DESCRIPTION
CAFCO 300 HS is a durable, gypsum based, wet mix, commercial density Spray-Applied Fire Resistive Material (SFRM) specifically designed to provide a cost effective fireproofing solution for structural steel and satisfies the IBC minimum bond strength requirement for buildings up to 420 ft. in height. CAFCO 300 HS exceeds all standard physical performance requirements for a commercial density SFRM and is used to protect concealed floor and roof assemblies, steel beams, columns, and joists in building construction projects.

In addition to its fire resistance properties CAFCO 300 HS also provides thermal benefits. As a thermal insulator, it is effective in reducing heat loss, particularly when applied to the underside of a roof deck. The R-Value added by CAFCO 300 HS may also allow a reduction in roof insulation.

CAFCO 300 HS requires less material to achieve required fire ratings and offers the best fire resistance performance per unit thickness of any commercial SFRM.

PRODUCT ADVANTAGES
• Satisfies the IBC minimum bond strength requirement for buildings up to 420 ft. in height
• Best fire ratings – minimal thickness
• Lightweight gypsum based material is easy to apply
• Provides additional value as thermal insulator

FIRE TEST PERFORMANCE
CAFCO 300 HS has been evaluated for fire resistance and is rated for up to 4 hours for floor assemblies, beams, joists, columns, and roof assemblies.
• Classified by UL in accordance with ANSI/UL 263 (ASTM E119)
• Classified by UL in accordance with CAN/ULC-S101 (ASTM E119)

CAFCO 300 HS has also been tested for surface burning characteristics in accordance with ASTM E84 and is rated Class A.
Flame Spread ..........0 Smoke Developed .......0

CODE COMPLIANCES
CAFCO 300 HS satisfies the requirements of the following:
• IBC® - INTERNATIONAL BUILDING CODE® (ICC ESR-1649)
• City of Los Angeles
• NBC - National Building Code of Canada

MAJOR SPECIFICATIONS
CAFCO 300 HS complies with the requirements of the following specifications:
• MasterSpec®, Section 078100 APPLIED FIREPROOFING (AIA)
• MasterFormat® 2014, Section 07 81 00 Applied Fireproofing (CSC,CSI)
• Unified Facilities Guide Specification, UFCOS 07 81 00 Spray-Applied Fireproofing (USACE, NAVFAC, AFCEC, NASA)
• Master Construction Specifications, Number 07 80 10 Applied Fireproofing (VA)
• Code of Federal Regulations, Title 40 Protection of the Environment (EPA)
• PBS-P100 Facilities Standards for the Public Buildings Services (GSA)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>ASTM Method</th>
<th>Standard Performance*</th>
<th>Tested Performance**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>E605</td>
<td>15 pcf (240 kg/m³)</td>
<td>17.5 pcf (280 kg/m³)</td>
</tr>
<tr>
<td>Combustibility</td>
<td>E136</td>
<td>Noncombustible</td>
<td>Noncombustible</td>
</tr>
<tr>
<td>Cohesion/Adhesion</td>
<td>E736</td>
<td>430 psf (20.6 kPa)</td>
<td>&gt;500 psf (23.9 kPa)</td>
</tr>
<tr>
<td>Deflection</td>
<td>E759</td>
<td>No Cracks or Delaminations</td>
<td>No Cracks or Delaminations</td>
</tr>
<tr>
<td>Bond Impact</td>
<td>E760</td>
<td>No Cracks or Delaminations</td>
<td>No Cracks or Delaminations</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>E761</td>
<td>1,440 psf (68.9 kPa)</td>
<td>&gt;3,500 psf (167.6 kPa)</td>
</tr>
<tr>
<td>Air Erosion Resistance</td>
<td>E859</td>
<td>Less than 0.025 g/ft² (0.27 g/m²)</td>
<td>0.000 g/ft² (0.000 g/m²)</td>
</tr>
<tr>
<td>Corrosion Resistance</td>
<td>E937, Mil.</td>
<td>Does Not Promote Corrosion of Steel</td>
<td>Does Not Promote Corrosion of Steel</td>
</tr>
<tr>
<td>Sound Absorption</td>
<td>C423</td>
<td>0.50 NRC 1” (25mm) on deck and beam</td>
<td></td>
</tr>
<tr>
<td>Fungal Resistance</td>
<td>G21</td>
<td>No Growth After 28 Days</td>
<td>Passed</td>
</tr>
</tbody>
</table>

* Standard performance based on MasterSpec®, Section 078100 APPLIED FIREPROOFING. Refer to UL design for density requirement.
** Values represent independent laboratory tests under controlled conditions.

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**Thermal Performance**

<table>
<thead>
<tr>
<th>Product</th>
<th>Conductivity(k)*</th>
<th>Resistance (R/inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAFCO 300 HS</td>
<td>0.581 BTU in/hr ft²°F @ 75°F (0.0838 W/m•K @ 24°C)</td>
<td>1.83</td>
</tr>
</tbody>
</table>

*When tested in accordance with ASTM C518
CAFCO 300 HS Guide Specification

1.0 INTRODUCTION

Isolatek International is registered with the AIA Continuing Education System (AIA/CES)

We support our customers with unsurpassed technical expertise and customer service, complemented by an extensive global network of experienced sales representatives and recognized applicators. For detailed product information or for the name of the representative in your area please contact us.

