

**City of Manassas Park Department of Building Inspections
One Park Center Court, Manassas Park, Virginia 20111**

RESIDENTIAL ADDITION BUILDING SUBMITTAL CHECKLIST

Applicants name _____ Date _____

Project address _____ Phone number _____

This checklist is used to aid in preparing a complete building permit application package. Most permit processing delays are the result of incomplete or inadequate plan submittal information. This checklist has been developed in an effort to expedite the application review process. Please check off each line as you identify that your submittal contains the required information, place N/A on lines that do not apply to your specific project, and then submit the checklist with your completed *application(s) and construction plans and associated documents.

Documents Required: for each proposed structure, (detached garages, swimming pools and Decks require separate permits).

Completed permit applications, including all parcel, applicant, and proposed improvements square footage information.

- Building permit-for architectural and structural elements.
- Electrical permit-for all electrical installations.
- Mechanical permit- for installations of heating and air conditioning systems.
- Plumbing permit- for installations of plumbing and gas piping

Current copy of contractor's license

*I.R.C, International Residential Code

Provide 2 copies of the house location survey with the proposed improvements drawn to scale on the survey.

Construction Plans and associated documents: (2 sets required) (verify that all of the following are provided):

Office Applicant

_____ Plans drawn to scale 1/4" per foot, minimum plan size 11" X 17"

_____ Floor plan(s) (indicating use of rooms)

_____ Elevations of all sides to indicate existing and proposed improvements

_____ *Building Framing Cross Section drawings showing all elevations indicating existing and proposed improvements

Adding vertically to existing structure

_____ Provide an evaluation report from a licensed Virginia architect or engineer verifying that the existing foundation and framing will support the additional loading of a vertical addition. i.e. adding a story or more to an existing structure. **OR** expose the existing framing members and arrange for an inspection by with this office.

Glazing-Glass*I.R.C R308

Identification Size, type i.e. single hung, double hung, casement safety glazing, skylights etc.?

Garages & Carports*I.R.C R309

opening from garage to residence min. 1 3/8" solid wood or 20 min. fire rated door?
(Openings to bedrooms not allowed)

*I.R.C R309.1

Garage/carport floor non-combustible and sloped?

Egress (Exits)*I.R.C R310-316

are egress windows or doors from basements with habitable space and bedrooms below grade shown on plans? (Windows must have a min. 5.7 s.f. of openable area with a maximum sill height of 44") *IRC Section R310

EGRESS WINDOWS: All sleeping rooms and basements with habitable space shall have at least one open able emergency escape and rescue opening. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet. Except that grade floor openings shall have a minimum net clear opening of 5 square feet (*see definition below*). The minimum net clear opening height dimension shall be 24". The minimum net clear opening width dimension shall be 20". The openings shall have a finished sill height not more than 44" above the floor. Emergency escape and rescue openings shall be operational from the inside of the room without use of keys or tools. Window wells shall be provided when egress windows have a finished sill height below adjacent ground elevation. The well 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". Window wells with a vertical depth of more than 44" shall be equipped with a permanent ladder. *Grade floor opening definition: A window or other opening located such that the sill height of the opening is not more than 44" above or below the finished ground level adjacent to the opening*

See Emergency escape and rescue Openings Pictorial Below

Egress (Exits)*I.R.C R310-316 Continued

Are window wells shown where required from basements with habitable space and bedrooms below grade? *I.R.C R310.2

Are landings with a minimum size of 36" X 36" shown? *I.R.C R312

Are stairway details shown

(Stairway minimum width of 36") (Maximum riser height of 8 1/4" min. tread width of 9") with headroom shown on the plans?

is lighting for stairways and landings shown on the plans? *I.R.C R314.7

Are Handrail details for stairways shown on the plans (when required) (mounted 34"-38" min. height) *I.R.C R315.1

Are guardrail details shown on the plans (when required) (34"-36" min. height) *I.R.C R316.1

Smoke detectors/alarms *I.R.C R317

Are smoke detectors/alarms locations shown on the plans? (Smoke alarms shall be installed in each bedroom and 1 on each floor level. Smoke detectors shall be interconnected so that when one is activated all will sound. Smoke alarms must be hardwired *I.R.C R317

Wall And Ceiling Finish*I.R.C R319

is the interior Finish material indicated on the plans? (i.e. ½” drywall, ¼” wood paneling, etc.)

Insulation *I.R.C. R320

is the type of insulation shown on the plans with the proposed R-values?

Protection against decay*I.R.C. R323

is wood that is subject to decay indicated on the plans? (i.e. wood joists or the bottom of a wood floor when closer than 18” or wood girders when closer than 12” to exposed ground in crawl spaces, sill plates that rest on concrete or masonry when less than 8” to exposed ground. Beams that enter masonry or concrete, exterior furring strips attached to concrete or masonry, wood columns in contact with concrete)

Foundations, Chapter 4 *I.R.C

is the footing width shown on the plans?

is the Footing Thickness shown on the plans?

is the Footing depth below grade shown on the plans? (24” minimum frost depth)

if any, is the Footing Reinforcement shown on the plans?

