Eddystone is a 22-story building originally constructed in 1927. The building structure consists of reinforced concrete floor slabs supported by structural steel and concrete framing. The exterior walls are clad in brick and limestone masonry. Persistent water leaks were an ongoing problem at the building for many years. Eddystone retained BTC to evaluate the building facade and provide recommended options for repairs.

BTC’s evaluation consisted of interior reviews at areas with reported water leakage, an up-close visual review of the exterior facade from swingstage scaffolding, calibrated spray rack testing to evaluate sources of interior water leakage, pressure differential measurements between interior and exterior environments, and coordination and review of exploratory openings on the exterior and interior of the building.

Field observations were analyzed to evaluate the overall condition of the exterior walls and potential sources of water leakage. BTC developed several options for repairing the exterior walls, and provided order-of-magnitude cost estimates for each option. Ultimately, a hybrid repair approach was decided upon, where areas with more severe water leakage were addressed by more robust repair strategies. BTC was subsequently retained to perform the repair design, to assist the Association in bidding the project to qualified masonry restoration contractors, and to perform construction phase services throughout the repair project.

Repair work was completed in 2013 with no subsequent water leakage into the building.