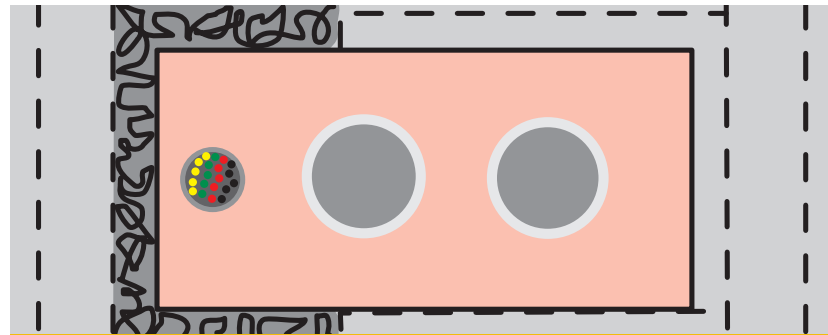


FIRE-HALT®

SEALANT/SETTING COMPOUND

Noncombustible fast-setting compound for use as a firestop sealant for penetrations.



Product Overview

Fire-Halt® Sealant is a noncombustible¹, gypsum-based fast-setting compound developed for use as a firestop Sealant for openings that penetrate fire-resistive assemblies. Fire-Halt Sealant is smoke- and sound-resistant and does not contain asbestos or PCBs. The product contains fiberglass to improve crack resistance and bulking characteristics. The product is tinted a reddish color to help building officials or fire marshals distinguish it from other products. In fire and hose stream tests, Fire-Halt Sealant has maintained its bond to pipes and concrete.

Primary Uses

Fire-Halt Sealant is used in assemblies designated as smoke barriers or those required to meet a sound attenuation STC rating. It resists smoke and gases, and also helps prevent dust infiltration. It can be used in plenums or attics as a fire-taping compound with or without tape. Use for:

- Firestopping, filling and sealing walls and floors for penetrations such as pipes, ducts, conduit, beams and telephone cables.
- Filling flutes in steel decks above walls and as a perimeter seal around steel or concrete beams and columns.
- Repairing holes, cracks and other openings, including gaps between floors and curtain walls. It can also be used as a perimeter sealant or grout for door frames.

Technical Data

Surface Burning Characteristics – Flame spread of 0 and smoke developed 0 when tested in accordance with ASTM E 84 or CAN/ULC S 102. Noncombustible as described and tested in accordance with ASTM E 136 and CAN/ULC S 114.

Fire Resistance Ratings – Fire-Halt Sealant has passed tests for 1-, 2- and 3-hour fire ratings when tested in accordance with ASTM E 814, UBC 7-5 and CAN/ULC S 115 for both walls and floors.* The product is manufactured to meet or exceed the requirements of ASTM C 475, Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board. The product conforms to the requirements of major building codes for fire-rated assemblies.

F and T Ratings – Ratings developed during the Fire-Halt test program show a very consistent pattern. Steel and copper pipes conduct heat so well that they cannot achieve 1-hour T ratings under any circumstances. Flexible aluminum conduit, however, has T ratings of 1- and 2-hour. PVC and PVC-jacketed phone cables also perform well with Fire-Halt Sealant, consistently achieving 1- and 2-hour ratings. Fire-Halt Sealant assemblies are shown in ITS/ Warnock Hersey listings under "Firestop Systems."

¹ As described and tested in accordance with ASTM E 136.

* Consult appropriate fire resistance directory for approved use in specific assemblies. (See Fire Safety Caution on back panel.)

