



## Residential Room Addition

Separate permits are required for each type of work being done. The following must be submitted along with the building permit application:

- 3 sets of detailed plans, drawn to scale
- A minimum of one elevation, one plan view per floor level and one section view per area being added.
- A survey or site plan showing the location of your project, lot size, property lines and all existing structures, driveways, sidewalks and patios.
- Heated additions require a RESCHECK worksheet.

The City of Brooklyn Center requires an addition be built with a **full perimeter foundation** at a minimum of 42" deep. Uses such as non-conditioned screened or non-conditioned enclosed porches, canopies, decks, balconies, stairs, etc. may be placed on a non-continuous permanent foundation as approved by the Building Official. If it is a crawl space, the area must be a conditioned space or vented. The foundation can be filled in to be built slab on grade. The City does not allow additions to be built on post footings.

### Energy Code Requirements for Heated Additions

Additions and alterations to homes built after February 14, 2015, must include methods, materials and mechanical equipment to meet the provisions of the current Minnesota Energy Code. To ensure that your project is in compliance with energy codes, go to [www.revisor.mn.gov/rules/?ID=13222012RCR408.3](http://www.revisor.mn.gov/rules/?ID=13222012RCR408.3)

### Unvented Crawl Spaces

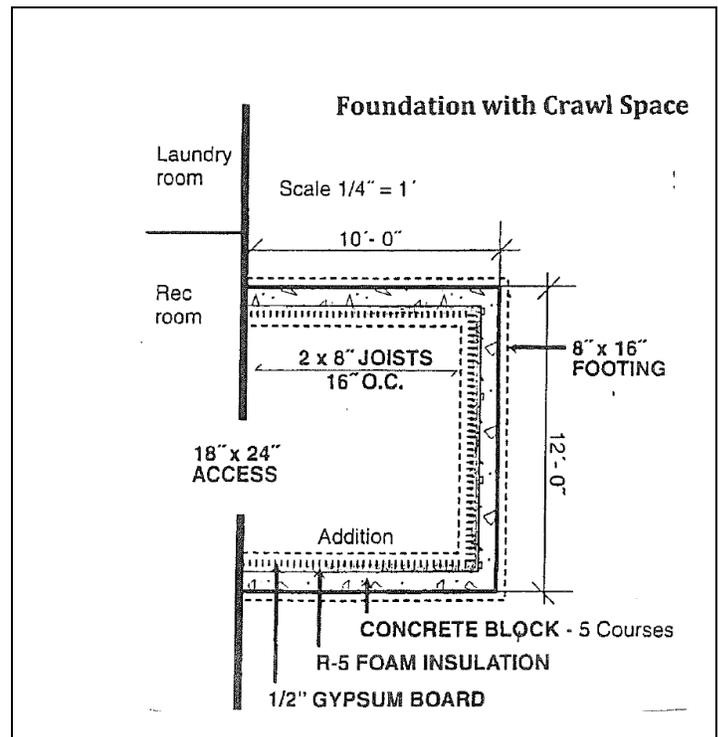
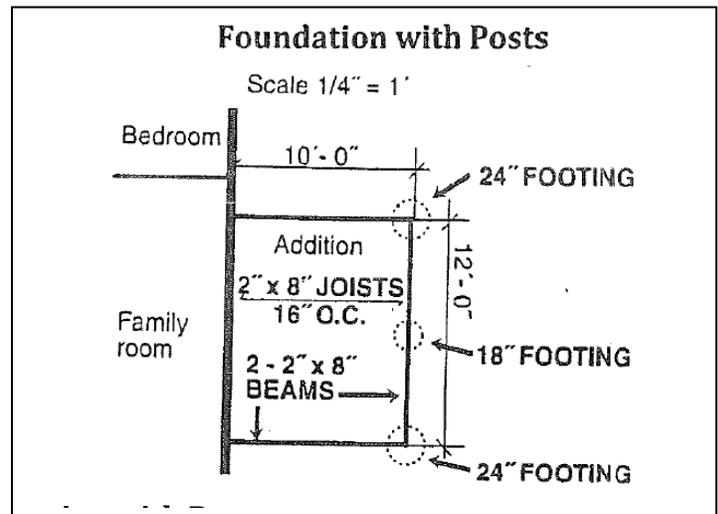
The ground must be covered with a vapor retarder. The joints must be overlapped a minimum of 6 in. and be sealed or taped. The edges must extend up the foundation wall a minimum of 6 in. and be attached and sealed to the wall. Exposed earth to be covered with Class I vapor retarder.

