

### Purpose of Guide

The purpose of this guide is to assist you in the permit process for your project. This handout is intended as a basic plan submittal under the 2015 International Residential Code. It is not intended to cover all circumstances. Depending on the scope and complexity of your project, additional and/or more detailed plans may be required.

This permitting process is not intended to take the place of any Homeowner Association (HOA) or Civic Association requirements; therefore, it is important for you to check with your HOA or CA for any additional requirements they may have.

### How to Use this Guide

**1. Complete this Building Guide:**

Provide job site address and initial this document on the next page. Two (2) completed copies must be provided to apply for a building permit.

**2. Provide a Floor Plan:**

Show the existing dimensions of the basement and provide dimensions of all new rooms, any new openings and items to be relocated.

**Notes:**

- a. Special consideration will be given to any new openings that exceed 6' in a bearing wall or new openings of any size in a foundation wall. A plan or letter from a registered engineer is required in these instances.
- b. Basement egress windows cannot be enclosed or obstructed in any way. Egress windows located under a deck must have a clear path of egress at least 36 inches in height that leads directly to the yard.
- c. Heat is required in all habitable rooms.
- d. A smoke detector is required in every basement. New smoke detectors installed as part of a basement finish shall be powered by electricity (not battery-operated).

**3. Submit a Completed Permit Application:**

Applications may be obtained at the City of Centennial or [www.centennialco.gov](http://www.centennialco.gov). It is important that the permit is filled out completely to the best of your knowledge and that you provide any additional pertinent information. It is important to print legibly to help staff review the information.

# Single Family Basement Finish

## Submittal Directions

### Directions

1. Submit (2) complete sets of required information.
2. Draw a floor plan with dimensions showing the layout of the entire basement. Label the use of all the rooms.
3. Show smoke detectors, plumbing modifications and furnace and water heater locations.
4. List window sizes and types; identify emergency escape and rescue windows and size of window wells.
5. Identify modifications if any to the existing structure i.e., posts, beams and joist.
6. Indicate height of dropped ceiling areas less than 7'.
7. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6'-8" above a minimum area 30" by 30" at the showerhead.
8. Show clearance around the tub and fixtures.

**Job Site Address:** \_\_\_\_\_

\_\_\_\_\_

# Single Family Basement Finish

## Basement Finish Requirements

### 1. Ceiling Heights

Finished ceiling height in existing basements shall not be less than 6'-8" with a minimum ceiling height of 6'-4" under obstructions such as beams and ductwork.

### 2. Emergency Escapes

Sleeping rooms must have their own egress code compliant window or exterior door in that space. Emergency escape windows with a sill height below grade must be provided with an egress window well. For egress window and window well requirements see attached Items II and III of this handout.

### 3. Smoke Detectors

A smoke detector is required in a basement in close proximity to the start of the stairs. If the finished basement contains a sleeping room, a smoke detector must be installed on the ceiling or wall in that room and in the hallway or area immediately outside of the room. Added smoke detectors must be hardwired with battery backup, and interconnected with existing smoke detectors. When one or more sleeping rooms are added or created in the existing residence, the entire dwelling unit shall be provided with smoke detectors located and installed as required for new Group R Occupancies.

### 4. Fuel Burning Appliances

Furnaces and water heaters cannot be located in or accessed through a bedroom or bathroom unless the appliances are of the direct vent type. If the furnace and water heater are being enclosed, adequate combustion air must be provided for these appliances to operate properly. For maintenance purposes, a minimum of 30" clear working space must be provided in front of the furnace and water heater. Maintenance or removal of each appliance must be possible without removing each other or disturbing walls, piping, valves, wiring and J-boxes.

### 5. Fire Stopping

Fire stopping must be installed in concealed spaces of wood-furred walls at the ceiling level, at 10' intervals along the length of the wall and at all interconnections of concealed vertical and horizontal spaces such as intersections of stud walls and soffits or dropped ceilings. A detail of typical fire stopping is attached as Item I of this handout. Fire stops may be constructed of ½" lumber, ¾" plywood or OSB, ½" gyp board or fiberglass insulation.

### 6. Insulation

Provide R-19 wall cavity insulation or R-15 continuous insulation at the perimeter basement walls.

