



## WARRINGTON TOWNSHIP CODE ENFORCEMENT

3400 Pickertown Road ♦ Chalfont, Pa 18914

Phone# 215-997-7501 \*Fax# 215-997-7539

### *RESIDENTIAL BASEMENT FINISHING/ REMODELING*

#### *Plan Submittal and Inspection Requirements*

The following information will provide guidance and instruction for submittal of a building permit application consisting of proposed construction for finishing/ remodeling a basement. The contractor or homeowner constructing the alterations should note regulations and codes might be changed without notice. Further questions or comments can be referred to the Building Inspectors Office prior to submission to make certain of proper information.

#### Step 1: Permits and Plan approval process:

A permit is required by Warrington Township prior to the alterations of the basement. For submission, the following is needed:

**Note:** The Township Code requires finished basements to either be equipped throughout with an automatic fire sprinkler system or have a second means of egress.

1. **Application:** A completed and signed building permit application.
2. **Plans:** Two (2) sets of construction drawings showing the following:
  - a. Must be to scale
  - b. Show the work being performed
    - i. Including electrical, plumbing, and mechanical
  - c. Wall section and floor plan with dimensions
    - i. List all room uses
  - d. If basement is sprinklered, submit a separate application for the modification of sprinkler system, as well as two (2) sets of plans to the Fire Marshal's Office
  - e. **Sleeping rooms:** Shall be provided with a secondary means of egress either by a door leading directly to the exterior or by an approved window egress.
    - i. Doors with steps to grade or walk out to grade
    - ii. Egress windows shall have a minimum opening area of five (5)-square feet, net clear opening with a minimum width of (20)-inches and (24)-inches in height.
    - iii. **Note:** Meeting the minimum height and width will not provide five (5)-square feet of openable area. Therefore, at least one (1) dimension will have to exceed the minimum. The sill of the window cannot be more than 44"-inches above the adjacent floor surface.
      1. If a window well is used, the window well shall be a minimum of nine (9) square feet with a projection of 36"-inches and cannot exceed 44"-inches in depth unless an egress ladder or steps is provided.
3. **Plan Details should consist of:**
  - a. A listing or wall section of construction materials to be used, for walls, insulation, and ceiling.
  - b. **Framing:** All stud wall bottom plates in contact with the floor slab shall be pressure treated or wood approved for ground contact.
    - i. Notching and boring in studs of bearing and non-bearing walls shall not exceed the limitations noted in the diagram above.
    - ii. Fire blocking/Fire Stop is required at ceiling level and walls 10-ft o.c.

- iii. Hallways shall have a minimum clear width of three (3) feet. Enclosed useable space under stairways shall be protected by ½-inch gypsum board on walls and ceiling under stair stringers.
- c. **Insulation:** Exterior walls of finished basement areas shall be insulated to provide a minimum insulation value of R-13, as per by energy code, Batts or continuous R-11.
- d. **Egress:** A secondary means of egress directly to the exterior is required from basements finished for living space under the following conditions;
  - i. Each basement not equipped throughout the entire dwelling with automatic fire sprinkler system shall provide at least one additional means of egress.
    - 1. The secondary egress may be a door or window leading directly to the exterior:
      - a. 3'x 6'x 8": door with steps to grade (bilco type), or walk out to grade
      - b. Window-minimum openable area of five (5) square feet with minimum height of twenty-four (24) inches and minimum width of twenty (20) inches with the bottom of the openable portion not ore than 44 inches above the floor.
      - c. All sleeping rooms must go directly from the sleeping room to the exterior.
    - 2. Basement finished adjacent to engineered swales or the FEMA floodplain may require a water-resistant window well. Contact the zoning officer to determine if your lot must comply with these criteria.
- e. **Ceiling Heights:** The minimum clearance requirement in all habitable room shall not be less than 7 feet.
  - i. Exception: Beams, main trunk lines for HVAC, and plumbing piping shall maintain a minimum height of six (6)-feet, six (6)-inches.
- f. **Mechanical Systems:** Access must be maintained to valves in the ceiling, walls, or to any gas valves such as valves to fireplaces on the first floor
  - i. Providing an identified access door or removable panel is acceptable.
  - ii. If walls are to be places around the furnace and hot water heater areas, adequate combustion air must be maintained to the appliance for the proper operation. (Door or wall louver).
  - iii. **Inside Air:** inside air may also be provided from an adjoining room through opening located within twelve (12)-inches of the floor and ceiling.
    - 1. Each opening shall equal one (1) – square inch for each 1,000 BTU/ hr of total input rating of all appliances and a total minimum of 100 square inches.
    - 2. The adjoining room must have a volume equal to at least fifty (50) cubic feet for each 1,000 BTU/hr of aggregate input rating of the appliances.
    - 3. Heat and ventilation are required for all habitable spaces. Fireplaces or portable devices do not meet this requirement.
- g. **Plumbing:** All plumbing fixtures shall be provided with approved drains and vents.
  - i. Approved water piping materials include welded or seamless cooper tubing (WK, WL, WM, K, L, or M), ABS plastic, polybutylene (PB), chlorinated polyvinyl chloride (CPVC), polyethylene (PE), and other materials as listed in the code.
  - ii. Underground building drain and vent piping may be ABS plastic, polyvinyl chloride (PVC-Type DWV), and other materials as listed in the code.
  - iii. Above ground sanitary drains and vent piping may be ABS plastic, polyvinyl chloride (PVC-Type DWV), and the materials as listed in the code. Approved gas piping includes copper (Type K or L), ductile iron pipe or other materials as listed in the code.

