WINDOW & DOOR REPLACEMENTS

All governing codes and noted sections are based on the 2015 Minnesota Residential Code.

Permit Application. A permit is required for installation of windows (full frame and inserts) and the total replacement of exterior doors. Provide the make/model and fenestration U-Factor rating for each style of window/door unit installed (Maximum U-Factor = .32) with the application. Changes to existing window opening sizes or new window installation will require submittal of plans/details of proposed framing of opening including size and materials proposed.

Smoke Detector (R314) and Carbon Monoxide Alarm (R315) requirements shall be met. When alterations, repairs (including installation or replacement of windows or doors) or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke and carbon monoxide alarms located as required for new dwellings. The smoke alarms can be battery operated as long as no ceiling renovations occur.

Smoke alarms shall be installed in each of the following locations:
- Within each sleeping room.
- Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
- On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics.

Carbon Monoxide alarms shall be installed in the following locations:
- One Carbon Monoxide Alarm shall be installed outside and not more than 10 feet from each separate sleeping area or bedroom.
- On each level.

Inspections. Final Inspection shall not be scheduled until all flashing, sealing, and insulation detail is verified. Verification may be completed by field inspection prior to concealing details or site specific digital pictures, before detail is covered. “Site Specific” pictures must include:
- Front of house (include address numbers).
- Close-up pictures of each window/door pan flashing, insulation, and (exterior) flashing/sealing.
- One picture of each exterior wall of the house in which windows/doors are being installed.

Pictures must clearly display that manufacturer’s installation requirements have been met. Clear digital pictures must be directly e-mailed to the City at bbrainard@slpmn.org with site address in subject line. Any changes in framing must also be field inspected. Bay window support details must either be field inspected or have “site specific” pictures submitted prior to final inspection.

All windows and doors shall be installed per the manufacturer’s requirements. Manufacturer’s installation instructions must be on site for all inspections.
R703.8 Flashing. Approved corrosion-resistant flashing shall be applied shingle-fashion in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Self-adhered membranes used as flashing shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashing shall be installed at all of the following locations:

1. Exterior window and door openings. Flashing shall be installed at the head and sides of exterior window and door openings and shall extend to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage. Flashing at exterior window and door openings shall be installed in accordance with at least one of the following:
   a) The fenestration manufacturer’s installation and flashing instructions. When flashing is not addressed in the fenestration manufacturer’s instructions, it shall be installed in accordance with the flashing manufacturer’s instructions;
   b) In accordance with the flashing design or method of a registered design professional; and
   c) In accordance with other approved methods.

R703.8.1 Pan Flashing. - New windows and Doors Only. A pan flashing shall be provided under all exterior windows and doors. Pan flashing shall be
   a) Sloped to drain water to the exterior surface of a weather-resistant barrier or flat with sealed back dam and side dams to prevent re-entry of water into the wall cavity or onto interior finishes, and
   b) Maintain the thermal envelope of the building. Pan flashing made from metal must be thermally isolated from interior surfaces.

R703.7.5 Flashing-Exterior Plaster/Masonry/Stucco. Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shelf angles and lintels when masonry veneers are designed in accordance with Section R703.7. See section 703.8 of the MN State Residential Code for additional requirements.

Table R402.4.1.1 Air Barrier and Insulation Installation. Criteria Insulation shall be installed to maintain permanent contact with the underside of subfloor decking. The minimum R-value required under floors, including cantilevered floors such as a bay window or bump-out area is R-30. The air barrier shall be installed at any exposed edge of insulation. All breaks or joints in the air barrier must be sealed (Air Barrier: Material(s) assembled and joined together to provide a barrier to air leakage through the building envelope. It may be a single material or a combination of materials). The space between window/door jambs and framing shall be sealed. Air-permeable insulation shall not be used as a sealing material.

R402.4.3 Fenestration Air Leakage. Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cubic feet per minute per square foot, and swinging doors no more than 0.5 cubic feet per minute per square foot. These items must be labeled by the manufacturer to meet the standards according to NFRC 400, or AAMA/WDMA/CSA 101/I.S.2/A440.

R310 Emergency Escape and Rescue Openings. (Windows in basements, habitable attics and sleeping rooms) Refer to the City of Spring Lake Park “Egress Windows & Wells” handout or Section R310 of the MN State Residential Code for requirements.
R308.4 Windows/Glass (Glazing) in Hazardous Locations. Locations of windows and glass that are deemed to be located in a hazardous area, are required to be tempered safety glazing. Hazardous area are as follows:

1. Any glass within 24 inches of either side of a door and less than 60 inches from the floor surface, must be tempered safety glazed.
2. All glass within doors must be tempered safety glazed.
3. Glass within 18 inches of the walking surface and greater than 9 square feet for any single pane of glass must be tempered safety glazed.
4. Any glass that is less than 36 inches above the walking surface or stairway must be tempered safety glazed.
5. Any glass less than 36 inches above the landing and within 5 feet of the bottom of a stairway interior or exterior, must be tempered safety glazed.
6. Any glass installed within bathrooms that are less than 5 feet high from the floor drain must be tempered safety glass.
7. Glass in a swimming pool or hot tub area that is less than 60 inches measured vertically above any standing or walking surface must be tempered safety glazed.

