BUILDING PERMITS

Residential Projects

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September 2016
How Does a Building Permit Work?

2007 MINNESOTA STATE BUILDING CODE

1300.0120 PERMITS.

Subpart 8. Action on application. The building official shall examine or cause to be examined applications for permits and amendments within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject the application and notify the applicant of the reasons. The building official shall document the reasons for rejecting the application. The applicant may request written documentation of the rejection and the reasons for the rejection. When the building official is satisfied that the proposed work conforms to the requirements of the code and applicable laws and ordinances, the building official shall issue a permit.

Subpart 9. Time limitation of application. An application for a permit for any proposed work shall be considered abandoned 180 days after the date of filing, unless the application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Subpart 10. Validity of permit. The issuance or granting of a permit or approval of plans, specifications, and computations, shall not be construed to be a permit for any violation of the code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of the code or other ordinances of the jurisdiction are not valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official may also prevent occupancy or use of a structure that violates the code or any other ordinance of this jurisdiction.

Subpart 11. Expiration. Every permit issued shall become invalid unless the work authorized by the permit is commenced within 180 days after its issuance, or if the work authorized by the permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official may grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Subpart 12. Suspension or revocation. The building official may suspend or revoke a permit issued under the code if the permit is issued in error; on the basis of incorrect, inaccurate, or incomplete information; or in violation of any ordinance or regulation or the code.

SPRING LAKE PARK BUILDING OFFICIAL IS: Barry Brainard. E-mail: bbrainard@slpmn.org
DETERMINING RESIDENTIAL BUILDING PERMIT FEES

The following information (subject to change) has been prepared to provide a general guide to help you estimate permit fees. A Building permit includes Permit fee, Plan Check fee, and State Surcharge. The permit fee covers the cost of on-site inspections while the plan check fee covers the cost to review and make sure your project complies on paper to all building and zoning requirements. The State of Minnesota also receives a fee called “surcharge”. The surcharge fee covers the State of Minnesota Administration Office that administers code amendments and publications.

To estimate your project Building Permit Fee you must first know the total value of all construction work (i.e. finish work, painting, roofing, electrical, plumbing, HVAC, etc). Use this five step process to calculate your total building permit fee.

1. Estimate Value of Construction Project

For most projects, the City of Spring Lake Park estimates your project construction value based on the State of Minnesota Department of Administration Building Valuation Data updated every May. Other projects such as reroofing, siding, window and door replacements, etc., are estimated based on the written contract for material and labor between the homeowner and the contractor. This written contract must be included with the building permit application.

With the projects listed below, take the gross square feet times the cost per square foot listed (2014 Values). Example: You want to build a 20’ x 20’ detached garage. What’s its total value? 20 times 20 = 400 gross square feet times $29.57 per square foot (400 x 29.57) = a total value of $11,828.00.

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost per Square Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Floor(s)</td>
<td>$91.23</td>
</tr>
<tr>
<td>Semi-finished Basement</td>
<td>$56.23</td>
</tr>
<tr>
<td>Unfinished Basement</td>
<td>$47.67</td>
</tr>
<tr>
<td>Crawl Space</td>
<td>$41.34</td>
</tr>
<tr>
<td>Finish Basement – Good</td>
<td>$65.68</td>
</tr>
<tr>
<td>Finish Basement – Average</td>
<td>$57.25</td>
</tr>
<tr>
<td>Garage: Attached</td>
<td>$34.80</td>
</tr>
<tr>
<td>Garage: Detached</td>
<td>$29.57</td>
</tr>
<tr>
<td>Storage Shed</td>
<td>$12.98</td>
</tr>
<tr>
<td>Four Season w/post Footings</td>
<td>$75.42</td>
</tr>
<tr>
<td>Three Season: Enclosure</td>
<td>$53.72</td>
</tr>
<tr>
<td>Three Season: Screened</td>
<td>$37.91</td>
</tr>
<tr>
<td>Deck: w/ Railings</td>
<td>$24.06</td>
</tr>
<tr>
<td>Deck: w/out Railings</td>
<td>$17.24</td>
</tr>
</tbody>
</table>

Please contact the City of Spring Lake Park at 763-784-6491 or for the updated cost per square foot for your project valuation.
2. Calculate Permit Fee

<table>
<thead>
<tr>
<th>Valuation</th>
<th>Fee Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1-$500</td>
<td>$31.00</td>
</tr>
<tr>
<td>$501-$2,000</td>
<td>$31.00 FOR FIRST $500 + $4.00 EACH ADDITIONAL $100</td>
</tr>
<tr>
<td>$2,001-$25,000</td>
<td>$79.44 FOR FIRST $2,000 + $16.34 EACH ADDITIONAL $1,000</td>
</tr>
<tr>
<td>$25,001-$50,000</td>
<td>$445.38 FOR FIRST $25,000 + $12.18 EACH ADDITIONAL $1,000</td>
</tr>
<tr>
<td>$50,001-$100,000</td>
<td>$731.80 FOR FIRST $50,000 + $8.80 EACH ADDITIONAL $1,000</td>
</tr>
<tr>
<td>$100,001-$500,000</td>
<td>$1,128.64 FOR FIRST $100,000 + $7.24 EACH ADDITIONAL $1,000</td>
</tr>
<tr>
<td>$500,001-$1,000,000</td>
<td>$3,671.86 FOR FIRST $500,000 + $6.20 EACH ADDITIONAL $1,000</td>
</tr>
<tr>
<td>$1,000,000 AND UP</td>
<td>$6,368.06 FOR FIRST $1,000,000 + $5.16 EACH ADDITIONAL $1,000</td>
</tr>
</tbody>
</table>

Example: $11,828.00 = $79.44 for the first $2,000 + $16.34 for each additional $1,000 ($11,828 subtract 2,000 = 9,828). 9,828 divided by 1,000 = 9.828 times $16.34 = $160.59 + $79.44 = $240.03 Permit fee.

3. Calculate Plan Check Fee

Plan check fee equals 65% (.65) of the Permit Fee (This is in addition to the permit fee). This fee is for the review of your project to make sure it conforms to all local, state, and federal codes. There is no plan check fee applied in all residential siding, roofing, window replacements, or Zoning permits.

Example: $240.03 times 65% (240.03x.65) = $156.02 Plan Check Fee

4. Calculate State Surcharge Fee

The State Surcharge is based on the valuation of the project per step one: There is no State Surcharge applied to Zoning Permits.

If the fee for the permit issued is fixed in amount the surcharge is equivalent to one-half mill (.0005) of the fee or $1, except that effective July 1, 2010, until June 30, 2015, the permit surcharge is equivalent to one-half mill (.0005) of the fee or $5, whichever amount is greater. For all other permits, the surcharge is as follows:

1. if the valuation of the structure, addition, or alteration is $1,000,000 or less, the surcharge is equivalent to one-half mill (.0005) of the valuation of the structure, addition, or alteration;
2. if the valuation is greater than $1,000,000, the surcharge is $500 plus two-fifths mill (.0004) of the value between $1,000,000 and $2,000,000;
3. if the valuation is greater than $2,000,000, the surcharge is $900 plus three-tenths mill (.0003) of the value between $2,000,000 and $3,000,000;
4. if the valuation is greater than $3,000,000, the surcharge is $1,200 plus one-fifth mill (.0002) of the value between $3,000,000 and $4,000,000;
5. if the valuation is greater than $4,000,000, the surcharge is $1,400 plus one-tenth mill (.0001) of the value between $4,000,000 and $5,000,000; and
6. if the valuation exceeds $5,000,000, the surcharge is $1,500 plus one-twentieth mill (.00005) of the value that exceeds $5,000,000

Example: Valuation = $11,828.00 times .0005 (11,828 x .0005) = $5.91 Surcharge.

5. Calculate Total Building Permit Fee

<table>
<thead>
<tr>
<th>Permit Fee:</th>
<th>$240.03</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Plan Check Fee:</td>
<td>$156.02</td>
</tr>
<tr>
<td>+ State Surcharge Fee:</td>
<td>$ 5.91</td>
</tr>
</tbody>
</table>

= TOTAL BUILDING PERMIT FEE: $401.96
BASEMENT & ROOM FINISH

SMOKE DETECTORS (R-317)

A smoke detector is required at a point centrally located in the hallway or area giving access to each separate sleeping area, on each story including basement, and in every sleeping room throughout the entire house. In new additions, the smoke detectors shall receive their primary power from the building wiring, be equipped with battery backup, and be interconnected. Existing finished areas may be solely battery operated.

MINIMUM CLEAR DIMENSIONS (R-304)

3’0” Hall width
7’0” Ceiling height in habitable rooms (living, sleeping, eating, cooking, and basements.
2’6” Width for toilet (centered) 15 inches from finished wall to center-line of toilet and 21 inches clearance in front of the toilet.
3’0” Stairway width

EMERGENCY ESCAPE AND RESCUE OPENINGS (R-310)

See “Emergency Escape (Egress Windows)” handout for details.

EGRESS WINDOW WELLS (R-310, 2)

See “Emergency Escape (Egress Windows)” handout for details.

NATURAL LIGHT (R-303,1)

Habitable rooms (room used for living, sleeping, eating or cooking) shall be provided with natural light by means of exterior glazed openings (windows) with an area not less than 8% of the floor area of such rooms of which half or 4% of such glazed openings shall be openable for natural ventilation.

FRAMING (R-602)

Lumber shall be grade-stamped. The bottom wall plate shall be treated wood and securely fastened to the floor slab with nails/screws or construction adhesive. Engineered floor trusses/beams shall not be cut, notched, or altered without written approval from the manufacturer.
STAIRWAYS (R-314)

Minimum stairway headroom clearance is 6’8” measured vertically from a plane parallel and tangent to the stairway tread nosing to the above ceiling at all points. Landings at the bottom of the stairways require 36” of depth before the door or the wall. Stairways shall not be less than 36” in clear width at all points above the permitted handrail height.

ENCLOSED AREA UNDER STAIRS

The walls and ceiling of an enclosed space below an interior stairway shall be protected with one layer of 1/2” gypsum board. If the area is greater than 100 square feet, a heat run shall be provided to the area for ventilation.

INSULATION

Foundation walls require R-10 insulation. Framed walls require R-19 insulation. Attic requires R-44 insulation. Rigid foam insulation with a flame spread rating greater than 75 and/or a smoke density rating greater than 450 shall be protected with ½” gypsum board or ¼” plywood.

Bathtub trap openings and other penetrations in the floor above should be filled with fibreglass or foam insulation (see plumbing section for more information on trap access).

A vapor barrier (4 mil poly or equal) is required on the warm side of insulated exterior walls. This includes behind showers and tubs on exterior walls. Water resistive gypsum board cannot be applied over another vapor barrier (such as 4 mil poly), or on ceilings.

CERAMIC TILE

Ceramic tile in shower/tub area shall be applied over a concrete board.

SAFETY GLAZING

Safety glazing is required in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathrooms and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60” above the walking surface.

Safety glazing is required in fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within a 24” arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60” above the walking surface.

MECHANICAL

A separate mechanical permit is required for work NOT done by the homeowner.

Masonry and manufactured fireplaces require a separate permit.

All habitable rooms shall be provided with a heating system capable of maintaining 68 degrees Fahrenheit at a point three feet above the finished floor. For minimum furnace room dimensions see the attached information and the furnace installation instructions.
Main trunk lines are to be adequately sized to allow additional supply branch ducts to be provided to any additional finished rooms. Provide return air ducts, the same size as the supply ducts, to all rooms but the kitchen and bathroom.

Each bathroom requires an exhaust fan to the exterior. The ducts shall be insulated to an R-4.2 the first three feet from the exterior wall, and terminate at least three feet from any opening such as an openable window or combustion air duct in the exterior wall.

**PLUMBING**

* A separate plumbing permit is required for work NOT done by the homeowner.

An access panel is required for hose bib shutoff valves and upper level tub traps. A shower or combination shower/bath must be equipped with an anti-scald type shower control valve. The valve must be of the thermostatic or pressure-balancing type.

**ELECTRICAL**

* A separate State Electrical Permit is required for any new wiring and must be obtained by the person doing the work. The State Inspector is Brian Nelson at (763) 434-4853. Office hours are weekday mornings 7:00-8:30 a.m. A State Electrical Inspection form is available at the City Building Inspections Department at a cost of $1.50 (cash).
NEW CARBON MONOXIDE LAW EFFECTIVE JANUARY 2007

The 2006 legislative session resulted in a new law that requires carbon monoxide (CO) detectors to be placed in new and existing residential structures as listed under Minnesota State Statutes 299F.50.

The new law will affect all new single-family homes and multi-family dwelling units built in Minnesota where building permits are obtained after January 1, 2007. The law will also require all existing single-family homes to comply by August 1, 2008, and existing multi-family dwellings and apartment units by August 1, 2009.

The location of a CO detector must be within ten (10) feet of each bedroom, such as a common hallway shared by each bedroom. If a bedroom is located on separate floor, an additional CO detector would be required within ten feet of the bedroom. CO detectors can be plugged directly into a wall outlet and should be placed per manufacturer recommendations. The life of a CO detector is generally five years. Any CO detectors older than five years should be replaced as the sensors most likely would not be accurate.

Carbon monoxide detectors must activate when the concentration of carbon monoxide (CO) reaches a dangerous level. If a CO alarm sounds in a residence, first verify that the occupants are not showing signs of CO poisoning such as headache, nausea, vomiting, disorientation, etc. If anyone in the home shows symptoms of CO poisoning, call 911 immediately. If no symptoms of CO poisoning is present, open windows or doors to allow fresh air to enter and contact the utility company or appliance repair company as soon as possible.

If you have any additional questions or concerns regarding the new carbon monoxide law, please contact the Spring Lake Park Fire Marshal, Barry Brainard at 763-792-7212 or by e-mail at bbrainard@slpmn.org.
Ceiling Height Information

IRC Section R305: Ceiling Height

R.305.1 Minimum Height. Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than 7 feet (2134 MM). The required height shall be measured from the finish floor to the lowest projection from the ceiling.

Exceptions
1. Beams and girders spaced not less than 4 feet (1219 mm) on center may project not more than 6 inches (152 mm) below the required ceiling height.

2. Ceilings in basements without habitable spaces may project to a within 6 feet, 8 inches (2032 mm) of the finish floor; and beams, girders, ducts or other obstructions may project to within 6 feet, 4 inches (1931 mm) of the finished floor.

3. Not more then 50 percent of the required floor area of a room or space is permitted to have a sloped ceiling less than 7 feet (2134 mm) in height with no portion of the required floor area less than 5 feet (1524 mm) in height.

Section R305 of the IRC reduces the required ceiling height from the UBC.

See next column
BUILDING PERMIT REQUIREMENTS:
Building permits are required for all decks and steps constructed within the City of Spring Lake Park. Building permits include a plan review of your proposed deck or steps, and inspections to assure compliance with all federal, state, and local building codes. Building permits are not designed to be a guarantee of the work, but to provide a reasonable degree of review and observation so that the project will be successful, safe and long lasting.

PERMIT FEES:
The building permit fee is based on the project construction value and is designed to cover the cost of a plan review and all necessary field inspections that will be conducted during construction. The plan review is performed by the Spring Lake Park Building Official in order to spot potential problems or pitfalls that may arise. Also a State Surcharge is added for upkeep of the Minnesota Department of Code Enforcement.

Please contact your local building inspection department to get an exact quote on permit fees for your particular project.

INFORMATION NECESSARY WHEN APPLYING FOR A BUILDING PERMIT:
Information necessary for the Spring Lake Park Inspections Department to conduct a proper job of plan review and to help the project go as smoothly as possible, is as follows:

- One (1) completed Spring Lake Park Building Permit Application
- Two (2) Site plan or Certificate of Surveys
- Two (2) proposed Floor Plan(s)
- Two (2) proposed Elevation Plan(s)
- (2) proposed Cross Section Plan
- Certificate of Survey
- Floor Plan
- Side Elevation
- Elevation Plan
- Cross Section Plan
In planning and designing your deck or stairs, the City of Spring Lake Park recommends that you apply these easy five steps as shown below to assure that your project will be in full compliance with applicable codes.

1. Preparing your Site Plan or Survey.
2. Placing and sizing your deck or stair on your lot.
3. Designing your deck or stairs according to building code requirements.
4. Preparing your Floor and Elevation Plan(s) for your deck or stairs.
5. Completing the Building Permit Application form.

1. PREPARING YOUR SITE PLAN OR SURVEY:
The City of Spring Lake Park requires two copies of a certificate of survey or site plan drawn to scale and indicating the lot dimensions, the location and size of the existing structure(s), and the location and size of the proposed deck or stairs. Survey or site plan must also indicate the setback (or distance) from the property lines(s) of the existing and proposed structures. See sample below...

The City of Spring Lake Park highly recommends that you hire a State of Minnesota registered Land Surveyor to survey and plot your site plan. Homeowners are permitted to draw their own site plan.

Listed below for your information are registered surveyors available in the area.

- EG Rud & Sons, Inc. 786-5556
- Cain & Associates 434-7646
- Carley-Torgerson, Inc. 484-3301
- Kurth Surveying, Inc. 788-9769
- Merila & Associates 533-7595
- Lot Surveys Company 560-3093
- Kemper & Associates 631-0351
- Midwest 786-6909

2. PLACING YOUR DECK OR STAIRS ON YOUR LOT ACCORDING TO SETBACKS:
Setbacks are defined as open space between a property line and a structure or a structure to structure. This space is needed for fire access and fire safety. Setbacks are from exterior finish to the property line or exterior finish of an adjacent structure. Your setbacks are calculated by first determining the zoning district in which your property lies. Please refer to the enclosed zoning map to determine your property zone by location. If you have any questions regarding your property zone please contact the Spring Lake Park City Hall at (763) 784-6491. The following setback requirements are set forth for all residential districts:

- **R-1:**  
  - Front Yard: 35’  
  - Rear Yard: 40’  
  - Side Yard: 10’
- **R-2:**  
  - Front Yard: 35’  
  - Rear Yard: 40’  
  - Side Yard: 10’
- **R-3:**  
  - Front Yard: 35’  
  - Rear Yard: 40’  
  - Side Yard: 10’  
  - Side Yard for over 2 Dwellings: 15’
- **R-4:**  
  - Front Yard: 35’  
  - Rear Yard: 30’  
  - Side Yard: 10’  
  - Side Yard for over 2 Dwellings: 20’
- **R-5:**  
  - Front Yard: 35’  
  - Rear Yard: 15’  
  - Side Yard: 10’  
  - Side Yard for over 2 Dwellings: 25’

All decks must maintain a distance of 8 feet between any other structures on site including garages, sheds, swimming pools, and play structures.
DETERMINING YOUR MAXIMUM DECK SIZE:

The City of Spring Lake Park requires that each lot must maintain a certain percentage of open space. The following is a listing of the maximum percentage of lot coverage allowed in each residential zoning district. Structures include: Your home, attached garage, detached garage or shed, swimming pools, play structures, gazebos, covered patios, and decks.

