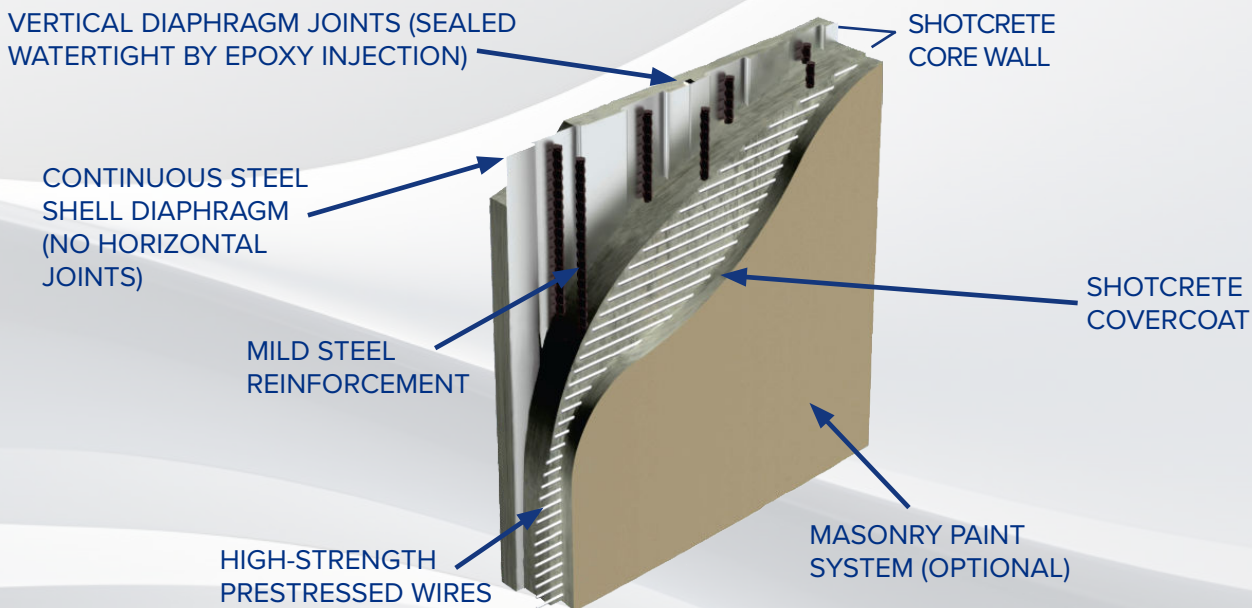


PRESTRESSED CONCRETE TANKS



UNIQUE ATTRIBUTES

GUARANTEED WATERTIGHTNESS

WITH A CONTINUOUS GALVANIZED STEEL SHELL DIAPHRAGM THAT IS SHOTCRETED, REINFORCED USING STEEL, AND THEN PRESTRESSED CIRCUMFERENTIALLY, CROM PRESTRESSED CONCRETE TANKS EXCEED AWWA D110 STANDARDS.

STRUCTURAL INTEGRITY

CROM DESIGNS STRUCTURES UNDER THE SUPERVISION OF PROFESSIONAL ENGINEERS AND ADHERES TO THE RIGID STANDARDS OF QUALITY CONSTRUCTION.

ECONOMIC EFFICIENCY

IN COMPARISON TO CONVENTIONAL REINFORCED CONCRETE CONSTRUCTION, THE AWWA D110 TYPE II PRESTRESSED CONCRETE DESIGN HAS PROVEN TO BE MORE ECONOMICAL AS ITS UTILIZATION OF COMPRESSED SHOTCRETE REQUIRES LESS MATERIAL.

ENHANCED EXTERIORS

AWWA D110 TYPE II WALLS HAVE A SOFT-TEXTURED SHOTCRETE FINISH WHICH ENSURES LASTING QUALITY DESIGN WITH MINIMAL CARE. THE LOW PROFILE SPHERICAL FREE-SPAN CONCRETE DOME ROOF COMPLETES THE STRUCTURES ENGINEERED DESIGN.

PRESTRESSED CONCRETE TANK CONSTRUCTION

1



Casting the Floor

The foundation of the prestressed tank is typically a heavily reinforced thin membrane concrete floor. Structural and ballast floor designs are also common, depending on site condition requirements.

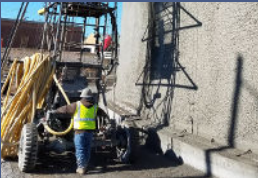
2



Diaphragm

The galvanized steel shell diaphragm is erected on a system of formwork specifically designed for this purpose. The steel shell extends the full height of the tank to ensure watertightness. Vertical joints in the steel shell are sealed watertight by epoxy injection.*

3



Outside Core Wall

The exterior encasement of the diaphragm is accomplished with shotcrete, which is pneumatically placed concrete. The core wall of the tank is constructed using successive layers of shotcrete until the required wall thickness is achieved.

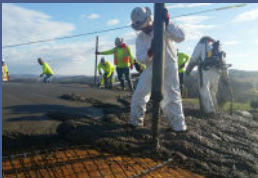
4



Inside Core Wall

After the formwork system is removed from the tank interior, shotcrete is applied to encase the diaphragm and complete the interior core wall.

5



Dome Shell Forming & Casting

The free-span concrete dome roof construction is made possible with the aid of a forming system that ensures accurate dome curvature. The free-span dome roof is then constructed of cast-in-place concrete.

6



Prestressing

Both the core wall and dome ring band is circumferentially prestressed using high-strength steel wire wrapped around the tank in a continuous helix. To avoid over-stressing or under-stressing of the tank, wire tension is measured via electronic digital stressometer applied to the tank wall.

7



Shotcrete Covercoat

To protect the prestressing elements, a shotcrete covercoat is applied to the exterior, which permanently bonds the wire to the tank wall. The covercoat completes the concrete portion of the tank construction.

LOCATIONS

GAINESVILLE, FL | HEADQUARTERS

AUSTIN, TX | CHATTANOOGA, TN | FT MYERS, FL | RALEIGH, NC | W. PALM BEACH, FL

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