ROOFING AND EXTERIOR COVERINGS

Sections:

- 14.36.010 General Requirements.
- 14.36.020 Types Of Weather Wall Coverings.
- 14.36.030 Aluminum Siding.
- 14.36.040 Nailing Weather Boarding, Wall And Roof Covering.
- 14.36.050 Exterior Stucco.

14.36.060 Roofs, Slope And Covering.

14.36.010 General Requirements.

A. All exterior wall coverings shall be of approved moisture and weather-resisting materials of sufficient stiffness and properly attached to resist rain and wind. All exterior intersections between wood or metal and masonry veneer shall be caulked with elastic water-proofed material, except where metal flashed.

B. The bottom edge of the exterior siding immediately over any exterior wall opening shall be so located as to permit the headflashing to extend under the siding and to be turned up behind the siding. (Part of Ord. passed 10/3/73: prior Code § 30.33(1)).

14.36.020 Types Of Weather Wall Coverings.

The following materials shall be accepted as approved weather coverings of nominal minimum thickness specified:

Brick masonry veneers	4 inches
Stone veneers	2 inches
Clay tile veneers	3/8 inch
Stucco or exterior plaster	3/4 inch
Wood siding – Bevel	$\dots 1/2$ inch at the butt
Wood siding – Board	1 inch
Pre-cast stone facing	5/8 inch
Protected combustible siding	Require approval
Wood shingles and shakes	
Exterior plywood	
Asbestos shingles	5/32 inch
Asbestos cement boards	1/8 inch
Formed metal siding	
(Part of Ord. passed 10/3/73: prior Code § 30.33(2)).	

14.36.030 Aluminum Siding.

Aluminum siding shall be allowed subject to the following conditions:

A. Such siding shall have a minimum thickness of .025 inch; provided however, where insulation board is used as backing, the minimum thickness shall be .020 inch. Furthermore, the minimum thickness shall be .002 inch less to allow for rolling tolerance.

- B. All siding or material being covered by such aluminum siding shall be in sound condition.
- C. Horizontal aluminum siding shall not exceed nine (9) inches in width.
- D. All aluminum siding not backed shall be coated on both sides.

(Part of Ord. passed 10/3/73: prior Code § 30.33(3)).

14.36.040 Nailing Weather Boarding, Wall And Roof Covering.

All weather boarding and wall and roof covering shall be securely nailed with aluminum, copper, zinc, zinc coated or other approved corrosion-resistive nails into the supporting structure in accordance with the recommended nailing schedule or the approved manufacturer's standards. Shingles and other weather covering attached directly to sheathing less than one (1) inch thick shall be secured with barbed or other mechanically-bonding nails of approved type, or other common nails on furring strips attached to studs. (Part of Ord. passed 10/3/73: prior Code § 30.33(4)).

14.36.050 Exterior Stucco.

All stucco work shall be reinforced with approved metal lath or wire fabric as herein specified; except when applied directly to a masonry base. The reinforcing fabric shall be coated with zinc or other approved rust-resistive coating, or shall be manufactured from corrosion-resistive alloys.

			Minimum	
Type of	Minimum	Maximum	Weight Pounds	
Reinforcement	U.S. Gauge	Mesh Inches	Per Sq. Yd.	
Metal Lath	-	-	1.80	
Expanded Metal	-	-	3.40	
Woven Wire	18	1	1.74	
Woven Wire	17	1 1/2	1.41	
Woven Wire	16	2	1.47	
Welded Wire	18	4 sq. in.	0.67	
Welded Wire	17	4 sq. in.	0.82	
Welded Wire	16	4 sq. in.	1.10	
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(Part of Ord. passed 10/3/73: prior Code § 30.33(5)).

14.36.060 Roofs, Slope And Covering.

A. Roofing. All roofs shall be covered with wood, asphalt, asbestos cement, tile or slate shingles; or with a built-up asphalt; or tar coated with gravel or capped with a mineral surface cap sheet; or with sheet metal. All roofing shall be placed and nailed in approved manner. Plain tar paper roll roofing shall not be permitted.

B. Slope and Rise. The slope of all roofs of buildings and structures when tile, asphalt or slate shingles are used shall be not less than four (4) inches rise to twelve (12) inches run, except as provided below:

1. Where built-up roofing with gravel slag or mineral cap sheet is used, the maximum rise shall be three (3) inches to twelve (12) inches run.

2. Self-sealing or interlocking asphalt shingles may be used when the slope of the roof is a minimum of two and one-half $(2\frac{1}{2})$ inches rise to twelve (12) inches run, providing a double layer of fifteen (15) pounds asphalt saturated felt underlayment is hot-mopped on the roof overhand and extends up to a point at least twenty-four (24) inches inside of the exterior building wall.

C. Wood Shingle Roofing. If wood shingles are used, they shall be No. 1 grade, edge grain and shall be of such length, thickness and exposure as shown in Tables G and H. Wood shingles shall not be used on roofs having a slope of less than four (4) inch rise per twelve (12) inch run.

TABLE G

Wood Shingle Roof Covering

Minimum Length Inches	Minimum	
Length menes	TIICKIC55	
16	5 Butts in 2 inches	
18	5 Butts in 2 1/4 inches	
24	4 Butts in 2 inches	

TABLE H

Wood Shingle Roof Covering

	Maximum Exposure		
Ι	For Shingle	Length	Inches
Slope of Roof to 12 inches Run	16	18	24
Rise 4 inches and over	5	5 1/2	7 1⁄2

D. Requirements for asphalt shingles are as follows:

1. Asphalt shingles shall be approved Class C label (Underwriters' Laboratories, Inc.) square butt strip shingles weighing not less than two hundred thirty-five (235) pounds per square, or hexagonal strip shingles weighing no less than one hundred ninety-five (195) pounds per square, interlocking shingles weighing not less than one hundred eighty (180) pounds per square, or individual shingles weighing no less than two hundred fifty (250) pounds per square laid over asphalt felt or similar felt of not less than fifteen (15) pounds per one hundred (100) square feet.

2. Starting row of all asphalt shingles shall be doubled. Such shingles shall be nailed with aluminum, copper or hot dipped galvanized nails. Nail according to manufacturer's recommendations.

E. Asbestos Cement Shingles. Asbestos cement shingles with approved Class A or B label (Underwriters' Laboratories, Inc.) and tile and slate shingles of durable quality shall be laid in approved manner over asphalt felt or similar approved felt of not less than thirty (30) pounds per one hundred (100) square feet.

F. Flat Roof Covering. Built up roof covering for flat roofs, having a pitch of not more than two and onehalf $(2 \frac{1}{2})$ inches rise to twelve (12) inches run, shall be approved Class B (Underwriters' Laboratories, Inc.) minimum three (3) ply roofing consisting of three (3) layers of asphalt or tar saturated felt, each layer of not less than fifteen (15) pounds per one hundred (100) square feet. Where tar or asphalt coating is used, the roof shall be surfaced with pea gravel. All layers of felt shall be mopped solid.

G. All other types of roof covering and manner of application shall be approved by the Building Inspector. (Part of Ord. passed 10/3/73: prior Code § 30.33(6)).

INTERIOR FINISHING'S

Sections:

14.40.010	Wall And Ceiling Finish.
14.40.020	Plastering And Drywall.
14.40.030	Nailing To Connecting Wood Members.

14.40.010 Wall And Ceiling Finish.

Every room used for living, sleeping, dining, cooking, toilet or bathing purposes shall have the walls and ceiling of approved materials, or finished in an approved manner as regulated by this Code. Approved materials shall include plaster, tile, wood, gypsum wallboard, and masonry units. All wall and ceiling finishing materials shall have a minimum composite thickness of one-half (½) inch, except that one-quarter (¼) inch plywood or hardboard paneling is acceptable.

Lathing requirements are as follows:

A. General Regulations. All lath shall be nailed in accordance with the nailing schedule, Table No. 4, Section 14.64.090, tied, laced, clipped or otherwise effectively secured. Internal angles, coves, arches and junctures between wood, fiber insulation, gypsum lath, and other plaster bases shall be reinforced with cornerites of metal lath or other similar approved material, except where metal or wire lath is carried around such intersections. No interior lath shall be applied until all exterior framing of buildings or structures is covered.

B. Gypsum lath requirements are as follows:

1. Gypsum lath shall be nailed to wood supports or attached to metal supports by means of clips in an approved manner. Such supports shall be spaced not to exceed sixteen (16) inches on centers for three-eighths (3/8) inch gypsum lath and twenty-four (24) inches on centers for one-half ($\frac{1}{2}$) inch gypsum lath.

2. Joints of gypsum lath abutting walls and ceilings shall be staggered. Gypsum lath shall be applied with the long dimension at right angles to supporting members, with joints broken in each course and shall not be abutted tightly together, nor be more than one-quarter ($\frac{1}{4}$) inch apart.

C. Fiber Insulation Lath. Fiber insulation lath, when used as a plaster base shall have a rough, fibrous texture to insure mechanical and suction bond, and shall be nailed in an approved manner to wood supports spaced not to exceed sixteen (16) inches on centers. Such nails shall be placed not less than three-eighths

(3/8) inch from the ends and not less than one-half $(\frac{1}{2})$ inch from ship-lapped, tongued and grooved, or interlocking edges. End joints, except in interlocking type laths shall be not less than three-sixteenths (3/16), nor more than one-quarter $(\frac{1}{4})$ inch wide. Ship-lapped, tongued and grooved, or interlocking edges shall be fitted to contact.

D. Metal and wire lath requirements are as follows:

1. The dimensions, sizes and application of expanded, ribbed and sheet metal lath, and all types of wire lath shall comply with accepted engineering practice. Expanded, ribbed and sheet metal lath shall provide a key sufficient to retain the plaster and shall weigh not less than two and one-half $(2 \frac{1}{2})$ pounds per square yard. Such lath shall be fabricated from steel sheets, copper-bearing steel or other approved corrosion-resistive metals, and shall be pierced to provide a mechanical key to retain the plaster by slitting; punching or expansion; and shall be given a protective coating of rust inhibitive paint after fabrication, or shall be made from galvanized sheets.

2. Wire lath shall be not lighter than number nineteen (19) W. & M. gauge wire, two and one-half $(2\frac{1}{2})$ meshes per inch coated with zinc and rust-inhibitive paint.

3. Stiffened wire lath shall not be lighter than number twenty (20) W. & M. gauge wire, two and one-half (2 $\frac{1}{2}$) meshes per inch, with number twenty-four (24) U.S. gauge V-rib stiffeners spaced not to exceed eight (8) inches apart coated with zinc or rust inhibitive paint.

