

**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 the Material and Equipment Acceptance (MEA) Division.**

**Patricia J. Lancaster, F.A.I.A., Commissioner**

**MEA 50-05-M  
Report of Material and Equipment Acceptance Division**

**Manufacturer- A/D Fire Protection Systems Inc., 420 Tapscott Rd.  
Scarborough, Ontario M1B 1Y4.**

**Trade Name- A/D FIREFILM-S.**

**Product- Thin film intumescent coating for fire protection of column assemblies.**

**Pertinent Code Section(s)- 27-323, 27-324, 27-133.**

**Prescribed Test(s)- RS 5-2 (ASTM E119), RS 5-5 (ASTM E84).**

**Laboratory- Underwriters Laboratories of Canada, Bodycote.**

**Test Report- R20543 (CR 1698), 02CA05691, 2004-11-26. Bodycote Report No. 05-02-100(A) dated February 22, 2005.**

**Description- Column protection assemblies, as per Fire Resistive Designs listed below utilizing A/D FIREFILM-S intumescent fire protection material, applied to the required thickness' following the manufacturer's instructions, for the fire resistance ratings of 1, 1-1/2 or 2 hours and in accordance with Underwriters Laboratories of Canada. Design Numbers listed below:**

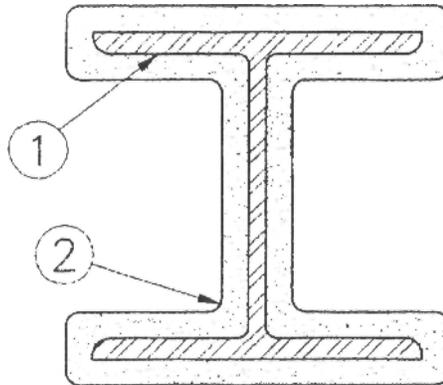
**Fire Resistance Ratings**

Guide Information

**Design No. 7.624**

October 04, 2004

Ratings -1, 1-1/2 & 2 h (See Item 2)



1. Steel Column — W-Shaped column with M.T) as specified in Item 2. AH columns should be free of dirt, loose scale and oily deposits.

2. Thin-Film Intumescent Coatings — CAVCC (Guide No. 40 U18.12.9). Intumescent coating designated "/VD FIRBFLM-S" Thin-Film Coating, applied in accordance with manufacturer's instructions to the minimum dry film thicknesses shown below. Column surfaces should be primed as per manufacturer's instructions.

Ratings, h	Min Column Size (mm)	Minimum M/D	Required Min Dry Film Thickness (mm)
1	W250 x 73	49.0	1.35
1 - 1½	W250 x 73	49.0	2.79
2	W250 X 73	49.0	5.77

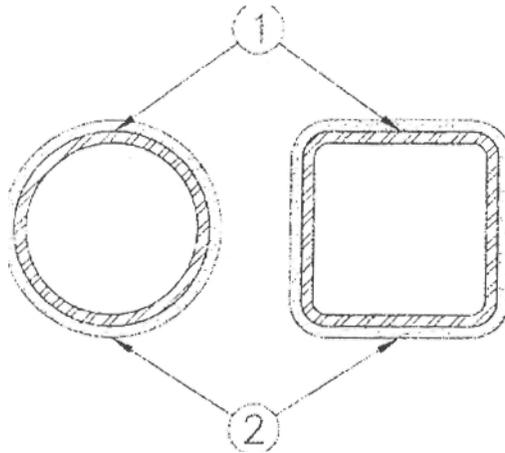
# DESIGN NO. Z625

## Fire Resistance Ratings

### Guide Information

Design No, Z6Z5  
October 04, 2004

Ratings - 1 and 1-1/2 h



1 Steel Column — Square, rectangular or circular HSS columns with minimum M/D as specified in Item 2. All columns should be free of dirt, loose scale and oily deposits.

2. Thin-Film Intumescent Coatings — CAVCC (Guide No. 40 U18.12.9). Intumescent coating designated "A/D FIRJ-ITI.M-S". applied in accordance with manufacturer's instructions to the minimum dry film thicknesses shown below. Columns surfaces should be primed as per manufacturer's instructions.

A/D FIRE PROTECTION SYSTEMS INC

### FOR SQUARE AND RECTANGULAR HSS COLUMNS

<b>Column Size</b>	<b>Minimum Column M/D</b>	<b>Required Minimum DryFilm Thickness (mm) 1 h Rating</b>	<b>1.5 h Rating</b>
<b>HSS102 x 102 x 64</b>	<b>44</b>	<b>3.53</b>	<b>—</b>
<b>HSS254 x 254 x 12.7</b>	<b>93</b>	<b>1.36</b>	<b>3.37</b>

### FOR CIRCULAR HSS COULUMNS

<b>Column Size</b>	<b>Minimum Column M/D</b>	<b>Required Minimum DryFilm Thickness (mm) 1 h Rating</b>	<b>1.5 h Rating</b>
<b>HSS 102 dia x 64</b>	<b>46</b>	<b>3.51</b>	<b>—</b>
<b>HSS114 dia x 17.1</b>	<b>115</b>	<b>3.26</b>	<b>4.39</b>

**Note: The following represent the test results of surface burning characteristics of intumescent paint designated A/D FIREFILM-S in accordance with requirement of ASTM E84-04 tested by Bodycote report No. 05-02-100(A) dated February 22, 2005.**

**Flame Spread Rating – 10**

**Smoke Developed Rating – 10**

**Recommendation – That the above described column protection assemblies be accepted for Class I and Class II Buildings 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 coating fireproofing be adhered to:**

- 1. Where used in Class I Buildings, subject material shall be used for fireproofing of selected structural members and be limited to 20% of all structural members on any one floor and a maximum of 20% of the gross area of all structural members in the entire building.**
- 2. Where used for protection of column(s) in fireproof buildings each such column(s) shall bear and 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 A/D FIREFILM-S finish and such finish shall not be removed nor any subsequent coating shall be applied other than A/D FIREFILM-S."**
- 3. Surfaces to receive intumescent coating shall be cleaned off and primed in accordance with the manufacturer's instructions prior to the application of the fireproofing.**
- 4. The finished fireproofing shall be applied to a uniform thickness, which shall not be less than the minimum thickness specified.**
- 5. The general contractor and the owner shall provide qualified personnel to supervise the application of the sprayed fire resistive material. 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.**

6. The installation of the sprayed fire resistive materials shall be subject to the controlled inspection requirements of Section 27-132.
7. The use of this material shall be subject to all pertinent regulations of the Department of Air Resources and the Department of Health.
8. All installation shall comply with 118-68 GR, the New York City Building Code, the Fire Department Directives, the manufacturer's instructions and laboratory recommendation.
9. 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 May 126/05  
Examined By S Dorkus