R-1: 30%  R-2: 50%  R-3: 35%  R-4: 40%  R-5: 40%

An example of how to calculate maximum deck size is as follows: Your Lot size is 100 feet wide by 100 feet deep; thus your area equals 100 multiplied by 100 (100 x100 = 10,000 square feet in area). You have determined that your lot is located in a R-3 zone. Thus, you take your lot and multiply it by the lot coverage percentage allowed in a R-3 zone (10,000 x35% or .35 = 3,500 square feet maximum coverage on your lot for structures). Your house is 32 feet deep by 40 feet wide (32 x40 = 1,280), your detached garage is 30 feet deep by 24 feet wide (30 x 24 = 720), your shed is 12 feet deep by 10 feet wide (12 x10 = 120), your swimming pool is 15 feet deep by 50 feet wide (15 x50 = 750), your play structure is 12 feet deep by 30 feet deep (12 x30 = 360). Thus;

Maximum coverage allowed: 3,500 square feet
Subtract House area: -1,280 square feet
Subtract Garage area: - 720 square feet
Subtract Shed area: - 120 square feet
Subtract Pool area: - 750 square feet
Subtract Play Structure area: - 360 square feet

Equals Maximum allowable deck size of: 270 square feet.

3. DESIGNING YOUR DECK ACCORDING TO BUILDING CODE REQUIREMENTS:

Frost footings are required for any deck attached to a dwelling, porch or garage that has frost footings. The minimum depth to the base of the footing is 42”. All decks shall be designed to support a live load of 40 pounds per square foot. Joist shall not overhang beams by more than two (2) feet, nor should beams overhang post by more than one (1) foot unless a special design is approved. All header beams more than six (6) feet long and joist over 12 feet long that frame into ledgers or beams, shall be supported by approved framing anchors such as hangers. Use only stainless steel, high strength aluminum or hot dipped galvanized nails and screws. All exposed wood shall be an approved wood of natural resistance to decay (redwood, cedar, etc.), Or approved treated wood. This includes post, beams, joist, decking, and railings. All connections between deck and dwelling shall be weatherproof. Any cuts in the exterior finish must be flashed with corrosion proof metal. Any wood to be buried in-ground must be made of approved in-ground contact. Composite material may be used with approved documentation.

Guardrails are required on all decks more than 30 inches above the ground or a lower deck. Rails must be 36 inches minimum in height. Open guardrails and stair railings must have intermediate rails in which a four (4) inch sphere cannot pass through.

Minimum width for stairs shall be 36 inches. Maximum 7 3/4 inch rise. Minimum run shall be 10 inches. Largest tread width or riser shall not exceed the smallest by more than 3/8”. Handrails shall be placed not less than 34” or more than 38” above nosing of the stair treads.
4. PREPARING A FLOOR AND ELEVATION PLAN FOR YOUR STAIRS OR DECK:

Elevations should show the height of your stair or deck from the ground, footing depth and size, guardrail and handrail height and spacing, stairway width, stairway rise/run, handrail height, clearance to overhead wires, and construction materials. When you have completed your deck elevation, it should look like the illustration below:

*NOTE: 10 foot minimum clearance required from decking to overhead power lines.

5. COMPLETE THE BUILDING PERMIT APPLICATION:

Attached with this information sheet you will find a building permit application for your convenience. If you hire a contractor to construct your stairs or deck, the contractor must be license by the State of Minnesota. It is required that the contractor hired to construct your structure must apply for the building permit indicating his/her license number. Some contractors might suggest that you the homeowner apply for the building permit. By doing this, the contractor avoids direct responsibility. If you are building yourself, please remember if you hire any subcontractors, they too must be licensed.

BACK TO INDEX
1. Building(s) to be demolished: _____________________________ Disposal site: _____________________________

2. Will building(s) be burned by SBM Fire Department? Yes ________ No ________

3. Type of construction material: Wood __________ Masonry __________ Other _______________________

   Asbestos present in building: Yes ___ No ___ If Yes, complete A & B below and notify the State.

   Name of contractor removing asbestos: ___________________________________________________

   Facility disposal site: Name _____________________________________________________________
   Address _____________________________________________________________

4. Indicate if any hazardous materials listed below are present. If Yes, how will they be managed

   Fluorescent lamps and ballasts: Yes _____ No ________

   Mercury containing devices (thermostats, switches, appliances, boilers, etc.) Yes ______ No ________

   Electrical equipment containing PCB’s, including light ballasts. Capacitors, and appliances: Yes _____ No ________

   Appliances and fire extinguishers containing freon, CFCs, halon, etc.: Yes ______ No ________

   Other Hazardous Material (paints, pesticides, batteries, auto or cleaning products, etc.): ______

5. Well on site: Yes ________ No ________ If Yes, will well(s) be abandoned? Yes ________ No ________

   If Yes, the name of the Licensed Well Contractor: _____________________________________________

6. Septic tank(s) on site: Yes ________ No ________ If Yes, complete below:

   Tank(s) to be collapsed and filled with (sand, gravel, etc.) Yes ________ No ________

   Tank(s) to be removed and disposed at: _____________________________________________________

7. City water & sewer: Yes _____ No ________ (If Yes, must be abandoned & approved by SLP Public Works)

8. Underground petroleum storage tank(s) on site: Yes _____ No ________

   If Yes, will tanks be reused?: Yes _____ No ________

   If No, the Underground Storage tank(s) must be abandoned in accordance with State rules and regulations.

9. Utilities to be abandoned by the utility company. Call Gopher State One Call (651-454-0002) prior to digging.

10. Provide details of erosion control and establish turf on all disturbed areas.

FOR OFFICE USE ONLY:

Date received: _____________________________ Initials: _____________________________

☐ MPCA ☐ SLP Public Works
☐ Fire Dept. ☐ SAC Adjustments

Signature of Contractor or Authorized Agent _____________________________ Date _______________
Demolition Contractor:
Name: 
Address: 
City, State, Zip: 
Contact Person: 
Phone Number(s): 

Building Information:
Building Name: 
Address/Location: 
City, State, Zip: 
County: 
Phone Number(s): 
Age of Bldg (yrs) 
Size of Bldg (sq ft) 
Number of Floors Including Basement Level(s): 
Present Use of Bldg: 
Prior Use of Bldg: 

Building Owner:
Name: 
Address: 
City, State, Zip: 
Contact Person: 
Phone Number(s): 

Dates when demolition or intentional burning will Begin: and End: 
Notification must be postmarked or received ten (10) working days before demolition begins. *See item #5 for emergency demolitions. Both Beginning and Ending dates should be amended in writing as necessary to reflect current project dates.

If there is >260 linear feet or >160 square feet of Regulated Asbestos-Containing Material (RACM) in the building to be demolished, it must be removed by a licensed asbestos contractor prior to demolition. The State of MN-Notice of Intent to Perform an Asbestos Abatement Project must be used to notify for the asbestos removal.

Is nonfriable ACM present in the structure to be demolished? YES NO
If YES complete items 1-9. If NO complete items 3-9.

1. If ACM will be left in place for the demolition indicate the amount of Category I and/or Category II nonfriable ACM left in place.

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<thead>
<tr>
<th>Category I</th>
<th>Linear Feet</th>
</tr>
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<tbody>
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<td>Linear Feet</td>
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<td>Linear Feet</td>
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<table>
<thead>
<tr>
<th>Category II</th>
<th>Linear Feet</th>
</tr>
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<tbody>
<tr>
<td>Linear Feet</td>
<td></td>
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<tr>
<td>Linear Feet</td>
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</tbody>
</table>

Category I nonfriable ACM means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos.

*Category I nonfriable ACM is not allowed to remain in place for demolition if it is in poor condition.

Category II nonfriable ACM means any material, excluding Category I nonfriable ACM, containing more than one percent Asbestos that, when dry, cannot be crumbled, pulverized, or reduced to a powder by hand pressure.

*Category II nonfriable ACM is not allowed to remain in place for demolition if it has a high probability of becoming crumbled, pulverized, or reduced to a powder during demolition, transport, or disposal. (ex transite, cement, slate roofing)

2. Description & Location of ACM remaining in place (including floor # and room #):
3. Company and/or individual that conducted the building inspection and the procedure used to determine the presence or absence of ACM (including analytic method): *Prior to demolition all buildings must be inspected by an U. S. Environmental Protection Agency (EPA) accredited inspector.

4. Description of planned demolition and the specific method(s) that will be used:

5. If the demolition was ordered by a government agency, please identify the agency and attach a copy of the order:
   Name: ____________________________ Title: ____________________________ Authority: ____________________________
   Date of Order (M/D/Y): ____________________________ Date Ordered to Begin (M/D/Y): ____________________________

   * Notification for an emergency demolition must be submitted as early as possible before demolition begins, but not later than the following working day. A demolition is considered an emergency ONLY when the facility has been deemed structurally unsound and in danger of imminent collapse. If the structurally unsound building is known to contain any regulated ACM or is suspected to contain any regulated ACM, special procedures MUST be followed. If you are unaware of the special procedures, instructions/regulations can be obtained by contacting the MPCA at the address or phone number listed below.

6. Description of procedure to be followed in the event that unexpected RACM is found or Cat. II nonfriable ACM becomes crumbled, pulverized or reduced to powder:

7. Waste Transporter(s) Information:
   Transporter Name: ____________________________ Transporter Contact: ____________________________
   Transporter Address: ____________________________ City, State, Zip: ____________________________
   Phone Number: ____________________________

8. Waste Disposal Information:
   Landfill Name: ____________________________ Owner/Operator: ____________________________
   Address/Location: ____________________________ City, State, Zip: ____________________________
   Phone Number(s): ____________________________

9. I certify that the above information is correct and I am a bonafide representative of the demolition contractor or building owner and have authority to enter into agreements for my employer.

Signature of Contractor/Owner: ____________________________ Date: ____________________________

Send to: Minnesota Pollution Control Agency
         Metro Districts – Regular Facilities Section
         520 Lafayette Road North
         St. Paul, MN 55155-4194

For questions call: 651-296-7300
1-800-657-3864
FAX: 651-215-1593

PCB Removal Information  Polychlorinated biphenyls (PCBs) must be removed from the building prior to demolition. PCBs may be found in light ballasts, small capacitors found in old appliances, and transformer oils. For questions call the MPCA Hazardous Waste (HW) business assistance unit at 1-800-657-3724.

PCB remover name/address/phone number: ____________________________

Mercury Removal Information  Mercury containing material must be removed from the building prior to demolition. Mercury containing materials may include fluorescent, metal halide, high pressure sodium, neon, mercury vapor lamps, mercury switches, thermostat probes, manometers, and gages. For questions call the MPCA HW business assistance unit at 1-800-657-3724.

Mercury remover name/address/phone number: ____________________________

Refrigerants/CFCs/HCFCs Recovery Information  A certified technician must recover refrigerants from refrigeration equipment and systems in the building prior to demolition. For questions call the CFC program at 1-800-657-3864.

Refrigerant recoverer name/address/phone number: ____________________________

Notification of Intent to Perform a Demolition form (w-sw4-21.doc) Revised 3/00
CHECKLIST FOR DEMOLITION STRUCTURES

1. Submit a completed notification of intent to perform a demolition from the MPCA (Minnesota Pollution Control Agency) 10 days prior to applying for a demolition permit from the City of Spring Lake Park.

2. Provide lot survey or site plan of proposed demolition site. Call Gopher State One at 651-454-0002 prior to digging.

3. Obtain a demolition permit from the City of Spring Lake Park Code Enforcement Department.

4. All gas lines capped by gas supplier.

5. All electrical services disconnected by electrical supplier.

6. Sewer and water services capped below-grade by a licensed contractor. Locator of termination marked and inspected by the City of Spring Lake Park Public Works.

7. Telephone and cable disconnected by suppliers.

8. Pump and fill all cesspool/septic tank by licensed septic/pumping contractor.

9. Location of all wells on property. Secure well abandonment by a licensed well contractor if the well is to be abandoned. Provide certification of abandonment to the City of Spring Lake Park.

10. Remove all existing structure footings, foundation, and site material and debris from site.

11. Provide erosion control as directed by the City of Spring Lake Park Public Works Director.

12. Establish seed or sod on all disturbed areas.

13. Schedule and conduct a final inspection and approval of restored site by the City of Spring Lake Park Code Enforcement Department at 763-784-6491.

BACK TO INDEX
R404.1.6 HEIGHT ABOVE FINISHED GRADE

Concrete and masonry foundation walls shall extend above the finished grade adjacent to the foundation at all points a minimum of 4 inches (102mm) where masonry veneer is used and a minimum of 6 inches (152 mm) elsewhere.

R403.1.6 FOUNDATION ANCHORAGE

When braced wall panels are supported directly on continuous foundations, the wall wood sill plate or cold-formed steel bottom track shall be anchored to the foundation in accordance with this section. The wood sole plate at exterior walls on monolithic slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. Bolts shall be at least 1/2 inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into masonry or concrete. Interior bearing wall sole plates on monolithic slab foundations shall be positively anchored with approved fasteners. A nut and washer shall be tightened on each bolt to the plate. Sills and sole plates shall be protected against decay and termites where required by Sections R322 and R323. Cold-formed steel framing systems shall be fastened to the wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.1.1. When vertical reinforcing is required by other sections of this code, the foundation anchor bolts shall align with the reinforcing. All anchor bolts installed in masonry shall be grouted in place with at least 1 inch (25 mm) of grout between the bolt and the masonry.

Exceptions:

Rev 5/16/2007 Minnesota Department of Labor and Industry, Construction Codes and Licensing Division 13

1. Foundation anchor straps spaced as required to provide equivalent anchorage to 1/2-inch-diameter (12.7 mm) anchor bolts. When vertical reinforcing is required by other sections of this code, the foundation anchor straps shall align with the reinforcing.

2. Walls 24 inches (609.6) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels according to Figure R602.10.5 at corners.

3. Walls 12 inches (304.8) total length or shorter connecting offset braced wall panels shall be permitted to be connected to the foundation without anchor bolts. The wall shall be attached to adjacent braced wall panels per Figure R602.10.5 at corners.

[See page two for diagrams]
REQUIRED SUBMITTAL FOR DUMPSTER ENCLOSURE

- Cross Section as shown below showing all materials to be used.
- Completed Building Permit Application
- Site plan showing location of enclosure on lot.

SEE REVERSE SIDE FOR SPECIFICATION DETAILS

**GATE DETAIL**

- Double Swing Gate with steel wire lattice slats to be inserted for screening. All material used must be galvanized or weather protective.
- 6" Minimum Clearance
- Composite wood also permitted for inserts or screening @ gate.
- Concrete Footing or encasement must be provided.

**BOLLARD DETAIL**

- 4" Min. Dia. Steel Pipe filled with concrete to be painted traffic yellow.
- 3'-0" (36") Minimum
- 3'-6" (42") Maximum Span for Support Post
- Composite wood also permitted for inserts or screening @ gate.
- Bumper Pipes Required at front corners
- Not to Scale

**SECTION & ELEVATION DETAILS**

- 4" x 4" Min. Support Post to be treated and rated for IN GROUND contact or APPROVED COMPOSITE.
- 8'-0" (96") Maximum Span for Support Post
- Not to Scale
NOTES:

1) WALLS
   New construction: maximum 6'-0" high and constructed of approved composite wood. Materials used should be comparable to style and color of the principal building.

2) SLAB
   Slab to be minimum 4" in thickness of asphalt or concrete.

3) GATES
   Constructed of min. 1-1/2" diameter galvanized tubular steel w/privacy-type slats inserted in galvanized steel mesh fabric, hinge-mounted on min. 3" diameter galvanized steel post.
   Approved composite wood grain at 3/4" minimum thickness is permitted in lieu of steel design.

4) DROP PIN
   ½" dia. 18" long metal rod gate latch. Provide ¾" dia. hole 6" into concrete for rods. In asphalt provide a ¾" p.v.c. sleeve, 6" long or equal.

5) SOIL
   Soil must have bearing capacity at least 2,500 p.s.f.

6) BOLLARD (BUMPER PIPES)
   3'-6" high, 4" diameter Min. steel pipe bollard with concrete, painted traffic yellow, imbedded 42' deep in 18" dia. concrete foundation.

COMPOSITE WOOD WALL CONSTRUCTION

Materials, construction and quality control of composite wood shall be in accordance with applicable Building Codes/Local Code Minimum Standards.

1. Minimum thickness shall be ¾".

2. Sample of composite wood must be included with application for permit.

3. All fasteners used for composite wood must be as approved by the manufacturer.
EMERGENCY ESCAPE AND RESCUE OPENINGS
(EGRESS WINDOWS)

R310.1 Emergency escape and rescue required.  
Basements space and every sleeping room must have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Where openings are provided as a means of escape and rescue they must have a sill height of not more than 44 inches above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure must comply with Section R310.3. The net clear opening dimensions required by this section must be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation must be provided with a window well in accordance with Section R310.2. A minimum ceiling height of 48 inches must be maintained above the exterior grade from the exterior wall to a public way.

R613.1 Installation:  
Windows must be installed in accordance with the manufacturer’s install instructions. Installation instructions must be provided by the manufacturer for each exterior window type and be available on site for all inspections.

R310.1.1 Minimum opening area. All emergency escape and rescue openings must have a minimum net clear opening of 5.7 square feet.

Exception: Grade floor openings must have a minimum net clear opening of 5 square feet.

R310.1.2 Minimum opening height. The minimum net clear opening height must be 24 inches.

R310.1.3 Minimum opening width. The minimum net clear opening width must be 20 inches.

R310.1.4 Operational constraints. Emergency escape and rescue openings must be operational from the inside of the room without the use of keys or tools.

R310.1.5 Replacement windows. Replacement windows installed in buildings meeting the scope of the International Residential Code may be exempt from the requirements of Sections R310.1.1, R310.1.2 and 310.1.3 if the replacement window meets the following conditions:

1. The existing height and width net clear opening must not be reduced by more than 2 inches in either dimension;
2. The rooms or areas are not used for any Minnesota state licensed purpose;
3. The window is not required pursuant to the Minnesota Fire Code;
4. The sleeping room is located above ground level;
5. The sleeping room is not undergoing an addition, remodeling, or a change in occupancy;
6. The window is not required to be replaced pursuant to a locally adopted housing, property maintenance, or rental licensing code.
7. Windows must be installed in accordance with the manufacturer’s installation instructions.

Please Note: Manufacturer’s installation instructions must be made available for all inspections.
**R310.2 Window wells.** Window wells required for emergency escape and rescue must have horizontal dimensions that allow the door or window of the emergency escape and rescue opening to be fully opened. The horizontal dimensions of the window well must provide a minimum net clear area of 9 square feet with a minimum horizontal projection and width of 36 inches.

**Exception:** The ladder or steps required by Section R310.2.1 shall be permitted to encroach a maximum of 6 inches into the required dimensions of the window well.

**R310.2.1 Ladder and steps.** Window wells with a vertical depth greater than 44 inches below the adjacent ground level must be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section will not be required to comply with Sections R311.5 and R311.6. Ladders or rungs must have an inside width of at least 12 inches, must project at least 3 inches from the wall and must be spaced not more than 18 inches on center vertically for the full height of the window well.

