



CLEARWELL BAFFLES

1.0 General Description

- 1.1 The clearwell baffles described in this specification shall be custom manufactured factory prefabricated hydraulic barrier curtain(s) designed to improve flow characteristics in a new or existing clearwell system. The manufacturer shall utilize virgin quality elastomeric geomembrane materials and factory dielectric and thermal seaming processes throughout. The clearwell baffle support hardware shall be manufactured in prefabricated kits to minimize field cutting and drilling. The clearwell baffles shall be designed for ease of installation in a new or existing clearwell.

2.0 Scope

- 2.1 Furnish and install Clearwell Baffles with appurtenances necessary to complete work as directed in the project specifications and drawings.
- 2.2 Each Clearwell Baffle shall include factory fabricated geomembrane panel(s) and related hardware required to complete the installation.

3.0 Qualifications

- 3.1 The diversion curtains shall be equivalent in all respects to the **Suspended baffle series curtain manufactured by EC Applications, Inc.**
- 3.2 Qualified manufacturers must have at least 20 years experience in the fabrication of geomembrane products and must have manufactured a minimum of 10,000,000 square feet of company experience for geomembrane fabrication for water reservoir applications.
- 3.3 Alternate manufacturers wishing to pre-qualify shall submit to the engineer, no later than 15 days prior to the bid date, a list of clearwell baffle projects with detail drawings meeting the requirements of this project specification.

4.0 Materials

- 4.1 Baffle Curtain Material
 - 4.1.1 The floating baffles shall be fabricated from NSF 61 approved polyester reinforced geomembrane material (45 mil RPP) The curtain materials shall meet or exceed the attached material specifications. Any proposed substitution must be approved by the Engineer.
 - 4.1.2 Nylon reinforced materials will not be acceptable. The nylon reinforcing fabric will absorb water through the exposed scrim causing swelling and material delaminating.
 - 4.1.3 Baffle Anchoring Hems - The baffle manufacturer shall provide a 3" wide two ply hem on all edges of the baffle curtains for anchoring purposes.



4.2 Anchoring Hardware

- 4.2.1 The top of the baffle shall be suspended in the clearwell structure by a 3/8" Ø stainless steel cable thermally welded in the top hem of the baffle panel. Intermediate top cable support assemblies shall be attached below the top support cable with 2 Ea. 1/8" x 2" x 4" stainless steel plates with 1/4" Ø stainless steel cable attaching to the clearwell ceiling. All cable assemblies shall utilize 3/8" Ø x 3" long stainless steel expansion anchor bolts, 3/8" Ø stainless steel eye nuts as required.
- 4.2.2 The bottom and side hems of the baffle shall be attached to the clearwell structure by clamping the baffle material between batten strips and concrete structure and secured with expansion anchor bolts. This procedure also applies to intermediate support columns, if applicable.
 - 4.2.2.1 The batten strips shall be minimum 3/16" x 1.5"
 - 4.2.2.2 The expansion anchor bolts shall be minimum 3/8" Ø x 3" long.
- 4.2.3 All hardware shall be supplied in ready to install kits with angle and batten cut and pre-drilled to minimize field cutting and drilling of attachment hardware.
- 4.2.5 All support hardware shall be type 304 stainless steel.

5.0 Execution

5.1 Installation

- 5.1.1 The installation contractor shall install the clearwell baffle(s) in the position(s) shown on the project drawings.
- 5.1.2 The clearwell baffle(s) shall be installed in accordance with the manufacturer's drawings, instructions and recommendations.
- 5.1.3 The contractor shall provide acceptance of baffle dimensions prior to approving fabrication.
- 5.1.4 The manufacturer shall, upon request, provide the services of a qualified on-site installation supervisor to ensure proper installation of the baffle system.

5.2 Warranty

- 5.2.1 Clearwell baffles shall have a limited 1-year warranty from the date of shipment covering workmanship and materials. All warranties must be submitted in writing by the manufacturer and confirmed by the end user.