





Contact[®] & Recharger[®] Septic Chambers



Product Booklet
for CULTEC Septic Leachfield Systems

The Founder of Plastic Chamber Technology
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CULTEC Septic Leachfield Systems 101 - The Basics

A septic system achieves sewage treatment and disposal for rural homes where centralized sewage systems may not be available. It is composed of a septic tank and a drainfield. The sewage flows from the house to the septic tank where the solids are removed; the wastewater then flows to the drainfield where it is allowed to soak into the ground.

The drainfield (leachfield, disposal trench or sub-surface disposal field) is an underground conduit network buried below the surface of the ground. The field distributes the effluent from the septic tank over a large area allowing it to percolate through the soil.

Conventional drainfields have used perforated pipe and stone systems or concrete galleries to distribute the effluent. CULTEC's Contactor® and Recharger® plastic chambers may be used in place of these conventional systems for more effective installation.

Our plastic septic chambers have been widely accepted in most parts of the United States for gravel-less septic leachfields as replacements for concrete galleries and conventional pipe and stone systems. Contact area is maximized by the fully open bottoms, perforated sidewalls, and the use of CULTEC No. 410™ Non-woven Geotextile.

Due to their greater contact area, CULTEC chambers are commonly allowed to reduce the overall system sizing requirements up to 50% when approved by the local authority. *(Check your local septic code.)*

This sizing reduction may be a key factor when choosing septic products for a residence with tight site constraints, existing landscaping or when area is desired for other structures such as a swimming pool.

Features & Benefits

- Less land area required than stone and pipe leachfields
- Greater contact with primary leaching area promotes maximum infiltration capabilities
- Gravel-less installation allows for less heavy equipment time
- Overlapping rib connection is fast and easy to install
- Long structural life expectancy
- Able to transport in a pickup truck and hand-carry to placement
- System sizing reductions allowed in most areas *(Check your local septic code.)*
- Optional inspection port opening on each unit
- Repeating support panel adds to strength of installation
- Chemically resistant
- Variety of sizes available
- No separate end plates required
- Integrated internal and external pipe supports
- Manufactured in ISO 9001:2008 certified facilities
- International Association of Plumbing and Mechanical Officials (IAPMO) certified





Gravel-less septic application using CULTEC chambers and CULTEC No. 410™ non-woven geotextile. Lightweight chambers minimize heavy equipment time and labor.

For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

Chamber + Non-woven Geotextile = A Two-Part System

Use of a non-woven polypropylene geotextile is required for CULTEC Contactor® and Recharger® septic installations to prevent soil intrusion and promote infiltrative capability.

For CULTEC gravel-less septic systems, the non-woven geotextile is placed directly over the chamber.

For septic installations using stone, the non-woven geotextile is placed over the top of the stone prior to final backfilling.

CULTEC distributes its own CULTEC No. 410™ Non-woven Geotextile to be used with the Contactor® and Recharger® septic chambers.

Substituted fabrics must meet or exceed the properties of the CULTEC No. 410™ Non-woven Geotextile listed below in order to not void the warranty.



Properties	Test Method	Test Results
Appearance		Black
Grab Tensile	D 4632	90 lbs 400 N
Elongation	D 4632	50%
Trapezoid Tear	D 4533	35 lbs 155 N
Puncture	D 4833	55 lbs 245 N
Mullen Burst	D 3786	175 psi 1205 kPa
AOS	D 4751	70 U.S. sieve .21 mm
Permittivity	D 4491	2.0 sec ⁻¹
Permeability	D 4491	.2 cm/sec
Water Flow	D 4491	145 gal/min/sf 5908 l/min/sq.m
UV Stability	D 4355	70%

Pipe Distribution Systems - PDS

CULTEC promotes the placement of perforated pipe along the top of the outside of their septic chambers. A non-woven geotextile covering is then placed over the pipe and chamber. This method of installation is called a Pipe Distribution System or PDS system.

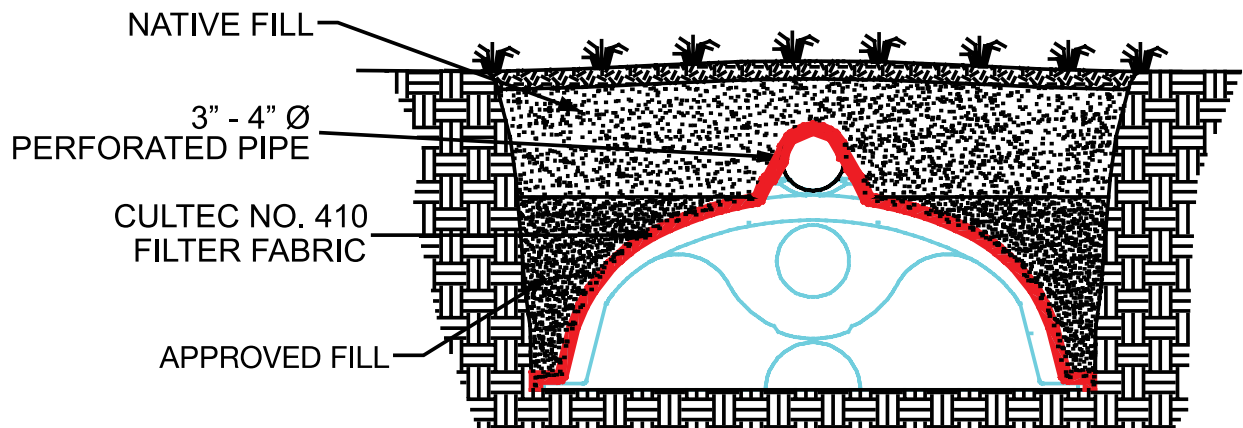
Wastewater is discharged through the perforations of the pipe directly onto the non-woven geotextile. The non-woven geotextile works as a sponge and absorbs the effluent and increases the total surface area of the septic system through capillary action. Overall concentration of effluent per square foot is thereby decreased.

