

CHAPTER 6

BUILDINGS AND BUILDING REGULATIONS

ARTICLE 4. MECHANICAL CODE

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6-4-1 ADOPTION OF MECHANICAL CODE.

Three (3) Document copies, in accordance with 50 ILCS 220/2, and 65 ILCS 5/1-3-2, have been available for public use, inspection and examination for thirty (30) days and one copy for permanent public use in the office of the Village Clerk of the Village of Carol Stream, being marked and designated as "International Mechanical Code, 2003 Edition," as published by the International Code Council, be and is hereby adopted as the Mechanical Code of the Village of Carol Stream, State of Illinois; for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, conditions, terms or offenses thereunder of the International Mechanical Code, are hereby referred to, adopted and made part hereof as if fully set out in this article, with additions, insertions, deletions and changes prescribed in Sections 6-4-2 through 6-4-15.

6-4-2 AMENDMENTS TO CHAPTER 1

**CHAPTER 1
ADMINISTRATION**

**SECTION 101
GENERAL**

101.1 Title: These regulations shall be known as the Mechanical Code of ~~(NAME OF JURISDICTION)~~ **the Village of Carol Stream**, hereinafter referred to as "this code. "

101.2.1 Appendices. Provisions in the appendices shall ~~not~~ apply unless specifically adopted **deleted**.

**SECTION 102
APPLICABILITY**

[EB] 102.5 Change in occupancy. It shall be unlawful to make a change in the occupancy of any structure which will subject the structure to any special provision of this code applicable to the new occupancy without approval. ~~The code official shall certify that such structure meets the intent of the provisions of law governing building~~

~~construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public, safety and welfare.~~

102.8 Referenced codes and standards. The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

102.8.1 Electrical code. All references to the *ICC Electrical Code* shall be construed to refer to the Electrical Code as amended and adopted by the Village of Carol Stream.

102.8.2 Gas code. All references to the *International Fuel Gas Code* shall be construed to refer to the Fuel Gas Code as amended and adopted by the Village of Carol Stream.

102.8.3 Residential code. All references to the *International Residential Code* shall be construed to refer to the Residential Code as amended and adopted by the Village of Carol Stream.

102.8.4 Plumbing code. All references to the *International Plumbing Code* shall be construed to refer to the Plumbing Code as amended and adopted by the Village of Carol Stream.

102.8.5 Property maintenance code. All references to the *International Property Maintenance Code* shall be construed to refer to the Property Maintenance Code as amended and adopted by the Village of Carol Stream.

102.8.6 Energy conservation code. All references to the *International Energy Conservation Code* shall be construed to refer to the Energy Conservation Code as amended and adopted by the Village of Carol Stream.

102.8.7 Fire code. All references to the *International Fire Code* shall be construed to refer to the Fire Code as amended and adopted by the Village of Carol Stream.

102.8.8 Building code. All references to the *International Building Code* shall be construed to refer to the Building Code as amended and adopted by the Village of Carol Stream.

SECTION 106 PERMITS

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other data shall be submitted in ~~two or more~~ **six** sets with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall

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indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire-resistance rating and fireblocking.

Exception. The code official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code.

106.5.2 Fee schedule. The fees for mechanical work shall be as indicated in the following schedule set forth in Chapter 6, Article 13, of the Carol Stream Village Code.

(JURISDICTION TO INSERT APPROPRIATE SCHEDULE

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 (SPECIFY PERCENTAGE) percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.~~
3. ~~Not more than (SPECIFY PERCENTAGE) percent of the plan review fee paid when the application for a permit for which a plan review fee has been paid is withdrawn or cancelled before any plan review effort has been expended.~~

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.

**SECTION 108.0
VIOLATIONS**

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 ~~(SPECIFY OFFENSE)~~ **misdemeanor**, punishable by a fine of not **less than 75.00 dollars or** more than ~~(AMOUNT)~~ **750.00 dollars** or by imprisonment not exceeding ~~(NUMBER OF DAYS)~~ **180 days**, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

108.5 Stop work orders: Upon notice from the code official that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or the owner's agent, or to the person doing the work. This notice shall state the conditions under which work is authorized to resume. Where an

emergency exists the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on a system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than (AMOUNT) 75.00 dollars or more than (AMOUNT) 750.00 dollars.

**SECTION 109
MEANS OF APPEAL**

109.2 Membership of Board of Appeals. The Board of Appeals shall consist of five members appointed by the chief appointing authority as follows: one for five years; one for four years; one for three years; one for two years; and one for one year **the President and Board of Trustees of the Village of Carol Stream.** Thereafter, each new member shall serve for five years or until a successor has been appointed.

109.2.1 Qualifications. The board of appeals shall consist of five individuals, one from each of the following professions or disciplines.

1. Registered design professional who is a registered architect; or builder or superintendent of building construction with at least ten years' experience, five of which shall have been in responsible charge of work.
2. Registered design professional with structural engineering or architectural experience.
3. Registered design professional with mechanical and plumbing engineering experience; or mechanical contractor with at least ten years' experience, five of which shall have been in responsible charge of work.
4. Registered design professional with electrical engineering experience; or an electrical contractor with at least ten years' experience, five of which shall have been in responsible charge of work.
5. Registered design professional with fire protection engineering experience; or fire protection contractor with at least ten years' experience, five of which shall have been in responsible charge of work.

