

# M3™ \* Expandable Rock Bolt



M3™ expandable rock bolts offer superior quality that responds to the most demanding roof support applications. Its high load capacity and excellent elongation properties ensure safer working conditions and faster excavation cycles.

This latest generation of rock bolt includes these improvements:

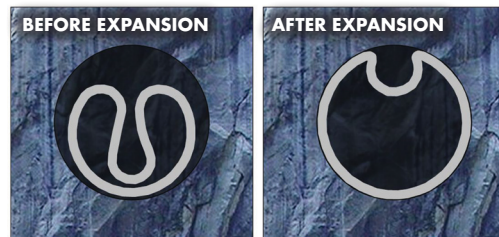
- **Redesigned Tooling** to reduce the thinning in the tongue area of the profile and prevent premature failures.
- **Improved Steel Chemistry** means full strength is achieved during our forming process avoiding any detrimental effects of cold working.
- **Improved Profile** to minimize stress concentration during roll forming and maximizing ability for surface preparation and coating application.
- **Modernized Equipment** (cold saw, tube end former, automatic sizing section, robotic welding, accumulator, etc.) for superior quality control.

M3 bolts tie and join fractures because they can withstand high loads and have excellent elastic properties, allowing the bolt to remain intact after rock movement without cutting. It is a versatile bolting solution for variable ground conditions.

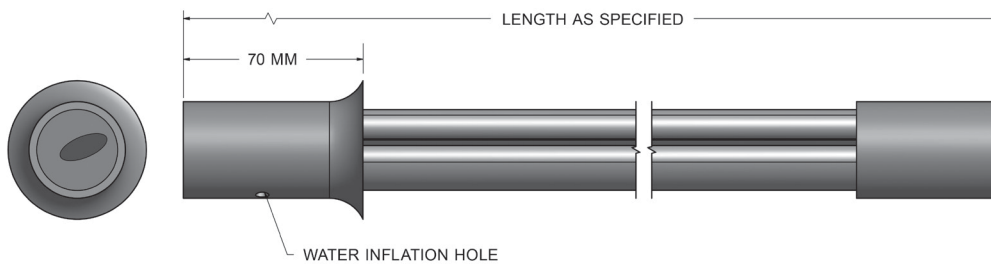
*Improved design and tooling means greater consistency and reliability.*  
**Our best expandable rock bolt yet!**

## Advantages

- Immediate full length support for faster excavation cycles and safer working conditions
- Simple and clean installation
- Adjusts to borehole irregularities
- Excellent elongation properties and flexibility allow for variations in drill diameter
- M3 bolts can be manufactured to any length up to a maximum of 20 ft (240 in.).



\* Domestically Manufactured. The M3 is the subject of pending U.S. patent applications issued to FCI Holdings Delaware, Inc.



## Technical Data - M3 Expandable Rock Bolts

	Standard	Midi	Super
Typical Breaking Strength, ton (kN)	13.5 (120)	18.0 (160)	27 (240)
Typical Elongation (Parent Material)	25%	25%	25%
Profile Diameter, nominal, in. (mm)	1.05 (27)	1.42 (36)	1.42 (36)
Material Thickness, nominal, in. (mm)	0.078 (2)	0.078 (2)	0.118 (3)
Hole Diameter Range, in. (mm)	1.25 – 1.50 (32 – 38)	1.70 – 2.05 (43 – 52)	1.70 – 2.05 (43 – 52)
Optimal Hole Diameter, in. (mm)	1.38 – 1.50 (35 – 38)	1.75 – 2.00 (44 – 51)	1.75 – 2.00 (44 – 51)
Inflation Pressure, psi (bar)	4350 (300)	3481 (240)	4350 (300)