E. Paper-backed Lath. Expanded metal or wire fabric lath backed with integral approved paper shall be fabricated from not lighter than number twenty-four (24) U.S. gauge zinc-coated metal sheets with maximum opening of one and one-eighth by two and one-half (1 $1/8 \ge 1/2$) inches or number sixteen (16) W. & M. gauge zinc-coated wire with not more than two by two (2 x 2) inch mesh.

F. Lathing Accessories. All metal lathing accessories including corner beads, base screeds, picture molds, metal casing and similar accessories shall be fabricated from not less than number twenty-six (26) U.S. gauge zinc-coated steel sheets, and shall be provided with prefabricated or expanded deformations or otherwise formed to insure complete embedment and keying of the plaster.

(Part of Ord. passed 10/3/73: prior Code § 30.34(1))

14.40.020 Plastering And Drywall.

A. Number of Coats. Plastering with gypsum hard-wall, lime or Portland cement plaster shall be applied in not less than three (3) coats when applied over metal or wire lath and in not less than two (2) coats when applied over other plaster bases permitted in this Code. Lime or Portland cement plaster shall not be applied directly to fiber insulation lath or gypsum lath.

B. Thickness. Grounds shall be installed to provide for the following thicknesses of interior plaster, from face of plaster base to finished plaster surfaces, as regulated in Table 1.

TABLE 1

Thickness of Plaster

(Inches)

Type of Base

Residential

Metal or Wire Lath	5/8 inch minimum
Other Approved Types of Lath	
Unit Masonry and Concrete Walls	1/2 inch minimum
Monolithic Concrete Ceiling	
	3/8 inch maximum

(If monolithic concrete ceiling surfaces require more than three-eighth (3/8) inch of plaster to produce desired lines or surfaces, metal or wire lath shall be attached thereto.)

C. Application to Masonry or Concrete Base. When masonry walls are plastered they shall be stripped, lathed and plastered to protect against moisture.

D. Weather Protection. When interior plastering work is in progress, adequate ventilation shall be provided, and in freezing weather the enclosure shall be heated. Plaster shall not be applied to surfaces that contain frost.

E. Drywall. All drywall shall be a minimum of one-half ($\frac{1}{2}$) inch gypsum board applied and jointed per manufacturer's specifications, except that if drywall is applied to twenty-four (24) inches truss joists in ceiling construction, then the drywall shall be a minimum of five-eighths (5/8) inch gypsum board applied and jointed per manufacturer's specifications. (Ord. 76-9-1, 1976: part of Ord. passed 10/3/73: prior Code § 30.34(2)).

14.40.030 Nailing To Connecting Wood Members.

A. The number of nails at each bearing and connecting wood member shall be not less than the number shown in Table No. 4, Section 14.64.090. A coated sinker or cooler nail may be used in lieu of a common nail.

B. Staples. Power-driven, divergent chisel point galvanized wire staples may be used for fastening plywood, fiber-board or gypsum wall sheathing, plywood or hardboard underlayment, plywood roof sheathing,

plywood subflooring, gypsum lath, asphalt roof shingles and the first ply only of two-ply system gypsum drywall finish, provided that the gauge, crown, length and spacing of the staples for a particular material and condition of use are in compliance with accepted standards and as regulated herein. Except that the gauge of staples used for fastening structural wall sheathing, roof sheathing, and subflooring shall be not less than No. 14.

C. Power-driven, divergent chisel point galvanized wire staples or equivalent nails not less than two (2) inches long, may be used in lieu of nails for fastening wood boards one (1) inch (nominal) in thickness to studs, joists or rafters, provided the gauge of such staples is not less than No. 14. The number of staples to be used at each stud, joist or rafter shall be determined on the basis of one staple for each required nail. (Part of Ord. passed 10/3/73: prior Code § 30.35).

APPARATUS

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	HEATING AND INCINERATING APPA
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14.44.410	Mounting Incinerators.
14.44.420	Clearance From Incinerators.
14.44.430	Chimneys For Incinerators.
14.44.440	Flue Pipes For Incinerators.

14.44.010 Permit Required.

Before proceeding with the construction, installation, erection, alteration or remodeling of any boiler, furnace, incinerator or other heat producing apparatus, a permit shall first be obtained from the Building Inspector by the heating contractor. A permit shall also be required for repairs and maintenance exceeding five hundred (\$500.00) dollars in cost. An application shall be filed by said contractor specifying in detail the work to be done and be accompanied by the fee as set forth in Table No. 1, Sections 14.64.010 through 14.64.030. (Part of Ord. passed 10/3/73: prior Code § 30.36(1) (a)).

14.44.020 Accessibility For Operation And Maintenance.

The installation of heat producing appliances shall in all cases be such as to make them accessible for cleaning, operation and maintenance. (Part of Ord. passed 10/3/73: prior Code § 30.36(1) (b)).

14.44.030 Design Temperature.

A. Heating systems for one (1) and two (2) family residences shall be capable of heating the dwelling to seventy degrees (70°) Fahrenheit when the temperature outdoors is minus fifteen degrees (15°) with a fifteen (15) mile per hour wind. Manual J, "Calculating Heat Losses, Second Edition 1964," National Warm Air Heating and Air Conditioning Association, or its succeeding publication shall be an acceptable design standard for purposes of determining heating requirements.

B. The Building Inspector shall be furnished with heat loss calculations upon request. Buildings other than one (1) and two (2) family dwelling units shall be heated in accordance with the requirements of the Heating, Ventilating and Air Conditioning Code, Industrial Commission, State of Wisconsin. (Part of Ord. passed 10/3/73: prior Code § 30.36(1) (c)).

14.44.040 Air Intake For Combustion.

Suitable provision shall be made where necessary for intake of air needed for combustion of fuel burning appliances. (Part of Ord. passed 10/3/73: prior Code § 30.36(1) (d)).

14.44.050 Unsafe Heating Appliances.

The Building Inspector shall have the authority to seal any heating appliance regulated herein which has been installed in violation of the regulations of this Code, or which is found upon inspection to be in an unsafe condition and to be a life, health or fire hazard. It shall be unlawful for any unauthorized person to break such seal. (Part of Ord. passed 10/3/73: prior Code § 30.36(1) (e)).

14.44.060 Furnace And Boiler Definitions.

A. Heating furnaces and boilers shall include central furnaces, hot water boilers operating at not in excess of two hundred fifty degrees (250°) Fahrenheit, and steam boilers operating at not in excess of fifteen (15) pounds gauge pressure.

B. Central furnace means a self-contained, flue connected appliance intended primarily to supply heated air through ducts to spaces remote from or adjacent to the appliance location as well as to the space in which it is located. (Part of Ord. passed 10/3/73: prior Code § 30.36(2) (a)).

14.44.070 Mounting Furnaces And Boilers.

A. Furnaces and boilers fired by combustible fuel shall be mounted on the ground or on floors of fireresistive construction with noncombustible flooring and surface finish, and with no combustible material against the unit. Where solid fuel is used, fire resistive construction shall extend not less than eighteen (18) inches at the front or side where ashes are removed.

B. Furnaces and boilers that are approved specifically for installation on a floor or wall constructed of combustible material may be mounted in accordance with the conditions of such approval.

C. Furnaces and boilers fired by combustible fuel located on the same floor as sleeping quarters shall be isolated by at least a one-hour (1) fire-resistive separation.(Part of Ord passed 10/3/73: prior Code §30.36(2) b)).

14.44.080 Clearance For Furnaces And Boilers.*

A. Clearance between the heat producing apparatus supply ducts and combustible materials shall not be less than those recommended for use by National Fire Protection Association Booklet 90B, a copy of which is on file in the office of the Building Inspector. Listed clearances can be reduced through use of protection specified by the National Fire Protection Association Booklet 90B.

B. Heating furnaces and boilers fired by combustible fuel shall not be installed in confined spaces such as alcoves or closets unless they have been approved specifically for such installation and are installed in accordance with the conditions of such approval. Installation clearances for furnaces and boilers in confined spaces shall not be reduced by protection methods. Combustion air shall be provided.

C. Minimum clearances from supply ducts, risers, boots and register boxes shall be as recommended by the National Board of Underwriters. (Part of Ord. passed 10/3/73: prior Code § 30.36(2) (c)).

* Clearances for gas appliances shall be as per current AGA or ASA standards.

14.44.090 Scope Of Gas Appliance Regulations.

A. The regulations of this Section shall apply to all gas appliances used for space heating purposes.

B. All gas appliances utilizing natural, manufactured or mixed gas, and the gas utilization equipment, shall be installed in accordance with American Standard Association Code ASA Z21.30 - 1964, which is also referred to as National Fire Protection Association Pamphlet No. 54 of the same date, and entitled "Installation of Gas Appliances and Piping" or revisions thereto. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (a)).

14.44.100 Definitions For Gas Appliance Regulations.

The following definitions shall apply to Sections 14.44.110 through 14.44.180:

A. "Draft hood" means a device built into a gas appliance or made part of the flue or vent connector from a gas appliance which is designed for the following purposes:

1. To insure the ready escape of the products of combustion in the event of no draft, back draft or stoppage beyond the draft hood;

2. To prevent a back draft from entering the appliance;

3. To neutralize the effect of stack action of the flue or vent upon the operation of the gas appliance.

B. "Flue or vent connector" means the pipe connecting a gas appliance with the flue or vent.

C. "Gas appliance" means any device utilizing gas fire, and especially designed to provide space heating.

D. "Gas conversion burner" means a burner designed to supply gaseous fuel to a boiler or furnace which was originally designed to utilize another fuel.

E. "Gas regulator" means a device for maintaining and controlling a uniform gas pressure.

F. "Space heater" means a direct fired heating device mounted on or near the floor for heating the room in which the device is located without external heating pipes or ducts.

G. "Wall heater" or "furnace" means a space heater which is supported from or recessed in the wall of the room being heated. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (b)).

14.44.110 Venting Gas Appliances.

All gas appliances regulated herein shall be vented to an approved flue or vent. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (c)).

14.44.120 Manufacturer's Identification Mark.

All gas appliances shall be labeled with the manufacturer's identification mark, the maximum hourly input rate in BTU per hour pressure required, the type of gas the burner is designed to use, and the symbol of the testing agency which approved the appliance. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (d)).

14.44.130 Operating Instructions.

The installer of any gas fired furnace or boiler or gas conversion burner shall post in a conspicuous place near the appliance, complete operating instructions for such appliances, including the installer's name and business address. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (e)).

14.44.140 Gas Appliance Safety Measures.

A. All gas appliances shall be provided with a main shut-off valve with an attached lever handle, so constructed that the valve can be easily and quickly closed.

