

# CHAPTER 15 EXHAUST SYSTEMS

## SECTION M1502

### CLOTHES DRYER EXHAUST

**M1502.1 General.** Clothes dryers shall be exhausted in accordance with the manufacturer's instructions.

**M1502.2 Independent exhaust systems.** Dryer exhaust systems shall be independent of all other systems and shall convey the moisture to the outdoors.

**Exception:** This section shall not apply to listed and labeled condensing (ductless) clothes dryers.

**M1502.3 Duct termination.** Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. If the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914 mm) in any direction from openings into buildings. Exhaust duct terminations shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination.

**M1502.4 Dryer exhaust ducts.** Dryer exhaust ducts shall conform to the requirements of Sections M1502.4.1 through M1502.4.6.

**M1502.4.1 Material and size.** Exhaust ducts shall have a smooth interior finish and shall be constructed of metal a minimum 0.016-inch (0.4 mm) thick. The exhaust duct size shall be 4 inches (102 mm) nominal in diameter.

**M1502.4.2 Duct installation.** Exhaust ducts shall be supported at 4 foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

**M1502.4.3 Transition duct.** Transition ducts used to connect the dryer to the exhaust duct system shall be a single length that is listed and labeled in accordance with UL 2158A. Transition ducts shall be a maximum of 8 feet (2438 mm) in length. Transition ducts shall not be concealed within construction.

**M1502.4.4 Duct length.** The maximum allowable exhaust duct length shall be determined by one of the meth-

ods specified in Section M1502.4.4.1 or M1502.4.4.2.

**M1502.4.4.1 Specified length.** The maximum length of the exhaust duct shall be 25 feet (7620 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.4.1.

**M1502.4.4.2 Manufacturer's instructions.** The size and maximum length of the exhaust duct shall be determined by the dryer manufacturer's installation instructions. The code official shall be provided with a copy of the installation instructions for the make and model of the dryer at the concealment inspection. In the absence of fitting equivalent length calculations from the clothes dryer manufacturer, Table M1502.4.4.1 shall be used.

**M1502.4.5 Length identification.** Where the exhaust duct is concealed within the building construction, the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located within 6 feet (1829mm) of the exhaust duct connection.

**M1502.4.6 Exhaust duct required.** Where space for a clothes dryer is provided, an exhaust duct system shall be installed. Where the clothes dryer is not installed at the time of occupancy the exhaust duct shall be capped or plugged in the space in which it originates and identified and marked "future use."

**Exception:** Where a listed condensing clothes dryer is installed prior to occupancy of the structure.

**M1502.5 Protection required.** Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than 11/4 inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, shall have a minimum thickness of 0.062-inch (1.6 mm) and shall extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

TABLE M1502.4.4.1

DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH

Dryer Exhaust Duct Fitting Type	Equivalent Length
4" radius mitered 45 degree elbow	2 feet 6 inches
4" radius mitered 90 degree elbow	5 feet
6" radius smooth 45 degree elbow	1 foot
6" radius smooth 90 degree elbow	1 foot 9 inches
8" radius smooth 45 degree elbow	1 foot
8" radius smooth 90 degree elbow	1 foot 7 inches
10" radius smooth 45 degree elbow	9 inches
10" radius smooth 90 degree elbow	1 foot 6 inches

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad.