



## Basement Finish Requirements Village of Gurnee Building & Safety Division

1. Complete a Building Permit Application.
2. Include all pertinent contractors (i.e. general contractor, electrician, plumber, HVAC, etc.). Verify that electrician, plumber and HVAC contractors are registered to perform work within the Village. **These three contractors must be registered prior to the release of the permit.**

**Electrician** - copy of current electrical license with a reciprocating municipality and a certificate of insurance with minimum general liability of \$500,000, listing the Village as Certificate Holder.

**Plumber** - copy of current plumbing license with either City of Chicago or State of Illinois; and a copy of the current IDPH Plumbing Contractor's Registration. A letter of intent on plumbing contractor's letterhead.

**HVAC** - copy of registration/license with any municipality and a certificate of insurance with minimum general liability of \$500,000, listing the Village as Certificate Holder.

3. Include: Two sets of layout of entire basement. Show location of stairs, existing windows, and furnace and mechanicals. Include location of electrical (show outlets and switches), supplies and returns for HVAC, any new walls and doors, and plumbing.
4. Include proposals/contracts of all sub contractors (i.e. electrician, plumbing, HVAC, etc.)
5. See below on a few of the frequently asked code requirements.
6. Inspections required:
  - a. Underground Plumbing
  - b. Rough - framing, electric, heating, and plumbing.
  - c. Insulation (for exterior walls)
  - d. Final

### **GENERAL:**

1. Provide proper clearances to appliances for safe operation and working clearances for servicing. (These clearances can be found marked on the appliance or in the installation instructions).
2. Appliances shall be capable of replacement without the removal of permanent piping, plumbing, or framing.
3. Access and access panels shall be provided for gas valves, water valves, cleanouts, and electric junction boxes. These panels need to be large enough to provide for proper servicing.
4. Access to ejector pumps, sump pumps, and water meters need to be provided to provide for servicing and replacement.

5. All bedrooms shall be provided with secondary means of egress (escape window or exterior door). The maximum sill height shall be 42 inches above the floor. The units shall be operable from the inside without the need for separate tools or special knowledge.
6. Homeowners wishing to install their own electrical work shall schedule with the Village of Gurnee Building Department, an appointment to take an electrical exam. The homeowner shall bring with him/her a detailed drawing of the basement finish electrical work, including: raceway material and size; wire size; breaker size; circuits separately labeled; and list of what each circuit controls.
7. Finished walls shall be installed with a minimum R-19 cavity or R-15 continuous insulation.

**CARPENTRY:**

1. Stud spacing shall not exceed 16 inches on center.
2. All wood in contact with concrete shall be treated or naturally durable.
3. Notching of framing members is prohibited. Drilling of framing members shall only be done in strict conformance with the building codes.

**PLUMBING:**

1. Basement plumbing shall go to an approved ejector pit. All ejector pits shall be a minimum of 30-inches in depth.
2. All below grade waste and vents shall be cast iron.
3. There shall be no more than two toilets on a 3-inch horizontal waste (a toilet on an ejector counts as one toilet).
4. Manufactured spun air chambers are not allowed.
5. Tub and shower valves shall be stamped with an ASSE 1016 approval.
6. Provide type L copper above ground for water piping.

**ELECTRICAL:**

1. Provide a 110 volt battery back-up interconnected smoke detector in the main room, furnace room, and within 15-feet of any bedroom door. Must have smoke detector within 15-feet of all sleeping areas.
2. Receptacles shall be placed on any wall that is at least two feet in length, with spacing not to exceed six feet from any opening or interruption in a wall, and is more than twelve feet from receptacle to receptacle.
3. Light switches shall be provided at each point of entry or exiting of any room.
4. Light switches shall be provided at the top and bottom of stairs.
5. Provide closet lights in all closets 8 square feet or larger. All closet lights shall be recessed or florescent with a solid lens covering the bulb.

6. Electric panels shall not be installed in a clothes closet or bathrooms, and shall be provided with a clear working space of 30-inches wide and 36-inches in front of the panel.
7. All bedroom receptacles shall be protected by an arc-fault protected branch circuit.
8. Provide fan-rated boxes for all ceiling boxes more than 2 feet from walls.
9. No more than 9 openings on 15 amp circuit; 11 openings on 20 amp circuits are allowed.
10. Receptacles must be rated at branch circuit ampacity.
11. Bathrooms must have a 20 amp protected branch circuit.
12. Unfinished parts of the basement must have a GFCI protected receptacle installed.
13. Provide a light in every enclosure that houses equipment.

**H.V.A.C.**

1. Provide equal supply and return air ducts to each room, except where prohibited.
2. Combustion air shall be provided to all rooms containing gas appliances to ensure safe operation. Combustion air shall not be taken from bathrooms or bedrooms.
3. Bathroom exhaust fan must be vented to the outside atmosphere.
4. Flexible ducts are limited to 14-feet maximum length and shall only be used in accessible areas.
5. Access to mechanical rooms shall not be through a bedroom or bathroom.
6. Show on drawings H.V.A.C. - mark as shown:

Supply 

Return 

Exhaust 