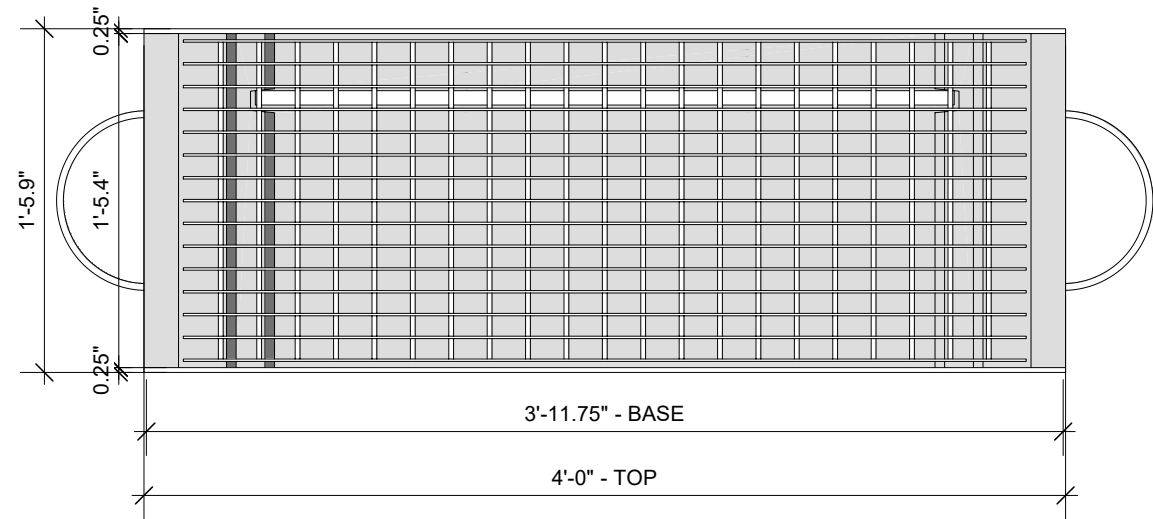
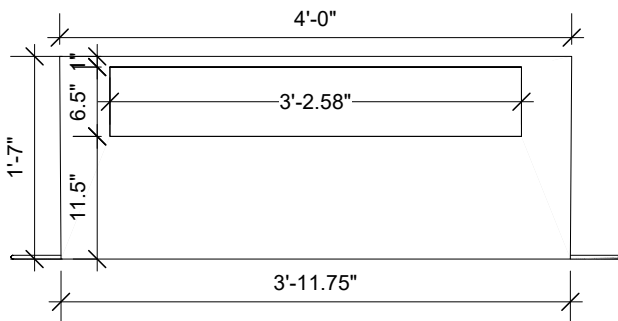
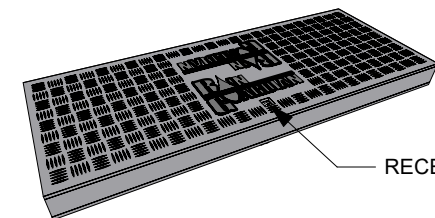




