CITY OF SAINT PAUL **DEPARTMENT OF SAFETY AND INSPECTIONS**

SAINT PAUL
SAFETY & INSPECTIONS

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BUILDING PLAN REQUIREMENTS

I. NEW 1- AND 2-FAMILY DWELLINGS; NEW COMMERCIAL OR MULTI-FAMILY RESIDENTIAL CONSTRUCTION AND ADDITIONS

Building permit application and two complete sets of plans must have stamped approval from the following offices before submittal to plan examination at 375 Jackson Street, Suite #220. Bring one additional copy of the survey to be submitted to public works.

PUBLIC WORKS: 10th Floor City Hall Annex - address and legal description (266-6151). PUBLIC WORKS: 7th Floor City Hall Annex - sewer size and location (266-6234).

NOTE: New houses in the river corridor area or tree preservation district and all new commercial or multi-family residential construction or additions require a Site Plan Review. This process should be started as soon as possible for commercial and multi-family projects.

Exterior work located in designated Historic Districts must have a building permit application for exterior construction. 3 copies of the plans, including exterior elevations, details and pictures, shall be submitted to the Heritage Preservation Commission (HPC) staff person in the DSI office at 375 Jackson St. They can be contacted at 651-266-9078. Building permits for all exterior work located in these districts may not be issued without HPC approval.

A certified survey will be required for all new construction including 1 and 2 family dwellings.
The site survey will be prepared by a licensed surveyor and include:

1. A lot survey
2. Required setbacks from property lines.
3. Proposed location of the structure/s.
4. Location of sidewalks, curbs, or streets as applicable.
5. Significant elevation variations.
6. Site drainage plan and topography.
7. Site erosion and sediment control devices, including construction entrances.

II. 1 AND 2 FAMILY ADDITIONS AND REMODELING

Submit a completed building permit application with 2 complete sets of plans including the following:

1. Site Plan: A view from above the property, including all pertinent structures and additions, their sizes, and dimensions with distances from the property lines. It is helpful to illustrate roof lines. Also include erosion and sediment control devices (refer to supplemental handout for requirements.
2. Floor Plans: A view of the interior floor levels from above. Preferred scale ¼"=1'.
   a. Types of rooms and sizes (include rooms adjacent to proposed additions).
   b. Types and sizes of windows and doors. Provide glass size as width x height in inches.
   c. Size, direction and spacing of joists and other pertinent structural members.

3. Elevations: Exterior views from ground level. Show the most descriptive view on additions, two or more elevations on complex or unusual designs.
4. Sections: A view from the side of the structure as though it has been cut in half vertically from footings and foundation thru roof structure.
   a) Size of footings and foundation walls.
   b) Size and spacing of floor and ceiling joists.
   c) Size and spacing of rafters – if trusses: provide manufacturer specifications and plans available from retailer to inspector on site during construction.
   d) Type and size of sheathing, insulation and finishes for walls and roof, flooring, etc.
   e) Show grade height on foundation wall and interior ceiling height.
   f) Specify special headers or beams.

5. ENERGY CALCULATIONS FORM: Except as noted below, one completed copy of an approved Energy Code Form is required.

NOTE: If remodeling or construction of additions, meet the following requirements and the amount of glazing is within the allowable percentage below, then an energy calculation will not be required:

Foundation: minimum of R-20 for entire foundation wall.
Rim-Joist: minimum R-20. (Floors over unheated space require R-30 minimum insulation). Wall Insulation: minimum R-20 13+5.
Roof Area: minimum of R-38 with raised heel "energy" trusses or rafters; R-49 otherwise.

6. Blower Door Testing**.**

The building or dwelling unit shall be tested and verified as having an **air leakage rate of not exceeding 3 air changes per hour** in Climate Zones 3 through 8 **(Minnesota 6 & 7)**.
Testing shall be conducted with a **blower door at a pressure of 0.2 inches water gauge (w.g.) (50 Pascals)**. Where required by the code official, testing shall be conducted by an approved third party.
A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

7. Certificate (Mandatory). A building certificate shall be completed and **posted on or in** the **electrical distribution panel** by the builder or registered design professional. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list:

1. the date the certificate is installed;
2. the dwelling address;
3. residential contractor name and contractor license number, or homeowner name, if acting as the general contractor;
4. the predominant installed R-values, their location, and type of insulation installed in or on ceiling/roof, walls, rim/band joist, foundation, slab, basement wall, crawl space wall or floor, and ducts outside conditioned spaces;
5. U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration;

NOTE: COMMONLY MISSED BUILDING CODE REQUIREMENTS

1. Each sleeping room and new habitable basements must have one exterior door or one escape/rescue window with 5.7 square feet of open able area. Minimum width 20", minimum height 24" (one minimum only) (5.7 sq. ft.= 821 sq. inches).
2. All habitable rooms shall be provided with aggregate glazing area of not less than 8% of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access of shall otherwise be readily controllable by the building occupants. The minimum open able area to the outdoors shall be 4% of the floor area being ventilated. (Glazing and ventilation requirements may be substituted with approved mechanical ventilation systems and artificial lights.)
3. Smoke detectors are required on all floor levels, including the basement, adjacent to sleeping rooms, and in the sleeping rooms. For new construction all smoke detectors must be "hard-wired" and interconnected with battery backup. For additions and remodeling a minimum of hardwired smoke detectors with battery backup are required and interconnected to existing if easily accomplished. (If significant walls are open and exposed, a basement, crawlspace, or an attic is available. Verify this possibility with your area inspector as soon as possible in the process, usually during a framing inspection.)
4. The National Electric Code now requires all new or remodeled bedrooms to have Arc-Fault Circuit Interrupter (AFCI) protection.
5. The National Electric Code also now requires that if rebar is provided in the footing of new construction, the electrical service must be grounded to the rebar of the footing per code. This applies only to main panels and not sub panels. This is only required in additions if the service is relocated and updated to the addition and rebar is provided in the footings. (This does not require that rebar be installed; only used if it is provided.)