

**CITY OF PHILADELPHIA DEPARTMENT OF LICENSES & INSPECTIONS** Construction Services Division Municipal Services Building - Concourse Level 1401 John F. Kennedy Boulevard Philadelphia, Pennsylvania 19102

# EZ PERMIT **DUCTWORK & WARM-AIR APPLIANCES**

For the Installation of New Ductwork, Registers/Grilles/Diffusers, and Warm-Air Appliances Revised 11/18

# EZ Ductwork & Warm-Air Appliances Permit

Obtain permits for the installation of new ductwork, registers, grills and diffusers, and warm-air appliances without submitting plans by meeting the Conditions and Design Limitations below. Any deviations from this permit standard will result in permit revocation.

Special Flood Hazard Area: If subject property is located within a Special Flood Hazard Area (Floodplain), EZ Alteration Permit MAY ONLY be submitted at Permit Services at 1401 JFK Blvd, MSB, Concourse Level. Additional documentation required

## **Conditions**

- Ductwork and air-handling equipment must be self-contained within single tenant space.
- Any work requiring vertical/horizontal assembly penetrations shall not be applicable to the EZ permit process. Such penetration locations shall include:
  - Floor & Horizontal Assemblies 0

Exterior Walls

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0 Stairway Enclosures

- **Fire-Resistance Rated Construction**
- Ductwork and air-handling equipment shall not exceed a design capacity of 2,000 cfm. Contractors shall specify size of appliance tonnage.
- The EZ permit process shall not be applicable to kitchen exhaust systems.

### **Construction Requirements**

- Non-metallic ducts to be constructed of Class 0 or 1 duct material in accordance with UL 181.
- All metallic ducts to be constructed as specified by SMACNA HVAC Duct Construction Standards-Metal & Flexible.
- All fibrous glass duct construction to conform to SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.
- Floor registers shall resist, without structural failure, a 200-lb concentrated load, and shall not be installed in floors within toilets and . bathrooms required to have smooth, hard, nonabsorbent surfaces, with exceptions of dwelling units.

#### Flexible Air Connectors & Ducts

- Flexible air connectors shall have a maximum length of 14'-0"
- Flexible air ducts and air connectors to be installed with a minimum clearance to an appliance as specified in the appliance manufacturer's installation instructions.

### Duct Support

- Factory-made ducts listed in accordance with UL 181 shall be supported in accordance with the manufacturer's installation instructions.
- Field- and shop-fabricated fibrous glass ducts shall be supported in accordance with the SMACNA Fibrous Glass Duct Construction Standards or the NAIMA Fibrous Glass Duct Construction Standards.
- Field- and shop-fabricated metal and flexible ducts shall be supported in accordance with the SMACNA HVAC Duct Construction Standards - Metal and Flexible.

#### **Duct Joints**

- Round metallic ducts shall be mechanically fastened by at least three (3) sheet metal screws or rivets spaced equally around the joint. Partially inaccessible duct connections shall have at least three (3) screws/rivets spaced equally on the exposed portion of the joint.
- Joints between plastic ducts and plastic fittings shall be made in accordance with the manufacturer's installation instructions
- Flexible, non-metallic ducts, air handlers, and filter boxes shall be made substantially airtight by approved closure systems in the following table:

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Closure Systems for Non-Metallic Duct System Joints and Seams (IRC 2015 Section M1601.4.1) (IMC 2018 Section 603.9)			
Duct Type	UL Rating	Closure Type	Closure UL Rating
Rigid Fibrous Glass Ducts	UL181A	Pressure Sensitive Tape	181 A-P
		Mastic	181 A-M
		Heat-Sensitive Tape	181 A-H
Flexible Air Ducts/Connectors	UL 181B	Pressure Sensitive Tape	181 B-FX
		Mastic	181 B-M
Flexible Non-Metallic Air Ducts	UL 181B	Mechanical Fasteners	181 B-C

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