

# SHOTCRETE AND UNDERGROUND



## PERFORMANCE ON THE FLY.

Shotcrete is unique, both in technique and applications. So it only makes sense that experts at Propex Concrete Systems would offer tested and proven solutions to meet the unique and specific needs of shotcrete projects. These solutions, including ENDURO® macro-synthetic fibers and Fibermesh® micro-synthetic fibers, bring safety and ease-of-use benefits that traditional reinforcement options just can't match.

### FASTER BUILD-UP. INCREASED TOUGHNESS.

- Fibers are added directly to the shotcrete mix, eliminating the time, labor cost and safety risk of installing wire mesh.
- Fibers are homogeneously dispersed throughout the shotcrete, reducing cracks while increasing toughness, residual strength, shatter resistance and resistance to fatigue and ductility of the shotcrete system.
- Less shotcrete is needed when fibers are used because the shotcrete cover can conform to the surface profile, unlike traditional steel reinforcement where more concrete is needed to cover wire mesh.
- No steel to shoot around so there are no voids or shadows; no rebar or wire mesh corrosion.
- Greatly increases the shotcrete's green strength within the first 24 hours after application.
- Contributes to a more cohesive shotcrete mix, encouraging faster build-up with less rebound and waste.
- Reduces shrinkage in the shotcrete's plastic state.

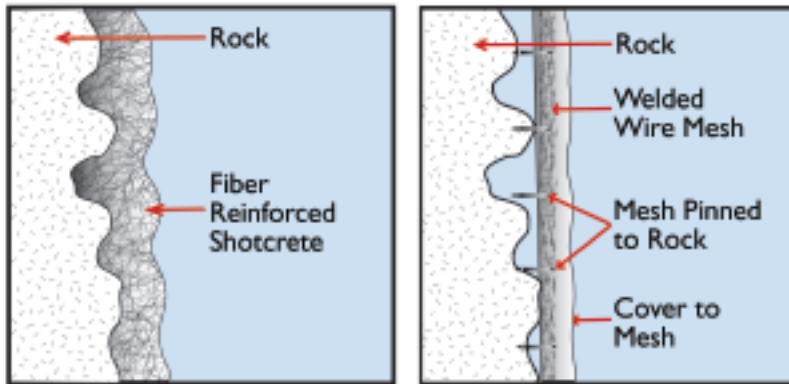


### IMPROVES SAFETY—A MORE PREDICTABLE AND SECURE SHOTCRETE MIX.

- Reduces shotcrete fallout and rebound.
- Offers superior resistance to rock burst, surface rock spalling and repeated blasting stresses.
- Fibermesh 150 fibers help protect against explosive fire spalling in high temperature fires by melting to relieve volatile steam pressure in concrete.
- Improves fire/disaster survivability in tunnels, mines and other applications involving human occupancy.



## SHOTCRETE REINFORCEMENT COMPARISON



### TRUSTED IN CRITICAL APPLICATIONS:

- Structural rehabilitation
- Lining large underground cavities
- Aqueduct rehabilitation
- Ground support and stabilization
- Marine structure repair and rehabilitation
- Seismic retrofits
- Retaining walls and soil nailing
- Slope stabilization
- Channel linings
- Mining
- Tanks
- Protection against fire spalling
- Pools

### FOR MORE INFORMATION:

See our Product Data Sheets for the ENDURO® and FIBERMESH® families of products.

**PROPEX**  
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CS-507  
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07/06