

Contactor® & Recharger® Septic Chambers Chamber of Choice™



Product Booklet
for CULTEC Septic Leachfield Systems



Product Information

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 subsurface 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™ Filter Fabric.

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

- Perforated sidewalls and open bottom promote infiltration
- Patented overlapping rib connection
- Optional inspection port opening on each unit
- Heavy Duty units meet traffic application criteria when installed per manufacturer's recommendations
- Repeating support panel adds to strength of installation
- Lightweight
- Variety of sizes available
- No separate end plates required
- Integrated internal and external pipe supports
- Chemically resistant
- Manufactured in ISO 9001:2008 certified facilities

System Benefits

- Less land area required
- Greater contact with primary leaching area promotes maximum infiltration capabilities
- Lightweight
- Gravel-less installation allows for less heavy equipment time
- Patented overlapping rib connection is fast and easy to install
- Long structural life expectancy
- Able to transport in a pick up truck
- System sizing reductions allowed in most areas *(Check your local septic code.)*

Product Information



Gravel-less septic application using CULTEC chambers and CULTEC No. 410™ filter fabric. Lightweight chambers minimize heavy equipment time and labor.

Design Information

Chamber and Filter Fabric - A Two-Part System

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

For CULTEC gravel-less septic systems, the filter fabric is placed directly over the chamber.

For septic installations using stone, the filter fabric is placed over the top of the stone prior to final backfilling.

CULTEC distributes its own CULTEC No. 410™ Filter Fabric to be used with the Contactor® and Recharger® septic chambers.

Substituted fabrics must meet or exceed the properties of the CULTEC No. 410™ Filter Fabric 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.mt |
| UV Stability | D 4355 | 70% |

Design Information



Pipe Distribution Systems - PDS

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

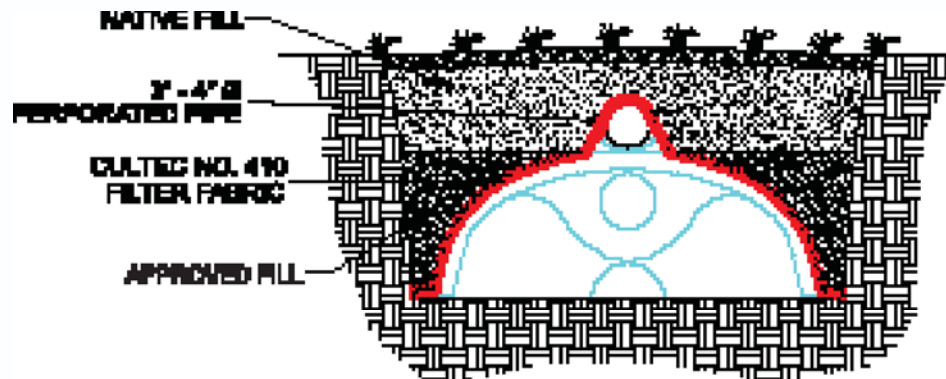
Wastewater is discharged through the perforations of the pipe directly onto the filter fabric. The filter fabric works as a sponge and absorbs the effluent and increases the total surface area of the septic system through capillary action. Overall concentration of effluent per square foot is thereby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



Design Information

The Contactor® Chamber series consists of lower profile, lower capacity chambers used for septic installations with depth restrictions or where larger units are may not approved by the local authority.



The Recharger® Chamber series consists of higher profile, higher capacity chambers. Fewer units are required resulting in a smaller overall footprint, where approved.



CULTEC Contactor® & Recharger® Chamber Specification Information

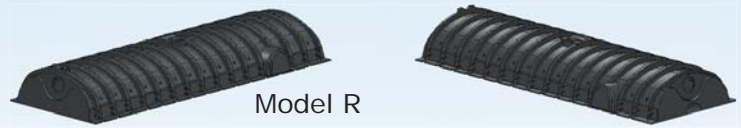
| | Contactor® EZ-24 | Contactor® Field Drain C-4 | Contactor® 100 | Contactor® 100HD | Recharger® 150XLHD | Recharger® 180HD | Recharger® 280HD | Recharger® 330XLHD |
|------------------|---------------------|----------------------------------|-------------------|---------------------|-----------------------|---------------------|---------------------|-----------------------|
| Length | 8.5' | 8.5' | 8' | 8' | 11' | 7.33' | 8' | 8.5' |
| | 2.59 m | 2.59 m | 2.44 m | 2.44 m | 3.35 m | 2.23 m | 2.44 m | 2.59 m |
| Installed Length | 8' | 8' | 7.4' | 7.5' | 10.25' | 6.33' | 7' | 7' |
| | 2.44 m | 2.44 m | 2.29 m | 2.29 m | 3.12 m | 1.93 m | 2.13 m | 2.13 m |
| Width | 16" | 48" | 36" | 36" | 33" | 36" | 47" | 52" |
| | 406 mm | 1219 mm | 914 mm | 914 mm | 838 mm | 914 mm | 1194 mm | 1321 mm |
| Height | 12" | 8.5" | 12.5" | 12.5" | 18.5" | 20.5" | 26.5" | 30.5" |
| | 305 mm | 216 mm | 318 mm | 318 mm | 470 mm | 673 mm | 673 mm | 775 mm |
| Invert Height | 6" | 3" | 6" | 6" | 12" | 14" | 20.5" | 24" |
| | 152 mm | 76 mm | 152 mm | 152 mm | 305 mm | 356 mm | 521 mm | 610 mm |

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.

