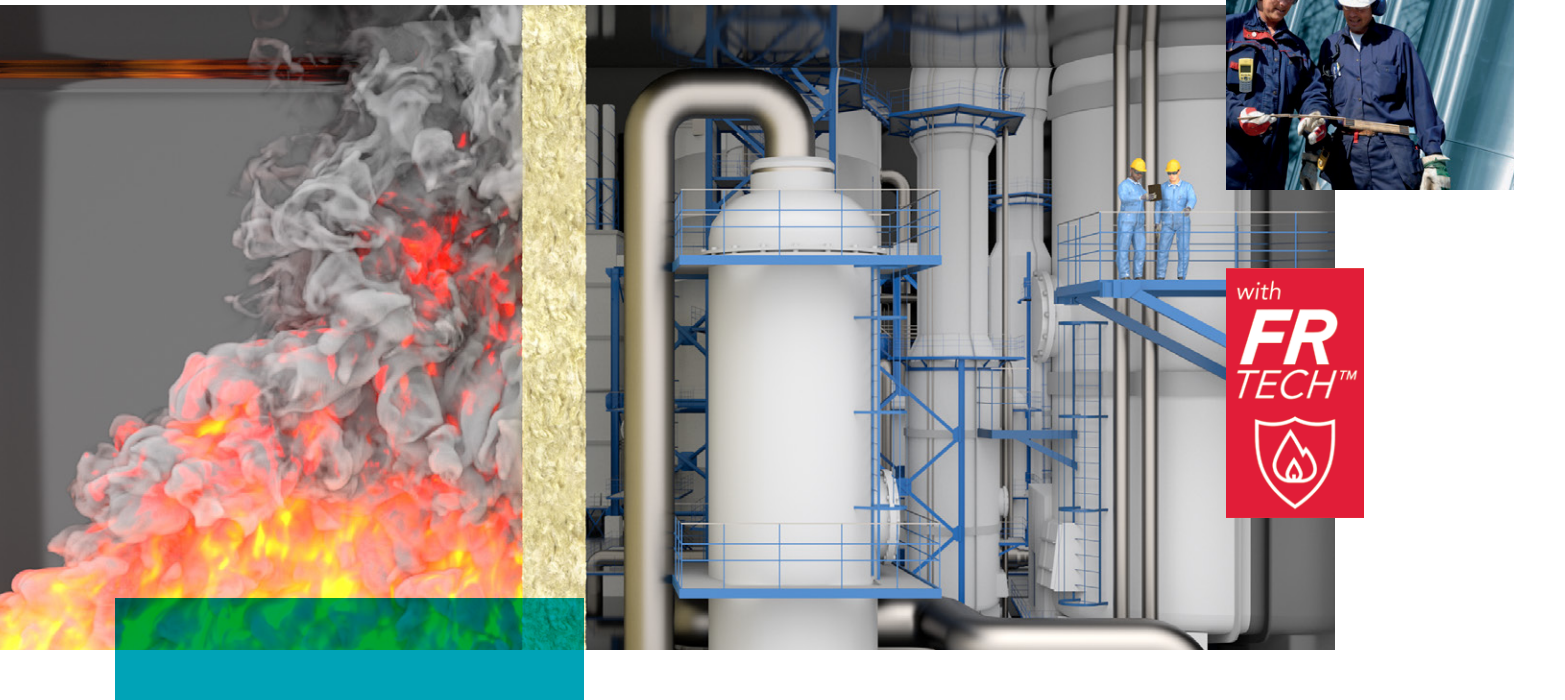


Keep Fire at Bay in Your Piping Systems

ProRox® PS 680 with FR-Tech™



Fire poses a real threat to your assets and people

Fires pose a significant risk to industrial manufacturing facilities, especially petrochemical plants, oil and gas processing plants, and any other facilities containing hydrocarbons. Hydrocarbon fires burn much faster and hotter than ordinary woodburning or cellulosic fires and can reach their peak temperatures up to 2,000°F (1,100°C) on average in less than five minutes. Cellulosic fires can take multiple hours to reach their peak roughly 1,100°F (600°C).

