		TOWNSHIP OF HOME TOWNSHIP OF LILLEY TOWNSHIP OF MERRILL TOWNSHIP OF TROY
OAKLAND	25	All
OCEANA	60	All except
	50	VILLAGE OF HESPERIA VILLAGE OF WALKERVILLE TOWNSHIP OF COLFAX TOWNSHIP OF CRYSTAL TOWNSHIP OF ELBRIDGE TOWNSHIP OF FERRY TOWNSHIP OF GREENWOOD TOWNSHIP OF LEAVITT TOWNSHIP OF NEWFIELD TOWNSHIP OF OTTO
OGEMAW	40	All except
	50	CITY OF ROSE CITY TOWNSHIP OF CUMMINGS TOWNSHIP OF FOSTER TOWNSHIP OF GOODAR TOWNSHIP OF HILL TOWNSHIP OF KLACKING TOWNSHIP OF OGEMAW TOWNSHIP OF ROSE
ONTONAGON	70	All except:
	60	TOWNSHIP OF HAIGHT TOWNSHIP OF INTERIOR TOWNSHIP OF MCMILLAN
OSCEOLA	50	All except:
	40	CITY OF EVART VILLAGE OF HERSEY TOWNSHIP OF EVART TOWNSHIP OF HERSEY TOWNSHIP OF ORIENT TOWNSHIP OF OSCEOLA TOWNSHIP OF SYLVAN
OSCODA	50	All

OTSEGO	50	All except:
	60	VILLAGE OF ELMIRA VILLAGE OF VANDERBILT TOWNSHIP OF CORWITH TOWNSHIP OF ELMIRA TOWNSHIP OF HAYES TOWNSHIP OF LIVINGSTON
OTTAWA	50	All except:
	35	TOWNSHIP OF GEORGETOWN TOWNSHIP OF JAMESTOWN TOWNSHIP OF TALLMADGE TOWNSHIP OF ZEELAND
	40	CITY OF COOPERSVILLE TOWNSHIP OF ALLENDALE TOWNSHIP OF BLENDON TOWNSHIP OF CHESTER TOWNSHIP OF POLKTON TOWNSHIP OF WRIGHT
PRESQUE ISLE	50	All except
	60	TOWNSHIP OF BEARINGER
ROSCOMMON	50	All except
	40	TOWNSHIP OF NESTER
SAGINAW	35	All except:
	30	CITY OF FRANKENMUTH VILLAGE OF BIRCH RUN VILLAGE OF CHESANING VILLAGE OF OAKLEY TOWNSHIP OF ALBEE TOWNSHIP OF BIRCH RUN TOWNSHIP OF BRADY TOWNSHIP OF BRIDGEPORT TOWNSHIP OF CHAPIN TOWNSHIP OF CHESANING TOWNSHIP OF FRANKENMUTH TOWNSHIP OF MAPLE

		GROVE TOWNSHIP OF ST.CHARLES TOWNSHIP OF TAYMOUTH
SANILAC	30	All except:
	25	VILLAGE OF MELVIN TOWNSHIP OF FREMONT TOWNSHIP OF WORTH
	35	VILLAGE OF MINDEN CITY TOWNSHIP OF AUSTIN TOWNSHIP OF GREENLEAF TOWNSHIP OF MINDEN
SCHOOLCRAFT	70	All
SHIAWASSEE	30	All except:
	25	VILLAGE OF BYRON TOWNSHIP OF BURNS
ST. CLAIR	25	All
ST. JOSEPH	30	All except:
	25	CITY OF STURGIS VILLAGE OF BURR OAK VILLAGE OF COLON VILLAGE OF WHITE PIGEON TOWNSHIP OF BURR OAK TOWNSHIP OF COLON TOWNSHIP OF FAWN RIVER TOWNSHIP OF SHERMAN TOWNSHIP OF STURGIS TOWNSHIP OF WHITE PIGEON
TUSCOLA	30	All except:
	35	VILLAGE OF CARO VILLAGE OF CASS CITY VILLAGE OF FAIRGROVE VILLAGE OF GAGETOWN VILLAGE OF REESE VILLAGE OF UNIONVILLE TOWNSHIP OF AKRON TOWNSHIP OF ALMER TOWNSHIP OF COLUMBIA

		TOWNSHIP OF ELKLAND TOWNSHIP OF ELMWOOD TOWNSHIP OF FAIRGROVE TOWNSHIP OF GILFORD TOWNSHIP OF WISNER
VAN BUREN	50	All except:
	30	TOWNSHIP OF PORTER
	35	CITY OF GOBLES VILLAGE OF DECATUR VILLAGE OF LAWTON VILLAGE OF MATTAWAN VILLAGE OF PAW PAW TOWNSHIP OF ALMENA TOWNSHIP OF ANTWERP TOWNSHIP OF BLOOMINGDALE TOWNSHIP OF DECATUR TOWNSHIP OF PAW PAW TOWNSHIP OF PINE GROVE TOWNSHIP OF WAVERLY
WASHTENAW	25	All except:
	20	CITY OF ANN ARBOR CITY OF SALINE CITY OF YPSILANTI VILLAGE OF MANCHESTER TOWNSHIP OF AUGUSTA TOWNSHIP OF BRIDGEWATER TOWNSHIP OF LODI TOWNSHIP OF MANCHESTER TOWNSHIP OF PITTSFIELD TOWNSHIP OF SALINE TOWNSHIP OF SUPERIOR TOWNSHIP OF YORK TOWNSHIP OF YPSILANTI
WAYNE	20	All except

	25	Northville
WEXFORD	60	All except
	50	TOWNSHIP OF CLAM LAKE

R 408.30516 Design criteria.

Rule 516. Table R301.2(1) of the code is amended and figures R301.2(7) and R301.2(8) are added to the code to read as follows:

TABLE R 301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Ground Snow Load	Wind Speed[d] (mph)	Seismic Design Category[f]	Subject to Damage From			Winter Design Temp[e]	Ice Barrier Underlay-ment Required[h]	Flood Hazards[g]	Air Freezing Index[i]	Mean Annual Temp[j]
			Weathering[a]	Frostline depth[b]	Termite[c]					
Table R301.2(5)	90	See Sec.R301.2 .2.1 & Figure R301.2(2)	Severe	42" See Note b	Figure R301.2(6)	See Note e	Yes	See Note g	Figure R403.3(2)	See footnote J

For SI: 1 pound per square foot = 0.0479 kN/m2, 1 mile per hour = 1.609 km/h.

(a) Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible", "moderate" or "severe") for concrete as determined from the weathering probability map [figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652 as listed in chapter 44.

(b) The frost line depth may be modified as provided in section R403.1.4 of the code.

(c) The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local damage.

(d) The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with section R301.2.1.4 of the code.

(e) The winter design temperature criteria shall be taken from appendix D of the Michigan plumbing code, R 408.30701 to R 408.30796.

(f) Design category determined from section R301.2.2.1 of the code.

(g) The jurisdiction shall fill in this part of the table with both of the following:

(i) The date of the jurisdiction's entry into the national flood insurance program (date of adoption of the first code or ordinance for management of flood hazard areas).

(ii) The date(s) of the currently effective FIRM and FBFM or other flood hazard map adopted by the community, as may be amended. Absent (i) or (ii) , flood hazard areas as determined by the state under its administration of the Part 31, floodplain regulatory authority of the natural resources and environmental protection act, 1994 PA 451, MCL 324.101 to 324.90106, shall become the basis for regulation of floodplain development within the community and section R324 of the code shall apply to buildings and structures within those areas.

(h) In accordance with sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1 of the code, for areas where the average daily temperature in January is 25 degrees Fahrenheit (-4 degrees Celsius) or less, or where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES". Otherwise, the jurisdiction shall fill in this part of the table with "NO".

(i) The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (bf-days) from figure R403.3(2) or from the 100-year (99%) value on the national climatic data center data table "air freezing index-USA method (base 32 degrees Fahrenheit)".

(j) The jurisdiction shall fill in this part of the table with the mean annual temperature from the national climatic data center data table "air freezing index-USA method (base 32 degrees Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.