Large Rib
End Detail

Small Rib
End Detail



Model R

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.

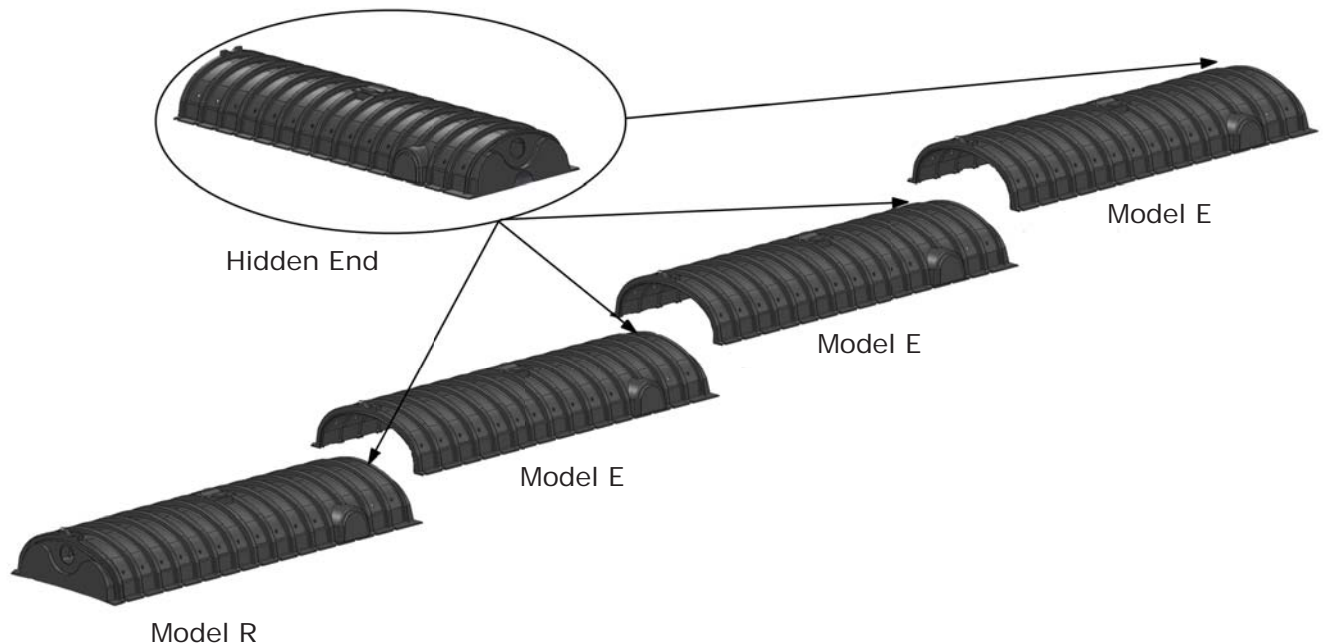


Model E

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.



Hidden End

Model E

Model E

Model E

Model R

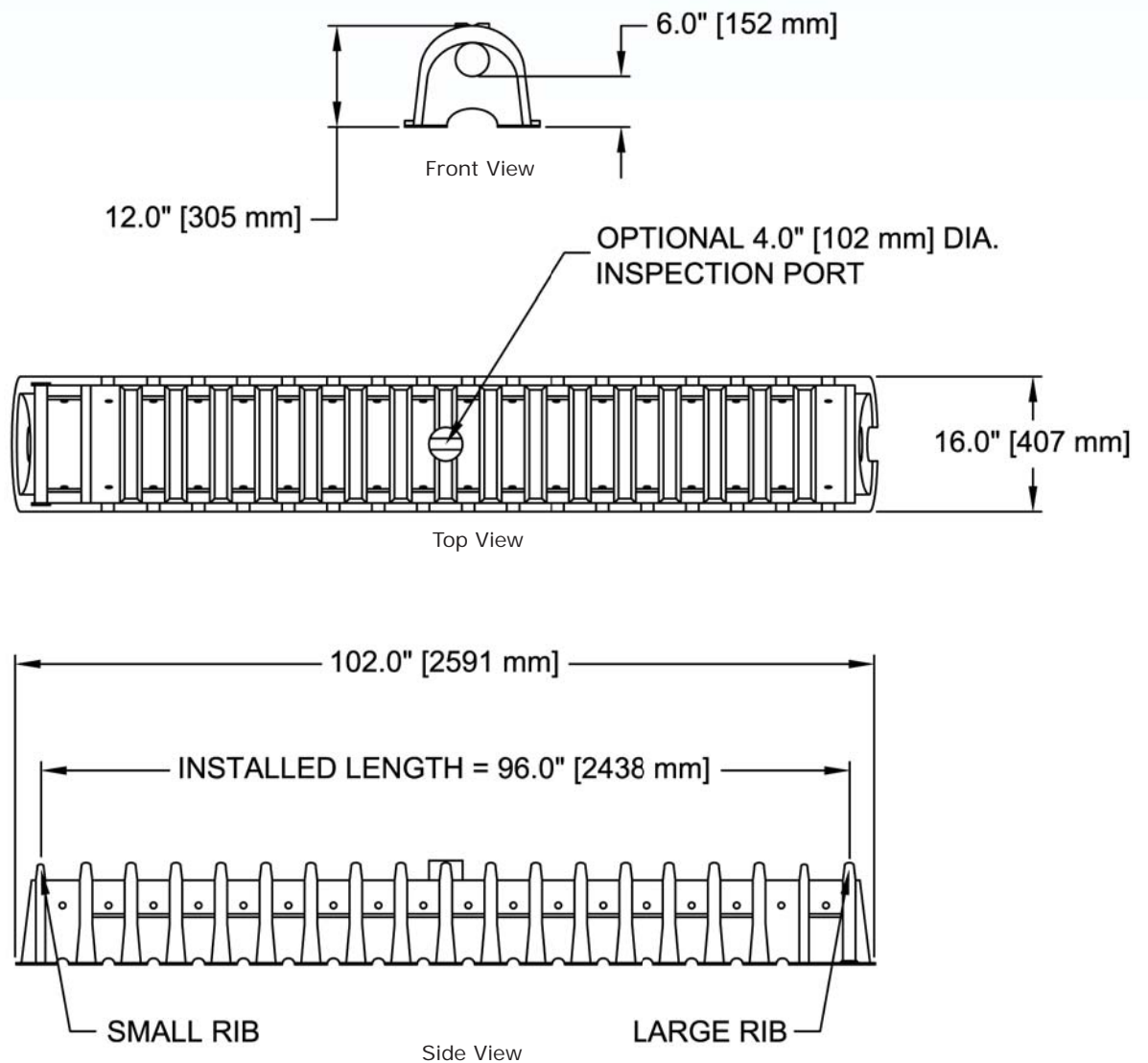
The patented overlapping rib connection used by CULTEC's chambers permit a curved line of installation. This is a beneficial quality when following land contours or a sweep around an obstruction is necessary.