Hydrocarbon fires give workers less time to react and have a greater potential for damage to people, equipment, and the surrounding environment. Not only do they injure hundreds of employees each year, but fires also create more than one billion dollars' worth of damage to plant equipment and property¹, not to mention the environmental toll to air quality. And whether a fire impacts one piece of equipment or an entire production line, the end result is significant downtime, unplanned repairs and rebuilds, and a major hit to your profitability.

¹ National Fire Protection Association (NFPA), "Fires by Occupancy or Property Type."

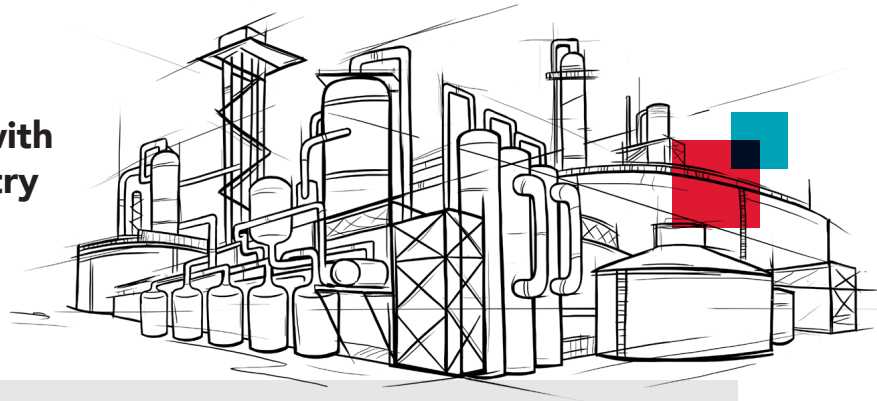
New ROCKWOOL ProRox FR-Tech can increase fire resistance

You can't avoid every fire or completely fireproof your plant, but you can increase the fire resistance of your plant with our **new ROCKWOOL ProRox PS 680 pipe solution with FR-Tech**. Our product slows the transfer of a fire's heat to steel structures and equipment—giving your people additional time to evacuate. Even mere seconds can mean the difference between localized fire damage and devastating loss of life and limb.

ProRox PS 680 with FR-Tech also incorporates ROCKWOOL's patented WR-Tech™, an advanced water repellency technology that repels water and has a low chloride content for mitigating the risks of corrosion under insulation (CUI).

ProRox PS 680 with FR-Tech the optimal passive fire protection solution

ProRox PS 680 is a mandrel wound stone wool insulation pipe section with a special fiber structure and chemistry that ensures the best possible performance in the event of a fire.



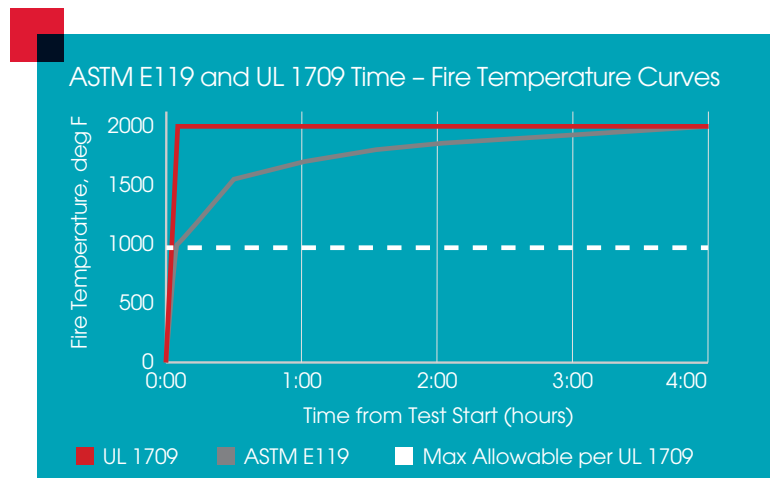
With ProRox PS 680, you're assured:

- **Safe solution:** Tested to the UL 1709 fire curve, ProRox PS 680 was developed by ROCKWOOL for optimized fire performance covering 1- and 2-hour ratings and developed by ROCKWOOL in cooperation with internationally recognized authorities like InterTek, SGH, and SwRI
- **Decreased down time:** Like all ProRox PS Products, PS 680 requires minimal layers and is easy and fast to process, without the need for sealants or offsite cutting
- **Maximum design flexibility:** ProRox PS 680 provides low-profile solutions compared to conventional solutions, which makes it easier to install around tight pipe bends or in areas with limited clearance space
- **Optimized maintenance costs:** ProRox PS 680 is removable and can be reused, allowing for easy inspection without the additional expense of replacing the material