B. The main shut-off valve shall shut off the entire supply of gas to the appliance, except where a pilot burner is used, a separate manual shut-off shall be used to shut off the supply of gas to the pilot burner. Such pilot shut-off shall be installed between meter and main shut-off valve and shall be close to main shut-off valve.

C. All automatically controlled gas appliances shall be provided with an automatic safety pilot device so constructed and adjusted that no gas can flow through the main burner unless the pilot light is burning. The operation of such device shall not depend on the closing of an electric circuit to shut off the main gas supply.

D. Automatic safety pilot devices shall be so adjusted that the main gas supply is shut off within three (3) minutes after the pilot flame has been extinguished, except that on gas conversion burners with inputs in excess of 400,000 BTU per hour such time shall be reduced to five (5) seconds. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (f)).

14.44.150 Gas Burner Installation And Maintenance.

A. Gas burners in gas appliances shall be properly installed and supported to prevent twisting, sliding or dropping out of proper position.

B. All burners shall be so located that they will be readily accessible for operation, adjustment or repair.

C. Baffles, when necessary, shall not interfere with proper combustion and shall be locked in position.

D. Where a gas space heating appliance is connected to a chimney or gas vent, the flue gas temperature at the inlet of the draft hood shall be set at not less than three hundred and fifty degrees (350°) Fahrenheit for interior chimneys, and not less than four hundred twenty-five degrees (425°) Fahrenheit for exterior chimneys. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (g)).

14.44.160 Automatic Gas Valve Control.

A. All gas fired furnaces, and hot water boilers, including those converted to gas firing, shall have automatic thermostatic control to close the automatic gas valve in the event that excessive high temperatures develop in the furnace or hot water boilers.

B. Such devices shall be provided for all gas fired steam boilers, as outlined above, in the event excessive pressures develop in the boiler or the water level in the boiler drops dangerously low.

C. Electrically operated safety controls shall not depend on the closing of an electrical circuit to shut off the gas supply to the appliance. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (h)).

14.44.170 Gas Conversion Burners.

A. Before any gas conversion burner is installed, the combustion chamber flue passages, smoke pipe and the chimney shall be thoroughly cleaned of all rust, soot and dirt. All rust and scale shall be scraped from the edges of the firing clinker or cleanout doors, and the door jambs to obtain a tight fit. Leaky joints on cast iron furnaces shall be recemented. A smoke or other test shall be used to determine the effectiveness of the repairs. All doors on the boiler or furnace, except the firing door shall be tightly sealed. The slots in the firing door shall be sealed. The fire brick in steel warm air furnaces shall be removed except where it is the only material that forms the sides of the fire pot.

B. The firing door on the furnace or boiler shall be arranged to open easily to relieve pressure by filing or removing the door catch and providing a spring device to hold the door closed.

C. Where a horizontal (in-shot) type gas conversion burner is installed in the ash pit of a dry base boiler or gravity warm air furnace, the ash pit shall be lined on the bottom and the sides up to the grate level with two (2) inches of insulating firebrick or other approved insulation.

D. Movable smoke pipe dampers shall be removed. Other dampers which are an integral part of the boiler or furnace shall be removed or permanently locked in a position which does not interfere with the operation of the burner.

E. In down draft or revertible flue type furnaces or boilers in which the flue passage turns downward after leaving the combustion chamber, the top of the combustion chamber or flue passage shall be vented to the smoke pipe by a one (1) inch diameter or larger pipe. The relief opening of a vertical or horizontal draft diverter should be at least one (1) foot higher than the highest flue passage.

F. Where a by-pass to the smoke pipe is provided in the construction of the furnace or the boiler at the point where the flue turns downward, the damper in the bypass may be partially opened and locked in place in lieu of the required one inch pipe.

G. The cross-Sectional area of the flue or vent connector shall be not less than one (1) square inch per seventy-five hundred (7500) BTU per hour input of the gas conversion burner, but in no case shall the diameter of the flue or vent connector be less than that of the appliance flue collar. An orifice plate or neutral pressure point adjuster shall be inserted in the flue or vent connector to make necessary adjustment of the burner. This orifice plate shall be located between the unit and the diverter.

(Part of Ord. passed 10/3/73: prior Code § 30.36(3) (i)).

14.44.180 Gas Fired Space Or Room Heaters.

A. Gas fired space heaters shall not be installed in bathrooms or shower rooms.

B. Gas fired space heaters may be installed in individual offices and in individual apartments, if such installation is in compliance with the following:

1. Space heater installed in normally closed rooms having a volume of less than four hundred (400) cubic feet shall be provided with an air intake to supply outside air for combustion purposes;

2. Space heaters shall be provided with an automatic safety pilot device;

3. The burner of the space heater shall be enclosed with a metal housing so arranged that there will be no open flame. The arrangement of space heater shield shall be such that there will be no possibility of personal contact or combustible material contact with the flame or the housing enclosing the burner;

4. Space heater installed in sleeping rooms shall be provided with automatic safety pilot devices, and combustion air shall be drawn directly from the outside;

5. Space heater shall be installed with clearances to combustible construction as shown in the following table:

Required Clearance From Combustible Construction (Inches)

	Jacket, Sides	Projecting flue box or	
Type of Space Heater	and Rear	draft hood	
Circulation or Radiating			
Space Heater	6	2	
Wall Heaters (Wall Furnace)	None	-	
Gas Steam and Hot Water Radiators	6	2	

6. Space heaters shall be placed so as not to cause a hazard to walls, floors, curtains, furniture, open doors or to the free movement of persons within the room.

7. Gas fired space heaters which have been approved for mounting on combustible floors shall be mounted in accordance with such approval. Other types of gas fired space heaters shall be mounted on noncombustible floors or on combustible floors as regulated in this Code. (Part of Ord. passed 10/3/73: prior Code § 30.36(3) (j)).

14.44.190 Scope Of Oil Burner Regulations.

The regulations of this Section shall apply to all oil burning equipment and shall include all equipment connected thereto including tanks, piping, pumps, control devices and all accessories. (Part of Ord. passed 10/3/73: prior Code § 30.36(4) (a)).

14.44.200 Fuel Oil Requirements.

Fuel oil used in connection with such burners to which Sections 14.44.190 through 14.44.220 apply shall have a flash point of not less than one hundred degrees (100°) Fahrenheit as determined by the Tag close cup tester, and shall be a hydrocarbon oil free from acid, grit, fibrous or other foreign matter likely to clog or injure the burners or valves. (Part of Ord. passed 10/3/373: prior Code § 30.36(4) (b)).

14.44.210 Installation Of Oil Burners.

A. All oil burners shall be installed in an approved and workmanlike manner. Combustion chambers, etc., shall be cleaned in accordance with the requirements of Section 14.44.170.

B. Where oil burners are installed in boilers or furnaces originally designed for other fuels, the ash door of the boiler or furnace shall be removed, or bottom ventilation otherwise provided to prevent an accumulation of vapors in the ash pit, unless the burner is of a type which mechanically purges the ash pit.

C. Manually operated dampers shall be such that they cannot close off more than eighty percent (80%) of the internal cross-sectional area of the smoke pipe.

D. Rooms in which oil burners are located shall be provided with adequate ventilation to assure continuous complete combustion of the oil. Where the oil burner is located in a room which does not have windows or doors to the outside air, such room shall be provided with an opening or duct to the outside air, or to a room which has windows or doors to the outside air.

E. Operating Instructions. The installer of any oil fired furnace or boiler or oil conversion burner shall post in a conspicuous place near the appliance, complete operating instructions for such appliances, including the installers name and business address. (Part of Ord. passed 10/3/73: prior Code § 30.36(4) (c)).

14.44.220 Oil Burner Construction And Control.

A. All oil burners shall be of an approved type.

B. All oil burners shall be arranged to prevent abnormal discharge of oil in the event of ignition failure or premature flame extinguishment by automatic means specifically approved for the burner with which used.

C. Oil burning space heaters shall be provided with such controls only if they are connected to an oil storage tank which is not an integral part of the space heater.

D. All oil burners shall be provided with an approved method for manually stopping the flow of oil to the burner from a point at a safe distance from the burner.

E. Automatically controlled oil burners used in connection with hot water, steam or warm air heating systems shall be equipped with approved automatic devices to stop the burner or reduce the fuel supply in the event of excessively high pressure or low water in the steam boiler or overhearing in the hot water boiler or warm air furnace.

F. Oil burners which are supplied by gravity feed shall be equipped with an approved constant level valve. Such constant level valves if not a part of the burner or the oil tank shall be installed in the oil feed line at the tank or as close thereto as possible. (Part of Ord. passed 10/3/73: prior Code § 30.36(4) (d)).

14.44.230 Recessed And Wall Heaters Defined.

Recessed heaters and wall heaters mean self-contained heating appliances designed for incorporation in or permanent attachment to a wall, partition, floor or ceiling of the room being heated. (Part of Ord. passed 10/3/73: prior Code § 30.36(5) (a)).

14.44.240 Installation Of Recessed And Wall Heaters.

A. Recessed heaters and wall heaters shall not be installed in or attached to walls, partitions, floors or ceilings constructed of combustible material unless approved specifically for such installation and installed in accordance with the conditions of such approval.

B. Recessed heaters and wall heaters shall be so located as not to cause a fire hazard to walls, floors, curtains, furniture and doors.

C. Panels, grilles and access doors which must be removed for normal servicing operations of recessed heaters and of wall heaters shall not be attached to the building construction.

D. Wall heaters installed in sleeping rooms shall be provided with automatic safety pilot devices and all combustion air shall be drawn directly from the outside.

(Part of Ord. passed 10/3/73: prior Code § 30.36(5) (b)).

14.44.250 Appliances Requiring Connections To Flue Or Vent.

A. Every heat producing appliance burning solid, liquid or gaseous fuel shall be connected to a chimney or vent that is suitable and safe for such use except those appliances approved specifically for use without a flue or vent connection. The main central heating devices shall be connected only to masonry chimneys or other approved chimney.

B. Gas burning ranges, hot plates, laundry stoves and domestic clothes dryers that are approved specifically for use without a vent, may be installed in accordance with the conditions of such approval.

C. Gas burning water heaters with inputs not over five thousand (5000) BTU per hour, gas refrigerators, counter appliances, room heaters except when installed in sleeping quarters, and other gas burning appliances not provided with flue collars that are approved specifically for unvented use may be installed in conditions of such approval. Gas burning devices requiring venting, other than central heating devices, shall be vented through an approved vent and such vent shall terminate in the outside air in accordance with the conditions of approval. (Part of Ord. passed 10/3/73: prior Code § 30.36(6)(a)).

14.44.260 Flue Pipes And Vent Connectors.

A. Materials. Flue pipe and vent connectors shall be made of noncombustible material capable of withstanding the flue gas temperatures of the appliances and of sufficient thickness to withstand physical damage. The material of vent connectors shall also be resistant to corrosion.

