TechSpan is a precast concrete 3-hinged arch, with 2-hinges at the base and 1-hinge at the crown. The design for each reclaim tunnel is carried out using state-of-the-art finite element analysis that determines the optimum arch shape to minimize in-service bending moments. Unique precasting methods are cost-effectively utilized to produce the optimum arch shape.

The TechSpan Reclaim Tunnel is constructed by assembling the prefabricated concrete elements in a staggered method to reduce required equipment and allows for rapid installation. TechSpan can be installed without disrupting existing conveyors and railways. A 3-man crew can install up to 100 lineal feet of TechSpan Reclaim Tunnel in a single workday.

The precast concrete arch elements are designed and prefabricated with openings and truncations for feeder saddles, drawdown gates, and conveyor components. Benefits of the TechSpan system compared to CMP include longer service life, maintenance-free performance, and ability to perform under severe loading conditions.
Industrial projects often require loading ramps and truck dump headwalls. Reinforced Earth structures are engineered to resist vibrations and support the extreme live loads associated with fully loaded mine vehicles.

“V-Notch Slot” or “Inverted Silo” bulk material storage facilities, having a “V” or a conical shape, respectively, are made of custom sloping panels to provide gravity-retrievable storage of aggregate material.

Reinforced Earth can be utilized for a variety of industrial and mining facility applications such as haul roads and tank supports. The advantages when employed as a support for frothing process settler tanks include easy access for pumps, pipe installation, and maintenance. The advantages when utilized as a haul road crossing is to minimize haul times and increase production rates.