ProRox PS 680 with FR-Tech delivers high-performance protection in industry standard fire tests

Passive industrial fire protection materials are typically tested to the UL 1709 standard, which dictates that materials must protect equipment and maintain structural integrity for at least 30 minutes in a 2,000°F (1,100°C) fire. While 30 minutes can give 1500 workers sufficient time to prevent a fire's spread to other plant systems, the most popular fire protection duration for plant owners is two hours.

ProRox PS 680 is a proven, cost-effective insulation for steam and pipe systems operating at temperatures up to 1,400°F (760°C). In 1- and 2-hour UL 1709 fire test scenarios on Schedule 40 and 80 pipe sections, ProRox PS 680 consistently kept the pipe core temperature below 1,000°F (537°C)—at a range of nominal pipe sizes and minimal insulation thickness.



UL 1709 2 Hour Fire Test Scenario Response of Insulated Pipe Sections

	NPS	2 hr rating PS 680 Thickness (in.)
Schedule 40	10	4.0
Schedule 80	10	2.5

For details on UL 1709 testing responses with other pipe sizes or thicknesses, contact your local ROCKWOOL representative.

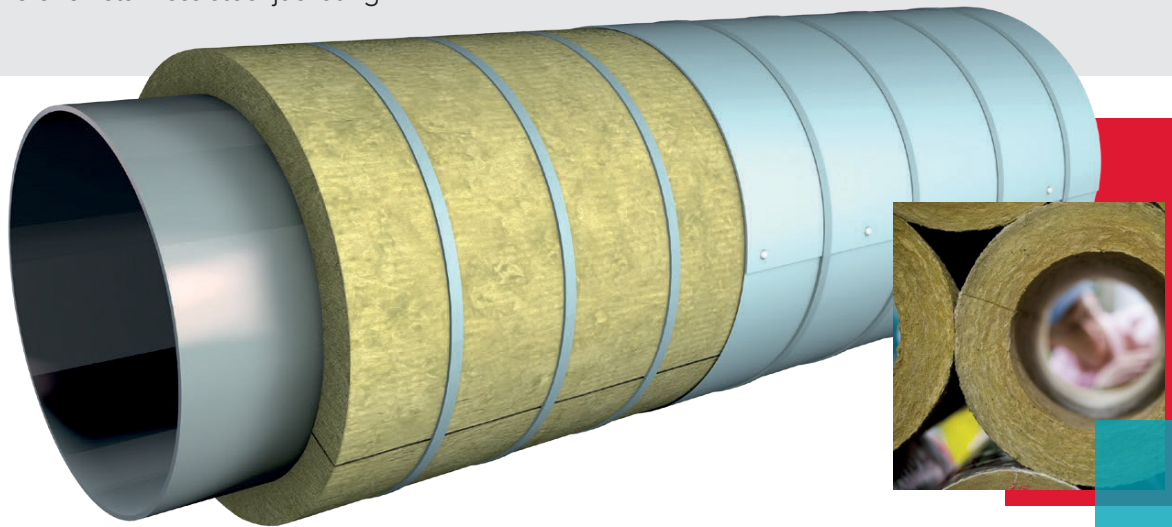
ProRox PS680 has been thoroughly tested and certified by internationally recognized testing and development bodies such as SWRI, Intertek and SGH

ProRox PS680 with FR-Tech is designed for optimal flexibility

With only one layer and typically half the thickness of conventional insulation materials, PS680 installs quickly and easily while providing excellent fire protection

Like all ProRox stone wool products, installation of ProRox PS 680 with FR-Tech is simple and efficient, with minimal equipment or specialized PPE required.

- ProRox PS 680 with FR-Tech is ASTM C547 compliant for types I, II, IV, V
- 3/4" stainless steel bands
- 0.016" stainless steel jacketing





Why choose **ROCKWOOL** stone wool?

Stone wool insulation products from the ROCKWOOL Group have been proven in service for 80 years. They provide effective protection and ensure optimal performance for the lifetime of the installation.



ROCKWOOL Technical Insulation

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