When the pipe is on top of the unit, the suspended solids settle out on the outside of the chamber between the fabric and the sidewall bottom of the unit. This allows for the open bottom within the chamber to perform at maximum effectiveness since it is not being contaminated by the settling out of particles.

The effectiveness of the primary leaching base area is increased by allowing suspended solids to settle on the outside of the chamber rather than contaminating the open bottom area beneath the chamber.

A PDS system may either be a gravity system that relies on gravity to distribute the effluent or may be a pressure distribution system that employs a lift station with a pump to dispense the wastewater to the leachfields.

This method of installation may not be approved in all areas, check with your local septic code.



CULTEC Contactor® Series Specification Information

	Contactor® Field Drain C-4™	Contactor® EZ-24™	Contactor® 100™	Contactor® 100HD™	Contactor® 202™
Length	8.5'	8.5'	8'	8'	8.33'
	2.59 m	2.59 m	2.44 m	2.44 m	2.54'
Installed Length	8'	8'	7.4'	7.5'	7.0'
	2.44 m	2.44 m	2.29 m	2.29 m	2.13 m
Width	48"	16"	36"	36"	24"
	1219 mm	406 mm	914 mm	914 mm	610 mm
Height	8.5"	12"	12.5"	12.5"	24"
	216 mm	305 mm	318 mm	318 mm	610 mm
Invert Height	3"	6"	6"	6"	17"
	76 mm	152 mm	152 mm	152 mm	432 mm



Field Drain C-4

EZ-24

100

202

CULTEC Recharger® Series Specification Information

	Recharger® 150XLHD™	Recharger® 180HD™	Recharger® 280HD™	Recharger® 330XLHD™
Length	11'	7.33'	8'	8.5'
	3.35 m	2.23 m	2.44 m	2.59 m
Installed Length	10.25'	6.33'	7'	7'
	3.12 m	1.93 m	2.13 m	2.13 m
Width	33"	36"	47"	52"
	838 mm	914 mm	1194 mm	1321 mm
Height	18.5"	20.5"	26.5"	30.5"
	470 mm	673 mm	673 mm	775 mm
Invert Height	12"	14"	20.5"	24"
	305 mm	356 mm	521 mm	610 mm



150XLHD

180HD

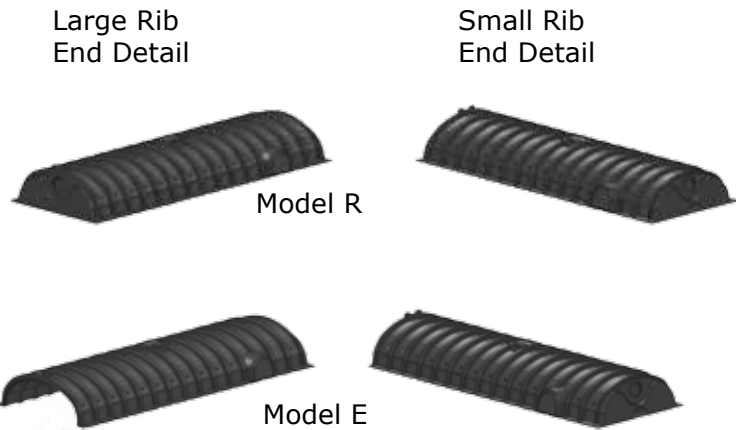
280HD

330XLHD

End Detail Information

Model R (or RHD for heavy duty version) is a **starter / stand alone** unit with two full endwalls. They are used to start lines or can be used singularly.

