RECHARGER® 360HD & 902HD STORMWATER MANAGEMENT SOLUTIONS



INSTALLATION INSTRUCTIONS



RETENTION • DETENTION • INFILTRATION • WATER QUALITY



Published by

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¥ `&\$&\$`71@H97ž`=bW75```f][\hg`fYgYfjYX"Df]bhYX`]b`h\Y1G5" H\]g`XcWiaYbh`UbX`UbmUWMcadUbm]b[`71@H97`dfcXiWhg`UfY`Wcdmf][\hYX`Vm71@H97ž`=bW75bmfYdfcXiWh]cb` UbX#cf`X]ghf]Vih]cb`k]h\cih`df]cf`kf]hhYb`WcbgYbh`Zfca`71@H97ž`=bW7]g`ghf]Wh`mdfc\]V]hYX"``

Disclaimers:

H\Y`XfUk]b[gžd\chc[fUd\g`UbX`]``i ghfUh]cbg`g\ck b`]b`h\]g`XcW a Ybh'UfY`Zcf`]``i ghfUh]j Y`di fdcgYg`cb`mUbX` are not necessarily to scale. Actual designs may vary.

71 @H97 fYgYfj Yg h\Y`f][\h`hc`a U_Y`XYg][b`UbX#cf`gdYWJÙWUh]cb`W\Ub[Yg`Uh`Ubm`h]a Y`k]h\ci h`bch]WY`Uh` CULTEC's sole discretion.

71 @H97ž'h\Y'71 @H97``c[cžF97<5F;9Fž'7CBH57HCFž'<J@lž'D57ž'GHCFA:=@H9Fž'GHCFA;9B=9`UbX'H\Y 7\Ua VYf`k]h\`H\Y'Ghf]dY`UfY`fY[]ghYfYX`hfUXYa Uf_g`cZ'71 @H97ž'=bW 7\Ua VYf`cZ'7\c]Wfž'<8ž'%\$\$ž'%) ž'%) \$z'%) \$L@ž'% \$ž'&, \$ž''' \$L@ž'' *\$ž'J, ž'-\$&ž':]Y`X`8fU]b`DUbY`ž 7!%ž'7!&ž'7!' ž'7!(z'9N!&(z'@UbXgWUdY'GYf]Yg`UfY`hfUXYa Uf_g`cZ'71 @H97ž'=bW'¥ '7cdmf][\h`cb`U```XfUk]b[gž']``i ghfUh]cbgž'd\chcgž'W\Ufhg'!'71 @H97ž'=bW'5```f][\hg`fYgYf]YX"

Protected by one or more of the following patents owned by Cultec, Inc.:

I "G" DUHYbhg * ž‰- ž(, &/ * ž' &&ž&, , / * ž,) (ž- &) / +ž&&* ž&(%/ +ž, \$* ž* &+/ , ž' ** ž' (*/ , ž(&) ž%(, / I "G" 8Yg][bg 8*%' ž, % / 8*', ž\$-) / 8**, ž' % / 7UbUX]Ub DUHYbh &ž() \$ž) *) / &ž) - ½&) / 7UbUX]Ub 8Yg][bg %- %((/ %) -, '/ %) - \$+' / %* + +/ UbX#cf ch Yf I "G" cf : cfY][b DUHYbhfgŁ cf DUhYbhfgŁ DYbX]b["

Contact Information:

: cf [YbYfU`]bZcfa Uh]cb cb ci f ch Yf dfcXi Wrg UbX gYfj]WYgž d`YUgY WcbHUWr ci f c WYg k]h]b h Y I b]hYX GhUhYg Uh fl \$\${(&, !), '&ž f&\$' ±++)!((% YI h' &\$&ž cf Y! a U]`i g Uh W ghgYfj]WY 4 W `hYWWca "

: cf`hYW\b]WU``gi ddcfhž`d`YUgY`WU```f&\$' _++)!((%*`YI h"`&\$' `cf`Y!a U]``hYW\4 W``hYWWca "

J]g]hkkk"W/`hYVWVca#Xckb`cUXg"\ha``Zcf`DfcXiWh8ckb`cUXg`UbX`758`XYhU]`g"

Doc ID: CLT009 03-20 March 2020 You are using version CLT009 03-20 of our CULTEC Installation Instructions for Recharger[®] 360HD and 902HD Stormwater Systems.

7KHVH LQVWUXFWLRQV DUH IRU VLQJOH OD\HU WUDÒF DSSOLFDWLRQV RQO\)RU PXOWL OD\HU \$OO LOOXVWUDWLRQV DQG SKRWRV VKRZQ KHUHLQ DUH H[DPSOHV RI W\SLFDO VLWXDWLRQV % \$FWXDO GHVLJQV PD\ YDU\

Required Materials and Equipment

- Proper geotechnical soil evaluation by a ei U`]ÙYX`Yb[]bYYf`cf`gc]``gWJYbh]gh`hc`XYhYfa]bY` suitability of structural installation
- OSHA compliance
- 71 @H97 k Ufb]b[hUdYž cf Yei]j U Ybh
- Assurances from local utilities that no
 i bXYf[fci bX`[UgžY`YWf]WD`cf`ch\Yf`dchYbh]U``m
 dangerous pipelines or conduits are already
 buried at the site
- 5\WYdhUV`Y`%Ë &]b\Vk k Ug\YXž\Wi g\YX`ghcbY`Ug` g\ck b`]b`HUV`Y`' ž`dU[Y`% "'7`YUb`]bYgg`cZ`ghcbY` hc`VY`j Yf]ÙYX`VmYb[]bYYf''
- 5WWYdHUV`Y`Ù```a UHYf]U`
- 71 @H97 Bc" (%\$[™] non-woven geotextile or equivalent

- 71 @H97 Bc" (, \$\$[™] woven geotextile or Yei]j UYbhž Ug fYei]fYX
- All CULTEC chambers and accessories as gdYWjÙYX]b th Y Yb[]bYYfĐj d Ubg]bWi X]b[71 @H97 Bc" (%\$™ bcb!k cj Yb [YchYl h]Yž CULTEC StormFilter® UbX 71 @H97 Bc" (, \$\$™ k cj Yb [YchYl h]Yž k \YfY Udd]WVYY" 7\YW CULTEC chambers for damage prior to installation. Do not use damaged CULTEC chambers. Contact your supplier immediately to report damage or packing list discrepancies.
- Reciprocating saw or router
- Stone bucket
- Stone conveyor and/or tracked excavator
- Transit or laser level measuring device
- Compaction equipment

Requirements for CULTEC Chamber System Installations

- CULTEC systems must be designed and installed in accordance with CULTEC's minimum requirements. Failure to do so will void the limited warranty. To request a copy and submit h\Y'71 @H97``]a]hYX'k UffUbmž'VU``71 @H97`Uh' &\$' !++)!((%*`cf`j]g]h'k k k "W`hYVWta "
- Installing contractors are expected to comprehend and use the most current installation instructions prior to beginning a system installation. If there is any question as to whether these are the most W ffYbh]bghfi Wh]cbgž WtbhUVh 71 @H97 Uh fl&\$' L++) ! ((%* cf j]g]h k k k "W hYWWta "
- Contact CULTEC at least thirty days prior to system installation to arrange a pre-construction meeting.
- 5``71 @H97 'gmghYa 'XYg][bg'a i gh'VY 'Wfh]ÙYX 'Vm' a registered professional engineer.
- Use these installation instructions as a guideline only. Actual design may vary. Refer to approved construction drawings for jobgdYWUWXYHU]`g"`6Y`gi fY`hc Zc``ck `h\Y`Yb[]bYYfty` drawings as your primary guide.