**R310.3 Bulkhead enclosures.** Bulkhead enclosures must provide direct access to the basement. The bulkhead enclosure with the door panels in the fully open position must provide the minimum net clear opening required by Section 310.1.1. Bulkhead enclosures must also comply with Section 313.5.8.2

**R311.5.8.2 Bulkhead enclosure stairways.** Stairways serving bulkhead enclosures that are not part of the required building egress and providing access from the outside grade level to the basement must be exempt from the requirements of Sections R311.4.3 and R311.5 when the maximum height from the basement finished floor level to grade adjacent to the stairway does not exceed 8 feet and the grade level opening to the stairway is covered by a bulkhead enclosure with hinged doors or other approved means.

**R310.4 Bars, grills, covers and screens.** Bars, grills, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.1.3, and such devices must be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

---

**ESCAPE AND RESCUE WINDOWS**

**CASEMENT**

- 24" M.L.
- 24" M.E.
- 5.7 SQ. FT. NET CLEAR

**DOUBLE HUNG**

- 20" MIN.
- 34" MIN.
- 5.7 SQ. FT. NET CLEAR

**SLIDE BY**

- 5.7 SQ. FT. NET CLEAR
- 20" MIN.

**MAXIMUM OF 44 INCHES MEASURED FROM FLOOR TO HIGHEST PORTION OF SILL**

**NOTE:** 20" & 24" ARE MINIMUM DIMENSIONS IN WIDTH & HEIGHT. TOTAL ESCAPE AREA MUST ALWAYS BE 5.7 SQ. FT. NET
ACCESS AND EXIT FACILITIES AND EMERGENCY ESCAPES

\[ A \times B = 9 \text{ SQUARE FEET} \]
\[ (\text{MINIMUM}) \]

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 a minimum dimension of 36 inches.

Window wells with a vertical depth of more than 44 inches shall be equipped with an approved permanently affixed ladder or 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 6 inches.
WINDOW & GLASS DOOR REPLACEMENT ADDENDUM
To be completed in addition with Building Permit Application

DATE______________________________

SITE ADDRESS_______________________________________________________________________

OWNER______________________________________________  PHONE#_______________________

CONTRACTOR_______________________________________   PHONE#_______________________

ADDRESS___________________________________________   LICENSE#______________________

☐ Will existing rough-opening size be altered? Yes ____ No ____ If so, by how many________ inches.

☐ Will a new opening be installed? (If yes, provide header detail.) Yes ____ No ____

☐ Residential (single & multi-family units):  Number of total window replacements _______

   Number of window replacements in sleeping area
   a. Above ground _______
   b. Below Ground * _______

   Number of glass door units being replaced _______

* Must provide emergency egress window as required by R310.1 of the 2006 IRC

☑ The manufacturer’s installation instructions must be on site for all inspections.
☑ Provide Fenestration U-Factor Rating for each style of window/door unit being installed. Use NOTES section or a separate sheet if additional space is needed. (Maximum U-Factor = .32)
☑ Smoke detector upgrade is required:
   1. In each sleeping room.
   2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
   3. On each additional story including basements.
Smoke detectors installed under this permit can be battery operated.
☑ Carbon Monoxide detectors are required within 10 feet of each bedroom.

NOTES: _____________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

BACK TO INDEX
2015 MN ENERGY CODE CHANGES

Effective Date: February 14th, 2015

**Disclaimer:** This document is to serve as informational purposes only. This is not a code book or a final interpretation of the code by the building official. This is to serve as a guide for some of the major code changes that will go into effect on February 14th, 2015.

**Plan Review**

In an effort to make sure that codes are communicated throughout the jobsite, the submittals required are listed below. There are several code changes that are very different from the previous code, and this will help make everyone successful in meeting the requirements of the new code.

The following Information must be provided either in schedule form or in notes on the plans:

1. Window manufacturer, size, and U-value
2. Door manufacturer, size, and U-value
3. Header type, size on all openings
4. Wall sections with the following information:
   a. Siding type
   b. Roofing type and manufacturer, wind ratings, sub roofing materials including location of ice and water
   c. Building wrap or barrier
   d. Sheathing type and thickness both walls and roof
   e. Stud size and grade
   f. Truss size, or notation of pre-engineered products, and engineered drawings for pre-engineered material
   g. Floor joist size, type, and engineered drawings for each material
   h. Cavity insulation type and R-Value
   i. Rim joist insulation type and R-value
   j. Attic insulation type and R-value
   k. Attic ventilation type
   l. Interior barrier type
   m. Wall covering type
   n. Footing type and strength, and list admixtures to be added (will also verify on delivery ticket at site)
   o. Foundation Wall type, strength, waterproofing, and drainage
   p. Foundation Insulation type and R-value
q. All materials sub-floor in basement, including type, size, and depth of material
r. Sub floor barrier type, insulation type and R-value
s. Radon Mitigation Plan

**Insulation Change Requirements**

*Wall insulation*- Minimum of **R-21** cavity insulation. No exterior continuous insulation is required in the new code.

*Attic insulation*- Minimum of **R-49** *(attic depth markers are required)*

*Foundation and crawl space insulation*- Minimum of **R-15**

**Fenestration U Factors** - **0.32** or better, **Skylights-0.55** or better

**Blower Door Tests**

Every new home will need to pass a blower door test that allows no more than 3 air changes per hour with a pressure differential of 50 Pascals.

Per the Department of Labor and Industry, there is a contractor that performs these tests within 1.5 hrs of anywhere in the state, for an average cost of $300.

**Hot Water Pipe Insulation**

*Hot water piping will be insulated to at least R-3 as follows:*

- Piping is larger than 3/4” in nominal diameter,
- Piping serves more than one dwelling unit,
- Piping runs from water heater to kitchen outlets,
- Piping is located outside of conditioned space,
- Piping runs from water heater to a distribution manifold,
- Piping is located under a floor slab,
- Piping is buried,
- Supply and return piping is in recirculation systems other than demand recirculation systems,

*Piping run exceeds the following maximum run lengths:*
<table>
<thead>
<tr>
<th>Nominal diameter of largest pipe diameter in run</th>
<th>3/8”</th>
<th>1/2”</th>
<th>3/4”</th>
<th>&gt; 3/4”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max run length</td>
<td>30 ft</td>
<td>20 ft</td>
<td>10 ft</td>
<td>5 ft</td>
</tr>
</tbody>
</table>

**Duct Sealing**

**Duct Sealing (Mandatory).** All ducts are required to be tested for total duct leakage (tightness).

**Exception:** The test is not required where the air handler and entire duct system are located within conditioned space.

<table>
<thead>
<tr>
<th>Construction Phase</th>
<th>Total Duct Leakage CFM25 per 100 ft² CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Construction</td>
<td>2009 IECC 12</td>
</tr>
<tr>
<td>Rough-in</td>
<td>2009 IECC 6</td>
</tr>
<tr>
<td>Rough-in if air-handler not yet installed</td>
<td>2009 IECC 4</td>
</tr>
</tbody>
</table>

*Note: Duct Leakage is measured in cubic feet per minute (CFM) at a pressure of 25 Pascals for every 100 square feet of conditioned floor space (CFA)*

**Building cavities are no longer allowed for supply or return air; (R403.2.3)**

**High-Efficacy lamps**

A minimum of 75% of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

**Attic Access Hatches**

Attic access doors from conditioned to unconditioned spaces shall be weather-stripped and insulated. Insulation dam/baffling required.
**Fireplaces.**

New wood-burning fireplaces will have tight-fitting flue dampers and outdoor combustion air.
PERMIT REQUIREMENTS:
Building permits are required for all sheds and garages over 200 square feet, and zoning permits are required for all shed and garages 200 square feet or less in size constructed within the City of Spring Lake Park. Building and Zoning permits include a plan review of your proposed shed or garage, and inspections to assure compliance with all federal, state, and local building codes. Permits are not designed to be a guarantee of the work, but to provide a reasonable degree of review and observation so that the project will be successful, safe and long lasting.

PERMIT FEES:
The permit fee is based on the project construction value and is designed to cover the cost of a plan review and all necessary field inspections that will be conducted during construction. The plan review is performed by the Spring Lake Park Building Official in order to spot potential problems or pitfalls that may arise. Also a State Surcharge is added for upkeep of the Minnesota Department of Code Enforcement.

Please contact your local building inspection department to get an exact quote on permit fees for your particular project.

INFORMATION REQUIRED WHEN APPLYING FOR A PERMIT:
Information necessary for the Spring Lake Park Inspections Department to conduct a proper job of plan review and to help the project go as smoothly as possible, is as follows:

One (1) completed Spring Lake Park Building or Zoning Permit Application

Two (2) Site plan or Certificate of Surveys

Two (2) proposed Floor Plan(s)

Two (2) proposed Elevation Plan(s)

(2) proposed Cross Section Plan
In planning and designing your shed and garage, the City of Spring Lake Park recommends that you apply these easy five steps as shown below to assure that your project will be in full compliance with applicable codes.

1. Preparing your Site Plan or Survey.
2. Sizing your shed or garage according to setbacks and size guidelines.
3. Designing your shed or garage according to building code requirements.
4. Preparing your Floor and Elevation Plan(s) for your shed or garage.
5. Completing the Building or Zoning Permit Application form.

1. PREPARING YOUR SITE PLAN OR SURVEY:
The City of Spring Lake Park requires two copies of a certificate of survey or site plan drawn to scale and indicating the lot dimensions, the location and size of the existing structure(s), and the location and size of the proposed shed or garage. Survey or site plan must also indicate the setback (or distance) from the property lines(s) of the existing and proposed structures. See sample below...

The City of Spring Lake Park highly recommends that you hire a State of Minnesota registered Land Surveyor to survey and plot your site plan. Homeowners are permitted to draw their own site plan.

Listed below for your information are registered surveyors available in the area.

EG Rud & Sons, Inc. 786-5556
Cain & Associates 434-7646
Carley-Torgerson, Inc. 484-3301
Kurth Surveying, Inc. 788-9769
Merila & Associates 533-7595
Lot Surveys Company 560-3093
Kemper & Associates 631-0351
Midwest 786-6909

2. SIZING YOUR SHED OR GARAGE ACCORDING TO REQUIREMENTS:
The City of Spring Lake Park regulates size restrictions for attached garages and detached sheds and garages. An attached garage maximum size is not allowed to exceed 1,200 square feet. The maximum size of a detached shed or garage also cannot exceed 1,200 square feet combined or forty (40) percent of the rear yard area, which ever is less. For example, say you have an existing 10’ x 15’ shed on a 80’ wide by 110’ deep lot and would like to add a detached garage. First you need to calculate your rear yard area: From the back of your house to the rear property line is 54 feet, and the width of the property is 80 feet. Thus your rear yard area equals 54 times 80 or 4,320 square feet. Now take your rear yard area and multiply it by 40 percent or .4 (4,320 x .4 = 1,728 square feet maximum). 1,200 square feet is less than the 1,728 square feet allowed by rear yard area, thus the maximum garage size is then calculated by taking the 1,200 square feet less the shed size: 1,200 - 150 = 1,050 square feet maximum detached garage size. All residents are allowed only one detached shed and one detached garage on their property which cannot exceed the forty (40) percent rear yard area or the 1,200 square feet minimum combined.

If you have any questions regarding the calculation of your rear yard area, please contact the Spring Lake Park Building Official at (763) 792-7212.
Placing your shed or garage on your lot according to setbacks:

Setbacks are defined as open space between a property line and a structure or a structure to structure. This space is needed for fire access and fire safety. Setbacks are from exterior wall finish to the property line or exterior finish of an adjacent structure. Your setbacks are calculated by first determining the zoning district in which your property lies. Please refer to the enclosed zoning map to determine your property zone by location. If you have any questions regarding your property zone please contact the Spring lake Park City Hall at (763) 784-6491.

The following setback requirements are set forth for all residential districts:

- **R-1:** Front Yard: 50’ Rear Yard: 5’ Side Yard: 5’
- **R-2:** Front Yard: 50’ Rear Yard: 5’ Side Yard: 5’
- **R-3:** Front Yard: 50’ Rear Yard: 15’ Side Yard: 10’
- **R-4:** Front Yard: 50’ Rear Yard: 15’ Side Yard: 10’
- **R-5:** Front Yard: 50’ Rear Yard: 15’ Side Yard: 10’

All detached sheds and garages must maintain a distance of 8 feet between any other structures on site including decks and play structures.

DETERMINING YOUR MAXIMUM SHED OR GARAGE HEIGHT:

The City of Spring Lake Park requires that a detached shed or garage have a maximum height of eighteen (18) feet or the height of your existing home whichever is less from the top of concrete slab to the roof peak. Attached garage may not exceed the maximum of thirty-five (35) feet to its roof peak.

3. DESIGNING YOUR SHED OR GARAGE ACCORDING TO BUILDING CODE REQUIREMENTS:

Frost footings are required for all attached garages. Floating footings are permitted for all detached garages, while an approved treated or concrete floor is acceptable for sheds. For frost footings the minimum depth to the base of the footing is forty-two (42”) inches. The minimum slab thickness shall be 3 1/2” inches using wire mesh or approved fiber mesh mixed in with the concrete. The minimum concrete strength required is 2500 pounds per square inch. In cold weather, protect concrete from freezing until cured (see handout on Cold Weather Masonry).

Foundation plates or sills must be bolted to the foundation with not less than 1/2 inch diameter steel anchor bolts per piece, with one bolt located within 12 inches of each end piece. All foundation plates or sills or sleepers on a concrete or masonry foundations must be of approved treated, cedar, or redwood, with not less than 2 inches in thickness, having a width not less than that of the wall studs. Wall studs must be placed with their wide dimension perpendicular to the wall, and not less than two (2) studs must be placed at each corner of an exterior wall. Minimum stud size shall be 2 x 4 and spaced at 24 inches on center. Bearing and exterior wall studs need to be capped with double top plates installed to provide overlapping at the corners and intersections with each other partitions. End joints in double top plates must be offset at least 48 inches. All wall sheathing, siding, roof sheathing and roof coverings must be install according to the manufacturers specifications. All wood used in construction located closer than 6 inches from the ground shall be treated wood or wood of natural resistance to decay (cedar, redwood).

All roof framing size and spacing of conventional lumber used for roof framing depends on the roof pitch, span and the type of material being used and the loading characteristics being imposed. All structures must be designed to meet or exceed a 30 pound per square foot snow load. Rafters need to be
Framed directly opposite each other at the ridge. A ridge board at least one (1) inch (nominal) in thickness and not less in depth than the cut end of the rafter is required for hand framed roofs. At all valleys and hips, there also needs to be a single valley or hip rafter not less than two (2) inches (nominal) thickness and not less in depth than the cut of the rafter. All rafters must be nailed to the adjacent ceiling joist to form a continuous tie between the exterior wall when the joist are parallel to the rafters. Where not parallel, rafters must be tied to a minimum one 1” x 4” (nominal) cross tie spaced a minimum four (4) feet on center. If manufactured trusses are to be used, submit one (1) copy of truss plans signed by a registered engineer.

**HEADERS SIZES FOR OPENINGS IN BEARING WALLS**

For one (1) Story Structures Only

Based on 1200 f Grade Lumber

30 PSF Live Load & 15 PSF Dead Load

<table>
<thead>
<tr>
<th>Header Span</th>
<th>Roof Span</th>
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<tr>
<td>10'-0&quot;</td>
<td>2-2&quot;x10&quot;</td>
<td>2-2&quot;x10&quot;</td>
<td>2-2&quot;x12&quot;</td>
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<tr>
<td>12'-0&quot;</td>
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**ALLOWABLE SPANS FOR ROOF RAFTERS USING NONSTRESS-GRADED LUMBER**

<table>
<thead>
<tr>
<th>Size of Roof Rafters (inches)</th>
<th>Spacing of Roof Rafters (inches)</th>
<th>Snow Load = 30 PSF Plate to Ridge = SPAN Use: number 2 - 1200 f Grade Douglas Fir, Western Larch, Southern Pine</th>
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<tbody>
<tr>
<td>2x4</td>
<td>12</td>
<td>Supporting Ceiling Non-Supporting Ceiling</td>
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<td></td>
<td>16</td>
<td>7'-0&quot; 8'-0&quot;</td>
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<td>32</td>
<td>15'-0&quot; 17'-0&quot;</td>
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4. **PREPARING A FLOOR AND ELEVATION PLAN FOR YOUR SHED OR GARAGE:**

Elevations must indicate size, material, and other important construction details such as ceiling heights. Floor plans must indicate dimensions and locations of openings and any firewall notes.

5. **COMPLETE THE PERMIT APPLICATION:**

Attached with this information sheet you will find a building and zoning permit application for your convenience.

If you hire a contractor to construct your shed or garage, the contractor must be licensed by the State of Minnesota. It is required that the contractor hired to construct your structure must apply for the building permit indicating his/her license number. Some contractors might suggest that you the homeowner apply for the building permit. By doing this the contractor avoids direct responsibility. If you are building yourself, please remember that if you hire any subcontractors, they too must be licensed.

BACK TO INDEX
R311.5.6 Handrails. Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

R311.5.6.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches and not more than 38 inches.

R311.5.6.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2 inch between the wall and the handrails.

Exceptions:
1. Handrails shall be permitted to be interrupted by a newel post at the turn.
2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.

R311.5.6.3 Handrail grip size. All required handrails shall be of one of the following types or provide equivalent grasp ability:

1. **Type I. Handrails** with a circular cross section shall have an outside diameter of at least 1 1/4 inches and not greater than 2 inches. If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6 1/4 inches with a maximum cross section of dimension of 2 1/4 inches.

2. **Type II. Handrails** with a perimeter greater than 6 1/4 inches shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for at least 3/8 inch to a level that is not less than 1 3/4 inches below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches to a maximum of 2 3/4 inches. Edges shall have a minimum radius of 0.01 inch.
At some time, most homeowners will hire someone for repairs or renovations. Even a homeowner experienced in home repairs may have to hire a contractor because of the size or level of difficulty of the job. This fact sheet will help you choose a contractor and work effectively and fairly with the contractor you choose. Most important, these guidelines will help you get what you want with the maximum protection for you personally.

Who do you hire?
Once you have decided to renovate, expand, or build, or at least have a good idea of what you want done, choosing a contractor or renovator is a crucial decision. It’s not something you should rush into. The contractor you hire should have the technical, business and interpersonal skills, the tools and the experience needed to do the job. Hire a contractor who has experience with projects similar to yours. This contractor will know what materials and techniques are needed for your work and, even better, about problems with similar work—and how to solve them. For large renovation projects, most people hire a contractor to take charge of the whole job. Many renovation contracting companies are set up to handle both design and renovation work. Alternatively, you can hire an architect or designer, who can provide professional design services and oversee hiring a contractor and execution of the work.