Technical Information

CULTEC Contactor® EZ-24™

The Contactor® EZ-24™ is a low profile, low capacity chamber. It is able to bend around obstacles with a deflection capability of 25' per 100' (7.62 m per 30.5 m).

| | |
|---------------------------|--|
| 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 |



Technical Information

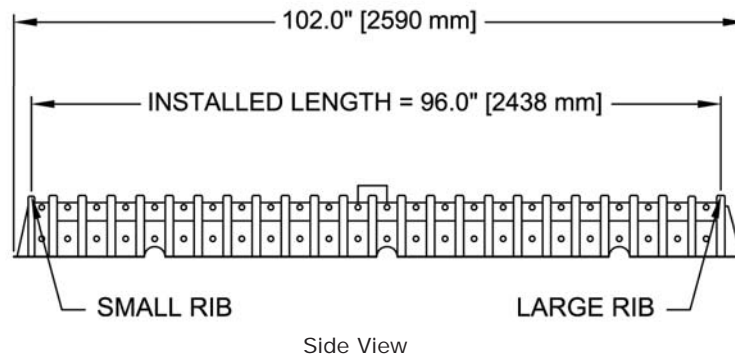
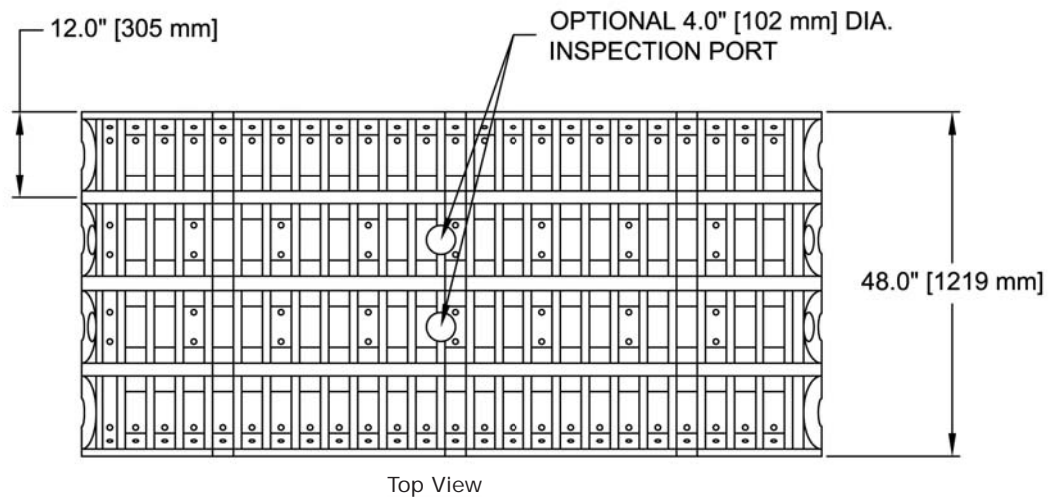


CULTEC Contactor® Field Drain C-4™

The Contactor® Field Drain C-4™ is our lowest profile septic chamber with largest bottom area infiltrative capability.



| | |
|---------------------------|--|
| 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 |