- GmghYa 'Wźj Yf#VUW<u>Ù</u>``fYei]fYa Ybhg'k]``j Ufmi based on installation type.
- Any discrepancies with the system sub-grade soil's bearing capacity must be reported to the design engineer.
- Non-woven geotextile must be used as gdYWWYX]b h\YYb[]bYYfW XfUk]b[g"
- Erosion and sediment-control measures must meet local codes and the design engineer's gdYWUWhjcbg'h\fci [\ci hh\Y'YbhjfY'g]hY' construction process.
- Responsibility for preventing vehicles that exceed CULTEC's requirements from traveling across or parking over the chamber system lies solely with the contractor throughout the entire site construction process. The d`UWa YbhcZk Ufb]b[`hUdYžhYa dcfUfmZYbV]b[ž' and/or appropriately located signs is highly recommended. Imprinted warning tape is Uj U]`UV`Y`Zfca '71 @H97": cf`5VWYdhUV`Y`J Y\]VV` @cUX`]bZcfa Uh]cbžfYZYfhc`HUV`Y`%cb`dU[Y`%*.



&KDPEHU 6SHFL; FDWLRQ ,QIRUPDWLRQ

	Recharger 360HD Chamber	Recharger 902HD Chamber
G]nY`fl@T`K`T`<Ł	("%+ĐI`*\$Î`I`' *Î	("&) fil `+, ´´`l `(, ´´
Installed Length	3.67′	' "* +fi
Length Adjustment per Row with two end caps installed	&") \$Đ	%"\$' fi
when not using end caps	\$") \$Đ	\$"), fi
Chamber Storage	%\$"\$\$`Zŀ³/ft	%+"' % Z h³/ft
	36.66 ft³/unit	*' "(+ Zh³/unit
Minimum Installed Storage	%) "&\$`Zh³/ft	27.06 ft³/ft
)) "+' ඁZʰ³/unit	99.28 ft³/unit
Minimum Area Required	&%"\$, `Zh²	&* "),
Minimum Center-to-Center Spacing) "+) Đ	+"&) fi
Minimum Spacing Between Chambers	- Î	- Î
Minimum Cover Requirements	% Î fDUj YXŁ	&(Î fDUj YXŁ
	&(Îʿfl bdUj YXŁ	'\$Î f∎ bdUj YXŁ
Maximum Allowable Cover	‰Đ	, "' fi
Maximum Allowable O.D. in Side Portal	%\$Î [`] < 8 D9ž %î [°] DJ 7	%\$Î `< 8 D9ž %&Î `DJ 7
Compatible Feed Connector	<j@i`:7!(,`:yyx`7cbbywmcf< th=""><th><j@i`:7!(,`:yyx`7cbbyw cf<="" th=""></j@i`:7!(,`:yyx`7cbbyw></th></j@i`:7!(,`:yyx`7cbbywmcf<>	<j@i`:7!(,`:yyx`7cbbyw cf<="" th=""></j@i`:7!(,`:yyx`7cbbyw>

(QG &DS 6SHFL; FDWLRQ ,QIRUPDWLRQ

	Recharger 360HD End Cap	Recharger 902HD End Cap
G]nY`fl@`I_`K_`I_`<Ł`	% Î 1 `* \$Î 1 '' * ") Î	- "+ "`' `+, "`' `(, ") "
Installed Length	%) Î	* "&″
End Cap Storage) "%+ [·] Zh³/ft) "' (`Zh³/ft
	"(`Zh³#ib]h`f]bhYf`cW_YXŁ	2.76 ft³#i b]hˈf]bhYf`c₩YXŁ
Minimum Installed Storage	‰"(\$ 'ℤʰ³/ft	%- ", ,
	%) ") \$ ⁻ Zʰ²/unit	%\$"&, [∵] Zh³/unit
Maximum Inlet Opening in End Cap	&(Î `< 8 D9ž'' \$Î `DJ 7	' \$ ´´ < 8 D9ž'' * Î `DJ 7
		EBE

\$00 GLPHQVLRQV DUH QRPLQDO \$FWXDO GLPHQVLRQV PD\ YDU\ RQ VLWH GXH WR VKLSSLQJ DQG WHPSHUDWXUH

&8/7(& +9/9)&)HHG & RQQHFWRU 6SHFL; FDWLRQ, QIRUPDWLR



Site Preparation and Excavation

- Excavate and level the area per engineer's drawings. Refer to plan view and cross-section details and excavate bed to accommodate chambers and manifold system. Be sure to U`ck 'Zcf'U'a]b]a i a '%&']bW 'ghcbY'VcfXYf' around the perimeter of the system and unforeseen overages in your excavation calculations.
- Remove any standing water and maintain positive drainage of the site throughout the installation. Dewatering procedures must be i gYXž⁻]ZbYWggUfm⁴
- Prepare the sub-grade soil for the chamber bed Ug gdYWJUXX Vmh\YYb[]bYYfDg XfUk]b[g"
- D`UW 71 @H97 Bc" (%\$; bcb!k cj Yb [YchYI h]Y fbf Yei]j U`Ybh' cb h\Y YI WJ UhYX VYX Vchca UbX dYf]a YhYf g]XYk U``g Ug gdYVJÙYX Vmh\Y Yb[]bYYf@ XfUk]b[g" 71 @H97 Bc" (%\$; bcb! woven geotextile is required on the sides and over the top of the system. It is also recommended on the system bottom. Overlap h\Y [YchYI h]Y VmUh YUgh & (]bVX Yg k \YfY h\Y fabric edges meet.

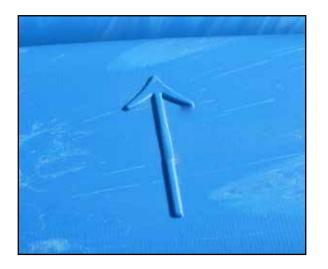


- 8]gdYfgY'U'Yj Y'VUgY'cZ'%'c'&']bW(X]Ua YhYf' k Ug\YXž'Wi g\YX'ghcbY'cj Yf'h\Y'Ybh]fY'UfYU' of the bed bottom. Refer to the engineer's drawings for sub-grade soil preparation and required stone foundation thickness.
- 7 ca dUWih Y ghcbY VUgY hc UW JYj Y U ÚUhž Yj Y unyielding surface. cf j VfUhcfmifc Yf i gYž fYZYf hc HUV Y % cb dU[Y % Zcf fYWa a YbXYX guidelines.



