Construction Industry Communication #02

From: Keith Wagenknecht, Chief Building Official
Re: Domestic Clothes Dryer Exhaust

Requirements: Section 504.6.1 of the 2007 Ohio Mechanical Code, Section 614.6 of the 2006 International Fuel Gas Code and Section G2439.5.1 of the 2006 Residential Code of Ohio limits the maximum length of the clothes dryer exhaust duct to 25 feet measured from the dryer location to the outlet terminal. Exception states the exhaust duct length is permitted to be extended if in accordance with the clothes dryer manufacturer’s installation instructions and the clothes dryer installation is verified by the code official.

Background: This communication is due to the increasing number of clothes dryer exhaust systems proposing to use booster fans for the purpose of exceeding the 25 foot maximum length. After careful review of the above code sections, the following determination shall become the policy and procedure for all domestic clothes dryer exhaust systems installed within the City of Columbus Building Services Division’s (BSD) jurisdiction.

Memorandum: Per Section M1501.3 of the 2006 Residential Code of Ohio, the use of a booster fan for clothes dryer exhaust systems for extending the length limitation is exclusive to the installation of electric clothes dryers in one-, two- and three-family dwellings. BSD will extend this exception to electric clothes dryers and fuel-gas clothes dryers installed in residential occupancies reviewed for compliance with the 2007 Ohio Mechanical Code, 2006 International Fuel Gas Code and 2006 Residential Code of Ohio Chapter 24, in accordance with the following:

a) It shall require submittal to plans examination for review and approval in accordance with the manufacturer’s listing of the booster fan. (If design is approved, it will then proceed to note b).

b) For commercial applications it shall be adjudicated to the Ohio Board of Building Appeals for a variance approval prior to installation. For residential (one-, two-, and three-family) it shall be adjudicated to the Columbus Building Commission for a variance approval prior to the installation.
c) The booster fan shall be electrically interlocked with the clothes dryer or the appliance power source to prevent clothes dryer operation in the event of booster fan operation failure. In the event electrical interlock is prohibited by the clothes dryer or booster fan manufacturer, an illuminating light device to indicate booster fan operation shall be installed at clothes dryer location. In addition:

d) A permanent label or tag shall be located within 6 feet of the clothes dryer location to notify user that the clothes dryer exhaust system is equipped with a booster fan that is required for safe operation of the clothes dryer.

I. For designs where the clothes dryer or power source is electrically interlocked preventing clothes dryer operation:

“This clothes dryer exhaust system is equipped with a booster fan for safe operation. Should this clothes dryer fail to operate check booster fan for operation. Service and clean as necessary”

II. For designs where the clothes dryer and booster fan are unable to be electrically interlocked, a notification device shall be installed to alert user that a problem may exist and service is required. The notification device shall be installed within 6 feet of the clothes dryer location and a minimum height of 48 inches above the finished floor.

“This clothes dryer exhaust system is equipped with a booster fan; if an audible or visual alarm, DO NOT use clothes dryer until system has been serviced and cleaned as necessary.