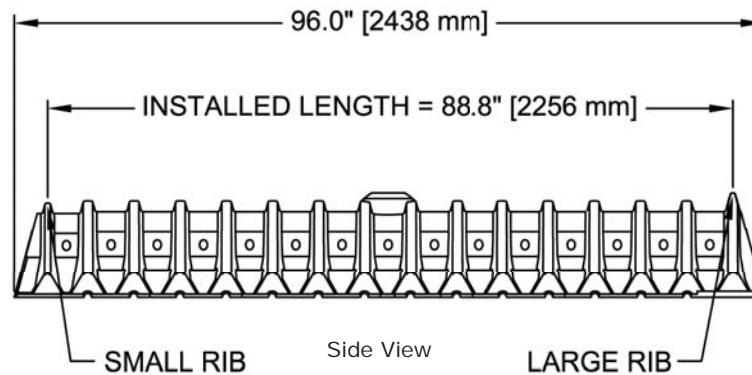
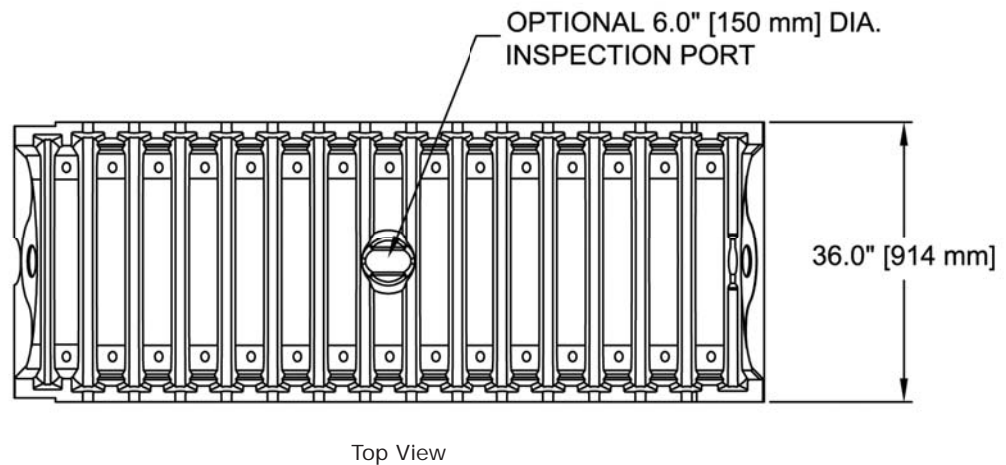
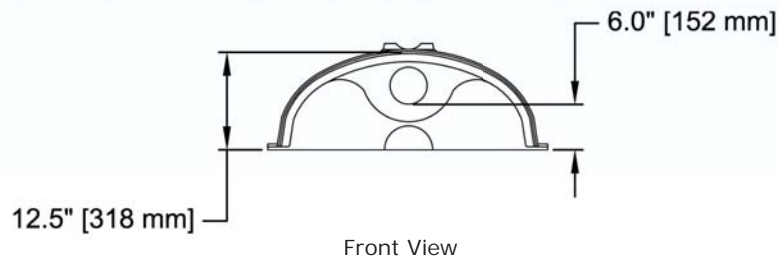
Technical Information

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 |

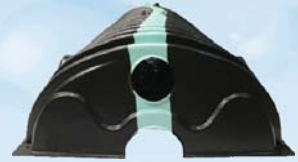


Technical Information

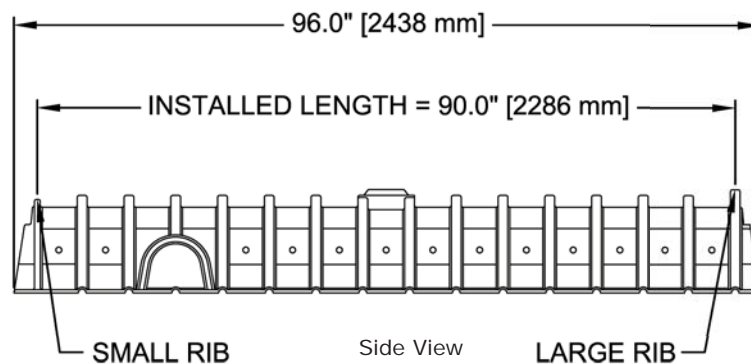
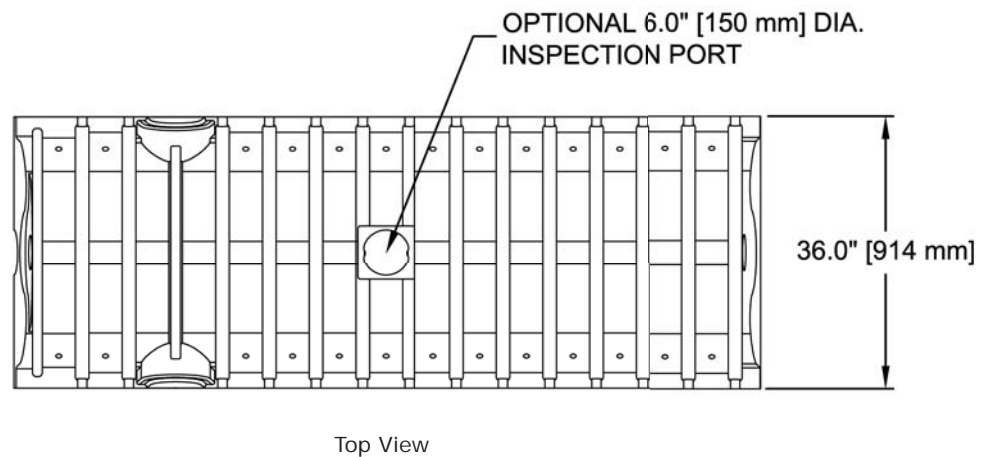
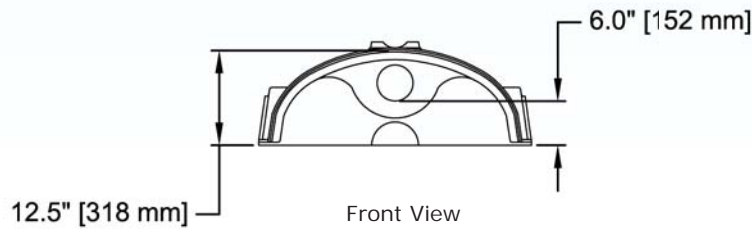