PLAN VIEW

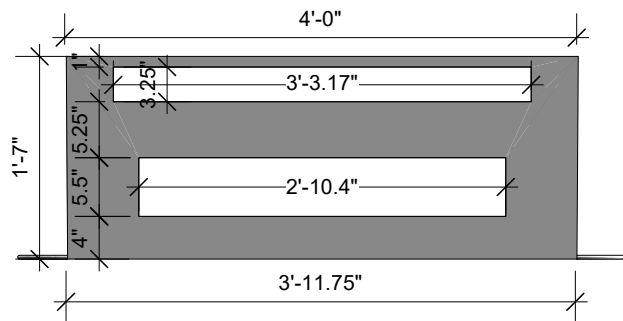


ELEVATION VIEW - INLET

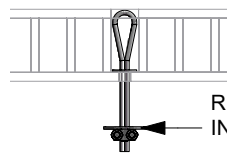


RECESSED LIFTING CABLE ASSEMBLY

OPTIONAL H-20 RATED LID OVERVIEW

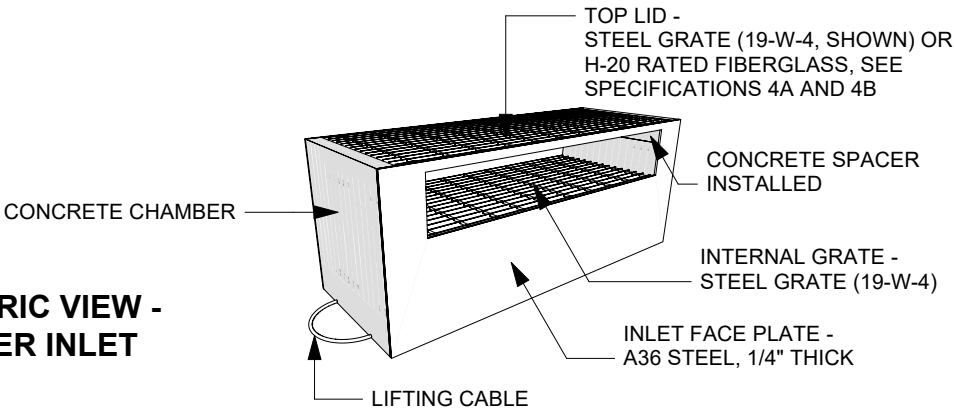


ELEVATION VIEW - OUTLET

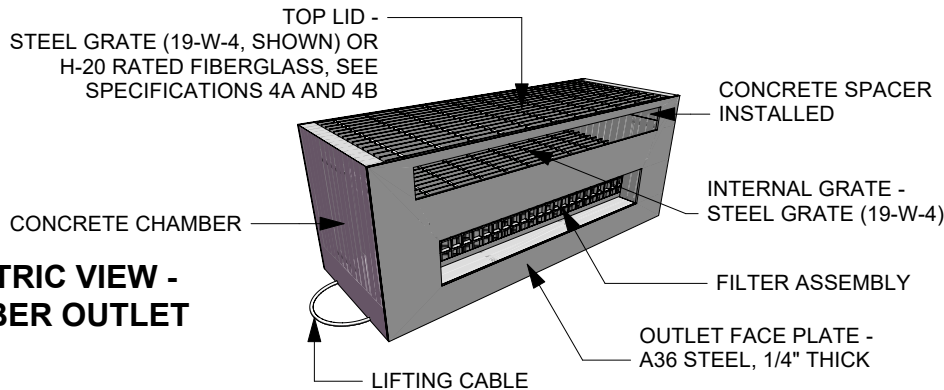


RECESSED LIFTING CABLE ASSEMBLY
INSTALL PER CROSS-SECTION

ISOMETRIC VIEW -
CHAMBER INLET

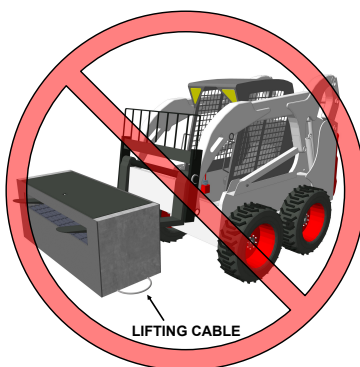


ISOMETRIC VIEW -
CHAMBER OUTLET



HANDLING
INSTRUCTIONS

DO NOT LIFT FORTRESS
BY METAL FACE PLATES



LIFT ONLY BY CABLES
WITH SPREADER BAR

SPECIFICATIONS

- 1. CONCRETE CHAMBER:** STEEL REINFORCED, COLD JOINT SECURED MONOLITHIC CONCRETE STRUCTURE; 3.37 CF CONCRETE (APPROX. 516 LBS); MINIMUM 4,500 PSI COMPRESSIVE STRENGTH AT 28 DAYS; AIR ENTRAINED (4% TO 8% BY VOLUME); MANUFACTURED AND DESIGNED TO ASTM C858; 1.34 CF STORAGE VOLUME
- 2. LIFTING:** TWO-POINT PICK WITH EMBEDDED LIFTING CABLES
- 3. INTERNAL GRATE:** STEEL GRATE (19-W-4), 1" THICK; 23 LBS, 361 CONCENTRATED LOAD OR 206 LB/SQ-FT UNIFORM LOAD
- 4. TOP LID:**
 - A. STANDARD:** STEEL GRATE (19-W-4), 1" THICK, 27 LBS, 361 LB CONCENTRATED LOAD OR 206 LB/SQ-FT UNIFORM LOAD. INCLUDES (2) 2" TALL CONCRETE SPACERS (INSTALLED).
 - B. OPTIONAL (H-20):** FIBERGLASS LID, 3" THICK, 89 LBS, H-20 RATED, 16,000 LB CONCENTRATED LOAD, 0.4" MAX DEFLECTION AT DESIGN SPAN
- 5. FACE PLATES:** A36 STEEL, 1/4" THICK (INLET AND OUTLET)
