

CULTEC RECHARGER® 150XLHD SPECIFICATIONS

GENERAL
CULTEC RECHARGER® 150XLHD 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 BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)

2. THE CHAMBERS SHALL BE DESIGNED AND TESTED VIA FINITE ELEMENT ANALYSIS IN ACCORDANCE WITH THE ASTM F2787 STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS. THE LOAD CONFIGURATION SHALL INCLUDE:
a. INSTANTANEOUS AASHTO DESIGN TRUCK LOAD AT MINIMUM COVER.
b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD.
c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD.

3. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD 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:
a. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75.
b. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.55.

4. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR

5. THE CHAMBER SHALL BE ARCHED IN SHAPE.

6. THE CHAMBER SHALL BE OPEN-BOTTOMED.

7. 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.

8. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.

9. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.

10. 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 CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.

11. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

12. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL
CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER STORMWATER CHAMBERS.

CHAMBER PARAMETERS
1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)

2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.

3. THE CHAMBER SHALL BE ARCHED IN SHAPE.

4. THE CHAMBER SHALL BE OPEN-BOTTOMED.

5. 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.

6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.

7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.

8. 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 CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.

9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE
CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)

2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.

3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).

4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.

5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.

6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.

7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.

8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.

9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.

10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.

11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.

12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SQ (5500 L/MIN/SQ) PER ASTM D4491 TESTING METHOD.

13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

ADS PLUS-US WOVEN GEOTEXTILE
ADS PLUS-US WOVEN GEOTEXTILE IS DESIGNED AS AN UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW/ADS ISOLATOR ROW PLUS CONFIGURATION (IF APPLICABLE) TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

GEOTEXTILE PARAMETERS
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)

2. THE GEOTEXTILE SHALL BE BLACK AND WHITE IN APPEARANCE.

3. THE GEOTEXTILE SHALL HAVE A MARV WEIGHT OF 8.0 OZ/YD² PER ASTM D5261 TESTING METHOD.

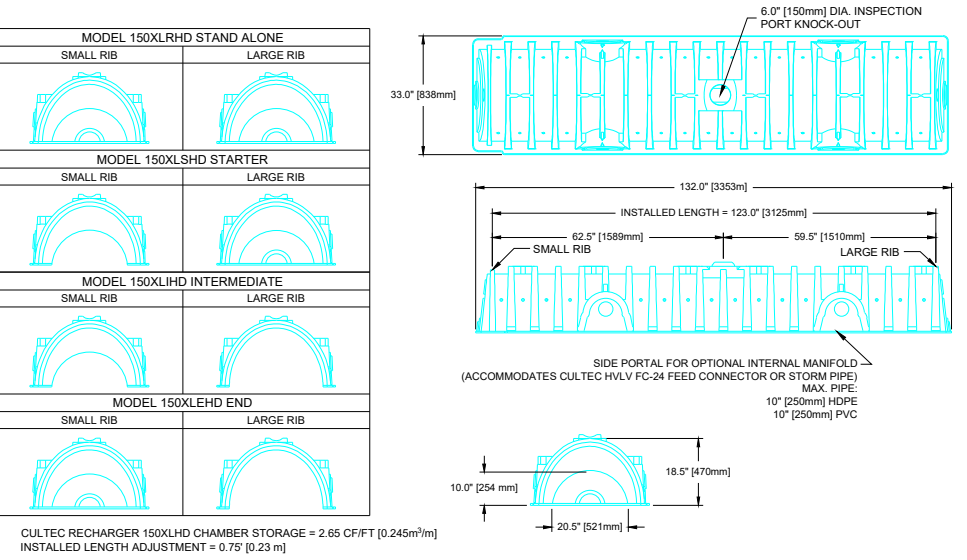
4. THE GEOTEXTILE SHALL HAVE A GRAB TENSILE STRENGTH OF 325 X 325 LBS (1,445 X 1,445 N) PER ASTM D4632 TESTING METHOD.