Finding and selecting a contractor
Start by looking for several suitable contractors. The best source is often referrals from family, friends and neighbors who have done similar renovations. They can tell you about the dependability of the contractors they worked with, the quality of the work and their overall experience with that company. You can also get names from local homebuilder and contractor associations, and you can check with building supply stores, the Yellow Pages, and the Internet. Discuss your project with a few potential contractors to get their advice and suggestions on how they would do the work. At the first meeting, some may give you a rough estimate of costs, depending on the project’s scope and complexity. The first meeting, though, is more to get to know the contractor and the contractor’s work. Do not sign anything or pay anything at this stage. You want to find out as much as you can, so ask a lot of questions, such as:

1. How long have you been in business?
2. What work are you licensed to do, e.g., electrical, plumbing?
3. What kind of work do you specialize in?
4. Have you done a similar job before?
5. Will you use your own crew for the work or will you subcontract part of the job?
6. How would you handle a specific problem related to the project, for example, installing kitchen cabinets on your sloping floor?
7. How will you deal with the health and energy efficiency aspects of the job?
8. How and when do you clean up, particularly fine dust?
9. What work schedule will you follow?
10. What kind of warranty do you offer and what does it cover?
11. Do you carry workers’ compensation and liability insurance?
12. Will you provide a written contract?
You won’t offend reputable firms with these questions. If a contractor doesn’t seem to know much about the technical details of the job or doesn’t want to talk about them, you may have the wrong contractor.

If the contractor plans to do the whole job alone, make sure he or she has the necessary skills. If the contractor does have the skills and equipment, that means fewer trades’ people, which may reduce costs and prevent delays. Most important, be sure you can get along with the contractor. If you cannot communicate effectively with the contractor, things can get very tense in a lengthy project. You want a contractor who will explain what’s going on as the project takes shape, who will discuss problems reasonably and who will work with you to make the renovation as good as it can be. You also want someone who’s willing and able to help you refine your plans where possible, resulting in a more cost-effective renovation. A contractor who is knowledgeable about the type of work you’re doing should be able to suggest ways to get what you want at a reasonable cost. The best proof of quality is satisfied customers. The contractors you decide to meet with should have references from at least three people they’ve done similar jobs for. Don’t accept the references at face value. Phone them and if they’ll let you, visit them to see the finished job. Their willingness itself is usually a sign that they were reasonably satisfied. Ask the references about their experience with the contractor and about the quality of the work. Were there any problems? Did the contractor keep them informed throughout the project? Did the crew clean up after work every day? Was work done on time? Were the workers supervised? Would they hire the contractor again, or recommend the company to friends or family. Check with your local Better Business Bureau. It records complaints about contractors in your community.

Getting estimates
It is wise to get estimates from at least three contractors. To get estimates, especially for substantial projects, you’ll need good-quality drawings and a list of specifications. You can either use an architect or designer to produce formal drawings, or you can hire a contractor who offers design services in addition to renovation services. In this latter case the drawings can become part of the overall contract if you hire the contractor for the entire design and renovation. But you don’t have to use the same contractor for the work. Because you have paid for the drawings, they are yours and you can provide them to the other contractors who can submit estimates. Even with a small project, a full list of the specifications is needed. List all the materials you’ll need and be as exact as you can: what type of flooring, what kind and brand of doors and windows, what kind of finishes you want. For a big job, it can take two to three weeks for a contractor to prepare an estimate. Ask the contractors to submit them in person so you can discuss the estimates with them. Compare the estimates carefully and make sure they all quote on the same job and use the same materials. Make sure that everything you ask for is in each estimate. The quote should include everything that the contractor will have to do to complete the job. Assume that anything not listed is not included in the price. As well, make sure the contractor is committed to the start and completion dates. In some cases, a contractor will give you a “fixed price” quotes. A fixed price includes all the materials, labor, equipment and fees, plus contingencies, overhead and profit. In some cases allowances are established for items, which you have yet to select, e.g., flooring, and light fixtures. The allowance, which is only an estimate, is later adjusted once you have made your final selection. If it is difficult to estimate just how much the job will cost— for example, an old house that might need extra work— you can use the “cost-plus method” for contracts. In a cost-plus contract, you pay the contractor the actual cost for labor, materials and equipment and a percentage for overhead and profit. Cost-plus contracts leave costs open-ended, so it’s best to set a limit so costs don’t get out of hand. Remember, renovation may uncover hidden problems, so make sure you include a contingency budget to cover unforeseen costs.

Another option is a design/build contract, in which the contractor designs and carries out the whole project. You can use either a fixed price or cost-plus contract, again with a set cost limit.
Don’t automatically choose the contractor who gives the lowest estimate. It may be unrealistically low. The contractor may not have understood the project, may be underestimating what it will take to do the work, or simply trying to get a price advantage over the competitors. In any case, you could risk unexpected and additional costs, or you may end up with a job that leaves you unsatisfied. Look for a fair price. Factor in any differences in what the contractors are offering and the skills they bring to the job. Then add the intangibles—reputation, willingness to make suggestions and offer advice, the likelihood of standing behind the work. Choose the contractor you think will give you the best overall value for your money.

Get it in writing
Do not be tempted by a contractor who doesn’t have an address, doesn’t want a written contract and offers a discount if you pay cash. This type of underground economy transaction involves many risks and pitfalls that offset any savings. For example, contractors who insist on cash may be unlicensed and uninsured; and without a written contract your cash advances are unprotected. They could neglect to get the required permits or inspections. Product warranties may not be valid if a recognized contractor does not install the items. As well, an underground contractor could do poor work and create health and safety problems. If one of the contractor’s crew is improperly trained, is injured on the job or damages your property or a neighbor’s property, your homeowner’s insurance policy might not cover you and you could be liable. A cash deal may leave you with no legal recourse if something goes wrong or if the work isn’t satisfactory, or if the contractor walks off the job without finishing it. In fact, it makes it difficult for you to prove the contractor was ever there. And after you have paid the contractor, you may find that materials haven’t been paid for or workers haven’t been paid—and you are responsible for the bills. For your own protection and peace of mind, it’s best to deal in a legal and responsible way—always get it in writing.

The contract
Using your drawings and the renovator’s estimate, the next step is to write a contract that is normally done by the contractor once you have accepted the estimate. The contract documents should include:

a. Names, addresses and phone numbers of the parties involved.
b. Business numbers (e.g., GST, Registration number), as issued by State of Minnesota Commerce Department.
c. Copies of the contractor’s business license (where required by municipal or State government) and membership in a homebuilders’ or contractors’ association.
d. For larger projects, drawings and specifications and a form for change orders authorizing changes to the original plan.
e. For smaller projects, a detailed description of the work with drawings if necessary.
f. Who is responsible for obtaining permits (building, plumbing, electrical, etc.) and arranging for required inspections.
g. Total price for the job, including allowances if applicable and taxes.
h. Payment and holdback (seasonal and lien) schedules.
i. Hourly labor rate, for extras.
j. Start and completion dates, with provisions for reasonable delays, and penalties.
k. Workers Compensation number and proof of workplace and business liability insurance coverage.
l. List of subcontractors to be used on the job.
m. Details of contractor’s warranty.
n. A statement of how disputes are to be settled, with name of mediator, if appropriate.
o. Termination agreement, specifying what it will cost you to void the contract at different stages of the work.
p. A statement that the contractor will provide you with manufacturer’s warranties for products supplied by the contractor and used in the renovation.

Do not sign the contract until:
1. You have read it carefully.
2. You understand what it says.
3. You are satisfied that it describes exactly what you want and that it includes everything you have been promised.

If the agreement does not include everything that you want and everything the contractor has promised, ask that missing items be written into the contract and initialed. Unwritten assurances are not binding. Although some firms use preprinted contract forms, there is no such thing as a standard contract. Each contract is a different document dealing with a specific situation. Fill in any blank spaces on a printed form with N/A (not applicable) or NIL (nothing). Strike out and initial anything you don’t agree with or ask that the contract be rewritten. A contractor will sometimes include a contingency clause allowing additional charge if there are unexpected problems, such as running into unknown solid rock when excavating a basement. This is perfectly legitimate, and better than having the contractor quote a higher price in order to cover all such possibilities. You don’t need a detailed contract for small jobs, such as roofing and painting, but you should at least have a written statement of the work to be done, the materials to be used, warranties, cost and start and completion dates, in addition to confirmation of workers’ compensation and insurance coverage. You and the contractor should both sign two copies of the contract, one for each of you. Before you sign the contract for a major renovation, have your lawyer review it if practical. No matter how carefully the contract has been written, some changes are almost certain to be made before the job is finished because of unforeseen problems or materials that are no longer available. You may also change your mind about what you want done after the project starts. Whatever the reason, making changes during the job will likely cost you money. Major changes can cost you a lot of money. You can avoid major changes by discussing every aspect of the job with your contractor/designer during planning. However, if there must be changes, sit down with your contractor as soon as possible and look for alternative solutions.

Changes to the original plan or the contract must be made using a “change order,” which you and the contractor sign. Having the labor rate included in the contract allows you to make sure you are not being overcharged if extra work has to be done.

Paying for the work
A deposit may or may not be required on routine home improvement and repair work. If a deposit is required, it should be a token amount to show good faith. However, when special fixtures, materials or custom work must be ordered, you may have to pay a larger deposit. In some cases, it may be advisable to make your check payable jointly to the contractor and the supplier. Make payments to the contractor at specified milestones. Avoid progression clauses that require payment at specific times, regardless of the amount of work that has been done. It’s better to schedule progress payments when a certain amount of the work is done, rather than on specified dates. Be certain that you are satisfied with the work before you make any payments. Remember, don’t give cash to anyone you don’t know or who has not been properly checked out. A check is safer than cash and a record of payment. The contractor should give you a signed receipt when you make a payment.
**Lien and escrow holdbacks**

A lien holdback is the portion of each payment you must withhold for a specified period of time in order to protect yourself against liens that can be placed on your property from suppliers or sub trades in the cases where the contractor does not pay them. The amount and length of time of the lien holdback is different in every state. Check with your state or county government, lawyer or local homebuilder or renovator association. If a lien is filed on your property, don’t make any more payments to the contractor until you are notified in writing that the lien has been discharged. An escrow holdback is the portion of the payment held back to cover any outstanding work which is not completed due to weather conditions. When applicable, the terms for the escrow holdback should be included in the contract.

**Completion certificate**

When the job is finished, the contractor may ask you to sign a certificate of completion. Don’t sign it until you and the governing inspection authority have thoroughly inspected the job, and you’re completely satisfied that everything has been done properly. If the contractor has to return later to finish a few minor details, you should note this, and if appropriate, put an escrow holdback on the portion to cover the outstanding work. Most reputable contractors offer a warranty on their work and should be willing to come back if something goes wrong.

**Working with your contractor**

Once the job is under way, you’ll see a lot of your contractor and the crew. The job will go much better if there is mutual respect and you co-operate with them. Talk regularly with the contractor so you know what’s going on and what might be needed from you—an empty driveway so the deliveries can be brought in. But don’t call every five minutes. Make a list of your questions and save them for a time that you are both available. If a problem arises during the job, the best course is to bring it up immediately with the contractor—not the trades’ people—and discuss it calmly and reasonably. If the problem escalates and the contractor just isn’t responding, send a registered letter to the contractor with a copy to your lawyer. If that doesn’t work, you can try sending a letter to the local homebuilders’ or contractors’ association, the Minnesota Consumer Protection Department, Better Business Bureau or the city/state that issued the contractor’s license. On the other hand, you must be reasonable. Don’t overreact if something is wrong. Allow sufficient time for a response. Consider as well, things the contractor can’t control, like bad weather and back-ordered components. So leave a little leeway in your schedule for them. If these steps have not helped, you can follow the dispute resolution method, or mediator as identified in the contract. Architects and construction arbitrators are often used to settle any disputes. As a last resort, and in cases where things are going so badly that the project seems unworkable, you have the option of canceling the contract. That’s why it’s wise to put a termination clause in the contract. You’ll likely have to pay to get out of the deal, so it’s best to agree on the cancellation penalty before you start. If you think that some of the work is not up to local building standards, report it in writing to the Spring Lake Park Inspection Department. If the work doesn’t meet building code requirements, the contractor should have to correct it at his or her expense. Also, you can report poor workmanship and unsatisfactory business practices to the government department that granted the contractor a business license.

**Consumer protection laws**

There are several laws protecting consumers. Minnesota consumer affairs or consumer relations departments usually administer consumer protection laws. They can help you resolve problems between you and your contractor. Sometimes a phone call is enough, but a letter outlining the problem—giving names, dates, addresses and details is often required before any action can be taken. The consumer protection authority may send an inspector to examine the work. The inspector’s report may be enough to settle the dispute. If not, the consumer protection office may provide mediation. The power of a government consumer protection office is a strong incentive for settlement. If it isn’t and legal action is required, the consumer protection office will give you further advice and assistance.
The Better Business Bureau, a monitoring agency maintained by the business community, will also handle consumer complaints and mediate disputes and try to get a fair settlement. If legal action is necessary, you may be able to take the contractor to small claims court without having to hire a lawyer or the complications and delays of a formal court case. Although small claims court is relaxed and informal, its decisions are binding. The size of the claim you can make in Minnesota is for the amount of seven thousand-five hundred dollars ($7,500). The Anoka County courthouse can give you this information and direct you to the office that handles small claims cases.

About insurance
It’s important to make sure the contractor has workers’ compensation and third-party liability insurance for all the people on the job and damage they may cause. Don’t just take the contractor’s word—ask to see a certificate and check to make sure it’s current. Also, don’t accept or assume any liability for the contractor or sub-contractor’s. As for your liability, your homeowner’s insurance policy may cover you during a project done by a contractor however, if you’re acting as your own general contractor and employing sub-contractor’s, your policy won’t automatically cover you. You’ll have to ask your insurance company for temporary coverage, which will likely involve a small extra premium. Again, make sure any sub-contractors’s you hire have their own insurance. Finally, take comfort in the fact that some day the renovation will be over, the workers will go away and you’ll be left in peace to enjoy the fruits of their labor and yours.

Checklist—hiring a contractor
What to do first:
Write a description of the work you want done with as much detail as possible. Check with your local municipal building department to ensure that the work can be done, and if any special permits or zoning approval is required.

Finding a contractor:
Ask friends and neighbors for recommendations. Get names from your local homebuilder and contractor associations and building supply outlets. Ask contractors for their business license number and check with the local licensing office and the firm’s insurance company for public-liability and property-damage insurance and workers’ compensation. Ask for references from past customers. Check with the Better Business Bureau or the State of Minnesota Commerce Department for complaints against any contractor.

Your contract should contain:

1. Correct and complete address of the property where the work will be done.
2. Your name and address.
3. Contractor’s name, address and telephone number. If a company name is used, the name of the company’s official on-site representative should be given.
4. Detailed description of the work, plans or sketches and a detailed specification of the materials (type, quality, model) to be used.
5. The type of work that will be subcontracted.
6. The right to retain a lien holdback as specified in provincial law.
7. A clause stating that work will conform to the requirements of all applicable codes, such as building, safety and fire codes.
8. Start and completion dates.
9. The price and payment schedule (keep in mind the lien and seasonal holdbacks).
10. Agreement on who (homeowner or contractor) is responsible for all necessary permits, licenses, inspections and certificates.
Contractor’s responsibilities include:

a. Public liability insurance.
b. Property damage insurance.
c. Identification of any necessary permits and proof that all legal requirements are satisfied.
d. Workers’ compensation for all employees of the contractor or subcontractors.
e. All work carried out under the contractor, including work done by subcontractors.
f. Removal of construction debris when the job is finished.
g. Warranties on all contractor supplied work and materials (in addition to manufacturer’s warranties) for a period of at least one year.

Homeowner’s responsibilities include:

a. Ensuring that all contracted work conforms to local zoning laws.
b. Ensuring adequate working space and freedom of movement for workers, and use of utilities.
c. Ensuring prompt payment according to the holdback and payment schedule.

If you have any additional questions or concerns about hiring a contractor, please contact the Spring Lake Park Building Inspection Department at 763-784-6491, or by e-mail at bbrainard@slpmn.org
BUILDING PERMIT REQUIREMENTS:
Building permits are required for all additions constructed within the City of Spring Lake Park. Building permits include a plan review of your proposed addition and inspections to assure compliance with all federal, state, and local building codes. Building permits are not designed to be a guarantee of the work, but to provide a reasonable degree of review and observation so that the project will be successful, safe and long lasting.

PERMIT FEES:
The building permit fee is based on the project construction value and is designed to cover the cost of a plan review and all necessary field inspections that will be conducted during construction. The plan review is performed by the Spring Lake Park Building Official in order to spot potential problems or pitfalls that may arise. Also a State Surcharge is added for upkeep of the Minnesota Department of Code Enforcement.

Please contact your local building inspection department to get an exact quote on permit fees for your particular project.

INFORMATION NECESSARY WHEN APPLYING FOR A BUILDING PERMIT:
Information necessary for the Spring Lake Park Inspections Department to conduct a proper job of plan review and to help the project go as smoothly as possible, is as follows:

One (1) completed Spring Lake Park Building Permit Application

Two (2) Site plan or Certificate of Surveys

Two (2) proposed Floor Plan(s)

Two (2) proposed Elevation Plan(s)

(2) proposed Cross Section Plan
In planning and designing your home addition, the City of Spring Lake Park recommends that you apply these easy five steps as shown below to assure that your project will be in full compliance with applicable codes.

1. Preparing your Site Plan or Survey.
2. Placing and sizing your addition on your lot.
3. Designing your addition according to building code requirements.
4. Preparing your Floor and Elevation Plan(s) for your addition.
5. Completing the Building Permit Application form.

1. PREPARING YOUR SITE PLAN OR SURVEY: 
The City of Spring Lake Park requires two copies of a certificate of survey or site plan drawn to scale and indicating the lot dimensions, the location and size of the existing structure(s), and the location and size of the proposed addition. Survey or site plan must also indicate the setback (or distance) from the property lines(s) of the existing and proposed structures. See sample below...

The City of Spring Lake Park highly recommends that you hire a State of Minnesota registered Land Surveyor to survey and plot your site plan. Homeowners are permitted to draw their own site plan.

Listed below for your information are registered surveyors available in the area.

EG Rud & Sons, Inc. 786-5556
Cain & Associates 434-7646
Carley-Torgerson, Inc. 484-3301
Kurth Surveying, Inc. 788-9769
Merila & Associates 533-7595
Lot Surveys Company 560-3093
Kemper & Associates 631-0351
Midwest 786-6909

2. PLACING YOUR ADDITION ON YOUR LOT ACCORDING TO SETBACKS:
Setbacks are defined as open space between a property line and a structure or a structure to structure. This space is needed for fire access and fire safety. Setbacks are from exterior finish to the property line or exterior finish of an adjacent structure. Your setbacks are calculated by first determining the zoning district in which your property lies. Please refer to the enclosed zoning map to determine your property zone by location. If you have any questions regarding your property zone please contact the Spring Lake Park City Hall at (763) 784-6491. The following setback requirements are set forth for all residential districts:

R-1: Front Yard: 35’ Rear Yard: 40’ Side Yard: 10’
R-2: Front Yard: 35’ Rear Yard: 40’ Side Yard: 10’
R-3: Front Yard: 35’ Rear Yard: 40’ Side Yard: 10’ Side Yard for over 2 Dwellings: 15’
R-4: Front Yard: 35’ Rear Yard: 30’ Side Yard: 10’ Side Yard for over 2 Dwellings: 20’
R-5: Front Yard: 35’ Rear Yard: 15’ Side Yard: 10’ Side Yard for over 2 Dwellings: 25’

All additions must maintain a distance of 8 feet between any other structures on site including garages, sheds, swimming pools, and play structures.
DETERMINING YOUR MAXIMUM ADDITION SIZE:

The City of Spring Lake Park requires that each lot must maintain a certain percentage of open space. The following is a listing of the maximum percentage of lot coverage allowed in each residential zoning district. Structures include: Your home, attached garage, detached garage or shed, swimming pools, play structures, gazebos, covered patios, and decks.

