# **CULTEC Recharger® 330XLHD Stormwater Chamber**



The Recharger® 330XLHD is a 30.5" (775 mm) tall, high capacity chamber. Typically when using this model, fewer chambers are required resulting in less labor and a smaller installation area. The Recharger® 330XLHD has the side portal internal manifold feature. HVLV® FC-24 Feed Connectors are inserted into the side portals to create the internal manifold.

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	1.50'			
	0.46 m			
Chamber Storage	7.46 ft <sup>3</sup> /ft			
	0.69 m³/m			
	52.21 ft³/unit			
	1.48 m³/unit			
Min. Installed Storage	11.32 ft³/ft			
	1.05 m³/m			
	79.26 ft³/unit			
	2.24 m³/unit			
Min. Area Required	33.83 ft <sup>2</sup>			
	3.14 m²			
Chamber Weight	73.0 lbs			
	33.11 kg			
Shipping	30 chambers/skid			
	2,335 lbs/skid			
	10 skids/48' flatbed			
Min. Center-to-Center Spacing	4.83'			
	1.47 m			
Max. Allowable Cover	12'			
	3.66 m			
Max. Inlet Opening in End Wall	24" HDPE, PVC			
	600 mm HDPE, PVC			
Max. Allowable O.D.	10" HDPE, 12" PVC			
in Side Portal	250 mm HDPE, 300 mm PVC			
Compatible Feed Connector	HVLV FC-24 Feed Connector			

Calculations are based on installed chamber length.

All above values are nominal.

Min. installed storage includes 6" (152 mm) stone base, 6" (152 mm) stone above crown of chamber and typical stone surround at 58" (1473 mm) center-to-center spacing.

	Stone Foundation Depth				
	6"	12"	18"		
	152 mm	305 mm	457 mm		
Chamber and Stone Storage Per Chamber	79.26 ft <sup>3</sup>	86.03 ft <sup>3</sup>	92.79 ft <sup>3</sup>		
Chamber	2.24 m³	2.44 m³	2.63 m³		
Min. Effective Depth	3.54'	4.04'	4.54'		
	1.08 m	1.23 m	1.38 m		
Stone Required Per Chamber	$2.50 \text{ yd}^3$	$3.13 \text{ yd}^3$	3.76 yd³		
	1.91 m³	2.39 m <sup>3</sup>	2.87 m³		

Calculations are based on installed chamber length. Includes 6" (305 mm) stone above crown of chamber and typical stone surround at 58"(1473 mm) center-to-center spacing and stone foundation as listed in table. Stone void calculated at 40%.



Recharger® 330XLHD Bare Chamber Storage Volumes

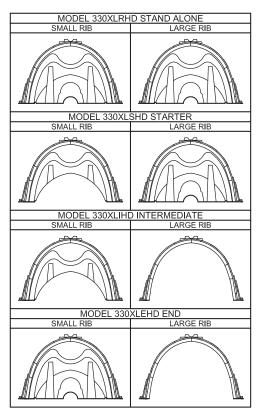
Elevation		Incremental Storage Volume				Cumulative Storage	
in.	mm	ft³/ft	m³/m	ft³	m³	ft³	m³
30.5	775	0.000	0.000	0.000	0.000	52.213	1.479
30	762	0.019	0.002	0.133	0.004	52.213	1.479
29	737	0.051	0.005	0.357	0.010	52.080	1.475
28	711	0.084	0.008	0.588	0.017	51.723	1.465
27	686	0.124	0.012	0.868	0.025	51.135	1.448
26	660	0.150	0.014	1.05	0.030	50.267	1.424
25	635	0.173	0.016	1.211	0.034	49.217	1.394
24	609	0.191	0.018	1.337	0.038	48.006	1.360
23	584	0.207	0.019	1.449	0.041	46.669	1.322
22	559	0.221	0.021	1.547	0.044	45.220	1.281
21	533	0.233	0.022	1.631	0.046	43.673	1.237
20	508	0.244	0.023	1.708	0.048	42.042	1.191
19	483	0.254	0.024	1.778	0.050	40.334	1.142
18	457	0.264	0.025	1.848	0.052	38.556	1.092
17	432	0.271	0.025	1.897	0.054	36.708	1.040
16	406	0.283	0.026	1.981	0.056	34.811	0.986
15	381	0.294	0.027	2.058	0.058	32.830	0.930
14	356	0.296	0.027	2.072	0.059	30.772	0.871
13	330	0.299	0.028	2.093	0.059	28.700	0.813
12	305	0.301	0.028	2.107	0.060	26.607	0.754
11	279	0.303	0.028	2.121	0.060	24.500	0.694
10	254	0.304	0.028	2.128	0.060	22.379	0.634
9	229	0.306	0.028	2.142	0.061	20.251	0.574
8	203	0.313	0.029	2.191	0.062	18.109	0.513
7	178	0.321	0.030	2.247	0.064	15.918	0.451
6	152	0.322	0.030	2.254	0.064	13.671	0.387
5	127	0.323	0.030	2.261	0.064	11.417	0.323
4	102	0.324	0.030	2.268	0.064	9.156	0.259
3	76	0.325	0.030	2.275	0.064	6.888	0.195
2	51	0.327	0.030	2.289	0.065	4.613	0.131
1	25	0.332	0.031	2.324	0.066	2.324	0.066
To	tal	7.459	0.693	52.213	1.479	52.213	1.479