### 7. Space Under Stairs

If access to the area under the basements stairs is provided for storage or other uses, the walls and ceiling of this enclosed space shall be protected on this inside with minimum ½" drywall.

### 8. Bathrooms

## Single Family Basement Finish

Toilets must be provided with a minimum of 21" in front of the toilet and 15" between the center of the toilet and any side wall or other obstruction. Shower compartments shall have a minimum inside dimension of 900 square inches, capable of encompassing a 30" circle and shall be finished 72" above the floor with nonabsorbent materials. A ventilation fan is required in bathrooms and toilet rooms without operable windows. The fan must be vented to the exterior of the building.

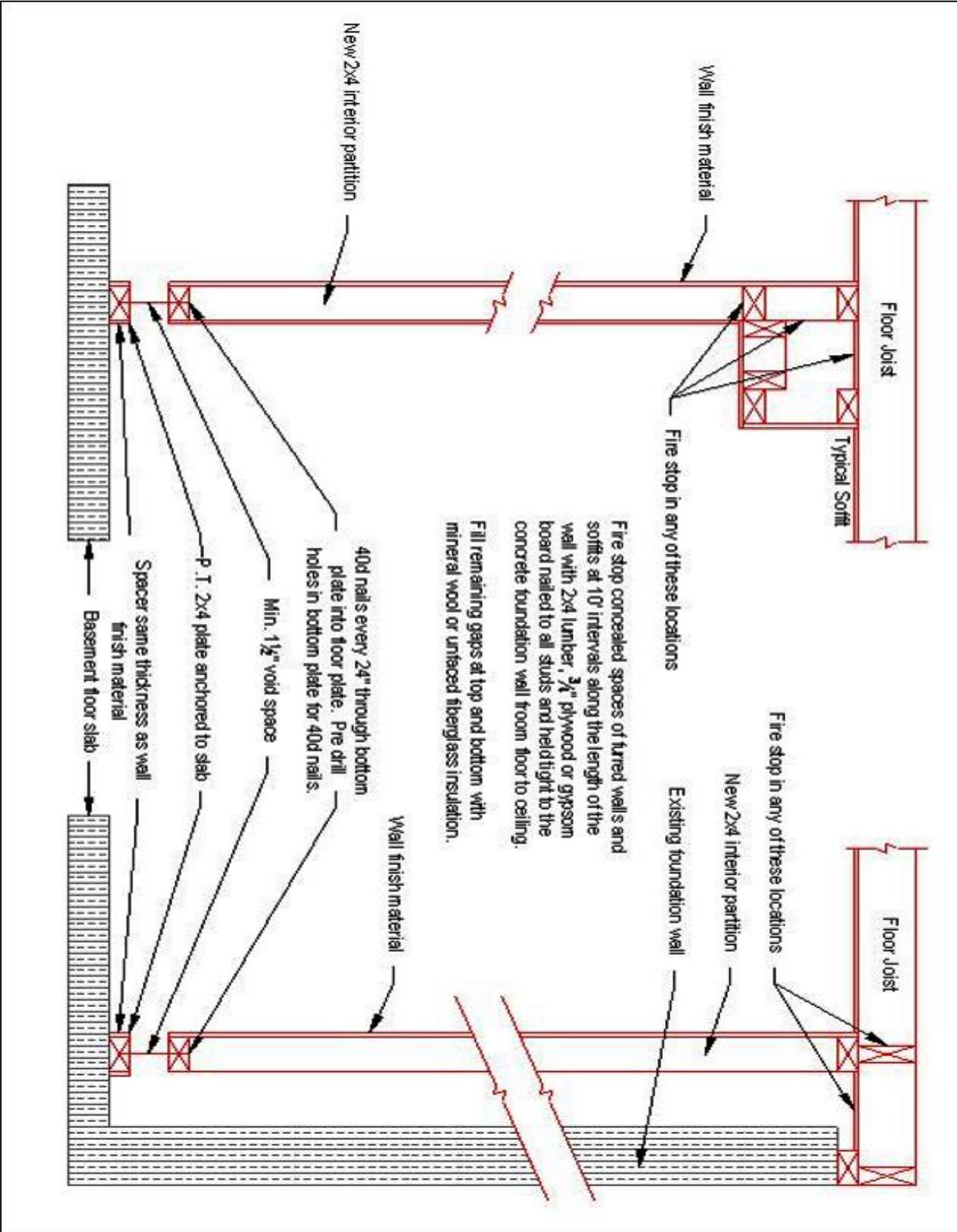
### 9. Lighting and Ventilation

Natural light and ventilation are required for all finished portions of the basement. This is typically accomplished through an operable window or door.