R-1: 30%  R-2: 50%  R-3: 35%  R-4: 40%  R-5: 40%

An example of how to calculate maximum addition size is as follows: Your Lot size is 100 feet wide by 100 feet deep; thus your area equals 100 multiplied by 100 (100 x100 = 10,000 square feet in area). You have determined that your lot is located in a R-3 zone. Thus, you take your lot and multiply it by the lot coverage percentage allowed in a R-3 zone (10,000 x35% or .35 = 3,500 square feet maximum coverage on your lot for structures). Your house is 32 feet deep by 40 feet wide (32 x40 = 1,280), your detached garage is 30 feet deep by 24 feet wide (30 x 24 = 720), your shed is 12 feet deep by 10 feet wide (12 x10 = 120), your swimming pool is 15 feet deep by 50 feet wide (15 x50 = 750), your play structure is 12 feet deep by 30 feet deep (12 x30 = 360). Thus;

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum coverage</td>
<td>3,500</td>
</tr>
<tr>
<td>Subtract House area</td>
<td>-1,280</td>
</tr>
<tr>
<td>Subtract Garage area</td>
<td>- 720</td>
</tr>
<tr>
<td>Subtract Shed area</td>
<td>- 120</td>
</tr>
<tr>
<td>Subtract Pool area</td>
<td>- 750</td>
</tr>
<tr>
<td>Subtract Play Structure area</td>
<td>- 360</td>
</tr>
</tbody>
</table>

Equals Maximum allowable addition size of: 270 square feet.

3. DESIGNING YOUR HOME ADDITION ACCORDING TO BUILDING CODE REQUIREMENTS:

Frost footings are required for any addition attached to a dwelling, porch or garage that has frost footings. The minimum depth to the base of the footing is 42”. The minimum concrete strength required is 2500 pounds per square inch. In cold weather, protect concrete from freezing until cured (see handout on cold weather masonry). Foundation plates or sills must be anchored to the foundation with not less than 1/2” diameter steel bolts embedded at least 7 inches into the concrete and spaced not more than 6 feet apart. There must be a minimum of two bolts per piece with one bolt located within 12” of each end of each piece. All foundation plates or sills and sleepers on a concrete or masonry foundations must be of approved treated wood, foundation cedar or redwood not less than 2” in thickness, having a width not less than that of the wall studs.

Wall studs must be placed with their wide dimension perpendicular to the wall, and not less than three (3) studs must be installed at each corner of an exterior wall. Minimum stud size is 2x4 and spaced not more 16” on center. Bearing and exterior wall studs need to be capped with double top plates installed to provide overlapping at corners and at intersections with other partitions. End joist in double top plates must be offset at least 48”. All wall sheathing, siding, roof sheathing, and roof coverings must be installed according to the manufacturers specifications. All wood used in construction located closer than 6” to the ground shall be treated wood or wood of natural resistance to decay (cedar, redwood). All roof framing size and spacing of conventional lumber used for roof framing depends upon the roof pitch, span, and the type of material to be used, and the loading characteristics being imposed. All additions must be designed to accommodate a 30 pound per square foot snow load. Rafters need to be framed directly opposite each other at the ridge. A ridge board at least 1” in thickness and not less in depth than the cut end of the rafter is required for hand framed roofs. At all valleys and hips, there also needs to be a single valley or hip rafter not less than 2” in thickness and not less in depth than the cut of the rafter. All rafters nailed to the adjacent ceiling joist to form a continuous tie between the exterior wall where joist are parallel to the rafters. If manufactured trusses are to be used, submit 1 copy of truss plans.
4. PREPARING A FLOOR AND ELEVATION PLAN FOR YOUR HOME ADDITION:

Elevations should show the height of your addition from the ground to the roof peak. Elevations should also indicate size, material, and other important construction details such as ceiling heights, stair details (if any), attic ventilation and access, insulation R-factors. When you have completed your addition elevation, it should look like the illustration below:

5. COMPLETE THE BUILDING PERMIT APPLICATION:

Attached with this information sheet you will find a building permit application for your convenience. If you hire a contractor to construct your addition, the contractor must be licensed by the State of Minnesota. It is required that the contractor hired to construct your structure must apply for the building permit indicating his/her license number. Some contractors might suggest that you the homeowner apply for the building permit. By doing this, the contractor avoids direct responsibility. If you are building yourself, please remember if you hire any subcontractors, they too must be licensed.

BACK TO INDEX
Verification of Lead Certification on permits for work in residential structures constructed prior to 1978

A Federal Environmental Protection Agency law has put in place contractor lead abatement regulations that require contractors doing work on pre-1978 child occupied residential buildings to test for and/or abate lead in the areas of those buildings on which they are working. The Minnesota Legislature passed a law, effective February 1, 2011, intended to work in conjunction with this Federal law. This Minnesota law is contained in Minnesota Statute (MS) 326B.106 subd. 13 & 14. (See attached copies of Minnesota & Federal law sections cited.)

The Department believes that this law intends that a permit should not be issued for work on pre-1978 residential structures unless the licensed residential contractor requesting the permit has the required lead certification or one of the exceptions in 745.82 can be met. In interpreting this statute it would be unreasonable to assume that the statute requires a certification be verified and then no action be taken if the certification is not present or valid. Also, Minnesota statutes need to be interpreted in favor of the public interest, such as protecting the public, rather than the private interest, such as the contractor. (See MS 645.17)

The Minnesota law uses the Federal law to define ‘renovation’. MS 326B.106 subd. 14 states that lead certification is required if the licensed contractor is “...performing renovation as defined by Code of Federal Regulations (CFR), title 40, section 745.83….unless the property has been determined to meet an exemption under CFR, title 40, section 745.82.” However, the scope of the Minnesota law is narrower than the CFR. The Minnesota law applies only to residential structures, and is further limited to the work being done by licensed residential contractors, whereas the CFR, title 40, Vol 30, section 745.83 also includes other ‘child occupied’ spaces which fall outside the scope of residential structures.

The Minnesota law applies only to licensed residential contractors, whereas, the Federal law applies to all contractors. A commercial contractor doing work on a large multi-family residential building would not be required to have their certification checked under Minnesota law because they are not licensed, but they would still need to comply with the Federal standard. A ‘handi-man’ with an exemption certificate under the residential contractor licensing law requesting a permit to do work on a single family house is not required to have their lead certification checked under Minnesota law because they are not licensed, but would still need to comply with the Federal standard. Even though roofing contractors are a part of the residential licensing group in Minnesota law, unpainted roofing that does not disturb paint is outside the scope of the CFR, they would not be required to provide a lead certification unless the scope of work includes doing more to the fascia than putting a drip edge over it.

Per MS326B.106 Subd. 14 The Minnesota licensed Residential Contractor “...must be certified in accordance with CFR title 40 section 745.89...”. This CFR section is for ‘Firm Certification’. An individual within the firm must also be certified, but the verification called for is the ‘Firm
Certification’. Nothing would prohibit a construction firm with the proper lead certification from doing the portion of the work dealing with the lead contamination and another contractor from doing the remaining work under separate permits, much as asbestos is handled.

During the early implementation of this law, remember that the ultimate intent is to have an EPA lead certified person on the work site of each pre-1978 residential structure where a licensed residential contractor is disrupting a surface that has lead based paint. During this transition, a city can certainly accept either form of certification that meets that intent on paper or on the web.

Legislation is currently moving forward that would delay the effective date of the Minnesota Lead Law until August 1, 2011. We will get the word out if this bill gets signed into law.

The link to look up the Federal Certification at

http://cfpub.epa.gov/flpp/searchrrp_firm.htm

Minnesota Health Department at

http://www.health.state.mn.us/divs/eh/lead/prof/pre/index.html
RESIDENTIAL PLAN REVIEW

IMPORTANT: ALL NEW RESIDENTIAL PERMITS APPLIED FOR ON OR AFTER FEBRUARY 14, 2015 SHALL COMPLY WITH THE PROVISIONS OF THE FOLLOWING MINNESOTA CODES:

2015 RESIDENTIAL BUILDING – MN Rules Chapter 1309
2015 MECHANICAL & FUEL GAS – MN Rules Chapter 1346
2015 RESIDENTIAL ENERGY – MN Rules Chapter 1322
2015 PLUMBING – MN Rules Chapter 4714

REQUIRED “BUILDING FINAL” INSPECTION FORMS:

1) Energy Certification Card: Must show “Blower Door” (must be 3 air changes/hour or less) and, if performed, “Duct Blaster” test results

2) “Blower Door” documentation of test performed must show, at minimum: test results, volume of house, company that performed test and signature of person that performed test

3) Insulation certificates showing R-values, type of insulation used (batt, spray-foam, rigid) and amount installed in all areas of house (attic, floors/cantilevers, walls, ceilings, rims, basements, floor/ceiling assemblies below bonus rooms above garage). Certificate must be signed by installer.

4) Lighting schedule showing types of bulbs used (CFL, LED, incandescent) and percentage of high-efficacy lamps used in permanent fixtures throughout house (must be 75% or more)

ZONING/LANDSCAPE:

1) A reasonable attempt shall be made to preserve as many existing trees as is practicable and to incorporate them into the site plan.

2) All new landscape trees and shrubs must meet the American Standard for Nursery Stock and American National Standard relating to planting guidelines, quality of stock and appropriate sizing of the root ball. Landscape trees must be balled and burlapped or moved from the growing site by tree spade. Deciduous trees will be not less than one and one quarter inches but not more than three inches caliper for balled and burlapped trees, and not less than three inches but not more than six inches caliper for spade-moved trees. Coniferous trees will not be less than six feet in height but no more than eight feet for balled and burlapped trees, and not less than eight feet in height but not more than 14 feet for spade-moved coniferous trees. The city may allow larger balled and burlapped or spade moved trees if these trees are accompanied with a three year guarantee.
3) All site areas not covered by buildings, sidewalks, parking lots, driveways, patios or similar hard surface materials shall be covered with sod or an equivalent ground cover approved by the City of Spring Lake Park. This requirement shall not apply to site areas retained in a natural state.

4) In order to provide for adequate maintenance of landscaped areas, an underground sprinkler system shall be provided as part of each new development, except one- and two-family dwellings and additions to existing structures which do not at least equal the floor area of the existing structure. A sprinkler system shall be provided for all landscaped areas except areas to be preserved in a natural state.

5) Not more than 25% of the required number of trees shall be composed of one species unless approved by the city. No required tree shall be any of the following:
   a. A species of the genus ulmus (elm), except those elms bred to be immune to dutch elm disease;
   b. Box elder;
   c. Eastern cottonwood;
   d. Lombardy poplar;
   e. Ash;
   f. Black locust; or
   g. Female ginkgo.

6) Boulevard areas shall be landscaped in accordance with §152.052 of SLP code of Ordinances.

7) Landscape plans shall be prepared by a landscape architect or other qualified person acceptable to the Zoning Administrator, drawn to a scale of not less than one inch equals 50 feet and shall show the following:
   a. Boundary lines of the property with accurate dimensions;
   b. Locations of existing and proposed buildings, parking lots, roads and other improvements;
   c. Proposed grading plan with two foot contour intervals;
   d. Location, approximate size and common name of existing trees and shrubs;
   e. A planting schedule containing symbols, quantities, common and botanical names, size of plant materials, root condition and special planting instructions;
   f. Planting details illustrating proposed locations of all new plant material;
   g. Locations and details of other landscape features including berms, fences and planter boxes;
   h. Details of restoration of disturbed areas including areas to be sodded or seeded;
   i. Location and details of irrigation systems; and
   j. Details and cross sections of all required screening.

8) Noise Abatement Standards shall apply in the construction of this project.
   - All exterior building elements shall meet the following minimum STC (Sound Transmission Class) value: Walls - 40 STC, Roof - 40 STC, Windows - 30 STC, Doors - 20 STC.
   - All ventilation ducts, except range hoods, connecting interior space to outdoors, shall be provided with a bend such that no direct line of sight exists from exterior to interior through the vent duct.

9) Driveways shall not be constructed closer than five (5) feet to the side property line.

10) Future City sewer hook-up is required as per Spring Lake Park Ordinance.

11) The municipal water shut off valve, curb stop, must be at grade and visible after laying sod.
12) A Ford Type A single lid or McDonald covers are required for all water shutoff standpipes located in the driveway. See more details at the end of this handout. Contact the Spring Lake Park Public Works Department for further information: 763-784-6491.

13) From May 15th- October 15th all landscaping must be completed prior to final inspection. Where there is a letter of credit for landscaping if not complete at final inspection a reinspection fee will apply. When escrow reinspection for landscaping is necessary, the inspection should not be scheduled until all items are complete.

14) From October 16th – May 14th escrow and re-inspection fees will be charged for landscaping items that are not complete at the time of final inspection. When escrow re-inspection for landscaping is necessary, the inspection should not be scheduled until all items are complete. During fall and winter months trees that have shed all of their leaves will be escrowed for and re-inspected when the leaves return in the spring.

15) All residential, commercial and industrial developments and/or construction sites of 1 acre or more in size are required to have a CONSTRUCTION STORM-WATER PERMIT from the MPCA BEFORE construction begins. Permit information, forms and further inquiries should be directed to the MPCA: Customer Assistance Center at 651-297-2274 (Metro Area) or 1-800-646-6247 (Out State)

FOOTING/Foundation:

1) Soil compaction testing is required;
   a. On all lots on which fill has been placed.
   b. The soils are of a questionable nature.

2) Footing inspections are required prior to placing concrete.
   a. Concrete for footings must be 5,000lbs psi.

3) Water proofing shall be installed across the top of the foundation wall and down to the top of the footings. When using a closed-cell sill sealer waterproofing the top of the foundation wall may be omitted.
   a. Walls exposed to exterior environment shall have a rigid, opaque, and weather resistant protective covering shall be installed to prevent degradation of the waterproofing system. The protective covering shall cover the exposed waterproofing and extend a minimum of 6 inches below grade.

4) Foundation inspections are required after waterproofing and foundation insulation have been installed and prior to placing backfill.
   a. Foundation walls shall extend at least 6 inches above the final grade or sod adjacent to the wall at all points.
   b. Below grade, non-draining foundation insulation shall be covered entirely with a minimum 6 mil poly slip sheet. See MN Energy Code section R402.1.1.1 Integral Foundation Insulation, R402.1.1.2 Draining Foundation Insulation, and R402.1.1.3 Non-Draining Foundation Insulation.
   c. A rigid, opaque, and weather resistant protective covering shall be installed to prevent degradation of the insulations thermal performance. The protective covering shall cover the exposed exterior insulation and extend a minimum of 6 inches below grade. The insulation protective covering system shall be flashed in accordance with IRC section R703.8
5) General contractor to compact all soil put back against inside foundation walls and in lower levels prior to placing concrete floors.

6) Under floor/slab radon mitigation inspection required - before pouring slab or installing the floor system.

7) Surface Conditions of Steel Reinforcement. “At the time concrete is placed, steel reinforcement shall be free from mud, oil or other nonmetallic coatings that decrease bond.” ASTM standards A615, A706 & A996.

8) Provide sill anchors as per R403.1.6. When using anchor straps follow the manufacturer’s guidelines.

9) Protect concrete from freezing as per ASTM Standard A706. More information is available on the Minnesota Concrete Masonry Association website at www.mcma.net.

10) Protect masonry from freezing as per ASTM Standard A996. More information is available on the Minnesota Concrete Masonry Association website at www.mcma.net.

11) Provide foundation sill plate as per Section R319.1 of the MN Residential Code.

12) Under-floor ventilation is to comply with Section R408 of the MN Residential Code.

13) Window wells with a vertical depth of more than 44 inches shall be equipped with an approved permanently affixed ladder or stairs that are accessible with the window in the fully open position. R310.2.1

14) Window wells shall provide a minimum accessible net clear opening of 9 square feet, with a minimum dimension of 36 inches. R310.2

PLUMBING:

IMPORTANT DETAILS OF SOME SIGNIFICANT CHANGES TO THE PLUMBING CODE ARE ATTACHED TO THE END OF THIS HANDOUT. THERE ARE MANY CHANGES THAT WILL EFFECT THE PLUMBING SYSTEM IN RESIDENTIAL DWELLINGS.

1) All hot water piping shall be insulated (minimum R-3) per the requirements and table listed in the MN Energy Code R403.3

2) Toilets must be installed in a space at least 30 inches wide (minimum 15” from center of toilet to finished wall or surface) and at least 24 inches of clear space must be provided in front of the toilet bowl.

3) Anti-scald control devices - combination tub/shower and shower valve must be of the thermostatic, pressure-balancing, or combination thermostatic and pressure-balancing type in accordance with ASSE Standard 1016.

4) Whirlpool bathtubs. Whirlpool bathtubs with pumps, air circulation, or both must comply with ASME A112.19.7. Pipe-less whirlpool bathtubs must comply with ASME A112.19.7 or IAPMO IGC 155. All whirlpool bathtub equipment must be provided with an access panel. Bathtubs which do not have a factory applied flange for installation against a wall are considered drop-in and shall not be installed against a wall.
5) Hot water temperature control device for tubs. Bathtubs and whirlpool tubs must be provided with water temperature limiting devices set at a maximum water temperature of 120 degrees Fahrenheit to reduce the risk of scalding, according to ASSE Standard 1070.

6) Water meters shall be located inside a building and installed at least 12 inches above the finished floor and shall be readily accessible. Water meters installed within five feet of a plumbing fixture must be shielded from contamination. All water meter installations shall be rigidly supported with a permanent support in order to prevent the meter from vibrating when the water is passing through it. Obstructing the meter so as to prohibit the ability to read, repair, or replace is prohibited. The wire used for the meter remote shall be the City of Spring Lake Park provided wire and it shall be installed prior to the plumbing final inspection.

7) All piping passing through concrete shall be protected/sleeved.

8) Upon plumbing final inspection, access shall be provided to all traps, clean outs, slip joint connections, pumps, and valves. 12”x12” Minimum.

9) When a tub or shower is located on an exterior wall, an air barrier must be provided at the interior surface of the wall behind the tub or shower.

10) When lawn irrigation is being installed, it is required that the water piping up to and including the back-flow prevention device be installed by a licensed plumbing contractor. The back-flow prevention device shall be installed a minimum of 12” above the highest sprinkler head. Pressure vacuum breakers are required to be tested by a certified tester prior to building final. It is required that all automatically operated landscape irrigation systems shall have a rain sensor that inhibits or interrupts operation of the irrigation system during periods of significant moisture. The sensor must be adjustable either by the end user or the professional practitioner of landscape irrigation services. Inspection upon completion of system is required.

11) Floor drains in garages are permitted to connect to the public sewer if the two methods to protect against sand intrusion, detailed below, were installed.
   a. A sand trap type floor drain must be installed with a side outlet above the bottom portion (this is the primary sand catch.)
   b. There must also be a 3” readily accessible vented trap installed inside the heated space, with removable couplings (this is the secondary sand catch.).