R 408.30517a Sanitary facilities.

Rule 517a. Section R306.1 of the code is amended to read as follows:

R306.1. Sanitary facilities. Every dwelling unit shall be provided with a water closet, lavatory, bathtub or shower, and automatic clothes washer connection.

R 408.30518 Means of egress.

Rule 518. Sections R311.6.4 and R311.2.1 are added to the code and R311.2 of the code is amended to read as follows:

R311.6.4 Modular ramps. Modular ramp systems approved pursuant to the act are not required to comply with the requirements of section R403.1.4 of the code.

R311.2. Door type and size. The required exit door shall be a side-hinged door not less than 3 feet (914 mm) in width and 6 feet (1828.8 mm), 8 inches (2032 mm) in height. Other exterior hinged or sliding doors shall not be less than 24 inches (6096 mm) in width and 6 feet (1828.8 mm), 6 inches (1524 mm) in height.

R311.2.1. Interior doors. Interior doors shall be not less than 24 inches (6096 mm) in width and 6 feet (1828.8), 6 inches (1524 mm) in height.

Exception: Doors to areas less than 10 square feet of floor area.

R 408.30519 Treads and risers.

Rule 519. Sections R311.7.4.1 and R 311.7.4.2 of the code are amended to read as follows:

R311.7.4.1. Riser height. The maximum riser height shall be 8 1/4 inches (210 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm)

R311.7.4.2. Tread depth. The minimum tread depth shall be 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the greatest winder tread depth at the 12-inch (305 mm) walk line shall not exceed the smallest by more than 3/8 inch (9.5 mm).

R 408.30520 Where required in existing dwellings.

Rule 520. Section R315.2 of the code is amended to read as follows:

R315.2. Where required in existing dwellings. Where work requiring a building permit occurs in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with section R315.1.

R 408.30521 Elevation requirements.
Rule 521. Section R322.2.1 of the code is amended to read as follows;
R322.2.1. Elevation requirements. (1) Buildings and structures shall have the lowest floor including basements elevated so the lowest point of the floor's concrete or subfloor surface is 1 foot (305 mm) or more above the design flood elevation. The bottom of the lowest horizontal structural member of the floor system shall not be lower than the design flood elevation. Compliance with this elevation requirement shall be based upon measurement taken from the floor surface without the final floor covering and from the bottom of the lowest horizontal structural member of the floor system.
(2) Crawl space interior floor grade elevation shall comply with R408.6 of the code.
(3) Basement floors that are below grade on all sides shall be considered lowest floors and shall be elevated so that the lowest point of the floor surface is 1 foot (305 mm) or more above the design flood elevation. Compliance with this elevation requirement shall be based upon measurement taken from the floor surface without the final floor covering.
Exception: Enclosed areas below the design flood elevation, including basements that have floors which are not below grade on all sides, shall meet the requirements of section R322.2.2 of the code.

R 408.30522a Vapor retarders.
Rule 522a. Section R601.3 of the code is amended to read as follows:
R601.3. Vapor retarders. Class I or II vapor retarders shall be provided on the interior side of frame walls in zones 5, 6, 7, 8 and marine 4.
Exceptions:
1. Class III vapor retarders shall be installed on the interior side of frame walls when insulating sheathing having a class I or II perm rating is installed on the exterior side of the wall.
2. Class I or II vapor retarders shall not be installed on the interior side of either of the following:
a. Frame basement walls.
b. The below grade portion of any frame wall.
3. Construction where moisture or its freezing will not damage the materials.

R 408.30522b Air freezing index.
Rule 522b. Table R403.3(2) of the code is amended to read as follows:

Table R403.3(2)
Air Freezing Index for Michigan Locations by County

1500 or less	2000	2500	3000	3500	4000
Berrien Branch Cass Kalamazoo Macomb Ottawa St. Clair	All counties not listed	Alger Charlevoix Cheboygan Chippewa Crawford Delta	Baraga Dickinson Iron Keweenaw Marquette	Gogebic Houghton Ontonagon	______

St. Joseph		Emmet Iosco Kalkaska Lake Luce Mackinac Menominee Missaukee Montmorency Ogemaw Osceola Otsego Roscommon Schoolcraft Wexford			

R 408.30527 Standards.

Rule 527. Section M2001.1.1 of the code is amended to read as follows:

M2001.1.1. Standards. (1) Oil fired boilers and their control systems shall be listed and labeled in accordance with UL726 listed in chapter 44.

(2) Gas fired boilers and their control systems shall be listed and labeled in accordance with ANSI Z21.13 or UL795 listed in chapter 44.

(3) Gas-fired boilers shall conform to the requirements listed in chapter 24 of the code.

(4) Electric boilers and their control systems shall be listed and labeled in accordance with UL834 listed in chapter 44.

R 408.30528 Terms defined in other codes.

Rule 528. Section G2402.3 of the code is amended to read as follows:

G2402.3. Terms defined in other codes. Where terms are not defined in the code and are defined in the Michigan electrical code, R 408.30801 to R 408.30880, Michigan building code, R 408.30401 to R 408.30547, international fire code and international fuel gas code listed in chapter 44, Michigan mechanical code, R 408.30901 to R 408.30998 or Michigan plumbing code, R 408.30701 to R 408.30796, the terms shall have the meanings ascribed to them as in those codes.

R 408.30528a CSST.

Rule 528a. Section G2411.1.1 (310.1.1) of the code is amended to read as follows:

G2411.1.1. CSST. Corrugated stainless steel tubing (CSST) gas piping systems shall be bonded in accordance with section E3609.7.2

R 408.30530 Requirements for discharge pipe.

Rule 530. Section P2803.6.1 of the code is amended to read as follows:

P2803.6.1. Requirements for discharge pipe. Relief valves shall not discharge so as to be a hazard, a potential cause of damage, or a nuisance. A relief valve discharge pipe shall be provided for each individual relief valve and shall meet all of the following:

(a) Shall terminate atmospherically not more than 4 inches (102 mm) from the floor with an unthreaded end.
(b) Shall not be interconnected.
(c) Valves shall not be connected in the relief valve discharge pipe.
(d) Shall be rigid pipe approved for water distribution, with a minimum temperature rating of 210 degrees Fahrenheit.
(e) Shall have the same nominal inside diameter as the relief valve outlet and shall drain by gravity flow.
(f) Shall discharge to the floor, or to the pan serving the water heater or storage tank, or to a waste receptor.
The outlet of a pressure, temperature, or other relief valve shall not be directly connected to the drainage system.

R 408.30531 Duct construction.
Rule 531. Table M1601.1.1(2) of the code is amended to read as follows:

Table M1601.1.1(2)
Gauges of Metal Ducts and Plenums Used for Heating or Cooling

Type of Duct	Size (inches)	Minimum thickness (inch)	Equivalent Galvanized Sheet Gauge	Approximate Aluminum B&S Gauge
Round ducts and enclosed rectangular ducts	14 or less over 14	0.13 0.016	30 28	26 24
Exposed rectangular ducts	14 or less over 14	0.016 0.019	28 26	24 22

For SI: 1 inch = 25.4 mm

R 408.30534 Venting.
Rule 534. Section P3105.1 is amended and section 3105.4 and figure P3105.4 are added to the code and figure N3 in appendix N of the code is amended to read as follows:
P3105.1. Distance of trap from vent. Each fixture trap shall have a protecting vent located so that the slope and the developed length in the fixture drain from the trap weir to the vent fitting are within the requirements in table P3105.1 of the code.
P3105.4. Vertical leg for waste fixture drains. A vertical leg (see figure P3105.4) is permitted within a fixture drain of a waste fixture in accordance with the following criteria:
(1) Minimum trap diameter shall be in accordance with table P3201.7 of the code.
(2) The diameter of section A shall be equal to the diameter of the trap.
(3) The length of section A shall not be less than 8 inches (2032 mm) and in accordance with table P3105.1 of the code.
(4) The diameter of section B shall be 1 pipe size larger than the diameter of Section A.
(5) The length of section B shall not be more than 36 inches (9144 mm).
(6) The diameter of section C shall be 1 pipe size larger than the diameter of section B.
(7) The total length of section A and section C shall not exceed the distance allowed in table P3105.1 of the code.

