Community Development
Department

# BASEMENT REMODELING

**Permit Procedures**:
The following items must be submitted for review prior to a permit being issued:

1. A completed permit application.
2. All contractors used must be licensed with the Village (*VC 9-1-2-1).
3. A letter of intent shall be included with all plumbing permit applications. The letter shall be written on stationary of the licensed plumber of record and shall include the license holder's signature and, if the license holder is incorporated, the license holder's corporate seal. If the license holder is not incorporated, the letter must be notarized.
4. In April 2010, U.S. Environmental Protection Agency's (USEPA) new rule, the Renovation, Repair and Painting (RRP) rule, requires contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 to be certified by the USEPA and to follow specific work practices to prevent lead contamination.
5. Two complete sets of plans are required (see example – Figure 1). The plans must be drawn to scale, fully dimensioned, and show all mechanical systems (*VC 9-1-2-1(A) – Subsection 106.3.4.1).
6. Any structural modifications will require architectural plans.

**Specifications**: *Please note that these specifications are general and **not** comprehensive. Additional changes or suggestions may be made by the inspectors during the site check to ensure compliance with Village Codes.*

General and Walls

1. Walls shall be a minimum of 2" x 4", 16" on center construction (*VC 9-5-3-6(B); Subsection R602.5).
2. Exterior walls shall be insulated R15 minimum with a vapor retarder on the warm side (*IECC-R402.2.8).
3. Fire blocking is required at all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, spaces between top plate and concrete wall, and at penetrations of top plate (*IRC-R602.8).
4. Basement and any sleeping room (*a 'sleeping room' is any room, except a utility room or bathroom, separated from common areas by a door, and is not passed through in order to access common areas*) shall have at least one emergency and rescue opening (*IRC-R310).
5. Minimum ceiling height shall be not less than 7 feet (7') from the finished floor to the lowest projection from the finished ceiling.

Electrical

1. The number of power consuming devise on a general lighting circuit shall not exceed the capacity of the over current protection device (*VC 9-2-2-4; Subsection 220.12).
2. Recessed can lights shall be IC rated and of the sealed type (*NEC-410.116(2).
3. At least one 20-ampere branch circuit shall be provided to supply bathroom receptacle outlet(s) (*NEC-210.11(C)(3)). This receptacle shall be GFCI.
4. Receptacles shall be installed so that no point, measured horizontally along the floor line in any wall space, is more than six feet (6') from a receptacle outlet (*NEC-210.52A(2)).
5. Electrical boxes cannot be concealed in walls or ceilings.
6. All wiring shall be in metal conduit with metal boxes (4" square minimum).
7. The 2012 IECC requires 75% of lamps (bulbs, tubes) within a residence to be energy efficient. This includes but is not limited to CFLs. Standard incandescent bulbs do not qualify (*IECC-R404.1).
8. Arc-fault and GFCI protection may be required in certain locations.
9. Hard wired, interconnected smoke and CO detectors with battery back-up are required (*IRC-R314.3.1).

Plumbing

1. An overhead sewer system is required (*VC 9-3-2-27(B); Subsection 890.1340(b)(2)).
2. A sealed ejector pit (18" in diameter, and 30" deep, with a 2" vent) is required (*VC 9-3-2-27(B); Subsection 890.1340(b)(2)).
3. A 2" ejector pump with a check valve and a shut-off valve shall be installed. The ejector pump shall have a dedicated electrical outlet (*VC 9-3-2-28(A); Subsection 890.1360(a)(1)).
4. Underground drainage pipe size is 4" cast iron or schedule 40 plastic (*VC 9-3-2-27(A); Subsection 890.1320(a)).
5. Type L copper or galvanized steel water pipe may be used; plastic water lines are not allowed (*VC 9-3-2-42; Table A).
6. Stud guards are required for waste, vent and water lines (*VC 9-3-2-24(A); Subsection 890.1245).
7. Anti-scald shower valves are required (*IPC-890.690(b)).

**Inspections**:

Rough inspections are required before any mechanical installation is concealed. An insulation inspection is required before any drywall is installed. If plumbing and electrical systems are installed, underground (if applicable), service and rough inspections are required before any such systems are concealed (*IRC-R109). A final inspection is required when the basement is completed (*IRC-R109.1.6).

**References (revised 01/2014):**

*VC = Village Code
*ILPC = Illinois Plumbing Code (2004)
*NEC = National Electrical Code (2011)
*IRC = International Residential Code (2012)
*IECC = International Energy Conservation Code (2012)

Figure 1 – Typical Basement Remodeling Plan

Wall construction: 2" x 4" boards and 16" on center

Insulation: R-13