



**Polk County Public Works**  
5885 NE 14<sup>th</sup> Street  
Des Moines, IA 50313  
[publicworks@polkcountyia.gov](mailto:publicworks@polkcountyia.gov)  
515-286-3705

## Single Family Home Building Permit Application and Checklist

PROJECT ADDRESS: \_\_\_\_\_ GEO PARCEL#: \_\_\_\_\_

IS A NEW ADDRESS NEEDED? YES/NO

### Checklist of items to be filled out or completed prior to submitting application packet:

- \_\_\_\_\_ Building Permit Application and checklist
- \_\_\_\_\_ Detailed Construction Plans- 2 Copies: PDF & hard copy
- \_\_\_\_\_ Engineered Truss Specifications
- \_\_\_\_\_ Energy Compliance Certificate, res check must be submitted, completed by a certified HERS rater in the State of Iowa
- \_\_\_\_\_ Detailed Site Plan Drawing
- \_\_\_\_\_ Proposed building staked
- \_\_\_\_\_ Ownership within the last 30 days? A legal description and copy of recorded deed must be in submitted.
  
- \_\_\_\_\_ Entrance Permit Application

### Septic or Sewer:

- \_\_\_\_\_ If a septic system is needed, results of a soil analysis/ soil perc test and a septic system permit application packet must be completed by a certified contractor licensed with Polk County, must be submitted.
- \_\_\_\_\_ If sanitary sewer is available, a completed sanitary sewer connection permit and agreement must be submitted

### Water:

- \_\_\_\_\_ Public water service connection fee
- \_\_\_\_\_ Well- Well permit application required
  
- \_\_\_\_\_ Geothermal- well permit application (if applicable) for vertical geothermal wells and horizontal wells at 20' depth or greater.
- \_\_\_\_\_ Right-of-way work- ROW Grant permit application (if applicable) for work within the ROW

- \_\_\_\_\_ Home occupation- Is any portion of the proposed home to be used for commercial or other business activities? YES/NO  
\*If yes, a home occupation permit must be applied for

**-No construction shall start until the permit is issued.**

**-All work must be permitted prior to inspections.**

**-Unresolved Zoning, Subdivision, Floodplain, Health items may delay the issuance of any permit. No structure should be used or occupied until the certificate of occupancy is issued.**

**-All electrical, mechanical, or plumbing permits must be applied for separately by a state licensed contractor.**



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Permit # \_\_\_\_\_

**Single Family Home Building Permit Application**

JOB SITE ADDRESS: \_\_\_\_\_ GEO PARCEL: \_\_\_\_\_

OWNER: \_\_\_\_\_ PHONE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

EMAIL: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ PHONE: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

EMAIL: \_\_\_\_\_

(Please circle one)

**NEW or MOVE-ON**

Height of proposed building to peak: \_\_\_\_\_

Total # of bedrooms: \_\_\_\_\_

**Fill in the square footage of the proposed home in the appropriate row:**

	Square Feet	Rate	Valuation
Unfinished basement			
Finished basement			
1st Floor			
2nd Floor			
Garage			
Deck- Covered/Uncovered			
Patio- Covered			
3 or 4 season room/ enclosed deck			
Front Porch/Stoop- Covered/Uncovered			
<b>Total Valuation</b>			
<b>Permit fee</b>			
<b>Move-On</b>			
<b>Total Building</b>			
<b>Septic/Sewer Fee</b>			
<b>Entrance Permit Fee</b>			
<b>Well Fee</b>			
<b>TOTAL FEE</b>			

Contractor/Owner/Applicant Statement:

Work must commence within 180 days from permit issuance date, and be completed and inspected within one year from the permit issuance date, or the building permit will be null and void. I understand all work must be inspected and approved by Polk County prior to concealing any installation and that I must call for a final inspection. I further understand that a Certificate of Occupancy is required in accordance with applicable codes and ordinances.

I have included all of the above checked items and I understand that all the items listed above must be reviewed and fees paid before a permit will be issued. I further understand that construction work cannot begin until the building permit has been issued. All information supplied by me is true and correct, and to the best of my knowledge and belief.

I affirm I am the owner or licensed contractor of this property. I hereby acknowledge that I have read this permit and state that the information is correct, and agree to comply with all ordinances and state and federal laws regulating activities covered by this permit.