Chamber Information for Recharger® Models 360HD & 902HD

'LUHFWLRQDO DUURZV ORFDWHG RQ WKH WRS RI WKH FKDPEHU SRLQW WRZDUGV WKH 6PDOO 5





CULTEC Recharger® 360HD & 902HD Chambers

The Recharger models 360HD & 902HD chambers come in only one model type which is fully open on both ends. The chamber requires the coordinating End 7 Ud fIV R O G V H StDhd DWW ft Dg cZ chambers or to create single stand alone units. One rib is dimensionally smaller to be able to interlock with additional units. A directional arrow points towards the ga U``f]V YbX" Htd]W``nž h\Y Vi]X cZ h\Y row begins with the large rib end facing you.



6KRZQ 5HFKDUJHU +' 5HFKDUJHU +' &KDPEHU ZLWK RYHUODSSLQJ (QG &DSV

CULTEC Recharger® 360HD & 902HD End Caps

The End Cap is used in conjunction with the chamber to cap rows of chambers or to create single stand alone units.

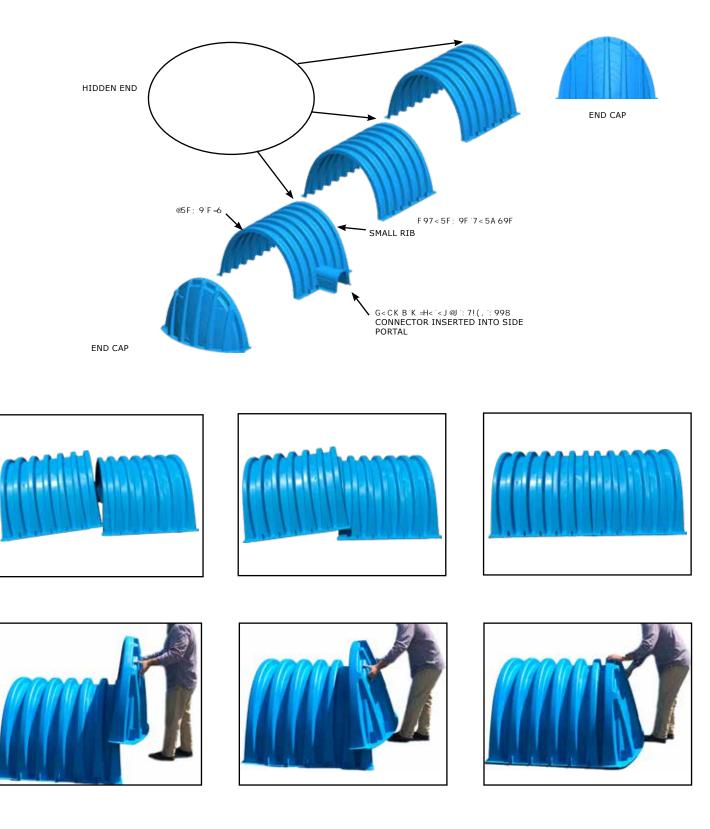


6KRZQ 5HFKDUJHU +'(QG &DS 5HFKDUJHU +'(

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

Typical Installation Method

Interlock Recharger chambers using the overlapping rib connection. Cap the ends of the lines using the Recharger End Cap.





Chamber Preparation and Installation

CULTEC Recharger[®] 360HD & 902HD chambers have the distinctive features of being fully open on both ends and utilize an overlapping rib connection. CULTEC chamber ribs are dimensionally sized with a large rib and a smaller rib to allow for an easy interlocking rib connection. The chambers require a separate YbX`Wd`hc`Wd`c``]bYg"

- Identify and group the chambers and end caps to ensure proper quantity and usage.
- Hf]a 'U``g]XY'dcfhU`gz'YbX'WUdg'UbX']bgdYW]cb' ports prior to installation for easier handling during trimming.
- Place one Recharger chamber for each row of units to be installed. Directional arrows point towards the small rib end of the chamber.
- If using the side portal internal manifold ZYUhi fYž'hf]a 'h\Y'g]XY'dcfhU'fgE'UWtfX]b[to guidelines located on the sidewall of the WUa VYfz'Ug'fYei]fYX" =bgYfh'cbY'YbX'cZ'h\Y' <J@: 7!(, ::YYX'7cbbYWtcf']bhc'h\Y'hf]a a YX' portal to create the internal manifold. Refer to Installation of Manifold section on page 9.
- Place the next Recharger chamber so the directional arrow located in the center of the unit points downstream towards the end of the line. Overlap the large rib over the small rib of h\Y'dfYWX]b[`W\Ua VYfDyYbX'k U`ž']bHYf`cW]b[`the chambers together. When placing chambers hU_Y'WJfY'hc'a U]bHJ]b'gYdUfUh]cb fYei]fYa Ybhgž' measuring from the base of the chamber.
- Hc YUgY VUW<u>U</u>``]b['fYei]fYa Ybhgž cb`m]bghU``Ug' many chambers as the stone-laying bucket or conveyor can reach.
- Place stone taking care not to drop stone over the last rib to be overlapped.
- Continue chamber and stone placement to extend the length of the row.
- I gY h Y FYW Uf[Yf 9bX 7 Udg hc Wd c W Ua VYf fck g" Hc]bghU h Y YbX Wdz]Zh h Y end cap above the chamber and slide down the chamber rib.
- Prior to the placement of the next line of
 W.Ua VYfgž W.YW_UbX WcffYWhA Y YJ Y UbX
 U`][ba YbhcZh Y W.Ua VYf i b]hgž k \YfY bYYXYX"







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

Installation of Manifold

Utilize the side portals located on the chamber as an internal manifold in locations where indicated on the Y'Yb[]bYYfBy XfUk]b[g" < J @ ®:: 7!(, :: YYX 7cbbYWfcfg UfY]bgYfhYX]bfc h\Y'dcfhU`g fc dfca chY Úck "5b" UXX]h]cbU`YI hYfbU`a Ub]Zc X`]g bch fYei]fYX i b`Ygg gdYVJUYX Vmh\Y'Yb[]bYYfBy XYg][b"

- 71 @H97 Bc" (, \$\$; k cj Yb [YchYl h]Y]g hc VY placed under all chambers utilizing the internal manifold feature and under all chambers accepting inlet/outlet pipe connections per Yb[]bYYfb XfUk]b[g"=Z]bgYfh]b[Ud]dY % Î X]Ua YhYf cf Uf[Yf]bhc h Y 71 @H97 WUa VYfZ h Y i gY cZ 71 @H97 Bc" (, \$\$ k cj Yb [YchYl h]Y]g recommended to prevent washout of the bedding stone.
- Most installations are designed with the internal manifold located at the ends of the chamber VYX" < ck Yj Yfz'h Y g]XY'dcfhU``]bhYfbU``a Ub]Zc`X` feature allows for the manifold to be located at any point within the chamber run. Refer to gmghYa `XYg][b Zcf`a Ub]Zc`X``cVUh]cbfbt"
- I g]b[UfYV]dfcVUh]b[gUk cffci hYf2hf]a
 the sidewall portals of the units that are to fYVY]j YhY<J@:7!(, :YYX7cbbYV/cfg":YYX connectors may be placed on any chamber fYei]f]b[Ua Ub]ZcXzUg]bX]WUhYXVmhY engineer's drawings.
- D`UWY`h\Y`<J@I`: 7!(, `: YYX`7cbbYWcf`]bhc` the side portal of the chambers per engineer's XfUk]b[g"`A U]bhU]b`U`-Î`a]b"`gYdUfUh]cb`VYhk YYb` chamber rows.
- Check for correct center-to-center spacing of chamber runs according to engineer's drawings before proceeding to next row.
- =bgYfh']bÚck #ci HÚck 'd]dYfbE']bhc YbX Wud cf' side portal as detailed on engineer's drawings. A UI]a i a ']b'Yh'g]nYg'Zcf'h\Y'YbX'Wudg'UfY. '&(Î < 8D9ž'' \$Î 'DJ 7 'Zcf'h\Y'FYW\Uf['Yf'' *\$<8 '9bX' 7Ud'UbX'' \$Î '< 8D9ž'' *Î 'DJ 7 'Zcf'h\Y'FYW\Uf['Yf' 902HD End Cap. Maximum pipe sizes for the side dcfhU'g'UfY. '%\$Î '< 8D9ž''&Î 'DJ 7"'H\YfY']g'bc'bYYX' to feed every row if utilizing the internal manifold feature.