B. Support. Flue pipes and vent connectors shall be securely supported and joints fastened with sheet metal screws.

C. Pitch. Flue pipes and vent connectors shall maintain a pitch or rise of at least one-quarter $(\frac{1}{4})$ inch to the foot (horizontal length) from the appliance to the chimney or vent.

D. Length. Connection to the chimney shall be as direct as possible and in no case shall the horizontal vent exceed seventy-five percent (75%) of the vertical height of the chimney above the flue connection.

- E. Size. The flue pipe or vent connector shall not be smaller than:
- 1. The size of the flue collar of the appliance;
- 2. The size recommended by the appliance manufacturer; or

3. The size of the outlet of the draft hood that is supplied by the manufacturer of the gas burning appliance;

4. When house heating gas conversion burners are installed the flue size shall be that suggested by American Standard Z-21-8-1958, Table 1, Page 13.

F. Damper. No manually operated damper shall be placed in such flue or vent connector.

G. Passage Through Floors or Ceilings. No flue pipe or vent connector shall pass through any floor or ceiling.

H. Flue pipes of liquid or solid fuel burning appliances shall not pass through walls or partitions constructed of combustible material unless they are guarded at the point of passage by:

1. Metal ventilated thimbles not less than twelve (12) inches larger in diameter than the flue pipe or vent connector; or

2. Metal or burned fire clay thimbles built in brickwork or other approved fireproofing materials extending not less than eight (8) inches beyond all sides of the thimble; or

3. In lieu of such protection, all combustible material in the wall or partition shall be cut away from the flue pipe or vent connector a sufficient distance to provide the clearance required from such flue pipe or vent connector. Any material used to close up such opening shall be noncombustible.

I. Not more than one (1) opening shall be allowed in each chimney flue, other connections may be made by means of an approved junction box. One additional opening for an incinerator may be made provided it does not open into the same section of flue liner. (Part of Ord. passed 10/3/73: prior Code § 30.36(6)(b)).

14.44.270 Steam And Hot Water Pipes.

A. Clearance from steam and hot water pipes shall be as follows:

1. Steam and hot water pipes shall be installed with a clearance of at least one (1) inch to all combustible material except as specified in 2 and 3 of this subsection.

2. At points where pipes carrying steam or hot water at not over fifteen (15) pounds per square inch gauge pressure, or hot water at not over two hundred fifty degrees (250°) Fahrenheit, emerge from a floor, wall or ceiling, the clearance at the opening through the finish floor boards or wall or ceiling boards may be less than one(1) inch, but shall not be less than one-half ($\frac{1}{2}$) inch. Each opening shall be covered with a plate of noncombustible material.

3. Hot water pipes on a system with automatic firing and with limit controls such that water temperature at the boiler or furnace cannot rise above one hundred eighty degrees (180°) Fahrenheit may be installed without clearance to combustible material.

B. Protection from steam and hot water pipes shall be as follows:

1. Coverings or insulation used on steam or hot water pipes shall be of noncombustible material.

2. Where steam pipes and hot water pipes pass through a floor, wall or ceiling of fire-resistive construction, the openings around them shall be filled with noncombustible material to prevent the passage of fire. (Part of Ord. passed 10/3/73: prior Code § 30.36(7)).

14.44.280 Warm Air Supply Ducts.

A. All warm air supply registers shall be connected to the furnace or other heating unit by means of fittings and ducts which are continuous and substantially air-tight throughout. Warm air supply ducts shall be constructed entirely of metal or other noncombustible material equivalent in structural strength and durability. The minimum thickness of metal used for warm air ducts shall be of the U.S. Standard Sheet Metal Gauges shown in the following table:

Round Ducts	Rectangular Ducts		
Diameter in Inches	Gauge	Width in Inches	Gauge
Less than 12	30	14 or less	28
12 or More	28	Over 14	26

B. Joints and seams of such ducts shall be securely fastened. Slip joints shall have a lap of at least one (1) inch and the units shall be securely fastened together. Ducts shall be securely supported by metal hangers, straps, lugs or brackets. No nails, conduit wiring or pipe shall penetrate through the duct walls.

C. Single wall ducts when passing through or contained in combustible walls, floors or ceilings shall have five-sixteenths (5/16) inch clearance to combustible construction and shall be covered with one (1) thickness of asbestos paper weighing not less than twelve (12) pounds per one-hundred (100) square feet, except that the five-sixteenth (5/16) inch clearance and the asbestos paper may be omitted on ducts from automatically fired forced air furnaces.

D. Ducts located in closets shall be covered with one-quarter $(\frac{1}{4})$ inch approved noncombustible insulation and shall be protected from mechanical injury.

E. Any open space around vertical ducts where such ducts enter walls, floors or ceilings shall be tightly filled with asbestos cement or other approved noncombustible insulating material.

F. Warm air ducts in gravity systems and risers in forced air installation shall be installed so that the same ducts or riser shall not serve both the bathroom and any other room.

G. Warm air supply ducts shall not terminate in any garage area. (Part of Ord. passed 10/3/73: prior Code § 30.36(8)(a)).

14.44.290 Cold Air Return Ducts--Warm Air Registers.

A. All cold air return registers shall be connected to the furnace by means of fittings and ducts which are continuous and substantially air tight throughout.

B. Portions of cold air return ducts within three (3) feet of the furnace shall conform to the regulations of Section 14.44.280(A) for warm air supply ducts. The remaining portions of cold air return ducts may be constructed of metal or other approved material; provided however, that no material more flammable than one (1) inch thick (nominal) wood boards shall be used.

C. Spaces between structural framing members may serve as return ducts provided such spaces are substantially air tight or are made tight with heavy asbestos paper secured to such framing members. When spaces between joists are used for this purpose, such spaces shall be closed with metal, dense composition board, cement-asbestos board or similar approved rigid material.

D. The interior of combustible return ducts shall be lined with metal at points where there is danger of incandescent particles being dropped through the register, such as directly under floor registers and at bottom of vertical ducts.

E. Cold air return ducts from bathroom or garages shall not be permitted.

F. Warm Air Registers. Where warm air registers are installed in combustible construction the register box shall be covered with one thickness of asbestos paper weighing not less than twelve (12) pounds per one hundred (100) square feet and shall have a clearance of five-sixteenths (5/16) inch from combustible construction, except that the five-sixteenths (5/16) inch clearance to combustible construction may be omitted where an automatically fired forced air furnace is used.

(Part of Ord. passed 10/3/73: prior Code § 30.36(8)(b), (c)).

14.44.300 General Chimney Requirements.

A. Height. Chimneys shall extend at least three (3) feet above a flat roof and at least two (2) feet above any portion of the building within ten (10) feet.

B. Corbeling. No chimney shall be corbelled from a wall more than six (6) inches; nor shall a chimney be corbelled from a wall which is less than twelve (12) inches in thickness unless it projects equally on each side of the wall; provided that in the second story of two (2) story buildings corbelling of chimneys on the exterior of the enclosing walls may be equal the wall thickness. Corbeling shall not exceed one(1) inch projection for each course of brick projected.

C. Change in Size or Shape at Roof not Permitted. No change in the size or shape of chimney, where the chimney passes through the roof, shall be made within a distance of six (6) inches above or below the roof joists or rafters.

D. Chimney Foundation. All masonry chimneys shall rest on a foundation located on permanently undisturbed soil, at least four (4) feet below established grade, or shall be supported on fire-proof construction.

No masonry chimney shall rest on or be hung or otherwise supported from combustible floor or wall construction. (Part of Ord. passed 10/3/73: prior Code § 30.39(1)).

14.44.310 Chimney Construction.

A. Masonry chimneys shall be constructed of masonry units or of reinforced concrete. Chimneys for heating equipment shall have walls not less than four (4) inches nominal thick.

B. Masonry chimneys shall be self-supporting and shall support no weight but their own.

C. Water leakage around chimneys shall be prevented by flashing and counter flashing. Saddles shall be built on the high side of chimneys on sloping roofs.

D. The roof, floors and walls shall be framed around chimneys so that no combustible material shall be within two (2) inches of the masonry. Such space shall be filled with noncombustible material at all floor and ceiling levels. (Part of Ord. passed 10/3/73: prior Code § 30.39(2)).

14.44.320 Chimney Liners.

A. Masonry chimneys for domestic heating plants shall be lined with approved fire clay flue liners not less than five-eighths (5/8) of an inch thick, or with other approved liner of material that will resist without softening or cracking a temperature of one thousand eight hundred degrees (1800°) Fahrenheit.

B. Fire clay flue liners shall be installed ahead of the construction of the chimney as it is carried up, carefully bedded one on the other in approved mortar with close fitting joints left smooth on the inside.

C. In masonry chimneys with walls less than eight (8) inches thick, liners shall be separate from the chimney wall and the space between the liner and the masonry shall not be filled; only enough mortar shall be used to make a good joint and hold the liners in position.

D. Flue liners shall start from the base of the chimney, or in the case of fireplaces, from the throat of the fireplace. They shall extend, as nearly vertically as possible, for the entire height of the chimney.

E. Where two (2) or more flues adjoin each other in the same chimney a four (4) inch masonry wythe shall be provided between the adjacent flues. The cross-sectional area of flues shall be not less than sixty-three (63) square inches. In no case shall any fuel burning equipment hereafter installed be connected to any flue unless the cross-sectional area of the draft intensity produced by the flue is adequate for such fuel-burning equipment which may be connected to such flue. (Part of Ord. passed 10/3/73: prior Code § 30.39(3)).

14.44.330 Chimneys For Incinerators.

Masonry chimneys for domestic type incinerators shall be constructed in accordance with the requirements for masonry chimneys. All flues shall terminate in a substantially constructed spark arrester with openings not greater than one-half ($\frac{1}{2}$) inch, or be provided with other suitable means for avoiding discharge of fly particles. (Part of Ord. passed 10/3/73: prior Code § 30.39(4)).

14.44.340 Chimney Cleanouts.

Cleanouts or other approved devices shall be provided at the base of all chimneys or ash pits to enable the flues to be maintained clean, and so constructed that they remain tightly closed when not in use. (Part of Ord. passed 10/3/73: prior Code § 30.39(5)).

14.44.350 Fireplaces.

A. For construction details of a typical house section see Section 14.64.110.

B. Fireplaces shall be constructed of masonry or of reinforced concrete with back and sides of the thickness specified herein. Fire brick at least two (2) inches thick or other approved lining shall be provided. The total thickness of back and sides including the lining shall be not less than eight (8) inches.

C. Factory built fireplaces that are approved as a result of tests and listing by a nationally recognized testing laboratory may be approved for installation. A factory built solid fuel burning fireplace shall be vented into an approved class A chimney.