\*Please allow 5-7 business days for permit review and approval

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## Building Spec Sheet

Job Address: \_\_\_\_\_

Type of Use (Including size): \_\_\_\_\_

1. Footings: (42" minimum frost depth)

Depth below grade: \_\_\_\_\_

Size of footing or trench: \_\_\_\_\_

Size and type of reinforcement: \_\_\_\_\_

2. Foundation wall: (footing tiles to be placed beside footing and in each egress window)

Thickness and type: \_\_\_\_\_

Type of waterproofing: \_\_\_\_\_

Spacing of anchor bolts: (1/2" dia. Min.) \_\_\_\_\_

3. Slab system: (structural only)

Thickness of slab: \_\_\_\_\_

Type of reinforcement: \_\_\_\_\_

Spacing of anchor bolts: (1/2" dia. min.) \_\_\_\_\_

4. Floor framing: (list size and grade of lumber)

Size of support beam(s): \_\_\_\_\_

Spacing of support beam posts: \_\_\_\_\_

Size, span and spacing of floor joist: \_\_\_\_\_

Type of floor sheathing: \_\_\_\_\_

5. Wall framing: (list size and grade of lumber)

Size and spacing of wall studs: \_\_\_\_\_

Type of \_\_\_\_\_ of \_\_\_\_\_ wind \_\_\_\_\_ bracing:

Double Top Plates Required

Thickness and type of insulation: \_\_\_\_\_

Type of siding: \_\_\_\_\_

Type of interior wall covering: \_\_\_\_\_

6. Roof and ceiling: (List size and grade of lumber)

Size, span and spacing of ceiling joists: \_\_\_\_\_

Size, span and spacing of roof rafters: \_\_\_\_\_

Truss rafters: **Must provide design data from manufacturer**

Thickness and type of insulation: \_\_\_\_\_

Type of ceiling covering: \_\_\_\_\_

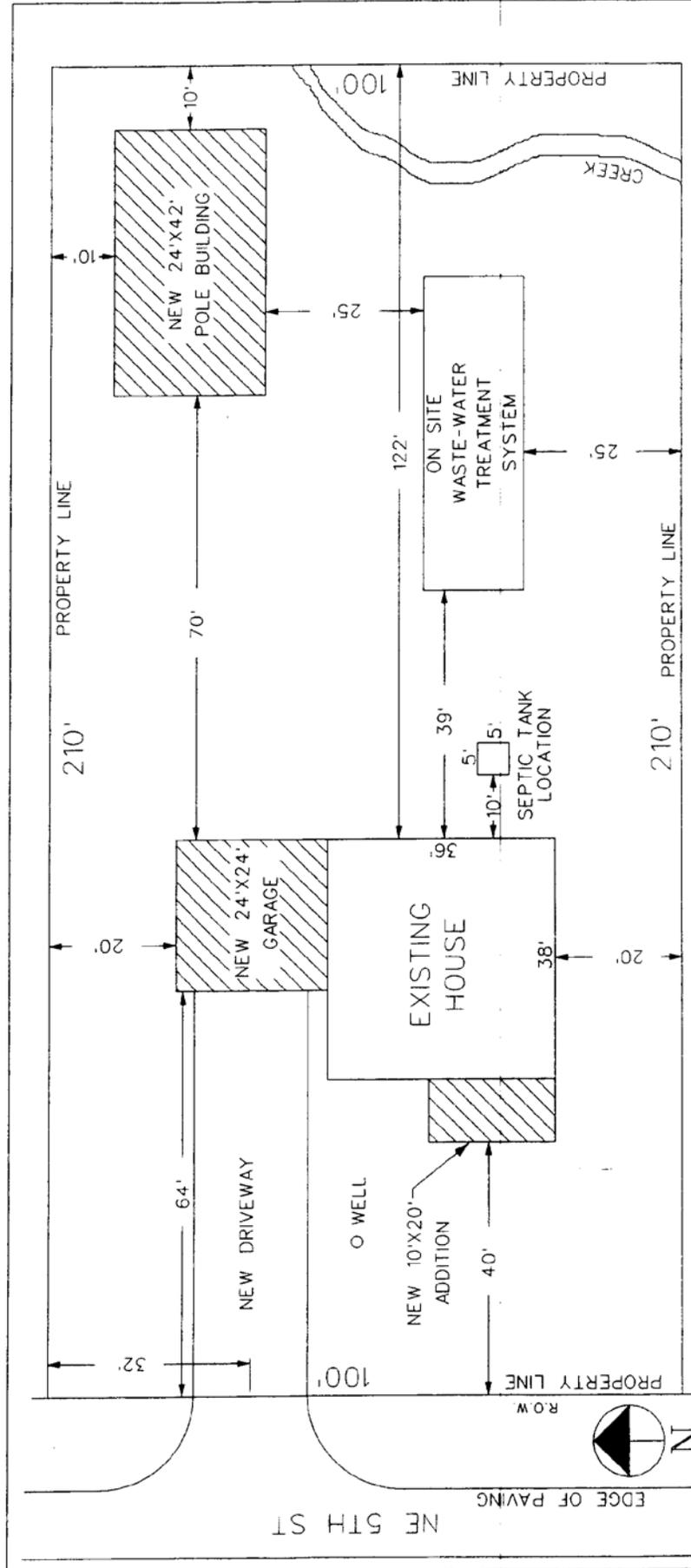
Type of attic ventilation: \_\_\_\_\_

Comments/ Additional Information

# RESIDENTIAL SITE PLAN INSTRUCTIONS

## Required Information:

1. Specify Site Address and Owner's Name.
2. Specify Name and Phone Number of person furnishing Site Plan information.
3. All streets must be identified.
4. Indicate Lot Dimensions.
5. All structures, existing and proposed, must be shown on the Site Plan. Dimensions of and distances to all lot lines from existing/proposed buildings must be indicated as well as distances between all proposed/and existing structures.
6. Indicate location of and distance to property entrance(s), existing and/or proposed. Dimensions from corner of property to center of drive should be indicated.
7. Indicate location of and distance to existing and proposed septic tank(s) and/or on site waste-water treatment system(s), if possible.
8. Indicate location of ponds, streams, drainage ways, and/or ravines. All physical features must be shown.
9. Identify North Directional Arrow and indicate scale of site plan.



ADDRESS: 101 NEW HOUSE LANE      OWNER: JOE BUILDER      APPLICANT: JOE BUILDER      PHONE: (515) 286-XXXX

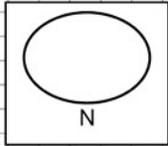
Polk County Public Works – Site Plan Worksheet

SITE ADDRESS: \_\_\_\_\_

OWNER'S NAME: \_\_\_\_\_

APPLICANT'S NAME: \_\_\_\_\_

APPLICANT'S PHONE: \_\_\_\_\_



**INSTRUCTIONS TO APPLICANT**

Specify Site Address and Owner's Name.

Specify Name and Phone Number of person furnishing Site Plan information.

all streets must be identified.

Indicate lot dimensions.

All structures, existing and proposed, must be shown on the Site Plan. Dimensions of and distances to all lot lines from existing/proposed buildings must be indicated as well as distances between all proposed/and existing structures.

Indicate location of and distance to property entrance(s), existing and/or proposed. Dimensions from corner of property to center of drive should be indicated.

Indicate location of and distance to existing and proposed septic tank(s) and/or on site waste-water treatment system(s) and if applicable geothermal heat pumps.

