

TOWN OF WEST HARTFORD CREATING HABITABLE SPACE IN BASEMENT

(Applies to existing unfinished basements being converted to habitable space)

This information does not address new construction requirements

The following information is needed to determine whether you can finish off a habitable space (recreation room, etc.) in your basement in accordance with the current State of Connecticut Building Code. (2015 IRC w/2018 State Amendments)

1. Stairs shall not be less than 32" in clear width at all points above the permitted handrail height and below the required headroom height. Connecticut Amendment R311.7.1 (Exception #2).
2. Handrails shall not project more than 4" on either side of the stairway. Connecticut Amendment R311.7.1 (Exception #2).
3. The minimum clear width of stairwell below the handrail height shall not be less than 28" where a handrail is installed on one side and 24" where handrails provided on both sides. R311.7.1 (Exception #2).
4. Headroom on all parts of existing stairway serving existing unfinished basements being converted to a habitable space shall be 6'4" measured vertically from sloped plane adjoining the tread nosing of from the floor surface of the landing or platform. Connecticut Amendment R311.7.2 (Exception 2).
5. Riser height – maximum riser height for existing stairs serving an unfinished basement shall be 9". The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8". Connecticut Amendment R311.7.5.1 (Exception 1).
6. Tread depth – minimum tread depth of existing stairs serving unfinished basements being converted to habitable space shall be 8". The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the treads leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8". Connecticut Amendment R311.7.5.2 (Exception)
7. Handrails shall be provided on at least one side of each continuous run of treads or flight with 4 or more risers and returned to wall or post. A minimum of 1 1/2" space required between handrail and wall. Section R311.7.8. See code for specific requirements on size of handrail.
8. Ceiling height – minimum ceiling height in **existing** basements being converted to habitable space shall not be less than 6'8" clear, except under beams, girders, pipes, ducts or other obstructions where clear height shall be a minimum of 6'4". Connecticut Amendment R305.1.1 (Exception #3).
9. If planning to use for sleeping purposes emergency egress window required. Window shall have a clear opening size of 5.7 square feet and maximum of 44" from finished floor to sill height. **Other considerations apply, but are beyond scope of this handout.** Please refer to Building Code including Connecticut Amendment R310.1.
10. Bring in a scaled drawing showing ENTIRE basement with locations of all utilities such as a boiler, furnace, hot water heater and electrical panel. If you have a wood burning stove or fireplace or a gas fireplace show these as well. Label all areas in basement to show their intended use.
11. Indicate type of heat source to be utilized for space. R303.10
12. Indicate insulation value and type to be utilized. N1102.1.1
13. Indicate framing type to be used, including type of material to be used for bottom plate. R106.1.1
14. Make up and combustion air must be addressed. A handout is available to help you address this issue. Please note on your drawing the number of INPUT BTU's on all fuel fired appliances. (i.e. gas or oil) If you have a gas dryer include this as well.
15. Fire blocking Section R302.11 information available at the building department.

The West Hartford Building Department is offering this informational handout as a representative of typical issues or questions that may arise on a typical job. The town assumes no responsibility for any errors, omissions and installer is required to follow all applicable codes. No handout could possibly cover all situations, nor is it intended to.

Please feel free to call us at 860-561-7530 if we may be of further assistance. Our inspectors are typically in the office Monday through Friday, between 8:00 a.m. to 9:00 a.m., or 1:00 p.m. to 2:00 p.m. to answer questions.

Please bring in scaled plans (2 sets) of the **ENTIRE** basement, with room layouts labeled with planned uses of the new rooms and existing spaces. Include the following information:

1. Stair width above handrail _____.
2. Stair width below handrail _____.
3. Headroom on stairway _____.
4. Riser height _____.
5. Tread depth _____.
6. Type of framing to be used (metal, wood, basement system, etc.)_____
7. Insulation value and type _____
8. Lowest finished ceiling height _____. (A) Height under lowest beam, pipe, duct or other obstruction after ceiling finishes installed_____.
9. Sleeping rooms proposed? (Circle one) YES or NO
10. Show total square footage of entire basement _____.
11. Type of heat source to be used for space _____
12. Show input BTU's on a furnace or boiler (if gas or oil) _____.
13. Show input BTU's on hot water heater (if gas or oil) _____.
14. Show input BTU's on clothes dryer (if gas) _____.
15. Do you have a wood fireplace or stove in basement? (Circle one) YES or NO
16. Do you have gas fired heaters or fireplaces in basement?(Circle one) YES or NO

