

Marginal Markings

Solid vertical lines indicate technical changes from 2012 IBC.

Dashed vertical lines indicate technical changes in Seattle amendments.

➔ Solid deletion arrow indicates IBC text has been deleted.

⇨ Hollow arrow indicates Seattle amendments have been deleted.

Text Markings

Underlining indicates Seattle amendments. ADULT FAMILY HOME.

Italics indicate a defined term. *A dwelling* licensed.

Strikethrough indicates Seattle deletions. (~~ADULT FAMILY HOME~~)

A bracketed and underlined W indicates Washington state amendments. [W]

CHAPTER 16 DUCT SYSTEMS

Note: this chapter includes only those sections of the 2015 International Residential Code for which amendments are proposed.

SECTION M1601 DUCT CONSTRUCTION

M1601.1 Duct design. *Duct systems* serving heating, cooling and *ventilation equipment* shall be installed in accordance with the provisions of this section and ACCA Manual D, the appliance manufacturer's installation instructions or other *approved methods*.

[W]M1601.1.1 Above-ground duct systems. Above-ground *duct systems* shall conform to the following:

1. *Equipment* connected to *duct systems* shall be designed to limit discharge air temperature to a maximum of 250° F (121°C).
2. Factory-made ducts shall be listed and labeled in accordance with UL 181 and installed in accordance with the manufacturer's instructions.
3. Fibrous glass duct construction shall conform to the SMACNA *Fibrous Glass Duct Construction Standards* or NAIMA *Fibrous Glass Duct Construction Standards*.
4. Field-fabricated and shop-fabricated metal and flexible duct constructions shall conform to the SMACNA *HVAC Duct Construction Standards—Metal and Flexible* except as allowed by Table M1601.1.1. Galvanized steel shall conform to ASTM A 653.
5. The use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125°F (52°C) and exposed surfaces are not subject to condensation.
6. *Duct systems* shall be constructed of materials having a flame spread index of not greater than 200.
7. Stud wall cavities and the spaces between solid floor joists shall not be used as a duct or an air plenum in new construction. For existing systems, stud wall cavities and the spaces between solid floor joists to be used as air plenums shall comply with the following conditions:
 - 7.1 These cavities or spaces shall not be used as a plenum for supply air.
 - 7.2 These cavities or spaces shall not be part of a required fire-resistance-rated assembly.
 - 7.3 Stud wall cavities shall not convey air from more than one floor level.
 - 7.4 Stud wall cavities and joist-space plenums shall be isolated from adjacent concealed spaces by tight-fitting fireblocking in accordance with Section R602.8.
 - 7.5 Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.