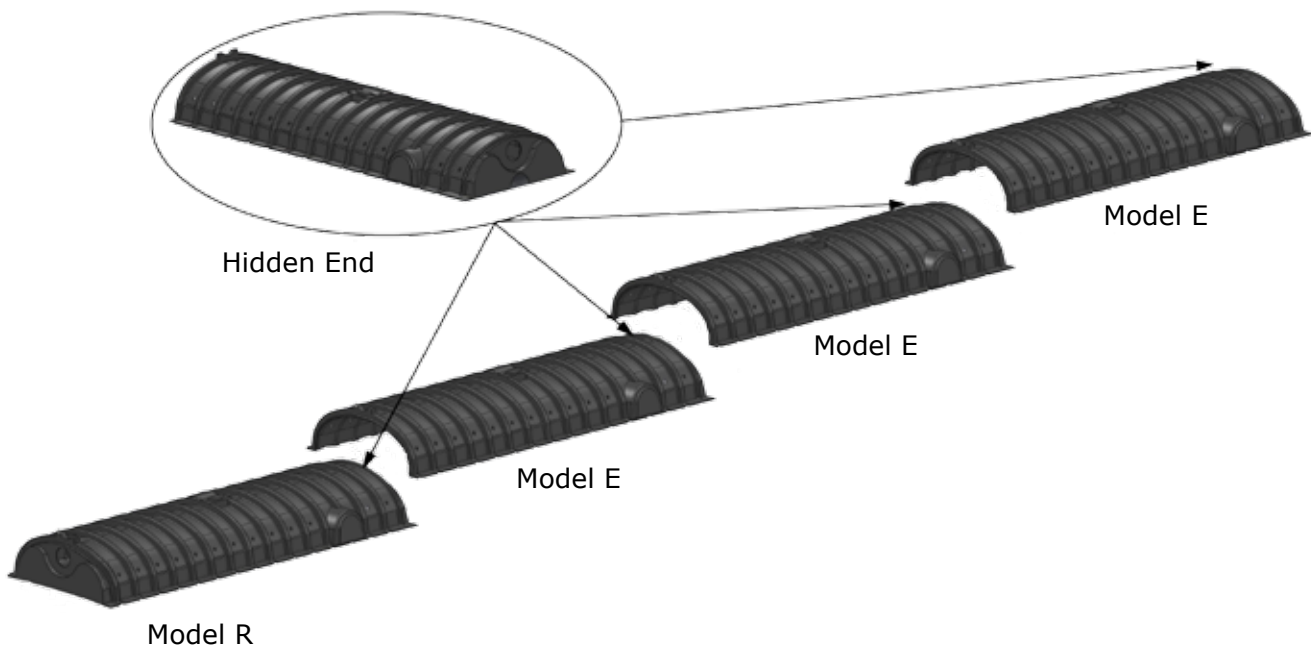
Model E (or EHD for heavy duty version) is a **middle / end unit** with one closed endwall and one open end. They are used to continue lines and also used to end a line.



CULTEC Typical Installation Method

Interlock Model R to E using the patented overlapping rib connection.

- Start each line with a Model R.
- Use Model E to continue the length of your line.
- End your line by using a Model E.

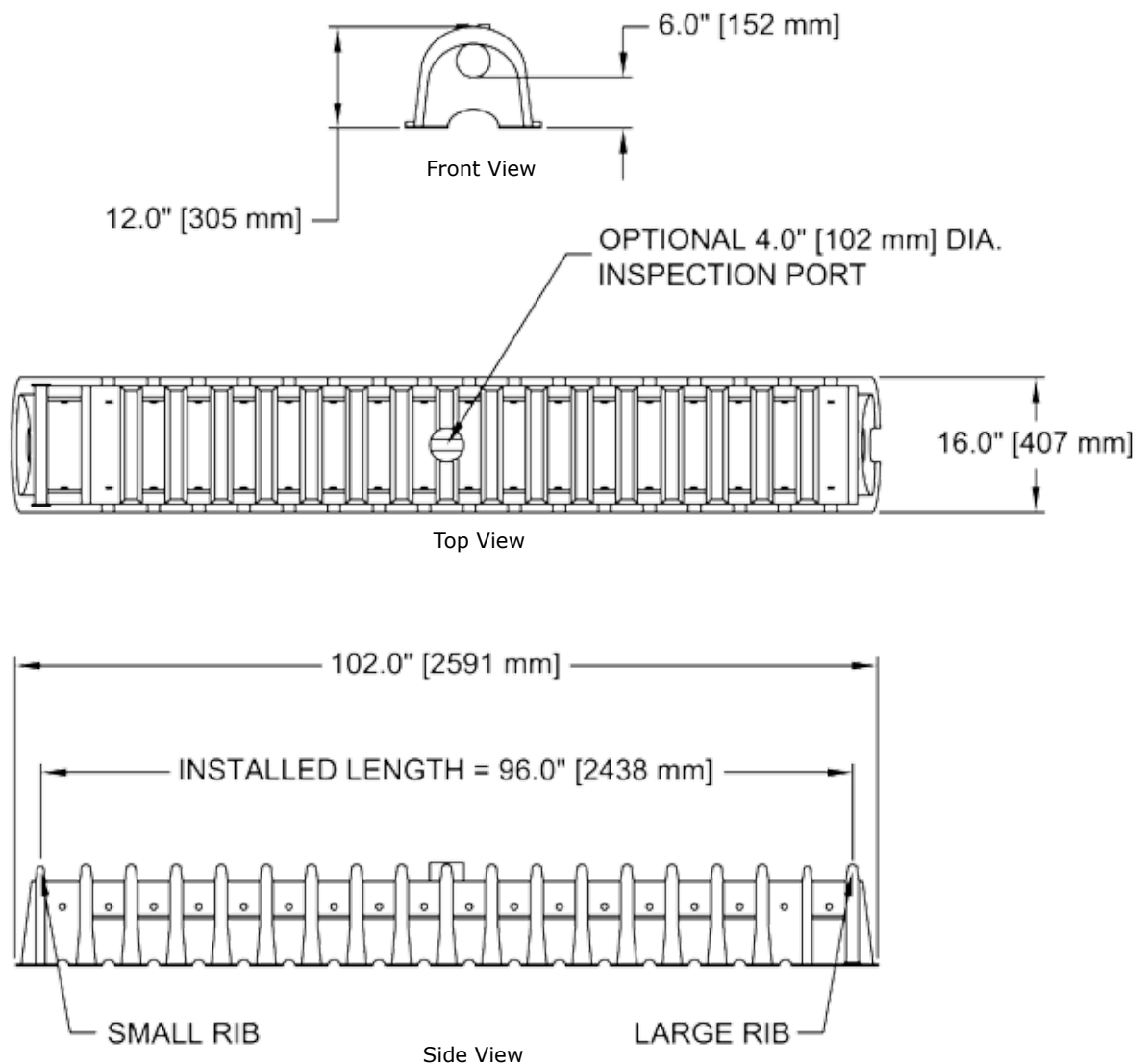


The overlapping rib connection used by CULTEC's chambers permit a curved line of installation. This is a beneficial quality when following land contours or a sweep around an obstruction is necessary.