One of the following mechanical systems must be installed:

- A continuously operated mechanical exhaust at a rate equal to 1 cfm for each 50 sq. ft. and an air

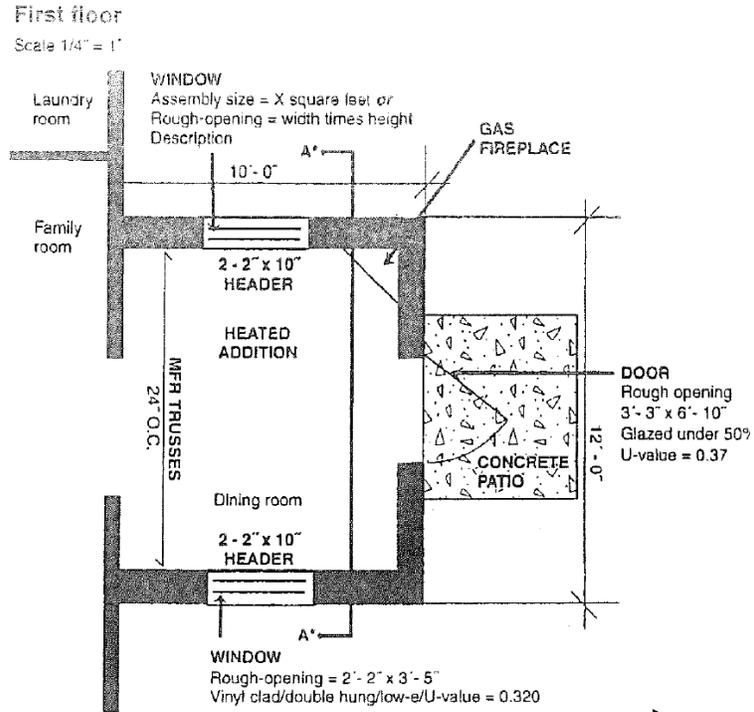
pathway to the common area (duct or transfer grill).

- Conditioned air supply sized to deliver at a rate equal to 1 cfm for each 50 sq. ft. It must include a return air pathway to the common area (duct or transfer grill).



