NYC Department of Buildings
280 Broadway, New York, NY 10007
Patricia Lancaster, FAIA, Commissioner
(212) 566-5000, TTY: (212) 566-4769

Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 406-06-M

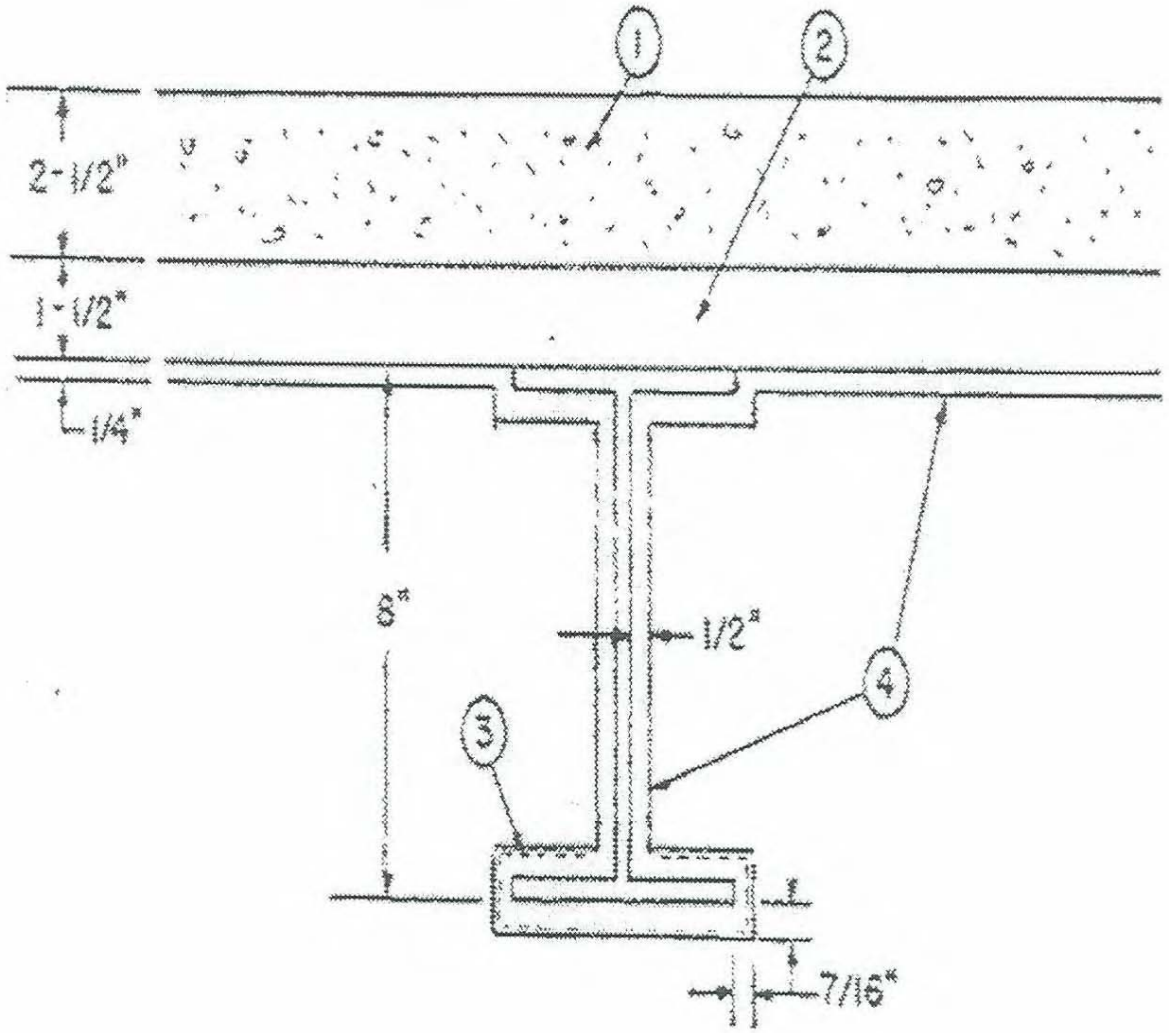
Manufacturer:	Albi Mfg. Division of Stanchem Inc., 401 Berlin Street , East Berlin, CT 06023
Trade Name(s):	Albi Clad 800
Product:	Intumescent Fire Protection Mastic For Interior Or Exterior Application on Steel and Concrete
Pertinent Code Section(s):	27-323, 27-234, 27-133
Prescribed Test(s):	RS5-2 (ASTM E119) RS 5-5 (ASTM E 84)
Laboratory:	Underwriter Laboratories Inc., Northbrook, IL
Test Report(s):	UL File R443, Project 94NK5027 (ASTM E 84) , UL File R4443-24, Project 86NK5844 (ASTM E 119)