   Note: Sink traps located in the garage must have provisions to protect from freezing. Water shut off valves to be inside heated space and must be drainable (same as hose bibs.)

12) Main cleanout cover (Tom Cap) shall be glued and threads sealed after final inspection has been completed and plumbing vent roof caps shall be removed prior to the Building Final inspection.

MECHANICAL

1) Operable window or mechanical exhaust fan required in bathroom. Mechanical exhaust is required to have a minimum ventilation rate of 50 CFM for intermittent ventilation or 20 CFM for continuous
ventilation. Exhaust air from fan shall be exhausted directly to the outside. Termination shall be 3’ from windows and other operable openings and 10’ from any mechanical intakes.

2) Clothes dryers shall be properly vented to the exterior per Section 504.6 of the MN Mechanical Code. The maximum length of clothes dryer vents shall be as allowed in Section 504.6.1.

3) For clothes dryers installed in a closet or confined area a minimum opening of 100 square inches shall be provided per Section 504.5 of the MN Mechanical Code.

4) Warm air supply ducts in floor cabinet toe space shall extend full to register.

5) Provide outside source of combustion, ventilation and dilution air as per Chapter 1346: Section 304 of the MN Fuel Gas Code and the MN Energy Code.

6) Heating contractors are to balance all furnace installations and supply a copy to the city inspector.

7) Prior to mechanical rough-in inspection all flue vents, insulation guards, straps, connections and fire stopping must be in place.

8) It is recommended to provide a warm-air supply in walk-in bedroom closets with an exterior wall.

9) Gas fireplaces not shown on house plans require a separate permit.

10) Factory built chimneys and factory built fireplaces shall be listed and shall be installed in accordance with the terms of their listings and the manufacturer’s instructions as specified in the mechanical code. Factory built chimneys: Section R1002.1/Factory built fireplaces: Section R1004.1 of the MN Residential Code.

11) Intake and exhaust ducts within a conditioned space must be insulated to an R-3.3 with a vapor retarder for a distance of three feet from the exterior.

12) Programmable thermostat required.

13) All ducts shall be sealed with approved mastic or UL 181 listed tapes.

14) Supply, return and exhaust ducts in any attic, garage or ventilated crawl space shall be insulated to minimum R-8 with a vapor retarder, and the duct insulation shall be installed without respect to other building envelope insulation.

15) When a duct is installed within the floor system of the building thermal envelope (such as above a garage) an additional insulation inspection may be required to verify code compliance. If an air and vapor permeable R-30 building thermal envelope insulation is installed (such as fiberglass or cellulose) in the cavity between the garage and conditioned room above the garage, the space above the garage ceiling shall be sealed at the junction of the house wall and garage wall with a durable continuous air barrier, creating a sealed six-sided building cavity. Ducts shall be insulated with minimum R-8 duct insulation and vapor retarder installed on the outside of the ducts (per IMC Section 604.11), and a vapor retarder having a perm rating of 1.0 or less (per IRC R702.7 and R202) shall be installed between the duct and the R-30 insulation. In addition, all duct joints, seams and connections shall be sealed with duct mastic listed to UL 181A-M or UL 181B-M installed liberally with a minimum thickness of approximately 1/16 inch.
16) Supply and return boots over the garage or other unconditioned spaces must be sealed to the subfloor.

17) R-8 insulation installed on ducts must cover the boots completely and be sealed.

18) AC refrigerant access ports shall have locking-type, tamper-resistant caps. Line sets for all air-conditioning systems on permits applied for after Jan. 24, 2016, shall have locking caps per Section 1101.10 of the 2015 MN Mechanical Code.

19) AC line sets shall be protected with a UV protective covering.

20) All exhaust system terminations shall be equipped with backdraft dampers at the point of discharge on the exterior.

21) Air intake openings shall be covered with a corrosion resistant screen with not less than ¼ mesh and shall be located not less than 12” above adjoining grade level.

22) All intake and exhaust outlets located on the exterior shall be labeled with a permanent, weather-resistant label.

**BUILDING ITEMS:**

1) Fire protection of floors is required over unfinished basements and crawl spaces. Use 1/2” gypsum, 5/8” wood structural panel, or equivalent on the underside of the floor framing members – all penetrations and gaps shall be sealed with a non-combustible material as listed for fire-blocking R302.11.1. Prior to concealing this area; inspections required for mechanical, insulation, fire-blocking, and draft stopping. MN R501.3

2) Window fall protection per R312.2 - Window fall protection is required in dwelling units where the lowest part of the opening is located more than 72 inches above finished grade/floor. Operable sections of windows shall not permit openings that allow passage of a 4 inch diameter sphere where such openings are located within 36 inches of the finished floor.

3) Window - escape/rescue – Basements, habitable attics, and every sleeping room shall have at least one operable emergency escape and rescue opening. Sill height of not more than 44” from finished floor to bottom of clear opening. Minimum net clear opening of 5.7 sq. ft. except grade floor openings permitted to have minimum 5 sq. ft. Minimum opening width 20” height 24”. See MN Residential Code R310 for exceptions.

4) Window wells shall provide a minimum accessible net clear opening of 9 square feet, with a minimum dimension of 36 inches. Area of the window well shall allow the emergency and rescue escape opening to be fully opened. Window wells with a vertical depth of more than 44 inches shall be equipped with an approved permanently affixed ladder or stairs that are accessible with the window in the fully open position. MN Residential Building Code R310.2 Drainage shall be tied into the buildings foundation drainage system

5) Egress windows under decks and porches shall have the ability to be fully opened and provide a clear height to 36 inches to yard or court.
6) Site address required per R319 – Address numbers shall be Arabic numbers or letters a minimum of 4 inches high with a minimum ½” stroke width and contrasting. During construction provide temporary address signage on site at all times.

7) Provide attic access as per Section R807.1 of the MN Residential Code.

8) Attic accesses must be 22”x30” min., weather-stripped and insulated to the equivalency of the surrounding area.

9) Provide attic ventilation not less than 1/300 of the area of the space to be ventilated. 50% to be located in the upper portion of the space to be ventilated with the balance to be provided by eave or cornice vents. (Section R806.2 of the MN Residential Code) Also applies to enclosed garage attic spaces.

10) Provide escape/rescue windows as per Section R310 of the MN Residential Code.

11) Provide smoke detectors as per Section R314 of the MN Residential Code and carbon monoxide detectors as per R315 MN Residential Code and MN Statute 299F.50.

12) Provide natural light as per Section R303 of the MN Residential Code.

   unfinished basement or lower level areas, future bedrooms, family rooms, etc. must comply with 8% light/4% ventilation requirement when finished. (See exceptions)

13) Provide wall bracing as per Section R602.10 (wood), Section R603.3.3 (steel) of the MN Residential Code.

14) Habitable space (bedrooms, family rooms, etc.) shall have a ceiling height of not less than 7’0” per Section R305.1 of the MN Residential Code.

15) Provide a landing within 8” of patio door or block door to open less than four (4) inches.

16) Decks not shown on plans are by separate permit.

17) Decks ledgers fastened with ½” lag bolts or screws shall be fastened per the requirements of R507. Important note: If LedgerLoks, Spax, Simpson, or any other ledger fastening bolt is being used, they shall be installed per the manufacturer’s requirements.

18) A manufacturer’s accessory or J block shall be installed for all exterior wall penetrations.

19) Floor joist spans shall be designed in accordance with Tables R502.3.1 (1), R502.3.1 (2) of the MN Residential Code. For other grades, species, and for other loading conditions, refer to the AF&PA span tables for joists and rafters.

20) Brick veneer will require #15 felt or building paper on the wall sheathing (house and garage) per Section R703 of the MN Residential Code.

21) Girders entering masonry or concrete walls require 1/2” air space on top, sides, and ends unless approved wood of natural resistance to decay or treated wood is used.

22) Roof sheathing on gable ends shall be supported by 2 x 4 blocking at 24” on center.
23) On all roof pitches of 3/12 and greater, ice and water protection shall extend from the eave up the roof to a line 24” inside the exterior wall line, including attached and detached garages. Ice and water protection shall be provided and extend the full length of all valleys.

24) Post and/or beam construction shall have positive connection to ensure against uplift and lateral displacement.

25) Chimney is to be installed as per Section R1001 of the MN Residential Code.

26) Provide a weather-resistive barrier between concrete stoop and house wall sheathing.

27) Roofing contractors and subcontractors are required to be licensed by the State of Minnesota and are to carry the license while on the job site.

28) Weather–resistive sheathing paper or other approved material shall be applied over sheathing of all exterior walls.

29) Weather barrier (house wrap) shall extend to the bottom of rafter or truss top chord.

30) Insulation attic markers shall be installed 1 every 300 sq. ft. with the markers facing attic access opening.

31) Insulation, gypsum board or other interior finish materials shall not be installed until the building is made weather tight. A weather tight building includes:
   1. A completed roof system.
   2. Properly installed, flashed and sealed windows and doors.
   3. An approved properly installed and sealed exterior weather barrier.
   4. Site specific items as determined by the Building Official to prevent the intrusion of water into the building envelope.

32) Recessed lights installed between conditioned and unconditioned spaces shall be sealed with a gasket or caulk between the housing and interior wall or ceiling covering.

RADON MITIGATION (PASSIVE CONTROL SYSTEMS)

1) Space required for future fan installation shall be a min. of 24” in diameter, centered around the axis of the pipe, and shall extend a min. of 3’ vertically.

2) A power source consisting of an electrical circuit terminating in an approved electrical box shall be installed in the anticipated area of the vent pipe fan. The power source shall not be installed in any conditioned space, basement or crawl space.

3) Radon pipe routed through unconditioned spaces shall be insulated to R-4 min.

4) A uniform 4” min. thick layer of clean aggregate ¼” - 2” in diameter across entire basement floor.

5) Exhaust pipe shall extend 12” min. above the roof and at least 10’ from any window or other opening into conditioned space.

6) Radon pipe must be labeled with 1 label min. on each story and in attics and crawl spaces. The label should read: “Radon Gas Vent System.”
RADON MITIGATION (ACTIVE CONTROL SYSTEMS)

1) When active radon control systems are installed, all the requirements of the passive radon control system shall be met.

2) A radon gas vent pipe fan shall be rated for continuous operation that provides a min. measurement of 50 cu. ft. per minute at ½” water column shall be installed in the vertical vent pipe.

3) The radon gas vent pipe fan shall be installed outdoors, in attics or in garages and shall not be installed in conditioned spaces of a building, basement or crawl space.

4) An audible alarm, a manometer or other similar device shall be installed to indicate when fan is not operating.

5) A switch-controlled luminaire and the receptacle outlet near the fan shall be installed according to the MN Electrical Code.

OTHER INSPECTION RELATED ITEMS

1) Structural information and layout design sheet for engineered roof trusses, floor trusses, engineered beams/girders shall be on site for the framing inspection.

2) The “approved” plan shall be kept on the site of the building.

3) Prior to scheduling the framing inspection all plumbing, mechanical and electrical rough-in inspections must be completed and approved.

4) Framing and weather barrier must be approved prior to installing the insulation.

5) Prior to scheduling the insulation inspection, the builder is to ensure that the roof shingles are installed.

6) Attic insulation marker verification inspection will be conducted with the insulation inspection. If markers not in place at the time of insulation inspection, contractor shall provide access for inspection through attic access opening. See Energy Code item #1.

7) Fire-blocking (R302.11) and Draft–stopping (R302.12) shall be completed for inspection with the insulation inspection. See code for installation and material requirements.

8) Prior to scheduling the house final inspection, builder is to ensure that all building code items are completed, and the plumbing, heating and electrical are approved. Escrow fees will be charged for any building code correction items and/or incomplete landscaping. A Certificate of Occupancy is required prior to occupancy or use.

9) Exterior plaster/stucco installation and materials shall be in compliance with Section: 703.6 of the MN Residential Code as amended by the State of Minnesota along with exterior flashing installation per Section: 703.8.

10) Windows and doors in the exterior wall envelope are to be properly flashed and sealed per the manufacturer’s installation instructions. Installation instructions are to be available at the jobsite.

11) All overhead garage doors shall be rated to withstand a wind speed of 90 mph.
12) Builder is responsible for complying with all conditions in the Development Agreement, the Spring Lake Park Zoning Ordinance, Building Permit, and stamped “Approved” house plan.

13) “Approved” plans and specification shall not be changed, modified or altered without prior approval from the Building Inspection Department.

14) Keep site clean. Construction debris to be in enclosed area or dumpster. Clear all excess dirt, sand, and gravel out of curb street area in front of lot both during construction and for final inspection. Failure to keep the site and area clear of debris may result in stop work/inspections order.

15) At time of final building inspection, the property corners are to be in place and readily visible. If any lot corners are dug out, graded out, or missing, the general contractor is to have a registered land surveyor re-establish the property corner.

**ENERGY CODE ITEMS:**

1) Insulation
   a. Floor minimum R-30
   b. Ceiling minimum R-49 (with 6 inch energy heel)
   c. Wood frame wall minimum R-20
   d. Rims minimum R-20
   e. Crawl spaces and basements minimum R-15
      - Minimum exterior R-10
      - Maximum interior R-11

See Energy Code table R402.1.1 and footnotes for exceptions

2) Identification. Materials, systems, and equipment shall be identified in a manner that will allow a determination of compliance with the applicable provisions of this code. Materials used shall be:
   a. listed for the intended use.
   b. installed in accordance with the manufacturer’s installation instructions.
   c. installed by an installer who is certified by a manufacturer to install that specific product, if such certification exists.

3) Insulation installer shall provide a certificate for all blown or sprayed foam insulation. The certificate shall:
   a. detail the type, manufacturer, and R-value of insulation installed.
   b. be posted in a clearly visible location.
   c. the R-value per inch, the design settled thickness, the square footage of attic coverage area and the number of bags installed.

4) Attic thickness marker for blown or sprayed attic insulation is required. The markers shall be written in inches and installed at least one for every 300 sq. ft. throughout the attic space. Each marker shall face the attic access opening. Insulation depth markers shall be installed in all vaulted areas. R303.1.1.1

5) All insulating materials require a manufacturer’s R-value mark which must be installed to be readily observable upon inspection.

6) A building Energy Code Compliance Certificate shall be posted in a permanently visible location inside the building. The certificate shall be completed by the builder.
7) Floor insulation shall be installed to maintain permanent contact with the underside of the subfloor decking.

8) All interior foundation insulation systems require an interior drainage system.

9) Waterproofing of the entire interior foundation wall is required with certain interior foundation insulation systems.

10) Exterior wind wash barrier must be installed.

11) Recessed lighting installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces.

12) All ducts shall be sealed with approved mastic or UL 181 listed tapes.

13) Provide balanced mechanical ventilation system as per MN Energy Code.

14) Prior to installing interior foundation insulation the concrete slab / foundation wall joint shall be sealed.

15) Rigid interior foundation insulation shall be in contact with the foundation wall and sealed with an acoustic sealant along vertical edges, all interior joints, edges, through penetrations and shall be applied horizontally between the top of the insulation and the foundation wall and horizontally between the bottom of the insulation edge and basement floor.

16) Non-draining exterior rigid foundation insulation shall have a 6 mil. poly slip sheet installed over the entire exterior surface.

17) Exposed waterproofing and exterior rigid insulation shall be protected by a rigid, opaque, weather-resistant material extending 6” min. below grade.

**SEWER & WATER ITEMS:**

When getting the Final Certificate of Occupancy Building Inspection, the curb stop will be checked to make sure it is in “working condition”. Working condition means:

- Curb stop must be at grade level and visible after laying sod.
- If the curb stop is in the driveway, it must have a Ford Type A1 or McDonald meter box covering it. ***The Ford and McDonald meter boxes are the only acceptable cover allowed.***
- You may not use a gate valve stack and cover.
- Have your driveway installer cover the Ford meter box top prior to pouring concrete or paving over the box to ensure the cover works.
- If the driveway is installed and the curb stop is not in working condition, it will have to be cut out and repaired.

Call Public Works at 763-784-64 to schedule an appointment if you want the curb stop checked prior to installing the driveway to make sure the curb stop is in working condition and not bent.
This checklist covers items to be included with plan submittals of Residential One and Two Family Dwellings and Townhouses. This list may not be all inclusive of all items required.


**REQUIRED CONSTRUCTION DETAILS**

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Note: Items listed under categories do not necessarily have to be detailed on that particular drawing but are to be indicated somewhere on the plan documents.
MN RULES 1300.0130 CONSTRUCTION DOCUMENTS.

Subpart 1. **Submittal documents.** Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit.

**Exception:** The building official may waive the submission of construction documents and other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with the code. The building official may require plans or other data to be prepared according to the rules of the Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience and Interior Design, chapter 1800, and Minnesota Statutes, sections 326.02 to 326.15, and other state laws relating to plan and specification preparation by occupational licenses. If special conditions exist, the building official may require additional construction documents to be prepared by a licensed design professional.

Subpart 2. **Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed and show in detail that it will conform to the code and relevant laws, ordinances, rules, and regulations, as determined by the building official.

Subpart 3. **Manufacturer's installation instructions.** When required by the building official, manufacturer's installation instructions for construction equipment and components regulated by the code, shall be available on the job site at the time of inspection.

Subpart 4. **Site plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan drawn to scale, showing the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades, and the proposed finished grades, and it shall be drawn according to an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official may waive or modify the requirement for a site plan if the application for permit is for alteration or repair or when otherwise warranted.

Subpart 5. **Examination of documents.**

The building official shall examine or cause to be examined the accompanying construction documents to ascertain whether the construction indicated and described complies with the requirements of the code and other pertinent laws and ordinances.

Subpart 6. **Approval of construction documents.** If the building official issues a permit, the construction documents shall be approved in writing or by a stamp, stating
“Reviewed for Code Compliance,” dated, and signed by the building official or an authorized representative. One set of the construction documents that were reviewed shall be retained by the building official. The other set shall be retained to the applicant, to be kept at the site of the work, and open to inspection by the building official or an authorized representative

STATE STATUTE 326.02 LICENSURE OR CERTIFICATION.

Subdivision 1. Licensure or certification mandatory. In order to safeguard life, health, and property, and to promote the public welfare, any person in either public or private capacity practicing, or offering to practice, architecture, professional engineering, land surveying, landscape architecture, or professional geoscience, or using the title certified interior designer in this state, either as an individual, a copartner, or as agent of another, shall be licensed or certified as hereinafter provided. It shall be unlawful for any person to practice, or to offer to practice, in this state, architecture, professional engineering, land surveying, landscape architecture, or professional geoscience, or to use the title certified interior designer, or to solicit or to contract to furnish work within the terms of sections 326.02 to 326.15, or to use in connection with the person's name, or to otherwise assume, use or advertise any title or description tending to convey the impression that the person is an architect, professional engineer (hereinafter called engineer), land surveyor, landscape architect, professional geoscientist (hereinafter called geoscientist), or certified interior designer, unless such person is qualified by licensure or certification under sections 326.02 to 326.15. This subdivision does not preclude an individual who retired from one of the professions listed in this subdivision from using the designation architect, professional engineer, land surveyor, landscape architect, professional geoscientist, or certified interior designer, unless such person is qualified by licensure or certification under sections 326.02 to 326.15. This subdivision does not subsequently revoked by the Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience, and Interior Design.