5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK RESISTANCE OF 15 X 15% PER ASTM D4632 TESTING METHOD.

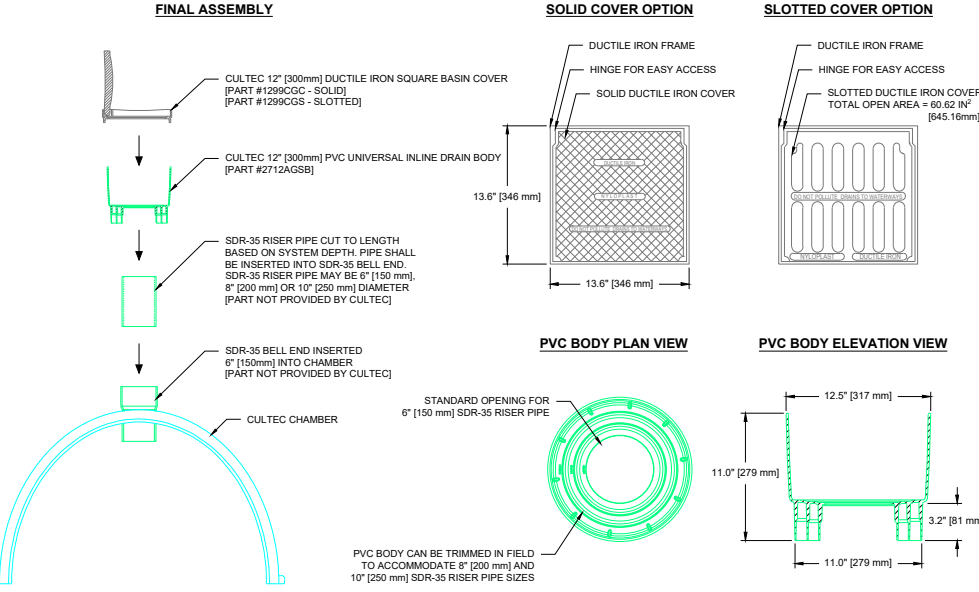
6. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,124 LBS (5,000 N) PER ASTM D6241 TESTING METHOD.

7. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 125 X 125 LBS (556 X 556 N) PER ASTM D4533 TESTING METHOD.