Description – Albi Clad 800 Intumescent fire protection coating is applied to protect both interior and exterior structural steel, concrete and other construction materials for fire protection. Albi Clad 800 is resistant to weathering and abuse found in exterior environments. Other unique features include up to 3-hour fire protection for interior/exterior, resistance to UV exposure, single component factory-formulated and lightweight.

Design No. N601

Restrained Beam Rating – 2 Hr.

Unrestrained Beam Rating – 1 Hr.



Steel Beam – Min size W8x17 with outside dimensions of 8x5 1/4 in. with a flange thickness of 5-1/4 in., a web thickness of 5/16 in., and a cross-sectional area of 5.01 sq in.

1. **Normal Weight Concrete** – 150 pcf.

2. **Steel Floor and Form Units*** – 1-1/2 in. cellular type, welded to beam.

3. **Glass Cloth** — Multifilament mesh with approx 14 threads per in., placed between last two coats of mastic coating. The cloth is adhered by applying a light brushing or spraying of mastic coating to beam and pressing the cloth in place.

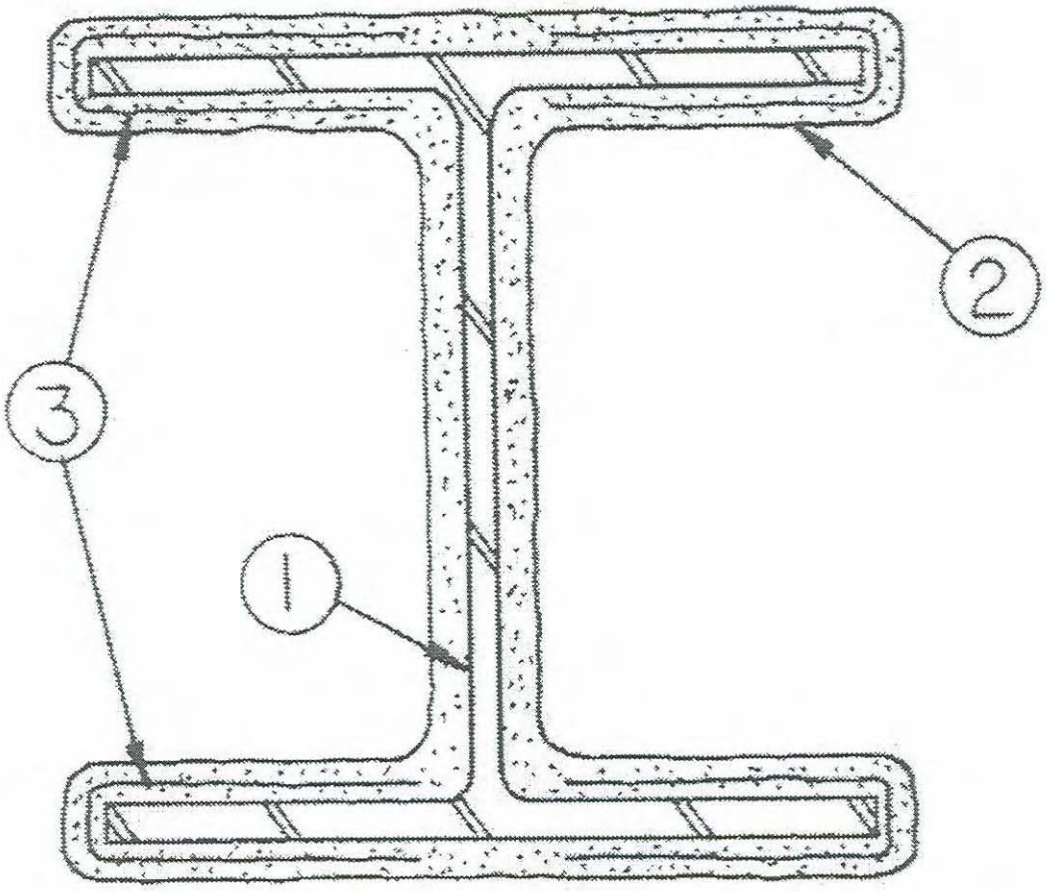
4. **Mastic Coating*** — The use of this coating requires proper ventilation during application and drying to minimize the possibility of an accumulation of flammable vapors. Such accumulation may be indicated by strong solvent odors. Applied in three coats to a min wet film thickness of 1/2 in. Because of solvent evaporation, the wet film thickness may be reduced to a max of 20 percent after the coating has cured a min of 5 days.