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Revised 6/2020

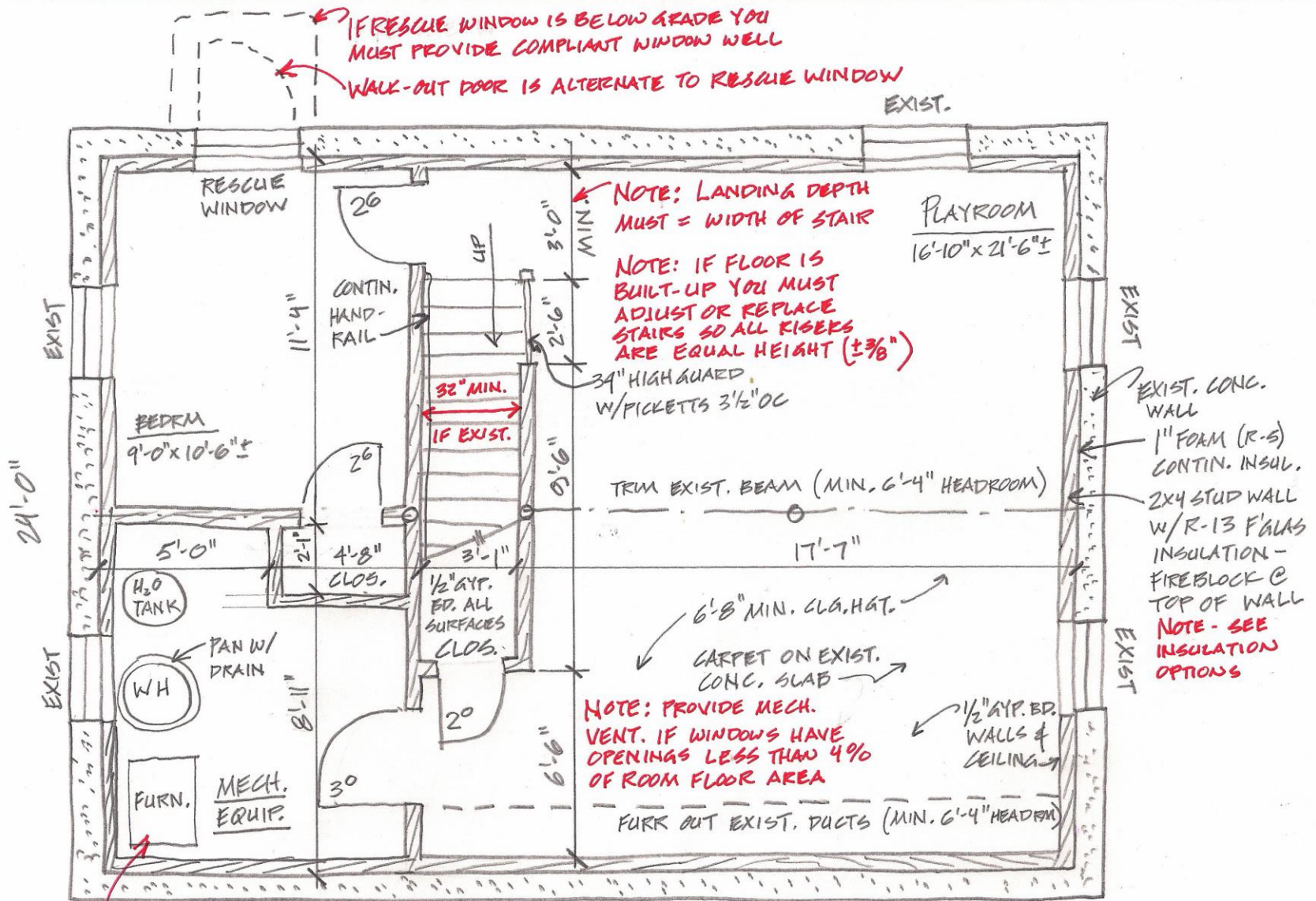
doc:basementhandout2020

BASEMENT CONSTRUCTION GUIDE

[This document contains relative code requirements when converting existing basements into habitable space. It does NOT cover all aspects of the code nor accept responsibility for errors or omissions, the actual language of the Connecticut State Building Code prevails. Rev19]

