

CITY OF NEW YORK  
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of Materials and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, F.A.I.A., Commissioner  
MEA 411-03-M

Report of Material and Equipment Acceptance Division  
Manufacturer – The Schundler Company, 150 Whitman Avenue, Metuchen, New Jersey 08840-0513.

Trade Name(s) – Schundler Classic 5 (LD, MD, XY).

Product - Cementitious material for fireproofing.

Pertinent Code Section(s) - 27-323, 27-324.

Prescribed Test(s) - RS 5-2 (ASTM 119).

Laboratory – Underwriters Laboratories, Inc.

Test Report(s) – UL File R21392, Project 03CA31517 dated October 2, 2003.

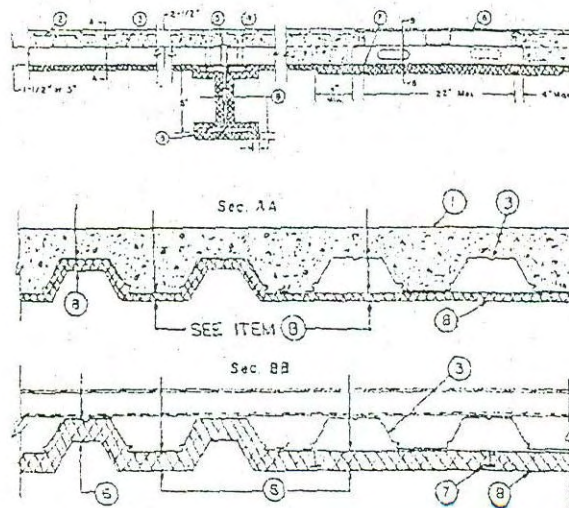
Description - Column/beam protection assemblies as per sketches below utilizing the Schundler's Types Classic 5LD, 5MD, and 5XY cementitious fire protection material, spray-applied to the required thickness, in achieving the fire resistance ratings listed below and in accordance with Underwriters Laboratories Inc. Design Nos. D787, P743, D943, Y726, and Y727.

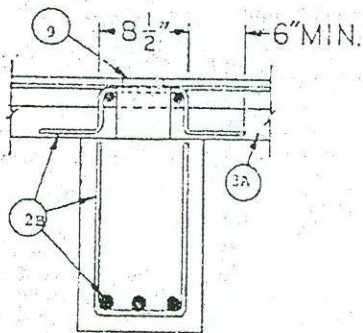
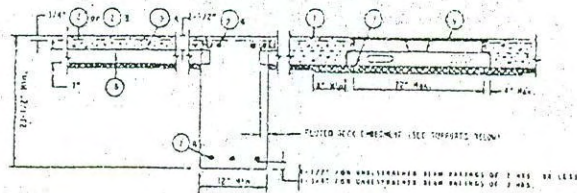
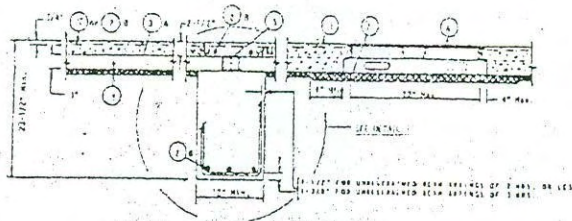
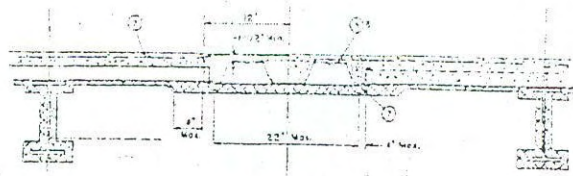
Design No. D787

Restrained Assembly Ratings — 1, 1-1/2, 2, 3 & 4 Hr.

Unrestrained Assembly Ratings — 0, 1, 1-1/2, 2, 3 & 4 Hr

Unrestrained Beam Ratings — 1, 1-1/2, 2, 3 & 4 Hr

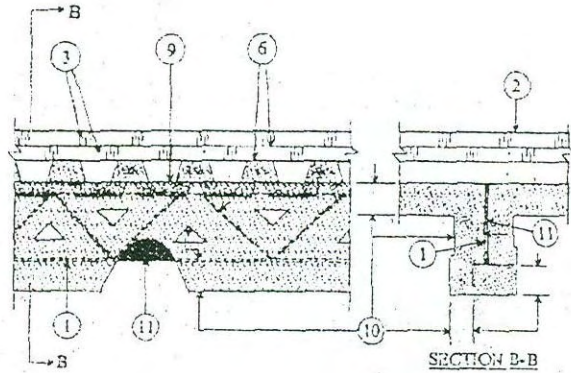
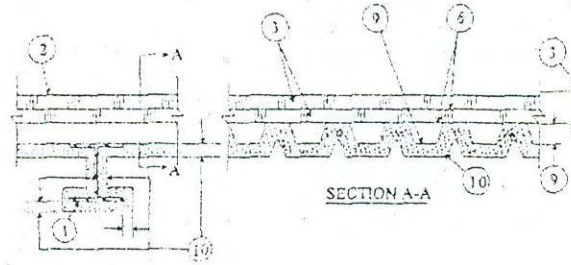




