

TOWNSHIP OF PEQUANNOCK

530 Newark Pompton Turnpike
Pompton Plains, N.J. 07444-1799

CONSTRUCTION DEPARTMENT
Tel: (973) 835-8668
Fax: (973) 835-9396

Finished Basements

1. This handout is based on the New Jersey Rehabilitation Subcode (NJAC 5:23-6). This is only a guide and may not cover each and every situation that may be encountered.
2. Permits are required for all finished basements as they are considered alteration work.
3. Drawings are required for finished basements. They must be **to scale** and include the owner's name, signature, address of job site, and the block and lot number. The plans must be drawn by the owner and occupant of said property or by a New Jersey registered architect. Contractors may **not** prepare the drawing unless they are licensed architects also.
4. Required permits:
 - **Building** for the general alteration of the space.
 - **Electric** for all new wiring, outlets, switches, panels etc. Note: The application must be sealed if anyone other than the homeowner is doing the work.
 - **Plumbing** for any additional equipment or fixtures. Note: The application must be sealed if anyone other than the homeowner is doing the work.
 - **Fire** for any gas fired appliances or detectors.
5. Required inspections:
 - **Building-** Framing, rough mechanical, insulation, and final.
 - **Electric-** Rough and final
 - **Plumbing-** Rough and final
 - **Fire-** Final
6. The drawings submitted shall include the following information:
 - (a) Show the entire basement floor plan, indicating partitions, doors, windows, stairways, guardrails, handrails, closets, columns, electric layout, furnace, hot water heater, and chimney, floor covering, and smoke detectors.
 - (b) Show wall cross section, indicating stud sizes, stud spacing, fire stopping, insulation, wall covering materials, ceiling material, ceiling height, height to girders, and height to heat ducts, if applicable.

Technical Requirements

1. All lumber in contact with concrete must be treated or naturally durable. Please review the ACQ notice for fastener requirements.

