

Addition Plan Information Handout

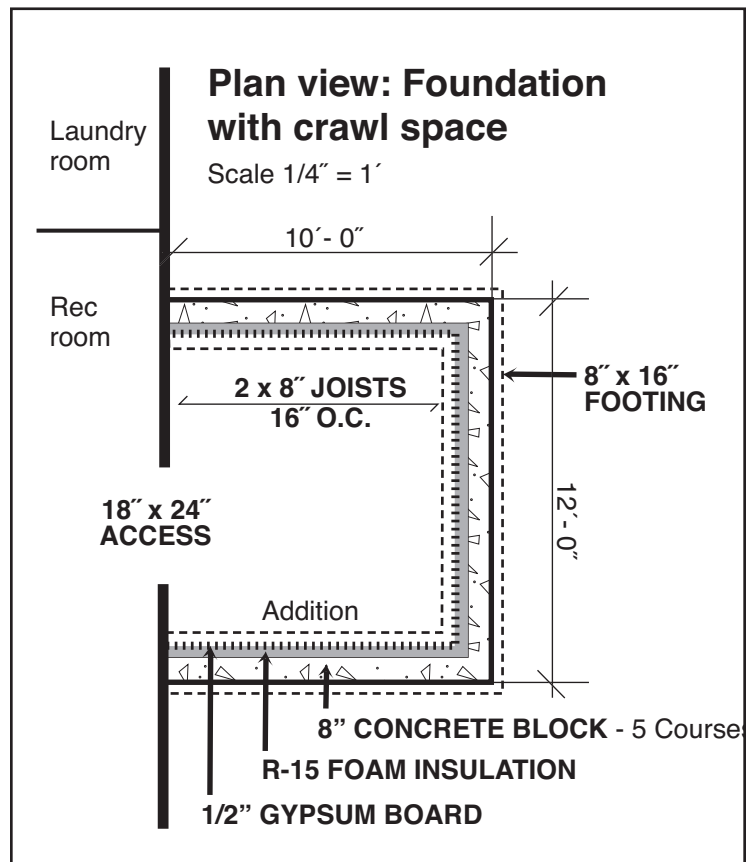
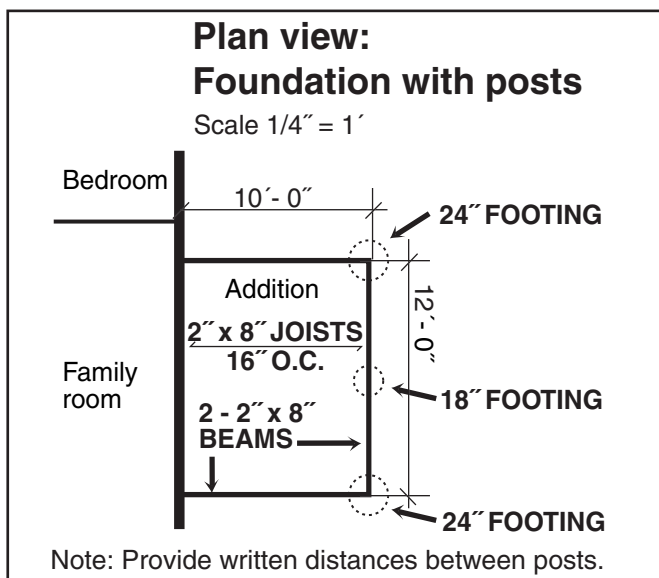
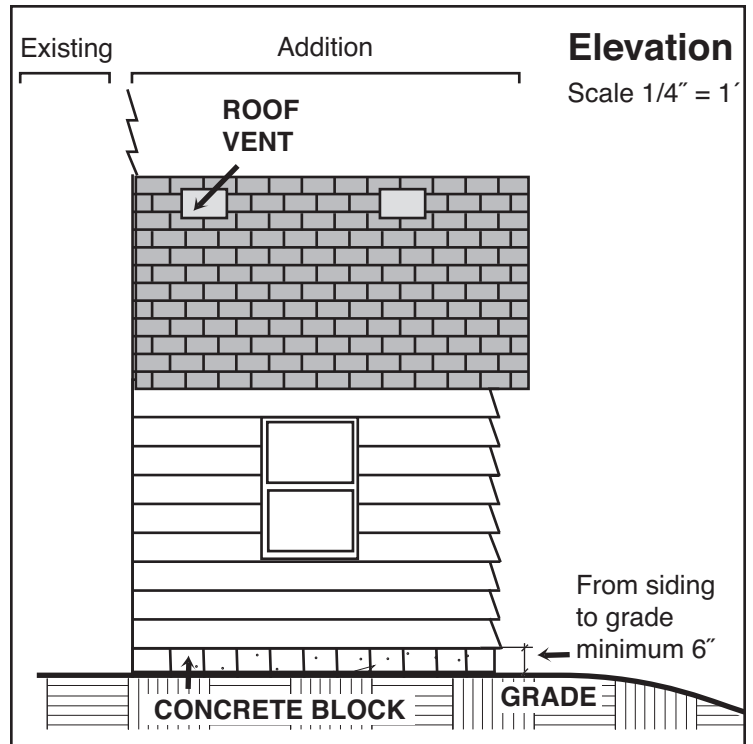
The following are required when submitting proposals:

- **Two sets of plans**, drawn to scale.
- A **minimum** of one elevation, one plan view per floor level and one section view per area being added.

Plan view: Foundation

- Locate addition in relation to existing home.
- Indicate whether the addition is a crawl space, full depth foundation or post footings.
- Include written dimensions and locations.
- If it is being built on post footings, the footings must be sized for submittal of plans.

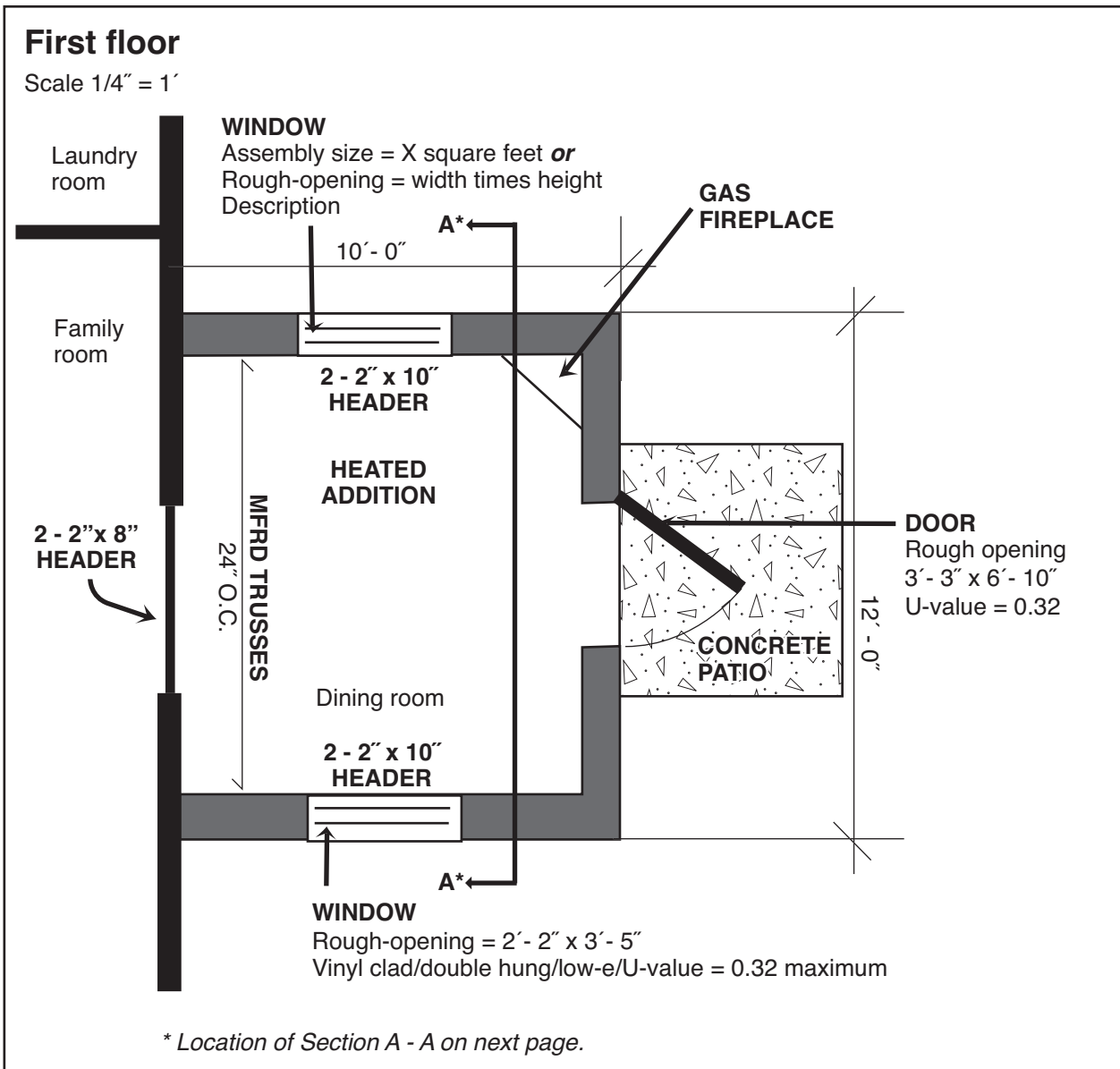
See graphic at right, below and page 2.