D. Fireplace hearth extensions shall be provided of approved noncombustible material for all fireplaces. Where the fireplace opening is less than six (6) square feet, the hearth extension shall extend at least sixteen (16) inches in front of and at least eight (8) inches beyond each side of the fireplace. Fireplace openings over six (6) square feet shall be provided with a hearth extension of twenty (20) inches in front of, and twelve (12) inches beyond each side of the fireplace opening. All combustible materials shall be kept a minimum of eight (8) inches from the fireplace opening.

E. Fireplaces constructed of masonry or reinforced concrete shall have hearth extension of brick, concrete, stone, tile or other approved noncombustible material properly supported and with no combustible material against the underside thereof. Wooden forms or centers used during the construction of hearth and hearth extensions shall be removed when the construction is complete.

F. Spaces between fireplaces and combustible material shall be fire-stopped by placing noncombustible material to a depth of one(1) inch at the bottom of such spaces.

G. Clearances from Combustible Construction. All wooden beams, headers and joists shall be trimmed away from fireplaces for a distance of not less than two (2) inches at all sides thereof. Headers supporting trimmer arches shall be not less than sixteen (16) inches from the face of the chimney breast and trimmers shall be not less than six (6) inches from the inside face of nearest flue.

(Part of Ord. passed 10/3/73: prior Code § 30.40).

14.44.360 Permitted Gas Vent Types.

Gas appliance vents that do not conform to the requirements of this Chapter for chimneys shall be of one of the following types installed as required by this Chapter:

A. Type B Gas Vents. Vent piping of noncombustible corrosion resistant material approved as a result of tests and listing by a nationally recognized testing laboratory for venting of gas appliances.

B. Type BW Gas Vents. Vent piping of noncombustible corrosion resistant material approved as a result of tests and listing by a nationally recognized testing laboratory for venting recessed gas heaters.

C. Type C Gas Vents. Vent piping of sheet copper of not less than No. 24 gauge or of galvanized iron of not less than No. 20 gauge, or of other approved noncombustible corrosion resistant material. (Part of Ord. passed 10/3/73: prior Code § 30.41(1)(a)).

14.44.370 Gas Vent Height.

Vent shall extend at least two (2) feet above the point of departure from the roof and two (2) feet above any portion of the building closer than ten (10) feet. Gas vents need not comply with this provision when equipped with an approved device that assures proper and effective venting as installed. Through the wall, vents shall terminate not less than eighteen (18) inches from any openable door or window and eighteen (18) inches above exterior grade. (Part of Ord. passed 10/3/73: prior Code § 30.40(1)(b)).

14.44.380 Gas Vent Use Limits.

A. Type B gas vents shall be used only with approved gas appliances which produce flue gas temperatures not in excess of five hundred fifty degrees (550°) Fahrenheit. They shall not be used for venting the following:

1. Incinerators;

2. Appliances which may be converted readily to the use of solid or liquid fuel;

3. Boilers and furnaces, other than attic furnaces, except where specific approval is obtained from the Building Inspector for the use of type B gas vents.

B. Type BW gas vents shall be used only with approved recessed gas heaters.

C. Type C gas vents shall be used only for runs directly from the space in which the appliance is located through the roof to the outer air. Such vents shall not pass through any nonaccessible attic or concealed space. Such vents shall be installed with clearances from combustible material of not less than nine (9) inches except that for vertical portions of the vent the clearance may be six (6) inches.

(Part of Ord. passed 10/3/73: prior Code § 30.41(1)(c)).

14.44.390 Incinerator Required--Application Of Provisions.

A. Sections 14.44.390 through 14.44.450 apply to direct-fed incinerators having a fire-box or charging compartment of not over five (5) cubic feet in capacity when used in dwellings.

B. Every residence and all buildings arranged to be occupied by one or more families, and all other buildings hereafter erected within the limits of the municipality in which garbage or waste is likely to accumulate, shall be provided with an approved garbage grinder, garbage consumer or incinerator. Part of Ord. passed 10/3/73: prior Code § 30.42(1)).

14.44.400 Gas Burner Connection To Incinerator.

Where a gas burner is used, a shut-off cock shall be provided at an accessible location in the gas line to the burner. Incinerators furnished with means for automatic ignition of the gas at the main burner shall be equipped with a device which will automatically shut off the main gas supply in the event the means of ignition becomes inoperative or the means of keeping the valve of the device open becomes inoperative, or both. (Part of Ord. passed 10/3/73: prior Code § 30.42(2)).

14.44.410 Mounting Incinerators.

A. Domestic type incinerators, except as hereinafter provided shall be mounted on the ground or on floors of fire-resistive construction with noncombustible flooring or surface finish and with no combustible material against the underside thereof. Such construction shall extend not less than twelve (12) inches beyond the incinerator base on all sides, except that at the front or side where ashes are removed, it shall extend not less than eighteen (18) inches beyond the incinerator.

B. Domestic type incinerators that are specifically approved for installation on a combustible floor may be mounted in accordance with the conditions of such approval.

C. Domestic type incinerators that are set on legs that provide not less than four (4) inches open space under the base of the incinerator may be mounted on floors other than as specified in subsection A, provided the incinerator is so arranged that flame or hot gases do not come in contact with its base, and further provided that floor under the incinerator is protected with hollow masonry not less than four (4) inches thick covered with sheet metal of not less than twenty-four (24) gauge. Such masonry course shall be laid with ends unsealed and joints matched in such a way as to provide a free circulation of air from side to side through the masonry. The floor for eighteen (18) inches beyond the front of the incinerator or side where ashes are removed and twelve (12) inches beyond all other sides of the incinerator shall be protected with asbestos millboard not less than one-fourth ($\frac{1}{4}$) inch thick covered with sheet metal of not less than twenty-four (24) gauge, or with protection equivalent thereto. (Part of Ord. passed 10/3/73: prior Code § 30.42(3)).

14.44.420 Clearance From Incinerators.

A. Domestic type incinerators, except as provided herewith, shall be installed to provide clearances between the unit and woodwork or other combustible material, of not less than thirty-six (36) inches at the sides and top, and not less than forty-eight (48) inches at the front, and in no case shall the clearance above the charging door be less than forty-eight (49) inches.

B. Domestic type incinerators that are specifically approved for installation with clearance less than specified above may be installed in accordance with the conditions of such approval; provided that in any case, the clearances shall be sufficient to afford ready accessibility for firing, clean out, and any necessary servicing, and with a minimum clearance of three inches between the sides and combustible materials.

C. Domestic type incinerators may be installed in rooms, but not in confined spaces such as alcoves, with reduced clearances to woodwork or other combustible materials, provided that the combustible material is protected with an approved protective material, but in no case shall this clearance be less than three (3) inches to the protection.

D. When a domestic type incinerator that is refractory lined or insulated with heat-insulating material is encased in common brick not less than four (4) inches in thickness, the clearances may be reduced to six (6) inches at the sides and rear, and the clearance at the top may be reduced to twenty-four (24) inches, provided

that the construction using combustible material above the charging door and within forty-eight (48) inches is protected with twenty-eight (28) gauge sheet metal spaced out one (1) inch or equivalent protection. (Part of Ord. passed 10/3/73: prior Code § 30.42(4)).

14.44.430 Chimneys For Incinerators.

A. Domestic type incinerators shall be connected to a chimney suitable for solid fuel burning appliances.

B. Chimneys used for incinerators shall be provided with a heavy, galvanized screen on top for fire protection, or be provided with other suitable means of avoiding discharge of fly particles. Such screen shall be kept in repair at all times. (Part of Ord. passed 10/3/73: prior Code § 30.42(5)).

14.44.440 Flue Pipes For Incinerators.

A. Domestic type incinerator flue pipes, except as herein provided shall be installed to provide clearance of not less than eighteen (18) inches to woodwork or other combustible material.

B. Domestic type incinerator flue pipes may be installed in rooms, but not in confined spaces such as alcoves, with reduced clearances to woodwork or other combustible material provided the combustible material is protected with an approved protective material.

C. Domestic type incinerator flue pipes shall not pass through any combustible wall or partition unless protected at the point of passage in accordance with Section 14.44.260(G) and (H). (Part of Ord. passed 10/3/73: prior Code § 30.42(6)).

14.44.450 Refuse Chutes.

Refuse chutes shall not feed directly into incinerators. (Part of Ord. passed 10/3/73: prior Code § 30.42(7)).

AIR CONDITIONING AND REFRIGERATION SYSTEMS

Sections:

14.48.010Permit requirements.14.48.020Exterior structures.

14.48.010 Permit Requirements.

A. Permit Required. Except as hereinafter provided, before proceeding with the construction, erection or installation of any air-cooled, water-cooled or mechanically-cooled air conditioning or refrigeration system or unit in or to serve any building, a permit shall first be obtained from the Building Inspector.

B. Permits shall not be required for the installation of any air conditioning or refrigeration system or unit that does not use water for cooling and where the source of operating power is obtained by plugging in an electrical cord connection to an electrical outlet. This paragraph shall be applicable to portable units, two and one-half tons $(2 \frac{1}{2})$ capacity or under.

C. Application for a permit shall be made by the installing contractor upon a form provided by the Building Inspector, shall be filled out completely and shall provide the following information:

- 1. Name and address of contractor;
- 2. Location of premises where installation is proposed;
- 3. Name and address of owner;
- 4. Location of unit on premises including distance to lot lines for exterior apparatus;
- 5. Manufacturer's identification, classification and size of unit;
- 6. Nature of coolant;

7. If water cooled, source of water and method of discharging waste water. (Refer to Plumbing Inspection Department);

8. Where water conservation devices are required, manufacturer's name, identification, classification and size of equipment;

9. Such additional information as shall be required by the Building Inspector. (Part of Ord. passed 10/3/73: prior Code § 30.38(1)).

14.48.020 Exterior Structures.

Where any unit of an air conditioning or refrigeration system is located outside of the structure, said unit shall comply with setback requirements as set forth in the zoning Title and said location shall be subject to approval of the Building Inspector. Said location shall not by noise or sight be detrimental to adjoining property. (Part of Ord. passed 10/3/73: prior Code § 30.38(2)).

FLAMMABLE LIQUIDS STORAGE AND EQUIPMENT

Sections:

- 14.52.010 Prevailing Rules And Regulations.
- 14.52.015 Flammable Liquid Tanks Restricted.
- 14.52.020 Fuel Oil Feed Systems.
- 14.52.030 Auxiliary Fuel Oil Tanks.
- 14.52.040 Overflow Oil Return.
- 14.52.050 Piping Used In Fuel Oil Heating Systems.
- 14.52.060 Permit Required.
- 14.52.070 Flammable Liquids Include Petroleum Gas.
- 14.52.080 Underground Tanks Temporarily Out Of Service.
- 14.52.090 Abandoned Underground Tanks.
- 14.52.100 Leaking Underground Tanks.
- 14.52.110 Cause For Removal Of Underground Tanks.
- 14.52.120 Removal Of Underground Tanks.