Subdivision 2. Practice of architecture. Any person shall be deemed to be practicing architecture, within the meaning of sections 326.02 to 326.15, who holds out as being able to perform or who does perform any professional service, such as planning, design, or supervision of construction for the purpose of assuring compliance with specifications and design, in connection with any private or public buildings, structures or projects, or the equipment or utilities thereof, or the accessories thereto, wherein the safeguarding of life, health, or property is concerned or involved, when such professional service requires the application of the art and science of construction based upon the principles of mathematics, aesthetics, and the physical sciences, acquired by education or training, and by experience. For the purposes of this subdivision "supervision" is a professional service as distinguished from superintending of construction and means the performance or the supervision thereof, of reasonable and ordinary on the site observations to determine that the construction is in substantial compliance with the approved drawings, plans and specifications.

Subdivision 5. Limitation. The provisions of sections 326.02 to 326.15 shall not apply to the preparation of plans and specifications for the erection, enlargement, or alteration of any building or other structure by any person, for that person's exclusive occupancy or use, unless such occupancy or use involves the public health or safety or the health or safety of the employees of said person, or of the buildings listed in section 326.03, subdivision 2, nor to any detailed or shop plans required to be furnished by a contractor.
to a registered engineer, landscape architect, architect, or certified interior designer, nor to any standardized manufactured product, nor to any construction superintendent supervising the execution of work designed by an architect, landscape architect, engineer, or certified interior designer licensed or certified in accordance with section 326.03, nor to the planning for and supervision of the construction and installation of work by an electrical contractor or master plumber as defined in and licensed pursuant to this chapter, where such work is within the scope of such licensed activity and not within the practice of professional engineering, or architecture, or where the person does not claim to be a certified interior designer as defined in subdivision 2, 3, or 4b.

STATE STUTUE 326.03 LICENSE OR CERTIFICATE REQUIRED.
Subdivision 1. Plans; documents. No person, except an architect, engineer, land surveyor, landscape architect, geoscientist, or certified interior designer, licensed or certified as provided for in sections 326.02 to 326.15 shall practice architecture, professional engineering, land surveying, landscape architecture, or professional geoscience, or use the title certified interior designer, respectively, in the preparation of plans, specifications, reports, plats or other architectural, engineering, land surveying, landscape architectural, geoscientific, or interior design documents, or in the observation of architectural, engineering, land surveying, landscape architectural, geoscientific, or interior design projects. In preparation of such documents, reasonable care shall be given to compliance with applicable laws, ordinances, and building codes relating to design.

Subdivision 2. Exceptions. Nothing contained in sections 326.02 to 326.15 shall prevent persons from advertising and performing services such as consultation, investigation, or evaluation in connection with, or from making plans and specifications for, or from supervising the erection, enlargement, or alteration of any of the following buildings:
(a) dwellings for single families, and outbuildings in connection therewith, such as barns and private garages;
(b) two family dwellings;
(c) any farm building or accessory thereto; or
(d) temporary buildings or sheds used exclusively for construction purposes, not exceeding two stories in height, and not used for living quarters.

Subdivision 3. Recording. No plat, map, or drawing of any survey or subdivision of lands required by law to be filed or recorded with the county recorder or registered with the registrar of titles of any county, shall be filed, recorded, or registered therein unless there shall be endorsed thereon a certification by a licensed land surveyor.

Subdivision 4. Exception for persons elected in office. The provisions hereof shall not apply to any person holding an elective office when in discharging the duties thereof such person is required to do work or perform service of the character of work or service usually done or performed by an architect, engineer, land surveyor, landscape architect, or geoscientist.

Subdivision 5. Insurance companies; rating bureaus. The provisions of sections 326.02 to 326.15 shall not apply to inspection and service work done by employees of insurance companies, their agents, or insurance rating bureaus.
In accordance with Minnesota Statutes, sections 326.02, subdivision 5, and 326.03, subdivision 2, the following classes of buildings are exempt subject to the limitations of the elements listed below:

<table>
<thead>
<tr>
<th>Occupant Use*</th>
<th>Exempted Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assembly</strong>  (as defined by the MSBC under occupancy group A2: Dining and drinking less than 50 persons)</td>
<td>Not greater than 1-story with no basement; and Seating for not more than 20 persons; and Not greater than 1,000 Gross Square Footage</td>
</tr>
<tr>
<td><strong>Business</strong>  (as defined by the MSBC under occupancy group B)</td>
<td>Not greater than 2-story with a basement; and Not greater than 2250 GSF</td>
</tr>
<tr>
<td><strong>Factory</strong>   (as defined by the MSBC under occupancy group F2)</td>
<td>Not greater than 1-story with no basement; and Not greater than 3,000 GSF</td>
</tr>
<tr>
<td><strong>Mercantile</strong> (as defined by the MSBC under occupancy group M)</td>
<td>Not greater than 2-story with a basement; and Not greater than 1,500 GSF</td>
</tr>
<tr>
<td><strong>Residential</strong> (as defined by the MSBC under occupancy group R)</td>
<td>Apartment houses/condominiums (3 units or less), dwellings, lodging houses, attached single family dwellings/townhomes, and congregate residences (each accommodating 10 persons or less)</td>
</tr>
<tr>
<td><strong>Storage</strong>   (as defined by the MSBC under occupancy group S1: Aircraft hangars and helistops)</td>
<td>Not greater than 1-story with no basement; and Not greater than 3,000 GSF</td>
</tr>
<tr>
<td><strong>Storage</strong>   (as defined by the MSBC under occupancy group S2 except for parking garages, open or enclosed)</td>
<td>Not greater than 1-story with no basement; and Not greater than 5,000 GSF</td>
</tr>
<tr>
<td><strong>Utility</strong>   (as defined by the MSBC under occupancy group U except for fences higher than 8 feet, tanks and towers, and retaining walls with over 4 feet of vertical exposed face)</td>
<td>Not greater than 1-story with no basement; and Not greater than 1,000 GSF</td>
</tr>
</tbody>
</table>

* All terms used in this table shall be as defined by the Minnesota State Building Code.
REQUIRED INSPECTIONS

As required by the State Building Code: It is the duty of the permit applicant to cause work to remain accessible and exposed for inspection purposes. It is the duty of the person doing work authorized by a permit to notify the appropriate official that such work is ready for inspection. It is the duty of the person requesting the inspection to provide access to and a means for inspection of the work.

FOOTING & FOUNDATION: Prior to pouring any concrete, all footing and/or foundation formwork, including reinforcement and miscellaneous embedments, must be inspected.

SLAB & UNDER-FLOOR: Inspections shall be made after in-slab or under-floor reinforcing steel and/or other conduits, pipes, hydronics, floor insulation, vapor barriers, etc., are in place, but before any concrete is placed.

FOUNDATION WALL(S): All foundation walls shall be inspected prior to backfilling. Required below grade insulation, drain tile and water/dampproofing shall all be installed and approved prior to backfilling.

SITE UTILITIES: All site utilities, including the water service, sanitary sewer/septic system(s), storm sewer, etc., must all be inspected and/or tested by the appropriate authority having jurisdiction prior to covering or concealment.

INSULATION/ENERGY CODE COMPLIANCE: All required exterior envelope insulation and the interior vapor barrier and the air barrier, and all required ducts, pipes and apparatuses, must all be insulated and approved prior to concealment. (Below grade foundation insulation shall also be inspected prior to backfilling or concealment.)

FIRESTOPPING: All penetrations of any fire-resistive membrane, including walls, floors, roofs, ceilings, etc., must each be inspected for proper placement and installation of the required fire-stop system. All sealing of fire-rated penetrations must be inspected and approved prior to concealment.

GYPSUM BOARD: Gypsum board & lath inspections shall be made after they have been installed but before any plastering is applied or joints and fasteners are finished. (Only required in fire-resistive or shear assemblies)

STRUCTURAL/DRAINAGE: All framework (structural and non-structural) must be inspected and approved prior to covering. All rough-in mechanical work (i.e., plumbing, electrical, mechanical, fire suppression, etc.) must also be inspected/approved by the appropriate AHJ and at this stage of inspection.

PLUMBING, MECHANICAL, ELECTRICAL AND FIRE SPRINKLER SYSTEMS: All plumbing piping, including waste/vent and water piping must be inspected prior to concealment. All mechanical ductwork, fire dampers, flues, controls, equipment, gas, hydronic & process piping, must be inspected prior to concealment. All electrical wiring, controls and equipment must also be inspected prior to concealment. Fire sprinkler piping must be inspected prior to concealment.

SPECIAL INSPECTIONS: In accordance with the Special Inspection Requirements of the code, it may be necessary for special inspectors to be employed to inspect such things as soils, concrete strength, steel reinforcing placement, structural welding and bolting, spray-on fireproofing, structural masonry construction, smoke control systems, pilings, caissons and/or other inspections as deemed necessary by the Architect and/or Engineer of record. Work requiring special inspections may not be covered/concealed until all required inspections are complete and approved.

HEALTH DEPARTMENT: Inspections by Health Department personnel may be required for commercial kitchen installations, food and beverage establishments and other associated operations. Verify required Health Department inspections with the State Health Department.

FIRE CODE: Applicable State Fire Code regulations must be completed and approved by the Fire Marshal prior to final inspection and occupancy of the building or structure.

OTHER REQUIRED INSPECTIONS: Depending on the building and the type of equipment specified for installation, the code allows for other required inspections as deemed necessary by the DLI-CCLD. Other required inspections will be identified at the time of permitting, pre-construction meeting, or by the assigned inspector(s). Unannounced progress inspections may also be made by the assigned inspector(s).

FINAL INSPECTIONS: A final inspection will be required for all plumbing, electrical, mechanical, fire suppression, fire alarm, fire code, health and building code compliance issues. Upon successful completion and approval of all systems, a Certificate of Occupancy will be issued.
RE-ROOFING: ASPHALT SHINGLES

This is a summary of the standard requirements based on the State Building Code regarding roofing. Information contained herein does not contain all of the specific codes for construction, and should only be used as a guide. The permit applicant is responsible for meeting all code requirements applicable to each project.

Before undertaking any re-roofing project, there are several questions that should be considered. You should familiarize yourself with all aspects of the re-roofing process before you begin. There are various conditions about your roof that may limit your product choices or affect the cost of your roofing job.

Do I need a new roof?

How old is it? A roof that has been properly installed can last 20 years or more. An inspection of the roof should be done periodically. Look for cracked, curled, or cupped shingles, worn mineral coatings, exposed nails, previous patches, holes and exposed underlayment or sheathing. Check for gaps at flashing around chimneys, plumbing vents, and other roof junctures.

Does the roof leak?

If the answer is yes, it is necessary to determine why. If you have inspected the roof and it looks sound, your problem could be roof flashing. Many roof leaks are the result of bad or improperly installed flashings. You should spend time in the attic looking for water stains, particularly around vents, chimneys, and vertical wall elements above the roof. A garden hose can help you find the leak. Flashing can usually be replaced or repaired without completely installing a whole new roof.

Do it myself or hire a professional?

This is a question only you can answer based on your skill level and time availability. An asphalt roofing project can be successfully accomplished by the homeowner if you take the time to become familiar with the roofing procedures. Be sure to plan your project around the weather and allow enough time to get a proper cover on the roof before it rains. Steep-sloped asphalt roofs and those with multiple valleys can present special problems, so be sure you have the right equipment and skills before undertaking this type of project. Other types off roofs, such as wood shingles, shakes, and clay tile are not normally taken on by the “do-it-yourself” homeowner because of the special skills required. Remember, if you decide to hire a professional, be sure the company is a state licensed contractor or roofer.

Should I overlay the existing roof or tear off the existing shingles?

For many years there have been two options available when re-roofing:

1. One would be to tear off the old roof before applying the new one (tear-off).
2. The second would be to lay new shingles over the existing roof (lay-over). Roofing materials are heavy, so multiple layers can affect the ability of a roof to hold the weight of winter snow.

With the Minnesota States Adoption of the 2006 International Building Code, the method of over-laying asphalt shingles is no longer allowed. According to the IRC, the Spring Lake Park Area is in a moderate hail hazard zone. In areas where hail storms are prevalent, the practice of overlays is restricted. Therefore, all new roofing will need to be laid directly on the roof sheathing after all existing roofing has been removed.
Although an overlay was often a less expensive option, it was not necessarily always the best choice. There are advantages to tearing off the old roof before installing a new one. For example:

- If there are any defects in the roof deck, they will be revealed when the roof is torn off. These defects should be repaired before applying the new roof.
- If condensation problems exist in the attic, they can be revealed when the roof is torn off. Properly designed attic ventilation can then be installed in order to eliminate such problems.
- When the old roof is torn off, an ice-protection underlayment can be installed before applying the new roof. This will help prevent against ice dam leakage.
- Tearing off the old roof and starting with a clean deck before re-roofing may result in a smoother finished roof system.
- Tearing off the old roof will typically result in a longer roof life than when the roof has been laid over. This is because they are installed on a smooth and sound substrate and have new underlayment.

**What is roof slope and does it limit the choice of shingles?**

The slope of the roof is the vertical rise of the roof in relation to the horizontal run. A 4:12 roof pitch rises four (4) feet vertically for every twelve (12) feet of roof measured horizontally. Asphalt shingles can only be used on roof slopes of two units vertical in 12 units horizontal (2:12) or greater.

**Do I need to increase my roof ventilation?**

Most likely, Yes. Enclosed attics and enclosed rafter spaces formed where ceilings are applied to the underside of the roof rafters shall have cross ventilation for each separate space by ventilation openings protected against the entrance of rain and snow. Proper ventilation is required if the shingles are to last their design life and warranty.

Minimum Ventilation Area: The total net-free ventilation area shall not be less than 1 to 150 of the area of the space ventilated. The total area is permitted to be reduced to 1 to 300, provided at least 50 percent and not more than 80 percent of the required ventilation area is provided by ventilators located in the upper portions of the space to be ventilated. Ventilation in the upper portion shall be at least 3 feet above eave or cornice vents, with the balance of the required. A ventilation sheet must be completed with each new roof or reroof project.

Ventilation provided by eave or cornice vents. As an alternative, the net-free cross-ventilation area may be reduced to 1 to 300 when a vapor barrier having a transmission rate not exceeding 1 perm is installed on the warm side of the ceiling. Where eave or cornice vents are installed, insulation shall not block the free flow of air. A minimum of a 1 inch space shall be provided between the insulation and the roof sheathing at the location of the vent. This can easily be accomplished by installing cardboard, plastic, or foam air chutes along the eave edge in the attic area.

**What function does shingle underlayment serve?**

Underlayment is more commonly known as roofing felt. A layer of felt paper on the roof sheathing will protect the roof deck from moisture prior to shingling. Felt underlayment will also provide a degree of back up protection in the event that water gets under the roofing shingles. Protection against ice dams can be obtained by using a special waterproof shingle underlayment at the eaves or lower edges of the roof. This underlayment is commonly referred to as an ice and water shield. This membrane is an ice barrier that should consist of a least two layers of underlayment cemented together or a self-adhering polymer modified bitumen sheet (ice/water shield). This layer shall be used in lieu of the normal felt underlayment and shall be installed along the eaves edge. The membrane shall extend up the roof line to a point 24 inches beyond the inside of the exterior wall line of the building. For added protection, ice and water underlayment can be installed up the valleys and around skylights and similar junctures.
How do ice dams develop?
In most cases, ice dams develop when heated air from the house or garage leaks up into the unheated attic. In the winter, the roof above the unheated attic is cold. When warm air leaks into the unheated attic, it creates warm areas on the roof, which in turn cause the snow on the exterior of the roof to melt. The melting snow moves down the roof slope until it reaches the cold overhang, where it freezes. The process continues, causing ice to build up along the eaves and form a dam. Eventually this dam forces water to back up under the shingles and sometimes into the ceiling or wall inside the home. In addition to the roof damage described above, ice dams may cause structural framing members to decay, metal fasteners to corrode, and mold and mildew to form in the attic and on wall surfaces.

How do I minimize ice dam build-up?
The three common techniques used to minimize ice dams are to seal attic bypasses, provide adequate insulation, and properly ventilate the attic.

The pathway through which heated indoor air moves into the attic are called attic bypasses. To reduce ice dams, attic bypasses must be eliminated. This is accomplished by sealing gaps or voids where heat can migrate into the attic. This task is much easier to complete when buildings are under construction, since not all attics or wall penetrations remain accessible once a building is finished. Some types of areas that should be sealed include penetrations for wiring, plumbing vents, heat vents, ducts, recessed light fixtures, outlet boxes, attic access hatches, etc.

Increasing attic insulation can help reduce heat loss, which helps minimize ice dam build-up. Older buildings will likely have poor insulating R-values, and therefore have more heat loss at the attic and roof line as compared to a newer building. The current standards require an R-value of 38 in attics framed with energy heels and an R-value of 44 for attics that are hand framed. Once attic insulation R-values have reached an R-44, there is little value in adding more insulation.

Proper ventilation is an important component in helping to reduce ice dam buildup. Good ventilation will facilitate the swift removal of warm air from the attic. Removing the warm air quickly helps keep the roof cool. If the roof system stays cool, then less snow melt will occur, which limits ice buildup. Use caution where utilizing power ventilators such as attic fans, as they can depressurize the attic, drawing warm moist air out of the house and into the attic area.

What specific code requirements apply to the installation of an asphalt shingle roof?

Fasteners: Fasteners for asphalt shingles shall be galvanized, stainless steel, aluminum or copper roofing nails, minimum 12 gauge shank with a minimum 3/8 inch diameter head, of a length to penetrate through the roofing materials a minimum of ¾ inch into the roof sheathing. Where the roof sheathing is less than ¾ inch thick, the fasteners shall penetrate through the sheathing. Staples are not permitted for shingle application unless specifically noted in the manufacturer’s installation instructions. Asphalt shingles shall have the minimum number of fasteners required by the manufacturer. Most shingles require not less than four nails per shingle strip.

Underlayment: Starting at the eave line up to a point 24 inches beyond the exterior wall, an ice and water shield membrane shall be installed. Starting at the top edge of the ice barrier, a felt underlayment shall be laid in shingle fashion over the remainder of the roof. For lower sloped roofs between a 2:12 to 4:12 pitch, two layers of 15 lb. non-perforated underlayment shall be applied, lapping successive sheets 19 inches and fastened sufficiently to be held in place. For roof slopes of 4:12 or greater, one layer of underlayment may be used. Underlayment shall be non-perforated 15 lb. felt lapped two inches horizontally and four inches vertically to shed water, with end laps offset by 6 feet.

Valleys: Valley linings shall be installed in accordance with manufacturer’s installation instructions before applying shingles. Valley linings of the following types shall be permitted:
1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be at least 24 inches wide with corrosion-resistant metal such as copper, aluminum, stainless steel, galvanized steel or as per IRC table 905.2.8.2.
2. For open valleys, valley lining of two plies of mineral surface roll roofing can be permitted. The bottom layer shall be 18 inches, and the top layer a minimum of 36 inches wide.
3. For closed valleys (valleys covered with shingles), use a valley lining of one ply of smooth roll roofing at least 36 inches wide or a metal valley lining as described above.