ALBI MFG, DIV OF STANCHEM INC — Type 89X or 89S intumescent mastic coatings for Interior General Purpose only; Type AC800 intumescent mastic coating for Interior General Purpose and Exterior Use. Flash point (closed cup) of coatings: 45 F (7 C). Coated beam surfaces are to be painted with type 144 coating where subjected to washing.

Design No. X601

November 29, 1999

Rating — 2 Hr.



1. **Mastic Coatings*** — The use of this coating requires proper ventilation during application and drying to minimize the possibility of an accumulation of flammable vapors. Such accumulation may be indicated by strong solvent odors. Spray applied in three coats. First coat sprayed to a min wet film thickness of 3/8 in. and allowed to dry. Glass fiber gauze applied with thinned out mastic coating using a paint brush. Two additional coats sprayed to a min wet film thickness of 1/16 in. each applied and allowed to dry after each coat to bring the total thickness to a min of 1/2 in. Because of solvent evaporation, the wet film thickness may be reduced a max of 20 percent after the coating has cured a min of 5 days.

ALBI MFG, DIV OF STANCHEM INC – Type 89S intumescent mastic coating for Interior General Purpose only; Type AC800 intumescent mastic coating for Interior General Purpose and Exterior Use. Coating column surfaces are to be painted with Type 144 coating where subjected to washing.

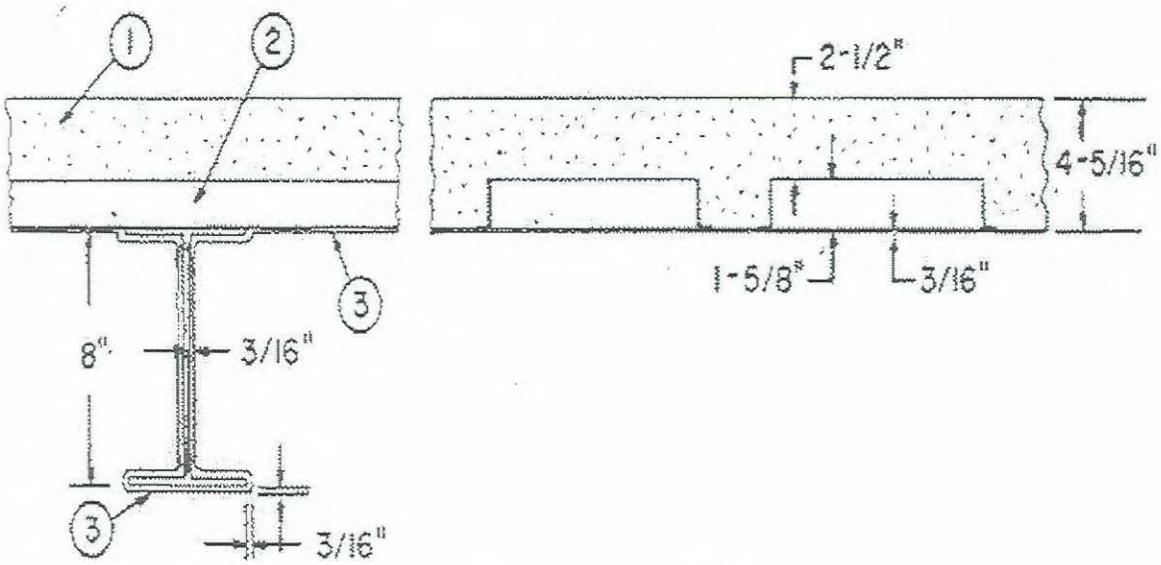
2. **Steel Column** – Min size of column, W10x49, with outside dimensions of 10 by 10 in. with a flange thickness of 9/16 in., a web thickness of 5/16 in., and a cross-sectional area of 14.4 sq in.