- 6. FILTER ASSEMBLY:** REMOVABLE, FIBERGLASS GRATE WITH FILTER FABRIC AND ALUMINUM CHANNEL FRAME

INSTALLATION NOTES:

- 1. LOCATION:** UNIT LOCATION VARIES BASED ON SITE CONDITIONS. PRIMARY CHAMBER OUTLET MUST ALIGN WITH TOE OF BASIN SIDE SLOPE TO AVOID SOIL INTERFERENCE WITH REMOVABLE FILTER WALL.
- 2. EXCAVATION:** EXCAVATE MINIMUM 4'-6" L X 2'-0" W. DEPTH: 1'-7" BELOW GUTTER LINE TO ACCOMMODATE 6" AGGREGATE BASE, 4" UNIT BASE, AND 9" PONDING DEPTH.
- 3. AGGREGATE BASE:** INSTALL 6" AGGREGATE BASE, COMPACTED 95% STANDARD PROCTOR. FINISHED ELEVATION: 1'-1" BELOW GUTTER LINE.
- 4. UNIT PLACEMENT:** SET RAIN GUARDIAN ON PREPARED BASE. INLET ELEVATION TO BE 1-1/2" BELOW GUTTER LINE.
- 5. INLET FRAMING:** INSTALL FRAMING BETWEEN BACK OF CURB AND UNIT. MATCH TOP OF CURB (STREET SIDE) AND TOP OF UNIT (BASIN SIDE).
- 6. JOINT MATERIAL:** PROVIDE ISOLATION/EXPANSION JOINT BETWEEN UNIT AND CAST-IN-PLACE INLET.
- 7. INLET PROFILE:** FORM INLET SIDE CURBS TO PREVENT OVERTOPPING ON DOWNSTREAM SIDE.
- 8. FILTER:** INSTALL REMOVABLE FILTER AT OUTLET WITH FABRIC FACING INLET.
- 9. GRATES AND LID:** INSTALL INTERNAL GRATE, THEN TOP LID.
- 10. LIFTING CABLE ASSEMBLY:** FOR H-20 LID OPTION, INSTALL PROVIDED LIFTING CABLE ASSEMBLY PER DETAIL.



RAIN GUARDIAN FORTRESS
PRETREATMENT CHAMBER
BIORETENTION PONDING DEPTH: 9"
TYPICAL DETAIL

REVISION HISTORY

REV	BY	DATE	DESCRIPTION
A	MDH	07/10/2026	FORTRESS
SCALE		VARIABLE	
U.S. PATENT NOS.		8,501,016 AND 8,858,804	

DEVELOPED BY:



MANUFACTURED BY:

