



Silent Seal[®] NA



Two-Component Polyisocyanurate (PIR) expanding Sealant

- Exclusively designed for mining applications.
- Creates no harmful environment for mine workers.
- Polyisocyanurate formulation for improved performance.
- User-friendly and “Ready-to-Use” systems.
- Yellow colour increases underground visibility.
- Deemed suitable by the Mine Safety and Health Administration.
- Passes ASTM E-162 with a flame spread of < 25.
- Environmentally friendly - Contains no HCFC's and CFC's.



SILENT SEAL® NA

Silent Seal® NA is a mine ventilation sealant. **Silent Seal®** expands and seals in seconds to quickly and efficiently seal, insulate, fill, coat and sound dampen many areas above-ground and underground. Created exclusively for mining, this product adheres to coal, steel, slate stone, concrete, wood and most other substrates. **Silent Seal®** creates airtight seals on and around stoppings resulting in improved ventilation efficiency and also may be useful for additional above-ground applications.

The Mine Safety and Health Administration (MSHA) have deemed **Silent Seal®** suitable for use by mine operators without wearing a Self-Contained Breathing Apparatus or a Supplied Air Breathing Apparatus. MSHA's testing concluded that Fomo's **Silent Seal®** does not create a harmful environment for workers when used with Fomo's patented Handi-Gun® dispensing unit.

Silent Seal® NA possesses ASTM E-162-87 with a flame spread index of less than 25, based on independent ASTM E-162-87 test results. The high optic yellow colour of **Silent Seal®** makes underground visibility easy (see exactly where sealant is applied). **Silent Seal® NA** expands with an approximate 8-to-1 ratio. Due to its special design, no more tanks fall out of the box when the box gets wet.

Optimum application temperature is 24°C (75°F) but may be sprayed onto colder or warmer substrates, with slight effects on the foam characteristics. Cured foam is resistant to heat and cold (-129°C to +115°C), and to aging, but not to UV rays (i.e. sunlight) unless painted, covered or coated. Cured foam is also chemically inert and non-reactive in approved applications. **Silent Seal® NA** systems are "ready-to-use", require no outside mechanical or electrical power source and can be applied onto any clean and dry surface in any direction.

Technical Data:

	Silent Seal® NA II-180
Expanded volume	420 Litres
Density (ASTM D-1622)	28 kg/m ³
Expansion time	10 – 25 seconds
K-Factor	0.022 W/mK
R-Value (aged)	6-7 / Inch
Tensile Strength (ASTM D-1623) Parallel @ 7% Perpendicular @ 10%	241 kPa (35 psi) 269 kPa (39 psi)
Compressive Strength (ASTM D-1621) Parallel @ 10% Perpendicular @ 10%	138 kPa (20 psi) 138 kPa (20 psi)
Dimensional Stability (ASTM D-2126) Heat age 50°C (+120°F), 10% RH Humid age 50°C (+120°F), 100% RH Cold age -40°C (-40°F)	+1,9% +8,3% +0,3%
Closed Cell content (ASTM D-2856)	> 90%
Fire Rating (ASTM E-162)	Flame Spread Index < 25

Important Note: Use only in well-ventilated areas or with certified respiratory protection. Wear impervious gloves, protective glasses and suitable work clothes when using. Read all instructions and safety information (MSDS) prior to use of any product. The product contains no formaldehyde. Cured foam is non-toxic. **KEEP OUT OF REACH OF CHILDREN!**

Product Storage: Store in a cool and dry area in the upright position. Do not expose to an open flame or temperatures above 49°C (120°F). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Containers are under pressure. Do not open with force or incinerate even after use.

Application / Use: Valves must be in the upright position. Materials are dispensed through hoses and mixed in a disposable nozzle. Once foaming has stopped, the dispensing unit must be reactivated within 30 seconds or a new nozzle must be installed. Fresh **Silent Seal®** may be applied in several stages to reduce overfilling or void damage to non-rigid, confined cavities. Cured foam can only be removed mechanically.