

# Plan Requirements for New Construction of Finished Basements for 2010 Residential Code

Provide 3 sets of plans showing compliance with the NYS Residential Code and the Town of Smithtown Zoning Regulations. Plans shall include the following:

- Floor plans shall include all room dimensions including ceiling height to finished ceiling and any ceiling projections
- Floor plans must show location and the use of each room
- Section indicating construction type and materials
- All sleeping rooms and habitable space in a basement require an Emergency escape opening. Identify each Emergency Escape opening on the floor plan. Include basement window and window well sizes.
- Indicate natural light and ventilation compliance or mechanical ventilation and artificial illumination.
- All dimensional lumber in contact with concrete must be pressure treated or protected from contact with concrete by an approved method. I.E. Sill Seal
- All enclosed rooms with heating equipment require fresh air supply and must meet required clearances as per manufacturer's specifications and the residential code
- All bathrooms must have exhaust fan directly vented to outside or a operable window located in bathroom
- Smoke detector
- Carbon monoxide detector
- Energy code compliance
- Plumbing rough plan if applicable

**Note: The items listed on this sheet are common deficiencies noted during finished basement plan reviews and are not intended to list all code requirements. For all code requirements see the New York State Residential Code and your design professional.**

## **BASEMENT CONVERSION**

### **SAFETY IS OUR FIRST CONCERN**

Over the years the need for additional space has made homeowners look to finish their basements for storage, TVs., card, or playrooms. Some people have even placed beds in their basement. As building inspectors we are looking for compliance with the New York State Building Codes and Town of Smithtown Zoning Codes. Safety is our first concern.

Egress or lack of means of exit from your basement can be fatal. It is something that cannot be ignored. This letter serves as a notice that a permit is required for basement conversion. Other concerns besides the main one of egress are light and ventilation. If electric and plumbing was installed, were they done according to the National Electric Code for electric and Residential Code of New York State for plumbing? If you have enclosed your boiler room, is there enough proper air for combustion?

The following code items will apply:

- Minimum ceiling height for a finished basement is 6 feet 8 inches; Beams, girders, ducts and other projections may project within 6 foot 4 inches of a finished floor.
- Recreation rooms and bedrooms require egress windows with compliant bulkheads or an egress door directly to the outside.
- If a bedroom exists the egress window or door must be directly located in the bedroom.
- Stairs must meet the proper stair width of 3 feet and headroom of 6 foot 8 inches and have code compliant guards and handrails.
- Finished basements must be provided with natural light not less than 8 percent of floor area and natural ventilation of not less than 4 percent of floor area or mechanical ventilation and artificial illumination.
- Hard-wired and inter-connected smoke detectors required.
- Carbon Monoxide detector required.
- All enclosed rooms with heating equipment require fresh air supply and must meet required clearances as per manufacturer's specifications and the residential code.
- All electric must meet the requirements of the residential code; national electrical code and electrical certificate must be obtained.
- All plumbing must meet the requirements of the residential code and plumbing permit is required.

The items listed on this sheet are common deficiencies that apply to finished basements and are not intended to list all code requirements.

You may wish to discuss these items with a design professional since this notice cannot include all applicable codes, rules, and regulations. You can also contact a building inspector at 360-7523 or 7524 or pick up an application at the Building Department. The Building Department will follow-up to assure compliance.

The information noted in this memo is in conjunction with our “Safety is Our First Concern” info sheet. This further explains certain New York State Code terminology and items needed for our plan review.

### **DEFINITION**

**Habitable Space** – A space in a building for living, sleeping, eating, or cooking. Bathrooms, toilet rooms, closets, halls, storage, or utility spaces and similar areas are not considered habitable spaces.