CULTEC Contactor® EZ-24™

The Contactor® EZ-24™ is a low profile chamber. It is able to bend around obstacles with a deflection capability of 25' per 100' (7.62 m per 30.5 m). Available in both Standard and Heavy Duty.

Size (L x W x H)	8.5' x 16" x 12" 2.59 m x 407 mm x 305 mm
Installed Length	8' 2.44 m
Length Adjustment per Run	0.5' 0.15 m
Invert Height	6" 152 mm



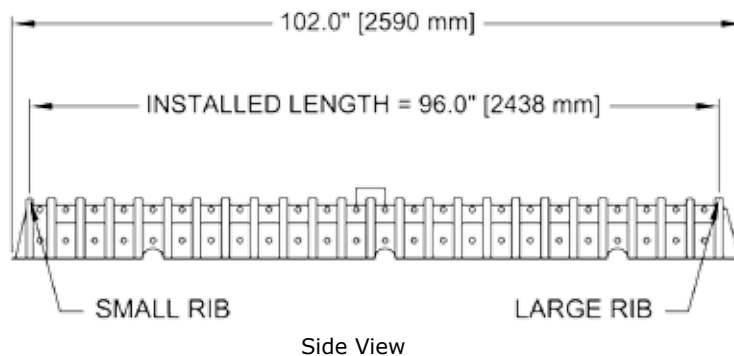
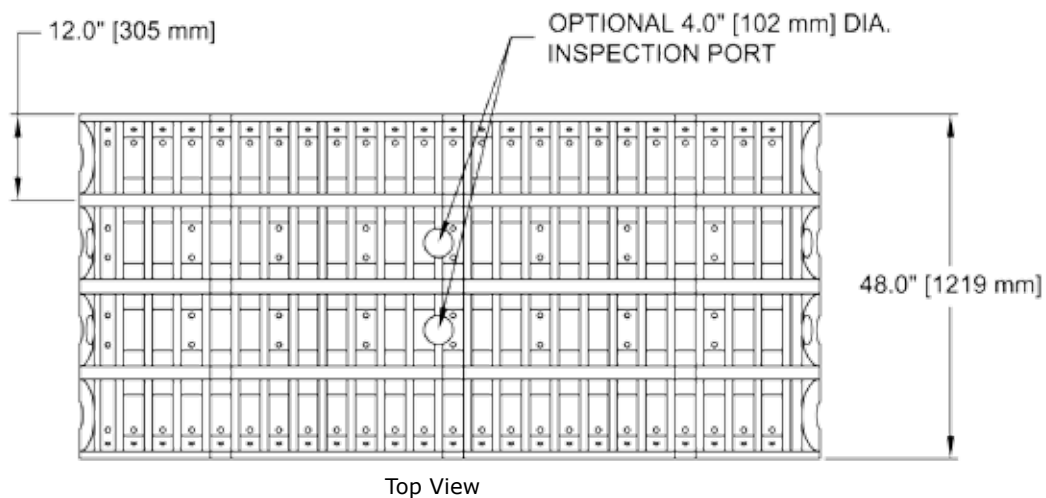
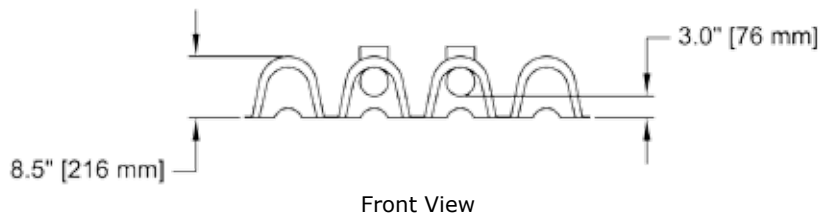
For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

CULTEC Contactor® Field Drain C-4™

The Contactor® Field Drain C-4™ is our lowest profile septic chamber with largest bottom area infiltrative capability. Available in both Standard and Heavy Duty.