109.2.2 Alternate members. The chief appointing authority shall appoint two alternate members who shall be called by the board chairman to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership and shall be appointed for five years, or until a successor has been appointed.

109.2.3 Chairman. The board shall annually select one of the members to **Village President shall** serve as chairman.

109.2.4 Disqualification of member. A member shall not hear an appeal in which that member has a personal, professional or financial interest.

109.2.5 Secretary. The chief administration officer shall designate a qualified clerk to **Village Clerk shall** serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.

109.2.6 Compensation of members. Compensation of members shall be determined by law.

6-4-3 AMENDMENTS TO CHAPTER 3

**CHAPTER 3
GENERAL REGULATIONS**

**SECTION 305
PIPING SUPPORT**

**Table 305.4
Piping support spacing^a**

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10^c
Aluminum pipe and tubing	10	15
Brass pipe	10	10
Brass tubing 1 ¼-inch diameter and smaller	6	10
Brass tubing 1 ½-inch diameter and larger	10	10
Cast-iron pipe ^b	5	15
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing, 1 ¼-inch diameter and smaller	6	10
Copper or copper-alloy tubing, 1 ½-inch diameter and larger	10	10
CPVC pipe or tubing, 1 inch and smaller	3	10^c
CPVC pipe or tubing, 1 ¼-inch and larger	4	10^c
Steel pipe	12	15
Steel tubing	8	10
Lead pipe	Continuous	4
PB pipe and tubing	2-2/3 (32 inches)	4
PEX tubing	2-2/3 (32 inches)	10^c
PVC pipe	4	10 ^c

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

- a. See Section 301.14
- b. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.
- c. Mid-story guide.

**SECTION 307
CONDENSATE DISPOSAL**

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene,

~~polybutylene, polyethylene, ABS, CPVC~~ or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Condensate waste and drain line size shall not be less than ¾-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an approved method. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope

6-4-4 AMENDMENTS TO CHAPTER 5

SECTION 512 SUBSLAB SOIL EXHAUST SYSTEMS

512.2 Materials. Subslab soil exhaust duct material shall be air duct material listed and labeled to the requirements of UL 181 for Class O air ducts, or any of the following piping materials that comply with the *International Plumbing Code* as building sanitary drainage and vent pipe: cast iron; brass or copper pipe; copper tube of a weight not less than that of copper drainage tube, ~~Type DWV,~~ **Type K** and plastic piping.

6-4-5 AMENDMENTS TO CHAPTER 6

CHAPTER 6 DUCT SYSTEMS

SECTION 606 SMOKE DETECTION SYSTEMS CONTROL

606.3 Installation. Smoke detectors required by this section shall be installed in accordance with NFPA 72. The required smoke detectors shall be installed to monitor the entire airflow conveyed by the system including return air and exhaust or relief air. Access shall be provided to smoke detectors for inspection and maintenance. **A remote annunciator and test switch shall be installed for each detector in the area of the detector installation. The test switch shall be located in an easily accessible location.**

606.4.1 Supervision. The smoke detectors shall **not** be connected to a fire alarm system. The actuation of the duct smoke detector shall activate a visible and audible supervisory signal ~~at a constantly attended location.~~

Exceptions:

- ~~1. The supervisory signal at a constantly attended location is not required where the smoke detector activates the building's alarm-indicating appliances.~~
- ~~2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.~~

6-4-6 AMENDMENTS TO CHAPTER 12

**CHAPTER 12
HYDRONIC PIPING**

**SECTION 1202
MATERIALS**

**Table 1202.4
Hydronic pipe**

Material	Standard (see Chapter 15)
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 1527, ASTM D 2282
Brass pipe	ASTM B 43
Brass tubing	ASTM B 135
Copper or copper-alloy pipe	ASTM B 43
Copper or copper-alloy tube (Type K,L or M)	ASTM B75; ASTM B88; ASTM B 251
Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D 2846; ASTM F 441; ASTM F 442
Cross-linked Polyethylene/aluminum/cross-linked polyethylene (PEX_AL_PEX) pressure pipe	ASTM F1281; CSA CAN?CSA-B-137.10
Cross-linked polyethylene (PEX) tubing	ASTM F 876; ASTM F 877
Lead pipe	FS WW P 325B
Polybutylene (PB) plastic pipe and tubing	ASTM D 3309
Polyethylene (PE) pipe, tubing and fittings (for ground source heat pump loop systems)	ASTM D2513; ASTM D3035; ASTM D2447; ASTM D2683; ASTM D1055; ASTM D2837; ASTM D3350; ASTM D1693
Polyvinyl chloride (PVC) plastic pipe	ASTM D 1785; ASTM D 2241
Steel pipe	ASTM A 53; ASTM A 106
Steel tubing	ASTM A 254

**SECTION 1203
JOINTS AND CONNECTIONS**

~~**1203.4 ABS plastic pipe.** Joints between ABS plastic pipe or fittings shall be solvent-cemented or threaded joints conforming to Section 1203.3.~~