

PROFORM[®] BRAND FIRE-SHIELD 90 COMPOUND

Fire and Smoke Stop

MANUFACTURER

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
(704) 365-7300

Technical Information:
1-800-NATIONAL
(1-800-628-4662)

Fax: 1-800-FAX NGC1
(1-800-329-6421)

Internet Home Page:
nationalgypsum.com
nationalgypsum.com/espanol
07 84 00/NGC BuyLine: 1100

DESCRIPTION

ProForm[®] BRAND Fire-Shield 90 Compound is a setting/hardening type compound designed to provide protection in fire-stopping penetrations through fire rated partitions or assemblies in both new and retrofit construction.

BASIC USES

Fire-Shield 90 Compound seals out smoke, toxic gas and water and provides a seal to stop sound and dust infiltration. It is tinted a reddish/pink color to distinguish it from other joint treatment products.

ADVANTAGES

- Comes in powder form so that only the amount of material needed can be mixed, thus less waste.
- Two components to system: FS 90 compound and fiberglass insulation backing.
- Tinted reddish/pink color for easy jobsite identification.
- Lower in place cost than many other type products.

LIMITATIONS

- Do not mix with other material.
- Do not mix more compound than can be used in 75 minutes. Use only clean containers, tools and water. Clean all equipment after each mix. Fresh batches of compound must be kept free of previous batches; otherwise working life will be affected.

TECHNICAL DATA

PACKAGING & COVERAGE

Package	Cubic inches per bag	Water Ratio per bag
25 lb. bag (11 kg)	850	12.5 pints

See Coverage section for additional information.

2 HOUR WALL SYSTEMS

Penetrating Item	Annular Space	Hole Size Max.	F Rating	T Rating	UL System No.
Min. 10-33% max. fill No. 24 AWG Cable	min. 1/4" (6.4 mm) max. 4 1/2" (144 mm)	6" (152 mm)	2 hr.	0 hr.	WL 3035
4" dia. (102 mm) EMT Pipe or Steel Pipe	min. 1/4" (6.4 mm) max. 2 1/2" (57 mm)	7" (178 mm)	2 hr.	0 hr.	WL 1041
3" dia. (76 mm) Copper Pipe	min. 1/4" (6.4 mm) max. 2 1/2" (57 mm)	6" (152 mm)	2 hr.	0 hr.	WL 1041

(Continued next page)

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

3 HOUR FLOOR CEILING/WALL SYSTEMS

Penetrating Item	Annular Space	Hole Size Max.	F Rating	T Rating	UL System No.
Steel Sleeve, nom. 6" dia. (152 mm) or smaller electrical metallic tubing, conduit or pipe Schedule 40 (or heavier)	max. 1/4" (6.4 mm)	6" (152 mm)	3 hr.	0 hr.	CAJ 0038
Steel Pipe, nom. 4" dia. (102 mm) or smaller Schedule 40 (or heavier)	min. 1/2" (12.7 mm) max. 3" (76 mm)	8" (203 mm)	3 hr.	0 hr.	CAJ 1163
10-40% fill No. 24 AWG Cables, nom. 6" dia. (152 mm) metallic sleeve (optional)	min. 1/2" (12.7 mm) max. 3 1/2" (88.9 mm)	6" (152 mm)	3 hr.	0 hr.	CAJ 3073

Tested in accordance with the standard ANSI/UL 1479 and ASTM E 814.

PARTITION/DECK INTERSECTION SYSTEMS

Description	Test Reference
1 Hour Partition/Fluted Deck Juncture	WHI 495-P5V 1067
2 Hour Partition/Fluted Deck Juncture	WHI 495-P5V 1068
1 Hour Deflection Track/Fluted Deck Juncture	WHI 495-P5V 1063
2 Hour Deflection Track/Fluted Deck Juncture	WHI 495-P5V 1064

COMPOSITION & MATERIALS

May contain any of the following:

Component	CAS No.
Quartz	14808-06-7
Mica	12001-26-2
Talc	
(non-asbestiform)	14807-96-6
Perlite	93763-70-3
Attapulgite Clay	12174-11-7
Plaster of Paris	10034-76-1
Calcium Carbonate	1317-65-3
Bentonite Clay	1302-78-9
Polyvinyl Alcohol	25213-24-5
Gypsum	10101-41-4

Contains no asbestos

of the stud cavity. Then cut a hole in this insulation cutout to match the size and location of the penetrant. Cut this ring of fiberglass at the bottom and insert into hole and hang from penetrant.

Apply mixed Fire-Shield 90 Compound into penetration opening with a 6" finishing knife. Force compound into opening to a minimum 1 1/4" thickness. Be sure entire surface is filled with compound. Fire-Shield 90 Compound may be coated over when set, even though not yet dry.

COVERAGE

A 25 lb. bag of Fire-Shield 90 Compound when mixed with 12.5 pints of water will produce enough compound to fill approximately 850 cu. in. If less than a full bag will be needed, then plan on a ratio of 2 parts dry powder to 1 part water. For example, 2 pounds of powder will need a pint of water to produce enough compound to fill 68 cu. in.

INSTALLATION

APPLICABLE STANDARDS

Consult local codes for penetration firestop requirements.

APPLICATION

Make sure surface is clean, dry and free of loose material. Pay particular attention to cut edges of gypsum board around penetration to ensure there is no loose paper, gypsum crumbles or dust that would inhibit adhesion of Fire-Shield 90 Compound. Cut a piece of glass fiber insulation an inch larger than the opening to be sealed. Insulation should be equal to or greater than the depth

MIXING

Mix no more compound than can be used in 75 minutes. For ease of cleaning, a plastic container is recommended. Mix at the rate of 12 to 13 pints (5.7 L to 6.2 L) of clean, drinkable water to the 25 lb. (11.3 kg) bag. Add the compound to clean water and mix until free of lumps. Allow to stand 5 minutes and remix. If a thinner or thicker mix is desired, add water or powder sparingly. When power mixing is used, motor speed should not exceed 400 RPM since high speed and prolonged mixing will shorten the working life.

National 
Gypsum®