3. **Glass Fiber Gauze** – Nom 10 in. wide, 6.8 grams per ft embedded in mastic coating around flange tips and applied to the entire length of the column.

Design No. N603

November 29, 1999

Unrestrained Beam Rating — 3/4 Hr



Steel Beam — Min size W8x17, with outside dimensions of 8x5 1/4 in. with a flange thickness of 5/16 in., a web thickness of 1/4 in., and a cross-sectional area of 5.01 sq in.

1. **Normal Weight Concrete** — 150 pcf unit weight.

2. **Steel Floor and Form Units*** — 1-5/8 in. deep cellular type, welded to beam.

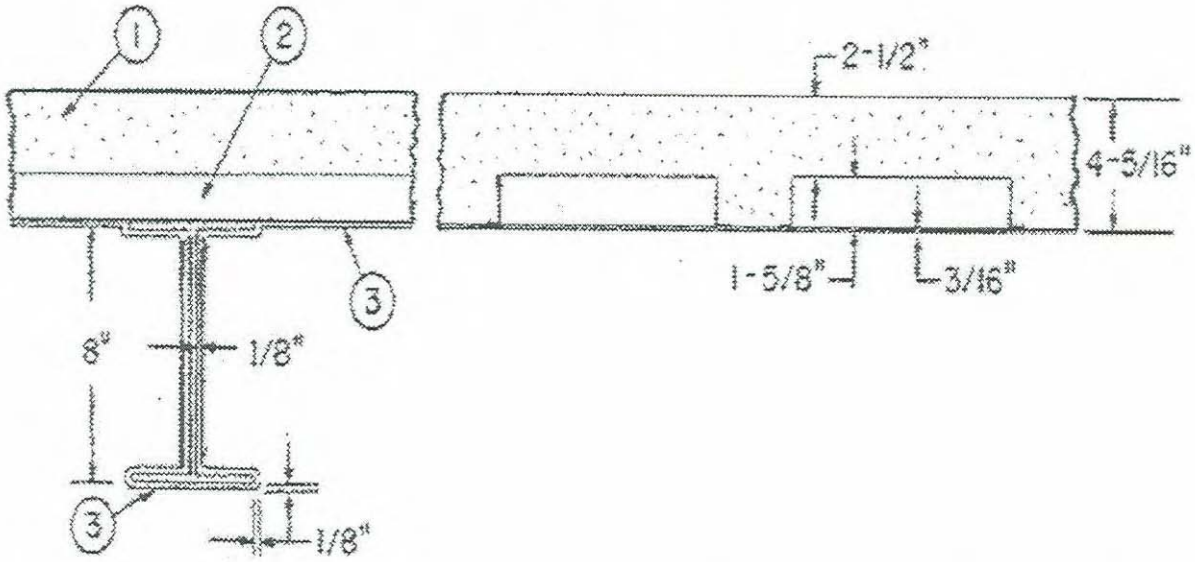
3. **Mastic Coatings*** — Spray applied in two coats to a minimum wet film thickness of 3/16 in. Because of solvent evaporation, the wet film thickness may be reduced a max of 20 percent after the coating has cured a min of 5 days. Steel surfaces are clean and free of dirt, loose scale and oil. Steel surfaces to be scratch coated with mastic coating as required per application instructions. The use of these coatings require proper ventilation during application and drying to minimize the possibility of an accumulation of flammable vapors. Such accumulation may be indicated by strong solvent odors.