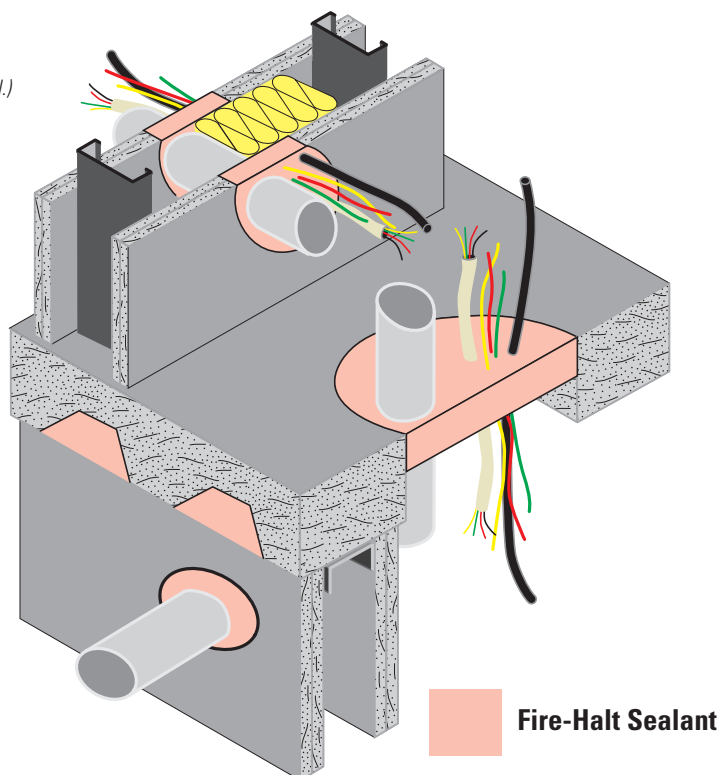


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CAUTION: For product fire, safety and use information, go to gp.com/safetyinfo.

2 • For latest information and updates: **Technical Service Hotline 1.800.225.6119** or **www.gpgypsum.com**

Installation Instructions

Where penetrations occur in fire-rated assemblies, the integrity of the system must be maintained. To fully comply with tested procedures, openings in the gypsum board for pipe and conduits should be 1/8" to 4-5/8" (3 to 118 mm) larger than the penetrating element.

In general, use a 4" (102 mm) finishing knife and force a generous amount of Fire-Halt® Sealant into the opening. Remove excess and smooth compound flush with the surface of the gypsum board. If shrinkage occurs, a second coat may be desirable in visible areas. Once compound has set, it may be covered with a second coat – even if it is not completely dry.

For Walls

1/8" to 1" (3 to 25 mm) annular space – For gypsum board assemblies with annular spaces not larger than 1" (25 mm), force a generous amount of Fire-Halt Sealant the full thickness of the gypsum board into the opening with a finishing knife. Smooth compound flush with the gypsum board.

1" to 4-5/8" (25 to 118 mm) annular space, PVC or metal pipes, telephone cables – For gypsum board assemblies with pipe/conduit penetrations or bundles of PVC-jacketed telephone cables with annular spaces up to 4-5/8" (118 mm), pack the wall cavity with any suitable damming material (crumpled newspaper, fiberglass, etc.). Using a finishing knife, cover the damming material with Fire-Halt Sealant equal to the thickness of the gypsum board on both sides of the partition and smooth flush with the gypsum board.

Multiple penetrations, hole up to 22-1/2" x 9" (572 x 229 mm) – For multiple pipes, conduits and/or telephone cables through the wall, the maximum size hole is 22-1/2" x 9" (572 x 229 mm). Maintain 2" (51 mm) minimum space between penetrating members. Pack the wall cavity with any suitable damming material (crumpled newspaper, fiberglass, etc.). With a finishing knife, cover the damming material with Fire-Halt Sealant equal to the thickness of the gypsum board and smooth flush.

For Concrete Floors and Walls

1/2" to 4-1/2" (13 to 114 mm) annular space, metal pipes, PVC telephone cables – For concrete floors or walls, the minimum thickness for Fire-Halt Sealant is 3" (76 mm). Any damming material may be used and may be removed after the Sealant has set. Pour the mixed Sealant around the pipes and/or cables and smooth level with the concrete.

For Fluted Steel Decks

Head of Wall – When both sides are to be finished, place damming material in the center of flutes, allowing 5/8" or 1" (16 or 25 mm) space for 1- or 2-hour ratings on both sides. Apply Sealant as directed above for walls. When only one side is to be finished, apply damming materials, allowing 1-1/4" or 2" (32 or 51 mm) for 1- or 2-hour ratings. Damming material may be removed. Fire-Halt Sealant may be applied solid through the flute, if desired.

