

*Attached below are 20**15** IMC Mechanical Code revisions with highlights showing new changes from our existing 20**12** Mechanical Code amendments.*

Plain text has no changes from the 2012 Village amendments.

**Highlighted text is additions or changes.** *The Highlights will be removed with final draft edition of code.*

**Red Line-outs** are deleted text not needed (~~abedefg~~) and will be removed from final edition

**Larger Red italic text are explanations** and will be removed from final edition

## **TITLE 5, CHAPTER 6**

### **MECHANICAL CODE**

#### **SECTION:**

##### **5-6-1: Adoption**

##### **5-6-2: Deletions**

##### **5-6-3: Amendments**

##### **5-6-1: Adoption:**

Section 5-6-1 of the Village Code of the Village of Orland Park is hereby amended to read in its entirety as follows:

**ADOPTION:** A certain document entitled "The International Mechanical Code/**2015** edition, **First** Printing, **2014** as published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, be and hereby is adopted as the "Mechanical Code" for the Village of Orland Park, for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems in the Village of Orland Park as provided; and each and all of the regulations, provisions, penalties, conditions and terms of said "International Mechanical Code/**2015**" are adopted and made a part hereof, as if fully set out in this Code with the additions, insertions, deletions and changes prescribed in this Chapter.

A copy of the rules and regulations of the "International Mechanical Code/**2015**" printed in book form was on file in the office of the Village Clerk for more than thirty (30) days prior to the enactment of this Code, and has been and is available for inspection. Reference in this Chapter to "this Code" is a reference to the "International Mechanical Code/**2015**" and such reference includes that document and any amendments, or supplements thereto whether adopted concurrently or subsequently. References in this Code to "the mechanical code" shall mean the Village's Mechanical Code as set forth in Chapter 6 of this Title 5, as may be amended from time to time.

##### **5-6-2: Deletions**

~~**Table 403.3:** See Section 403.1.1 added to this code's amendments and only deletes the referenced smoking lounges noted in Table 403.3.~~

*This existing deleted section does not need to be deleted (removed from existing ordinance) due to special applications where smoking may be allowed by law.*

### **5-6-3: Amendments:**

## **Chapter 1 – SCOPE AND ADMINISTRATION**

**101.1 Title.** These regulations shall be known as the *Mechanical Code* of Orland Park, Illinois, hereinafter referred to as “this code.”

**106.5.2: Fee schedule.** The fees for mechanical work shall be as indicated in Title 5 chapter 2 of the Village Code

**106.5.3 Fee refunds.** The code official shall authorize the refunding of fees as follows.

1. The full amount of any fee paid hereunder which was erroneously paid or collected.
2. Not more than 75% (percent) of the permit fee paid when no work has been done under a permit issued in accordance with this code.
3. Plan reviews completed shall be charged the full fee designated in Title 5 Chapter 2 of the Village Code for work that has been canceled.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

**108.4: Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a Village Code offense, punishable by a fine of not more as specified in the Village Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense. Mechanical work started or completed without 1<sup>st</sup> obtaining a mechanical permit shall be charged double the normal permit fees referenced in Title 5 Chapter 2 of the Village Code.

**109.2: Means of Appeal and Membership.** The board of appeals shall consist of the Board of Village Trustees. The Building Official and consulting architects and/or engineers shall advise the Board of Trustees on appeals to the Mechanical Code.

**109.3: Notice of Meeting.** The Village Development Services Committee and Board of Trustees shall meet on periodic monthly schedules for the review of appeals upon notification from Building Code Official.

## **Chapter 2 DEFINITIONS**

**Section 202: Building Official.** The Building Official appointed by the Development Services Department Director shall interpret the Mechanical Code provisions, for the application of this code.

## CHAPTER 3 GENERAL REGULATIONS

### 303.9 Existing and Abandoned Equipment

Any HVAC equipment including process cooling equipment not being used shall be removed including all ducts, hoods, flues, piping, electrical and miscellaneous supports.

#### Commentary:

Existing equipment not being used becomes a hazard and can become operational by tenants without inspection. This equipment can also be repaired and placed in use in use by not qualified technicians and can lead to code violations and safety concerns.

#### Add section

### 304.13 Minimum requirements for Cooling equipment:

“All HVAC systems shall be equipped with an evaporator coil, refrigeration line sets, and electrical disconnect required for the installation of an exterior condensing unit. Line sets shall extend to exterior of building and be capped as required. Stop valves shall be installed per IMC section 1107.8. System does not have to be charged with approved refrigerants.”

#### Commentary:

This section requires the contractor on new construction to provide the necessary equipment and provisions to allow an individual home/apartment owner to readily install a new remote condenser (a.c. unit) without providing excessive cutting, puncturing or penetrating of new exterior wall or roof material.

### 306.5: Elevated Access and Service Space.

Where equipment requiring access and appliances are installed on roofs or elevated structures at a height exceeding 10 feet, such access shall be provided by a permanent approved means of access. Equipment located on a roof shall be through the interior of the building using a roof hatch opening having a permanent ladder access as referenced below. The means of access shall be from grade or floor level to the equipment and appliances' level service space. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) high or walking on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall. Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm). Exception: interior ladders using a roof hatch.
2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be a minimum of 18 inches (457 mm) between rails.
5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a 300-pound (136.1kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488.2 kg/m<sup>2</sup>). Landing dimensions shall be not less than 18 inches (457mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
7. Ladders shall be protected against corrosion by approved means. Catwalks installed to

provide the required access shall be not less than 24 inches (610 mm) wide and shall

have railings as required for service platforms.