(8) Bends shall be the diameter of the largest connected section.

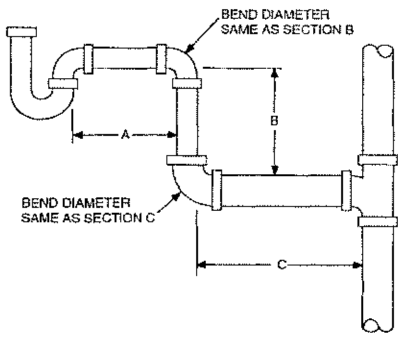
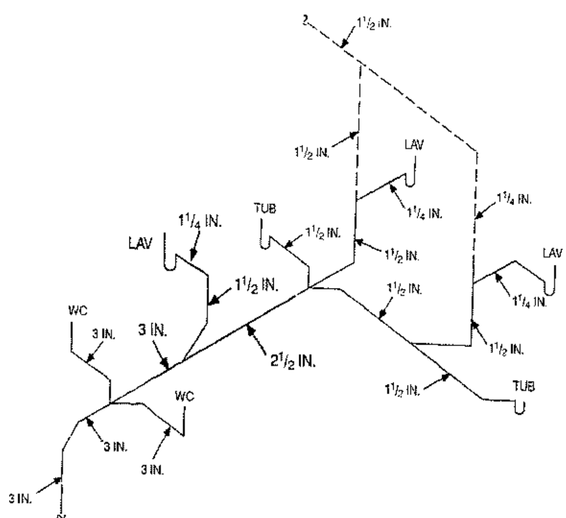


FIGURE P3105.4
VERTICAL LEG FIXTURE DRAIN SCHEMATIC

Figure N3. Typical horizontal wet venting.



For SI: 1 inch = 25.4 mm.

Note: The lower lavatory connected to the horizontal part of the wet vent illustrates a portion of Section P3105.4 Vertical leg for waste fixture drains.

FIGURE N3
TYPICAL HORIZONTAL WET VENTING

R 408.30536 Electrical, general, electrical conductors and connections and electrical grounding.

Rule 536. Sections E3401.1, E3401.2, E3401.3, E3406.7, E3908.8.1, E3908.8.2, and table E3602.2 of the code are amended to read as follows:

E3401.1. Applicability. The provisions of chapters 34 to 43 of the code shall establish the general scope of the electrical system and equipment requirements of the code. Chapters 34 to 43 of the code cover those wiring methods and materials most commonly encountered in the construction of 1- and 2-family dwellings and structures regulated by the code. Other wiring methods, materials, and subject matter covered in the Michigan electrical code, R 408.30801 to R 408.30880 are also allowed by the code.

E3401.2. Scope. Chapters 34 to 43 of the code shall cover the installation of electrical systems, equipment, and components indoors and outdoors that are within the scope of the code, including services, power distribution systems, fixtures, appliances, devices, and appurtenances. Services within the scope of the code shall be limited to 120/240 volt, 0- to 400- ampere, single-phase systems. These chapters specifically cover the equipment, fixtures, appliances, wiring methods, and materials that are most commonly used in the construction or alteration of 1- and 2-family dwellings and accessory structures regulated by the code. The omission from these chapters of any material or method of construction provided by the Michigan electrical code, R 408.30801 to R 408.30880, shall not be construed as prohibiting the use of such material or method of construction. Electrical systems, equipment, or components not specifically covered in these chapters shall comply with the applicable provisions of the Michigan electrical code, R 408.30801 to R 408.30880.

E3401.3 Not covered. Chapters 34 to 43 do not cover the following:

(1) Installations under the exclusive control of communications utilities and electric utilities.

(2) Services over 400 amperes.

E3406.7 Conductors of the same circuit. All conductors of the same circuit and, where used, the grounded conductor and all equipment grounding conductors and bonding conductors shall be contained within the same raceway, trench, cable, or cord.

TABLE E3602.2
MINIMUM SERVICE LOAD CALCULATION

LOADS AND PROCEDURE
3 volt-amperes per square foot of floor area for general lighting and general use receptacle outlets.
Plus
1,500 volt-amperes total number of 20-ampere-rated small appliance and laundry circuits.
Plus
The nameplate volt-ampere rating of all fastened-in-place, permanently connected or dedicated circuit-supplied motors and appliances such as ranges, ovens, cooking units, clothes dryers, and water heaters.
Apply the following demand factors to the above subtotal:
The minimum subtotal for the loads above shall be 100% of the first 10,000 volt-amperes of the

sum of the above loads plus 40% of any portion of the sum that is in excess of 10,000 volt-amperes.
Plus the largest of the following:
Nameplate rating(s) of the air-conditioning and cooling equipment.
Nameplate rating(s) of the heating where a heat pump is used without any supplemental electric heating.
Nameplate rating of the electric thermal storage and other heating systems where the usual load is expected to be continuous at the full nameplate value. Systems qualifying under this selection shall not be figured under any other category in this table.
One hundred percent of nameplate rating of the heat pump compressor and 65 percent of the supplemental electric heating load for central electric space-heating systems. If the heat pump compressor is prevented from operating at the same time as the supplementary heat, the compressor load does not need to be added to the supplementary heat load for the total central electric space-heating load.
Sixty-five percent of nameplate rating(s) of electric space-heating units if less than 4 separately controlled units.
Forty percent of nameplate rating(s) of electric space-heating units of 4 or more separately controlled units.
The minimum total load in amperes shall be the volt-ampere sum calculated above divided by 240 volts.

E3908.8.1. Grounding of flexible metal conduit. Flexible metal conduit shall not be permitted as an equipment grounding conductor.

E3908.8.2. Grounding of liquid-tight flexible metal conduit. Liquid-tight flexible metal conduit shall not be permitted as an equipment grounding conductor.

R 408.30536a General requirements.

Rule 536a. Sections E3402.2, E3403.3, E3404.13, E3405.4, E3407.5 and Figure E3405.1 are amended to read as follows:

E3402.2 Penetrations of fire-resistance-rated assemblies. Electrical installations in hollow spaces, vertical shafts, and ventilation or air-handling ducts shall be made so that the possible spread of fire or products of combustion will not be substantially increased. Electrical penetrations through fire-resistance-rated walls, partitions, floors, or ceilings shall be protected by approved methods to maintain the fire-resistance-rating of the element penetrated. Penetrations of fire-resistance-rated walls shall be limited as specified in section R302.4.

E3403.3 Listing and labeling. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling.

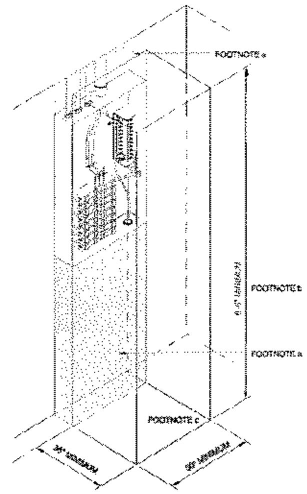


FIGURE E3405.1a, b, c, d, e
WORKING SPACE AND CLEARANCES
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
a. Equipment, piping and ducts foreign to the electrical installation shall not be placed in the shaded areas extending from the floor to a height of 6 feet above the panelboard enclosure, or to the structural ceiling, whichever is lower.
b. The working space shall be clear and unobstructed from the floor to a height of 6.5 feet.
c. The working space shall not be used for storage.
d. Panelboards, service equipment and similar enclosures shall not be located in bathrooms, toilet rooms, clothes closets or over the steps of a stairway.
e. Such work spaces shall be provided with artificial lighting where located indoors.

E3405.4 Location of working spaces and equipment. Required working space shall not be used for storage. Panelboards and overcurrent protection devices shall not be located in clothes closets, in bathrooms, or over the steps of a stairway.

E3407.5 Polarity of connections. No grounded conductor shall be attached to any terminal or lead so as to reverse the designated polarity.

R 408.30537 Separate outdoor electric space conditioning equipment.

