



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

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.

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
 - Stairway Enclosures
 - Exterior Walls
 - 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 Standard*.
- Floor registers shall resist, without structural failure, a 200-lb concentrated load, not to be installed in floors within toilets and bathrooms with exceptions of dwelling units.

Flexible Air Connectors & Ducts

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

Duct Support

- Metal ducts shall be supported by 1/2-inch wide 18-gage metal straps, or 12-ga galvanized wire at intervals not exceeding 10 feet, or other approved means.
- Non-metallic ducts to be supported in accordance with the manufacturer's installation instructions.

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.
- Flexible, non-metallic ducts, air handlers, and filter boxes shall be made substantially airtight by approved closure systems in the following table:

| Closure Systems for Non-Metallic Duct System Joints and Seams (IRC 2009 Section M1601.4.1) (IMC 2009 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 |

- Joints between plastic ducts and plastic fittings shall be made in accordance with the manufacturer's installation instructions

AP# _____ Applicant's Signature _____