



RESIDENTIAL ADDITION REQUIREMENTS
CITY OF NOVI
Community Development Department
(248) 347-0415

Requirements for Submittal of Plans:

- **Woodland Affidavit**
- **Wetland Affidavit**
- **Application for Building Permit**
- **2 sets of plans with information outlined below**
- **Oakland County Health Department permit for septic system**

Zoning:

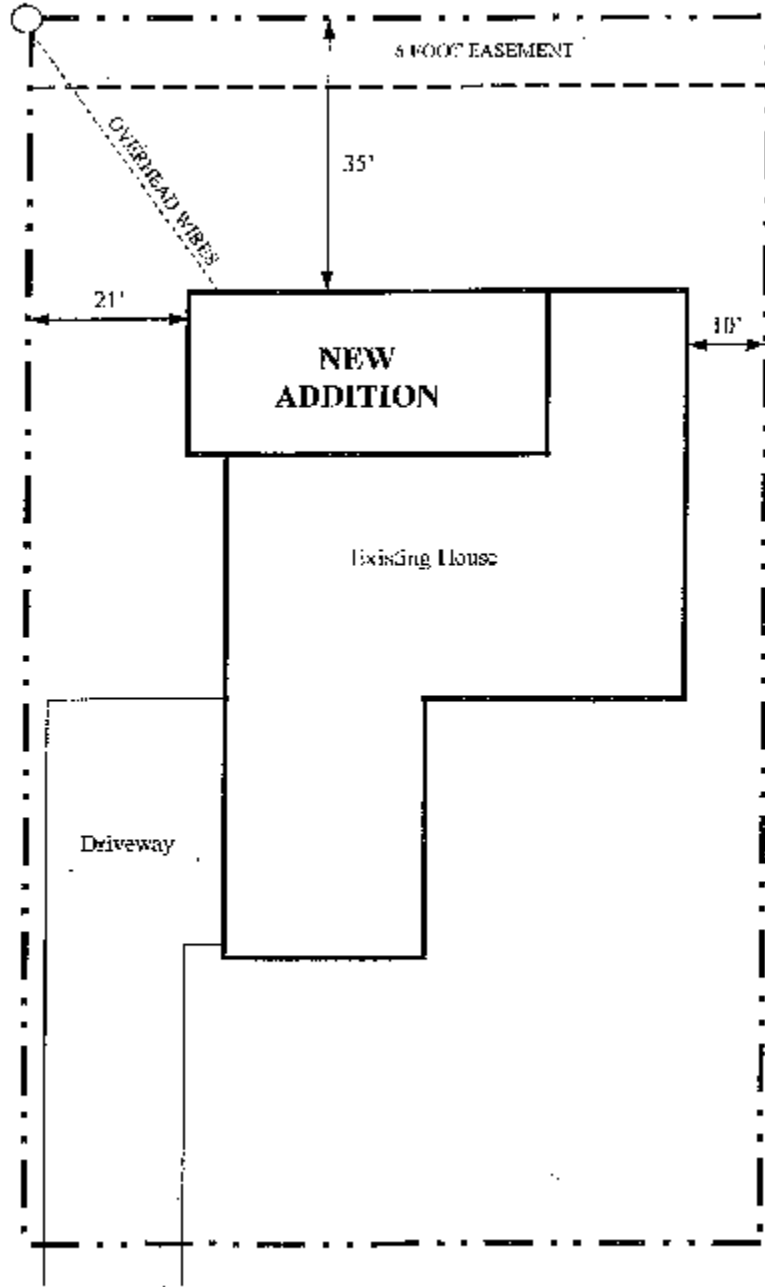
Application for Permit shall be accompanied by not less than two (2) sets of site plans showing the size and location of all new construction and the location of all existing structures on site. Plans must be drawn on a minimum of 8-1/2" X 11" paper showing dimensions from proposed and existing structures to property lines and easements (see example).