,I WKH PDQLIROG LQVWDOODWLRQ GHWDLO SRUWDO LQWHUQDO PDQLIROG SURFHHG DF GUDZLQJV IRU SLSH PDQLIROG LQVWDOODWLF









How to Trim CULTEC Chamber to Accommodate Pipe on End Cap

K \Yb'i g]b['U'Wtbj Ybh]cbU``d]dY'a Ub]Zc`X'cf']b`Yh'#'ci hYh'd]dYgž'h\Y'WtbhfUWtcf']g'fYei]fYX'hc'hf]a 'h\Y' CULTEC Recharger End Cap on-site. Here are some quick steps to ensure a successful outcome:

- Lay out chambers according to engineered plans.
- Directional arrows located at the top of the chamber point towards the small rib end.
- Install end caps on the chambers as detailed on the engineer's drawing.
- Locate the proper diameter pipe outline on the end cap to accommodate the designed pipe size and invert elevation.
- Drill a hole on the chamber end wall large enough to accommodate a saw blade.
- c``ck]b['h\Y'YhWYX'ci h`]bYž'i gY'U' reciprocating saw to trim out the opening to accommodate the pipe. Trimming should be k]h\]b'%#(Î ``hc`YfUbWY`cZ'd]dY`C"8"`hc`dfYj Ybh` stone intrusion.
- =bgYfh'h\Y'd]dY'cf'Ùh]b['U'a]b]a i a cZ, î' into the chamber. This is not required to be a watertight connection. Maximum inlet pipe g]nYg.''*\$<8.'`&(î'<8D9ž'' \$î'DJ 7ž'-\$&<8.'' '\$î <8D9ž''*î DJ 7"
- 6UW_Ù```UgʻbchYX`]b`h\Y`]bghU``Uh]cb`]bghfi Wh]cbg` and engineering details.
- Trimming may only be performed on end caps or within side portal areas. Pipe may not be inserted into the sidewall of the chamber unless it is within the side portal trim lines.







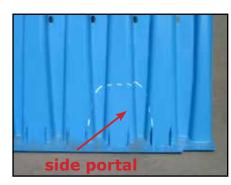


For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

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How to Trim Side Portal to Accommodate HVLV FC-48 Feed Connector for Internal Manifold

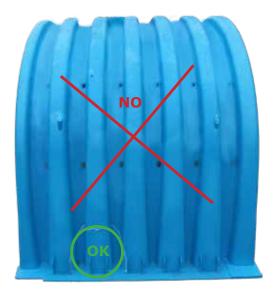
K \Yb`i g]b[`h\Y`g]XY`dcfhU``]bhYfbU``a Ub]Zc`X`ZYUhi fYž`h\Y`V&bhfUWvcf`]g`fYei]fYX`hc`hf]a `h\Y`g]XY`dcfhU`` of the CULTEC Recharger chamber on site.







 c``ck]b[`h\Y`[i]XYg`cb`h\Y`g]XY`dcfhU`ž`igY`U`fYW]dfcWUh]b[`gUk `hc`hf]a `ci h`h\Y`cdYb]b[`hc` UVWca a cXUhY`h\Y`<J@] : 7!(, `: YYX`7cbbYWfcf"`Hf]a a]b[`g\ci `X`VY`k]h\]b`%#(Î`hc`YfUbWf`cZ`<J@] : 7!(, `: YYX`7cbbYWfcf`hc`dfYj Ybh'gc]``]bhfig]cb"



Trimming may only be performed on the side portal area. Side entry in any other location is unacceptable.



 =bgYfh'h'Y' < J@': 7!(, ': YYX'7cbbYWcf'U' a]b]a i a 'cZ', Î ']bhc'h'Y'WUa VYf''H']g']g'bch' required to be a watertight connection.

 Maintain proper separation cZ-Îa]b]a i a VYhk YYb chamber rows.





How to Trim Side Portal to Accommodate Pipe for Side Entry

K \Yb`i g]b[`h\Y`g]XY`dcfhU``ZYUhi fY`Ug`Ub`]b`Yh`#ci hYh`cWUh]cbž`h\Y`WcbhfUWfcf`]g`fYei]fYX`hc`hf]a `h\Y` side portal of the CULTEC Chamber onsite.

- Line up the pipe on the chamber side portal to the designated pipe elevation as detailed on the engineer's drawing. The side portal may UWMta a cXUhY "%1 < 8D9 cf" &1 DJ 7 d]dY"
- I g]b[U [fYUgY dYbž ci h]bY h\Y d]dY cb h\Y side portal of the CULTEC chamber. See Fig. % Zcf UVWY dhUY Y hf]a UfYU" 8 c bch W h ci hg]XY the side portal area guides.
- Drill a hole on the chamber side portal large enough to accommodate a saw blade.
- : c``ck]b['h\Y'[fYUgY'dYb'ci h`]bYž'i gY'U' reciprocating saw to trim out the opening to accommodate the pipe. Trimming should be k]h\]b'%#(î 'hc`YfUbWY'cZ'd]dY'C"8"'hc'dfYj Ybh' soil intrusion.
- =bgYfh'h Y'd]dY cf ùhh]b[U'a]b]a i a cZ, î into the chamber. This is not required to be a watertight connection.







Trimming may only be performed on the side portal area. Side entry in any other location is unacceptable.



Fig. 1 - Acceptable Trim Area

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

(PEHGPHQW 6WRQH %DFN¿OO

6UW_Ù```i g]b['k Ug\YXžWi g\YX'ghcbY" Hc a U]bhU]b' row separation distance and prevent chamber X]gd`UWa Ybhz'g`ck `mX]ghf]Vi hY'ghcbY'cb hcd cZ' the center of the chamber crown so that stone trickles down and builds between chamber rows Ug'fYei]fYX" GhcbY Wc`i a b`X] YfYbhJU`g\ci `X'bch YI WYX %&Î VYhk YYb'UX'UWbhWUa VYf fck g'cf between chamber rows and perimeter.

