120-PSI BlastSeal Retrofit of Existing Standard (Mitchell Barrett) Concrete Block Seal
MSHA SEAL APPROVAL NUMBER 120-75.336.1.07.12.0

120-PSI BlastSeal Retrofit of Existing Standard (Mitchell Barrett) Concrete Block Seals (for entries up to 11 feet high and widths greater than 16 feet)

This seal design provides a means to retrofit existing standard (Mitchell Barrett) concrete block seals to withstand a 120-psi overpressure from a mine explosion. The retrofit involves the placement of additional concrete block, shotcrete, steel reinforcement, and BlastSeal (carbon-fiber mats). The reinforcing bars are drilled and grouted into the roof and floor. The existing standard (Mitchell Barrett) seal must be constructed from solid concrete block with a minimum compressive strength of 1800 psi and have a minimum thickness of 16 inches.

The retrofit design is detailed in a report titled "Retrofit Design for 120psi for Mitchell Barrett Seals" and dated September 17, 2007. The design was prepared by the structural engineering consulting firm Crosby Group. The design is certified by a registered professional engineer and as being in accordance with accepted engineering practices. MSHA Seal Approval Number 120-75.336.1.07.12.0 was issued on September 17, 2007.

For detailed information on this retrofit design, contact:

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