Finishing/Painting

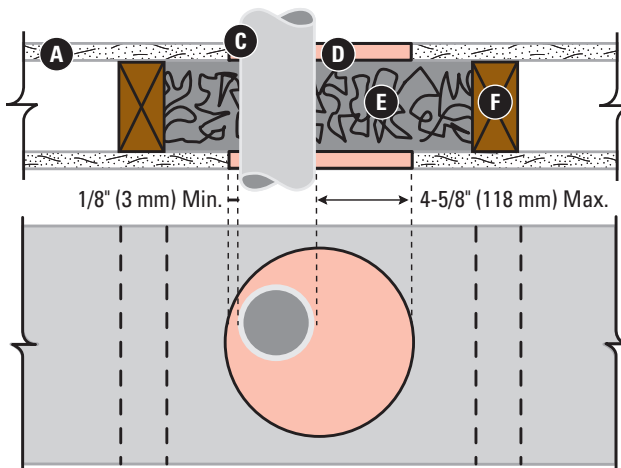
Fire-Halt Sealant may be painted following the usual recommended methods for gypsum board finishing. If decorating an area, allow Sealant to dry thoroughly. Sand lightly and use a full-bodied, quality latex primer-sealer before applying final decoration. Priming will equalize the suction variation between the Sealant and the paper surface of the gypsum board. If glossy paints are used in areas such as kitchens or bathrooms, skim-coat joint compound over the entire surface to reduce highlighting or joint photographing.

CAUTION: See Handling and Use information on back panel.

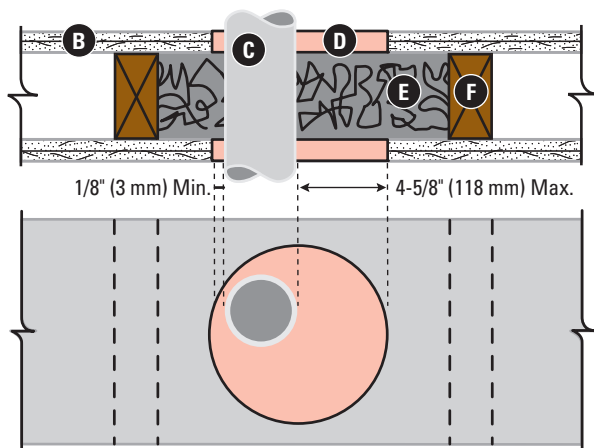
Assemblies*

- | | |
|--|--------------------------|
| A. 5/8" (15.9 mm) DensArmor Plus® Fireguard® or
5/8" (15.9 mm) ToughRock® Fireguard® Gypsum Board | F. Steel or Wood Stud |
| B. 1/2" (12.7 mm) DensArmor Plus® Fireguard C™ or
1/2" (12.7 mm) ToughRock® Fireguard C™ Gypsum Board | G. Telephone Cables |
| C. 4" (102 mm) ID Copper, Steel, EMT or PVC Pipe | H. Concrete |
| D. Fire-Halt® Sealant (Gypsum Board Thickness) | I. Corrugated Steel Deck |
| E. Crumpled Newspaper or Fiberglass | J. Damming Optional |
| | K. Fiberglass Insulation |
| | L. Steel Studs |