ALBI MFG, DIV OF STANCHEM INC — Type 89X or 89S intumescent mastic coatings for Interior General Purpose only; Type AC800 intumescent mastic coating for Interior General Purpose and Exterior Use. Coated beam surfaces to be painted with Type 144 coating at a rate of 110 to 120 sq ft per gal when expected to be subjected to washing. Type 101 intumescent mastic coating for Interior General Purpose . Steel surfaces to be primed with Type 89X or 89S coating. Coated surfaces may be painted with latex paint only, at a rate not to exceed 75 sq ft per gal. Flash point (closed cup) of coatings: 45 F (7 C).

Design No. N604

October 16, 1996

Unrestrained Beam Rating — 1/2 Hr.



Steel Beam — Min size W8x17, with outside dimensions of 8x5 1/4 in. with a flange thickness of 5/16 in., a web thickness of 1/4 in., and a cross-sectional area of 5.01 sq in.

1. **Normal Weight Concrete** — 150 pcf unit weight.

2. **Steel Floor and Form Units*** — 1-5/8 in. cellular type, welded to beam.

3. **Mastic Coatings*** — Spray applied in one coat must be a min wet film thickness of 1/8 in. on the beam and 3/16 in. on the steel deck. Because of solvent evaporation, the wet film thickness may be reduced a max of 20 percent after the coating has cured a min of 5 days. Steel surfaces are clean and free of dirt, loose scale or oil. The use of these coatings require proper ventilation during application and drying to minimize the possibility of an accumulation of flammable vapors. Such accumulation may be indicated by strong solvent odors.

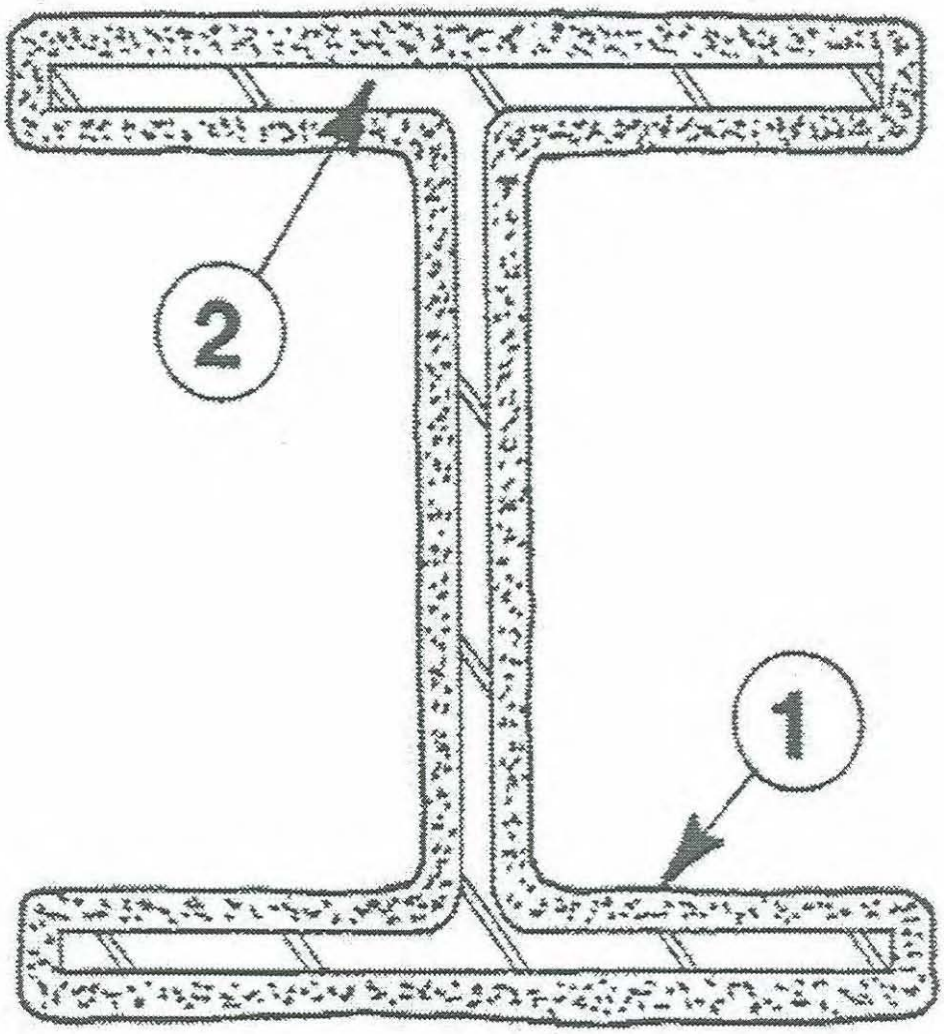
ALBI MFG, DIV OF STANCHEM INC — Type 89X or 89S intumescent coatings for interior use only; Type AC800 intumescent mastic coating for interior and exterior use. Coated beam surfaces to be painted with Type 144 coating at the rate of 110 to 120 sq ft per gal when expected to be subjected to washing.