Rule 537. Section E3601.6.3 and E3601.6.4 are added to the code and sections E3609.7, E3609.7.1, and E3609.7.2 are amended to read as follows:

E3601.6.3. Separate outdoor electric space conditioning equipment. A service disconnect for separately metered outdoor electric space conditioning equipment may be located immediately adjacent to the outdoor meter cabinet. A permanent plaque or directory shall be installed at each service disconnect location denoting the other services, feeders, and branch circuits supplying a building or structure and area served by each service, feeder, and branch circuit.

E3601.6.4 Electric vehicle charging system service disconnect. A separate disconnect for electric vehicle charging systems shall be permitted. The disconnect shall be located immediately adjacent to the outdoor meter cabinet. A permanent plaque or directory shall be installed at each service disconnect location identifying the other services, feeders, and branch circuits supplying a building or structure and area served by each service, feeder, and branch circuit. The disconnect shall not be required to be grouped with the service disconnects for the structure.

E3609.7 Bonding other metal piping. Where installed in or attached to a building or structure, a metal piping system, including gas piping, capable of becoming energized shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the 1 or more grounding electrodes used.

E3609.7.1 Other than corrugated stainless steel tubing (CSST).

The bonding jumper shall be sized in accordance with table 3908.12 using the rating of the circuit capable of energizing the piping. The equipment grounding conductor for the circuit that is capable if energizing the piping may serve as the bonding means.

E3609.7.2 Corrugated stainless steel tubing (CSST).

Corrugated stainless steel tubing gas piping systems shall be bonded by connection to a metallic piping segment or fitting, either outside or inside the building, between the individual gas meter and the first CSST fitting. The bonding jumper shall be sized in accordance with Table E3603.1 based on the size of the service-entrance conductor or feeder supplying each occupancy and as permitted in Table E3603.1 note (d) but not smaller than 6 American Wire Gauge (AWG) copper (or equivalent).

R 408.30537a Wiring methods.

Rule 537a. Sections E3803.6 and E3803.9 and Tables E3801.2, E3801.4, and E3802.1 are amended to read as follows:

E3803.6 Raceway seals. Conduits or raceways shall be sealed or plugged at either or both ends where moisture will enter and contact live parts. Sealants shall be identified for use with the cable insulation, shield, or other components.

E3803.9 Earth movement. Where direct buried conductors, raceways, or cables are subject to movement by settlement or frost, direct buried conductors, raceways, or cables shall be arranged to prevent damage to the enclosed conductors or to equipment connected to the raceways.

Table E3801.2

ALLOWABLE WIRING METHODS

ALLOWABLE WIRING METHOD	DESIGNATED ABBREVIATION
Armored cable	AC
Electrical metallic tubing	EMT
Electrical nonmetallic tubing	ENT
Flexible metal conduit	FMC
Intermediate metal conduit	IMC
Liquidtight flexible conduit	LFC
Metal-clad cable	MC
Nonmetallic sheathed cable	NM
Rigid polyvinyl chloride conduit	PVC
Rigid metallic conduit	RMC
Service entrance cable	SE
Surface raceways	SR
Underground feeder cable	UF
Underground service cable	USE

Table E3801.4

ALLOWABLE APPLICATIONS FOR WIRING METHODS[a, b, c, d, e, f, g, h, i, j, k]

ALLOWABLE APPLICATIONS (application allowed where marked with an "A")	AC	EMT	ENT	FMC	IMC RMC PVC	LFC[a]	MC	NM	SR	SE	UF	USE
Services	–	A	A[h]	A[i]	A	A[i]	A	–	–	A	–	A
Feeders	A	A	A	A	A	A	A	A	–	A[b]	A	A[b]
Branch circuits	A	A	A	A	A	A	A	A	A	A[c]	A	–
Inside a building	A	A	A	A	A	A	A	A	A	A	A	–
Wet locations exposed to sunlight	–	A	A[h]	–	A	A	A	–	–	A	A[e]	A[e]
Damp locations	–	A	A	A[d]	A	A	A	–	–	A	A	A
Embedded in noncinder concrete in dry location	–	A	A	–	A	A[j]	–	–	–	–	–	–
In noncinder concrete in contact with grade	–	A[f]	A	–	A[f]	A[j]	–	–	–	–	–	–
Embedded in plaster not exposed to dampness	A	A	A	A	A	A	A	–	–	A	A	–
Embedded in masonry	–	A	A	–	A[f]	A	A	–	–	–	–	–
In masonry voids and cells exposed to dampness or below grade line	–	A[f]	A	A[d]	A[f]	A	A	–	–	A	A	–
Fished in masonry voids	A	–	–	A	–	A	A	A	–	A	A	–
In masonry voids and cells not exposed to dampness	A	A	A	A	A	A	A	A	–	A	A	–
Run exposed	A	A	A	A	A	A	A	A	A	A	A	–
Run exposed and subject to physical damage	–	–	–	–	A[g]	–	–	–	–	–	–	–
For direct burial	–	A[f]	–	–	A[f]	A	A[f]	–	–	–	A	A

For SI: 1 foot = 304.8 mm.

a. Liquid-tight flexible nonmetallic conduit without integral reinforcement within the conduit wall shall not exceed 6 feet in length.

b. The grounded conductors shall be insulated except where used to supply other buildings on the same premises. Type USE cable shall not be used inside buildings.

c. The grounded conductor shall be insulated.

d. Conductors shall be a type approved for wet locations and the installation shall prevent water from entering other raceways.
e. Shall be listed as "sunlight resistant."
f. Metal raceways shall be protected from corrosion and approved for the application. Aluminum RMC requires approved supplementary corrosion protection.
g. PVC shall be Schedule 80.
h. Shall be listed as "sunlight resistant: where exposed to the direct rays of the sun.
i. Conduit shall not exceed 6 feet in length.
j. Liquid-tight flexible nonmetallic conduit is permitted to be encased in concrete where listed for direct burial and only straight connectors listed for use with LFNC are used.
k. In wet locations under any of the following conditions
(i)The metallic covering is impervious to moisture.
(ii)A lead sheath or moisture-impervious jacket is provided under the metal covering.
(iii)The insulated conductors under the metallic covering are listed for use in wet locations and a corrosion-resistant jackets is provided over the metallic sheath.

TABLE E3802.1
GENERAL INSTALLATION AND SUPPORT REQUIREMENTS FOR WIRING METHODS[a, b, c, d, e, f, g, h, i, j, k]

INSTALLATION REQUIREMENTS (Requirement applicable only to wiring methods marked "A")	AC MC	EMT IMC RMC	ENT	FMC LFC	NM UF	PVC	SE	SR[a]	USE
Where run parallel with the framing member or furring strip, the wiring shall be not less than 1 ¼ inches from the edge of a furring strip or a framing member such as a joist, rafter, or stud or shall be physically protected.	A	–	A	A	A	–	A	–	–
Bored holes in framing members for wiring shall be located not less than 1 ¼ inches from the edge of the framing member or shall be protected with a minimum 0.0625-inch steel plate or sleeve, a listed steel plate, or other physical protection.	A[k]	–	A[k]	A[k]	A[k]	–	A[k]	–	–
Where installed in grooves, to be covered by wallboard, siding, paneling, carpeting, or similar finish, wiring methods shall be protected by 0.0625-inch-thick steel plate, sleeve, or equivalent, a listed steel plate or by not less than 1 ¼-inch free space for the full length of the groove in which the cable or raceway is	A	–	A	A	A	–	A	A	A

installed.									
Securely fastened bushings or grommets shall be provided to protect wiring run through openings in metal framing members	–	–	A[j]	–	A[j]	–	A[j]	–	–
The maximum number of 90-degree bends shall not exceed 4 between junction boxes.	–	A	A	A	–	A	–	–	–
Bushings shall be provided where entering a box, fitting, or enclosure unless the box or fitting is designed to afford equivalent protection.	A	A	A	A	–	A	–	A	–
Ends of raceways shall be reamed to remove rough edges.	–	A	A	A	–	A	–	A	–
Maximum allowable on center support spacing for the wiring method in feet.	4.5[b,c]	10[l]	3[b]	4.5[b]	4.5[i]	3[d, l]	2.5[e]	–	2.5[e]
Maximum support distance in inches from box or other terminations.	12[b, f]	36	36	12[b, g]	12[h, i]	36	12	–	12

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad.

a. Installed in accordance with listing requirements.
b. Supports not required in accessible ceiling spaces between light fixtures where lengths do not exceed 6 feet.
c. Six feet for MC cable.
d. Five feet for trade sizes greater than 1 inch.
e. Two and one-half feet where used for service or outdoor feeder and 4.5 feet where used for branch circuit or indoor feeder.
f. Twenty-four inches where flexibility is necessary.
g. Thirty-six inches where flexibility is necessary.
h. Within 8 inches of boxes without cable clamps.
i. Flat cables shall not be stapled on edge.
j. Bushings and grommets shall remain in place and shall be listed for the purpose of cable protection.
k. See section R502.8 and R802.7 for additional limitations on the location of bored holes in horizontal framing members.
l. Raceways shall be permitted to be unsupported where the raceway is not more than 900 millimeters (36 inches) long and remains in unbroken lengths (without coupling). Such raceways shall terminate in an outlet box, junction box, device box, cabinet, or other termination at each end of the raceway.