CULTEC Contactor® 100HD™

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 |

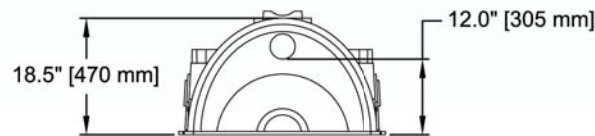


Technical Information

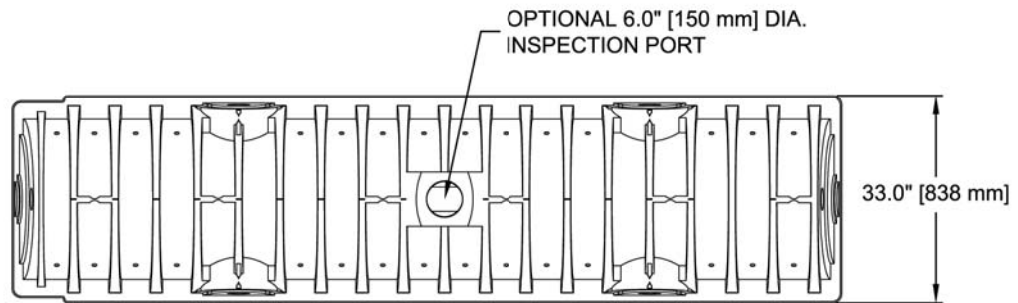
CULTEC Recharger® 150XLHD™

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

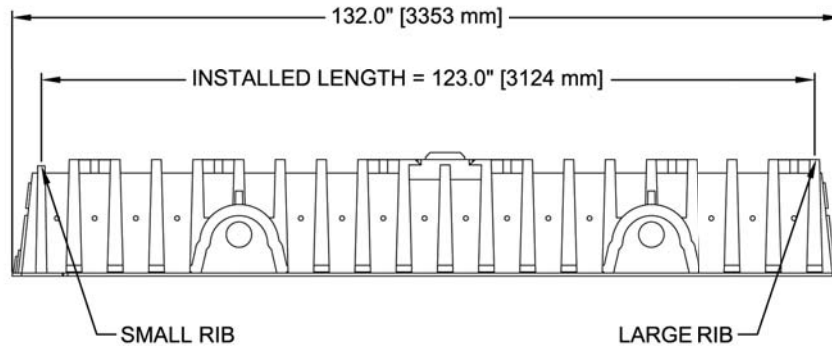
| | |
|---------------------------|---|
| Size (L x W x H) | 11' x 33" x 18.5" 3.35 m x 838 mm x 470 mm |
| Installed Length | 10.25' 3.12 m |
| Length Adjustment per Run | 0.75' 0.23 m |
| Invert Height | 12" 305 mm |



