Ladder Lengths are 3.0m, 3.66m, & 6.0m (10', 12', 20')

**Hardware Required to Install (Supplied & Installed by Others):**

- 1/2"Ø SS Bolts
- 1/2"Ø SS Hilti Anchors

**Installation Instructions:**

- Ladders Typically Supplied Over Length to allow for Risers
- Ladders over 3.66m Long are Supplied with an additional Center Support
- Cut Ladder to Length Ensuring Clearance to the Access Hatch or MH Casting
- Top Rung to be within 500mm of Finished Grade Elevation
- Top Brackets to be Mounted within Top 2 Rungs (203 from Top of Ladder)
- Manhole Mount Brackets Available Upon Request
- Install Foot Brackets to Ladder by Drilling and Bolting through Ladder Frame (1/2"Ø SS Bolt)
- Position Ladder & Mark Holes in the Ladder Frame for the Ceiling / Wall Brackets
- Drill Holes in Ladder Frame
- Install the Ceiling or Wall Mount Brackets to Ladder (1/2"Ø SS Bolts) 1 Each (Typ 4 to 6)
- Place Ladder in Position & Hilti Bolt Brackets to Floor & Ceiling / Wall (1/2"Ø SS Hilti Anchors)
- Confirm that All Bolts are Tight, Ladder is Secure, Safety Post Operates Smoothly & doesn't Interfere with Access Cover



Foot Brackets Shipped Loose



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

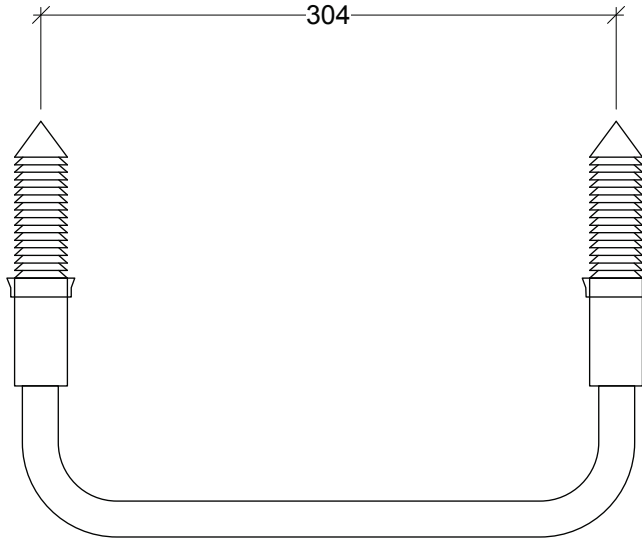
Tel (604) 576-1808  
info@aeconcrete.com

**Aluminum Ladder w/ Safety Post**

Scale: N.T.S.