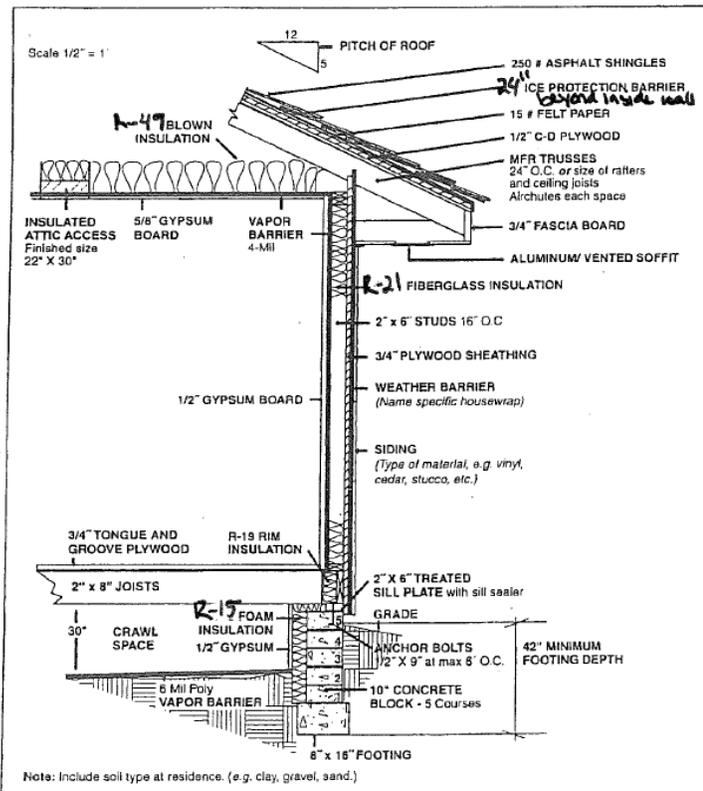
## Sample Floor Plan

Include on your plan – floor plan including dimensions, location of doors and windows (including rough opening sizes), header and beam sizes, type of material being used, direction and spacing of joists, rafters and trusses and indicate what the room will be used for.

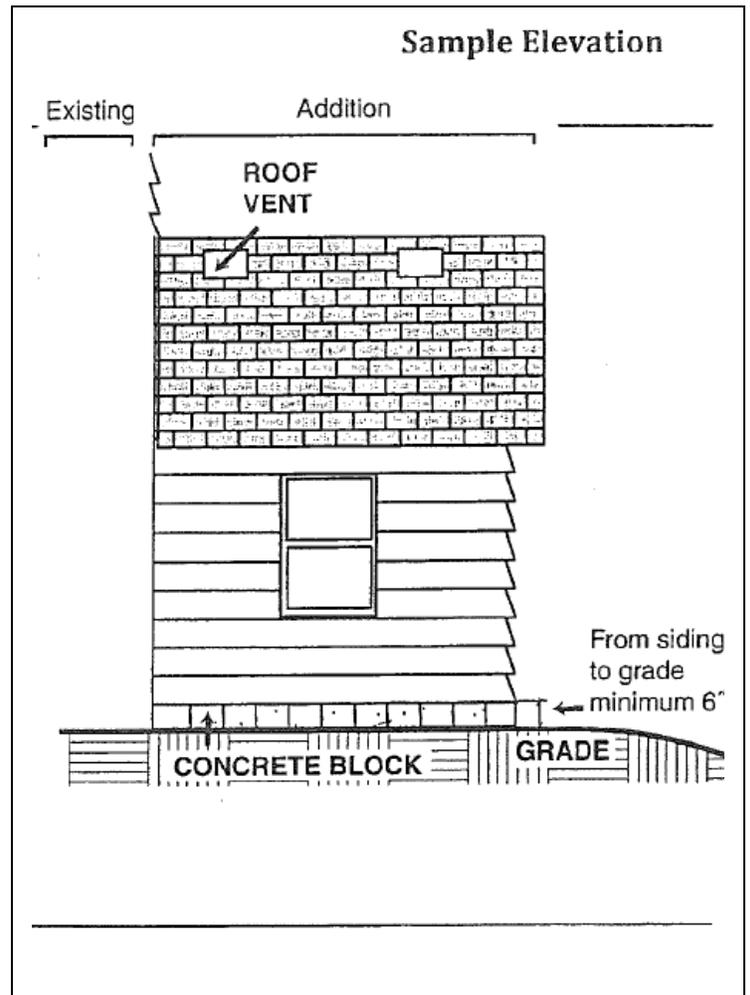


## Sample Section View

Materials, types and sizes are given for example only.



## Sample Elevation



### Setback Requirements

Your plans for an addition must comply with the following setback requirements for a primary residential structure. All structures must be at least 6 ft. apart unless attached. Setback distances are measured from the property line not streets, curbs, fences or sidewalks:

Front	Side Interior	Side Corner	Rear*
35 ft.	10 ft.	25 ft.	25 ft.

