

MR-MANUFACTURER

USG® Fire Stop Systems are manufactured by United States Gypsum, a leader in construction materials and building systems for 90 years.

For specifications on this product, 1.) close this product Snapshot, 2.) click on the Manufacturer's Showcase button, 3.) select the screen, *Specification: USG Fire Stop Systems* from the drop-down Showcase list that appears in the upper right of your screen.

PP-PRODUCT PRESENTATION

The first priority in building safety is containment of both smoke and fire to the area of origin. An important part of this containment is blocking smoke, hot gases and flames from passing through openings. All three national building codes have firestopping requirements and fire marshals strictly enforce these requirements.

The USG Fire Stop System employs the newly developed FIRECODE® Compound from U.S. Gypsum Company (standard joint compound is unacceptable) for a fire stop system that combines both exceptional economy and performance. The system provides protection from heat and smoke to temperatures over 1925°F. It seals out major causes of building fire fatalities, *smoke and toxic gas*, and the major cause of equipment damage, water. It also stops dust infiltration and sound leakage.

Features

Low-Cost Leader -- FIRECODE Compound comes in 15 lb. bags and mixes easily with water at the jobsite. This makes FIRECODE Compound much more economical to use than competitive products, especially for large scale jobs with lots of different penetrations. One 15 lb. bag provides approx. 517 cu. in. of fire stop.

Less Waste -- Caulking tube products are frequently discarded with some compound left so there's costly waste. With FIRECODE Compound you mix only what's needed for the application at hand.

Long Working Life -- Compound has approx. 75 min. working time; sets in 2-3 hours. Several applications can be made from each batch.

Non-Toxic -- The ingredients in FIRECODE Compound are all non-toxic. There are no silicones, no solvents, no halogens, no PCB's, no asbestos or inorganic fibers of any kind. It is rated non-toxic in accordance with the sixth draft of the University of Pittsburgh test method and the LC50 calculated using the Weil method.

Tough, Durable Fire Stop -- FIRECODE Compound forms a very tough, very durable fire stop once it has hardened. Has withstood the thermal and mechanical shock of high pressure hose stream testing.

Removable -- FIRECODE Compound can be removed in case of retrofit work. This is particularly important for frequently altered penetrations such as those containing telecommunication lines.

Easily Repaired -- FIRECODE Compound is *autobonding*, that is, fresh compound will bond to cured compound, a big plus when making repairs due

to construction damage or changes to penetrating items. The FIRECODE Compound Repair Procedure has been UL-evaluated and tested to assure that the through-penetration fire stop requirements of ASTM E814/UL 1479 are maintained. The simple removal of loose FIRECODE Compound and replacement with additional FIRECODE Compound is all that is required to repair a damaged through-penetration fire stop.

Sound Control -- FIRECODE Compound provides a tight seal to prevent sound leakage that would otherwise occur through the space between the penetrant and the periphery of the opening.

Easy to Mix -- FIRECODE Compound is a lightweight, low density product that mixes quickly and easily with water at jobsite. By changing the amount of water added, the consistency of the compound may be changed to suit the application at hand.

Easy Installation -- No special tools are required -- simply cut insulation with a serrated knife and use a trowel, putty knife or spatula to scoop the compound from its container.

Fast-Setting -- Once mixed with water, FIRECODE Compound hardens in 2 to 3 hours. And it bonds to concrete, metals, wood and cable jacketing, without the use of primers.

Easily Identifiable -- Applied FIRECODE Compound dries to a pale red color which is easily seen and identified by fire marshals.

Easy Cleanup -- Soap and water cleanup of tools saves time.

UA-USES, APPLICATIONS

USG Fire Stop System blocks smoke and flames from passing through openings in concrete floors and gypsum panel walls -- electrical and plumbing penetrations, sprinkler systems, etc.

AI-ASSEMBLY, INSTALLATION

Clean substrate of dirt, dust, grease, oil, efflorescence, loose material or other matter. With a serrated knife, cut THERMAFIBER Safing Insulation slightly wider than the opening. Compress and tightly fit min. 2-1/2" or 3" thickness (per system specifications) of insulation with min. density of 3.5 pcf completely around penetrant.