14.52.010 Prevailing Rules And Regulations.

The Rules and Regulations of the Industrial Commission of the State of Wisconsin, as incorporated in the Flammable Liquids Code adopted by said Commission, and all amendments thereof and supplements thereto shall prevail except where stricter requirements are hereinafter provided. (Part of Ord, passed 10/3/73; prior Code & 30.32 (part))

(Part of Ord. passed 10/3/73: prior Code § 30.32 (part)).

14.52.015 Flammable Liquid Tanks Restricted.

Except for tanks for fuel oil feed systems for heating purposes and tanks for liquefied petroleum gas, as regulated by the provisions of this Chapter, no tanks for the storage of flammable liquids, whether above or below ground, shall be permitted in any residential or multiple dwelling area in the Village. (Ord. 79-7-1).

14.52.020 Fuel Oil Feed Systems.

In the construction and installation of fuel oil system for heating purposes, only pump suction feed systems having anti-syphon devices shall be used. The storage tanks to be used in connection with such systems shall be located underground, outside the building, with the following exceptions:

A. Not more than two (2) tanks shall be permitted in a basement. When two (2) tanks are installed, there shall be installed a straight thru head valve at each tank, in connection with the outlet arrangement approved by the Building Inspector. A tank shall be not less than two hundred twenty (220) gallons nor more than three hundred (300) gallons in capacity, and shall be at least fourteen gauge (14) sheet steel. The fill pipe shall be at least two (2) inches in diameter, and shall terminate outside of building at least three (3) feet from any opening such as a door or window. The vent pipe shall be one (1) inch in diameter and shall terminate outside of building at least two (2) feet from any opening such as a door or window. The tank or tanks shall be mounted on an incombustible stand and shall be at least nine(9) inches from floor. Where applicable, the requirements for inside tanks shall also apply to outside tanks.

B. Fuel oil storage tanks of one thousand gallons capacity or less may be installed under the basement floors of all buildings which are not places of public assemblage. The top of each fuel oil storage tank installed under this exception shall be at least two (2) feet below the top of the basement floor. This Section shall not be construed to prohibit the use of auxiliary supply tanks as described in the following Section. Part of Ord. passed 10/3/73: prior Code § 30.32(1)).

14.52.030 Auxiliary Fuel Oil Tanks.

A. Auxiliary supply tanks of the gravity or pressure type may be used if suitable automatic safeguards are installed to prevent abnormal discharges of oil at the burners. No such tank shall have a capacity in excess of sixty gallons (60). If more than one (1) auxiliary tank is installed in a single building, the total capacity of such tanks shall not exceed sixty gallons (60).

B. Where an auxiliary supply tank of the pressure or gravity type is located within a building, the tank shall be not less than five (5) feet if of the gravity type, and if of the pressure type, not less than ten (10) feet distant measured horizontally, from any fire or flame. The tank shall be substantially and rigidly supported and otherwise protected against mechanical injury.

C. Tanks for systems under pressure shall be designed for six (6) times the maximum working pressure and be tested and proven tight at twice the maximum working pressure. The maximum working pressure shall not exceed fifty pounds (50) per square inch. All such tanks shall be provided with a reliable pressure gauge, an air relief valve and a suitable device to vent the tank in case of fire, both discharging outside of the building.

D. The use of gauging devices or test wells, the breakage of which would permit the escape of oil or vapor within the building is hereby prohibited.

E. Auxiliary tanks shall be filled by pumping from the storage tank except that where the entire storage is contained in an auxiliary tank located inside of a building, a fill pipe shall extend from such auxiliary tank to a location outside of the building. The fill pipe shall be so installed that in case of overflow, none of the overflow will enter the building. (Part of Ord. passed 10/3/73: prior Code § 30.32(2)).

14.52.040 Overflow Oil Return.

The overflow pipe of auxiliary gravity type tanks shall not be provided with valves or other obstructions, but in pressure type tanks the overflow and supply pipes shall be provided with interconnection valves so designed that the opening or closing of the overflow pipe shall likewise open and close the supply pipe. Where a reducer is not used on the supply pipe at the pump, the overflow pipe shall be one (1) size larger than the supply pipe. (Part of Ord. passed 10/3/73: prior Code § 30.32(3)).

14.52.050 Piping Used In Fuel Oil Heating Systems.

Pipes shall be of black malleable pipe or of copper tubing bearing the approval of recognized authorities. Suitable fittings of galvanized cast iron or brass shall be used in connecting the piping and other fuel oil equipment. All piping within the building extending in any position other than vertical shall be laid under or within the concrete floor of the basement, and shall have a coverage of concrete of not less than one (1) inch. (Part of Ord. passed 10/3/73: prior Code § 30.32(4)).

14.52.060 Permit Required.

Before proceeding with construction, erection, alteration, remodeling or replacement of storage tanks or other equipment pertaining to the use of flammable liquids, a permit shall first be obtained from the Building Inspector. Before the Building Inspector shall issue such permit, an application shall be filed with said Building Inspector by the contractor or builder, specifying the location, size, use and capacity of such storage tanks or equipment, together with the estimated cost of the work. If the application shows that the installation, remodeling, altering, repairing or replacements are to be performed in compliance with the provisions of this Code, the Building Inspector shall approve the same and shall issue a permit to the applicant for which a fee shall be charged in accordance with Sections 14.64.010 through 14.64.030. (Part of Ord. passed 10/3/73: prior Code § 30.32(5)(a)).

14.52.070 Flammable Liquids Include Petroleum Gas.

A. Liquefied petroleum gas shall mean and include any material which is composed predominantly of any of the following hydrocarbons or mixtures of them: propane, propylene, butanes (normal butane or isobutane) and butylenes.

B. The term storage tanks or equipment shall be construed to include all devices, piping, storage tanks, cylinder, installations for the use of removable cylinders, and equipment pertinent to the use of liquefied petroleum gas.

C. All installations of liquefied petroleum gas storage tanks or equipment shall be in conformity with the provisions of this Code, with the statutes of the state of Wisconsin and with any orders, rules or regulations issued by the Industrial Commission of the State of Wisconsin, conformity with the standards for the design, installations and construction of containers and pertinent equipment for the storage and handling of liquefied petroleum gases as recommended by the National Fire Protection Association shall be prima facie evidence of conformity with generally recognized standards for safety to persons and property.

D. A storage tank or installation for the use of removable cylinders erected above the surface of the ground shall be considered a building within the meaning of this Code, and the zoning Code, particularly the building setback provisions for yards. Each such storage tank or installation for the use of removable cylinders and such cylinders may not be seen from adjoining property. Such enclosure shall be in place not later than two (2) weeks after a storage tank or installation for the use of removable fixtures has been placed on any premises, and each day thereafter that such an enclosure is not in place shall be a separate violation of this Code. (Part of Ord. passed 10/3/73: prior Code § 30.32(5)(b)).

14.52.080 Underground Tanks Temporarily Out Of Service.

Tanks shall be rendered "temporarily out of service" only when it is planned that they will return to active service at the location within ninety days. The following steps shall be carried out successively:

A. Removal of a flammable liquid which can be pumped out with a service pump;

B. Cap or plug the fill line, gauge opening, and pump suction, using appropriate sealing compound on pipe fittings. If fill line and gauge opening are equipped with caps which can be properly locked, the secure locking of these caps is sufficient;

C. Leave the vent line open. (Part of Ord. passed 10/3/73: prior Code § 30.37(a)).

14.52.090 Abandoned Underground Tanks.

Tanks which are no longer in service may be rendered "temporarily out of service" pending their removal in accordance with the procedure outlined in Section 14.52.080. (Part of Ord. passed 10/3/73: prior Code § 30.37(b)).

14.52.100 Leaking Underground Tanks.

All tanks found to be leaking shall be removed as per Section 14.52.120. (Part of Ord. passed 10/3/73: prior Code § 30.37(c)).

14.52.110 Cause For Removal Of Underground Tanks.

Whenever there is a change in use of a premises which no longer requires the use of existing underground tanks, they shall be removed as per Section 14.52.120. This shall apply to all premises where the use has already changed and all future changes in use. (Part of Ord. passed 10/3/73: prior Code § 30.37(d)).

14.52.120 Removal Of Underground Tanks.

Tanks shall be removed according to the following successive steps:

- A. Remove all flammable liquid from connecting lines and tank;
- B. Disconnect and remove insofar as possible the suction, inlet, gauge and vent lines;
- C. Cap or plug open ends of remaining lines;
- D. Close all openings in the tank with pipe plugs before the tank is removed from the ground;
- E. Remove the tank from the premises within seventy-two(72) hours from the time the tank is uncovered.
- F. Keep the tank tightly sealed with plugs or caps until it is removed from the premises and during transportation upon its removal. (Part of Ord. passed 10/3/73: prior Code § 30.37(e)).

GARAGES

Sections:

14.56.010	Definitions.
14.56.020	Locations.
14.56.030	Area.
14.56.040	Foundations And Footings.
14.56.050	Floor Surface.
14.56.060	Construction.
14.56.070	Attached Private Garages.

14.56.010 **Definitions.**

An "attached private garage" means a private garage attached directly to the principal building, or A. attached by means of an enclosed or open breezeway, porch, terrace, or vestibule, or a private garage so constructed as to form an integral part of the principal building.

Β. A "detached private garage" means a private garage entirely separated from the principal building.

- C. One-hour fire-resistive construction shall include the following assemblies and materials:
- 1. Two (2) inch brick or stone veneer;
- 2. Metal lath or perforated rock lath and three-fourths (3/4) inch of plaster;
- 3. Five-eighths (5/8) inch of vermiculite plaster board;
- 4. Five-eighths (5/8) inch fire Code gypsum plaster board.

(Part of Ord. passed 10/3/73: prior Code § 30.43(1)).

14.56.020 Locations.

Detached garages shall be governed by the following unless otherwise provided for in appropriate zoning Codes.

A. Garages of wood frame construction shall not be located less than ten (10) feet from any residence building or principal structure.

Garages of masonry wall construction shall not be located less than five (5) feet from any residence Β. building. (Ord. 95-8-2; part of Ord. passed 10/3/73: prior Code § 30.43(2)).

14.56.030 Area.

All private garages shall be limited in area as regulated in this Section.

