FINISHED BASEMENTS

(Based on the 2016 Connecticut Building Code, utilizing the 2012 IRC with Connecticut supplements and amendments)

Please submit the following:

1. Existing Floor Plan

2. Proposed Floor Plan

To be shown on plans:

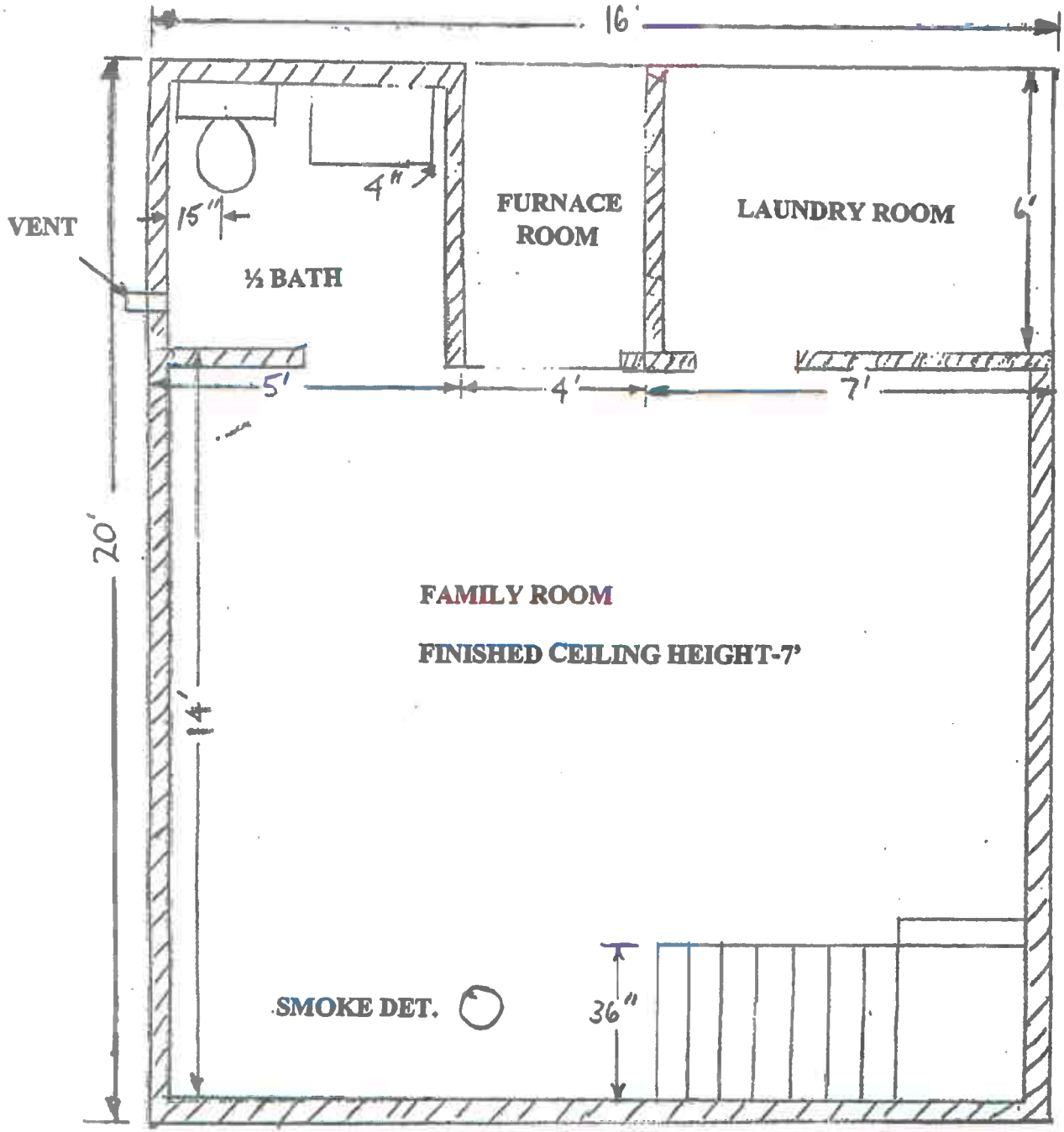
- Show all dimensions
- Show finished ceiling height to finished floor
- Show floor type(concrete, wood sleepers, carpet, tile, etc.)
- Show room use (family room, study, office, etc.)
- Show wall construction and anchorage (example-2x4 16 OC)
- Show insulation type and R-value
- Show pressure treated plate (any wood coming into contact with concrete must be pressure treated)
- If enclosing furnace area, show source of combustion air (indicate oil, gas, or electric heat)
- Show smoke detector location
- Show stair detail (show tread and rise, ceiling height, stair width, railing height)

If Bathroom is included in proposed plans, please include the following:

- Show ceiling height in bathroom to finished floor
- Show either a window or vent to outside
- Show spacing between fixtures and from fixtures to walls

Please see attached example and requirements for additional information.