Plan view: Floor

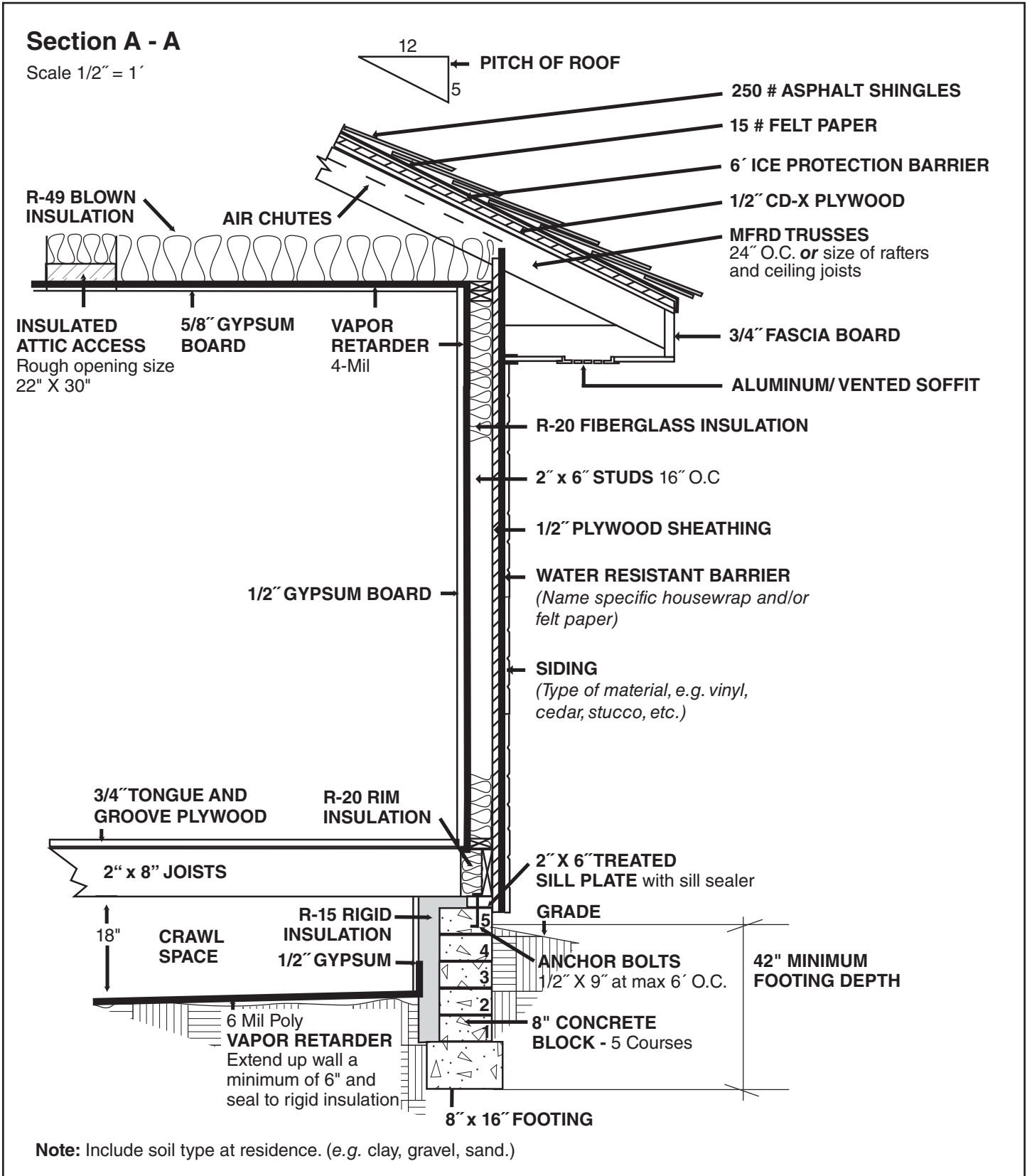
- Include written dimensions on the plan.
- Locate all doors and windows.
- Provide rough opening sizes and U-values from the manufacturer for each window unit and door.
- Provide header and beam sizes, as well as type of material being used. (e.g. 2 - 2" x 10" Doug Fir or 2 - 9-1/2" LVLs.)
- Provide a floor plan for **each** level being built.
- Indicate direction and spacing of joists, rafters/trusses, e.g. 12", 16" or 24" on center.
- Indicate the use (e.g. bathroom, family room, bedroom) of the new room(s) and those adjoining the addition.