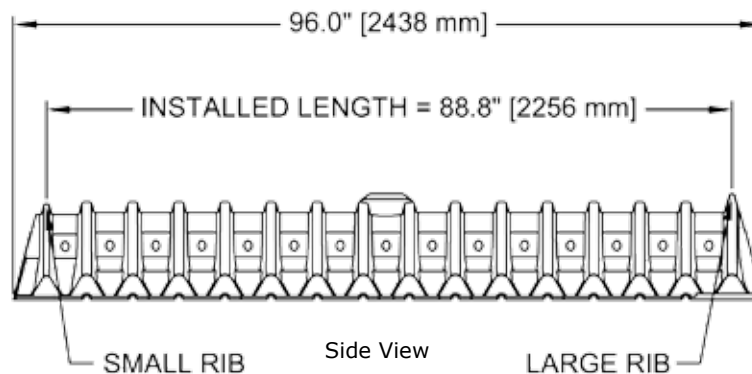
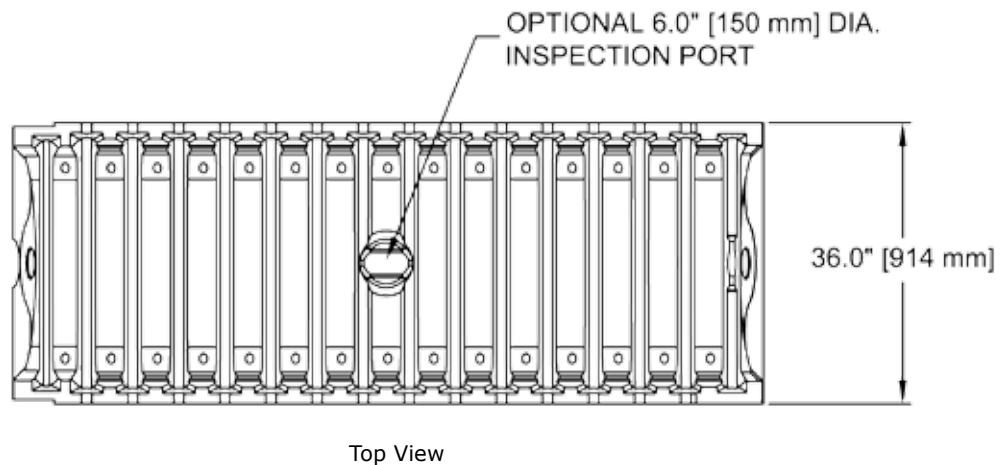
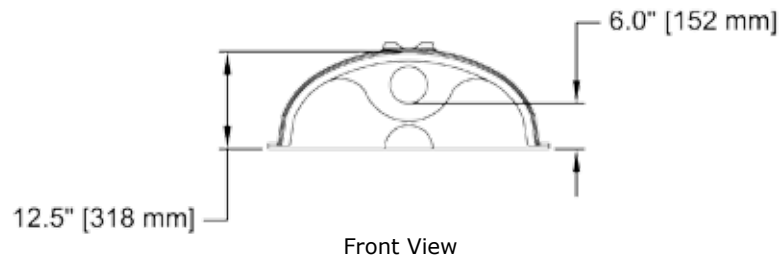
Size (L x W x H)	8.5' x 48" x 8.5" 2.59 m x 1219 mm x 216 mm
Installed Length	8' 2.44 m
Length Adjustment per Run	0.5' 0.15 m
Invert Height	3" 76 mm



CULTEC Contactor® 100™

The Contactor® 100™ is currently our most popular low profile septic chamber. It typically meets most 3' wide septic code regulations.

Size (L x W x H)	8' x 36" x 12.5" 2.44 m x 914 mm x 318 mm
Installed Length	7.4' 2.26 m
Length Adjustment per Run	0.6' 0.18 m
Invert Height	6" 152 mm

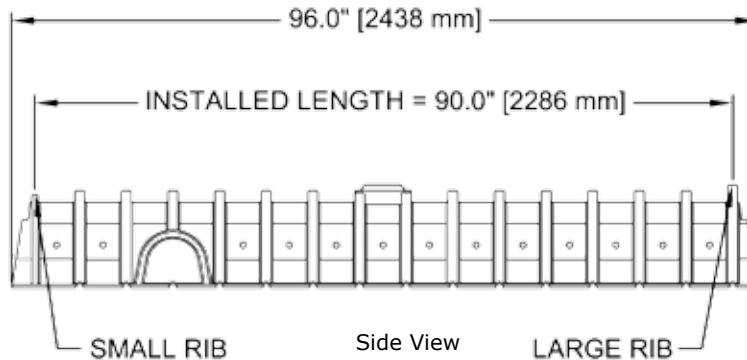
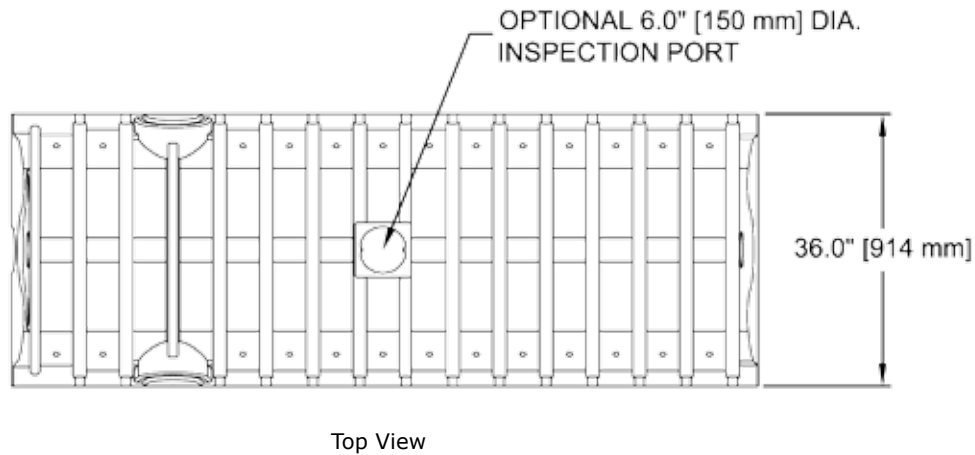
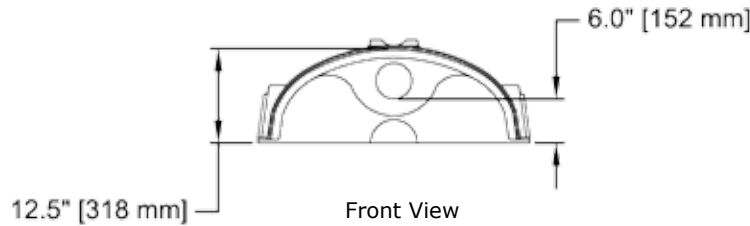