Flash point (closed cup) of coatings: 45 F (7 C).

Design No. X606

November 29, 1999

Rating — 1 Hr.



1. **Mastic Coatings*** — The use of this coating requires proper ventilation during application and drying to minimize the possibility of an accumulation of flammable vapors. Such accumulation may be indicated by strong solvent odors. Applied in two coats to 1/4 in. wet film thickness. Because of solvent evaporation, the wet film thickness may be reduced a max of 20 percent after the coating has cured a min of 5 days. Steel surfaces to be primed and "scratch" coated with mastic coating as required per application instructions.

ALBI MFG, DIV OF STANCHEM INC — Type 890 or AC800 intumescent mastic coatings for Interior

General purpose use.

2. **Steel Colum –** Min. size of column, W10x49, with outside of 10 by 10in. a flange thickness of 9/16in., a web thickness of 5/16in. and a cross –sectional area of 14.4 sq in.

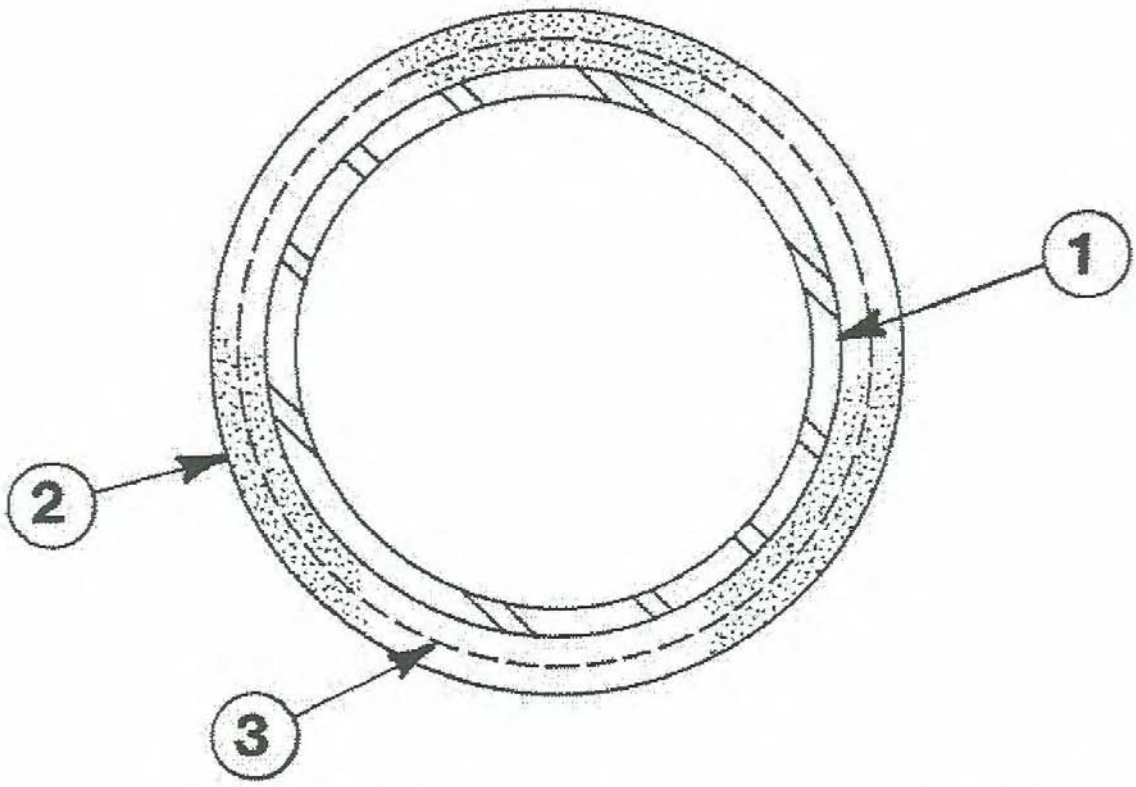
Fire Resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. X615

