

## Basement Finishing Requirements

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

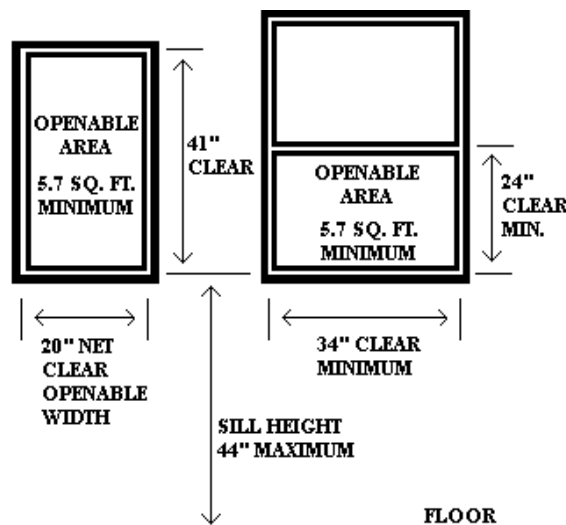
### General Information

1. Requires a Building Permit application and one set of plans showing basement layout, proposed walls, rooms, etc.
2. Plumbing, heating and electrical permits may also be required.
3. When repairs or additions requiring a permit occur or when a sleeping room is added or created within a single-family dwelling smoke detectors are required.
4. Foundation walls must meet energy code minimum requirements of R-15, wood framed walls above foundation of R-20, and rim joists R-20.
5. Any rigid insulation, such as 3/4" Styrofoam, must be protected by a 15-minute fire rating.
6. Basement headroom must be a minimum of 7 feet.
7. Must have one doorway and/or stairway as an exit.
8. Gas-fired appliances must have a fresh air intake.
9. Building inspections are required for framing, insulation, drywall and final. Additional inspections are required for plumbing, heating and electrical work.
10. Windows are required equal to 8 percent of the floor area of the room and natural ventilation equal to 4 percent of room area.

### Basement Bedroom/Sleeping Room Requirements or Habitable Space

All sleeping rooms or habitable space shall have at least one egress window meeting all these requirements.

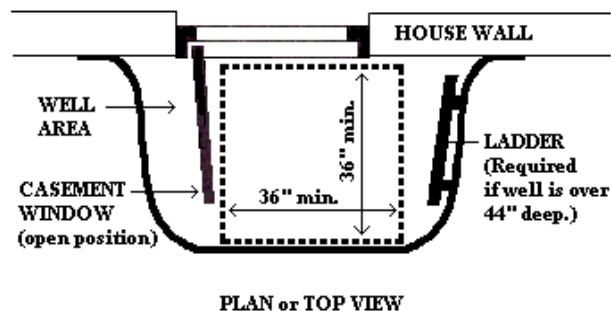
- Sill Height: not more than 44-inches above floor.
- Openable Area: not less than 5.7 square feet (820 square inches). Grade floor openings not less than 5.0 square feet.



## Emergency Escapes – Window Wells Below Grade (Section 310.04)

Minimum access **WITH WINDOW FULLY OPEN**: 36" measured horizontally from the foundation wall to the well and from the window surface to the well. Note: 3' by 3' wells will **NOT** provide the required access for the casement.

- The clear horizontal dimensions shall allow the window to be fully opened and provide a minimum accessible net clear opening of 9 square feet with minimum dimensions of 36-inches.
- Window wells with a vertical depth of more than 44-inches shall be equipped with an approved permanently affixed ladder of stairs that are accessible with the window in the fully open position. The ladder or stairs shall not encroach into the required dimensions of the window well by more than six inches.
- Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet.