REFERENCE DETAILS

TO BE USED AS A CONSTRUCTION GUIDE ONLY

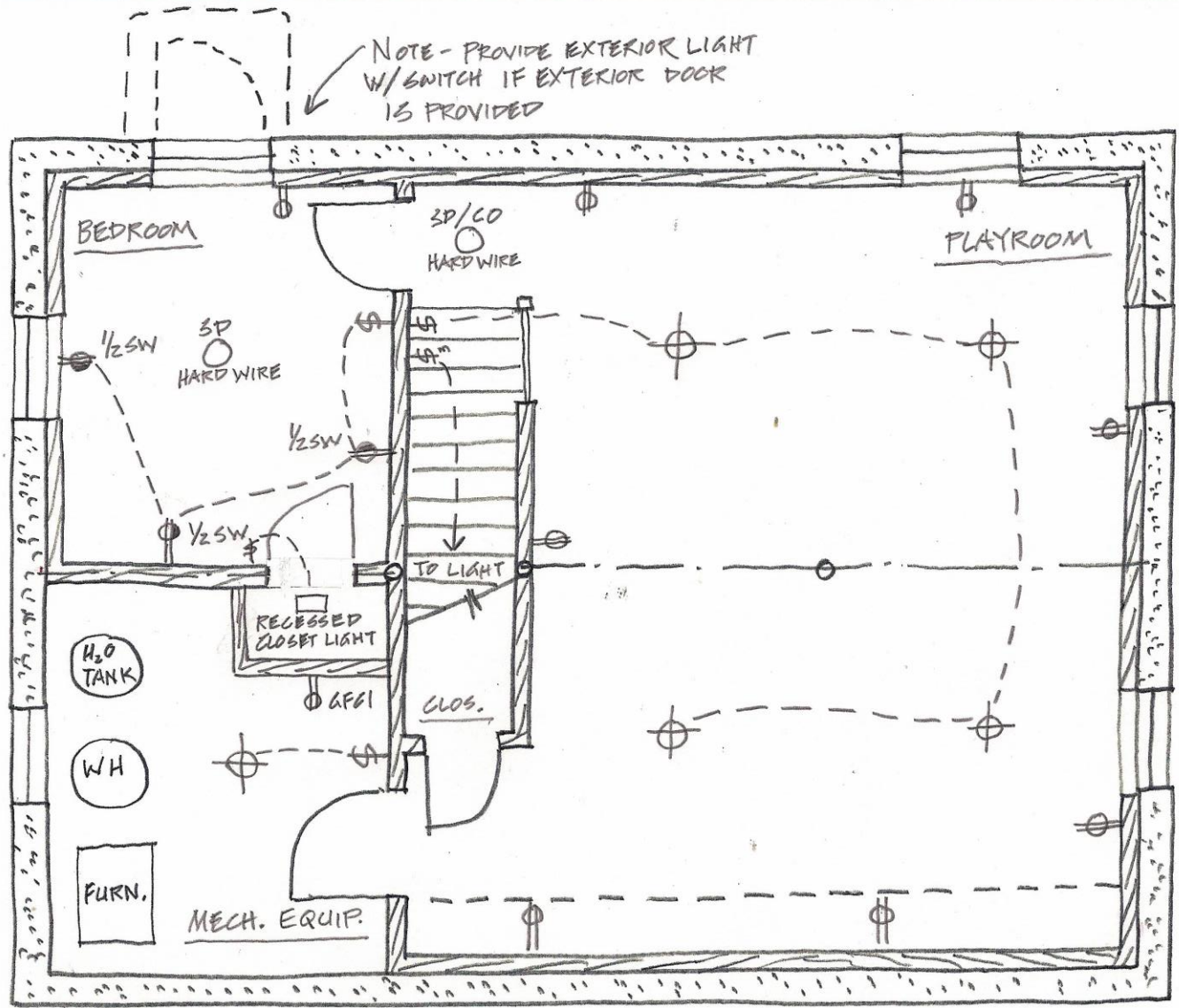


NOTE: PROVIDE COMBUSTION AIR FOR ALL FUEL-FIRED MECHANICAL EQUIPMENT

BASEMENT CONVERSION PLAN 1