Rev: 20Feb17

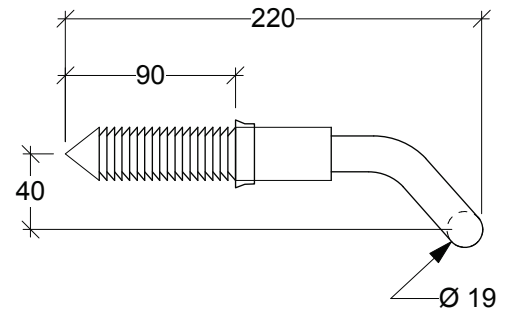
Dwg#: **RSLA-MB-3050-C**



**Plan**



**Front View**



**Side View**



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

**Aluminum Ladder Rung**

Rung: 0.75 lbs / 0.4 kgs

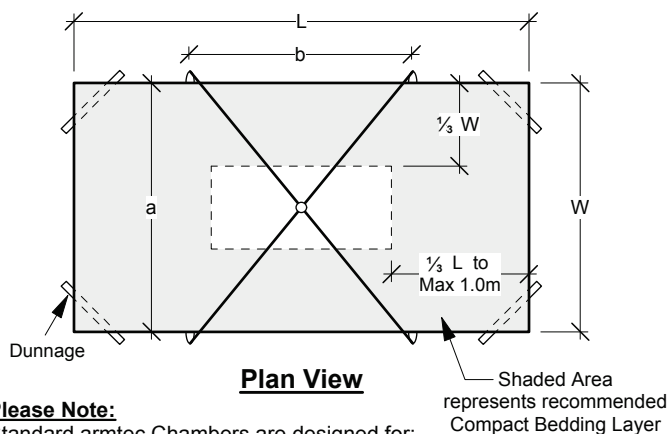
Scale: 1:4 mm

Rev: 28Jun08

Dwg#: **VCLA-19AL-RUNG-C**

## Chamber Installation:

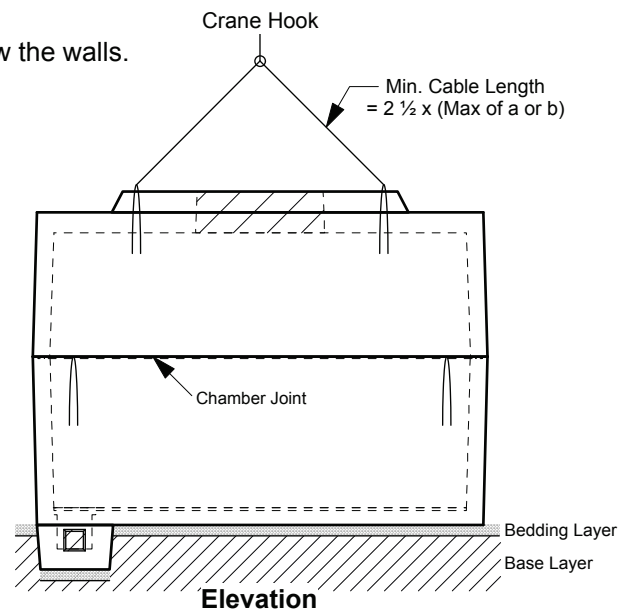
1. **This information is a guideline only** - Please ensure you comply with local safety codes and regulations. Locate and protect all above and below ground utilities prior to beginning installation.
2. Review project specifications for the excavation and to select the appropriate base material, thickness & compaction for the site location as approved by the Project Engineer.  
(Typically 150-300mm Thick of 40mm minus Clear Aggregate Base)
3. Excavate for Chamber with reference to dimensions on the armtec shop drawings.  
For ease of installation, allow 300 to 600mm of Space on all sides of chamber walls.  
Allow adequate depth for base and bedding layers for any sump protrusions as well as risers and castings.  
Use shoring as required by WCB regulations.
4. Minimum 50mm thick Bedding Layer of 20mm Road Mulch suggested. Slope Bedding Material 0.5% to Sump End.  
Compact Bedding Layer for Perimeter of chamber footprint area only. (See Sketch)  
eg: Centre Area under chamber Not Compacted.
5. Double Check excavation depth to product assembled height, prior to placing bottom section.
6. Ensure Minimum Cable Length =  $2 \frac{1}{2}$  times the Longest Distance Between Lift Points (a or b)  
or use spreader bar to lift vertically above lift points. Confirm distances for **Each** section.  
Place Bottom Section using the Lift Points detailed on the shop drawings.
7. Install components as required eg: Piping, Thrust Blocks Designed & Supplied by Others.
8. Install Joint Mastic in Perimeter Keyway.  
Ensure keyway is clear of all debris before applying. Butt joints (NOT overlap) & knead together.
9. Place Top Section, Ensuring Correct Keyway Alignment.
10. Apply Non-Shrink Grout to Inside & Outside of Chamber Joint.
11. Backfill around chamber evenly and in standard lifts to the required grade.  
**Note:** Contact armtec if the Depth of Bury increases by more than 300mm from the armtec Shop Drawings.  
Backfill should be of a good compacting material to prevent the occurrence of point loads.  
No voids should remain between the vault walls and native soil of excavation.  
All backfilling is the responsibility of the customer/contractor.
12. If storage Required prior to installation -  
Ensure Dunnage is placed across 4 corners, directly below the walls.



### Please Note:

Standard armtec Chambers are designed for:

- H-20 Traffic Loads or CSA-S6 (CL-625)
- To a Maximum 2.0m Bury Below Grade
- Water Table at Grade
- Subject to Required Openings (Size, Quantity, Orientation & Location)
- Buoyancy Only Reviewed upon Request
- Thrust Blocks are to be Designed & Supplied by Others and the Loads Transferred to the Perimeter Ceiling, Walls & Floor.



19060 - 54th Avenue  
Surrey, B.C. V3S 8E5

Tel (604) 576-1808  
info@aeconcrete.com

## Chamber Installation Template

This drawing and ALL information is and shall remain the property of Armtec Limited Partnership and any use, alterations, or reproductions without the expressed written consent of Armtec Limited Partnership is STRICTLY PROHIBITED.

Scale: NTS

Rev: 07Jun17

Dwg#: **VCZZ-INST-CH-C**