8. Landings required. Ladders shall be provided with a clear and unobstructed bottom

landing area having a minimum dimension of 30 inches centered in front of the ladder.

Exception: This section shall not apply to Group R-3 occupancies.

**307.2.1: Condensate Disposal** is amended to add the following language at the end of the sections sentence: "The use of a condensate pump shall be prohibited unless the means of drainage by minimum slopes cannot be achieved due to existing conditions"

**Explanation:**

**Condensate pumps eventually break and can cause your furnace to detect a stoppage of condensate water discharge. This can cause furnace to shut down and not provide required heating into your occupied area.**

**CHAPTER 4 - VENTILATION**

**403.1.1: Smoking Rooms or Lounges.** Table 403.3 references ventilation rates for smoking areas under the headings for "Education", Public spaces" and "Retail stores". Smoking is not permitted in public places as referenced in the Village Code (6-2-2-12) and shall take precedence.

In building uses where smoking is permitted, the ventilation rate used for "Smoking lounges" under the heading of "Education" in Table 403.3, shall be used for design.

**Add section**

**403.4: Return Air from occupied spaces (commercial).** "A ducted return grille/register or a transfer grille/register shall be in all occupied rooms and spaces with ducted supply cfm quantities. Air shall be returned via a ducted sheet metal return grille or through a sheet metal ceiling or open wall grille to a room with a ducted return of adequate size. Transfer return grille shall be located min. 7'- 0" above finished floor or by a ducted transfer grilles located in ceiling.

**Add section**

**403.5: Return Air from habitable spaces (residential - single and multiple family).** "A ducted return grille/register shall be in all occupied rooms and spaces with ducted supply cfm quantities. Transfer grilles shall be permitted for alterations per building officials approval. Center of transfer grilles shall be min. 7'- 0" above finished floor.

**Explanation:**

**Improper return air will prohibit adequate supply air flow to all rooms in the cooling mode. The balancing of the system is also jeopardized.**

**CHAPTER 5 EXHAUST SYSTEMS**

**506.3.1.2 Type 2 hood duct materials:** "Type 2 heat removal hood duct materials shall match the min. gauge sheet metal as the Type 2 hood based on materials specified in IMC section 507.5"

**Explanation:**

**The model IMC code does not reference duct materials for type 2 heat removal only hoods. This item is constantly requested for clarification and this amendment should set a specific code and interpretation.**

**CHAPTER 6 – DUCT SYSTEMS**

**Section 603.5 Nonmetallic ducts** are amended to add the following language at the end of the section's sentence:

"Nonmetallic ducts shall not be used in a non-combustible plenum."

**Section 603.5.1 Gypsum Ducts:** Building cavities shall not be used as ducts or plenums. See adopted International Energy Conservation Code, (R-403.2.3)

**Section 603.6.2.1 Connector length:** shall be amended to a maximum length of 7 feet, 0 inches (2133.5 mm)” for a connector.

**Section 603.18.2 Prohibited locations:**

**Exception: Dwelling** is amended to add language

## CHAPTER 7 COMBUSTION AIR

**Section 702.1 Combustion Air:** Factory built or masonry fireplaces shall be provided with an adequate amount of exterior air (combustion air) as referenced in the Building Code, the Fuel Gas Code and the Energy Conservation Code as shown in Chapter 15 (Referenced Standards).

## CHAPTER 8 CHIMINEYS AND VENTS

**Section 801.18.4 Clearances** shall be amended to delete in its entirety the language therein and substitute the following:

**Clearances:** Any portion of a masonry chimney located within the exterior wall of the building shall have a minimum airspace clearance to combustibles of 2 inches. Chimneys located entirely outside the exterior walls of the building, including chimneys that pass through the soffit or cornice, shall have a minimum airspace clearance of 1 inch. The airspace shall not be filled except to provide fire stopping as approved by the Code Official.  
Clearances shall be provided in accordance with the International Building Code.

**Exception:** Masonry chimneys without the required airspace *clearances* shall be permitted to be used if lined or relined with a *chimney* lining system *listed* for use in chimneys with reduced *clearances* in accordance with UL 1777. The *chimney clearance* shall be not less than permitted by the terms of the *chimney* liner listing and the manufacturer’s instructions.

**801.18.4.1 Fire blocking.** Noncombustible fire blocking shall be provided in accordance with the *International Building Code*.

**Section 802.1.1 Fuel Gas Vents:** Fuel Gas appliances shall be vented to meet the requirement of the 2015 ICC “International Fuel Gas Code” as referenced in Chapter 15 of this code.

**Section 1209.5.1**

**Add language:**

**Exception:**

Heated slabs placed on ground located 24” or more below finished established grade shall be required to be insulated along perimeter only with min. R-5 insulation extending horizontally for 24” under slab.

**CHAPTERS 9, 10, 11, 13, 14, 15**  
**NO CURRENT VILLAGE AMENDMENTS**

**End of review on 2/28/17 mjc**