Place the stone carefully over the centerline of the chamber crown. Embedment stone must only be placed by an excavator or telescoping conveyor boom. Placement of embedment stone with a bulldozer is not an acceptable method of installation and may cause damage to the chambers. Any chambers damaged using an i bUWW dhUVY'a Yh\cX'cZ'VUW_Ù```UfY'bchWcj YfYX' under the CULTEC limited warranty.

Excavator-Placed Stone

Hmd]WU``mh\Y`a cgh'V&a a cb`a Yh\cXž'YI WUj Uhcf! placed stone is limited by the reach of the arm. Hc`UWV&a a cXUhY`h\]g`]ggi Y`k]h\``Uf[Yf`VYXgž']h`]g` common to prepare a bed by joining just a few V\Ua VYf`i b]hg`Uh'U`h]a Yž'h\Yb`d`UV\Jb[`h\Y`ghcbY` and fabric before installing the next few units.

The excavator is usually operated within the excavation area. The excavator may work at grade 'Yj Y``cj Yf`fYWbhmd`UWX`WUa VYfgž`dfcj]XYX` coverage between the chambers and the excavator tracks meets the minimum requirements.

Telescoping Conveyor Boom Placement

K]h\ Vcca g Ug a i W Ug &\$! %(\$ ZYYh cb[ž telescoping aggregate conveyors can greatly aid the process of stone placement.

K]h. Vch. ghcbY!d`UWa Ybh'a Yh.cXgž``UX`]b['h.Y' stone carefully over the chambers' centers will secure them in place. Evenly distributing the stones will help prevent chamber movement and maintain row separation.

CbWrgYW fYXžghcbY a UmVY'd`UWX hc gi ffci bX h\Y'W Ua VYfg'UbX'Ù``h\Y'dYf]a YhYf'UfYUg"'6Y sure to adhere to manufacturer recommendations UbX'Yb[]bYYfbg'XfUk]b[g'Zcf'gmghYa 'Wcj Yf#VUW<u>Ù</u>`` requirements.









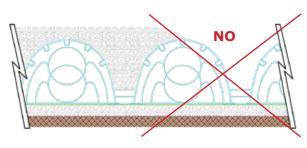
Do not allow equipment to drive over the chambers unless the minimum cover is in place. Use a k Ufb]b['HJdY'fUj U]`UV`Y Zfca '71 @H97Ł'hc`fYghf]Wh access.

Repeat steps until all of the last chamber units are in place. Be certain to use the Recharger End Caps hc `YbX`h\Y``]bY`cZ`V\Ua VYfg`Ug`gdYV)ÙYX`Vmh\Y` drawings.

If a manifold system is designed on the back end cZ'h\Y'W\Ua VYf'VYXž'Zc``ck `a Ub]Zc`X']bghU``Uh]cb' instructions as described previously.

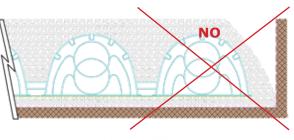
GhcbY'Wt`i a b`\Y][\hX] YfYbh]U`g\ci X'bYj Yf' YI WYX'%&']bW Yg'k]h\ UX'UWfbh'W Ua VYfg'cf' between chamber rows and perimeter. Minimum depth of cover of properly compacted material must be met before allowing vehicles to drive over the bed. Avoid using large rocks and/or organic a UhYf'Ug'VUW_Ù``a UhYf]U`"'FYZYf'hc'f5WWfdhUV`Y' :]``A UhYf]U`gÎ 'cf'WtbhUWfh\Y'XYg][b'Yb[]bYYf'Zcf' Uddfcj YX'Ù``'mdYg"





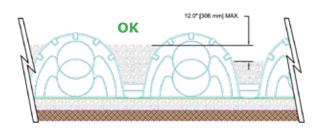
NOTE: CHAMBERS MUST BE BACKFILLED EVEN.Y.

| B9J9B 657?: =@@! INCORRECT INSTALLATION



NOTE: WHEN FILLING IN PERIMETER, STONE MUST BE FILLED IN EVENLY WITH CHAMBER ROWS.

D9F =A 9H9F 'BCH': I @@M657?: =@@98 INCORRECT INSTALLATION



NOTE: STONE HEIGHT IN BETWEEN ROWS AND PERMETER SHOULD NOT DIFFER BY MORE THAN 12" (300 mm).

9J 9B 657?: =@?! CORRECT INSTALLATION



NOTE: PERIMETER MUST BE FULLY BACKFILLED WITH STONE AND EXTEND TO THE EXCAVATION WALL.

D9F = A 9H9F : I @@M657?: =@@98 CORRECT INSTALLATION

30DFHPHQW RI 7RS)DEULF /D\HU 6\VWHP %DFN¿OO 3URFHV

- Place the stone over the entire bed area as described in previous section.
- Cover the entire installation area with CULTEC Bc" (% bcb!k cj Yb [YchYI h]Y ghUfh]b[Zfca the perimeter and laying it on top of the ghcbY" H\Y [YchYI h]Y a i ghcj Yf Ud Uh YUgh &(inches at the edges.
- :]``h\Y`Ùfgh'&]bW\Yg`k]h\Ybci [\`a UhYf]U`fGYY`
 ']b`:]["'%z`dU[Y% Łhc`a YYh'h\Y`fYei]fYa Ybhg'Ug`g\ck b`]b`HUYY' ž`dU[Y% "6UWÙ``cj Yf`h\Y`hcd`cZh\Y`[YchYI h]Y`fGYY'']b`:]["'%z`dU[Y% Ł']b``]Zhg`h\UhXc`bchYI WYX`*`]bW\Ygž`UbX`X]gdYfgY'h\Y`Ù``k]h\U'j Y\]WY h\Uha YYhg'h\Y`a UI]a i a wheel loads or ground pressure limits as gdYWJÙYX cb`gdYWJÙYX`]b`HUYY'%cb`dU[Y'%*"
- 7 ca dUVMYUVX ``]Zh cZ VUW Ù```Ug gdYVJÙYX]b` h\Y Yb[]bYYfBj XfUk]b[g"71 @H97 gdYVJÙYg Wa dUVMb[hc U'a]b]a i a `cZ-)ı `cZh\Y standard proctor density using compaction Yei]da YbhFYZYf hc HUYY %z dU[Y %* Zcf acceptable equipment.
- 6UW_Ù```cj Yf h\Y'W Ua VYf VYX fGYY'(`]b`:]["' %ž'dU[Y'% Ł']b'%&!]bW\`a UI]a i a ``]Zŋg`i bh]`` h\Y`gdYWJÙYX [fUXY`]g'UV\]Yj YX"': cf`dUj Ya Ybh` gi V!VUgY cf`gdYWJU``Ù``fYei]fYa Ybhgž'gYY` engineer's drawings.

NOTE:

Excavation alongside already installed chamber fck g'VUW_Ù``YX'k]h\ 'ghcbY']g'bch'UWWdhUV`Y"' No chambers may be added or subtracted from previously installed systems.