- Ordinary construction, (masonry walls), one thousand two hundred (1200) square feet; A.
- Β. Unprotected noncombustible frame construction, one thousand two hundred (1200) square feet;
- C. Wood frame construction, one thousand two hundred (1200) square feet.

(Ord. 95-8-3: part of Ord. passed 10/3/73: prior Code § 30.43(3)).

14.56.040 **Foundations And Footings.**

Attached private garages shall be provided with the same type footings and foundations as required herein for the principal building. Detached private garages may be built with a continuous floating slab of reinforced concrete not less than four (4) inches in thickness. Reinforcement shall be a minimum of six inches by six inches (6 x 6) Number ten by ten(10×10) wire mesh. The slab shall be provided with a thickened edge all around, eight (8) inches wide and eight (8) inches below top of slab. Exterior wall curbs shall be provided not less than four (4) inches above the finished ground grade adjacent to the garage. Bolts three-eighths (3/8) inches in diameter with nuts and washers attached, six (6) inches long, shall be embedded three (3) inches in the concrete curb of detached garages eight (8) feet on centers.

(Part of Ord. passed 10/3/73: prior Code § 30.43(4)).

14.56.050 Floor Surface.

The floor in all private garages shall be of concrete construction. No openings or pits in the floor shall be permitted, except for drainage. (Part of Ord. passed 10/3/73: prior Code § 30.43(5)).

14.56.060 Construction.

Private garages shall be constructed as follows:

A. Load bearing foundation walls and piers, masonry walls, and partitions shall be constructed as regulated herein except as stated above.

B. Detached private garages of wood frame construction shall be constructed with the following minimum requirements:

- 1. Studs may have a maximum spacing of twenty-four (24) inches on centers;
- 2. Diagonal corner bracing may be applied on the inside surface of studs;
- 3. Corner posts may consist of two by four (2 x 4) inch studs or a single four by four (4 x 4) inch stud;

4. Horizontal bracing and collar beams may be two by six (2×6) inch with a maximum spacing of four (4) foot on centers.

C. Attached private garages shall be of the same type of construction as that of the principal building and as further regulated in this Code. (Part of Ord. passed 10/3/73: prior Code § 30.43(6)).

14.56.070 Attached Private Garages.

Private garages may be attached to or made a part of residence buildings when in compliance with the following regulations:

A. All walls in common with a principal building and attached private garage shall be of not less than one (1) hour fire-resistive construction on garage interior.

B. Where a private garage is part of a building having habitable rooms over such garage, there shall be provided a horizontal and vertical separation between the two (2) occupancies of not less than two (2) hour fire-resistive construction, except that in lieu thereof, the spaces between the joists and studs of the floor and wall shall be filled with approved noncombustible material four (4) inches in thickness and protected with one (1) hour fire-resistive construction.

C. An attached private garage may have a door connecting directly into the principal building, provided that floor of such garage is at least eight (8) inches below the floor of such principal building. Such door shall be a self-closing metal-clad door or solid wood door not less than one and three-quarter $(1 \frac{3}{4})$ inches in thickness. A maximum one hundred (100) square inches of one-quarter (¹/₄) inch stationary wire glass window may be permitted in such door.

D. Boilers, furnaces or other heating equipment used in connection with the principal building shall not be installed in private garages. There shall be no openings from a private garage which shall lead directly to a boiler or furnace room unless they conform to the requirements for openings directly to the house. Heating equipment in private garages shall be limited to steam or hot water piping. Unit heaters approved for installation in public garages may be used. (Part of Ord. passed 10/3/73: prior Code § 30.43(7)).

MISCELLANEOUS AND VIOLATIONS

Sections:

14.60.010	Identification Of Products.
14.60.020	Severability.
14.60.030	Violation AbatementPermit Not A Defense.
14.60.040	Failure To Obtain Permit.
14.60.050	Special Requirements For Prefabricated Buildings
14.60.060	Variances.
14.60.070	New Material And Methods.

14.60.010 Identification Of Products.

All materials shall be identified by the approved label, the grade mark, the trademark or by other approved manufacturer's identification. (Part of Ord. passed 10/3/73: prior Code § 30.47).

14.60.020 Severability.

If any Section, subsection, paragraph, clause or provision of this Code shall be adjudged invalid, such adjudication shall apply only to the provisions so adjudged and the rest of this Code shall remain valid and effective. (Part of Ord. passed 10/3/73: prior Code § 30.48).

14.60.030 Violation Abatement--Permit Not A Defense.

A. It shall be the responsibility of the offender to abate the violation as expeditiously as possible and each day that such violation is permitted to continue shall constitute a separate offense.

B. If, in any action, a permit was issued, it shall not constitute a defense, nor shall any error, oversight or dereliction of duty on the part of the Building Inspector constitute a defense. (Part of Ord. passed 10/3/73: prior Code § 30.49).

14.60.040 Failure To Obtain Permit.

It is unlawful to commence work prior to obtaining a permit therefore. Double fees shall be charged if work is commenced prior to the issuance of a permit. (Part of Ord. passed 10/3/73: prior Code § 30.50).

14.60.050 Special Requirements For Prefabricated Buildings.

Notwithstanding any provision of this Code to the contrary or the interpretation of any provision of this Code to the contrary, all residential and commercial prefabricated building assemblies shall meet the following requirements:

A. Approvals. Every prefabricated assembly for a residential building or a commercial building shall have the prior approval of the State of Wisconsin and the Village Building Inspector.

B. Roofs. The maximum roof rafter spacing for a prefabricated residential building shall be sixteen (16) inches on centers and the maximum roof rafter spacing for a prefabricated commercial building shall be twenty-four (24) inches on centers. (Part of Ord. passed 11/12/73: prior Code § 30.46(a))

14.60.060 Variances.

A Variance of this building Code may be had upon application which is filed with and granted by the Village Board. The Village Board may designate the form and contents of an application for a Variance and may require the furnishing of specific information bearing upon the requested Variance. (Part of Ord. passed 11/14/73).

14.60.070 New Materials And Methods.

All new materials, methods of construction, devices and equipment shall be approved by the Building Inspector for use in buildings by the procedure herein provided when they are proved to be the equal of those specifically required by this Code; or he may adopt the recommendations and approvals of the Department of Industry, Labor and Human Relations, state of Wisconsin, or such other committee as may be established by this or other Ordinances of the Village. (Ord. 76-6-1).

TABLES

Sections:	
14.64.010	Table 1Electrical Permits And Inspection.
14.64.020	Table 1Plumbing Permits And Inspection.
14.64.030	Table 1Building Permits And Inspection.
14.64.040	Table 2, Room Areas.
14.64.050	Table J-L, Floor Joists.
14.64.060	Table J-4, Ceiling Joists.
14.64.070	Table R-8, Low Slope Rafters.
14.64.080	Table R-10, High Slope Rafters.
14.64.090	Table No. 4, Nailing Schedule.
14.64.100	Table No. 5, Minimum Girder Size.
14.64.110	Key To Construction Details.

14.64.010 Table 1--Electrical Permits And Inspection.

A. State Code Applies. All electrical work, including the placing of wires and other equipment, shall conform to the Wisconsin State Electrical Code, in the Wisconsin Administrative Code, which Electrical Code is made by reference a part of this Title. A copy of such Wisconsin State Electrical Code shall be kept on file in the office of the Village Clerk/Treasurer.

C. Inspection of Work. After roughing in the wiring of any building and before any such work is covered up, or upon completion of any outside wiring construction work, it shall be the duty of the person doing such work to notify the Building Inspector who shall at once inspect the same. Upon completion of such wiring, the inspector shall be notified and shall inspect the finished work. If he finds that the work conforms to the State Electrical Code, he shall issue a Certificate of Compliance which shall contain the date, and an outline of the result of such inspection, a duplicate of which shall be filed by location in the office of the Building Inspector. It is unlawful to use any such electrical equipment until such certificate has been issued. (Ord. 79-3-1; Ord. 75-3-2 (part): part of Ord. passed 10/3/73: prior Code § 30.51; part of Ord. passed 1/13/69; prior Code § 9.03).

14.64.020 Table 1--Plumbing permits and inspection.

A. State Code Applies. The construction, reconstruction, installation and alteration of all plumbing, drainage and plumbing ventilation shall conform to the Wisconsin Administrative Code Chapter H 62, Plumbing Code adopted by the State Board of Health, effective November 1, 1970 (and as may be subsequently amended), which is made by reference a part of this Title. A copy of such Code shall be kept on file in the office of the Village Clerk/Treasurer.

C. Inspection of Work. Upon completion of the plumbing work on any premises the person doing such work shall notify the Building Inspector before such work is covered up, and the Building Inspector shall at once inspect the work. If he finds that the work conforms to the State Plumbing Code, he shall issue a Certificate of Compliance which shall contain the date and an outline of the result of such inspection, a duplicate of which shall be filed by location in the office of the Building Inspector. No person shall use or permit to be used any plumbing or drainage until it has been inspected and approved by the plumbing inspector. (Ord. 79-3-1; Ord. 75-3-2 (part): part of Ord. passed 10/3/73: prior Code § 30.52; part of Ord. passed 1/13/69; prior Code § 9.04).

14.64.030 Table 1--Building Permits And Inspection.

A. Permit Required. No building or any part thereof shall hereafter be erected or ground broken for the same, within the Village except as hereinafter provided, until a permit therefore shall first have been obtained by the owner, or his authorized agent, from the Building Inspector. The term "building" as used in this Section includes any building or structure, and any enlargement, alteration, heating or ventilating or plumbing

installation, moving or demolishing, or anything affecting the fire hazards or safety of any building or structure.

B. Application. Application for a building permit shall be made in writing upon a form furnished by the Building Inspector and shall state the name and address of the owner of the land and also the owner of the building if different, the legal description of the land upon which the building is to be located, the name and address of the designer, and shall contain such other information as the Building Inspector may require.

C. Plans. With such application there shall be submitted two complete sets of plans and specifications, including a plot plan showing the location of the proposed building with respect to adjoining streets, alleys, lot lines and buildings. Plans for buildings required to comply with the State Building Code shall bear a stamp of approval from the Department of Industry, Labor and Human Relations of the state. Such plans and specifications shall be submitted in duplicate; one set shall be returned after approval as hereinafter provided; the other set shall remain on file in the office of the Building Inspector. All plans and specifications shall be signed by the designer.

D. Waiver of Plans. If the Building Inspector finds that the character of the work is sufficiently described in the application, he may waive the filing of plans for alterations, repairs or moving provided the cost of such work does not exceed two thousand dollars.