CULTEC Contactor® 100HD™

The Contactor® 100HD™ is currently our most popular low profile septic chamber. It typically meets most 3' wide septic code regulations.



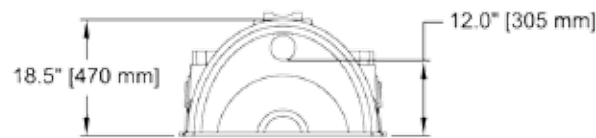
Size (L x W x H)	8' x 36" x 12.5" 2.44 m x 914 mm x 318 mm
Installed Length	7.5' 2.29 m
Length Adjustment per Run	0.5' 0.15 m
Invert Height	6" 152 mm



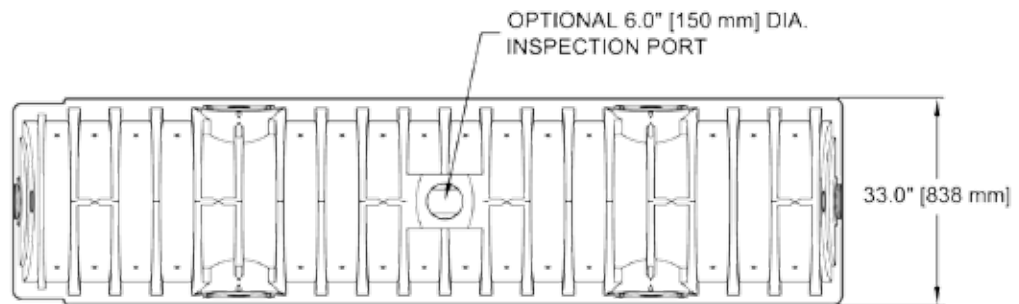
CULTEC Recharger® 150XLHD™

The Recharger® 150XLHD™ is a 18.5" (470 mm) midsize chamber used for septic leachfields.

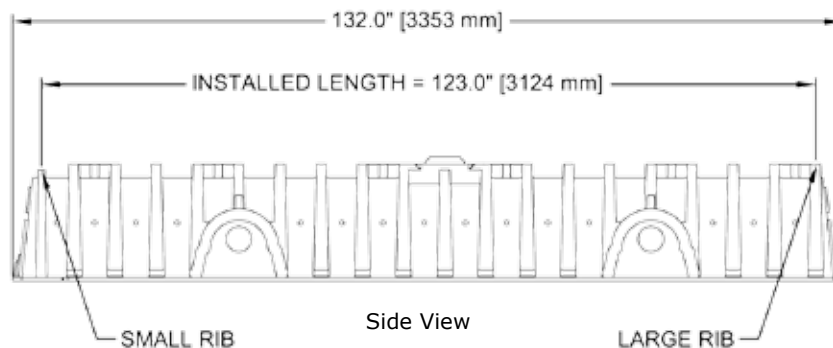
Size (L x W x H)	11' x 33" x 18.5" 3.35 m x 838 mm x 470 mm
Installed Length	10.25' 3.12 m
Length Adjustment per Run	0.75' 0.23 m
Invert Height	12" 305 mm



Front View



Top View



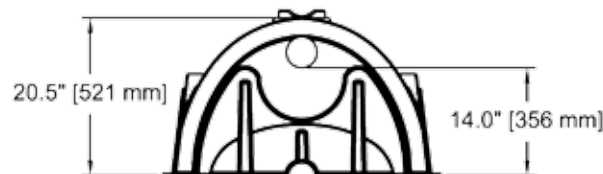
Side View

For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

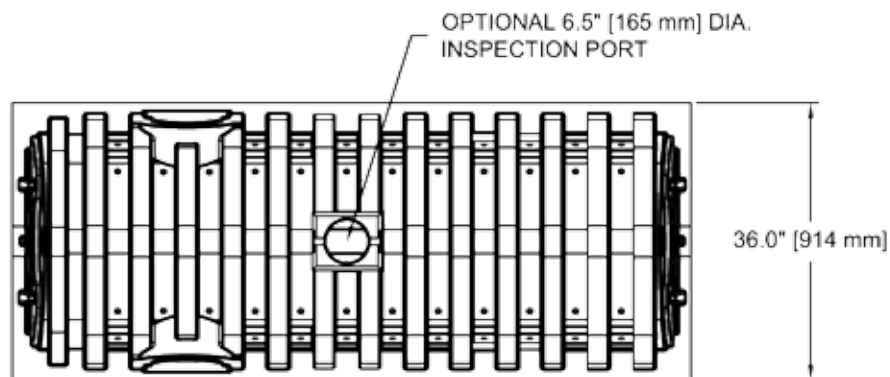
CULTEC Recharger® 180HD™

The Recharger® 180HD™ is a 20.5" (521 mm) tall, mid-size chamber used for septic leachfields.