123 MAIN ST. ANYTOWN CT.

1/4" = 1'-0" ±

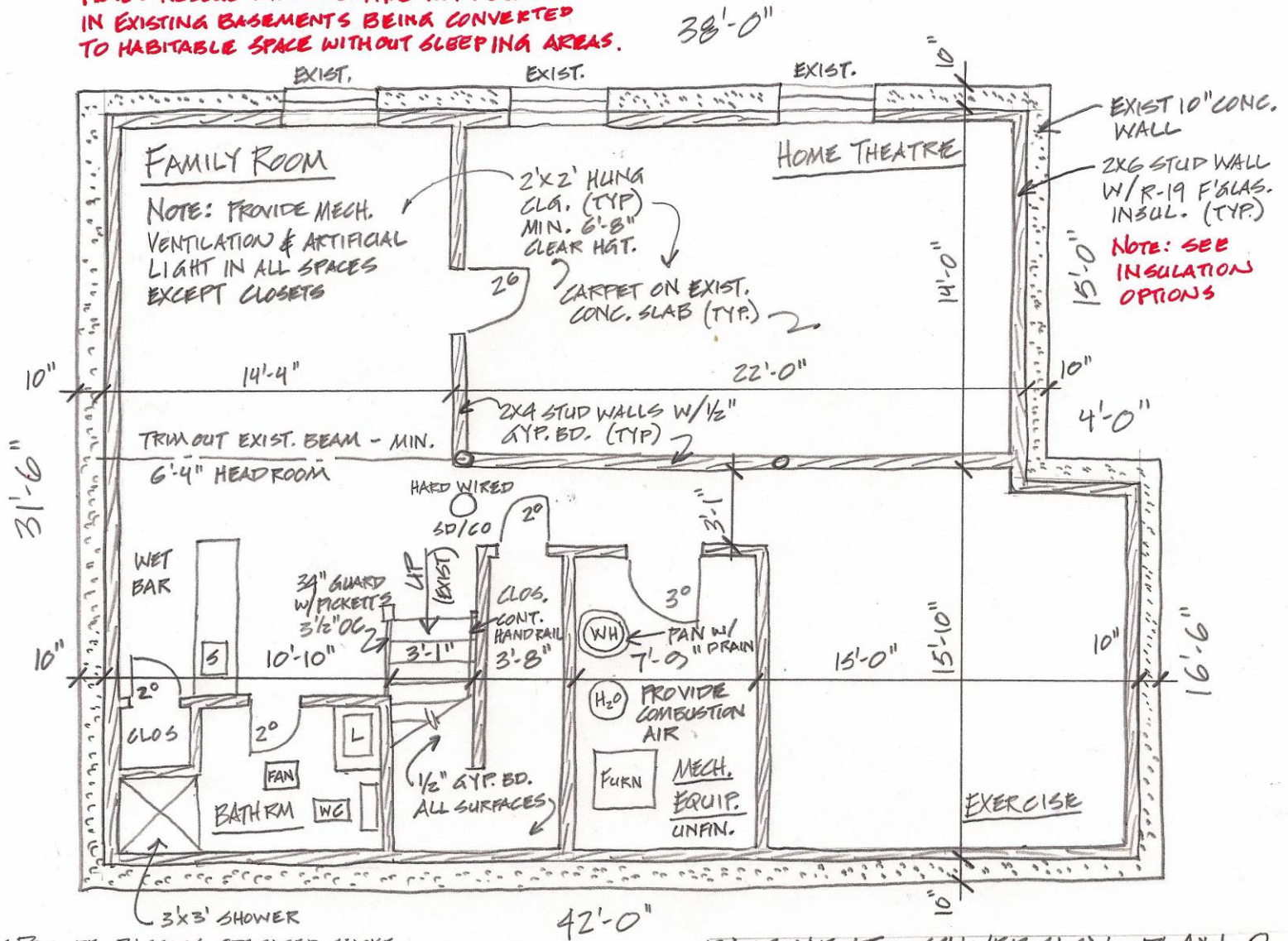


NOTE - ADD BATTERY POWERED SMOKE & CO DETECTORS IN LOCATIONS REQ'D. BY CODE THROUGHOUT HOUSE WHERE NONE EXIST.