E. Approval of Plans. If the Building Inspector determines that the proposed building will comply in every respect with all ordinances of the Village and all applicable laws and orders of the state, he shall officially approve and stamp one set of plans and return it to the owner, and shall issue a building permit therefor which shall be kept and displayed at the site of the proposed building in full view. After being approved, the plans and specifications shall not be altered in any respect which involves any of the abovementioned ordinances, laws and orders, or which involves the safety of the building or occupants, except with the written consent of the Building Inspector. In case adequate plans are presented for part of the building only, the Building Inspector may, at his discretion, issue a permit for a part of the building before receiving the plans and specifications for the entire building.

F. Minor Repairs. The Building Inspector may authorize minor repairs or alterations valued at less than five hundred (\$500.00) dollars, which do not change the occupancy area, structural strength, fire protection, exits, or ventilation of the building without requiring a building permit to be issued. Replacement of any defective portion of a building shall require no building permit.

- G. Fee Schedule for Permits.
- 1. Standard Permit Fees Include:
- a. Minimum Permit Fee for all permits
- b. Residence- One & Two family & Attached garages
 - i. Service Fee for Time Extension

c. Residences & Apartments, Three Family & over, Row Housing, Multiple Family Dwellings,

Institutional

- d. Residences- Additions
- e. Local Business, Office Buildings or Additions thereto
- f. Manufacturing or Industrial (Office Areas to be included under E)
- g. Permit to start construction of footings & foundations
- h. Agriculture Buildings, Detached Garages & Accessory Buildings
- i. All other buildings, structures, alterations & repairs where square footage cannot be calculated

j. Heating, Incinerator Units, Wood Burning Appliances, Energy Recovery Ventilators, Heat Pumps & Split HVAC units

- k. Commercial/Industrial Exhaust Hoods & Exhaust Systems
- 2. Heating & Air Conditioning Distribution Systems
 - i. Air Conditioning, Heat Pumps & Split HVAC units
- 3. Wrecking, Razing, & Interior Demolition Fees may be waived at the discretion of the Building Inspector
 - i. Moving buildings over public ways
- 4. Reinspection

- 5. Plan Examination
- a. One & Two Family Residence
- b. Apartment, Three Family Residence, Row Housing, Multiple Family Buildings
- c. Commercial/Industrial New, Alterations & Additions
- d. Additions to One & Two Family Dwellings
- e. Alterations to One & Two Family Dwellings
- f. Accessory Buildings, greater than 120 sq. ft.
- g. Decks, Swimming Pools
- h. Heating plans, lighting & energy calculations to heating plans submitted separately
- i. Priority Plan Review
- j. Resubmission of previously approved plans
- 6. Special Inspections & Reports
- 7. Wisconsin Uniform Building Permit Seal
- 8. Occupancy Permits
- a. Residential
- b. Commercial/Industrial New, Alterations & Additions
- c. Temporary Occupancy Permits
- 9. Pools- In Ground/Above Ground/Spas
- 10. Decks & Sheds
- 11. Erosion Control Fees:
- a. One & Two Family Lots
- b. Multi-Family Units
- c. Commercial Lots
- d. Industrial Lots
- e. Institutional Lots
- f. Other
- 12. Reroofing, residing & trim
- a. Residential
- b. Commercial
- 13. Other fees charged to the Municipality from other government entities
- 14. Failure to obtain permit before work commences
- a. Failure to call for required inspection(s)
- b. Work not ready at time of scheduled inspection

PERMIT FEES

Residential	
Fire Suppression System	\$150.00
Irrigation System	\$50.00
Driveway	\$50.00
Sidewalk	\$50.00
Renewals or extensions of expired permits 50% of original	
permit fee or	\$50.00 minimum
Commercial/Industrial	
Change of Use	\$50.00
Fire Suppression Systems	\$300.00 (plus engineering fees)
Irrigation Systems	\$200.00
Driveway	\$75.00
Landscaping	\$200.00 (Plan and Inspection)
Stormwater sewer inspection	\$300.00 (or actual engineers fees)
Parking Lot Plan Review & Inspection	\$350.00 (or actual engineers fees)
Illumination Plan Review & Inspection	\$100.00
Renewals or extensions of expired permits	50% of original permit fee or \$50.00 minimum
Publicly owned buildings	50% of original permit fee
Mechanical and Miscellaneous.	
Signs/per side	\$3.00 per square foot or \$50.00 minimum

Drainage plan review 1. Residential \$50.00 Residential-requiring Engineer review (as determined by the Village Building Inspector) \$150.00 2. Commercial \$300.00 Special letters/reports \$40.00 per hour Shoreline Restoration/alteration \$50.00 Grading/filling/erosion control \$100.00 Witness fee \$50.00 per hour Research fee \$75.00 **Emergency Inspection** \$50.00 (in addition to regular fees) Property Record Maintenance Fee (See Section 3.06.010(L)) Fence and Other Permits \$50.00 Any duties other than listed shall be as stated in Article 7 of the Contract for Service.

ZONING PERMIT FEES

Residential—New Single-Family House	\$50.00
Commercial—New Construction	\$100.00
Residential—Addition	\$30.00
Commercial—Addition	\$70.00
Residential—Accessory Structure/Decks	\$25.00
Foundation Waiver—Filing Fee	\$50.00
Information Request	\$25.00 per parcel
Release of Waiver or similar document	\$50.00
Administrative CSM/Lot Line Adjustment	\$50.00
Special Research	\$25.00
Building Permit Report	\$1.00 per page
Rush Surcharge	\$25.00 per parcel or request
Faxing/Mailing Charge	\$2.00 per page

PLUMBING FEES

Closets	\$10.00 each
Lavatory	\$10.00 each
Bath Tubs	\$10.00 each
Kitchen Sinks	\$10.00 each
Showers	\$10.00 each
Laundry Tubs	\$10.00 each
Washer Cont.	\$10.00 each
Floor Drains	\$10.00 each
Water Heaters	\$10.00 each
Dishwashers	\$10.00 each
Disposers	\$10.00 each
Frost Proof	\$10.00 each
Sump Pump	\$10.00 each
Sanitary or Ejector Sumps	\$10.00 each
Water Softeners	\$30.00 each
Boilers	\$10.00 each
Bar Sinks	\$10.00 each
Ice Makers	\$10.00 each
Ice Cube Sinks	\$10.00 each
Inside Sewer	\$30.00 each
Bubblers	\$10.00 each

Grease Traps	\$10.00 each
Studer Vent	\$10.00 each
Storm sewer conductor	\$10.00 each
Catch basins	\$10.00 each
Manhole	\$20.00 each
Sewer tap	\$50.00 each
Storm sewer and sanitary sewer	\$25.00 each
Lateral Connections	
i. 100 feet or less	\$50.00 each
ii. Over 100 feet outside	\$0.50 per foot
iii. Over 100 feet inside	\$0.50 per foot
Private Sewer- Interception Review	\$200.00 each
Renewals or extensions of expired permits 50% of original	
permit fee or	\$25.00 minimum
Double fees shall be charged if work is started before permit	
is issued for all new construction	\$0.05 per sq ft
Base fee	\$50.00

HEATING, VENTILATING AND AIR CONDITIONING PERMIT FEES

All new construction:	\$1.60 per 100 sq ft of vented area	
	\$50.00 minimum permit fee	
	\$0.05per sq ft of all heated areas with \$50.00 base fee	
Furnace:	\$50.00 per unit up to 150,000 BTU	
	Additional \$16.00 for each 50,000 BTU added	
Air Conditioning:	\$50.00 per unit up to 36,000 BTU	
	Additional \$16.00 for each ton or 12,000 BTU added	
Fireplace	\$50.00	
Minimum inspection fees	\$50.00	
Double fees shall be charged if work is started b	before permit is issued	

Requirements before permit is issued

i. Commercial, industrial and buildings housing over two (2) families shall have state approved heating plans with this application.

ii. Residential heating plans, heat loss calculations and specifications of the equipment to be installed.

ELECTRICAL FEES

Outlets, switches and receptacles	\$1.00 each
Light fixtures	\$0.65 each
Fluorescent lamps	\$3.00 each
Arc, mercury, sodium, post lights	\$4.00 each
Electric range	\$10.00 each
Electric water heater	\$8.00 each
Electric well pump	\$8.00 each
Electric clothes dryer	\$8.00 each
Garbage disposal, trash compactor	\$8.00 each
Dishwasher	\$8.00 each
Sump pumps	\$4.00 each
Gas burner, oil burner	\$30.00 each
Electric heating units	\$5.00 each
Electric heat pumps and furnaces	\$1.00 per kW
Refrigerating, air conditioning equipment	\$30.00 each
Audio, signal, communication devices	\$ 1.00 each
Temporary service and service change Inspection	\$25.00 each

Services	
i. 0-100 amps	\$20.00 each
ii. 101-400 amps	\$30.00 each
iii. 401-1000 amps	\$40.00 each
Feeders- #6 and larger	\$20.00 each
Power receptacles 230-480v, 20-60amps	\$ 9.00 each
Dimmers	\$ 3.00 each
Signs	
i. Incandescent .15/stock	\$15.00 minimum
ii. Fluorescent or gas tub .80/transformer	\$ 8.00 minimum
Motors over ¹ / ₄ HP	\$0.50 per HP
Generators, transformers	\$0.50/kW
X-ray machines, motion picture machines, fuel pumps	\$20.00
Wireways, busways, underfloor raceway	\$0.30 per ft
Swimming pool- wiring in ground	\$50.00 each
Swimming pool- wiring above ground	\$50.00 each
Electric metal melting furnace systems	\$0.50/kW
To change, alter, repair or correct an Electrical installation where none	
of the above specific fees apply	\$50.00
Minimum permit fee	\$50.00
Plan review- for all homeowner done work	\$30.00
All new construction	\$0.05 per sq ft
Base fee	\$50.00
Double fees shall be charged if work is started before permit is issued.	
Reinspection fee	\$50.00
Renewals or extensions of expired permits 50% of	
original permit fee or	\$50.00 min.

(Ord. 2013-12-1 (G); Ord. 2004-11-1; Ord. 2000-11-1; Ord. 97-12-1; Ord. 95-2-3: Ord. 89-4-1: Ord. 85-9-1; Ord. 84-5-2; Ord. 80-7-1; Ord. 79-3-1; Ord. 75-3-2 (part): part of Ord. passed 10/3/73: prior Code § 30.53; part of Ord. passed 1/3/69; prior Code § 9.02).

14.64.040 Table 2, Room Areas.

TABLE NO. 2Room Areas

Category	Requirement	Minimum Dimension
Living Room	160 square feet	11'
Living Room with Dining Space	180 square feet	
Dining Room	80 square feet	
Kitchen-usable floor area	60 square feet	6'
Bedroom	100 square feet	
Other habitable rooms	70 square feet	
Bathroom	See Section 30.15(9)(d)	

(Part of Ord. passed 10/3/73).