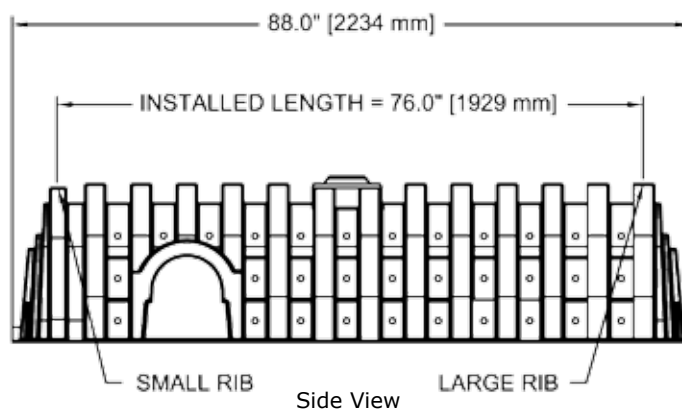
Size (L x W x H)	7.33' x 36" x 20.5" 2.23 m x 914 mm x 521 mm
Installed Length	6.33' 1.93 m
Length Adjustment per Run	1' 0.30 m
Invert Height	14" 356 mm



Front View



Top View

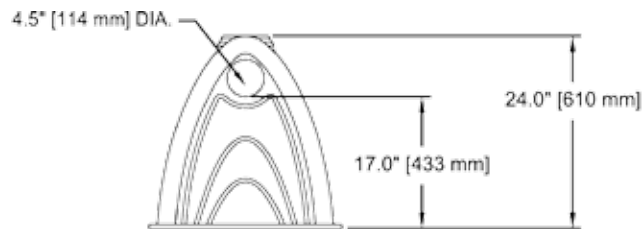


Side View

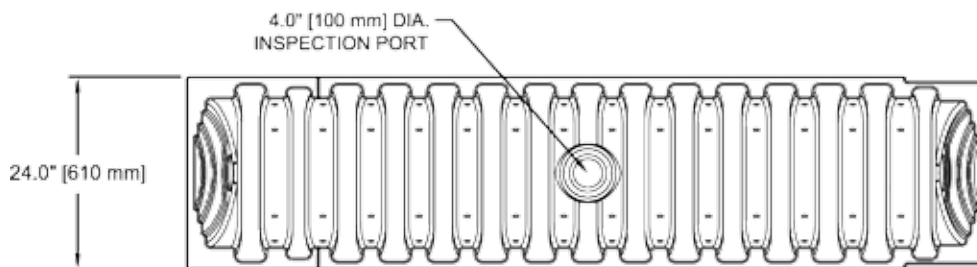
CULTEC Contactor® 202™

The Contactor® 202™ is a 24" tall (610 mm) midsize chamber used for septic leachfields.

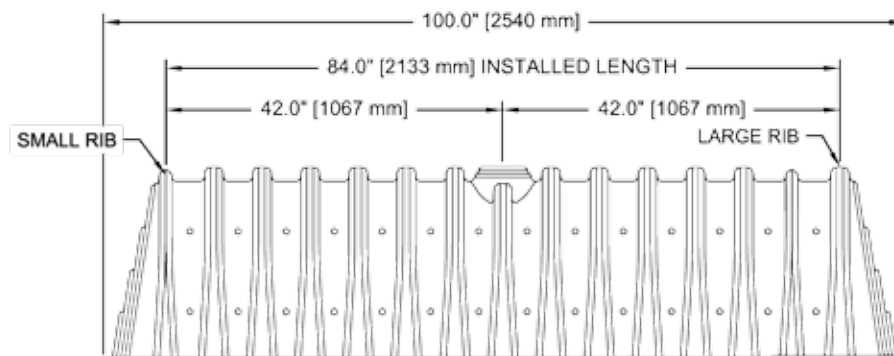
Size (L x W x H)	8.33' x 24" x 24" 2.54 m x 610 mm x 610 mm
Installed Length	7.0' 2.13 m
Length Adjustment per Run	1.33' 0.41 m
Invert Height	17" 432 mm