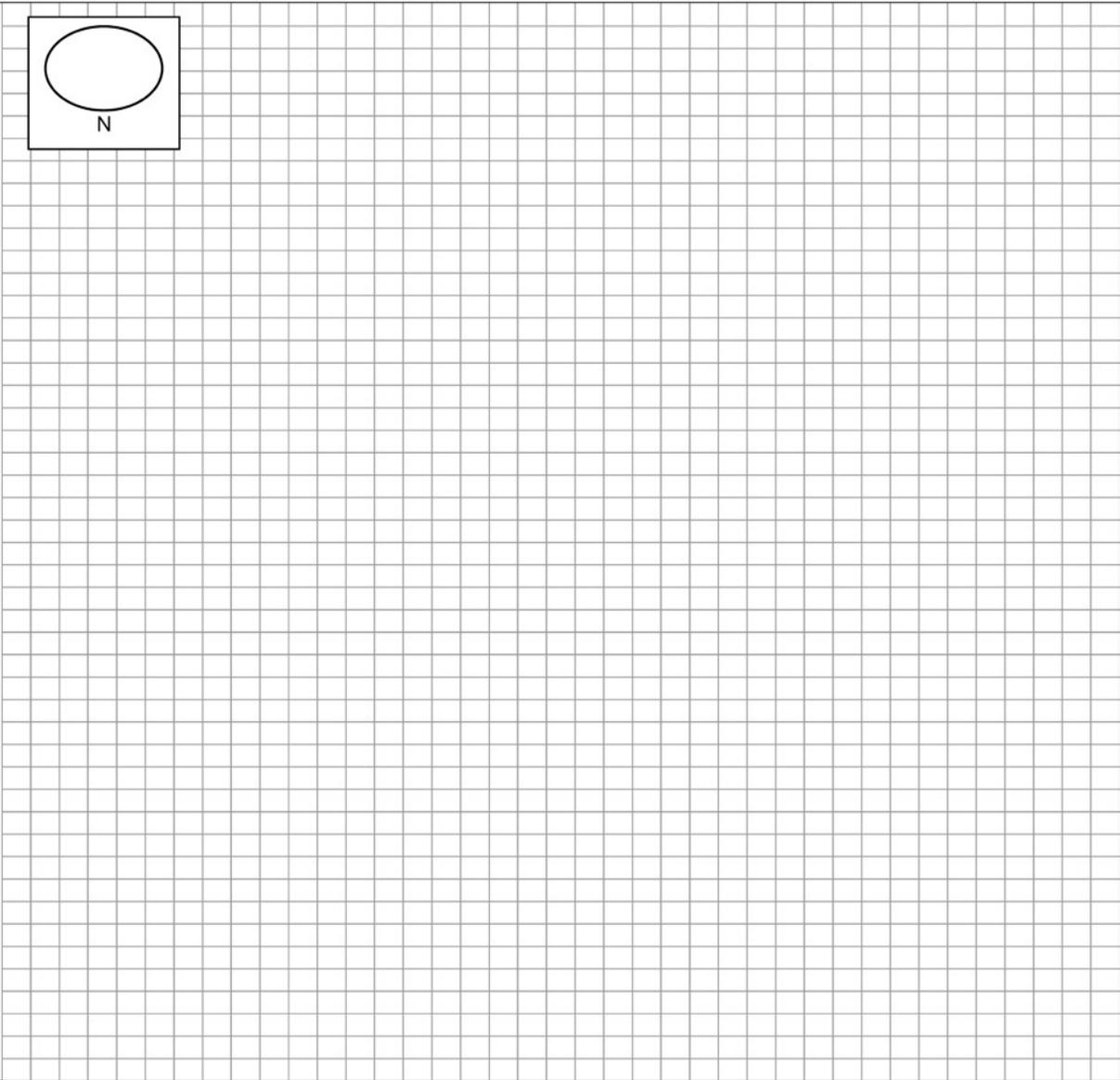
Indicate location of ponds, streams, drainage ways, and/or ravines. All physical features must be shown.

Identify North Directional Arrow and indicate scale of Site Plan.

I, WE CERTIFY THAT THE PROPOSED CONSTRUCTION WILL CONFORM TO THE DIMENSIONS AND USES SHOWN ABOVE AND THAT NO CHANGES WILL BE MADE WITHOUT FIRST OBTAINING APPROVAL.

APPLICANT'S SIGNATURE

DATE





# Polk County Public Works

5885 NE 14 Street, Des Moines, IA  
Phone: 515-286-3705 FAX: 515-286-3437  
Email: publicworks@polkcountyiowa.gov

## ENTRANCE PERMIT APPLICATION

PERMIT FEE: \$245.00

APPLICANT/LANDOWNER \_\_\_\_\_  
REPRESENTED BY (if not landowner) \_\_\_\_\_  
APPLICANT MAILING ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_  
PHONE \_\_\_\_\_ ALT PH \_\_\_\_\_  
EMAIL \_\_\_\_\_

**NAME OF CONTRACTOR DOING WORK** (if applicable) \_\_\_\_\_  
CONTRACTOR REPRESENTATIVE: \_\_\_\_\_  
CONTRACTOR MAILING ADDRESS: \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_  
PHONE \_\_\_\_\_ ALT PH \_\_\_\_\_  
EMAIL \_\_\_\_\_

### ENTRANCE LOCATION:

SITE ADDRESS \_\_\_\_\_  
OR ON (STREETNAME) \_\_\_\_\_  
OR (if no address), SECTION \_\_\_\_\_, TOWNSHIP \_\_\_\_\_, RANGE \_\_\_\_\_, \_\_\_\_\_ FEET \_\_\_\_\_ OF \_\_\_\_\_  
ON \_\_\_\_\_ SIDE OF ROAD  
OR (if no address), ACCESS TO LOT NO. \_\_\_\_\_ OF \_\_\_\_\_ SUBDIVISION  
PROPOSED SURFACE WIDTH OF THE ENTRANCE (in feet) \_\_\_\_\_

