50-PSI Precision Mine Repair Seal MSHA SEAL APPROVAL NUMBER 50-75.336.1.07.03.0

50-PSI Precision Mine Repair Seal (for openings up to 8-feet high and 25-feet wide)

<u>Basic Seal Description</u>: This Precision Mine Repair seal is designed to withstand a dynamic overpressure of 50 psi from a mine explosion. The pressure-time curve used for the design was a 50-psi pressure instantaneously applied to the seal for a duration of 100 milliseconds. The 26-inch thick seal is designed for a maximum seal height of up to 8 feet and a maximum seal width of up to 25 feet. Construction materials for the seal are Precision Mine Repair Welded Wire 3-D Panels, rebar and shotcrete. The design includes dowels embedded into the roof and floor.

The seal design is detailed in the report, entitled "50-PSI 8FT X 25FT Blast Seal." This report, dated June 28, 2007, was prepared for Precision by Hurst-Rosche Engineers, Inc. MSHA seal approval number 50-75.336.1.07.03.0 was issued on July 13, 2007.

The seal design is certified by a registered professional engineer. A mine operator may install the Precision Mine Repair 50-psi seal provided its installation is approved in the ventilation plan and the mine operator meets the provisions specified in Section 75.336 (b).

For detailed information on this seal, contact Mr. Harry Riddle, Precision Mine Repair, 705 W. Main Street, Ridgway, IL. The telephone number is 618-272-7220.