Front View



Top View



Side View

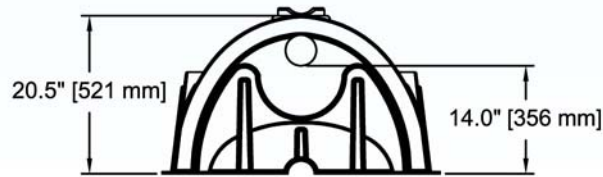
Technical Information



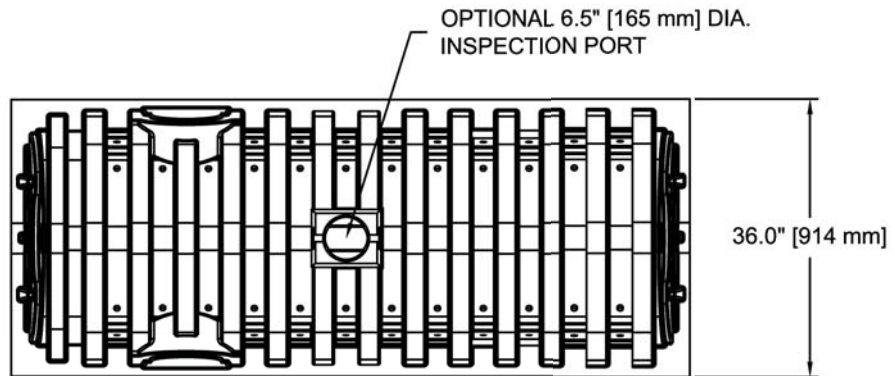
CULTEC Recharger® 180HD™

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

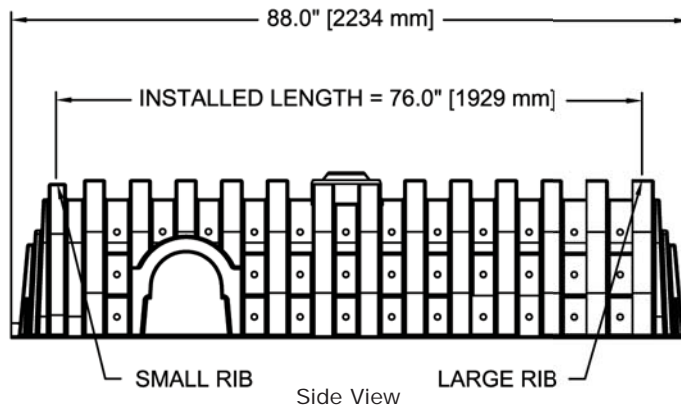
| | |
|---------------------------|---|
| Size (L x W x H) | 7.33' x 36" x 20.5" 2.23 m x 914 mm x 521 mm |
| Installed Length | 6.33' 1.93 m |
| Length Adjustment per Run | 1' 0.30 m |
| Invert Height | 14" 356 mm |



Front View



Top View



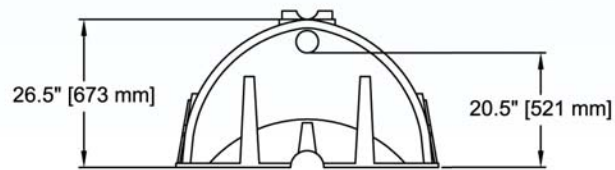
Side View

Technical Information

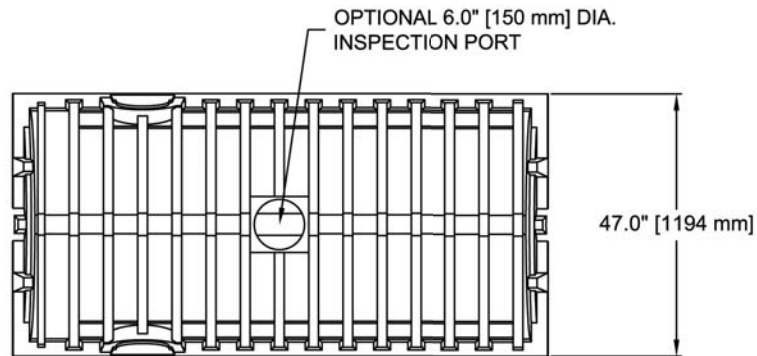
CULTEC Recharger® 280HD™

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

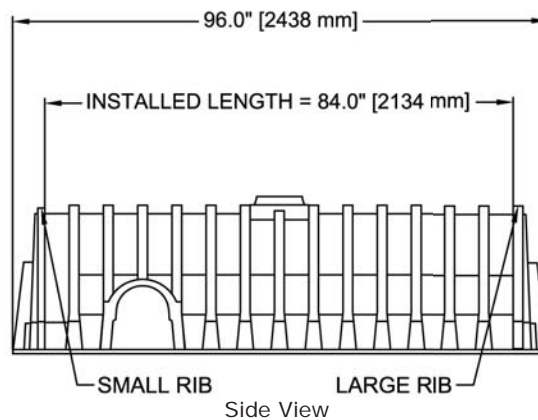
| | |
|---------------------------|---|
| Size (L x W x H) | 8' x 47" x 26.5" 2.44 m x 1194 mm x 673 mm |
| Installed Length | 7' 2.13 m |
| Length Adjustment per Run | 1' 0.30 m |
| Invert Height | 20.5" 521 mm |