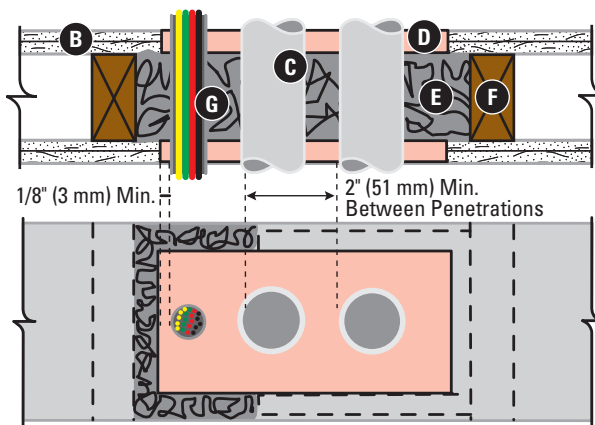
1-Hour Wall, 4" Pipe Shown



2-Hour Wall, Single Penetration



2-Hour Wall, Multiple Penetrations

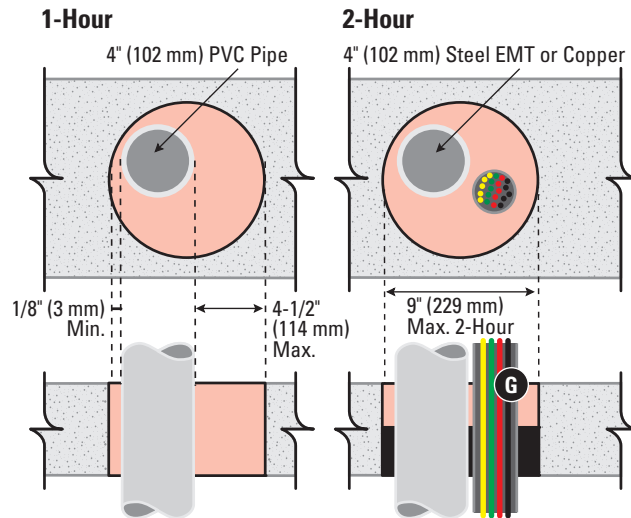


* Design assemblies for illustrative purposes only. Consult appropriate fire resistance directory for assembly information. See Fire Safety Caution on back panel.

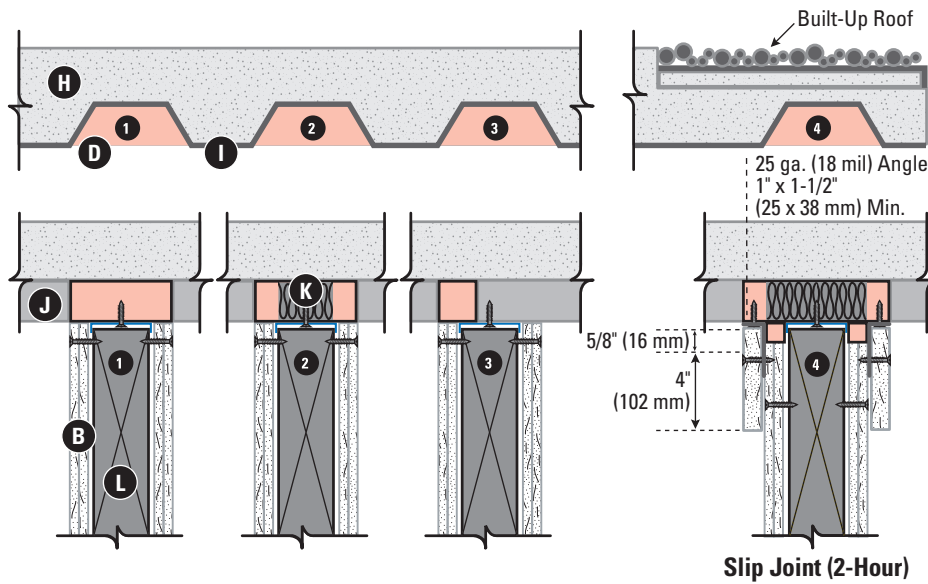
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Concrete Slab or Wall, Single or Multiple Penetrations