All glass that is tempered safety glazed must be etched in one corner of the glass pane indicating “tempered”.

R308.6 Skylights and Sloped Glazing. Skylights are defined as glass or other transparent or translucent glass material installed at a slope of 15 degrees or more from vertical. Materials permitted for glass are as follows:

1. Laminated glass with a minimum 0.015 inch polyvinyl butyral interlaced for glass panes 16 square feet or less in area located such that the highest point of the glass is not more than 12 feet above a walking surface.
2. Fully tempered glass.
3. Heat-strengthened glass.
4. Wired glass.
5. Approved rigid plastics.

R302.5.1 Opening Protection. Any door leading from the home directly into a garage must be a minimum 1-3/8 inch solid wood door, 1-3/8 inch solid or honeycomb steel door or a 20-minute fire-rated door. Unless specialty fire glass, there should be no glass in the door.

R311.2 Egress door. At least one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged, and shall provide a minimum clear width of 32 inches when measured between the face of the door and the stop, with the door open 90 degrees. The minimum clear height of the door opening shall not be less than 78 inches in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

R612.3 Testing and labeling. Exterior windows, sliding, and hinged doors shall be tested by an approved independent laboratory, and bear a label identifying manufacturer, performance characteristics and approval inspection agency to indicate compliance with AAMA/WDMA/CSA 101/IS.2/A440.

R612.4 Garage doors. Garage doors shall be tested in accordance with either ASTM E 330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108.
EMERGENCY ESCAPE AND RESCUE OPENINGS
(EGRESS WINDOWS)

All governing codes and noted sections are based on the 2015 Minnesota Residential Code.

R310.1 Emergency escape and rescue required. Basements, habitable attics, and every sleeping room shall have at least one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings shall be required in each sleeping room, but not required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches measured from the finished floor to the bottom of the clear opening. 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 shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exception:

1. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet.
2. Basements or basement bedrooms when the building is protected with an automatic sprinkler system installed in accordance with IRC Section P2904 or NFPA 13D.
3. Basements or basement bedrooms that comply with ALL the following:
   A. Constructed prior to August 1, 2008; and
   B. Undergoing an alteration or repair; and
   C. The entire basement area, when all portions of the means of egress to the level of exit discharge that are open to the means of egress is protected with an automatic sprinkler system in accordance with IRC Section P2904 or NFPA 13D.

Basement is defined as a story that is not above grade plane with a minimum ceiling height of 6’-4” measured to finished floor or grade below.

R612.1 Installation: Windows and doors must be shall be installed in accordance with the fenestration manufacturer’s written installation instructions. Window and door openings shall be flashed in accordance with Section R703.8. Written installation instructions shall be provided by the fenestration manufacturer for each window and/or door. Installation instructions must 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: Above grade floor openings may 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 or special knowledge.

R310.1.5 Replacement windows. Replacement windows installed in buildings regulated by the International Residential Code shall be exempt from the maximum sill height of 44”, including Subsections R310.1.1, R310.1.2, and R310.1.3, if the replacement window is the manufacturer’s largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

R310.2 Window wells. The minimum horizontal area of the window well shall be 9 square feet with a minimum horizontal projection and width of 36 inches. The area of the window well shall allow the emergency escape and rescue opening to be fully opened.

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 shall 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 shall not be required to comply with Sections R311.7 and R311.8. 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 shall provide direct access to the basement. The bulkhead enclosure with the door panels in the fully open position shall provide the minimum net clear opening required by Section 310.1.1. Bulkhead enclosures shall also comply with Section 311.7.8.2

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, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening.

R310.5 Emergency escape windows under decks and porches. Emergency escape windows are allowed to be installed under decks and porches provided the location of the deck allows the emergency escape window to be fully opened and provide a path of not less than 36 inches in height to a yard or court.
**ESCAPE AND RESCUE WINDOWS**

Casement:
- 5.7 sq. ft. net clear
- 24" min.

Double Hung:
- 5.7 sq. ft. net clear
- 24" min.

Slide By:
- 5.7 sq. ft. net clear
- 24" 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.*

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**R310.1.5.1 Licensed facilities.** Windows in rooms used for foster care or day care licensed or registered with the state of Minnesota shall comply Section R310.1.5, or all of the following conditions, whichever is more restrictive:

1. Minimum of 20 inches in clear opening width;
2. Minimum of 20 inches in clear opening height;
3. Minimum of 4.5 square feet clear opening; and
4. Maximum of 48 inches from the finished floor to the sill height.
ACCESS AND EXIT FACILITIES AND EMERGENCY ESCAPES

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.
Lead Certification. When issuing permits in compliance with the State Building Code to a residential building contractor, residential remodeler, manufactured home installer, or residential roofer licensed under section 326B.805, municipalities must verify lead certification qualifications of the licensee required under subdivision 14 for renovations performed on residential property constructed prior to 1978. Municipalities may charge a surcharge for verification of this certification under section 326B.815, subdivision 2.