Front View



Top View



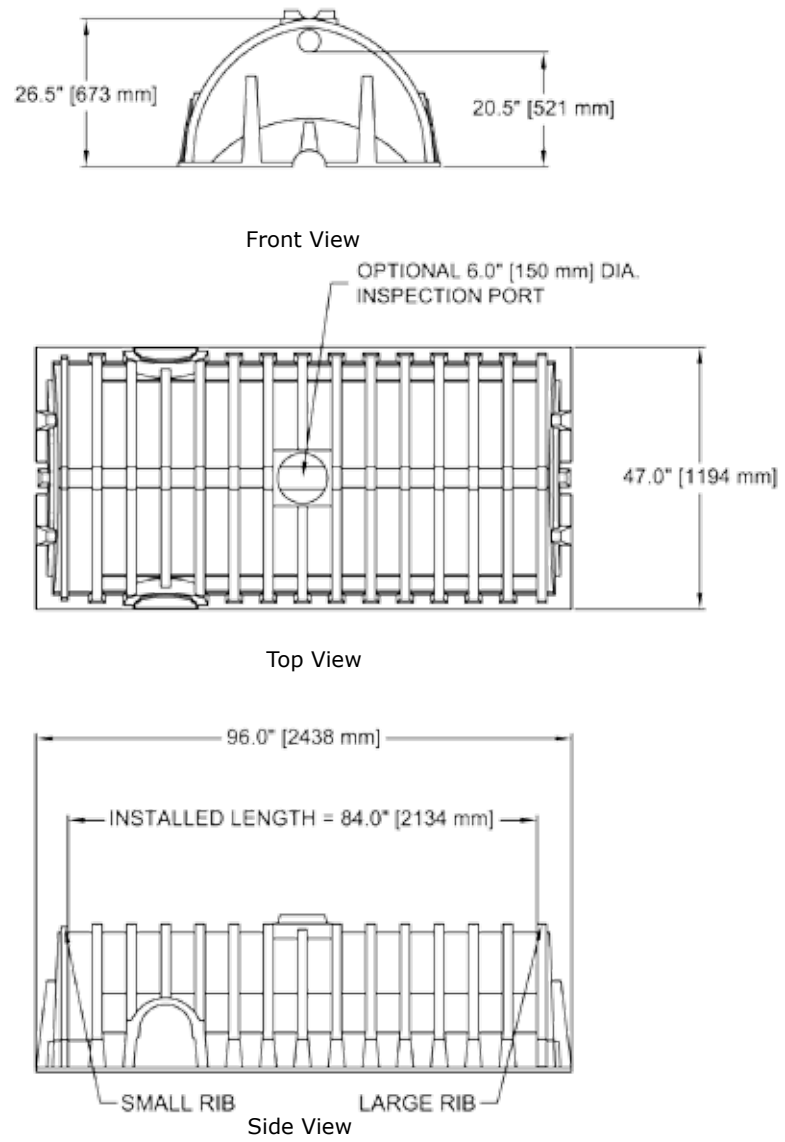
Side View

For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

CULTEC Recharger® 280HD™

The Recharger® 280HD™ is a 26.5" (673 mm) tall, mid-size chamber used for septic leachfields.

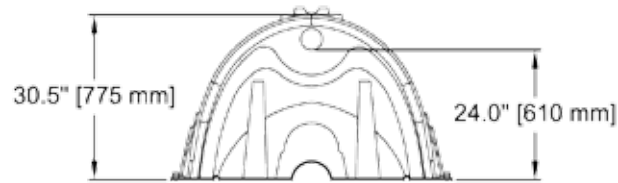
Size (L x W x H)	8' x 47" x 26.5" 2.44 m x 1194 mm x 673 mm
Installed Length	7' 2.13 m
Length Adjustment per Run	1' 0.30 m
Invert Height	20.5" 521 mm



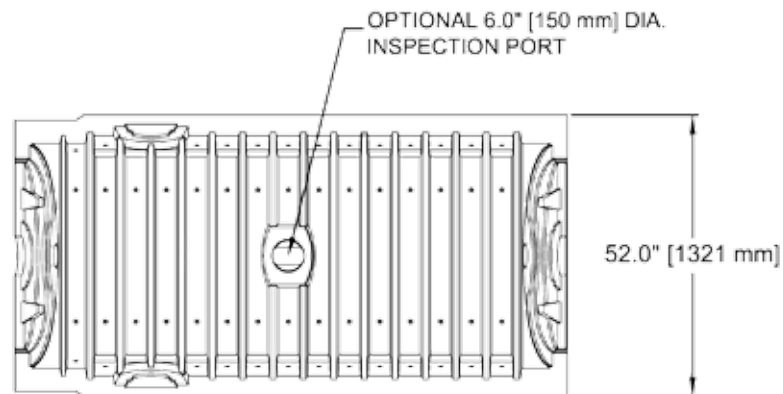
CULTEC Recharger® 330XLHD™

The Recharger® 330XLHD™ is a 30.5" (775mm) tall, high capacity chamber used for septic leachfields.

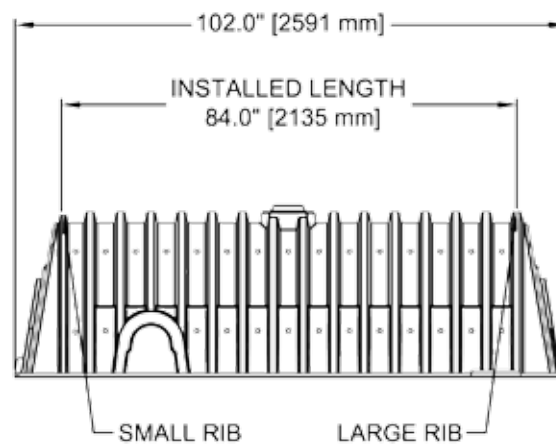
Size (L x W x H)	8.5' x 52" x 30.5" 2.59 m x 1321 mm x 775 mm
Installed Length	7' 2.13 m
Length Adjustment per Run	1.5' 0.46 m
Invert Height	24" 610 mm



Front View




Top View



Side View



The Founder of Plastic Chamber Technology

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