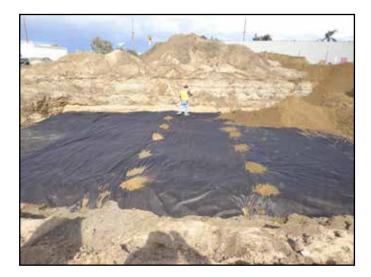






Table 1: Maximum Allowable Construction Loads

		Cumulative	Maximum Allowable Wheel Loads		Maximum Allowable Track Loads		Maximum Allowable Compaction Loads	
	erial Location ig. 1, p. 18	Cover Depth over Chambers (in)	Max Axle Load for Trucks (lbs)	Max Axle Load for Loaders (lbs)	Track Shoe Width (in)	Max Ground Pressure (psi)	Maximum Centrifugal Force (lbs)	Max Gross Vehicle Weight (lbs)
4	Final Fill	()	()		%&	23.8	(155)	
4	Material				%	%* "'		
		36 Compacted	'&ž\$\$\$	%* ž\$\$\$	&(%&",	',ž\$\$\$	%* ž\$\$\$
					30	%\$"*	,	
					36	- "%		
					%&	&\$")		
					%	%("'		
		30	' &ž\$\$\$	%* ž\$\$\$	% &(%%"(&(ž\$\$\$	%&ž\$\$\$
		Compacted	$(\mathbf{x} \mathbf{z} \mathbf{\psi} \mathbf{\psi} \mathbf{\psi})$	70 2444	30	- ")	α(2ψψψ	7032.4.4.4
					36	8.3		
	Table L Cill				%&	%+"&		
3	Initial Fill Material				7ax %	%&""		
		&(' &ž\$\$\$	0/* ቆድድ		⁷⁰⁰ 9.9	o ድ ቆድ ድ	0/0 ቆድ ድ
		Compacted	&Z\$ \$ \$	%* ž\$\$\$	&(30		&\$ž\$\$\$	%&ž\$\$\$
						, "(
					36	+"(
					%&	%) "*		
		&('*\$<8.''&Ž\$\$\$	'*\$<8. [*] %*ž\$\$\$	%	%%"'		
		Loose/Dumped	- \$&< 8. &(Ž\$\$\$	- \$&< 8. `%&ž\$\$\$	&(9.2	&\$ž\$\$\$	%&ž\$\$\$
					30	7.9		
					36	7.0		
					%&	%("\$		
		%	'*\$<8.''&ž\$\$\$	'*\$<8. [°] %*ž\$\$\$	%	%\$"'	'*\$<8.`&\$ž\$\$\$	'*\$<8.`‰ž\$\$\$
		Compacted	- \$&< 8. `&(ž\$\$\$	- \$&< 8. `%&ž\$\$\$	&(, ")	902HD: NOT ALLOWED	- \$&< 8. ') Ž\$\$\$
					30	+"(
					36	6.6		
					%&	%&"*		
					%	9.3		
		% Loose/Dumped	* \$<8. %* ž\$\$\$ 902HD: NOT ALLOWED	NOT ALLOWED	&(7.7	NOT ALLOWED	' * \$<8. `‰ž\$\$\$ 902HD: NOT ALLOWED
					30	6.7		
					36	6.0		
2	Embedment				%&	%\$"+		
	Stone				%	8.3		
		%&	NOT ALLOWED	NOT ALLOWED	&(7.0	NOT ALLOWED	NOT ALLOWED
					30	6.3		
					36)",		
						-OWED FOR 9F - \$&< 8"		
					LOAD DAT. F 97 < 5F	9DH< 'HF 57?' A APPLIES TO ; 9F '' * \$< 8 ' DNLY		
		6	NOT ALLOWED	NOT ALLOWED	%&	+"(NOT ALLOWED	NOT ALLOWED
					%	6.3		
					&() "*		
					30)""		
					36) "\$		

The use of wheeled equipment without proper cover is strictly prohibited.)RU 7UDFNHG 9HKLFOHV *URXQG SUHVVXUH LV YHKLFOH RSHUDWLQJ ZHLJKW GLYLGHG E\ WRWDO WUXFN FRQWDFW DUHD IRU 1R ZKHHOHG YHKLFOHV DUH DOORZHG SULRU WR FRPSDFWHG ¿OO SODFHPHQW

Mat	erial Location	Placement Method/ Restrictions	Wheel Load Restrictions	Track Load Restrictions	Compaction Restrictions	
see F	ig. 1, p.18		See Table 1, p. 16 for Maximum Construction Loads			
4	Final Fill Material	A variety of placement methods may be used. All construction loads shall not exceed the maximum j U'i Yg ']gHYX ']b'HUV'Y %	- \$&< 8. ' * Î a]b]a i a ' cover for dump truck and wheel loader travel ' * \$<8. '&(Î a]b]a i a ' cover for dump truck and wheel loader travel	Dozers shall push parallel to rows only.	902HD: Roller travel shall be parallel to rows cb mi bh''' *1 cZ V&j Yf ']g' reached 360HD: Roller travel shall be parallel to rows cb mi bh]'&(1 cZ V&j Yf ']g' reached	
3	Initial Fill Material	9! WJ Uhof dog]hJobYX of of bed or on foundation stone. Ga Umi@ D'HUW_XonYf2 track skid steer loaders may be used. A i gha UJbHUJb %&i a JbJa i a 'UmVY ok 'HUW_g' at all times.	902HD: Asphalt can be dumped into paver machine when total W a i 'Uhj Y'Ù'''XYdh\ cj Yf' W Ua VYfg'fYUW Yg &(T' 360HD: Asphalt can be dumped into paver machine when total W a i 'Uhj Y'Ù'''XYdh\ cj Yf' W Ua VYfg'fYUW Yg % T'	Equipment direction of travel shall be parallel to rows at all times. Equipment shall not be permitted to turn direction over chambers.	Roller travel shall be parallel to rows only. 902HD: Dynamic roller mode shall be used only when total cumulative D``XYdh`cj Yf`W Ua VYfg` fYUW Yg`&(1 360HD: Dynamic roller mode shall be used only when total cumulative D``XYdh`cj Yf`W Ua VYfg` fYUW Yg`% 1	
2	Embedment Stone	No equipment shall be permitted to contact the chambers. Stone conveyor positioned c 'cZVYX'cf'cb' foundation stone. 91 Wij Uhcf'dcg]h]cbYX'c 'of bed or on foundation stone. Stone column height X] YfYbh]U'VYHk YYb 'chamber rows shall never YI WYX'%&I" Stone to be placed at the crown of the chamber. No stone shall be pushed over chambers.	No wheel loads allowed. No wheel loaders permitted to dump stone directly onto chambers.	No tracked equipment is allowed on chambers until &{i cZYa VYXa YbhghcbY g' in place.	No rollers allowed.	
1	Foundation	5 'j Uf]YhricZd`UWa Ybh'a Yh placement or dozer placeme D`UhY`Wa dUWicf`fc```hc`UW]	Yj Y`U`ÚUhž`i bm]Y`X]b[`gi fZJWY" ``Ubm`WɛbX]h]cbg`cf`fYei]fYa Ybl			