Pre-1978 Structures. A residential building contractor, residential remodeler, manufactured home installer, or residential roofer licensed under section 326B.805 performing renovation as defined by Code of Federal regulations, title 40, section 745.83, on a residential structure constructed prior to 1978 must be certified in accordance with Code of Federal Regulations, title 40, section 745.89, unless the property has been determined to meet an exemption under Code of Federal Regulations, title 40, section 745.82. Before performing the renovations as defined by Code of Federal Regulations, title 40, section 745.83, on a residential structure constructed prior to 1978, a licensee working on the structure must be able to provide to the commissioner information so that proof of certification can be obtained as required in this subdivision. The department shall provide on its Web site a link to the United States Environmental Protection Agency Web site for verification of certification of a licensee.
Final inspection requires labels to be on all new windows to verify energy code compliance.
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 section R310 of the 2015 Minnesota Residential Code (MRC).

☑ 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.

I hereby certify that I have read and examined the information herein and that any information provided to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not.

Signature of Contractor/Homeowner License Number Date
City of Spring Lake Park - Code Enforcement
1301 81st Avenue N.E. • Spring Lake Park MN 55432 • Phone: 763-784-6491 • Fax: 763-792-7257 • www.slpmn.org

BUILDING PERMIT APPLICATION

Job Address __________________________________________________________

Property Owner
Name ______________________________________________________________
Address ___________________________________________ Phone _________
Email ____________________________________________________________

Contractor
Name ______________________________________________________________
Address ___________________________________________ Phone _________
Email ____________________________________________________________
State License # ___________________________ Exp. Date ______ Lead Cert. Date __________ dd/mm/yy dd/mm/yy

Applicant  Same as : Property Owner Contractor
Name ___________________________________________________________________
Address ___________________________________________ Phone _________
Email ____________________________________________________________

Describe Work _____________________________________________________________________________

__________________________________________________________

Value of Work Including Labor ___________________________ Start Date dd/mm/yy Estimated Completion Date __________ dd/mm/yy

Commercial/Industrial Submit two plan sets and specifications for commercial or industrial work.
Describe Building Use and/or Changes in Use ______________________________________________________

Notice
Separate permits are required for electrical, plumbing, heating, ventilating, and air conditioning. This permit becomes null and void if work or construction authorized is not commenced within 180 days or work is suspended or abandoned for a period of 180 days at any time after work is commenced.

I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any other State or local law regulating construction or the performance of construction. Initial here ______

 Contractor Signature ____________________________________________ Date of Application __________ dd/mm/yy

 Homeowner Doing Work in Homestead Signature ____________________________________________ Date of Application __________ dd/mm/yy

If application is not fully completed, it will be denied at time of processing. Please verify that all necessary information is legible and plans are included with job cost estimates. Contact Permit Technician to verify all necessary information is provided before submitting.
Payment:  We accept cash, checks payable to City of Spring Lake Park, or credit cards (with additional processing fees), at the front counter only.
Building Permit Applicant: Property Owner

I understand that the State of Minnesota requires that all residential building contractors, remodelers and roofers obtain a state license unless they qualify for a specific exemption from the licensing requirements. By signing this document, I attest to the fact that I am building or improving this house myself. I hereby claim to be exempt from the state licensing requirements because I am not in the business of building on speculation or for resale and that the house for which I am applying for this permit, located at ______________________ is the first residential structure I have built or improved the past twenty-four (24) months. I also acknowledge that because I do not have a state license, I forfeit any mechanic’s lien rights to which I may otherwise have been entitled under Minnesota Statute 514.01. In the event that I do construct or improve another residential structure in the next 24 months, I will not do so until I obtain the required state license, per Minnesota Statute 326.84, understanding that failure to do so is a misdemeanor under state law.

Furthermore, I acknowledge that I may be hiring independent contractors to perform certain aspects of the construction or improvement of this house and I understand that some of these contractors may be required to be licensed by the State of Minnesota. I understand that unlicensed residential contracting; remodeling and/or roofing activity is a misdemeanor under Minnesota Statute 326.92, subdivision 1, and that I would forfeit my rights to reimbursement from the Contractor’s Recovery Fund in the event that any contractors I hire are unlicensed.

I also acknowledge that as the contractor on this project, I am solely and personally responsible for any violations of the state building code and/or city ordinance in connections with the work performed on this property.

______________________________
Signature of Property Owner

______________________________
Date dd/mm/yr