- iv. Submit a riser plan for new plumbing work. If an ejector pump is to be provided submit specification and model number. Pumps must be approved for use by a national recognized standard or ICC evaluation.
  - v. All piping materials shall be labeled with the manufacturer's mark or name and the quality or grade of the product. Maintain access to plumbing drain clean-outs and floor drains.
- h. **Electrical:** All electrical work shall comply with the 2008 National Electrical Code (NEC).
- i. All junction boxes shall remain accessible and shall not be concealed within walls or ceilings.
  - ii. Receptacles shall be provided for all unbroken wall spaces over two (2) feet wide.
  - iii. Receptacles shall be located so that no point on the floor line is more than six (6) feet measured horizontally from an outlet.
  - iv. All receptacles shall be of the grounding type.
  - v. All receptacles in sleeping rooms shall be protected by arc-fault circuit interrupters.
  - vi. Receptacles in bathrooms, within six (6) feet of sinks or counter top mounted shall be GFCI protected.
  - vii. At least one wall switch controlled lighting outlet shall be provided in each finished room and hallway.
  - viii. An approved electrical underwriter shall inspect all work (**See Township website for a list of registered underwriters**).
- i. **Smoke Detectors:** Smoke detectors are required in each sleeping area and on each story of the dwelling.
- i. When basements are finished all existing alarm devices that are accessible through an attic or crawl space shall be interconnected in such a manner that the activation of one alarm will activate all alarms within the dwelling.
  - ii. Detectors shall receive their primary power from the house wiring and shall be provided with battery backup.
- j. Carbon monoxide detector required in the area of sleeping rooms.
4. **Permit Approval:** At the time of permit approval the applicant will be informed of approval and costs (**See Fee Schedule**). At this time contractors must be registered with Warrington Township or provide the state attorney general number or the permit will not be released.

**Step 2: Inspections:**

**Building inspections are required at specific phases during construction. Once permit and plans are on site (a copy should remain on site) follow the listing of inspections listed on the Permit and reference the listing below. To schedule an inspection call the permits office 2-4 days in advance of inspection time needed at 215-997-7501.**

1. **(First Inspection)** Rough-in or Frame which may include:
  - a. Framing, Plumbing, mechanical, and rough electrical
  - b. A rough and final electrical inspection is performed by third party underwriter (**See the Township website or permits office for a list of underwriters registered with the Township**).
2. **(Second Inspection)** Insulation
3. **(Third Inspection)** A final inspection is required after all work is complete.
  - a. Once work is complete and construction has final approval the homeowner can expect a Use and Occupancy Permit (green permit) in the mail.
  - b. The U&O Permit should be kept for the homeowner's personal file for future records.