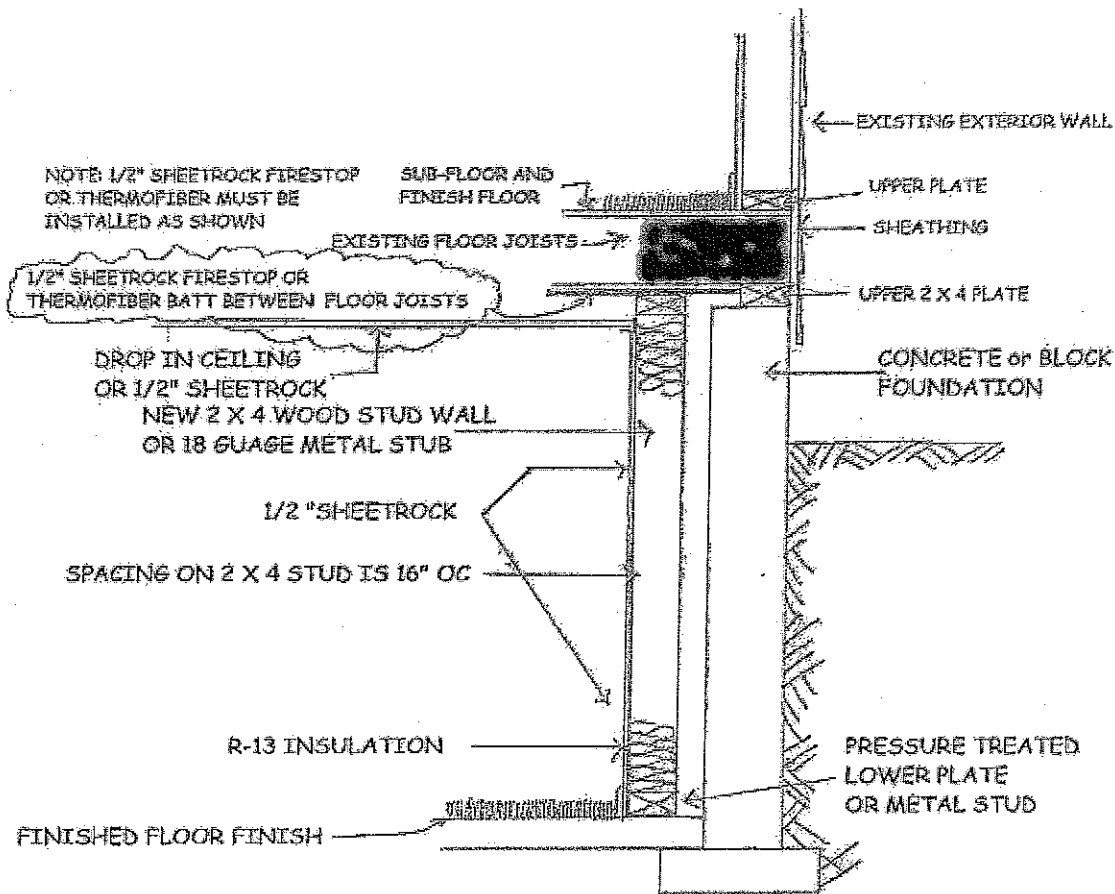
2. A room in the basement may not be used as a bedroom unless the room has two means of egress. An approved door directly to the outside or a means of egress window along with the interior egress stairway is acceptable.
3. Guardrails are required on the sides of the stairways with three or more risers and must be a minimum of 34" measured vertically from the leading edge of the tread.
4. The guard shall be constructed so that a sphere with a diameter of four inches cannot pass through any opening.
5. Stairways shall be a minimum of 36" wide, have risers of not more than 8 ¼ inches and treads not less than 9 inches. Headroom is to be a minimum of 6'8" measured vertically from the tread nosing.
6. Stairways with three or more risers require a handrail. All handrails must have a circular cross-section with an outside diameter of at least 1-¼ inches and not greater 2 inches. Handrails are to be smooth and free of any sharp edges or splinters. All handrail ends shall be returned to a wall or post.
7. Draft stopping is required in dropped ceilings that have an area of 500 square feet or larger. The space shall be divided into approximately equal areas. Draft stopping materials shall not be less than ½" gypsum board, 3/8" plywood or other approved material.
8. Fire blocking must be installed when the project exposes a wall, floor, ceiling, or roof framing spaces in accordance with the building subcode. Approved materials for fire blocking include mineral fiber, ½" gypsum board, 2X lumber, ¾" plywood, and fire caulk
9. Insulation must be installed in all walls and ceilings within the building envelope when exposed by the construction.
10. The Rehabilitation Code requires battery powered smoke detectors to be installed on each level of the structure whenever any alteration is done. Battery backup hard wired smokes must be installed in any newly crated bedrooms. Also all buildings with an attached garage or containing fuel burning appliances must have carbon monoxide detectors in the vicinity of the sleeping areas.
11. Combustion air is required to keep your furnace and possibly your hot water heater burning properly. Consult the manufacturer's instruction manual for minimum air requirements. The **minimum** required combustion air must be provided. The attached worksheet or similar calculations must be submitted show compliance with the requirements. Please complete and submit along with the application. All required clearances must be as per manufacturer or 2 inches minimum.
12. Every space intended for human occupancy shall be ventilated by natural or mechanical means. The minimum open area to the outdoors shall be 4 percent of the floor being ventilated for natural ventilation. If this cannot be accomplished,

mechanical ventilation shall be provided.

13. The load on the furnace/boiler must not be increased beyond that specified by the manufacturer. Heat must be provided in every space intended for human occupancy so a new system may be required if the existing is undersized. A minimum of 24 inches of clear space is required in front of the furnace for service. A door directly in front of the service side will be acceptable.
14. A plumbing riser diagram is required if any plumbing alterations include the installation of additional equipment or fixtures. Provide the specifications for of the injector pump if you are installing one also.
15. Interior finishes shall be class I, II, or III material with a flame spread between 76-200 and have a smoke development rating not greater than 450.
16. An electrical wiring diagram is required showing all receptacles, switches, fixture and panel locations. The spacing between outlets is required to be a maximum of twelve feet with the first outlet being no further than six feet from any doorway or opening. Bathroom receptacles must be GFCI protected and be on a dedicated 20 Amp. Circuit. A minimum of 36 inches must be maintained in front of all panels.