1- and 2-Hour Firestopping in Corrugated Deck Flutes**



**Not tested in Dynamic Mode

Applications*

Assembly	Penetrating Material	Annular Spacing	Rating		WHI Listing
			F	T	
1-Hour Wall	Up to 4" (102 mm) Closed PVC Pipe	1/8" to 4-5/8" (3 to 118 mm)	60	60	GP/PV 60-03
	Up to 4" (102 mm) Schedule 40 Steel Pipe	1/8" to 4-5/8" (3 to 118 mm)	60	24	GP/PV 60-03
	Up to 4" (102 mm) EMT Steel Pipe	1/8" to 4-5/8" (3 to 118 mm)	60	16	GP/PV 60-03
	Up to 4" (102 mm) Copper Pipe	1/8" to 4-5/8" (3 to 118 mm)	60	14	GP/PV 60-03
	Up to 1" (25 mm) PVC Jacketed Flexible Steel Conduit	1/8" to 4-5/8" (3 to 118 mm)	60	16	GP/PV 60-03
	Bundle of 100 Telephone Cables	1/8" to 4-5/8" (3 to 118 mm)	60	47	GP/PV 60-03
	Up to 12" (305 mm) Diameter Steel Air Duct	1/8" to 4-5/8" (3 to 118 mm)	60	12	GP/PV 60-03
	Up to 4" (102 mm) Copper Pipe with 2" (51 mm) Thick Listed Fiberglass Pipe Insulation	1/8" to 4-5/8" (3 to 118 mm)	60	60	GP/PV 60-03
1-Hour Wall Group Penetrations 9" x 22-1/2" (229 x 572 mm) Opening	Up to 4" (102 mm) Closed PVC Pipe	1/8" to 20" (3 to 508 mm)	60	60	GP/PV 60-04
	Up to 4" (102 mm) Schedule 40 Steel Pipe	1/8" to 20" (3 to 508 mm)	60	24	GP/PV 60-04
	Up to 4" (102 mm) EMT Steel Pipe	1/8" to 20" (3 to 508 mm)	60	16	GP/PV 60-04
	Up to 4" (102 mm) Copper Pipe	1/8" to 20" (3 to 508 mm)	60	14	GP/PV 60-04
	Up to 1" (25 mm) PVC Jacketed Flexible Steel Conduit	1/8" to 20" (3 to 508 mm)	60	16	GP/PV 60-04
	Bundle of 100 Telephone Cables	1/8" to 20" (3 to 508 mm)	60	47	GP/PV 60-04
2-Hour Wall	Up to 4" (102 mm) Closed PVC Pipe	1/8" to 4-5/8" (3 to 118 mm)	120	120	GP/PV 120-04
	Up to 4" (102 mm) Schedule 40 Steel Pipe	1/8" to 4-5/8" (3 to 118 mm)	120	20	GP/PV 120-04
	Up to 4" (102 mm) Copper Pipe	1/8" to 4-5/8" (3 to 118 mm)	120	14	GP/PV 120-04
	3/4" (19 mm) Flexible Steel or Aluminum Conduit	1/8" to 4-5/8" (3 to 118 mm)	120	109	GP/PV 120-04
1-Hour Wood Floor or Wall	Up to 4" (102 mm) PVC Vent Pipe Offset	1/2" to 4" (13 to 102 mm)	60	60	GP/PH 60-02
	Up to 4" (102 mm) Schedule 40 Steel Pipe	1/2" to 4" (13 to 102 mm)	60	60	GP/PH 60-01
	Up to 4" (102 mm) Copper Pipe	1/2" to 4" (13 to 102 mm)	60	33	GP/PH 60-01
	Two #4 Electrical Feed Cables	1/2" to 4" (13 to 102 mm)	60	60	GP/PH 60-01
3-Hour Concrete Floor or Wall	Up to 4" (102 mm) Schedule 40 Steel Pipe	1/8" to 4-5/8" (3 to 114 mm)	180	27	GP/PV 180-04
	Up to 4" (102 mm) Copper Pipe	1/8" to 4-5/8" (3 to 114 mm)	180	15	GP/PV 180-04
	Up to 4" (102 mm) EMT Steel Pipe	1/8" to 4-5/8" (3 to 114 mm)	180	34	GP/PV 180-04
	Up to 1-1/2" (38 mm) Bundle Telephone Cables	1/8" to 4-5/8" (3 to 114 mm)	180	110	GP/PV 180-04
	3/4" (19 mm) Flexible Aluminum Conduit	1/8" to 4-5/8" (3 to 114 mm)	180	139	GP/PV 180-04
2-Hour Concrete Floor or Wall	Up to 4" (102 mm) Schedule 40 Steel Pipe	1/8" to 4-5/8" (3 to 114 mm)	120	32	GP/PH 120-01
	Up to 4" (102 mm) Copper Pipe	1/8" to 4-5/8" (3 to 114 mm)	120	16	GP/PH 120-01
	Up to 4" (102 mm) EMT Steel Pipe	1/8" to 4-5/8" (3 to 114 mm)	120	34	GP/PH 120-01
	1-1/2" (38 mm) Bundle of 25 Telephone Cables	1/8" to 4-5/8" (3 to 114 mm)	120	114	GP/PH 120-01
1-Hour Wall	Fluted Steel Deck with Slip Joint	Flutes	60	60	GP/PV 60-02
2-Hour Wall	Fluted Steel Deck	Flutes	120	120	GP/PV 120-02
3-Hour Wall	Fluted Steel Deck with Slip Joint	Flutes	120	120	GP/PV 120-03

*Consult appropriate fire resistance directory for assembly information.