EXAMPLE ONLY

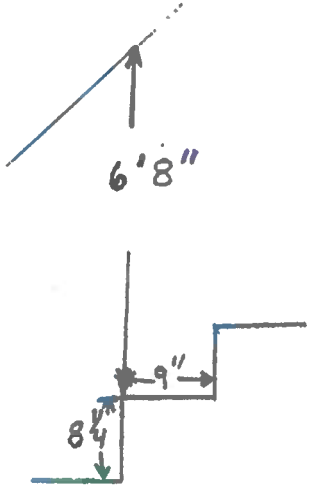


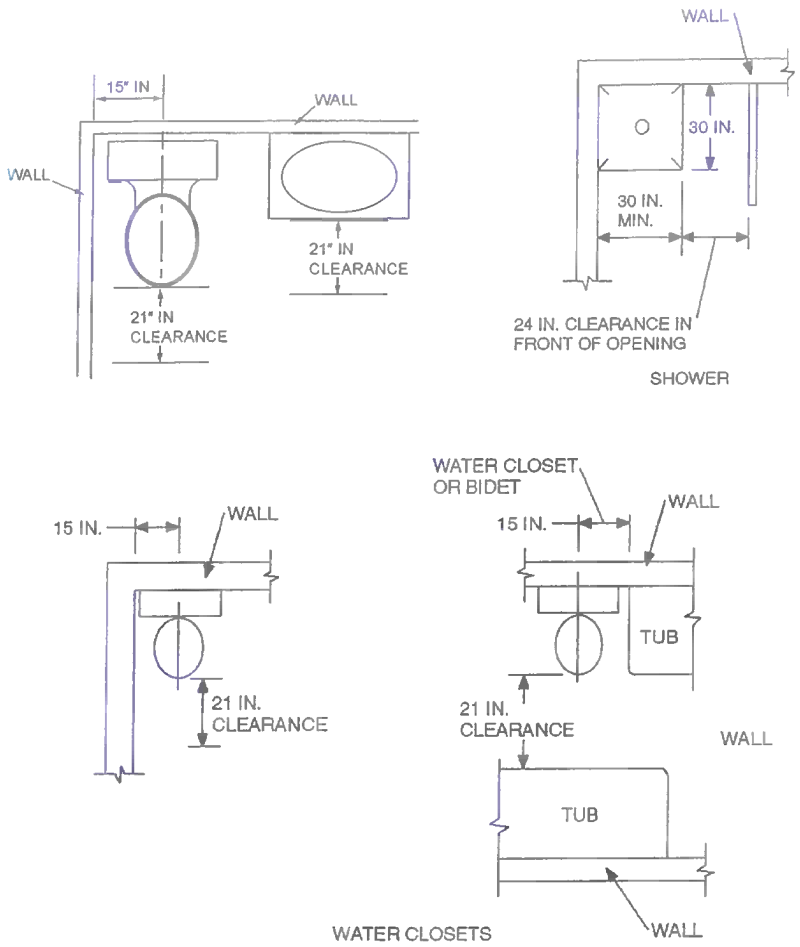
NAME _____

ADDRESS _____

= NEW WALLS
2X4 16 OC 2X4 P.T. PLATE
R-20 INSUL.
½" SHTRCK

STAIR DETAIL





For SI: 1 inch = 25.4 mm.

FIGURE R307.1

SECTION R305
CEILING HEIGHT

R305.1 Minimum height. *Habitable space*, hallways, bathrooms, toilet rooms, laundry rooms and portions of *basements* containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm).

Exceptions:

1. For rooms with sloped ceilings, at least 50 percent of the required floor area of the room must have a ceiling height of at least 7 feet (2134 mm) and no portion of the required floor area may have a ceiling height of less than 5 feet (1524 mm).
2. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) at the center of the front clearance area for fixtures as shown in Figure R307.1. The ceiling height above fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

R305.1.1 Basements. Portions of basements that do not contain habitable space, hallways, bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

Exceptions:

1. Beams, girders, ducts or other obstructions may project to within 6 feet 4 inches (1931 mm) of the finished floor.
2. Ceiling height in existing basements being converted to habitable space shall not be less than 6 feet 10 inches clear except under beams, girders, pipes, ducts or other obstructions where the clear height shall be a minimum of 6 feet 4 inches.

SECTION R307
TOILET, BATH AND SHOWER SPACES

R307.1 Space required. Fixtures shall be spaced in accordance with Figure R307.1, and in accordance with the requirements of Section P2705.1.

R307.2 Bathtub and shower spaces. Bathtub and shower floors and walls above bathtubs with installed shower heads and in shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet (1829 mm) above the floor.

COMBUSTION AIR—CABO–

1. Direct vent appliances and appliances equipped with a combustion air kit, do not require additional combustion air.
2. All fuel burning appliances (Furnaces, Hot Water Heater, etc.) require air for combustion based on 50 cubic feet of air for each 1000 BTU'S of appliance(s).
3. The air may be taken from the space the appliance(s) is located if sufficient or adjacent spaces (if volume is sufficient & connected by two openings of reguired size)
4. To see if you comply, please do the following calculation below for the space:
   *Length_____x Width_____=Area_____x Height_____= SPACE VOLUME of air in cubic feet_____.
   *BTU'S of the Appliance(s)_____ x 50 Cubic Feet = required VOLUME cubic feet_____ 1000
   *SPACE VOLUME of air_____
   *APPLIANCE VOLUME of air_____
5. The volume of air required for the appliance(s) must be equal to or less than the SPACE VOLUME of air. If the space volume of air is less (not enough combustion air) outside air is required.
6. Connected spaces require TWO openings. One opening must be located 12" from the floor the other must be located 12" from the ceiling. Each opening shall have a clear opening equal to 1 square inch per 1000 Btu's but not less than 100 square inches.
7. Calculations for openings:
   *Appliance BTU'S_____x 1 square inch =_____square inch of opening.
8. Metal louvers are 75% efficient, Wood louvers are 25% efficient; use calculations below for the type of louvers used:
   *Metal_____sq. inch of opening divided by .75 =_____required size of louver in sq. inches.
   *Wood_____sq. inch of opening divided by .25 =_____required size of louver in sq. inches