R 408.30537b Power and lighting distribution.

Rule 537b. Sections E 3902.11, E3905.3.2, E3908.9, and E3908.10, are amended to read as follows:

E3902.11 Arc-fault protection of bedroom outlets. All branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in bedrooms shall be protected by a combination type or branch/feeder type arc-fault circuit interrupter installed to provide protection of the entire branch circuit.

Exception: The location of the arc-fault circuit interrupter shall be permitted to be at other than the origination of the branch circuit provided that:

1. The arc-fault circuit interrupter is installed within 6 feet (1.8 m) of the branch circuit overcurrent device as measured along the branch circuit conductors and
2. The circuit conductors between the branch circuit overcurrent device and the arc-fault circuit interrupter are installed in a metal raceway or a cable with a metallic sheath.

E3905.3.2 Securing to box. All permitted wiring methods shall be secured to the boxes.

Exception: Where nonmetallic-sheathed cable is used with boxes not larger than a nominal size of 2 ¼ inches by 4 inches (57 mm by 102 mm) mounted in walls or ceilings, and where the cable is fastened within 8 inches (2032 mm) of the box measured along the sheath, and where the sheath extends through a cable knockout not less than ¼ inch (6.4 mm), securing the cable to the box shall not be required. Multiple cable entries shall be permitted in a single cable knockout opening.

E3908.9 Equipment fastened in place or connected by permanent wiring methods. Noncurrent-carrying metal parts of equipment, raceways and other enclosures, where required to be grounded, shall be grounded by 1 of the following methods:

(a) By any of the equipment grounding conductors permitted by sections E3908.8 and E3908.8.3.

(b) By an equipment grounding conductor contained within the same raceway, cable or cord, or otherwise run with the circuit conductors. Equipment grounding conductors shall be identified in accordance with section E3407.2.

E3908.10 Methods of equipment grounding. Fixtures and equipment shall be considered grounded where mechanically connected to an equipment grounding conductor as specified in sections E3908.8 and E3908.8.1. Wire type equipment grounding conductors shall be sized in accordance with section E3908.12.

R 408.30537c Devices and luminaires

Rule 537c. Sections E4002.2, E4002.15, and Table E4002.1 are amended to read as follows:

E4002.2 Grounding type. Receptacles installed on 15- and 20-ampere-rated branch circuits shall be of the grounding type and connected to an equipment grounding conductor.

Exception: Replacement receptacles as permitted by section E4002.15.

E4002.15 Replacements. Replacement of receptacles shall comply with the following as applicable.

(1) Grounding-type receptacles. Where a grounding means exists in the receptacle enclosure or an equipment grounding conductor shall be used and shall be connected to the equipment grounding conductor.

(2) Ground-fault circuit interrupters. Ground-fault circuit-interrupter protected receptacles shall be provided where replacements are made at receptacle outlets that are required to be so protected elsewhere in this code.

(3) Non-grounding-type receptacles. Where attachment to an equipment grounding conductor does not exist in the receptacle enclosure, the installation shall comply with 1 of the following:

(a) A non-grounding-type receptacle shall be permitted to be replaced with another non-grounding-type receptacle.

(b) A non-grounding-type receptacle may be permitted to be replaced with a ground-fault circuit interrupter-type of receptacle. These receptacles shall be marked "no equipment ground". An equipment grounding conductor shall not be connected from the ground-fault circuit-interrupter-type receptacle to any outlet supplied from the ground-fault circuit-interrupter receptacle.

(c) A non-grounding type receptacle may be permitted to be replaced with a grounding-type receptacle where supplied through a ground-fault circuit interrupter. Grounding-type receptacles supplied through the ground-fault circuit interrupter shall be marked "GFCI protected" and "no equipment ground." An equipment grounding conductor shall not be connected between the grounding-type receptacles.

Table E4202.1
ALLOWABLE APPLICATIONS FOR WIRING METHODS[a, b, c, d, e, f, g, h, l]

WIRING LOCATION OR PURPOSE (application allowed where marked with an "A")	AC, FMC, NM, SR, SE	EMT	ENT	IMC[j], RMC[j], PVC	LFMC	LFNMC	UF	MC[k]	FLEX CORD
Panelboard(s) that supply pool equipment: from service equipment to panelboard	A[b, e] SR not permitted	A[c]	A[b]	A	–	A	A[e]	A[e]	–
Wet-niche and no-niche luminaries: from branch circuit OCPD to deck or junction box	AC[b] only	A[c]	A[b]	A	–	A	–	A[b]	–
Wet-niche and no-niche luminaries: from deck or junction box to forming shell	–	–	–	A[d]	–	A	–	–	A[h]
Dry niche: from branch circuit OCPD to luminaries	AC[b] only	A[c]	A[b]	A	–	A	–	A[b]	–
Pool-associated motors: from branch circuit OCPD to motor	A[b]	A[c]	A[b]	A	A[f]	A[f]	A[b]	A	A[h]
Packaged or self-contained outdoor spas and hot tubs with underwater luminaire: from branch circuit OCPD to spa or hot tub	AC[b] only	A[c]	A[b]	A	A[f]	A[f]	–	A[b]	A[h]
Packaged or self-contained outdoor spas and hot tubs without underwater luminaire: from branch circuit OCPD to spa or hot tub	A[b]	A[c]	A[b]	A	A[f]	A[f]	A[b]	A	A[h]
Indoor spas and hot tubs, hydromassage bathtubs, and other pool, spa or hot tub associated equipment: from branch circuit OCPD to equipment	A[b]	A[c]	A[b]	A	A	A	A	A	A[h]
Connection at pool lighting transformers	AC[b] only	A[c]	A[b]	A	A[g]	A[g]	–	A[b]	–

For SI: 1 foot = 304.8 mm.

a. For all wiring methods, see section E4205 for equipment grounding conductor requirements.
b. Limited to use within buildings.
c. Limited to use on or within buildings.
d. Metal conduit shall be constructed of brass or other approved corrosion-resistant metal.
e. Permitted only for existing installations in accordance with the exception to section E4205.6.
f. Limited to use at pool, spa, or hot tub equipment where flexibility is necessary. For spas and hot tubs, the maximum length shall be 6 feet.
g. Limited to use in individual lengths not to exceed 6 feet. The total length of all individuals runs of LFMC and LFNMC shall not exceed 10 feet. LFNMC type B shall be limited to lengths not exceeding 10 feet.
h. Flexible cord shall be installed in accordance with section E4202.2
i. Nonmetallic conduit shall be rigid polyvinyl chloride conduit type PVC or reinforced thermosetting resin conduit type RTRC.
j. Aluminum conduits shall not be permitted in the pool area where subject to corrosion.
k. Where installed as direct burial cable or in wet locations, type MC cable shall be listed and identified for the location.
l. See section E4202.3 for listed, double-insulated pool pump motors.

R 408.30538 Combustible insulation.

Rule 538. Section 302.13 of the code is amended to read as follows:

302.13. Combustible insulation. Combustible insulation shall be separated a minimum of 3 inches (76 mm) from recessed lighting fixtures, fan motors, and other heat-producing devices.