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COMMONLY USED METRIC CONVERSIONS

Gypsum Board Thickness

1/4 in. – 6 mm
1/2 in. – 12.7 mm
5/8 in. – 15.9 mm
1 in. – 25.4 mm

Gypsum Board Width

2 ft. – 610 mm
4 ft. – 1219 mm
32 in. – 813 mm

Gypsum Board Length

4 ft. – 1219 mm
5 ft. – 1524 mm
8 ft. – 2438 mm
9 ft. – 2743 mm
10 ft. – 3048 mm
12 ft. – 3658 mm

Framing Spacing

16 in. – 406 mm
24 in. – 610 mm

Fastener Spacing

2 in. – 51 mm
2.5 in. – 64 mm
7 in. – 178 mm
8 in. – 203 mm
12 in. – 305 mm
16 in. – 406 mm
24 in. – 610 mm

Temperature

40°F – 5°C
50°F – 10°C
125°F – 52°C

The Dens™ Brand of High-Performance Gypsum Products from Georgia-Pacific

DensGlass® Sheathing	The original and universal standard of exterior gypsum sheathing offers superior weather resistance, with a 12-month weather exposure limited warranty. Look for the familiar GOLD color.
DensShield® Tile Backer	Acrylic-coated tile backer stops moisture at the surface. Lightweight and strong, built for speed on the job site. IBC/IRC Code Compliant. GREENGUARD listed for microbial resistance.
DensDeck® Roof Boards	Fiberglass mat roof board used as the ideal thermal barrier and cover board to improve resistance to wind uplift, hail, foot traffic, fire, moisture and mold in a broad range of commercial roofing applications. Look for green DensDeck Prime and DensDeck DuraGuard, too.
DensGlass® Shaftliner	Specially-designed panels for moisture-prone vertical or horizontal shafts, interior stairwells and area separation wall assemblies. 12-month weather exposure limited warranty. GREENGUARD listed for microbial resistance.
DensArmor Plus® High-Performance Interior Panel	High-performance interior panel accelerates scheduling because it can be installed before the building is dried-in. 12-month weather exposure limited warranty. GREENGUARD Indoor Air Quality Certified,® GREENGUARD Children & Schools SM Certified and CHPS TM listed for low emissions. GREENGUARD listed for microbial resistance.
DensArmor Plus® Abuse-Resistant Interior Panel	Same benefits as DensArmor Plus® High-Performance Interior Panel with added resistance to scuffs, abrasions and surface indentations. Ideal for healthcare facilities and schools. GREENGUARD Indoor Air Quality Certified,® GREENGUARD Children & Schools SM Certified and CHPS TM listed for low emissions. GREENGUARD listed for microbial resistance.
DensArmor Plus® Impact-Resistant Interior Panel	Even greater durability with an embedded impact-resistant mesh for the ultimate resistance in high traffic areas. Ideal for healthcare facilities, schools and correctional institutions. GREENGUARD Indoor Air Quality Certified,® GREENGUARD Children & Schools SM Certified and CHPS TM listed for low emissions. GREENGUARD listed for microbial resistance.



Georgia-Pacific
Gypsum

U.S.A. Georgia-Pacific Gypsum LLC
CANADA Georgia-Pacific Canada, ULC

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UPDATES AND CURRENT INFORMATION –

The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

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HANDLING AND USE – WARNING!

Heat develops as the product hardens (rehydrates) and may cause serious burns resulting in possible permanent injury. After mixing with water, do not allow prolonged contact with skin until the product has completely hardened and cooled. Mixing or sanding this product after drying may generate dust which can irritate eyes, nose, throat, skin and upper respiratory tract. Use wet sanding to minimize dust generation and always maintain proper ventilation in the work area. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Use a

dust mask or NIOSH/MSHA approved respiratory protection during mixing of dry materials, while sanding and during clean-up as appropriate. For Material Safety Data Sheet or additional information, call 1-800-225-6119 or go to www.gpgypsum.com.

FIRE SAFETY CAUTION –

Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.