Notes:

- A. No proposed structure shall be located in any drainage or utility easement.
- B. All proposed additions shall comply with current zoning requirements.
- C. Original grading conditions must NOT be changed. If change in grade occurs, a Minor Land Improvement Permit will be required.
- D. The proposed lot coverage for all structures cannot exceed 25%.
- E. Additions must have a min. of 3 feet between the roof and overhead power lines for roofs that are 4/12 pitch or more. Roofs that are less than 4/12 pitch cannot be under the overhead wires and the service will need to be moved prior to construction and a new service location permit applied for.
- F. The setback requirements for all zoning districts are as follows:

	R-A	R-1	R-2	R-3	R-4
Front Yard	45'	30'	30'	30'	30'
Rear Yard	50'	35'	35'	35'	35'
Min. Side Yard	20'	15'	15'	10'	10'
Agg. Side Yard	50'	40'	40'	30'	25'

EXAMPLE



BUILDING CODE REQUIREMENTS

Michigan Residential Code 2009 (MRC)

Application for Permit shall be accompanied by not less than two (2) sets of plans showing with sufficient clarity and detail all dimensions, size of structural members, grade and species of structural members, spacing of structural members, spans of structural members, engineered wood beams, foundation anchorage system, transfer of all loads to the foundation, and all materials to be used for construction of said addition.

At a minimum, the plans shall include:

1. Foundation Plan
2. Floor Plan(s)
3. Roof Plan
4. Cross-Section of wall and roof, with pitch.

Subdivision Association Approval Required

General Code Requirements: *The sections listed below represent a list of commonly referenced code requirements but in no way incorporate the entire list of Code requirements for additions. The items listed below are intended to only help in the design of the proposed work. Omission of the Code requirements listed below and/or those not identified on the approved drawings does not relieve the Builder and/or applicant from the responsibility to achieve compliance with all Code requirements.*

A copy of the current 2009 Michigan Residential Code is available at the City of Novi Public Library

MRC
R106.3.1 **Approved Plans MUST** remain on the building site, open for inspection by the Code Official or authorized representative at all reasonable times.

MRC
R403 **Footings:**

Exterior footings and foundation walls, piers, and other permanent supports of all buildings and structures shall extend a minimum of **42 inches** (1,067 MM) below actual grade. Spread footings of adequate size shall be provided where necessary to properly distribute the load within the allowable bearing value of the soil as defined in Table R403.1

MRC
R406 **Foundation damp-proofing:**

Concrete and masonry foundation walls that retain earth and enclose habitable or usable spaces located below grade (except where conditions are present as defined in section R406.2) shall be provided with a minimum approved damp-proofing material as defined in section R406.1. Damp-proofing shall extend from the top of footings to the finish grade elevation.
Wood foundations shall be damp-proofed in accordance with sections R406.3.1 through R406.3.4.

MRC
R406 **Foundation Waterproofing:**

Concrete and masonry foundations shall be waterproofed in areas where a high water table and/or other severe soil-water conditions are known to exist and where exterior foundation walls that retain earth and enclose habitable or useable spaces are located below grade. The waterproofing membrane shall extend from the top of the footing to the finish grade

elevation. Minimum membrane requirements are as defined in section R406.2.

MRC
R319

Wood:

Where wood joists or any wood construction is closer than 18 inches, or wood girders closer than 12 inches, to the exposed ground in a crawl space or unexcavated areas, the floor assembly shall be of approved, naturally durable, or preservative treated wood.

R319.1(5) Clearance between wood siding, sheathing and wall framing and the ground on the exterior of a building shall not be less than six (6) inches, or shall be of approved, naturally durable, or preservative treated wood.

R319.1(2) All sills or plates that rest on concrete or masonry exterior walls and are less than 8-inches from the exposed ground shall be of approved, naturally durable, or preservative treated wood.

MRC
R601

Existing exterior wall supporting headers and transfer beams:

Wall construction shall be capable of accommodating all imposed loads according to section R301 and transmitting the resulting loads to the supporting structural elements. **Existing exterior wall headers and transfer beams which will be subject to additional loading due to the addition of a second story**, shall be identified on the drawings with both current and proposed sizing of structural members, grading, species and/or flange sizes and PLF capabilities of steel beams.

MRC
R602

Wind bracing:

See MRC R602.10 for exterior wall bracing requirements (i.e., 4' plywood corners).
See MRC R602.10.5 for exterior wall bracing requirements when using continuous structural wood sheathing panels.
See MRC R602.10.6 for alternate exterior wall bracing requirements when using minimum 2' – 8" plywood corners.

You may need to contact a specialty panel producer or a design professional if a prescriptive bracing method is not used.