# Single Family Basement Finish

**FIRE STOPPING**

**ITEM I**

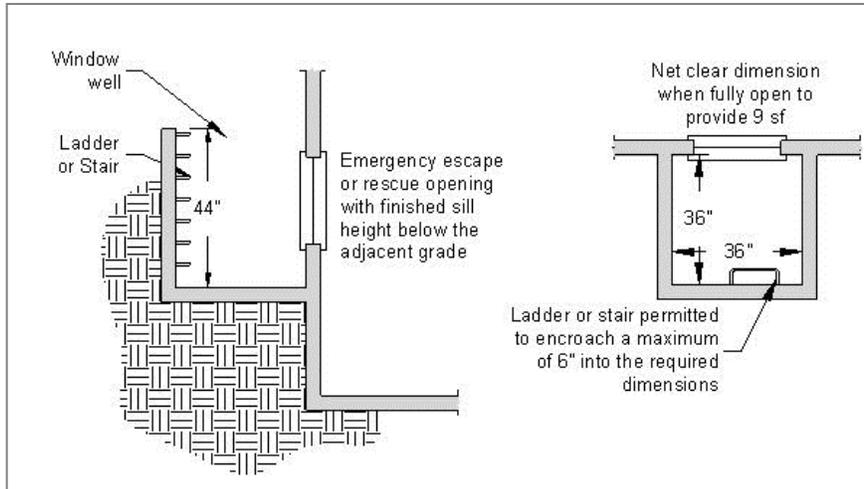


# Single Family Basement Finish

## EGRESS WINDOW WELL

## ITEM II

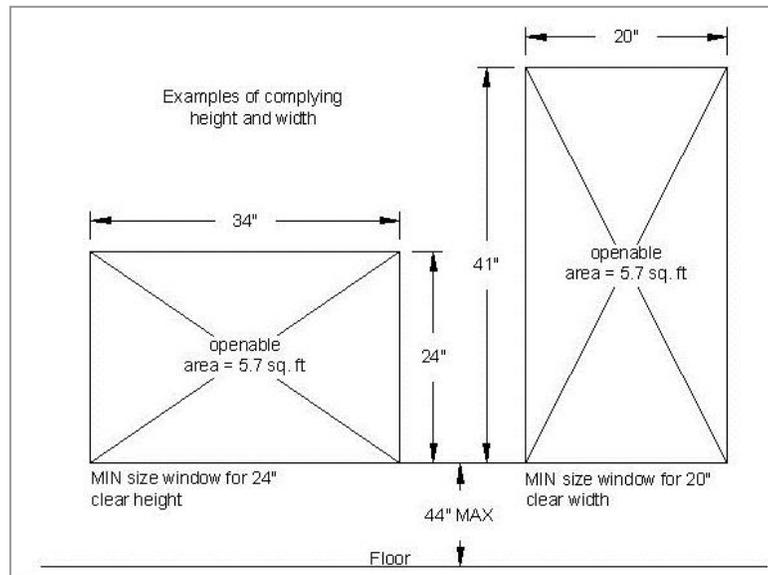
Egress window wells must provide a minimum area of 9 S.F. with a minimum dimension of 36" and shall enable the window to open fully. If the depth of the window well exceeds 44" a permanently affixed ladder must be provided. The ladder must not interfere with the window.



## EMERGENCY ESCAPE AND RESCUE WINDOW ITEM III

Emergency Escape and Rescue Windows must meet the following criteria:

- A minimum total open-able area of not less than 5.7 s.f.
- A minimum clear open-able height of 24".
- A minimum clear open-able width of not less than 20".
- A finished sill height of not more than 44".
- The window must be open-able from the inside without the use of a key, tools, special knowledge or effort.



We hope you find the information in this guide useful. If you have any questions, please feel free to contact us.