\*Interior residential lots shall have a minimum rear yard area of 30% of the total lot area, exclusive of permitted accessory structures

### Framing Requirements

- Base plates on concrete shall be of approved treated wood.
- Minimum 2 X 4 studs, not more than 10 feet in length. Maximum 24 in. on center space. If only one top plate is used, trusses or rafters must bear over studs (up to 1 in.)
- Rafters and roof sheathing for sloped roofs shall be designed for a 35 lb./sq. ft. live load. Collar ties are installed at a maximum of 4 ft. within the top third of the rafters.
- Trusses must be engineered by an approved manufacturer. Truss specs must be on-site.
- Allowable header spans for openings in outside bearing walls on one story frame buildings, assuming a 20 ft. wide addition and a 2 ft. overhang. Spans are both Spruce-Pine-Fir and Hem-Fir.

### Landings

One, 3 ft X 6 ft 8 in, side-hinged door leading directly to the exterior is required. The exit door must have a landing/floor on each side. The landing/floor on the interior may be no more than 1 ½ in. below the threshold. The exterior landing must be, at a minimum, the width of the door and a minimum of 36 in. in depth from the door or wall. This landing may be up to 7 ¾ in. lower than the top of the door threshold if the primary door does not swing out.

### Attic Ventilation 2012 IRC R806.2

Attics above heated spaces must be provided with ventilation equivalent to 1/300<sup>th</sup> of the attic area, with soffit vents equally distributed between soffit vents and high roof or ridge vents.

### Insulation

Foam insulation shall be an approved type or covered with ½ in. gypsum board or equivalent material. Exposed foam plastic insulation is **not allowed** in any room.

### Light, Ventilation and Ceiling Height

All habitable rooms shall have a window area equal to at least 8% of the floor area. The minimum openable area to the outdoors shall be 4% of the floor area being ventilated. Minimum ceiling height for habitable spaces is 7 ft. with exceptions for beams and sloped ceilings.

### Roofs

A minimum 26 gauge, by 24 in. wide galvanized steel flashing is required. For open or closed valleys (no metal) the shingle manufacturer's instructions must be followed.

Chimney's greater than 30 in. wide require crickets. Shingles shall not be installed on roofs with a slope of less than 2/12.

An ice barrier protection membrane shall be installed to a point no less than 24 in. inside the exterior wall line. The product must start on the fascia board and be installed per the manufacturer's instructions.

### Basement Sleeping Rooms/Emergency Escape

Every sleeping must have an exterior door or an egress window meeting egress requirements. (See Egress Window handout.) If the egress window is below exterior grade, a window well is required. The well must provide a 9 sq. ft. net clear opening when the window is open and a minimum 36 X 36 in. are from the open window to the well.

Basements and every sleeping room must have at least one emergency and rescue opening. When **adding** a foundation that is 7 ft. high or more and no emergency opening currently exists in the basement, one must be added to either the existing basement or the addition (even if there are no sleeping rooms or if the basement is unfinished).

### Sheathing Paper/Flashing

At least one layer of No. 15 asphalt felt or other approved material shall be applied over sheathing of all exterior walls. Lap a minimum of 2 in. horizontally and 6 in. vertically at joints.

Flashing is required over all exterior exposed openings. Flashing must be designed to shed water away from the building wall. When installing vinyl siding, manufacturer's installation instructions must be followed.

