1. Design

The design is based on the assumption that the material within the reinforced earth walls, methods of construction and quality of prefabricated materials shall conform to the contracting agency’s technical specifications for retained earth walls.

2. Factors of Safety

Overturning: 2.0
Internal Plasticity 0.12 (allowing deformation 3/4"
Cantilever Stability: L = 2.0
Sliding: L = 2.0

3. Soil Reinforcement with Cut-off at End of Design Life

4. Soil Characteristics Assumed for Design

Soil Parameters

See wall design drawings for soil characteristics of foundation material used in the design of the wall system. The contractor shall provide soil design parameters for backfill material based on the actual soil characteristics as utilized at the site. The values of B, C and S shall be provided in the shop drawings.

4.1. The maximum applied beam pressure is 0.01 psi at the foundation level. It is shown on the wall elevations for each design case. It is the responsibility of others to determine that this applied beam pressure is allowable for that location.

4.2. The Installed Foundation Material Below the Reinforced Earth Wall, as determined by the engineer, shall be excavated and replaced with suitable material or otherwise stabilized as directed by the engineer.

5. Wire Faced Panels & Reinforcing Elements

6. Reinforcing mesh elements shall be shop-fabricated from cold drawn steel rods conforming to the minimum requirements of ASTM A-498 and shall be welded at the junctions between longitudinal and transverse wires in accordance with ASTM A-498. Galvanized reinforcing mesh shall be applied after mesh fabrication and shall conform to the minimum requirements of ASTM A-498.

Loop embeds shall be shop-fabricated from cold drawn steel rods conforming to ASTM A-498. Loop embeds shall be welded in accordance with ASTM A-498. Loop embeds shall be galvanized in accordance with ASTM A-498.

6.3. The steel reinforcing mesh shall conform to the minimum requirements of ASTM A-498, and shall be galvanized in accordance with ASTM A-498.

6.4. The steel reinforcing mesh shall be shop-fabricated from cold drawn steel rods conforming to ASTM A-498. The loop embeds shall be welded in accordance with ASTM A-498. The loop embeds shall be galvanized in accordance with ASTM A-498.

6.5. The steel reinforcing mesh shall be shop-fabricated from cold drawn steel rods conforming to ASTM A-498. The loop embeds shall be welded in accordance with ASTM A-498. The loop embeds shall be galvanized in accordance with ASTM A-498.

6.6. The steel reinforcing mesh shall be shop-fabricated from cold drawn steel rods conforming to ASTM A-498. The loop embeds shall be welded in accordance with ASTM A-498. The loop embeds shall be galvanized in accordance with ASTM A-498.