JB ENGINEERING AND CODE CONSULTING, P.C.

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> JULIUS A. BALLANCO, P.E. President

January 15, 2008

Mr. Rick Harpenau In-O-Vate Technologies 810 Saturn Street Jupiter, FL 33477

Dear Rick:

The Dryer Box has been tested in accordance with UL 1479 (ASTM E814) by Underwriters Laboratory. The results of the testing indicated that the Dryer Box has a 1 Hour F Rating for a membrane or cabinet through penetration firestop system. The UL Test Report is File R21933, Project 05CA29358, dated February 15, 2005. This test report is of fire tests conducted at Underwriters Laboratories in Northbrook, Illinois.

The UL Test Report identifies the through penetration firestop system as being acceptable for both wood and steel studs with a layer of 5/8 inch Type X gypsum on each side of the wall. These are the common type of 1 hour wall assemblies.

The installation of the Dryer Box would meet the requirements of the 2006 International Building Code and 2006 International Residential Code regarding penetrations of 1 hour fire separation assemblies. Both codes require any penetration to have a minimum F Rating equal to the rating of the wall assembly.

If you have any questions regarding this matter, please don't hesitate to call.

Cordially yours,

a hid

Julius Ballanco, P.E. President

XHGK.R21933 Cabinets

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Cabinets

See General Information for Cabinets

IN-O-VATE TECHNOLOGIES #21 810 SATURN ST JUPITER, FL 33477 USA



Dryerbox Models 350, 425, 3D and 4D for use in Through-Penetration Firestop System No. W-L-7129.

Last Updated on 2008-02-07

Questions?

Notice of Disclaimer

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R21933

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ONLINE CERTIFICATIONS DIRECTORY

ONLINE CERTIFICATIONS DIRECTORY

XHEZ.W-L-7129 Through-penetration Firestop Systems

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Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems



March 26, 2008

System No. W-L-7129

F Ratings – 1/2 and 1 Hr (See Items 1, 1A and 4)

T Ratings - 1/2 and 1 Hr (See Items 1 and 1A)





1. **Wall Assembly — Configuration A —** The fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of min nom 2 by 6 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 6 in. (152.4 mm) wide and spaced max 24 in. (610 mm) OC.

B. **Gypsum Board*** — One layer of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design.

The hourly F and T Rating of the firestop system for Configuration A is 1/2 Hr.

1A. **Wall Assembly — Configuration B** — The fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs** — Wall framing to consist of wood studs. Wood studs to consist of min nom 2 by 6 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC.

B. **Gypsum Board*** — One layer of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design.

C. **Gypsum Board*** — An additional layer of gypsum board shall be cut to fit ID of stud cavity and installed flush with edge of studs on non-penetrated face of wall. Additional layer of gypsum board to be attached to min 1 by 2 in. (25 by 51 mm) wood nailing strips with fasteners spaced max 18 in. (457 mm) OC around periphery of board. Nailing strips to be secured to wood studs and plates with fasteners spaced max 18 in. (457 mm) OC. Nailing strips may be discontinuous and terminate max 1 in. (25 mm) from vent duct and cabinet interfaces with plates and studs.

The hourly F and T Rating of the firestop system for Configuration B is equal to 1 Hr.

2. **Cabinet*** — Recessed fixture intended for dryer appliance exhaust duct installed per manufacturer's installation instructions in one side of wall assembly. Cutout in gypsum board for top exhaust device is 18-1/4 by 9-1/2 in. (464 by 241 mm). Cutout in gypsum board for bottom exhaust duct is 16 by 14 in. (406 by 356 mm). Max gap between cabinet and gypsum board around periphery of cutout shall be 1/8 in. (3.2 mm). As an option, gap may be sealed with UL Classified sealant or caulk (see Fill, Void or Cavity Material (XHHW) category in the Fire Resistance Directory for names of manufacturers) or drywall compound.



XHGK7.R21933 Cabinets Certified for Canada



Cabinets Certified for Canada

See General Information for Cabinets Certified for Canada

IN-O-VATE TECHNOLOGIES

#21 810 SATURN ST JUPITER, FL 33477 USA



Dryerbox Models 350, 425, 3D and 4D for use in through-penetration firestop system described in Volume 2 of the UL Fire Resistance Directory. The specific System No. and the applicable rating information is as follows:

	Rating Hr			
System No.	F	FT	FH	FTH
<u>W-L-7129</u>	1/2 and 1	1/2 and 1	1/2 and 1	1/2 and 1
	,			

Last Updated on 2008-03-26

Questions?

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