2006 International Mechanical Code 2006 Uniform Mechanical Code NFPA 96 - 2008 Edition

Require Testing to New Grease Duct Enclosure Test Standard

The 2006 International Mechanical Code (IMC) has adopted new language that requires field installed grease duct enclosure systems to be tested to ASTM E 2336. The 2006 Uniform Mechanical Code requires field installed grease duct enclosure systems to be installed per NFPA 96. NFPA 96 (both the 2004 and 2008 Editions) requires field installed grease duct enclosure systems to be tested to ASTM E 2336. Specific reference to ASTM E 2336 in these model codes eliminates confusion with previous building code language which referenced testing per a "nationally recognized test standard". This clarification gives designers, contractors, and code enforcement officials clear guidance on how to specify and accept field installed grease duct enclosure systems.

Also, nationally recognized testing and listing laboratories will only list and support field applied grease duct enclosure systems tested to ASTM E 2336 after January 1st 2009. <u>Current single layer systems on the market are not tested to the ASTM E 2336 Grease Duct Enclosure standard, and will therefore not bare listing marks after January 1st 2009.</u>

What is ASTM E2336?

ASTM E 2336 is a new ANSI approved test standard published in 2004, and titled "Standard Test Methods for Fire Resistive Grease Duct Enclosure Systems". ASTM E 2336 is based largely on ICC-ES Acceptance Criteria 101 (AC101) which has been in use in western USA jurisdictions for more than 10 years to test and approve field applied grease duct enclosure systems. ASTM E 2336 evaluates enclosure systems for:

- 1. Non-combustibility
- 2. Fire resistance
- 3. Service durability
- 4. Internal fire-clearance to combustibles
- 5. External fire engulfment performance and through-penetration firestop performance

See Thermal Ceramics flyer titled "ASTM E 2336 New Grease Duct Test Standard" for more detailed description of the requirements of this new test standard.

FireMaster FastWrap[®] XL Meets <u>ALL</u> the Requirements of ASTM E 2336 NEW in 2008! FireMaster FastWrap XL is the thinnest (1-1/2" thick) and lightest (6 PCF) field installed grease duct enclosure system available that meets all 5 acceptance criteria of ASTM E 2336. FireMaster FastWrap XL is applied in two layers to meet the stringent requirements of ASTM E 2336. FireMaster



FastWrap XL is UL classified per ASTM E 2336 in listing G18, and has 2006 IMC and 2006 UMC building code approvals with ICC-ES report ESR 2213.

FastWrap XL is thin and flexible, allowing for ZERO clearance in congested spaces.





Important Grease Duct Enclosure Changes to:

- 2006 International Mechanical Code
- 2006 Uniform Mechanical Code
- NFPA 96 2008 Edition







2006 IMC Change

506.3.10 Grease duct enclosure. A grease duct serving a Type I hood that penetrates a ceiling, wall or floor shall be enclosed from the point of penetration to the outlet terminal. A duct shall penetrate exterior walls only at locations where unprotected openings are permitted by the International Building Code. Ducts shall be enclosed in accordance with the International Building Code requirements for shaft construction. The duct enclosure shall be sealed around the duct at the point of penetration and vented to the outside of the building thorough the use of weather-protected openings. Clearance from the duct to the interior surface of enclosures of combustible construction shall be not less than 18



inches (457 mm). Clearance from the duct to the interior surface of enclosures of noncombustible construction or gypsum wall board attached to noncombustible structures shall be not less than 6 inches (152 mm). The duct enclosure shall serve a single grease exhaust duct system and shall not contain any other ducts, piping, wiring or systems.

Exceptions:

1. The shaft enclosure provisions of this section shall not be required where a duct penetration is protected with a through-penetration firestop system classified in accordance with ASTM E 814 and having an "F" and "T" rating equal to the fire-resistance rating of the assembly being penetrated and where the surface of the duct is continuously covered on all sides from the point at which the duct penetrates a ceiling, a wall or floor to the outlet terminal with a classified and labeled material, system, method of construction or product specifically evaluated for such purpose, in accordance with ASTM E 2336. Exposed duct wrap systems shall be protected where subject to physical damage.

When Will FireMaster Be Affected By These Code Changes?

The 2006 IMC has already been adopted by many state and local jurisdictions. It is important that architects and contractors check the code requirements in their jurisdiction to be sure to specify the correct FireMaster grease duct enclosure system to meet the current building code.



 January 1, 2009, single layer systems not compliant to ASTM E 2336 will no longer be listed by test laboratories.