SECTION 15250
1 Hour Rated Shaft Alternative for Dryer Exhaust Ductwork

Part 1 - GENERAL

1.01 SUMMARY
This section specifies material and equipment to provide a 1-hour fire-resistive rated duct enclosure for dryer exhaust ductwork.

1.02 CODES AND STANDARDS
A. The following published specifications, standards, or tests apply to flexible, fire rated duct wrap systems in this section:

1. NFPA 101
2. International Organization for Standardization (ISO)
3. International Building Code (IBC)
4. International Mechanical Code (IMC)
5. National Building Code of Canada

NOTE: The Authority Having Jurisdiction has final responsibility for approving equipment, materials, procedures, and performance requirements for their respective jurisdiction.

1.03 SYSTEM DESCRIPTION
A. A lightweight (8pcf maximum), non-asbestos, low biopersistence, high temperature, inorganic, noncombustible, foil encapsulated insulation blanket. The duct wrap system shall be a tested and listed system evaluated for a 1-hour fire resistance rating on dryer vent applications in wood floor assemblies. Testing to be conducted by a nationally recognized testing laboratory.
B. Performance Requirements:
   1. Single layer system for one hour fire rating.
   2. 1-hour fire resistive enclosure assembly tested per ISO 6944 (1985) Edition
   3. Firestop system, tested per UL 1479/ASTM E-814, 1-hour F and T Ratings

1.04 SUBMITTALS
A. Submit product data sheet and installation instructions showing system performance and Code compliance.
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1.05 DELIVERY, STORAGE AND HANDLING
   A. Deliver materials in original unopened packages, clearly marked with manufacturer’s name, product designation, manufacturer’s lot numbers and appropriate third party classification listings.
   B. Store in a covered dry environment.

PART 2 - PRODUCT

2.01 MANUFACTURERS
   A. Unifrax I LLC, Tonawanda, NY - FyreWrap® DPS Insulation
   B. Approved equal

2.02 MATERIALS
   A. A flexible, fully encapsulated duct wrap material to provide 1-hour fire resistive enclosure assembly per ISO 6944 (1985)
   B. A lightweight, ½” thick, 8pcf, flexible, inorganic, non-asbestos, noncombustible, low biopersistence core insulation blanket.
   C. Blanket insulation must maintain a 2012ºF (1100ºC) operating temperature
   D. Blanket fiber materials must be tested per EU regulatory requirements, Directive 97/69/EC for bio-solubility, and verified by an independent laboratory.
   E. Provide firestop sealants, foil tape, tie wire and other components per manufacturer’s instructions to ensure the installation complies with the complete tested system and corresponding Design Listing(s).

PART 3 - EXECUTION

3.01 PREPARATION
   A. Inspect and verify that ductwork has been tested and installed properly before applying duct wrap material.
   B. Inspect and verify that all surfaces are smooth, dry, clean and free from dust, debris, or other loose materials. Surfaces must be dry before the application of duct wrap materials.

3.02 INSTALLATION
   A. Install duct wrap system in accordance with manufacturer’s installation instructions.