**Cricket and Saddles:** A cricket or saddle shall be installed on the ridge side of any chimney greater than 30 inches wide. Cricket or saddle coverings shall be sheet metal or the same material as the roof covering.

**Sidewall Flashing:** Flashing against a vertical side wall juncture shall be by the step-flashing method.

**Other Flashing:** Flashing against a vertical front wall, soil stack, vent piping and chimney flashing are required and shall be applied according to asphalt shingle manufacturer’s instructions.

**Kick-out Flashing/Diverters:**
A kick-out flashing shall be installed where the lower portion of a sloped roof stops within the plane of an intersecting wall cladding in such a manner as to divert or kick-out water away from the assemblies.

**Drip-Edge:** A drip edge shall be provided at eaves and gables of shingle roofs. Adjacent pieces of drip edge shall be overlapped a minimum of 2 inches. Drip edges shall extend a minimum of 0.25 inch (6.4 mm) below the roof sheathing and extend up the roof deck a minimum of 2 inches. Drip edges shall be mechanically fastened to the roof deck at a maximum of 12 inches on center with fasteners as specified in Section R905.2.5. Underlayment shall be installed over the drip edge along eaves and under the underlayment on gables. Unless specified differently by the shingle manufacturer, shingles are permitted to be flush with the drip edge. **R905.2.8.5 Drip edge.**
**TECHNICAL ADVISORY BULLETIN**

To: GAF Residential Sales, GAF Contractors, GAF Field Services

From: Technical Services Department

**Subject: Temperature Extremes & Fiberglass Asphalt Shingles**

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**When Is It Too Cold Or Too Hot To Shingle A Home?**

Theoretically, there is no lower or upper temperature limit governing when asphalt fiberglass shingles may be applied as long as appropriate precautions are taken.

- In cold weather, for easiest handling, temperatures should be above 40° F.
- In hot weather, for easiest handling, temperatures should be below 90° F.

**Cold Weather Tips For Easier Installation And To Prevent Damage...**

GAF suggests the following.... for easier installation and to prevent damage during cold weather:

- Store shingles in a heated area above 70° F for at least 24 hrs, if possible, prior to use. This will make the shingles more pliable and easier to install. For more information on storage, see Technical Point #122 on Proper Shingle Storage.
- GAF prefers that the racking method not be used and special care should be taken in cold weather. Racking requires the lifting/bending of the shingles to place the last nail. This method may cause them to crack or break along the bend either immediately or in the future.
- Sealing time for the shingles will vary depending on slope of roof, its orientation, and the amount of sun/heat exposure that the shingles receive. Hand sealing of shingles may be required if the temperature is too cold to activate the Dura-Grip® adhesive relatively promptly. For more details on hand sealing, see Technical Point #114.

**Hot Weather Tips For Easier Installation And To Prevent Damage...**

GAF suggests the following.... for easier installation and to prevent damage during hot weather:

- Store shingles in a shaded area out of the sun, if possible, prior to use. This will help prevent the m from sticking in the bundle. For more information on storage, see Technical Point #122 on Proper Shingle Storage.
- Wear soft soled shoes to prevent scuffing or other damage to the shingle.

**What Issues May Be Encountered When It Is Hot Or Cold During Installation?**

During very cold weather, shingles may:

- Become brittle and possibly crack or break where bent.
- Need to be hand sealed.
- Have a condition known as “cold curl”. (shingle edges curl up due to cold)

During very hot weather, shingles may:

- Stick together in the wrapper or on the roof.
- Be more easily damaged by foot traffic.
- Tear during installation.

**Is My Warranty Affected?**

No, the GAF Limited Warranty for the shingles will remain in effect. However, any damage such as cracking, lack of sealing, foot damage or tearing is the responsibility of the applicator and is excluded from GAF’s responsibility under the terms of our Limited Warranty, which covers only manufacturing defects.

**Where Can I Get More Information?**

GAF Technical Services can assist you... with these and other questions you may have regarding your new roof installation. GAF Technical Services can be contacted at 800-ROOF-411 (800-766-3411). Also, the GAF website is a great resource for just about any question you may have or for additional information you may require. Please visit: www.gaf.com.
ROOF VENTILATION WORKSHEET

THIS WORKSHEET MUST BE COMPLETED AND TURNED IN AT TIME OF BUILDING PERMIT APPLICATION.

International Residential Code Section 06.2 requires that the minimum ventilation for a residential roof cannot be less than one square foot of ventilation for every 150 square feet of roof area in a roof where the ventilation comes only from the upper portion of the roof. If ventilation is to be provided through the soffits or the lower gable ends and the upper portion of the roof the ventilation can be reduced to one square foot of ventilation for every 300 square feet of roof area. If ventilation is to be provided by the soffits or lower gable ends and the upper portion of the roof, then 50% of the ventilation must be provided through the soffits or lower gable ends and the other 50% through the upper portion of the roof.

STEP 1: Determine roof area. Roof area is determined by a flat one dimensional area calculation. There is no need to calculate cubic area or the number of squares to be used on the roof. The square foot area of a roof is determined by simply taking the width and length distance in feet of the roof.
For example, let's say your home is 32 feet wide by 28 feet in length. Simply add your roof over hang distance, in this example we'll add one foot on each side, to determine the width (W) of 34 feet and the length (L) of 30 feet. Take 34 (W) times 30 (L) for a total roof area of 1020 square feet.

STEP 2: Determine ventilation area required based on method A or B. Depending on how you plan to ventilate your roof using either the upper roof portion only (Method A) or through the soffit and/or lower gable ends and upper roof portion (Method B). Method A is Roof Area (A) divided by 150. Method B is Roof Area (A) divided by 300 divided by two.

Using the example above for Method A: (A)/150 = Vent Area: 1020 divided by 150 equals 6.8 square feet of ventilation required.
Using the example above for Method B: (A)/300 = Vent Area for upper roof and soffits/gables: 1020 divided by 300 equals 3.4 square feet divided by two equals 1.7 square feet of ventilation for the upper portion of the roof and 1.70 square feet of ventilation for the lower gable ends.

STEP 3: Determining number of ventilation fixtures required. Depending on how you wish to ventilate your roof based on Method A or B, you will need to calculate the number of ventilation fixtures required. The following ventilation fixtures are listed for a common use in residential roofing.

Upper Roof Ventilation Fixtures:
* Mushroom Vent: .43 square feet of ventilation per fixture.
* Ridge Vent: 7.5 feet in length for one square foot of ventilation.
* 12" Turbine Vent: 4 square feet of ventilation per fixture.

Gable End Ventilation Fixtures:
* 12" by 12" opening: 12 times 12 divided by 144 = 1 square foot of ventilation.

Soffit Ventilation Fixtures:
* Continuous Soffit Vent: 16 feet in length for one square foot of ventilation.

Again, using the above example, and determining the method of ventilation that is needed for your particular roof we can calculate the number and/or amount of ventilation fixtures as follows:

METHOD A (Requires 6.80 square feet of ventilation area):
1. Mushroom Vents: 6.80 divided by .43 = 15.81 or 16 fixtures.
2. Ridge Vents: 6.80 times 7.5 = 51 feet of ridge vent required.
3. Turbine Vents: 6.8 divided by 4 = 1.7 or 2 fixtures.

METHOD B (Requires 1.7 sq. ft. for upper and soffit area):
1. Mushroom Vents: 1.70 divided by .43 = 3.95 or 4 fixtures.
2. Ridge Vents: 1.70 times 7.5 = 12.75 or 13 feet of ridge vent required.
3. Turbine Vents: 1.70 divided by 4 = 1 fixture.
4. Soffit Vents: 1.70 times 16 = 27.2 or 27 feet of continuous soffit vent.
ROOF VENTILATION WORKSHEET

A COPY OF THIS WORKSHEET MUST BE PRESENT AT THE JOB SITE AT THE TIME OF FINAL INSPECTION.

STEP 1: Determining Roof Area:

Area A. Length (ft) _______ Times Width (ft) _______ = _______ Square Feet.

Area B. Length (ft) _______ Times Width (ft) _______ = _______ Square Feet.

Area C. Length (ft) _______ Times Width (ft) _______ = _______ Square Feet.

Area D. Length (ft) _______ Times Width (ft) _______ = _______ Square Feet.

_______ Total Roof Area

STEP 2: Determining Ventilation Area Required Based on Method:

Method A. Total Roof Area (sq. ft.) _______ Divided by 150 = _______ Upper Roof Ventilation (sq. ft.)

Method B. Total Roof Area (sq. ft.) _______ Divided by 300 = _______ Divided by 2 = _______

Upper Roof and Soffit Ventilation

STEP 3: Determining number of Venting Fixtures Required:

Mushroom Vents: Ventilation Area Required (sq. ft.) _______ Divide by .43 = _______ Fixtures Required.

Ridge Vents: Ventilation Area Required (sq. ft.) _______ Times 7.5 = _______ Feet of Ridge Vent Required.

12” Turbine Vents: Ventilation Area Required (sq. ft.) _______ Divided by 4 = _______ Fixtures Required.

Gable End Vents: (L) Inches ____ Times (W) Inches ____ Divided by 144 = _______ Times No. of Vents ____ = _______ Sq. Ft.

Continuous Soffit Vents: Ventilation Area Required (sq. ft.) _______ Times 16 = _______ Feet Ridge Required.

Soffit Vents: (L) Inches ____ Times (W) Inches ____ Divided by 144 = _______ Times No. of Vents ____ = _______ Sq. Ft.

I hereby testify that the above calculations are true and accurate. I have verified that any and or all existing ventilation fixtures are in good operating order and function fully as required.

Roofing Contractor Signature ____________________________ State License Number (If applicable) __________ Date __________

BACK TO INDEX
SMOKE DETECTOR REQUIREMENTS

Why are Smoke Detectors Required? More fire death occur in residential buildings than in any other type of building. More than half of all fire deaths that occur in residential buildings occur when the occupants are asleep and are unaware that a fire has occurred. Death usually results from asphyxiation long before the fire reaches the bedroom. Smoke detectors installed in a home give an early warning of smoke and fire thus giving the occupants the critical few moments needed to escape.

When Required: In all newly built residential dwelling and whenever the valuation of an addition, alteration, or repair to a residential occupancy exceeds $1,000 and a permit is required; or whenever one or more sleeping rooms are added or created in an existing residential occupancies, smoke detectors must be installed.

Exception: Work on the exterior of a residential occupancy that does not require entry into the residential building or structure for inspections is exempt.

Power Source: In all new residential and commercial construction, required smoke detectors must receive their primary power from the building wiring system and be equipped with a battery backup. The detector must emit a signal when the batteries are low. Wiring must be permanent and without a disconnection switch other than those required for over-current protection. Smoke detectors may be only battery operated when installing in an existing buildings; or in buildings without commercial power; or in buildings that undergo alterations, repairs, or additions.

Location within Residential Dwelling Units:
In residential dwelling units, a detector must be installed in each sleeping room and at a point centrally located in the hallway or corridor, or in an area giving access to each separate sleeping area. When the residential dwelling unit has more than one floor or a basement, a detector must be installed on each floor and in the basement. In residential dwelling units where a floor or the basement is split into two or more levels, except that when the lower level contains a sleeping area, a detector must be placed at the ceiling of the upper level in close proximity to the stairway. In residential dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceed that of the hallway by 24 inches or more, a smoke detector must be installed in the hallway and in the adjacent sleeping area. Detectors must sound an alarm audible in all sleeping areas of the residential dwelling unit in which they are located.

TEST YOUR SMOKE DETECTOR MONTHLY AND REPLACE YOUR BATTERIES YEARLY
STUCCO APPLICATION ON WOOD FRAME STRUCTURES

When filling out application for a building permit, which includes stucco application as part of the project, information to verify code compliance should be included with submittal documents. Building Code requirements related to stucco include:

- **MN Rules 1309.0703 Subpart 1** - Vertical joints in paper shall be lapped at least 6 inches and horizontal joints shall be lapped at least 2 inches.
- **MN Rules 1309.0703 Subpart 9** - Exterior openings shall be flashed to make them weatherproof.
- **MN Rules 1309.0703 Subpart 3 R703.6.3** - Weather resistive barriers over wood base sheathing shall include two (2) layers of grade D paper.
- **MN Rules 1309.0703 Subpart 3 R703.6.4** - A corrosion resistant weep screed with a minimum vertical attachment flange of 3 ½ inches shall be provided at or below the foundation plate line on all exterior stud walls. The screed must be placed at minimum of 4 inches above the earth or 2 inches above paved areas and shall be of a type that will allow trapped water to drain to the exterior of the building.
- **MN Rules 1309.0703 Subpart 3 R703.6.2** - Stucco must cover, but not extend below the lath and paper for slab on grade construction.
- **MN Rules 1309.0703 Subpart 3 R703.6.1** - Fasteners for metal lath must be 6 inches on center at supports.
- **MN Rules 1300.0210 Subpart 6 paragraph K** - The building official may require additional inspections.
  - Type 15 or 15# felt is not grade D paper.
- **MN Rules 1309.0703 Subpart 1 R703.2** - Paper must be installed on the entire wall, including within the soffit framing.
  - All paper must be installed shingle fashion.
  - Nailing flanges on windows shall not be accepted for flashing unless the Manufacturer's installation instructions are provided stating that the flange is acceptable as flashing.
  - Exterior penetrations shall be weatherproofed (i.e., windows, deck ledgers, pipe and vent penetrations, etc.). Weatherproof by definition; that can withstand exposure to wind, rain, snow etc., without being damaged. This is a critical area that needs detailed attention before being covered by stucco.
  - Kickout flashing needs to be installed at wall/roof intersections where the roofline does not extend past the wall.

If you have any additional questions regarding stucco application, please contact the Spring Lake Park Building Official at: 763-784-6491 or by e-mail at: bbrainard@slpmn.org

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Swimming Pool Information

The purpose of this handout is to provide a reasonable degree of safety for owners, users, and others who may have occasion to be on the premises where swimming pools are located; and further to provide reasonable regulations so that the use and enjoyment of nearby properties will not be subjected to noise, lighting, or other nuisances that may result from swimming pool use and activities.

Every swimming pool must be constructed in accordance to the requirements set forth in this handout. Section 29.02 of the Municipal Code sets the requirements for swimming pools as follows:

1. Permit Required:

   Section 29.21 states that a permit is required for any swimming pool with a capacity of more than 500 gallons or more than two (2) feet in depth.

2. Application Must Show:

   All building permit applications for a swimming pool must indicate the following:
   a. Type and size of pool.
   b. Site Plan.
   c. Location of Pool.
   d. Location of existing house, garage, fencing and other features on the lot.
   e. Location of structures on all adjacent lots.
   f. Location of filter unit, pump and wiring (involving type).
   g. Location of back-flush and drainage outlet.
   h. Grading Plans, finished elevations, and final treatment (decking, landscaping, etc.), around pool for in-ground pools only.
   i. Location of existing overhead and underground wiring, utility easements, tress and similar features.

3. Pool Location on Single Family Property:
   a. Cannot be location within ten (10) feet of any side or rear property line, nor within six (6) feet of any building that has a foundation and frost footings.
   b. Pools are not allowed within any front yard area.
   c. Pools cannot be located beneath overhead utility lines or underground utility lines of any type.
   d. Pools cannot be located within any private or public utility, walkway, drainage, or any other easement.

4. Pool Construction Requirements:
   a. Avoid damage, hazards or inconvenience to adjacent or nearby property.
   b. Assure that proper care is taken when stock piling excavated material to avoid erosion, dust or other infringement onto adjacent properties.
   c. To the extent feasible, back flush water from pool drainage onto owner’s property or into approved public drainage ways. Water cannot drain onto adjacent or nearby private land.
   d. The filter unit, pump, heating unit, and any other noise making mechanical equipment must be located at least 30 feet from any adjacent residential property line or structure or closer than 10 feet to any property line when enclosed in a sound resistive enclosure. In all cases, noise shall not exceed minimum standards as set forth in Chapter 29.142 of the Municipal Code.
   e. Lighting for any pool shall be directed into or onto the pool itself,
and not onto any adjacent properties.

f. A safety fence of at least four (4) feet in height shall completely enclose the newly constructed pool. All openings or points of entry into the pool area must be equipped with gates or doors. All gates in the fences must have a lockable latch that is no less than 3 ½ feet from the ground, and must be placed in a manner so as to be inaccessible to small children. All gates must be locked when the pool is not in use or is unattended. Any opening between the fence bottom and the ground cannot exceed 2 inches. All fences must be constructed or either vertical board, alternating board (board on board), or approved chain link. The materials used in the construction of the fence must be sufficient strength to withstand normal use and weather conditions. Vertical board fences cannot have more than 1-inch space between boards on the same side. Alternating board fences cannot have more than a 4-inch space between the front and backboard. Cross member boards for both vertical board and alternating board fences cannot be less than 3 ½ feet apart on a horizontal plane. Chain link fences must have a minimum 9 gauge metal wire with a mesh no greater than 2 inches. The Building Official shall approve all plans for the construction of fences around swimming pools required by Municipal Code prior to construction. All above ground outdoor swimming pools that have a minimum 4 foot high vertical sidewall must provided access to such above ground with a 4 foot safety fence meeting the requirements of the Municipal Codes encloses swimming pool.

g. Water in the pool must be maintained in a suitable manner to avoid health hazards of any type. Water is subject to periodic inspection by the Health Officer.

h. Any wiring, lighting, installation of heating unit, grading, installation of pipes, and all other installations and construction must be subject to inspections.

i. Any proposed deviation from these standards and requirements must require a variance in accordance with normal zoning procedures.

5. Pools in Medium and Multi-Family Areas:

Pools in medium density and multiple family areas (residential structure containing two or more dwelling units combined), must conform to the same standards set in single-family areas with the following restrictions:

a. No part of the water surface of the swimming pool can be less than 50 feet from any property line.

b. No pump, filter, heating units, or other apparatus used in connection with or to service a swimming pool can be located closer than 50 feet from any property line. In all cases, the noise cannot exceed minimum standards as set forth in Chapter 29.142 of the municipal Code.

c. All deck areas, adjacent patios, or other similar areas used in conjunction with the swimming pool cannot be located closer than 30 feet to any adjacent single family property line. Adequate screening including both fencing and landscape treatment must be placed between multiple and single family property lines.

6. In all Areas:

a. Required safety fencing must be completely installed within 3 weeks following installation of the pool and prior to the pool being filled.

b. Nuisances such as noise or lighting onto adjacent property, health and safety hazards, damage to nearby vegetation, and the like is not permitted.

c. Filling of swimming pools by means of a fire hydrant or other public means must require approval of the City Public Works Department.

d. Drainage of pools into public streets or other public drainage ways must also require approval from the City Public Works Department.
**Pools cannot be located beneath or above utility lines!**

- 4'-6' Safety Fence Enclosure Required
- 10' Rear Yard Pool Setback
- 10' Side Yard Pool Setback
- 30' Side Yard Equip. setback
- 30' Rear Yard Equip. Setback
- 6' Separation Pool Setback