Exception: When heat-producing devices are listed for lesser clearances, combustible insulation complying with the listing requirements shall be separated in accordance with the conditions stipulated in the listing.

Recessed lighting fixtures installed in the building thermal envelope shall be installed in accordance with the manufacturer's installation instructions.

R 408.30539a Automatic fire sprinkler systems.

Rule 539a. Sections R313.1, P2902.5.4 and P2904.1 of the code are amended to read as follows:

R313.1. Design and installation. Where installed, automatic residential fire sprinkler systems shall conform to the design and installation requirements of the national fire protection association (NFPA) standard 13D or P2904.1.

P2902.5.4. Connections to automatic fire sprinkler systems. The potable water supply to automatic fire sprinkler systems shall be protected against backflow by a double check-valve assembly or a reduced pressure principle backflow preventer.

Exception: Isolation of the water distribution system is not required for deluge, preaction, or dry pipe system.

P2904.1. General. Where installed, residential fire sprinkler systems, or portions thereof, shall be in accordance with NFPA 13D.

R 408.30540 Elevators and platform lifts.

Rule 540. Sections R321.1, R321.2, and R321.3 of the code are amended to read as follows:

R321.1. Elevators. Where provided, passenger elevators, limited-use/limited-application elevators or private residence elevators shall comply with the Michigan elevator rules R 408.7001 to R 408.8695.

R321.2. Platform lifts. Where provided, platform lifts shall comply with the Michigan elevator rules R 408.7001 to R 408.8695.

R321.3. Accessibility. Elevators or platform lifts that are part of an accessible route required by chapter 11 of the Michigan building code, shall comply with ICC A117.1, as listed in chapter 44, and 1966 PA 1, MCL125.1354 to MCL 125.1356.

R 408.30541 Solid fuel burning equipment.

Rule 541. Section M1905 is added to the code to read as follows:

M1905. General. Solid fuel burning equipment shall be listed and labeled in accordance with section M1302.1, installed in accordance with the manufacturer's installation instructions, and NFPA 211-2006 requirements.

R 408.30542 Duct insulation/floor register location.

Rule 542. Section M1601.4.5 of the code is amended and section M1601.4.10 is added to the code to read as follows:

M1601.4.5. Duct insulation. Duct insulation shall be installed in accordance with the following requirements:

(1) A vapor retarder having a maximum permeance of 0.05 perm [(2.87 ng/(s · m^2 · Pa)] in accordance with ASTM E 96, as listed in chapter 44, or aluminum foil with a minimum thickness of 2 mils (0.051 mm), shall be installed on the exterior of insulation on cooling supply ducts that pass through nonconditioned spaces conducive to condensation.

(2) Exterior duct systems shall be protected against the elements.

(3) Duct coverings shall not penetrate a fire blocked wall or floor.

(4) All portions of the air distribution system shall be installed in accordance with section M1601 and be insulated to an installed R-6 when system components are located within the building but outside the conditioned space, and R-8 when located outside to the building. When located within a building envelope assembly, at least R-8 shall be applied between the duct and that portion of the assembly farthest from conditioned space.

Exception: Exhaust air ducts and portions of the air distribution system within appliances or equipment.

M1601.4.10 Floor register location. Floor registers located in room or spaces containing water closets shall be located a minimum of 3 feet from the water closet.

R 408.30544 Light, ventilation, and heating.

Rule 544. Section R303.4.2 of the code is amended to read as follows:

R303.4.2. Exhaust openings. Outside exhaust openings shall be located as not to create a nuisance. Exhaust openings shall not be directed onto walkways. Exhaust openings shall not terminate within 3 feet of a ventilated section in a soffit.

R 408.30544a Townhouses.

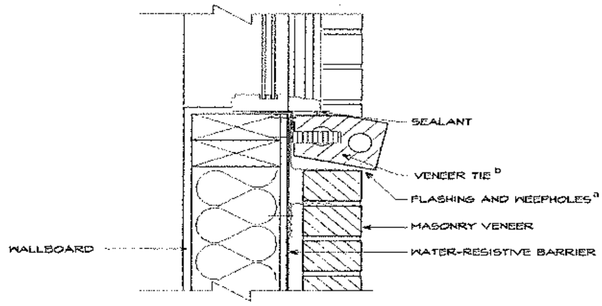
Rule 544a. Section R302.2 of the code is amended to read as follows:

R302.2. Townhouses. Each townhouse shall be considered a separate building and shall be separated by A 2-hour fire-resistance-rated wall assembly tested in accordance with ASTME E 119 or UL 263 with exposure from both sides.

Exception: Where the building is provided with an automatic fire sprinkler system installed in accordance with NFPA 13D or P2904.1, a common 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263, as listed in chapter 44, is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts, or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with chapters 34 to 43. Penetrations of electrical outlet boxes shall be in accordance with section R302.4.

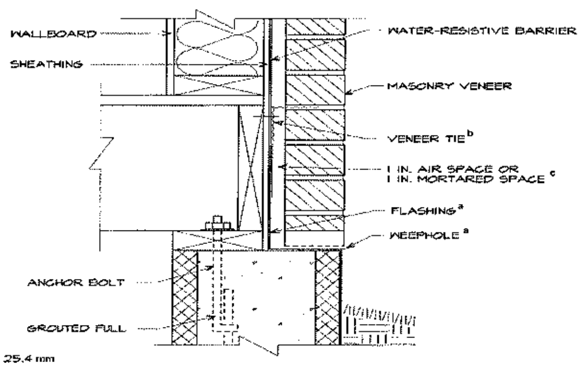
R 408.30545 Masonry veneer wall covering.

Rule 545. figures R703.7, R703.7.2.1, and R703.7.2.2, of the code are amended to read as follows:



FOR SI: 1 INCH = 25.4 mm

FIGURE R703.7
MASONRY VENEER WALL DETAILS
(CONTINUED)



FOR SI: 1 INCH = 25.4 mm

FIGURE R703.7
MASONRY VENEER WALL DETAILS
(CONTINUED)

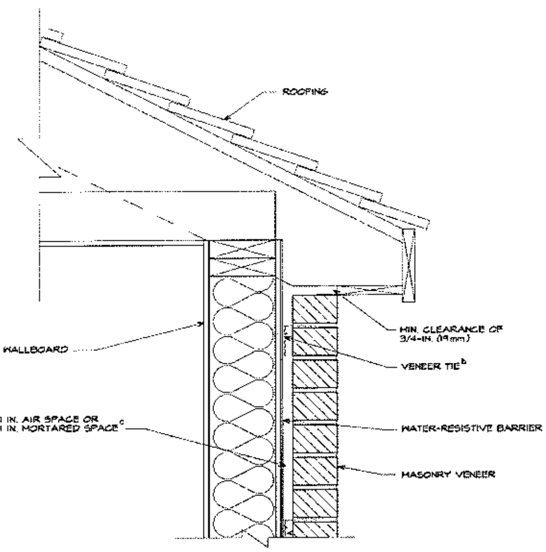


FIGURE R703.7-CONTINUED
MASONRY VENEER WALL DETAILS

FOR SI: 1 INCH = 25.4 mm

a. SEE SECTIONS R703.7.5, R703.7.6 AND R703.8.
b. SEE SECTIONS R703.2 AND R703.7.4.
c. SEE SECTIONS R703.7.4.2 AND R703.7.4.3
d. SEE SECTION R703.7.3

