

FIREPLACE CLEARANCES

2006 INTERNATIONAL RESIDENTIAL CODE Subjected to Local Code Enforcement

Providing a safe clearance around masonry and metal heat flues is paramount during the design and construction of a building. Failure to follow the required clearances is a threat to life and safety. In cold climates, there is often a conflict between maintaining required airspace and sealing the space to stop the flow of cold air into the building. Maintaining the air space is required and the infiltration of cold air due to the air space often cannot be avoided. The 2006 International Residential Code (IRC), Chapter 10, lists the all fireplace and stovepipe requirements. Here is a brief outline of the flue clearance requirements:

MASONRY CHIMMEYS: If there is 12” or more of masonry between the inside face of the flue liner and the outside face of the masonry, insulation may be in contact with the masonry surface. If the space from the inside of the flue liner to the outside edge of the masonry is less than 12”, then a 2” airspace is required between the outside edge of the masonry and the insulation. The airspace cannot be filled except to provide fire blocking. The fire blocking detail/material should be constructed per the ICC ESR report for the specific construction product used.

FACTORY BUILT CHIMMEYS: All premanufactured fireplace flues are required to be labeled by the manufacturer showing the required clearances. Chimneys for wood burning fireplaces need to be marked with “Type HT” and “Residential Type and Building Heating Appliance Chimney.” Type HT chimneys often have more stringent clearance requirements than gas flue chimneys. Unless the pipe is specifically marked, the most restrictive air space clearance is required, which is 18” of airspace. The airspace shall not be filled, and a metal lath is allowed for a fire stop. The use of non-labeled factory-built chimneys, which require 18” of air space, while meeting code for clearance, are not recommended in cold climate regions.

EXTERIOR AIR SUPPLY: Unless the air intake supply pipe is marked otherwise, 1” of airspace on the air intake pipe needs to be maintained for 5’ out from the fireplace.

SINGLE WALL VENT PIPES: Single wall vent pipes are addressed in section G2427.7.2. The code section states that in cold weather climates non-insulated single wall metal pipe is not allowed.