Table 2: Placement Methods and Descriptions

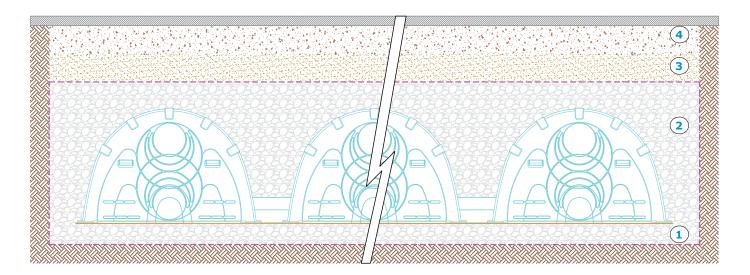


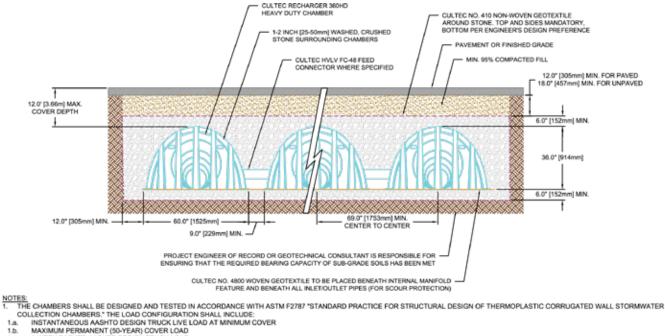
Table 3: Acceptable Fill Materials

	Material Location	Description	AASHTO M43 &ODVVL¿FDWLR	Compaction/ Density Q Requirement
4	:]``A UhYf]U`Zcf`@UnYf`(`ghUfhg`Zca the top of Layer 3 to the bottom cZdUJ Ya Ybh`cf`i bdUJ YX`Ub]g\YX` [fUXY`UVcj Y"`FYZYf`hc`Wfcgg`gYWf]cbZ` dU[Y`%-Zcf`dfcdYf`a`]b]a i a``U``` requirements.	5bmgc]`#fcW_`a UHYf]U`gz`bUhjj Y`gc]`g` or per engineer's plans. Check plans for pavement subgrade requirements.	Per engineer's drawings	Prepare per engineer's drawing. Paved installations may have strict material and preparation requirements.
3	Fill Material for Layer 3 starts from hcd`cZYa VYXa YbhghcbY`fi@UnYf`&L` to minimum required depth above top of chamber. FYZYf hc Wcgg gYWjcbž dU[Y`%-`Zcf` dfcdYf`a]b]a i a `Û``fYei]fYa Ybhg"	;fUbi`Uf`kY``![fUXYX` gc]#U[[fY[UhY`a]]hifYgž`` O`)ı `ÜbYg	' Ž (Ž) Ž '* Ž +Ž , Ž - Ž %\$Ž) * Ž) +Ž '* +Ž * , Ž + , Ž , - Ž (* +	7ca dUWijb'*Ĩ'']2hg'hc'U'a]b]a i a ' -) i 'GHUbXUfX'DfcWhcf'XYbg]hn'i FY2Yf'hc'HUV'Y'%Zcf'UWWidhUV'Y' gross vehicle weights.
2	Embedment Stone surrounding chambers and to a minimum elevation above chamber crown. ' *\$<8. '*Ĩ`a]b"'fYei]fYX - \$&<8. '%8Ĩ `a]b"'fYei]fYX"	K Ug\YXžWi g\YXghcbY'k]h\'h\Y majority of particles between %i '!`&i	' Ž (Ž) +Ž * +	No compaction required.
1	Foundation Stone below chambers per engineer's drawing ' * \$<8. '*Î 'a]b""fYei]fYX - \$&<8. '-Î 'a]b""fYei]fYX"	K Ug\YXžWi g\YXghcbY'k]h\'h\Y majority of particles between %i '! &i '	' Ž (Ž) +Ž * +	Plate compact or roll to achieve a ÚUhż'i bm]Y'X]b['gi fZUWY"

7KH OLVWHG \$\$6+72 FODVVL¿FDWLRQV DUH IRU JUDGDWLRQV 7KH VWRQH PXVW EH ZDVKHG FUXVKHG DQG DQJXODU 6HH 7DE)RU H[DPSOH WKH VWRQH PXVW EH VSHFL¿HG DV ZDVKHG FUXVKHG 1R VWRQH)LOO PDWHULDOV VKDOO EH IUHH RI GHEUL &RQWDFW &8/7(& IRU JUDGDWLRQ UHTXLUHPHQWV IRU VSHFL¿F SURMHFWV WKDW GR QRW IDOO ZLWKLQ WKH DERYH VSHFL¿FDV

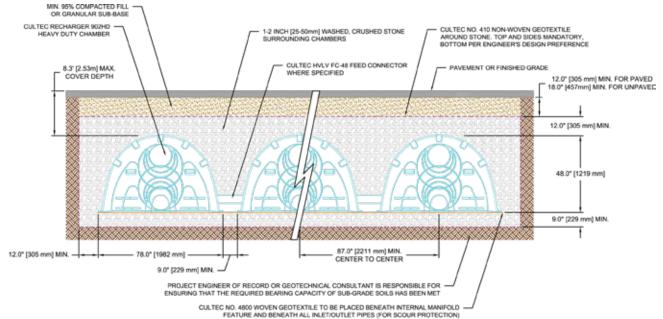
Fig. 1. Fill Material Locations - refer to Tables 1-3





- MAXIMUM PERMANENT (50-YEAR) COVER LOAD 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD 1.b.
- 1.c.
- THE CHAMPERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMPERS" 2.
- THE UNSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LIKE BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430
- THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
- 3.b. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE

5 H F K D U J H U +' 7\SLFDO &URVV 6HFWLRQ IRU 7UDÒF \$SSOLF



THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORWWATER COLLECTION CHAMBERS' THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F330-2015TANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS
 THE INSTALLED CHAMBERS SHALL NOLUCIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE ASHTOL REPORT BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED
 ACCORDING TO CULTECS RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 a. THE CREEP MODULUS SHALL BE SOLVERAR AS SPECIFIED IN ASTM F3430
 the WINIMUM SAFETY FACTOR FOR LIVE 0.175
 the WINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

&8/7(& 1R OE 1RQ :RYHQ *HRWH[WLOH 6SHFL; FDWLRO 7 D E O H

Properties	ASTM Test Method	Test Results
Appearance		Black
Weight - Typical	8 ') &* %	(") [·] cn#gm
Tensile Strength	8 (* ' &	%&\$``Vg
9`cb[Uh]cb'4 '6fYU_	8 (* ' &) \$1
Mullen Burst*	D 3786*	&&) `dg]
Puncture Strength*	8 ·(, ' ' ł	*) ``Vg
CBR Puncture	8 ** &(%	' (\$``Vg
Trapezoid Tear	8 () ' ') \$``Vg
AOS	8 (+) %	70 US Sieve
Permittivity	8 ((- %	%"+\$`GYW%
Water Flow Rate	8 ((- %	%) [U`#a]b#gZ
IJ`FYg]ghUbWY`4`)\$\$` <cifg< td=""><td>8 ('))</td><td>+\$1</td></cifg<>	8 ('))	+\$1