## STATE BUILDING CODE REQUIREMENTS

1. Smoke detectors are required for the entire house when remodeling or finishing a basement. Smoke detectors shall be in each bedroom, in corridors leading to bedrooms and on every level of the home. Smoke detectors shall be hard wired with battery backup in the newly remodeled areas. Smoke detectors in existing areas may be solely battery powered. Smoke detectors should be interconnected if possible.
2. Each bedroom shall have at least one escape window with the following dimensions:
  - a. Width - 20" minimum clear opening
  - b. Height - 24" minimum clear opening
  - c. Total opening - 5.7 square feet minimum
  - d. Sill height - not more than 44" above the floor
  - e. Exit windows under decks, overhangs, etc. shall have a minimum 36" clearance above grade.
3. Bathrooms require an exhaust fan capable of providing 5 air changes per hour, connected directly to the outside. Exhaust vents shall be insulated at least 3 feet from the outlet.
4. Habitable rooms shall have window area equal to 8% of the floor area with 1/2 openable or mechanical ventilation capable of providing 2 air changes per hour. Mechanical ventilation may be provided by the furnace ductwork if the thermostat has a setting to turn the furnace fan on.
5. Foam insulation shall be covered by a minimum of 1/2" sheetrock.

6. The walls and soffits of enclosed usable space under the stairs and landing shall be fire protected with 1/2" sheetrock. Draft stop all soffits, under bathtub(s) and all other locations such as holes for pipes and similar places which could afford a passage for flames. Draft stop material shall be gypsum board. Draft stopping may be solidly packed fiberglass insulation where gypsum board is not possible.
7. Use treated or rot resistant plates on concrete floors.
8. Foundation walls shall be insulated with a minimum of R-10 on the entire foundation wall. Buildings with insulation on exterior side of foundation wall do not require interior insulation to be added.
9. Post the inspection record card in a convenient place for the inspectors to sign. Call for inspections as indicated on the inspection record card.
10. Minor heating alterations are inspected by the Building Inspector at the time of the framing inspection. Significant changes to the heating system require a heating permit and inspection by the Heating Inspector.
11. Shower faucets shall be temperature controlled anti-scald type. Toilets shall be 1.6 gallon or less flush volume.
12. For homeowners doing their own electrical work, an information package is available from the City of West St Paul.
13. Cost of the permit is determined based on the value that should include both materials and labor.

While not all inclusive, the above comments should be used as a general guide to code compliance. Complete and accurate information will expedite the plan review process.

## Supplement to Basement Finish Application

*Plans and all the following information are required with Basement Finish Applications*

1. Show size of area to be finished and all dimensions on plan.
2. Show location of all walls on plan which exist and those to be added.
3. Show use of rooms on plan (i.e. Family Room, Bedroom, Den, Unfinished space)
4. Window information with locations on plan: window, glass, size, type (casement, slider, location operable sash double hung, etc.)

Window A	
Window B	
Window C	
Window D	

5. Exterior wall construction

Size of studs/stripping	
Spacing of studs	
Type and thickness of insulation	
Vapor barrier (i.e. 4 or 6 mil polyethylene)	
Wall covering (i.e. 1/2" sheetrock)	

6. Interior wall construction

Size of studs	
Spacing of studs	
Wall covering (i.e. 1/2" sheetrock)	

7. Ceiling covering (i.e. 1/2" or 5/8" sheetrock)

8. Smoke detector location (also show on plan)

9. Plumbing to be installed (check one) – separate permit

None	
1/2 bath on existing rough-in	
3/4 or full bath on existing rough-in	
1/2 bath including new rough-in	
3/4 or full bath including new rough-in	
Other (specify)	

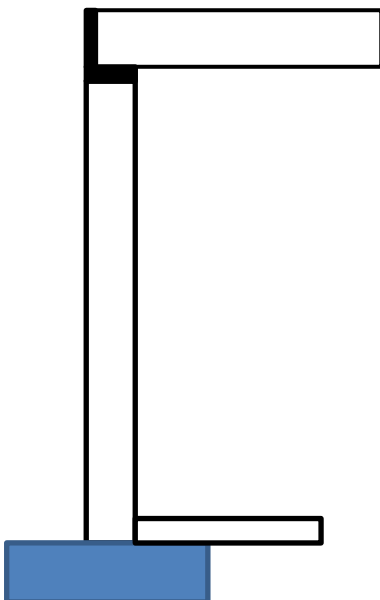
10. Heating to be installed (check one) – separate permit

Extend supply and returns	
Use existing with no changes	
Other (specify)	

11. Type and number of fireplaces to be added

12. Total square footage of finished basement area

13. Side view of foundation wall area. Fill out information accordingly.



FOUNDATION TYPE	
FLOOR JOIST SIZE	
INSULATION R-VALUE	
FRAMING MATERIAL	
CEILING HEIGHT	