DETAIL 1

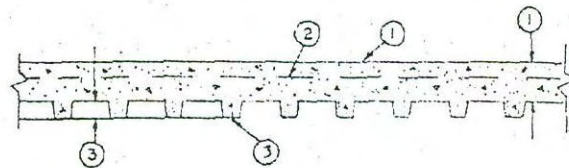
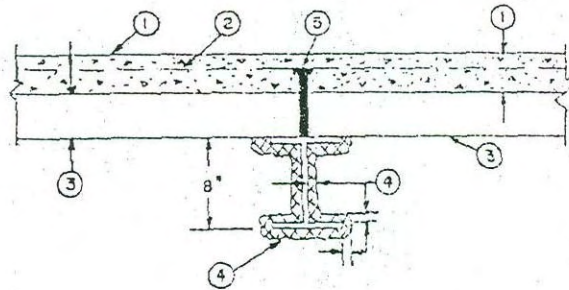
Design No. P743

Restrained Assembly Ratings — 1, 1-1/2 and 2 Hr  
Unrestrained Assembly Ratings — 1, 1-1/2 and 2 Hr  
Unrestrained Beam Ratings — 1, 1-1/2 and 2 Hr



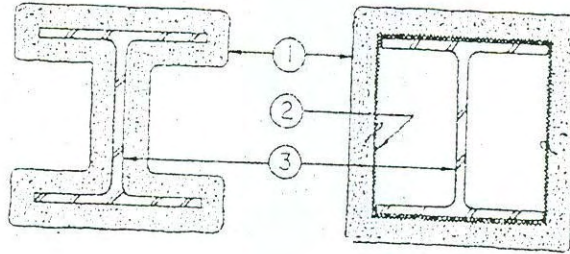
Design No. D943

Restrained Assembly Ratings — 3/4, 1, 1-1/2, 2 & 3 Hr  
Unrestrained Assembly Ratings — 0 Hr  
Unrestrained Beam Ratings — 1, 1-1/2, 2 & 3 Hr



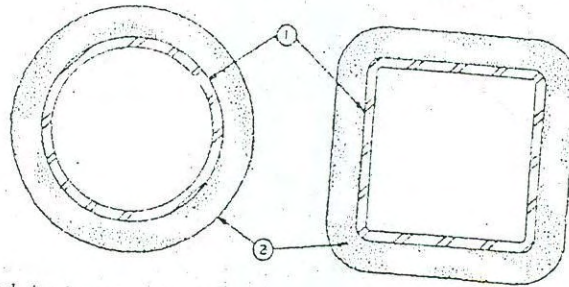
Design No. Y726

Ratings — 1, 1-1/2, 2, 3 & 4 Hr



Design No. Y727

Ratings — 3/4, 1, 1-1/2, 2, 3 & 4 Hr



- 1 **Steel Pipe or Tube Column** — Steel circular pipe with diam (OD) ranging from a min of 3 in. to a max of 32 in. with a min wall thickness of 3/16 in.  
Steel square or rectangular tube with outside wall dimensions ranging from a min 3 in. to a max of 32 in. and a min wall thickness of 3/16 in.
  - 2 **Spray-Applied Fire Resistive Materials\*** — Applied by mixing with water and spraying in one or more coats to steel surfaces which must be clean and free of dirt, loose scale and oil. Min avg and ind density of 15/14 pcf respectively for the Type Classic 5 LD and Classic 5 XY, and 22/18 pcf, respectively for the Type Classic 5 MD. For method of density determination, see Design Information Section, preceding these designs.
- The hourly rating of the structural member is dependent upon the ratio of A/P and the thickness of Spray-Applied Fire Resistive Materials, where A is the cross sectional area of the pipe or tube and P is the heated perimeter.
- The A/P ratio of a circular pipe is determined by:

$$A/P_{\text{pipe}} = \frac{t(d-t)}{d}$$

Where:

- d = the outer diameter of the pipe (in.)
- t = the wall thickness of the pipe (in.)

Recommendation - That the above described column/beam assemblies be accepted as having the fire resistance ratings given above, when members framing into the column/beams have at least the same fire resistance rating, provided the following requirements for application and protection of the sprayed-on fireproofing be adhered to:

1. Surfaces to receive sprayed-on fireproofing shall be cleaned of dirt, grease, oil, loose scale, paint, and any extraneous material immediately prior to the application of the fireproofing.
2. All spray surfaces shall be permanently jacketed or otherwise protected from abrasion or displacement for the full height of the exposed column, but such protection need not extend more than 9 feet above floor level.
3. The finished fireproofing shall be sprayed to a uniform thickness, which shall not be less than the minimum thickness specified. Fireproofing may be finish troweled to required thicknesses and densities.
4. Density of the sprayed-on fireproofing shall be verified by removing a minimum of three 6-inch square sections, randomly selected from the buildings, subjecting them to 120 degrees Fahrenheit in an oven to constant weight, usually 24 to 48 hours at a laboratory, followed by accurate weighing, measuring and calculation of the density in pounds per cubic foot.
5. 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 accepted requirements and drawings approved by the Department of Buildings.
6. The installation of the sprayed-on fire protection shall be subject to the controlled inspection requirements of Section 27-132.
7. The use of the material shall be subject to all pertinent regulations of the Department of Air Resources and the Department of Health.
8. All shipments and deliveries of the materials comprising this assembly 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 March/25/04

Examined By S Deshpande