Front View



Top View



Side View

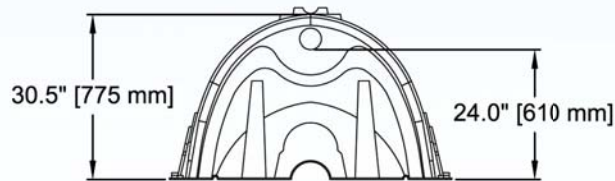
Technical Information



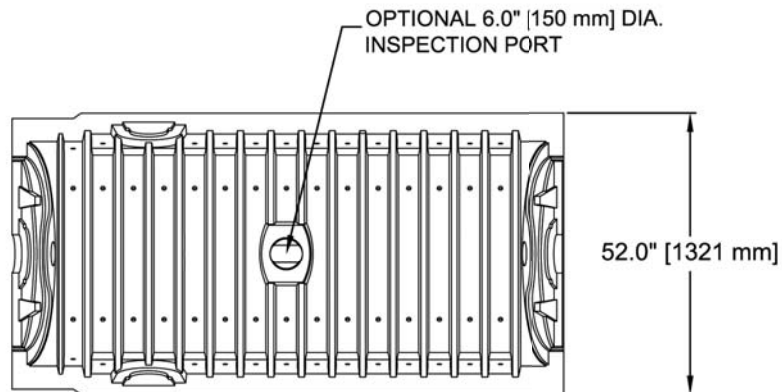
CULTEC Recharger® 330XLHD™

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

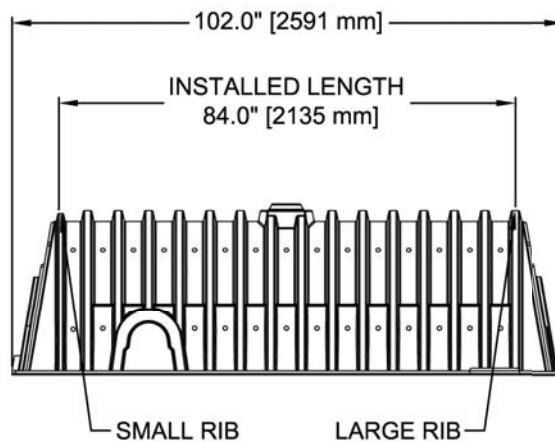
| | |
|---------------------------|---|
| Size (L x W x H) | 8.5' x 52" x 30.5" 2.59 m x 1321 mm x 775 mm |
| Installed Length | 7' 2.13 m |
| Length Adjustment per Run | 1.5' 0.46 m |
| Invert Height | 24" 610 mm |



Front View



Top View



Side View

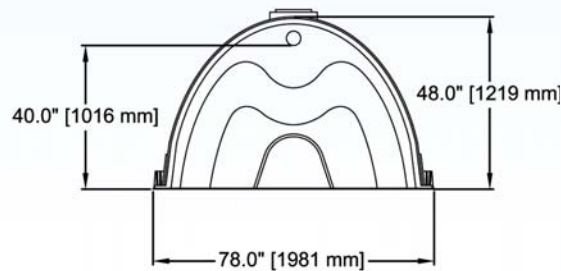
Technical Information

CULTEC Recharger® 900HD™

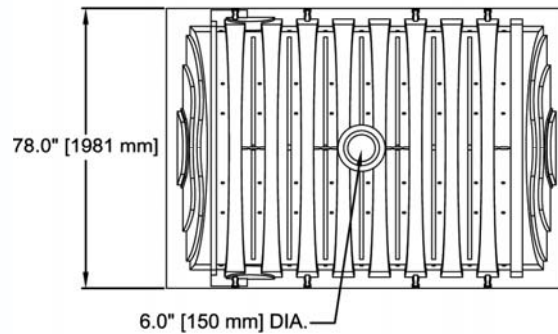
The Recharger® 900HD™ is a 48" (1219 mm) tall, jumbo-sized chamber used for septic leachfields.



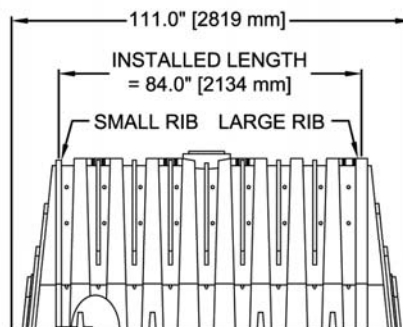
| | |
|---------------------------|---|
| Size (L x W x H) | 9.25' x 78" x 48" 2.82 m x 1981 mm x 1219 mm |
| Installed Length | 7' 2.13 m |
| Length Adjustment per Run | 2.25' 0.69 m |
| Invert Height | 40" 1016 mm |



Front View



Top View



Side View

Limited 1-Year Warranty

CULTEC, Inc. finished products, when properly installed, registered with Cultec, Inc., and operated under normal conditions of use, are covered under Cultec Inc.'s Limited Warranty to be free from defects in material and workmanship for a period of one (1) year from the date of manufacture. In order to obtain Cultec's Limited Warranty, the product warranty registration card must be completed and returned to Cultec, Inc., having been postmarked within thirty (30) days of installation. Failure to return the warranty registration card to Cultec, Inc. shall void the Limited Warranty. This Limited Warranty shall be void if the finished product is not installed within forty-five (45) days of the date of purchase from Cultec, Inc. In order to obtain performance under this Limited Warranty, Cultec, Inc. must be provided with written notice of any defect promptly (in no case later than ten (10) business days after initial discovery AND prior to the end of the Limited Warranty period), with such notice sent to 878 Federal Road, PO Box 280, Brookfield, CT 06804-0280. The original purchase receipt for the product must be included with documentation supporting any claim under the terms of this Limited Warranty. Failure to promptly submit notice of defect, a receipt and completed limited warranty certificate will void the Limited Warranty. Cultec, Inc. shall not be responsible for any freight charges incurred in connection with this Limited Warranty. A fee may be incurred when Cultec, Inc. (in its sole discretion) deems it necessary for a Cultec, Inc. representative to visit a product installation site.

This Limited Warranty extends only to Cultec, Inc. products when the products are installed in 'single level', provided that such products do not, in the collective, amount to more than 12,000 cubic feet (339.84 cubic meters) of water volume storage capacity. This Limited Warranty shall be void where products are installed in 'multi-layer' or 'multi-tier' systems, as well as wherein collective system volume exceeds 12,000 cubic feet (339.84 cubic meters) of water volume storage capacity. Notwithstanding the foregoing, Cultec, Inc., in its sole discretion, may extend certain Limited Warranty terms upon 'double-layer' or 'double-tier' product installations, as well as 'single level' product installations wherein collective system volume exceeds 12,000 cubic feet (339.84 cubic meters) of water volume storage capacity, provided that (i) the buyer has contacted Cultec, Inc. prior to installation and has advised of the proposed installation design; (ii) all product warranty registration information has been provided prior to product installation; (iii) a pre-construction/pre-installation meeting has been held with representatives of Cultec, Inc.; and (iv) Cultec, Inc. has provided written confirmation of its intent to honor any Limited Warranty terms with respect to the specific installation. Under no circumstances shall any decision by Cultec, Inc. to honor such terms be relied upon by any party in any subsequent product purchase or installation.