BASEMENT ELEC. PLAN 1

123 MAIN ST. ANYTOWN CT.

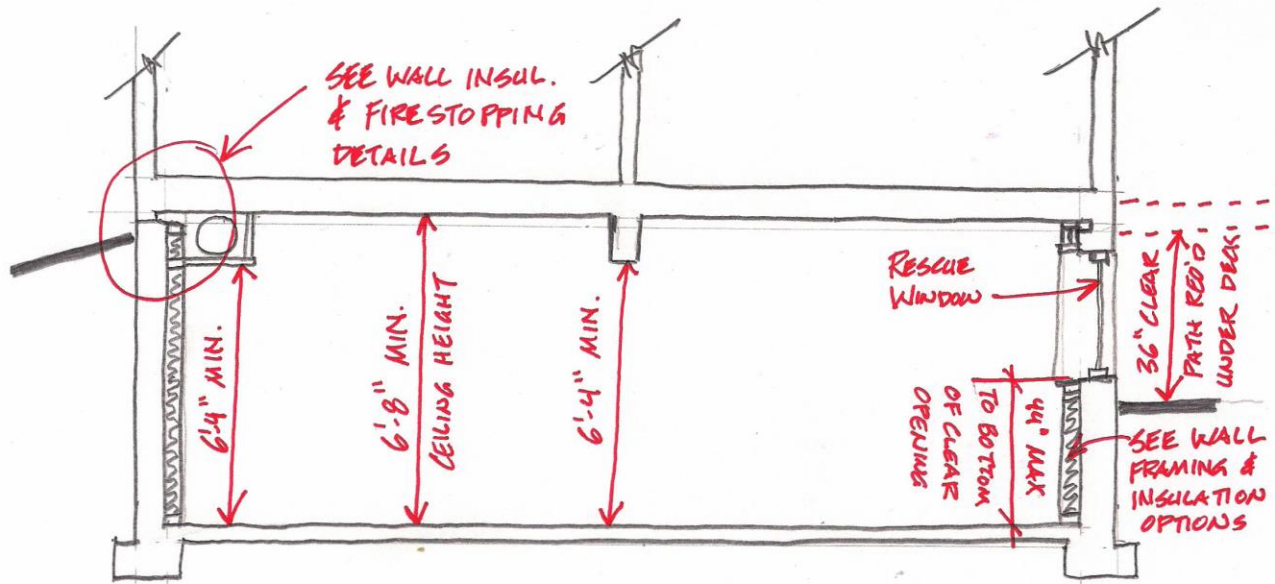
NOTE: RESCUE WINDOWS ARE NOT REQUIRED IN EXISTING BASEMENTS BEING CONVERTED TO HABITABLE SPACE WITHOUT SLEEPING AREAS.



NOTE: PROVIDE BATTERY OPERATED SMOKE & CO DETECTORS IN CODE REQUIRED LOCATIONS THROUGHOUT EXISTING HOUSE WHERE NONE EXIST.