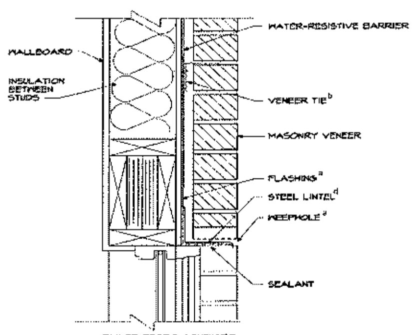
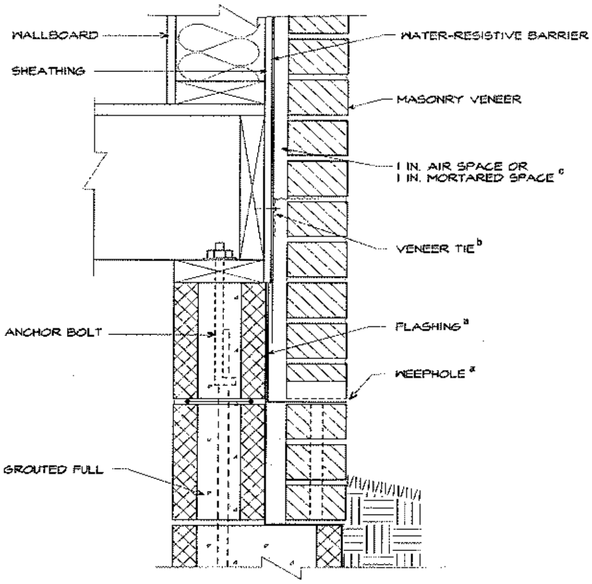


FIGURE R703.7-CONTINUED
MASONRY VENEER WALL DETAILS

FOR SI: 1 INCH = 25.4 mm

a. SEE SECTIONS R703.7.5, R703.7.6 AND R703.8.
b. SEE SECTIONS R703.2 AND R703.7.4.
c. SEE SECTIONS R703.7.4.2 AND R703.7.4.3
d. SEE SECTION R703.7.3

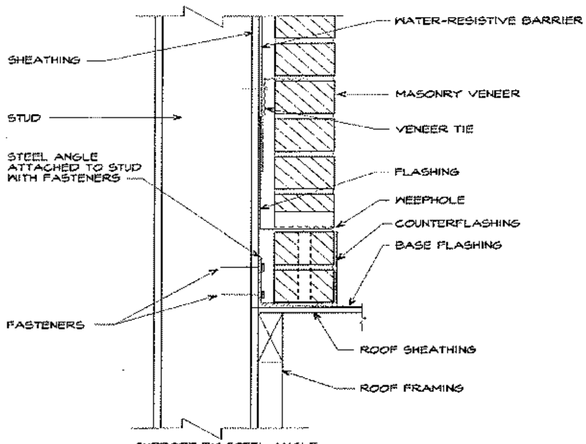


FOR SI: 1 INCH = 25.4 mm

ALTERNATE

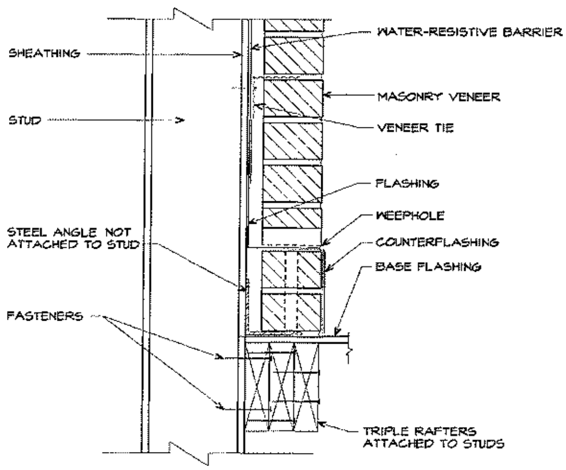
FIGURE R703.7
MASONRY VENEER WALL DETAILS

(CONTINUED)



SUPPORT BY STEEL ANGLE

FIGURE R703.7.2.1
EXTERIOR MASONRY VENEER SUPPORT BY STEEL ANGLES



SUPPORT BY ROOF CONSTRUCTION

FIGURE R703.7.2.2
EXTERIOR MASONRY VENEER SUPPORT BY ROOF CONSTRUCTION

R 408.30545a Masonry heater clearance.

Rule 545a. Section R1002.5 of the code is amended to read as follows:

R1002.5. Masonry heater clearance. Combustible materials shall not be placed within 36 inches (914 mm) of the outside surface of a masonry heater in accordance with NFPA 211-2006 chapter 12 § 12.6 (clearances for solid-fuel-burning appliances), and the required space between the heater and combustible material shall be fully vented to permit the free flow of air around all heater surfaces.

R 408.30546 Smoke alarm locations.

Rule 546. Sections R314.5 and R314.6 are added to the code to read as follows:

R314.5. Smoke alarm locations in existing buildings constructed before November 6, 1974. Within each dwelling unit or sleeping unit, a single-station smoke alarm shall be installed in the following locations:

(1) In each sleeping room or each area directly outside the sleeping room.

(2) On each floor level including the basement level.

For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than 1 full story below the upper level.

R314.6. Equipment requirements. The required equipment for smoke alarms shall consist of the following:

(1) Installation. Smoke alarm devices shall be listed and installed in accordance with the manufacturer's installation requirements, the provisions of the code and the provisions of NFPA 72 as listed in chapter 44.

(2) Power Source. The equipment shall be operable by power from 1 of the following primary sources.

(a) The building wiring provided that such wiring is served from a commercial source and is equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

(b) A non-rechargeable battery that is capable of operating the smoke alarm in the normal condition for a life of 5 years.

(c) A rechargeable battery, with proper charging, able to power the alarm for a life of 5 years and shall be automatically recharged by an AC circuit of the commercial light and power source.

(d) A household use alarm system with battery backup listed and approved in accordance with the household fire warning equipment provisions of NFPA 72, as referenced in section R314.4 of the code.

(3) Audible alarm notification. The activation of the alarm signal shall produce a sound that is audible in all occupiable dwelling areas.

(4) Testing and maintenance. The owner of a dwelling unit, in which required or optional fire detection or fire protection systems equipment is installed, shall be responsible for the proper operation, testing, and maintenance of the equipment in accordance with the manufacturer's instructions included with the equipment. The occupant of rental dwelling units shall be responsible for the periodic operational testing and periodic cleaning of the installed equipment within the rental unit in accordance with the testing instructions provided in the manufacturer's instructions for the equipment. If

the system fails, breaks, or is out of service, it shall be repaired and functional within 30 days.

Exception: Smoke alarms and devices installed in buildings constructed before November 6, 1974 where an installation was approved by the appropriate enforcing agency under regulations in effect at the time of the installation shall be considered to comply with the provisions of the code.

DEPARTMENT OF ENERGY, LABOR, AND ECONOMIC GROWTH

DIRECTOR'S OFFICE

CONSTRUCTION CODE

Filed with the Secretary of State on November 8, 2010

These rules take effect March 9, 2011

(By authority conferred on the director of the department of energy, labor, and economic growth by section 4 of 1972 PA 230, MCL 125.1504, and Executive Reorganization Order Nos. 2003-1 and 2008-20, MCL 445.2011 and MCL 445.2025)

R 408.30551, R 408.30557, R 408.30560, R 408.30561, R 408.30569, R 408.30573, R 408.30576, and R 408.30577 of the Michigan Administrative Code are amended to read as follows:

REHABILITATION CODE

R 408.30551 Applicable code.

Rule 551. The international existing building code, 2009 edition, including appendix A and resource A, hereinafter referred to as "the code," is adopted by reference, as provided in MCL 24.232, as the "Michigan rehabilitation code for existing buildings" with the exception of sections 104.8, 108.2 to 108.6, 114.3, 605.1.1 to 605.2, 706.2, 706.3 and 1105.15 and Appendix B, and as otherwise noted in these rules. The international existing building code, 2009 edition is available for inspection at the Okemos office of the Michigan Department of Energy, Labor, and Economic Growth, Bureau of Construction Codes or from International Code Council, 500 New Jersey Avenue, N.W., 6th Floor, Washington, D.C. 20001, at a cost as of the time of adoption of these rules of $66.00.

R 408.30557 Definitions.

Rule 557. The definitions of act, building official, and registered design professional are added to section 202 of the code to read as follows:

202. Definitions.

"Act" means 1972 PA 230, MCL 125.1501 to 125.1531 and known as the Stille-DeRossett-Hale single state construction code act.

"Building official" means the person who is appointed and employed by a governmental subdivision charged with the administration and enforcement of the state code or codes and who is registered in accordance with the requirements of 1986 PA 54, MCL 338.2301 to 338.2313. Where used in this code, the term code official means "building official."