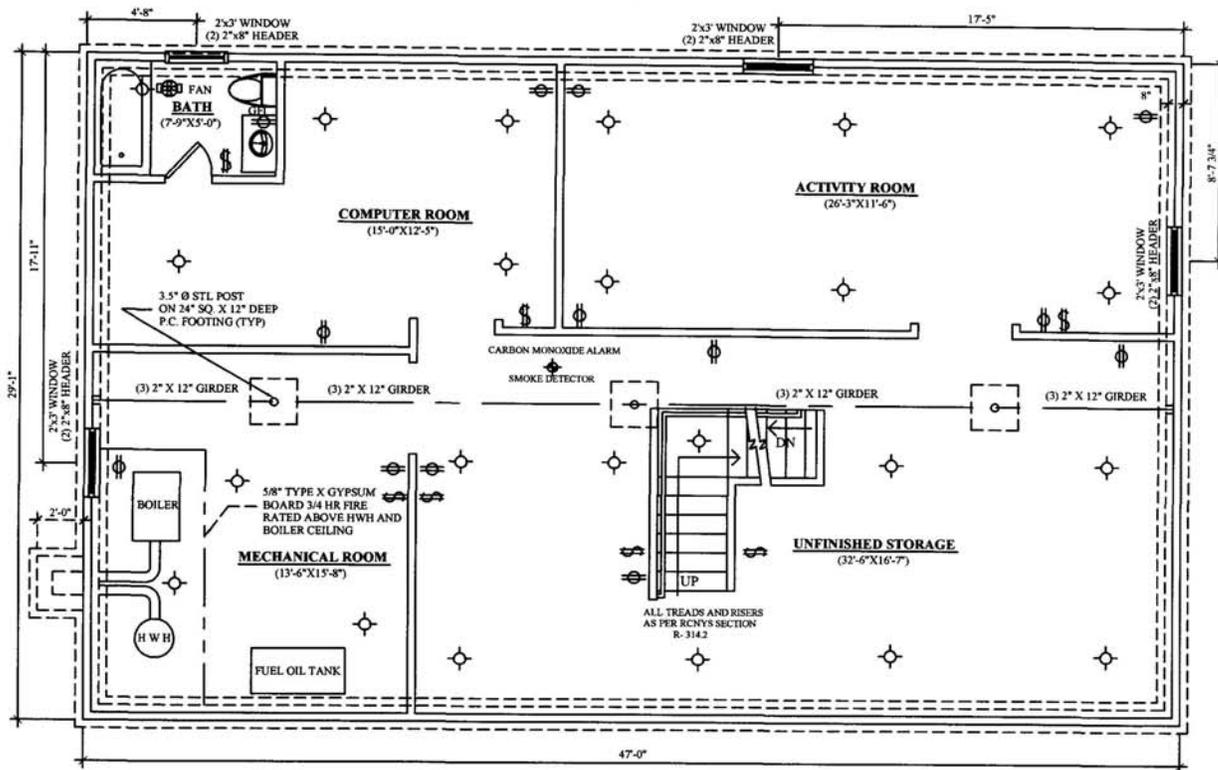
Each “**habitable**” room in a basement must meet the criteria for light, ventilation, egress and ceiling height. These are explained in detail in the Residential Code of New York State.

The submitted drawing should show the following:

- ✓ Room sizes.
- ✓ What rooms are used for.
- ✓ Show window and note sizes.
- ✓ Show all electrical, plumbing, and HVAC work to be done.
- ✓ Indicate smoke and carbon monoxide detectors on plan.
- ✓ Give a wall section – materials used in building the walls.
- ✓ Show compliance with light, ventilation egress, ceiling height, and required heating as per NYS Code.

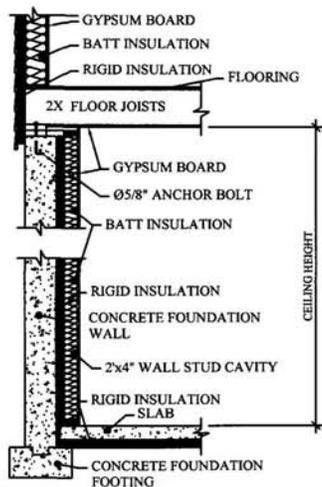
**Note:** After a review of the plan, a request for additional information may be necessary. This memo does not detail the entire Residential Code but is a helpful tool in understanding the application process. You may wish to contact a licensed professional.

# SAMPLE



## AS-BUILT BASEMENT PLAN

SCALE: 1/4"=1'-0"