Mix FIRECODE Compound according to directions on bag. Using a trowel, putty knife or spatula, scoop the compound from its container and work it into the penetration opening. Apply compound to min. 1/2" or 1" thickness (per system specifications) on top of safing insulation. Ensure that compound is in contact with all surfaces and that entire opening is filled with safing and compound.

MF-MATERIALS, FINISHES

Physical Characteristics of FIRECODE Compound

Material: vinyl-type non-asbestos formulation.

Color: pale red.

Storage: up to 9 mos. under good storage conditions. Close opened bags as tightly as possible and store in a dry place.

Surface burning characteristics: flame spread 0, smoke developed 0.
Compliance with standards: rated noncombustible as defined by NFPA Standard 220 when tested in accordance with ASTM E136.
Working time: Approx. 75 min.
Setting time: 2-3 hours.
Freezing sensitivity: none after set.
Packaging: 15 lb. (6.7 kg) bag.

Approximate Coverage Rates*

Dry Powder (lbs.): 1
Approx. Water Additions (pts.): 0.5
Approx. Wet Mixed Compound (lbs.): 1.5
Applied Fire Stop (cu. in.): 33.6

Dry Powder (lbs.): 5
Approx. Water Additions (pts.): 2.5
Approx. Wet Mixed Compound (lbs.): 7.7
Applied Fire Stop (cu. in.): 172.5

Dry Powder (lbs.): 7.5
Approx. Water Additions (pts.): 3.8
Approx. Wet Mixed Compound (lbs.): 11.5
Applied Fire Stop (cu. in.): 257.6

Dry Powder (lbs.): 10
Approx. Water Additions (pts.): 5.0
Approx. Wet Mixed Compound (lbs.): 15.4
Applied Fire Stop (cu. in.): 344.9

Dry Powder (lbs.): 15
Approx. Water Additions (pts.): 7.5
Approx. Wet Mixed Compound (lbs.): 23.1
Applied Fire Stop (cu. in.): 517.4

*Based on approximately 7.5 pints water per 15 lb. bag for wall penetrations. For floor penetrations, approximately 8.3 pints water per 15 lb. bag is recommended and yields approximately 537 cu. in. of applied fire stop.

CS-COATINGS, SURFACING

Applied FIRECODE Compound may be sanded smooth and painted with either latex or oil-based paints.

TS-TECHNICAL SUPPORT

For further information on specifications, design criteria and product performance, order catalog SA-727 *USG Fire Stop Systems for Floor and Wall Penetrations* by calling toll-free 1-800-USG-4YOU.

CC-CODES, CERTIFICATION

FIRECODE Compound has met all of the conditions of UL 1479 and ASTM E814 in tests conducted at Underwriters Laboratories. Fourteen different UL-classified through-penetration systems are available: CAJ-0032 (Blank), CAJ-1081 (Pipe) and CAJ-3045 (Cable) -- 3-hr. fire-rated floor/wall systems; WL-1027 (Pipe), WL-1063 (Pipe), WL-1065 (Pipe), WL-2023 (PVC Pipe), WL-3023 (Cable), WL-7002 (Duct) -- 2-hr. fire-rated wall systems; WL-1039 (Pipe), WL-2036 (PVC Pipe), WL-3034 (Cable) and WL-7001 (Duct) -- 1-hr. fire-rated wall systems; and new U400T, a 1-hr. fire-rated fluted metal deck/gypsum wall construction joint system with a deflection of slip joint detail. In addition, there is a UL-witnessed fire test of a construction joint assembly.

FIRECODE Compound is rated noncombustible as defined by NFPA Standard 220 when tested in accordance with ASTM E136 at Underwriters Laboratories. Surface burning characteristics: flame spread 0, smoke developed 0, when tested in accordance with ASTM E84 at Underwriters Laboratories.

Meets ASTM E814: Fire Tests of Through-Penetration Fire Stops. Meets UL 1479: Fire Tests of Through-Penetration Fire Stops.

OM-OPERATION, MAINTENANCE

Contact local U.S. Gypsum Company Sales Office with any questions about maintenance and replacement recommendations.