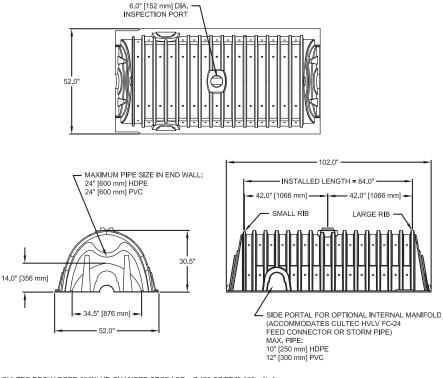
Calculations are based on installed chamber length.

Visit http://cultec.com/downloads/ for Product Downloads and CAD details.



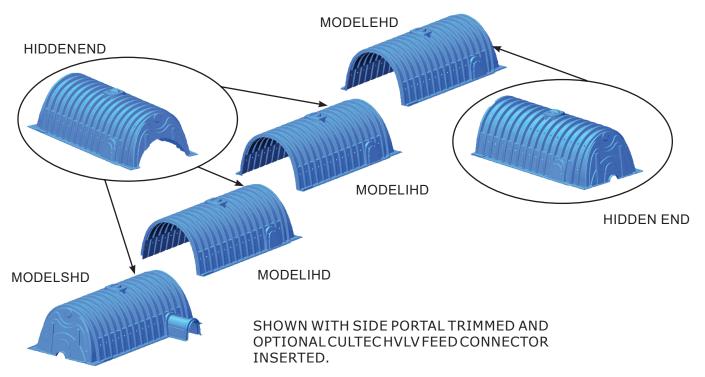
### **Three View Drawing**





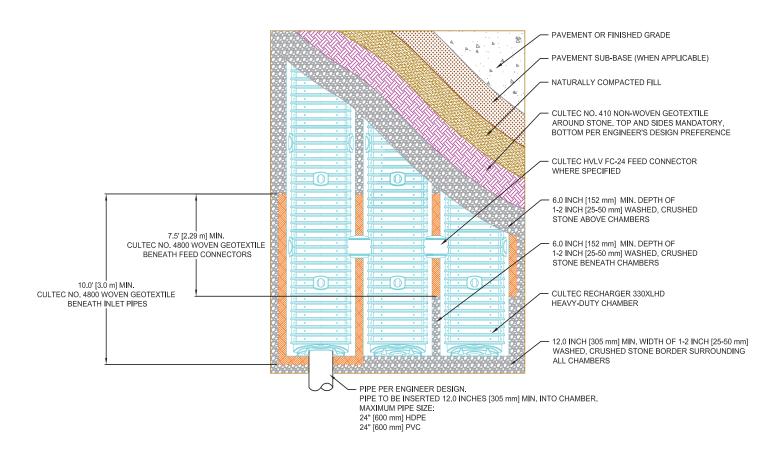
CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.459 CF/FT [0.693 m³/m] INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m] SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR

## **Typical Interlock Installation**

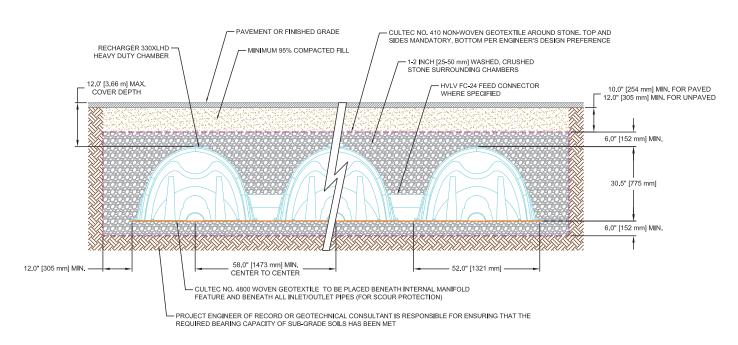




#### **Plan View Drawing**



## **Typical Cross Section for Traffic Application**



# **CULTEC Recharger® 330XLHD Stormwater Chamber**



### **CULTEC Recharger® 330XLHD Specifications**

#### **GENERAL**

CULTEC Recharger® 330XLHD chambers are designed for underground stormwater management. The chambers may be used for retention, recharging, detention or controlling the flow of on-site stormwater runoff.