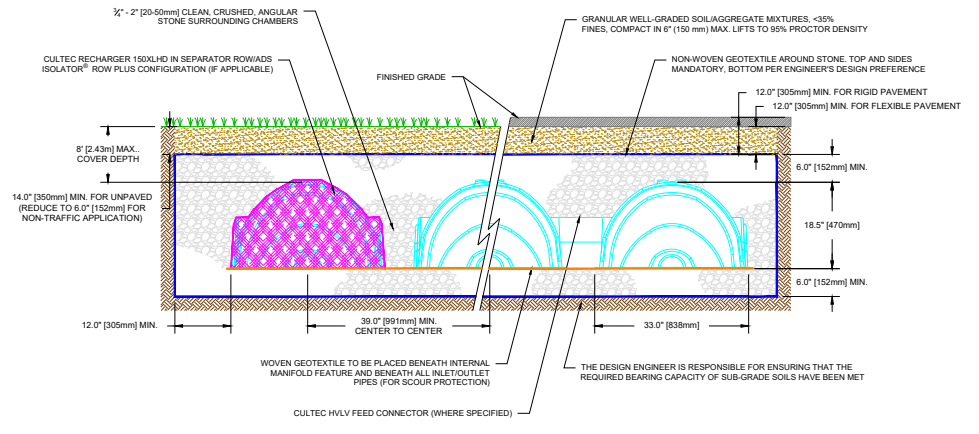
GENERAL NOTES



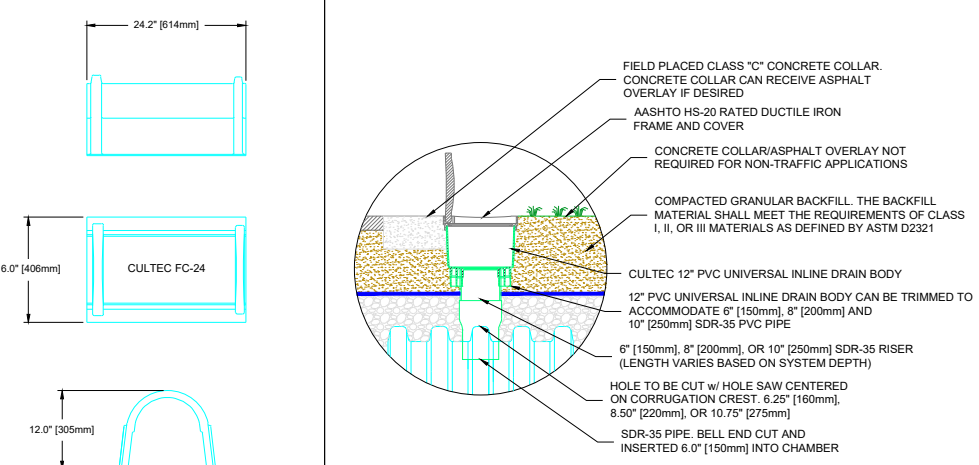
CULTEC RECHARGER 150XLHD HEAVY DUTY THREE VIEW



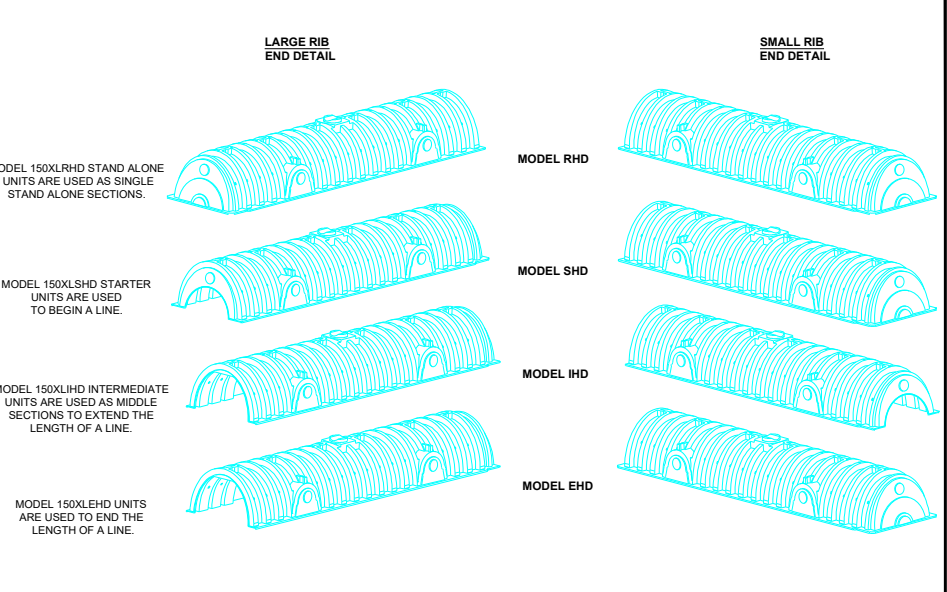
CULTEC UNIVERSAL INSPECTION PORT KIT DETAIL