Foundation anchorage

Size and spacing (Min. ½” bolts 12” from corners and 6’ on center embedded a min. of 7” into concrete or grouted in masonry) or other approved method.

Foundations Walls, *I.R.C R404-406

Masonry Walls*I.R.C R404.1

Materials (i.e. Size, type)

Insulation

Reinforcement, (size, spacing and location)

is the wall(s) unbalanced fill height shown?

Concrete Walls *I.R.C R404.1.2 (Width, height)

Concrete strength (i.e. 3500 p.s.i @ 28 days air entrained)

Insulation

Reinforcement, (size, spacing and location)

is the Maximum wall height shown?

is the wall(s) unbalance fill height shown?

is the wall(s) height above finished grade shown? (8" min.)

Columns, *I.R.C R407

 Type, size, material (i.e. 6"x6" Pressure treated, 3" steel, 8" round fiberglass)

 Column anchorage

 Structural Requirements

Floors, Chapter 5 *I.R.C

Wood Joists and Girders *I.R.C R502

 Species & Grade

i.e. (2x10 SPF#2, SYP#1 etc.)

 Engineered Lumber (provide Manufacturers information)

 Joist Span

 Joist Bearing (Min. 1.5")

 are Joists under bearing partitions shown on the plans?

Wood Joists & Girders *I.R.C R502 (Cont.)

 Girders/Beams sizes and span(s)

 Header(s) sizes and span(s)

 is the floor sheathing, type, thickness & Span rating shown on the plans?

Concrete floors

 is the concrete strength indicated on the plans?

 is the Slab thickness indicated on the plans? Min. Thickness 3.5"

 slab support is the Base course shown on the plans? (Min. 4") *I.R.C Section R506.2.1

 is the slab reinforcement, (size, spacing and location) shown on the plans? i.e. 6x6#10 wire, #4 rebar etc.

 is a vapor barrier shown on the plans? *I.R.C Section R506.2.3

 is the slab and foundation Perimeter insulation shown on the plans *I.R.C Section N1102.1.6

Wall Construction *I.R.C Chapter 6 Wood

 is the Stud Species & Grade shown on the plans?) i.e. #3 standard, utility etc. *I.R.C Section R602.2

 is the stud spacing shown on the plans? *I.R.C Section R602.3.1

 is the wall(s) top and bottom plate(s) shown on the plans? *I.R.C Section R602.3.2 & R602.3.4

are interior load and non-load bearing walls shown on the plans? *I.R.C Section R602.4 & R602.5

Wall Construction *I.R.C Chapter 6, (Cont.)

is the wall sheathing type shown on the plans? *I.R.C Section R602.4 & R602.5

is the wall(s) bracing shown on the plans? *I.R.C Section R602.10

is the wall anchorage shown? size and spacing (Min. ½” bolts 12” from corners and 6’ on center embedded a min. of 7” into concrete or grouted in masonry) or other approved methods. *I.R.C Section R602.10

Interior Wall Covering *I.R.C Chapter 7

is the Interior wall material indicated on the plans? i.e. ½” gypsum board, ¼” wood paneling, ceramic tile etc. *I.R.C Section R702

Exterior wall Covering *I.R.C Chapter 7

is the Exterior wall material indicated on the plans? i.e. Vinyl Siding, Stucco, Brick Veneer, provide installation details for brick veneer, i.e. footings or other approved means of support, weep holes, wall ties, lintels and flashing Etc. *I.R.C Section R703

Roof Ceiling Construction *I.R.C Chapter 8

Engineered Roof Systems

Are engineered roof truss’s being utilized and indicated on the plans? *I.R.C Section R802.10.1

Are 2 copies of the engineered roof truss’s drawings provided with the plans? (Drawings and calculations must be stamped and signed by a registered Virginia architect or engineer) *I.R.C Section R802.10.1

Conventional Roof/Ceiling Framing

Does the plan indicate the lumber Species & Grade of ceiling joists and rafters? I.e. (2x10 SPF#2, SYP#1 etc.) if using

Engineered Lumber (provide Manufacturers information) *I.R.C Section R802.1

Does the plan indicate the Ceiling Joist Span(s)? *I.R.C Section R802.1

Does the plan indicate the Ridge board or beam size (roofs with a pitch less than 3 units vertical in 12 units horizontal require that the structural members that support roof rafters and ceiling joists be designed as beams, i.e. ridge beams, hips and valleys *I.R.C Section R803.2