November 29, 1999

Ratings — 1, 1-1/2 and 2 Hr. (See Item 2)



1. **Steel Columns** — Steel pipe columns with a minimum inside diameter of 4 in., a minimum wall thickness of 0.237 in. and a minimum weight of 10.79 lb. per foot. The column shall be free of dirt, loose scale and oil.

2. **Mastic Coating*** — Spray applied to desired thickness in multiple 1/8 in. thick (wet) coats. See table below for appropriate final dry thickness. After each coat, the surface shall be lightly rolled with a paint roller. Steel surfaces to be primed as required per application instructions.

Rating Hr	Min Thkns In.
1	0.38

1-1/2	0.61
2	0.85

ALBI MFG, DIV OF STANCHEM INC — Type 89S intumescent mastic coating for Interior General Purpose Use; Type AC800 intumescent mastic coating for Interior General Purpose and Exterior Use.

3. **Reinforcing Mesh** — 1 in. hexagonal wire mesh (No. 20 SWG galvanized steel wire), tied together using the ends of the wire mesh. Mesh is embedded in the coating prior to application of final two (min.) coats in accordance with manufacturer's recommendations.

*Bearing the UL Classification Mark

Terms and Conditions: The above described column assemblies are accepted for Class II building only as having the fire resistance ratings given above, when members framing into the columns have at least the same fire resistance rating, provided the following requirements for application and protection of the Intumescent fireproofing to adhered to:

1. When used for protection of column(s) in fireproofing buildings each such column(s) shall bear an identifying tag installed at 7'-0" above finished floor. Subject tag shall be of metal construction mechanically attached to such column(s) and shall state the following: "This column has been fireproofed with MEA approved Albi Clad 800 and such film shall not be removed"-nor any subsequent coating shall be applied other than Albi Clad 800.

2. Surfaces to receive Intumescent coating for fireproofing shall be cleaned prior to the application of the fireproofing.

3. The finished fireproofing shall be applied to a uniform thickness, which shall not be less than the minimum thickness specified.

4. The general contractor and the owner shall provide qualified personnel to supervise the application of the sprayed on fireproofing. They shall certify to the Department of Buildings that the finished fireproofing of the completed building is in full compliance with the acceptance requirements and drawings approved by the Department of Buildings.

5. The installation of the sprayed on fire protection shall be subject to the controlled inspection requirements of Section 27-132.

6. The use of this material shall be subject to all pertinent regulations of the Department of Air Resources and the Department of Health.

7. All installations shall comply with 1148-68 GR, the New York City Building Code, the Fire Department Directives, the manufacturer's instructions, and laboratory recommendations.

8. All shipments and deliveries of the materials comprising these assemblies shall be accompanied by a certificate or label certifying that the materials shipped or delivered are equivalent to those tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance October 17, 2006

Examined By Sian Derkhodam