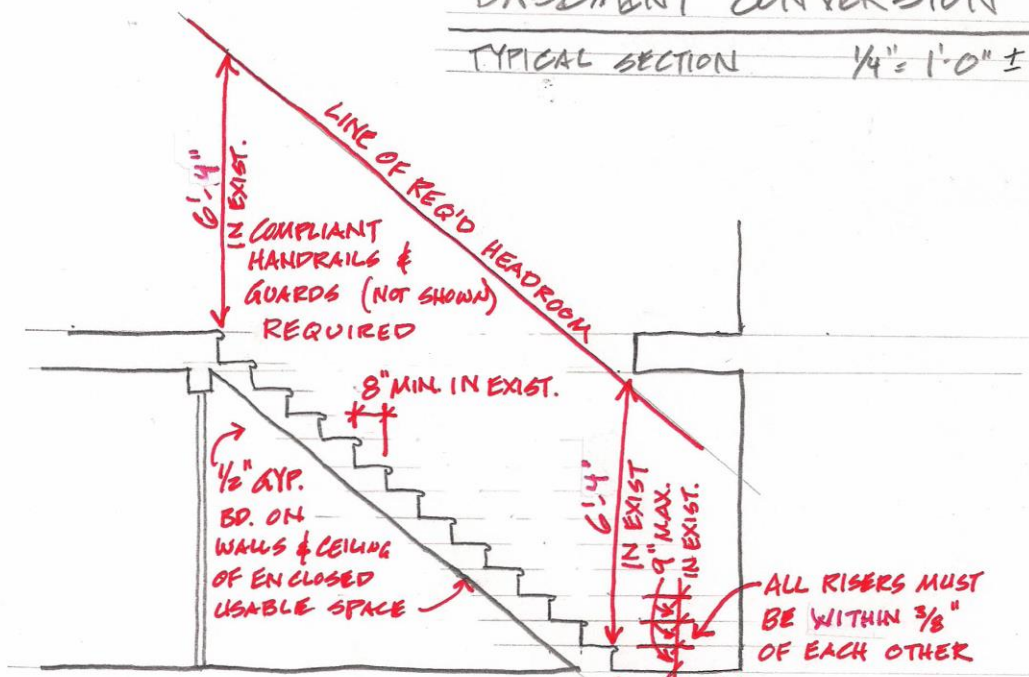
BASEMENT CONVERSION PLAN 2

456 MAIN ST. YOURTOWN CT 3/16" = 1'-0" ±



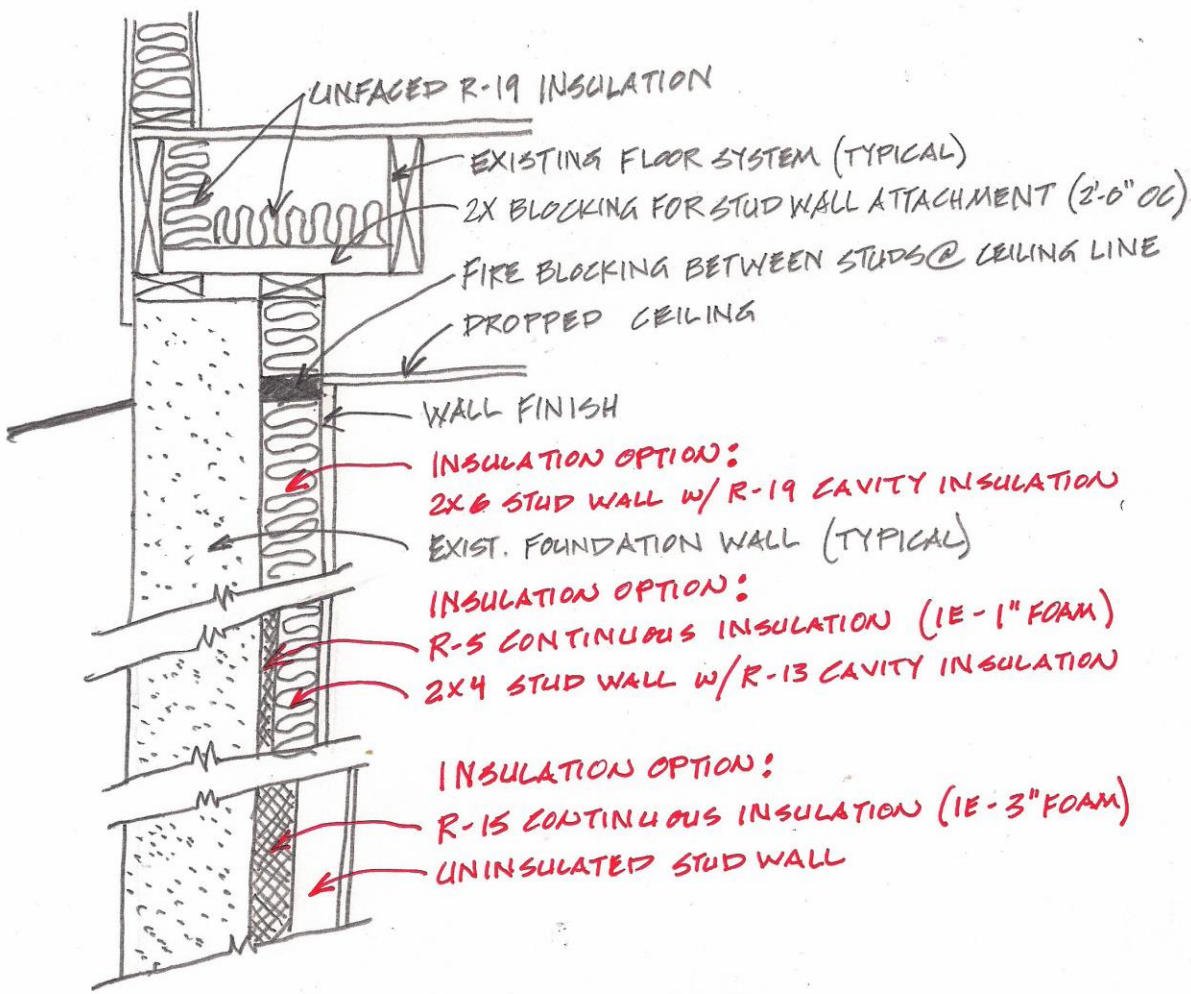
BASEMENT CONVERSION