### TYPE OF ENTRANCE (Check One)

NEW CURB CUT  
WIDEN EXISTING FOR NON-FARM USE  
NEW OPEN DITCH FOR NON-FARM  
NEW or WIDEN FARM FIELD ENTRANCE

### TYPE OF USE (Check One)

HEAVY COMMERCIAL  
LIGHT COMMERCIAL  
NON-PAVED RES OR FARM  
PAVED RESIDENTIAL

### PAVING (Check One)

DO YOU INTEND TO PAVE THE ENTRANCE?      YES      NO  
**If yes, you must schedule an inspection of the form work prior to paving of the entrance.**

### CHECK THOSE THAT APPLY:

I affirm the information provided for this permit is accurate and correct to the best of my knowledge and belief and that I am the owner or designated agent, of the property this entrance provides access to.

I understand the work must be completed and inspected within one year of the issue date or this permit will be null and void.

I affirm I have read and understand the entrance standards and stipulations on the attached forms and will complete all work in accordance with these standards and stipulations.

I understand that if the entrance is to be paved, I will contact the Polk County Public Works Department for an inspection of the form work prior to paving.

\_\_\_\_\_  
APPLICANT SIGNATURE

\_\_\_\_\_  
DATE

# ENTRANCE PERMIT STIPULATIONS

## A. CONSTRUCTION AND MAINTENANCE STIPULATIONS

1. The entrance, including drainage structure, grading, surfacing and entrance configuration, shall be constructed by the applicant at the applicant's expense, in accordance with the attached entrance standard and upon final inspection and approval shall thereafter be kept in repair and maintained by Polk County. Nothing in this stipulation shall preclude Polk County from entering upon said entrance on highway right-of-way and performing necessary maintenance for the protection of the highway. Polk County will not construct paved type surfaces on entrances, but will use gravel only.

2. The construction, future repair or maintenance of said entrance shall be carried on in such a way as not to interfere with, or interrupt traffic on said highway, and the owner shall take all reasonable precautions to protect and safeguard the lives and property of any person or persons, or account of such construction, repair or maintenance operation.

3. No filling will be permitted in the right-of-way other than necessary to construct the proposed entrance. No excavations will be made within the limits of the traveled portion of the roadway. The entrance fill is to be compacted by tamping or rolling as per the approved standards.

4. The finished surface elevation of the driveway over the pipe or place where the pipe would normally be shall be four (4) inches lower than the shoulder elevation to prevent water draining onto the pavement or traveled way and the minimum depth of earth fill over the pipe shall be twelve (12) inches.

## B. GENERAL

1. The owner's attention is directed to the fact that private property may not be used so as to obstruct or encumber the public highway right-of-way, or interfere with the safety, comfort and rights of public highway users.

2. A copy of the approved application shall be available on the job site at all times for examination by Polk County officials.

3. Subject to the approval of this application and upon completion of the constructing of the entrance in compliance with the terms agreed upon in this document and attachment, no changes in the entrance, including landscape walls or plantings, or its location shall be undertaken without the prior written approval of the Polk County Engineer.

4. Polk County shall be responsible for all future maintenance associated with that portion of the access located within Polk County right-of-way, except pavement placement or repair.

5. In the future, should this entrance generate sufficient traffic to warrant a need for additional traffic control upon the roadway system, costs for these improvements shall be the responsibility of the owner and shall be constructed in accordance with Polk County Standards. These may include, but would not necessarily be limited to, the constructing of turn lanes and/or signalization.

6. All provisions herein relating to the construction, repair or maintenance of the entrance shall be binding on all successors or assigns of the owner.

7. Upon completion of construction, the applicant shall leave the right-of-way area in as good a condition as prior to construction.

8. The Polk County Engineer reserves the right to relocate the proposed entrance to meet minimum required sight distance for the safety purposes at crest vertical curves, horizontal curves, and intersections.

9. This entrance permit will be executed prior to the issuing of a building permit.

## C. LIABILITY

1. The Owner(s) shall indemnify and save harmless Polk County, its agencies and employees, from any and all causes of action, suits at law or in equity, for losses, damages, claims or demands, and for any and all liability and expense of whatsoever nature, arising out of or in connection with owner's use or occupancy of the public right-of-way.

