

Instructions – Basement

Building

1. Provide a wall section (side view) indicating all materials to be used for wall framing, insulation and finishing. Also provide same for ceiling. N.J.A.C. 5:23-2.15 (f) 1.ii.(3)
2. Provide a floor plan (looking down) showing dimensions for all rooms and doors.
3. Indicate type of ceiling to be installed.
4. Indicate a minimum R-13 insulation in all new walls. N.J.A.C. 5:23-6.6 (e) 15. These are the citations per NJ Rehabilitation Codes. Also paper vapor barriers on the face of insulation cannot be exposed.
5. Provide a minimum 2" air space between the new wall and existing foundation. Insulation and fir lumber cannot be in contact with the existing basement walls that are underground.
6. Indicate the uses of each room. *Use as Bedrooms and Business Offices requires special guidance and approvals from the Township. Please contact us.*
7. Indicate that vertical and horizontal fire and draft stopping will be done at any concealed connections where smoke and hot gases can travel. Also indicate fire blocking at top of wall penetrations and at 10-foot intervals vertically where air can travel behind a concealed wall space. Provide type of fire blocking material to be used. [R602.8 and R602.8.1]
8. Indicate that the walls and under stair surface in the closet below the stairs will be covered with ½" gypsum board. [R311.2.2.]
9. Provide the square footage of the finished areas.

Mechanical

1. Submit detailed drawings for all the mechanical work that is to be done. They must be legible and include the following:
 - Main duct sizes with approximate lengths
 - Supply and Return sizes and locations
 - Heater locationsNote: Supply ducts must connect from the main duct. They cannot connect from ducting that feed upper levels.
2. Provide gas pipe drawings, if applicable. Drawings must be detailed, legible and include the following:
 - What table was used for sizing. Residential per I.R.C. 2006 or manufacturer's sizing chart for CSST (Corrugated Stainless Steel Tubing) piping.
 - All pipe lengths and sizes. Include all mains and branch piping from point of delivery.

Electrical

1. Provide floor plan with symbols identifying locations of all devices, fixtures, electrical equipment and appliances.
2. Identify all required GFCI protected receptacles.
3. Provide a symbols legend to correctly identify all electrical equipment.
4. Provide type of wiring methods. Examples: ROMEX, Armor Cable Conduit with Single Conductors, etc.
5. Provide manufacturer's installation instructions for special equipment such as hot tubs, whirlpools and other similar equipment.

Fire Protection

1. Provide two (2) louvers in the wall, between the finished area and the heater/utility area, one high and one low, at least 10x10 inches clear opening
2. If bedrooms have been approved, include the following for each:
 - One Carbon Monoxide detector
 - One egress window
3. Get fire permit (Mandatory)

Plumbing (if applicable)

1. Provide floor plan drawing with measurements that show fixture location (minimum 3 copies signed by homeowner or sealed if drawn by a master plumber licensed in State of NJ)
2. Provide isometric riser drawings, include sanitary drains, vent piping, water piping and gas piping, if applicable. (minimum 3 copies signed by homeowner or sealed if drawn by a master plumber licensed in State of NJ). Gas piping may also be installed by a contractor with a Home Improvement Registration Number.
3. Submit manufacturer's "Cut Sheet" of any equipment, pumps or ejectors that will be installed.

Code sections referenced above under **Building** and **Mechanical** are from the *2009 International Residential Code New Jersey Edition*. This entire code book is available as a "Read Only" document at New Jersey Department of Community Affairs, Division of Codes and Standards (<http://www.state.nj.us/dca/divisions/codes/>) under **Codes & Regulations as International Residential Code – NJ ed., 2009**.

For the successful completion of your project, in addition to general guidance and information in this section, The Construction Department reserves the right to ask for any specific information or clarification unique to your project.