Do the plans show the Rafter span(s) and roof pitch(s)? *I.R.C Section R802.1

Does the plan show the Girders/Beams sizes and span(s) if using Engineered Lumber (provide Manufacturers information) *I.R.C Section R802.1

Does the plan indicate the Header(s) and trimmer sizes and span(s) (if using Engineered Lumber provide Manufacturers information) *I.R.C Section R809

Conventional Roof/Ceiling Framing, (Continued)

is the roof sheathing, type, and thickness. & Span rating indicated on the plans?
*I.R.C Section R803.1

is the size and location of attic access shown on the plans? Minimum (size 22" X30")
with a minimum of 30" headroom *I.R.C Section R807.1

is attic ventilation type, size and location indicated on the plans? *I.R.C Section
R806

Roof Assemblies, *I.R.C Chapter 9

do the plans indicate the type of roof covering and underlayment? .i.e. 20 year
asphalt shingles with 1 layer of 15 or 30lb. Felt etc.? *I.R.C Section R905

Chimneys & Fireplaces, *I.R.C Chapter 10

is the footing width, Thickness and depth below grade shown on the plans? (24"
minimum frost depth) footings shall be a minimum of 12" and extend a minimum 6" beyond the
exterior dimensions of the chimney. *I.R.C Section R1001.1.1

is the chimney termination (clearance above the roof) shown on the plans?
*I.R.C Section R1001.6

is the chimney wall material and thickness shown on the plans? *I.R.C Section
R1001.7

is the chimney wall flue liner material and size shown on the plans? *I.R.C Section
R1001.8 & 1001.12

is the chimney wall material and thickness shown on the plans? *I.R.C Section
R1001.7

is the fireplace hearth and hearth extension materials, thickness & reinforcement and
dimensions shown on the plans? *I.R.C Section R1003.9, R1003.9.1, R1003.9.2 & R1003.10

is the fireplace firebox dimension shown on the plans? *I.R.C Section R1003.11

are clearances to combustible materials indicated on the plans? (Minimum of 2" on
the front and side faces and 4" on the back faces) *I.R.C Section R1003.12

are location and size of mantels shown on the plans? (Minimum of 2" on the front
and side faces and 4" on the back faces) *I.R.C Section *I.R.C R1003.12

is the fireplace exterior air combustion air supply size; location and materials shown
on the plans? *I.R.C Section R1005

Energy Conservation, *I.R.C Chapter 11

Design Criteria:

Winter-Minimum design conditions:

Outside, 10°F

Inside, 72°F

4501 Annual heating degree days

Summer -Minimum design conditions:

Outside 92° Fahrenheit Dry Bulb

Outside 77° Fahrenheit Wet Bulb

Inside 78° Fahrenheit Dry Bulb

Energy Conservation, *I.R.C Chapter 11, Continued

are energy load calculations included with the plans? A.C.C.A (Air Condition Contractors of America) Manual "J" calculations or other approved methods *I.R.C Section R1005
You can down load a free software program called ResCheck from The U.S. Dept. of energy to compute your energy calculations the website address is
<http://www.energycodes.gov/rescheck/download.stm>

Mechanical *I.R.C Chapter 12-23

are all appliances and fuel sources shown and indicated on the Plans sheets? *I.R.C Section M1302 & M1303

is access to appliances shown on the Plans sheets? *I.R.C Section M1305 & M1401

is the heating and or cooling equipment load calculation including efficiency ratings shown or attached with the plans? *I.R.C Chapter 1401.3

are exhaust fans locations with CFM sizes, duct type, size and lengths shown on the plans? *I.R.C Chapter 15

are combustion air source(s) for fuel burning appliances shown on the plans? *I.R.C Chapter 15

are supply and return ducts shown to include material type, sizes and insulation (if required) and locations shown on the plans? *I.R.C Chapter 16

Fuel Gas*I.R.C Chapter 24

is a gas riser diagram indicating, pipe/tubing material, size and length to include all valves and controls with equipment loads shown on the plans? *I.R.C section G2401.1

Plumbing

is a water supply riser diagrams attached or shown on the plans to include materials, and location etc. shown on the plans?) *I.R.C Chapter 29

is the water heater size and location shown on the plans? (Water heaters in areas that if leakage occurs from the tank or connections with cause damage is required to have a pan installed underneath the tank) *I.R.C Chapter 28

are plumbing Drain, waste and vent riser diagrams attached or shown on the plans to include materials, and location, venting etc.? *I.R.C Chapters 30, 31.

are fixtures and appliances shown Note: Shower control valves must be scald resistant (in accordance with ASSE/ANSI 1016) with a hot water limit setting of 120°F.

Electrical

are electrical load calculations provided showing the electrical service size either new or existing?

are line drawings shown indicating wire type, size and location to include existing or new circuits shown on the plans?

are all devices such as switches, receptacles, smoke detectors, lighting fixtures and appliances etc. shown on the plans?

are receptacles and or circuits that are required to be on ground fault or arc fault protection indicated on the Plans?