2. If the Owner(s) should fail to comply with any of the conditions and requirements of this agreement, Polk County may terminate it, whereupon the owner(s) shall immediately remove any construction undertaken pursuant to this agreement and restore the access (es) previously existing and any rights granted the owner(s) by this agreement shall end.

## D. NOTIFICATION

1. Before beginning any work in the highway right-of-way, it is the responsibility of the owner(s) to give the Polk County Public Works Department, forty-eight (48) hours prior written or verbal notice of owner's intent to start construction on the highway right-of-way. The owner shall also notify Polk County Public Works upon completion of construction.

2. Before beginning any work in the highway right-of-way, it is the responsibility of the owner(s) to contact utility companies which may be located in the area of the proposed work. Contact should be made by calling One Call at 1-800-292-8989, a minimum of forty-eight (48) hours in advance of starting construction.



# Fire Protection of Wood Floor Assemblies

Section 302.13 2015 IRC. Fire protection of floors.

Floor assemblies shall be provided with a ½-inch gypsum wallboard membrane, 5/8-inch wood structural panel membrane, or equivalent on the underside of the floor framing member. Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaires, wires, speakers, drainage, piping and similar openings or penetrations shall be permitted.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA13D, or other approved equivalent sprinkler system.
2. Floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances.
3. Portions of floor assemblies can be unprotected when complying with the following:
  - a. The aggregate area of the unprotected portions shall not exceed 80 square feet per story
  - b. Fire blocking in accordance with Section 302.11.1 shall be installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.
    - i. Fireblocking materials.
      1. Two-inch nominal lumber.
      2. Two thicknesses of 1-inch nominal lumber with broken lap joints.
      3. One thickness of 23/32-inch wood structural panels with joints backed by 23/32-inch wood structural panels.
      4. One thickness of ¾-inch particleboard with joints backed by ¾-inch particleboard.
      5. One-half-inch gypsum board.
      6. One-quarter-inch cement-based millboard.
      7. Batts or blankets of mineral wool or glass fiber or other approved materials installed in such a manner as to be securely retained in place.
      8. Cellulose insulation installed as tested for the specific application.
4. Approved floor assemblies demonstrating equivalent fire performance by an approved testing company showing length and time duration for exposure to fire. It shall be defined by performance equivalent to twenty-six (26) minutes using ASTM E 119 standard fire endurance testing with a superimposed load simulating a maximum load condition (i.e. 100% design load).

# RADON MITIGATION



## Section AF103.6 Passive subslab depressurization system.

In basements or slab-on-grade buildings, the following components of a passive subslab depressurization system shall be installed during construction.

A minimum 3-inch diameter ABS, PVC, or equivalent gas-tight pipe shall be embedded vertically into the subslab aggregate or other permeable material before the slab is cast. A “T” fitting or equivalent method shall be used to ensure that the pipe opening remains within the subslab permeable material. Alternatively, the 3-inch pipe shall be inserted directly into an interior perimeter drain tile loop or through a sealed sump cover where the sump is exposed to the subslab aggregate or connected to it through a drainage system. The pipe shall be extended up through the building floors, and terminate at least 12 inches above the surface of the roof in a location at least 10 feet away from any window or other opening into the conditioned spaces of the building that is less than 2 feet below the exhaust point, and 10 feet from any window or other opening in adjoining or adjacent buildings.

## Section AF103.5 Passive submembrane depressurization system.

In buildings with crawl space foundations, the following components of a passive submembrane depressurization system shall be installed during construction.

Exception: Buildings in which an approved mechanical crawl space ventilation system or other equivalent system is installed.

Crawl spaces shall be provided with vents to the exterior of the building. The minimum net area of ventilation opening shall not be less than 1 square foot for each 150 square feet of under-floor space area, unless the ground surface is covered by a Class I vapor retarder material. When a Class I vapor retarder material is used, the minimum net area of ventilation openings shall not be less than 1 square foot for each 1,500 square feet of under-floor space area. One such ventilating opening shall be within 3 feet of each corner of the building.

A plumbing tee or other approved connection shall be inserted horizontally beneath the sheeting and connected to a 3-or-4-inch diameter fitting with a vertical vent pipe installed through the sheeting. The vent pipe shall be extended up through the building floors, and terminate at least 12-inches above the roof in a location at least 10 feet away from any window or other opening into the conditioned spaces of the building that is less than 2 feet below the exhaust point, and 10 feet from any window or other opening in adjoining or adjacent buildings.