"Registered design professional" means an individual who is licensed under 1980 PA 299, MCL 339.101 to 339.2919.

R 408.30560 Annual permit.

Rule 560. Sections 105.1.1, 105.1.2, and 105.2 of the code are amended as follows:

105.1.1 Annual permit. In place of an individual permit for each alteration to an already approved electrical, gas, mechanical, or plumbing installation, the enforcing agency is authorized to issue an annual permit upon application to any person, firm, or corporation. The applicant shall be licensed in accordance with the requirements of 1956 PA 217, MCL 338.881 to 338.892, 1984 PA 192, MCL 338.971 to 338.988, or 2002 PA 733, MCL 338.3511 to 338.3569.

105.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under an annual permit. Access to the records shall be provided at all times and the records shall be filed with the enforcing agency.

105.2. Work exempt from permit. Exemptions from permit requirements of the code shall not be deemed to grant authorization for any work to be done in any manner in violation of the code or any other laws or ordinances of this jurisdiction. Permits shall not be required for any of the following:

(a) Building permits shall not be required for any of the following:

(i) One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 120 square feet ($11.15m^2$).

(ii) A fence that is not more than 6 feet (1 829 mm) high.

(iii) Oil derricks.

(iv) A retaining wall that is not more than 4 feet (1 219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding class I, II, or III-A liquids.

(v) A water tank supported directly upon grade if the capacity is not more than 5, 000 gallons (18 927 L) and the ratio of height to diameter or width is not greater than 2 to 1.

(vi) A sidewalk or driveway that is not more than 30 inches (762 mm) above grade and is not over any basement or story below and which are not part of an accessible route.

(vii) Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.

(viii) Temporary motion picture, television, and theater stage sets and scenery.

(ix) Prefabricated swimming pools accessory to a group R-3 occupancy, as applicable in section 101.2, which are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18 927 L) and are installed entirely above ground.

(x) Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.

(xi) Swings and other playground equipment accessory to 1- and 2-family dwellings.

(xii) Window awnings supported by an exterior wall which do not project more than 54 inches (1 372 mm) from the exterior wall and do not require additional support of group R-3, as applicable in section 101.2 and group U occupancies.

(xiii) Movable cases, counters, and partitions.

(b) Electrical permits shall not be required, as in accordance with the Michigan electrical code, R 408.30801 to R 408.30880, for any of the following:

(i) Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

(ii) Radio and television transmitting stations: The provisions of the code do not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for power supply and to the installation of towers and antennas.
(iii) Temporary testing systems: A permit is not required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.
(c) Mechanical permits shall not be required for any of the following:
(i) A portable gas heating appliance that has inputs of less than 30,000 Btu's per hour.
(ii) Portable ventilation appliances and equipment.
(iii) Portable cooling unit.
(iv) Steam, hot water, or chilled water piping within any heating or cooling equipment or appliances regulated by this code.
(v) The replacement of any minor part that does not alter the approval of equipment or an appliance or make such equipment or appliance unsafe.
(vi) A portable evaporative cooler.
(vii) Self-contained refrigeration systems that contain 10 pounds (4.5 kg) or less of refrigerant, or that are actuated by motors of 1 horsepower (0.75 kW) or less.
(viii) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.
(ix) A boiler or pressure vessel for which a permit is required by sections 17 and 18 of 1965 PA 290, MCL 408.767 and 408.768.
(x) An oil burner that does not require connection to a flue, such as an oil stove and a heater equipped with a wick.
(xi) A portable gas burner that has inputs of less than 30,000 Btu's per hour.
(xii) When changing or relocating a gas meter or regulator, a permit is not required when installing gas piping which shall be limited to 10 feet (3005 mm) in length and not more then 6 fittings.
(d) Plumbing permits shall not be required for either of the following:
(i) The stopping of leaks in drains, water, soil, waste, or vent pipe. However, if any concealed trap, drainpipe, water, soil, waste, or vent pipe becomes defective and it becomes necessary to remove and replace the drain or pipe with new material, then the work is considered new work and a permit shall be obtained and inspection made as provided in the code.
(ii) The clearing of stoppages or the repairing of leaks in pipes, valves, or fixtures, and the removal and reinstallation of water closets, if the repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.

R 408.30561 Accessibility.
Rule 561. Sections 310.1, 310.6, 310.7, 310.8.2 and 310.8.3 of the code are amended as follows:
310.1 Scope. A building, facility, or element that has a change in use group or occupancy load or alteration shall comply in accordance with the requirements of 1966 PA 1, MCL 125.1351 to 125.1356 and the Michigan building code, R 408.30401 to R 408.30547.
310.6 Alterations. A building, facility, or element that is altered shall comply with the applicable provisions in chapter 11 of the code and ICC/A117.1 listed in chapter 15,

unless technically infeasible. When compliance with this section is technically infeasible, then the alteration shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by section 310.7 of the code.

2. Accessible means of egress required by chapter 10 of the code are not required to be provided in existing buildings and facilities.

3. Buildings, structures, or improved areas which exist on or before the effective date of these rules and which are in compliance with the code at the time of the issuance of the certificate of occupancy unless the alteration specifically modifies an area covered by sections 310.6 to 310.8 of the code.

4. The alteration to type A individually owned dwelling units within a group R-2 occupancy shall meet the provision for a type B dwelling unit and shall comply with the applicable provisions in chapter 11 and ICC/A 117.1 listed in chapter 15.

310.7 Alterations affecting an area containing a primary function. Where an alteration affects the accessibility to a, or contains an area of, primary function, the route to the primary function area shall be accessible. The accessible route to the primary function area shall include toilet facilities or drinking fountains serving the area of primary function.

Exceptions:

1. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets, and signs.

2. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems, and abatement of hazardous materials.

3. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of an existing building, facility, or element.

310.8.2 Elevators. Altered elements of existing elevators shall comply with the Michigan elevator code, R 408.7001 to R 408.8695. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

310.8.3. Platform lifts. Platform (wheelchair) lifts complying with ICC/A 117.1 listed in chapter 15, and installed in accordance with the Michigan elevator code, R 408.7001 to R 408.8695 shall be permitted as a component of an accessible route.

R 408.30569 Minimum requirements.

Rule 569. Section 1005.1 of the code is amended as follows:

1005.1. Minimum requirements. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, primary function shall comply with the requirements of section 310.

R 408.30573 Change of occupancy.

Rule 573. Section 310.4 of the code is amended as follows:

310.4. Change of occupancy. Unless technically infeasible, sections 310.5, 310.6, 310.7, and 310.8 of the code shall be applied in accordance with 1966 PA 1, MCL 125.1351 to 125.1356.

R 408.30576 Accessibility requirements.

Rule 576. Sections 906.1, 912.8, and 1104.1 of the code are amended as follows:

906.1 General. Accessibility in portions of buildings undergoing a change of occupancy classification shall comply with the provisions of section 310.4.

912.8 Accessibility. A building, facility, or element that has a change in use group or occupancy load or alteration shall comply with the requirements of 1966 PA 1, MCL 125.1351 to 125.1356 and the Michigan building code, R 408.30401 to R 408.30547.

1104.1 Accessibility requirements. The provisions of section 310 shall apply to buildings and facilities designated as historic structures that undergo alterations, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the code official, the alternative requirements of sections 1104.1.1 to 1104.1.4 for that element shall be permitted.

R 408.30577 Applicability.

Rule 577. Sections 706.1 and 806.1 are added to the code and 1301.2 and 1301.2.5 of the code are amended as follows:

706.1 General. A building, facility, or element that is altered shall comply with section 310.

806.1 General. A building, facility, or element that is altered shall comply with section 310.

1301.2 Applicability. Structures existing before November 6, 1974, in which there is work involving additions, alterations, or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of chapters 4 to 12 of the code. The provisions in sections 1301.2.1 to 1301.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in groups A, B, E, F, M, R, and S. This rule shall not apply to buildings with occupancies in group H or I.

1301.2.5 Accessibility requirements. All portions of the buildings proposed for change of occupancy shall conform to the accessibility provisions of section 310.