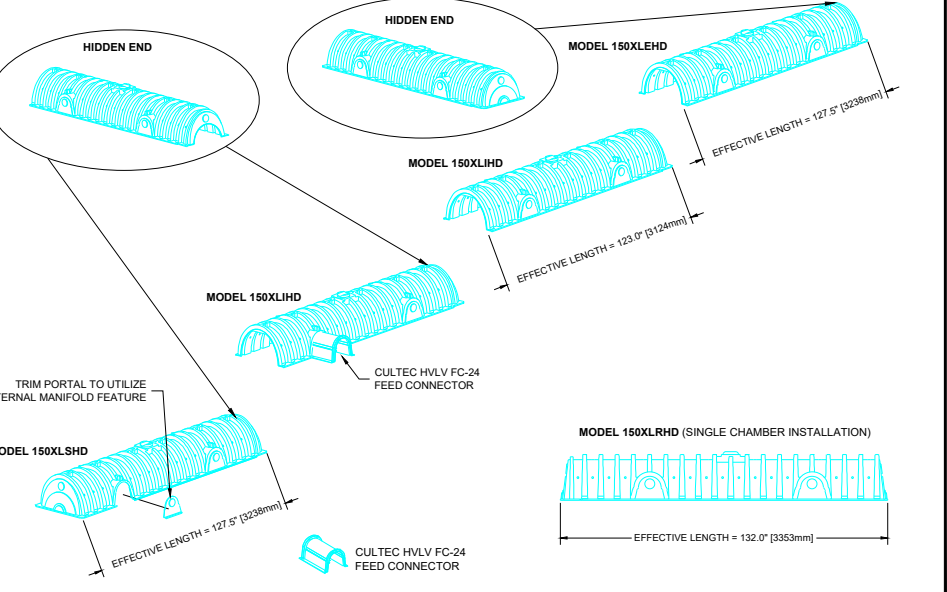
CULTEC RECHARGER 150XLHD CROSS SECTION



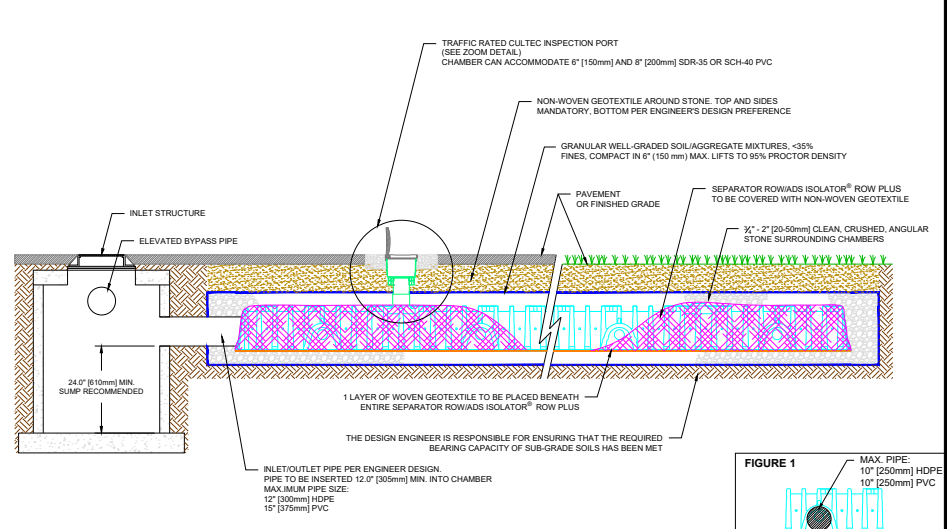
OPTIONAL CULTEC INSPECTION PORT - ZOOM DETAIL



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC SEPARATOR ROW - CULTEC INSPECTION PORT DETAIL (IF APPLICABLE)

| | | | | |
|----------------------------------|--------------|------------|-------------|--------|
| CULTEC STORMWATER CHAMBER | PROJECT NO: | 06/05/2026 | CHECKED BY: | 1 OF 1 |
| | DESIGNED BY: | | | |
| | SCALE: | | | |

RECHARGER 150XLHD
DETAIL SHEET

CULTEC
Subsurface Stormwater Management Systems
878 Federal Road
Brookfield, CT 06804
www.cultec.com
PH: 1(203) 775-4416
PH: (800) 4-CULTEC
CT-tech@cultec.com



THIS DRAWING HAS BEEN PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO CULTEC UNDER THE DIRECTION OF THE PROJECT ENGINEER OF RECORD. CULTEC SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS, REGULATIONS AND MANUFACTURER REQUIREMENTS.