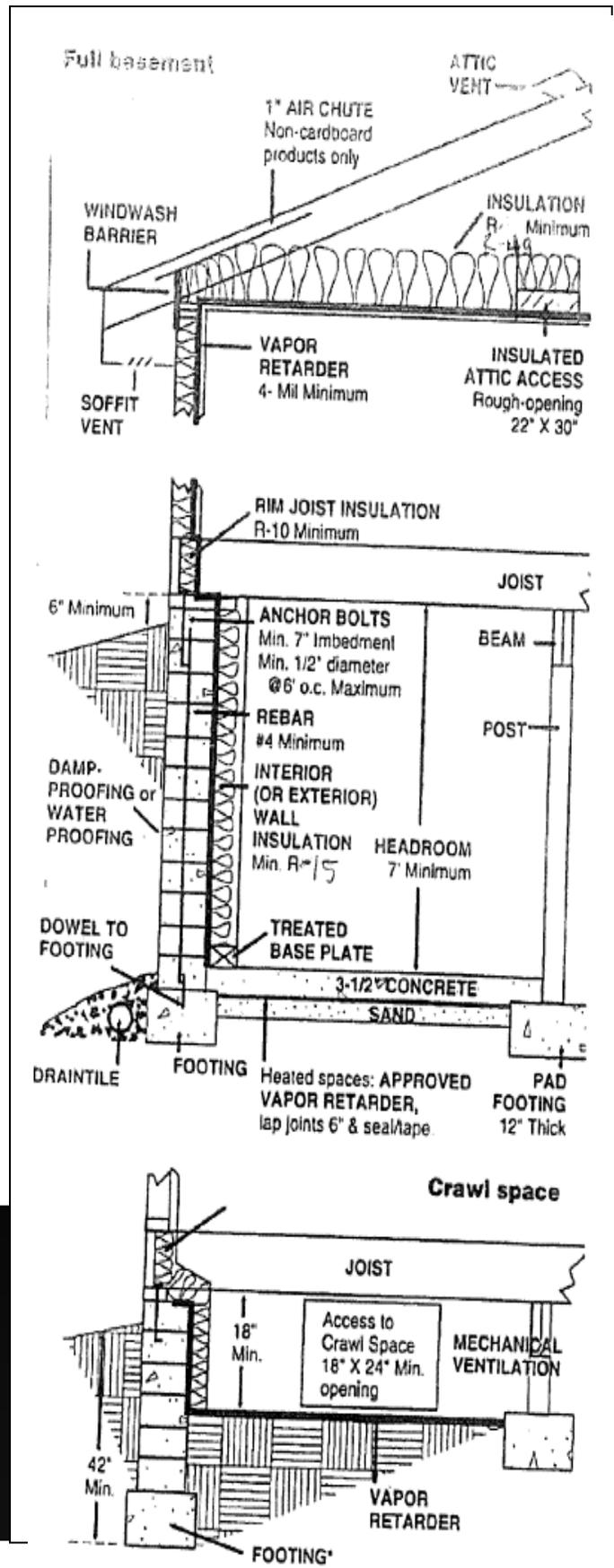
**Smoke Detector Requirements**

When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing homes, the entire building shall be provided with smoke detectors (as required for new homes). This includes the installation of a smoke detector in the basement of houses having a stairway which opens from the basement into the dwelling. Smoke detectors may be battery operated when installed in existing buildings unless the walls and ceilings are open and new wiring is being installed. In that case, smoke detectors must be hard-wired.

**Carbon Monoxide Detector Requirements**

The 2006 legislation passed a carbon monoxide (CO) law requiring CO alarms in all single family homes by August 1, 2008. All carbon monoxide alarms must be certified by a nationally recognized testing laboratory that conforms to the latest Underwriters Laboratories (U/L) Standards.

Every single family dwelling and every multifamily dwelling unit shall be provided with a minimum of one approved and fully operational carbon monoxide alarm installed within ten (10) feet of each room lawfully used for sleeping purposes. If bedrooms are located on separate floors, additional carbon monoxide alarms would be necessary within ten feet of these areas.



Questions? Need an inspection?  
 Contact the City of Brooklyn Center  
 Building and Community Standards  
 Building Official  
 6301 Shingle Creek Pkwy  
 Brooklyn Center, MN 55430  
 763-569-3313 Phone  
 763-569-3360 FAX