Deck Construction Guide

1. This handout is based on the **2006 International Residential Building Code NJ**.
2. Drawings are required for decks, they may be drawn by the homeowner or an architect licensed in the State of New Jersey.
3. A survey of the property indicating the proposed location of the deck is required. If the deck is more than 30" above finished grade it must have a guardrail and be located within the building envelope. Decks less than 30" with no rail may encroach into the required side and rear yard setbacks. No decks are permitted in front yards.
4. Prior to the construction of your deck, you must call for utility locations. The utility dig number is **1-800-272-1000**. Once you obtain the dig number, write it in the designated area of the construction permit application folder (inside rear cover of the folder).
5. Permits are required for new and replacement decks.
6. Decks cannot be put on top of septic systems, see the Health Department for location information.
7. Lumber to construct decks should be naturally durable or preservative treated.
8. Required Inspections:
 - **Footing**- After hole is dug but before concrete is placed.
 - **Final**- After everything is complete.



TYPICAL WALL SECTION

NOT TO SCALE

The above is a typical wall section detail that should be followed for all basement applications. You, as the designer must specify which materials you intend to use for your project. The above is simply a sample, with several options.

The following are the Codes used by all the municipalities in the State for new commercial and residential structures. *The State of New Jersey Uniform Construction Code, N.J.A.C. 5:23 et, seq* and the following National Codes as *amended by* the New Jersey Uniform Construction Code the *International Building Code/2000, New Jersey Edition* the *International Mechanical Code/2000* the *International Fuel Gas Code/2000* the *National Electrical Code/2000* the *National Standard Plumbing Code/2000* the *ASHRAE 90.1-99 Energy Subcode* and *CABO/ANSI A117.1-98*, and for all alteration work you would use *Subchapter 6 of the Uniform Construction Code* known as the *Rehabilitation Subcode*.

COMBUSTION AIR CALCULATION-Gas Fired Appliances

Date: _____ Name: _____

Address: _____ Phone #: _____

Block _____ Lot _____

Furnace BTU's _____ Hot Water Heater BTU's _____

Gas Dryer BTU's _____ Other Appliances BTU's _____

(All BTU ratings are to be the input ratings)

Total BTU's of all appliances: _____

Appliance total BTU's _____ X 40 cubic ft. = _____
(Calculate at 40 cu. Ft. per 1,000 BTU's) 1,000

Total Cubic Feet Needed _____

Space(s) available for Combustion Air:

<u>Room</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>	
_____	_____	X _____	X _____	= _____
_____ cu ft.				
_____	_____	X _____	X _____	= _____
_____ cu ft.				
_____	_____	X _____	X _____	= _____
_____ cu ft.				
_____	_____	X _____	X _____	= _____
_____ cu ft.				

Total Cubic Feet Available: _____

If total need is greater than what is available, then you must provide additional combustion air. Please indicate below how the additional combustion air will be provided.

COMBUSTION AIR CALCULATION-Oil Fired Appliances

Date: _____ Name: _____

Address: _____ Phone #: _____

Block _____ Lot _____

Furnace BTU's _____ Hot Water Heater BTU's _____

Gas Dryer BTU's _____ Other Appliances BTU's _____

(All BTU ratings are to be the input ratings)

Total BTU's of all appliances: _____

Appliance total BTU's _____ X 50 cubic ft. = _____
(Calculate at 50 cu. Ft. per 1,000 BTU's) 1,000

Total Cubic Feet Needed _____

Space(s) available for Combustion Air:

<u>Room</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>	
_____	_____ X _____	_____ X _____	_____	=
_____ cu ft.				
_____	_____ X _____	_____ X _____	_____	=
_____ cu ft.				
_____	_____ X _____	_____ X _____	_____	=
_____ cu ft.				
_____	_____ X _____	_____ X _____	_____	=
_____ cu ft.				

Total Cubic Feet Available: _____

If total need is greater than what is available, then you must provide additional combustion air. Please indicate below how the additional combustion air will be provided.