This Limited Warranty does not apply to installation piping and/or other parts not supplied by Cultec, Inc. Cultec, Inc.'s limited warranties also do not extend to any goods or parts which have been damaged prior to installation, subjected to misuse, damaged by lack of maintenance, improper installation, neglect, damaged by accident, or damaged by being crushed by heavy equipment weighing in excess of the rated load carrying capacity of the product. This Limited Warranty also does not apply to shipping or in-transit damage.

THIS LIMITED WARRANTY DOES NOT APPLY TO CULTEC, INC. PRODUCTS THAT HAVE NOT BEEN INSTALLED ACCORDING TO CULTEC WRITTEN INSTALLATION INSTRUCTIONS. ANY PRODUCT DAMAGE OR FAILURE RESULTING FROM IMPROPER OR NEGLIGENT INSTALLATION IS SPECIFICALLY EXCLUDED FROM THIS WARRANTY AND SHALL REMAIN THE BUYER'S RESPONSIBILITY.

THIS WARRANTY IS LIMITED TO THE BUYER AND IS NOT TRANSFERABLE. THIS EXPRESS LIMITED WARRANTY EXCLUDES ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESSED, IMPLIED, OR STATUTORY, BY ANY LITERATURE, DATA, OR PERSON. CULTEC, INC. EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE WITH RESPECT TO THE GOODS SOLD. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTIONS SET FORTH IN THIS LIMITED WARRANTY, NOTWITHSTANDING ANY KNOWLEDGE OF CULTEC, INC. REGARDING THE USE OR USES INTENDED TO BE MADE OF GOODS, PROPOSED CHANGES OR ADDITIONS TO GOODS, OR ANY ASSISTANCE OR SUGGESTIONS THAT MAY HAVE BEEN MADE BY CULTEC, INC. PERSONNEL. BUYER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF CULTEC, INC. PRODUCTS FOR BUYER'S USE OR RE-SALE, OR FOR INCORPORATING THEM INTO OBJECTS OR APPLICATIONS WHICH BUYER DESIGNS, ASSEMBLES, CONSTRUCTS OR MANUFACTURES.

CULTEC, INC. WILL NOT BE RESPONSIBLE OR LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, HOWEVER ARISING, INCLUDING BUT NOT LIMITED TO THOSE FOR USE OF ANY PRODUCTS, LOSS OF TIME, INCONVENIENCE, LOST PROFIT, LABOR CHARGES, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES WITH RESPECT TO PERSONS, BUSINESS, OR PROPERTY, WHETHER AS A RESULT OF BREACH OF WARRANTY, NEGLIGENCE OR OTHERWISE. NOTWITHSTANDING ANY OTHER PROVISION OF THIS LIMITED WARRANTY, BUYER'S REMEDY AGAINST CULTEC, INC. FOR GOODS SUPPLIED OR FOR NON-DELIVERED GOODS OR FAILURE TO FURNISH GOODS, WHETHER OR NOT BASED ON NEGLIGENCE, STRICT LIABILITY OR BREACH OF EXPRESS OR IMPLIED WARRANTY, IS LIMITED SOLELY, AT CULTEC, INC.'S OPTION, TO REPLACEMENT OF OR CURE OF SUCH NONCONFORMING OR NON-DELIVERED GOODS OR RETURN OF THE PURCHASE PRICE FOR SUCH GOODS AND IN NO EVENT SHALL EXCEED THE PRICE OR CHARGE FOR SUCH GOODS. CULTEC, INC.'S MAXIMUM LIABILITY UNDER THIS EXCLUSIVE REMEDY SHALL NEVER EXCEED THE COST OF THE SUBJECT PRODUCT. CULTEC, INC. RESERVES THE RIGHT, AT ITS SOLE DISCRETION, TO REFUND THE PURCHASE PRICE IN LIEU OF REPAIR OR REPLACEMENT.



CULTEC
Chamber of Choice™

CULTEC, Inc.

878 Federal Road • P.O. Box 280 • Brookfield, CT 06804

Phone: 203-775-4416 • Toll Free: 1-800-4-CULTEC • Fax: 203-775-1462

Web: www.cultec.com • E-mail: custservice@cultec.com

Protected by one or more of the following patents: U.S. Patent No. 5,419,838; 6,129,482; 6,322,288 B1; 7,226,241; 8,425,148 B2; Canadian Patent No. 2,252,286; 2,450,565; 2,591,255; 2,303,658; Other U.S. and/or Foreign patent(s)/patent(s) pending. European Design Nos. 001092191 (0001-0004).

CULTEC® RECHARGER® and CONTACTOR® are trademarks of CULTEC, Inc.



36 Hudson Rd
Sudbury MA 01776



800-225-4616
www.tisales.com