#### **CHAMBER PARAMETERS**

- 1. The chambers shall be manufactured in the U.S.A. by CULTEC, Inc. of Brookfield, CT (cultec.com, 203-775-4416).
- 2. The chamber shall be vacuum thermoformed of polyethylene with a black interior and blue exterior.
- 3. The chamber shall be arched in shape.
- 4. The chamber shall be open-bottomed.
- 5. The chamber shall be joined using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings or separate end walls.
- 6. The nominal chamber dimensions of the CULTEC Recharger® 330XLHD shall be 30.5 inches (775 mm) tall, 52 inches (1321 mm) wide and 8.5 feet (2.59 m) long. The installed length of a joined Recharger® 330XLHD shall be 7 feet (2.13 m).
- 7. Maximum inlet opening on the chamber end wall is 24 inches (600 mm) HDPE, PVC.
- 8. The chamber shall have two side portals to accept CULTEC HVLV® FC-24 Feed Connectors to create an internal manifold. Maximum allowable O.D. in the side portal is 10 inches (250 mm) HDPE and 12 inches (300 mm) PVC.
- 9. The nominal chamber dimensions of the CULTEC HVLV® FC-24 Feed Connector shall be 12 inches (305 mm) tall, 16 inches (406 mm) wide and 24.2 inches (614 mm) long.
- 10. The nominal storage volume of the Recharger® 330XLHD chamber shall be 7.459 ft³ / ft (0.693 m³ / m) without stone. The nominal storage volume of a single Recharger® 330XLRHD Stand Alone unit shall be 63.40 ft³ (1.80 m³) without stone. The nominal storage volume of a joined Recharger® 330XLIHD Intermediate unit shall be 52.213 ft³ (1.478 m³) without stone. The nominal storage volume of the length adjustment amount per run shall be 11.19 ft³ (1.04 m³) without stone.
- 11. The nominal storage volume of the HVLV® FC-24 Feed Connector shall be 0.913 ft<sup>3</sup> / ft (0.026 m<sup>3</sup> / m) without stone.
- 12. The Recharger® 330XLHD chamber shall have fifty-six discharge holes bored into the sidewalls of the unit's core to promote lateral conveyance of water.
- 13. The Recharger® 330XLHD chamber shall have 16 corrugations.
- 14. The end wall of the chamber, when present, shall be an integral part of the continuously formed unit. Separate end plates cannot be used with this unit.
- 15. The Recharger® 330XLRHD Stand Alone unit must be formed as a whole chamber having two fully formed integral end walls and having no separate end plates or separate end walls.
- 16. The Recharger® 330XLSHD Starter unit must be formed as a whole chamber having one fully formed integral end wall and one partially formed integral end wall with a lower transfer opening of 14 inches (356 mm) high x 34.5 inches (876 mm) wide.
- 17. The Recharger® 330XLIHD Intermediate unit must be formed as a whole chamber having one fully open end wall and one partially formed integral end wall with a lower transfer opening of 14 inches (356 mm) high x 34.5 inches (876 mm) wide.
- 18. The Recharger® 330XLEHD End unit must be formed as a whole chamber having one fully formed integral end wall and one fully open end wall and having no separate end plates or end walls.
- 19. The HVLV® FC-24 Feed Connector must be formed as a whole chamber having two open end walls and having no separate end plates or separate end walls. The unit shall fit into the side portals of the Recharger® 330XLHD and act as cross feed connections.
- 20. Chambers must have horizontal stiffening flex reduction steps between the ribs.
- 21. The chamber shall have a raised integral cap at the top of the arch in the center of each unit to be used as an optional inspection port or clean-out.
- 22. The units may be trimmed to custom lengths by cutting back to any corrugation on the large rib end.
- 23. The chamber shall be manufactured in an ISO 9001:2015 certified facility.
- 24. The chamber shall be designed and manufactured to meet the material and structural requirements of IAPMO PS 63-2019, including resistance to AASHTO H-10 and H-20 highway live loads, when installed in accordance with CULTEC's installation instructions.
- 25. The chamber shall be designed and manufactured in accordance with the specifications of NSAI Irish Agrement Board Certificate for Cultec Attenuation and Infiltration.
- 26. Maximum allowable cover over the top of the chamber shall be 12' (3.66 m).
- 27. The chamber shall be designed to withstand traffic loads when installed according to CULTEC's recommended installation instructions.