Egress Windows & Other Escape Exits

Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue.

International Residential Code,
section R310.1



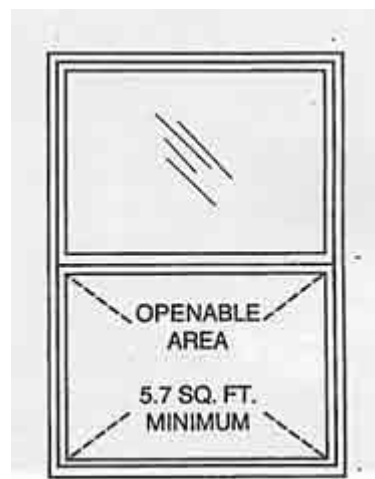
Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

International Residential Code,
section R310.1.4

All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet.

Exception follows.

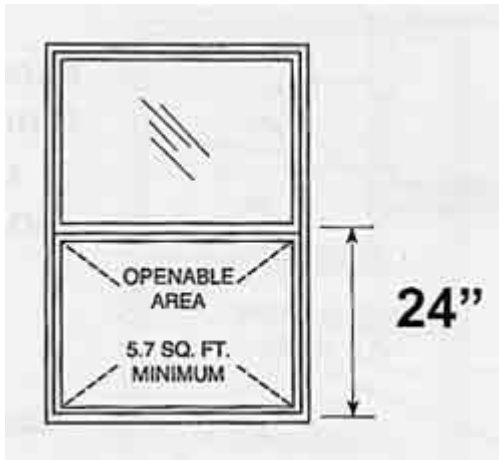
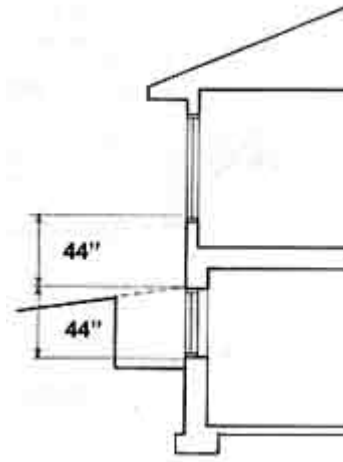
International Residential Code,
section 310.1.1



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

Grade floor opening is a window or other opening located such that the sill height of the opening is not more than 44 inches above or below the finished ground level adjacent the opening.

International Residential Code, section R310.1.1 and R202

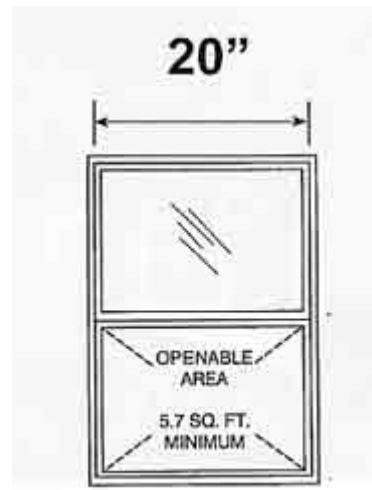


The minimum net clear opening height shall be 24 inches.

International Residential Code, section R310.1.2

The minimum net clear opening width shall be 20 inches.

International Residential Code, section R310.1.3



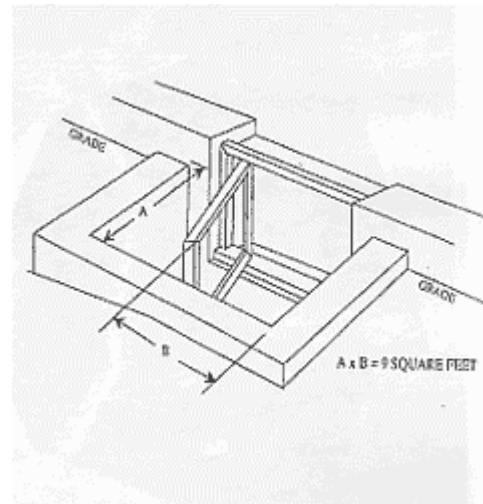


When openings are provided as a means of escape and rescue they shall have a sill height of not more than 44 inches above the floor.

International Residential Code, section R310.1

Window wells required for emergency escape and rescue shall 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 shall provide a minimum net clear area of 9 square feet with a minimum horizontal projection and width of 36 inches.

International Residential Code, section R310.2



Window wells with a vertical depth greater than 44 inches below the adjacent ground level shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position.

The ladder or stairs...shall be permitted to encroach a maximum of six inches.

International Residential Code, section R310.2.1

Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

International Residential Code,
section R310.2.1



Bars, grills, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings provided such devices shall 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.

International Residential Code,
section R310.4



A guard is not required for window wells.