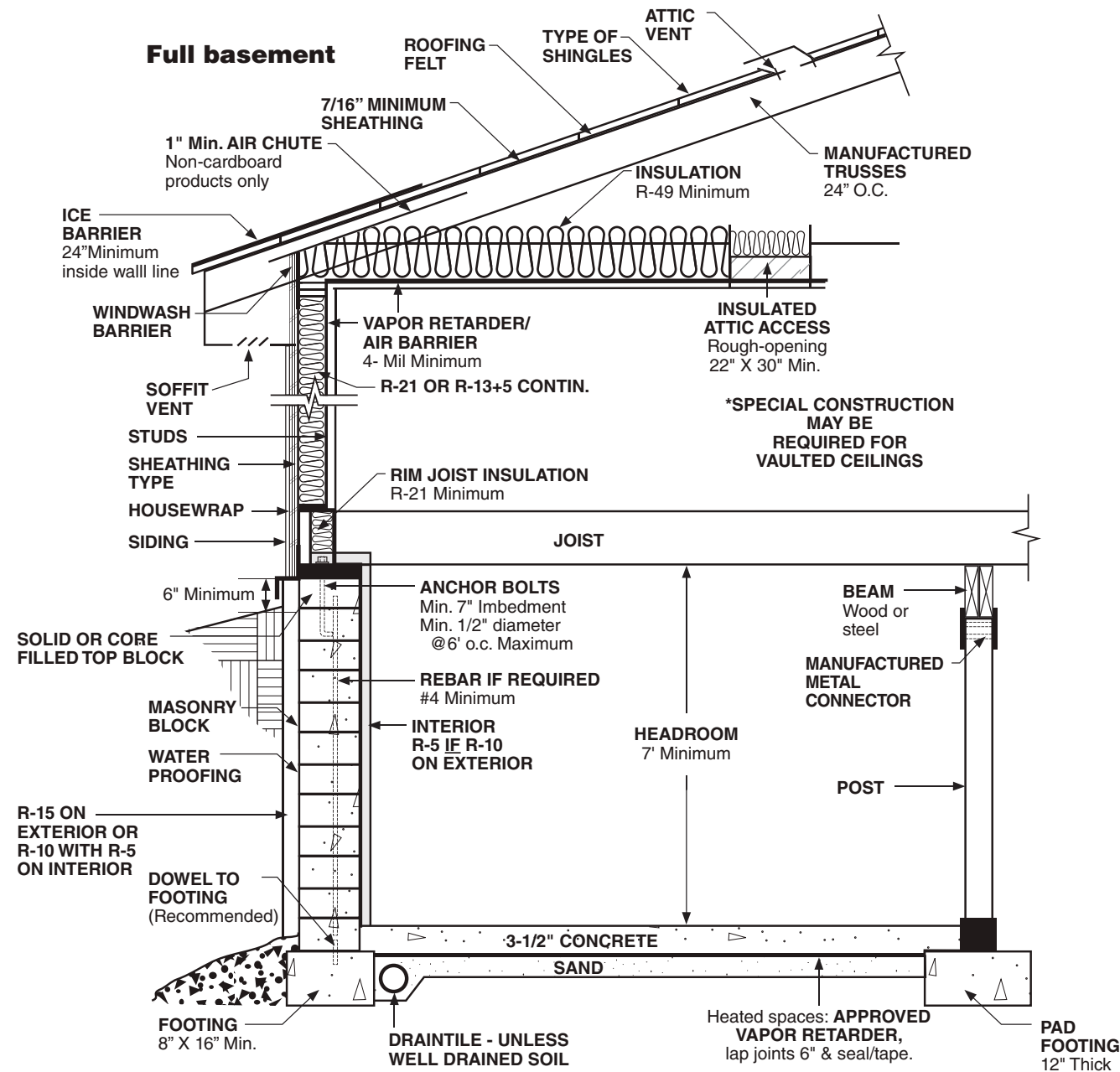
See graphic below. (Note: Materials, types and sizes are given for example only.)



Section view

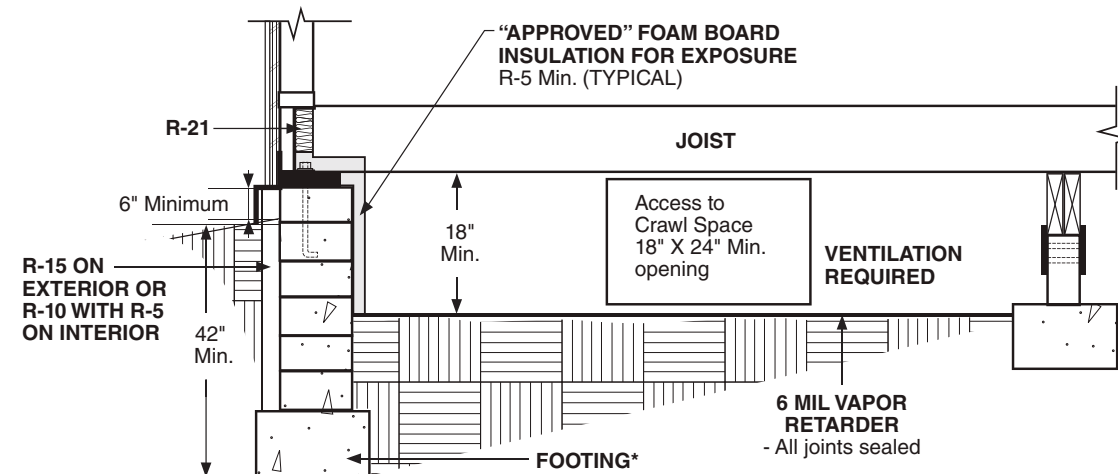
If more than one area is being built, provide one section view for each area. (Note: Materials, types and sizes are given for example only.)