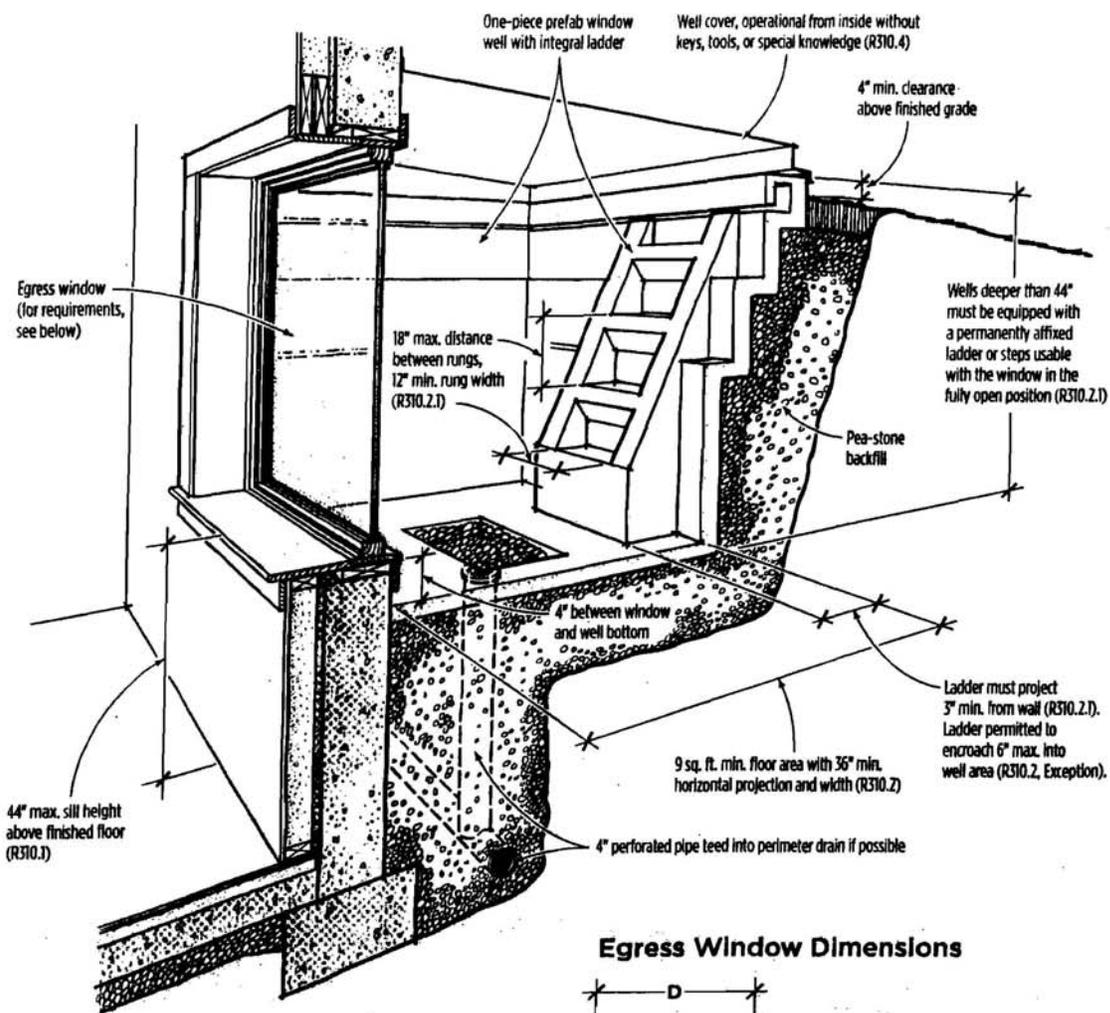
### LEGEND

-  40W LIGHT BULB
-  50 CFM EXHAUST FAN
-  ELECTRICAL CONVENIENCE RECEPTACLE OUTLET WITH GROUND FAULT INTERRUPTER
-  ELECTRICAL CONVENIENCE RECEPTACLE OUTLET
-  ELECTRICAL SWITCH

## BASEMENT WALL CROSS-SECTION

SCALE: 1/2"=1'-0"

# RESIDENTIAL CODE OF NEW YORK STATE - 2010



Egress window  
(for requirements,  
see below)

18" max. distance  
between rungs,  
12" min. rung width  
(R310.2.1)

One-piece prefab window  
well with integral ladder

Well cover, operational from inside without  
keys, tools, or special knowledge (R310.4)

4" min. clearance  
above finished grade

Wells deeper than 44"  
must be equipped with  
a permanently affixed  
ladder or steps usable  
with the window in the  
fully open position (R310.2.1)

Pea-stone  
backfill

4" between window  
and well bottom

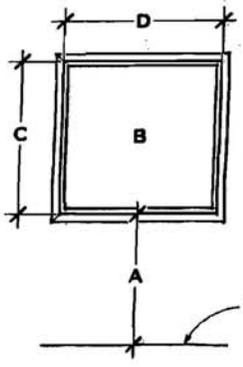
Ladder must project  
3" min. from wall (R310.2.1).  
Ladder permitted to  
encroach 6" max. into  
well area (R310.2, Exception).

9 sq. ft. min. floor area with 36" min.  
horizontal projection and width (R310.2)

44" max. sill height  
above finished floor  
(R310.1)

4" perforated pipe teed into perimeter drain if possible

### Egress Window Dimensions



- A = 44" max. sill height (R310.1)
- B = 5.7 sq. ft. min. net-clear opening (R310.1.1)
- C = 24" min. net-clear height (R310.1.2)
- D = 20" min. net-clear width (R310.1.3)

Below-grade egress windows must have a minimum 5.7-square-foot net-clear opening that is at least 20 inches wide and 24 inches high. A 20-inch-wide window opening, for example, would have to be 42 inches high to meet most codes.