Insulation:

Must comply with the Michigan Energy Code 2009

MRC
R303

Natural Ventilation:

Habitable rooms must be provided with an aggregate glazing area of not less than 8% of the floor area of the room. The minimum openable area to the outdoors shall be 4% of the floor area being ventilated. Exceptions may apply as defined in exceptions 1&2 Sec. R303.1. Also see adjoining rooms in Sec. R302.2.

MRC
R303

Natural Light:

Habitable rooms must be provided with an aggregate glazing area of not

less than 8% of the floor area of the room. Exceptions may apply as defined in exceptions 1&2 Sec. R303.1. Also see adjoining rooms in Sec. R302.2.

Bathroom ventilation:

MRC
R303.3

Bathrooms, toilet compartments and other similar rooms shall be provided with aggregate glazing areas in windows of not less than three (3) square feet, one-half of which must be operable. Exceptions may apply as defined in Sec. R303.3.

Ventilation of roof spaces:

MRC
R806

The minimum net free attic ventilation area shall be 1/150 of the area of the space ventilated. This minimum may be reduced to 1/300, provided that: A vapor retarder, having a permanence not exceeding 1 perm, is installed on the warm side of the ceiling; or if 50% but not more than 80% of the ventilating area is provided in the upper portion of the space to be ventilated and at least three (3) feet above eave or cornice vents. (i.e., ridge, roof, and/or vents).

Ventilation of crawl spaces:

MRC
R408

Crawl spaces shall be ventilated by an approved mechanical means or by openings in exterior foundation walls. Ventilation openings shall be within three (3) feet of each corner. Openings shall provide a net area of not less than one (1) square foot for each 150 square feet (1/150) of foundation space. Where an approved vapor retarder is installed over the ground surface and openings are placed so as to provide cross-ventilation through the space, the net area of the openings shall be reduced to 1/1,500 of the under floor area.

Smoke Alarms:

MRC
R313

When interior alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired with battery backup.

Emergency escape and rescue openings:

MRC
R310

Every sleeping room shall have at least one operable window or exterior door approved for emergency escape or rescue.

Requirements for egress windows above grade floor:

- Bottom of the clear opening: Not more than 44" above finish floor
- Minimum net clear opening: 5.7 square feet
- Minimum net clear opening Height: 24-inches
- Minimum net clear opening Width: 20-inches

Note: Windows at grade floor - the Minimum Net Clear Opening can be reduced to 5.0 square feet where the sill height of the opening is not more than 44-inches above or below the finish ground level adjacent to the opening.

Exits:

MRC
R311

The required exit door shall be a side-hinged door not less than three (3) feet in width and six (6) feet 8 inches in height. The required exit shall not be permitted to pass through a garage to the public way. The minimum width of a hallway shall not be less than 3 feet.

MRC
R309

Garage separation:

The garage shall be separated from the residence and its attic area by means of a minimum of ½-inch gypsum board applied to garage side. Garages beneath habitable rooms shall be separated from all habitable spaces by not less than 5/8" type X gypsum board. Where the separation is a floor/ceiling assembly, the structure supporting the floor/ceiling assembly shall also be protected by not less than 1/2-inch gypsum board or equivalent, fastened at 6" O.C. to the ceiling.

MRC
R702.4.3

Ceramic tile:

Water resistant gypsum backing board shall not be installed:

- 1) Over a vapor retarder in a shower or bathtub compartment.
- 2) Where there will be direct exposure to water, or in areas subject to high humidity.

Miscellaneous:

1. Separate permits must be obtained for all mechanical installations (i.e., electrical, plumbing, heating, and pre-fab fireplace).
2. All building, plumbing, mechanical and electrical inspection **requests must be scheduled before 3:30 PM** the day before the requested inspection date.
3. The minimum required inspections shall be footings/foundations, slab on grade, rough building/electrical/mechanical/plumbing/fireplace, brick veneer flashing and weepholes, insulation, final building/electrical/mechanical/plumbing/fireplace and grade.
4. If you have a septic field, an Oakland County Health permit is required when:
 - a) A bedroom and/or a bathroom is added
 - b) Substantial increase in building area
 - c) Any construction, modification, or repair performed on the septic system
 - d) A trench within five (5) feet of the septic field
 - e) A basement constructed within ten (10) feet of the septic field

Note that a certificate of occupancy shall be obtained from the Community Development Department prior to occupancy.