+LVWRULFDO DYHUDJHV FXUUHQW YDOXHV QRW DYDLODEOH 0XOOHQ %XUVW 6WUHQJWK \$670 ' LV QR ORQJHU UHFRJQL]H PHWKRG 3XQFWXUH 6WUHQJWK \$670 ' LV QRW UHFRJQL]HG E\ \$\$6+72 0 DQG KDV EHHQ UHSODFHG ZLWK &%5 3XQFWXUH \$ 6XEVWLWXWLRQV PXVW PHHW RU H[FHHG WKHVH PLQLPXPV 1RQ ZRYHQ JHRWH[WLOH SODFHPHQW LV PDQGDWRU\ RYHU WRS D UHFRPPHQGHG +RZHYHU IROORZ HQJLQHHU¶V GHVLJQ SUHIHUHQFH

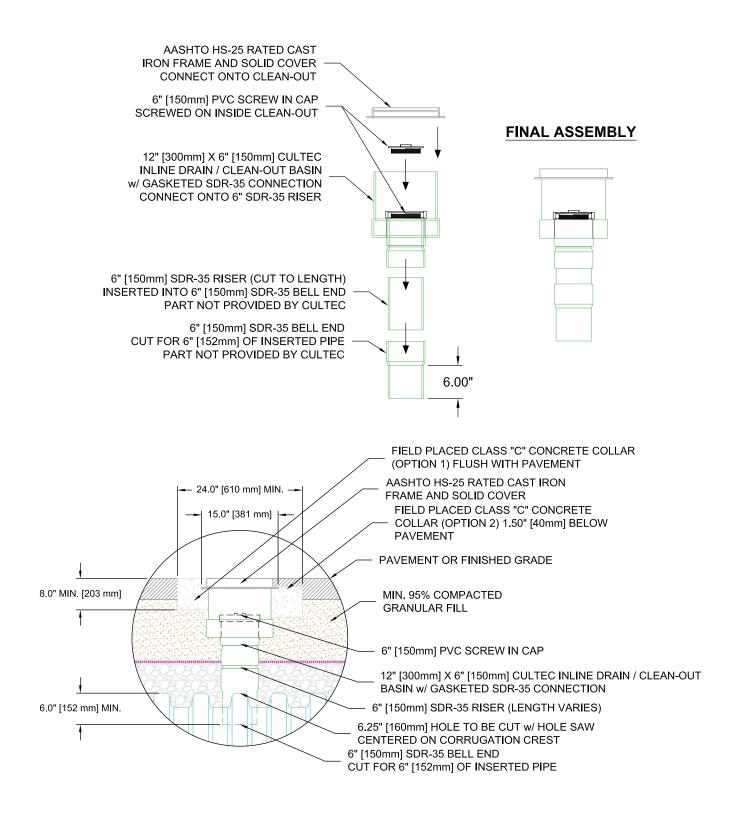
Table 4: &8/7(& 1R OE :RYHQ *HRWH[WLOH 6SHFL; FDWLRQ, QIRU]

Properties	ASTM Test Method	Test Results
Appearance		Black
Tensile Strength	8 (*' &))\$1`))\$``Vg
9`cb[Uh]cb'4'6fYU_	8 (*' &	&\$`I`&\$i
Wide Width Tensile	8 () -)) ž\$+\$`I`) ž\$+\$``Vg#Zh
K]XY`K]Xh\`HYbg]`Y`4`&ı `GhfU]b	8 () -)	- * \$`I `%ž\$- * ``Vg#Zh
K]XY`K]Xh\`HYbg]`Y`4 `) ı `GhfU]b	8 () -)	&ž+(\$`I`&ž+(\$``Vg#Zh
K_]XY`K_]Xh\`HYbg]`Y`4 %\$i_`GhfU]b	8 () -)	(ž, \$\$`I `(ž, \$\$``Vg#Zh
CBR Puncture	8 ** &(%	%ž+\$\$``Vg
Trapezoidal Tear	8 () ' '	%, \$`I`%, \$``Vg
Apparent Opening Size	8 (+) %	(\$`IG`G]YjY
Permittivity	8 '((- %	\$"%) GY₩%
Water Flow Rate	8 '((- %	%%") [[#a]]b#gZ
IJ FYg]ghUbWY 4)\$\$ <cifg< td=""><td>8 ('))</td><td>, \$1</td></cifg<>	8 ('))	, \$1

6XEVWLWXWLRQV PXVW PHHW RU H[FHHG WKHVH PLQLPXPV 7R EH XVHG DV VFRXU SURWHFWLRQ DQG LQ FRQMXQFWLRQ ZLWK

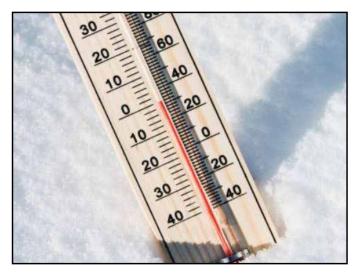
Table 5: Criteria for acceptable 1 - 2 inch washed, crushed, angular stone

Washed Crushed Stone	Description	Criteria
Accontable	Angular	Stones have sharp edges and relatively plane sides with unpolished surfaces
Acceptable Subangular		Stones are similar to angular description but may have slightly rounded edges
Unacceptable	Subrounded	Stones have nearly plane sides but have well-rounded corners and edges
	Rounded	Stones have smoothly curved sides and no edges
6HH,WHP DQG,WHP RI7DEO	H RQSDJH IRU	DGGLWLRQDO VWRQH UHTXLUHPHQWV



Trim inspection port knock-out with reciprocating saw or hole-saw. Corrugated pipe is not suitable for inspection port.

Special Handling Instructions for Polypropylene, Chambers in Colder Temperatures



CULTEC chambers are manufactured of impacta cX]ÙYX dc`mdfcdmYbYž k \]W `]g`]b\YfYbh`m resistant to corrosion and chemical breakdown UbX Wc`X`k YUh\Yf`]a dUWi'' 5XX]h]cbU`'I J `]b\]V]hcfg` and antioxidants increase the chambers' fYg]ghUbW' hc gi b`][\h`XY[fUXUh]cb'''' < ck Yj Yfz' 7I @H97 'fYWta a YbXg'h\Uhz'k \Yb `]bghU`YX`]b`Wt`X` hYa dYfUh fYg'VY`ck '' & XY[fYYg': \mathring{z} 'h\Y`]bghU`Yf' take special care when removing the chambers Zfca 'h\Y`ghUW_gz`bchU``ck]b['h\Y`W\Ua VYfg'hc 'ZJ``` from height. Avoid using machinery to handle the V\\Ua VYfg'' K \Yb`dcgg]V`Yz`7I @H97 'fYWta a YbXg' h\Uh'h\Y`ghcbY`VUW_Ù``VY'd`UWXX`]b`hYa dYfUhi fYg above 32 degrees F to minimize depressions or XYÚYWjcbg''





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









CULTEC, Inc. 878 Federal Road • P.O. Box 280 • '6fcc_ÙY`Xž'7H'\$*, \$('I G5 D. 'f&\$' Ł'++)!((%* • Hc``: fYY. '%fl \$\$L'(!71 @H97 • www.cultec.com



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