The performance data herein reflect our expectations based on tests conducted in accordance with recognized standard methods under controlled conditions. The applicator, general contractor, property owner and/or user MUST read, understand and follow the directions, specifications and/or recommendations set forth in this Isolatek International’s publications concerning use and application of these products, and should not rely merely on the information contained in this product data sheet. Isolatek International is not responsible for property damage, bodily injuries, consequential damages, or losses of any kind which result from or are related to the applicator’s, general contractor’s, or property owners’ failure to follow the recommendations set forth in Isolatek International’s publications. The sale of these products shall be subject to the Terms and Conditions set forth in the Company’s invoices.

1.1.1 Cohesion/Adhesion (bond strength): When tested in accordance with ASTM E736, the materials shall exhibit a minimum bond strength of 430 psf (20.6 kPa).

1.1.2 Curing: When tested in accordance with ASTM E736, the material shall be cured for a minimum of 24 hours after application of spray-applied fire resistive material. If necessary for job progress, General Contractor shall provide enclosures and heat to maintain proper temperatures and humidity in accordance with the procedures of UL 263 (ASTM E119) or CAN/ UL-C601.

1.2.2 Materials shall be manufactured and tested in accordance with the procedures of UL 263 (ASTM E119) or CAN/ UL-C601.

2.2.3 Spray-applied fire resistive materials shall be applied at the appropriate UL/ ULC fire resistance design and manufacturer’s written recommendations.

3.2.3 Clips, hangers, supports, sleeves and other fasteners attached to the substrate are to be placed by others prior to the application of spray-applied fire resistive materials.

3.2.4 The sprayed-applied fire resistive material shall not be applied to steel deck which has been fabricated and set in accordance with the criteria set by the Steel Deck Institute.

3.3.1 All surfaces to receive spray-applied fire resistive material shall be free of oil, grease, loose mill scale, dirt, paint/primer or other foreign materials which would impair satisfactory bonding to the surface. Manufacturing shall be conducted for procedures on handling primed/insulated steel. Any cleaning of surfaces to receive sprayed fire protection shall be the responsibility of the General Contractor or Subcontractor as outlined in the structural steel or steel deck section.

3.4.1 The sprayed-applied fire resistive material shall not be applied to steel deck which has been fabricated and set in accordance with the criteria set by the Steel Deck Institute.

3.4.2 The sprayed-applied fire resistive material shall be tested for thickness and density in accordance with one of the following procedures:

ASTM E605 — Standard Test Method of Sprayed Fire-Resistive Materials Applied to Structural Members


IBC® INTERNATIONAL BUILDING CODE® CHAPTER 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS, Section 1704 Special Inspections

SECTION 078123 — INTUMESCENT BUILDING MATERIALS

SECTION 078443 — JOINT FIRESTOPPING

SECTION 014000 — HIGH PERFORMANCE FIREPROOFING

SECTION 012000 — THERMAL INSULATION

SECTION 011000 — THERMAL INSULATION

SECTION 010000 – THERMAL INSULATION

SECTION 091000 – THERMAL INSULATION

SECTION 074343 – JOINT FIRESTOPPING

SECTION 074342 – JOINT FIRESTOPPING

SECTION 074341 – JOINT FIRESTOPPING

SECTION 073100 – STEEL DECKING.

SECTION 053100 – STEEL DECKING.

SECTION 052100 – STEEL DECKING.

SECTION 051000 – STEEL DECKING.

SECTION 042100 – STEEL DECKING.

SECTION 041100 – STEEL DECKING.

SECTION 031100 – STEEL DECKING.

SECTION 031000 – STEEL DECKING.

SECTION 021100 – STEEL DECKING.

SECTION 021000 – STEEL DECKING.

SECTION 011100 – STEEL DECKING.

SECTION 011000 – STEEL DECKING.

SECTION 010100 – STEEL DECKING.

SECTION 010000 – STEEL DECKING.

SECTION 080100 – STEEL DECKING.

SECTION 070100 – THERMAL INSULATION

SECTION 070100 – THERMAL INSULATION

SECTION 070000 – THERMAL INSULATION

SECTION 060100 – THERMAL INSULATION

SECTION 060000 – THERMAL INSULATION

SECTION 050100 – THERMAL INSULATION

SECTION 050000 – THERMAL INSULATION

SECTION 040100 – THERMAL INSULATION

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SECTION 030000 – THERMAL INSULATION

SECTION 020100 – THERMAL INSULATION

SECTION 020000 – THERMAL INSULATION

SECTION 010100 – THERMAL INSULATION

SECTION 010000 – THERMAL INSULATION

SECTION 000100 – THERMAL INSULATION

SECTION 000000 – THERMAL INSULATION

SECTION 911000 – STANDARD INSPECTIONS, Section 1704 Special Inspections

SECTION 911000 – STANDARD INSPECTIONS, Section 1704 Special Inspections

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