TYPICAL SECTION 1/4" = 1'-0" ±

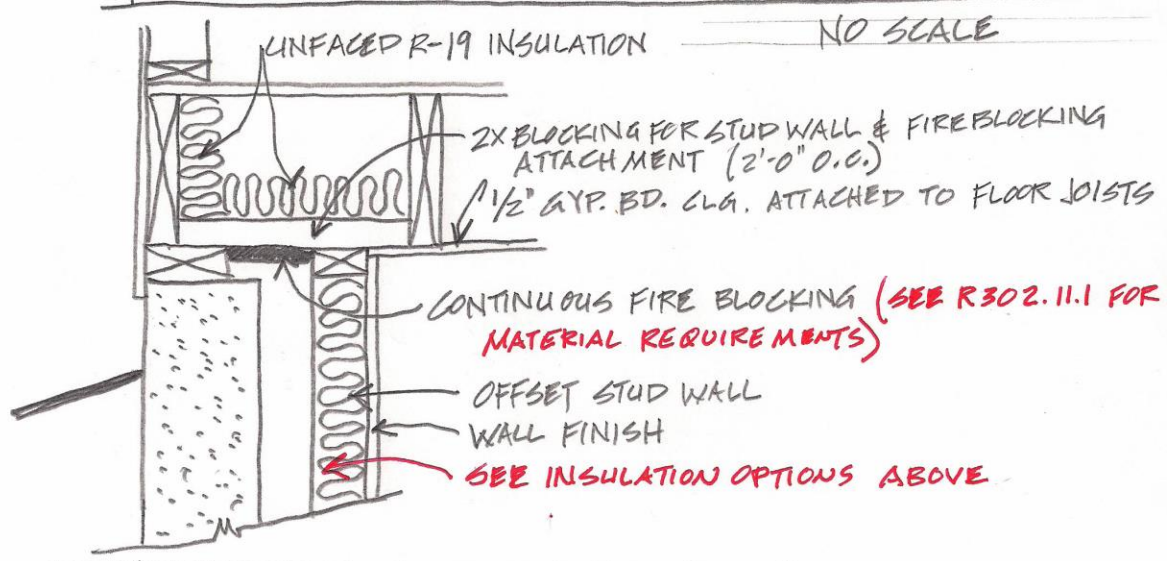


TYPICAL STAIR ISSUES

IN BASEMENT CONVERSIONS



FIREBLOCKING @ DROPPED CEILING



FIREBLOCKING @ OFFSET STUD WALL

NO SCALE