*REFER TO: <http://www.bamn.org/fieldguide-illustrations.pdf> for foundation and insulation illustrations

Crawl space



*Note: Submit soil type on plans submitted for permit.

Building permits

Two sets of plans - Submitted plans must have sufficient detail to build the addition from them. A plan view, section view and elevations are required; all drawn to scale. Indicate all materials and sizes being used.

Permit application must be completed. Be sure to include your daytime phone number.

Certificate of Occupancy is issued to owner upon completion and approval of the Building Official. Addition must not be occupied until the Certificate of Occupancy is received.

Energy code requirements

Note: The energy rating stickers must be left on doors and windows until the inspector has verified conformance with the application.

Component	R-Value - Min U-Value - Max	Component	R-Value - Min U-Value - Max
Attic / Ceiling	R-49	Windows	U-0.32
Framed walls	R-21 or R-13 + R-5 c.i.	Skylights	U-0.60
Floor over unheated spaces	R-30	Rim joists	R-21
Foundation / crawl space walls	R-15	Slab on-grade floors	R-10 for 3'-6"

*c.i. - continuous insulation

This pamphlet is a guide to the most common questions and issues. It is not intended, nor shall it be considered, a complete set of requirements.

Additions over garages

Fire separation is required. The underside of floor joists and/or truss members require 5/8 inch type X gypsum. Walls supporting the joists and/or truss ends and the wall separating the house from garage require 1/2 inch gypsum.

Basement emergency escape

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

Fire / smoke alarm system

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 walls and ceilings are open and new wiring is being installed. In that case, smoke detectors must be “hard wired”—interconnected without a disconnect switch other than a breaker.

Sleeping rooms / egress

Every sleeping room shall have an exterior door or an egress window meeting all these requirements:

- A. Sill height – not more than 44 inches above the floor.
- B. Openable area – net clear of 5.7 square feet.
- Exception:** An egress window at grade floor may have a net clear opening of 5 square feet.
- C. Opening height – not less than 24 inches.
- D. Opening width – not less than 20 inches.

If this egress window is below exterior grade, then a window well is required. The well must provide a minimum nine square feet net clear opening and a minimum 36 X 36 inch area within the well. (See “Egress Escape Windows” information sheet.)

Ceiling height and stair headroom

Minimum ceiling height for habitable spaces is 7 feet, with exceptions for beams and sloped ceilings.

Minimum headroom for stairs is 6'-8" measured vertically from the front of the stair nosings.

Landings

In each single family home there must be a minimum of one, 3 foot x 6 foot 8 inch, side-hinged door leading directly to the exterior. This exit door must have a landing/floor on each side. The floor/landing on the interior may be no more than 1-1/2 inches below the threshold. The exterior landing must be, at a minimum, the width of the door and a minimum 36 inches in depth from the door/wall plane. This landing may be up to 7-3/4 inches lower than the top of the door threshold if the primary door does not swing out.

Landings for exterior doors other than defined exit

If no door other than a storm/screen door swings over the exterior landing, that landing may be up to 7-3/4 inches below the top of the threshold.

The code allows an exterior stair, when less than 30 inches high, to butt up to the opening without a landing if no door swings over it. This would include sliding patio doors. The 30 inches measurement is taken from the interior floor height to the exterior finished grade or surface the bottom of the stair rests on.

Unvented crawl spaces

The ground must be covered with a vapor retarder. The joints must be overlapped a minimum of 6 inches and be sealed/taped. The edges must extend up the foundation wall a minimum 6 inches and be attached and sealed to the wall.

One of the following mechanical systems must be installed:

1. A **continuously** operated mechanical exhaust at a rate equal to 1 cfm for each 50 square feet and an air pathway to the common area, e.g. a duct or transfer grille.
2. Conditioned air supply sized to deliver at a rate equal to 1 cfm for each 50 square feet. It must include a return air pathway to the common area such as a duct or transfer grill.

Safety Glazing

Glass panels installed in doors, windows adjacent to doors; stairways and landings; enclosing tubs, showers and hot tubs; and in locations considered to be ‘hazardous’ must be safety glazed and labeled in accordance with Minnesota State Residential Building Code.

Shingles

Shingles shall not be installed on roofs with a slope of less than 2:12. Refer to the “Asphalt Roofing Shingles” information sheet for special requirements for roofs with low pitch from 2:12 to 4:12.

Roof starter material

A manufactured ice barrier protection membrane shall be installed to a point no less than 24 inches inside the exterior wall line. The product must start on the fascia board and be installed per the manufacturer’s instructions. Detached accessory structures that contain no conditioned floor area are exempt.

Valley flashing for asphalt shingles

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

Cricket

Chimneys greater than 30 inches wide require crickets.

Attic ventilation

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

Foam plastic insulation

Shall be an approved type or covered with 1/2 inch gypsum board or equivalent material. Unapproved exposed foam plastic insulation is not allowed in any room, including crawl spaces and attics. (Exception: Spray foam in the rim joist area, not exceeding 5-1/2 inches thick and having a flame spread of 25 or less and smoke development 450 or less.)

Water resistive sheathing paper

A minimum of one layer of No. 15 asphalt felt or other **approved** water-resistive material (commonly referred to as “housewrap”) shall be applied over sheathing of all exterior walls. Lap all horizontal and vertical joints. Fanfold foam products are NOT an approved alternative to the requirement for a water resistive sheathing paper.

An inspection is required prior to installing any soffits or siding.

Note: Not required for detached accessory buildings, or when specifically prohibited by sheathing and/or siding manufacturer.

Flashing

Corrosion-resistant flashing is required over all exterior exposed openings. Flashing must be designed to shed water **away** from the building wall. When installing siding, manufacturer’s installation instructions must be followed. Windows and doors **must** have “pan flashing” installed on the sill area.

Framing requirements

- A. **Base plates** on concrete shall be of approved treated wood.
- B. **Studs:** Minimum 2x4 studs, not more than 10 ft. in length. Maximum 24 in. OC spacing.
- C. **Headers and beams** must be sized to bear all imposed loads and transfer weight down to foundation.
- D. **Top plates:** Bearing walls are required to have two top plates. A single top plate is allowed on roof bearing walls if the rafters bear over a stud (1 in. tolerance allowed).
- E. **Rafters and roof sheathing** for sloped roofs shall be designed for 35 lb/sq. ft. snow load. (Trusses must be engineered by an approved manufacturer and truss specs must be on site for inspection.)
- F. **Wall ties:** When parallel to rafters and used as ceiling joists: nail to both the rafter and the top plates. When parallel to rafters and not used as ceiling joists: provide at 48 in. OC maximum with 2 x 4s in the lower one-third of the rafter space. When ceiling joists are not parallel to rafters: provide at 48 in. OC maximum with 2x4s in the lower one-third of the rafter space. **Note:** Where ceiling joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall, girder or ridge beam.
- G. **Collar ties:** Collar ties or ridge straps to resist wind uplift shall be connected to rafters in the upper one-third of the attic space. Collar ties shall be a minimum 1x4 spaced 48 in. OC maximum.
- H. **Allowable spans for joists and rafters** can be found in the Information Sheet titled: No. 2 Grade Wood Members and “I” Joists Span Tables under “Wood species charts.”

When calling for an inspection have permit number(s) available.

**Questions?
Need an inspection?**

Contact the City of Bloomington,
Community Development Department

Building and Inspection

1800 West Old Shakopee Road
Bloomington MN 55431-3027

952-563-8930

FAX 952-563-8949

TTY 952-563-8740

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