

BONDING OF METAL ITEMS AROUND HOT TUB OR SPA

- Metal conduit and metal piping located within 5ft of the inside walls of the hot tub or spa shall be bonded to the hot tub or spa with a #8 solid copper wire unless separated by a permanent barrier.
- All metal surfaces that are within 5ft of the inside walls from the inside walls of the hot tub or spa shall be bonded to the hot tub or spa with a #8 solid copper wire unless separated by a permanent barrier.

PERMIT

Please submit an Electrical Permit application with a payment. If a homeowner is obtaining the permit, a Homeowner Cautionary Statement will also need to be submitted with the application. A final inspection is required.

If you have any question, please contact the Electrical Inspector at (414) 766-7000 between the hours of 7:30 a.m. - 4:00 p.m.



Hot Tub or Spa Installation *(Residential Use)*

Electrical Requirements



8040 S. 6th Street
Oak Creek, WI 53154



(414) 766-7000



www.oakcreekwi.org

GENERAL INFORMATION

The electrical installation of hot tubs or spas shall conform to the manufactures instructions that are included with the unit. This will pertain to the size of the current carrying conductors, neutral conductor (if needed), and the size of the ground wire required. The instructions will specify the correct size of the overcurrent and GFCI device that will be used. The instructions will be needed at the time of the inspection to check proper wire size, overcurrent and GFCI device.

- There shall be a disconnecting means at least 5ft minimum away from the spa or hot tub.
- The disconnect shall have an ampere rating not less than the overcurrent device required for the unit.
- The conductors supplying the hot tub shall be installed in rigid metal conduit, intermediate metal conduit (IMC) or rigid nonmetallic conduit (gray PVC).
- Nonmetallic-sheathed cable (NM), MC cable or armored cable may be used in the interior of the dwelling to supply the unit.
- The conduits shall be buried at the depth as follows:
 - Rigid and intermediate conduit 6" below grade
 - Nonmetallic conduit 18" below grade

OUTDOOR LOCATIONS

The wiring methods shall comply with provisions of swimming pools and the manufactures installation instructions of the unit plus the exception below

- Listed packaged units using a factory-installed or assembled control panel or panelboard shall be permitted to use flexible connections of not more than 6ft of liquidtight flexible conduit or a cord and plug connection not longer 15ft when protected by a GFCI.
- One 125V 15A or 20A receptacle shall be installed not closer than 6ft but not more than 20ft from the inside edge of the hot tub. This receptacle shall be GFCI protected. All new receptacles installed to meet this section shall have in-use covers. Existing receptacles that require GFCI protection shall have in-use covers.
- The overhead and underground clearance of service conductors shall comply to that of swimming pool regulations.

INDOOR LOCATIONS

The wiring methods shall comply with the provisions of swimming pools and the manufactures installation instructions of the unit plus the exceptions below

- Listed spa and hot tub packaged units rated 20 amperes or less shall be permitted to cord and plug connected to facilitate the removal or disconnection of the unit for maintenance and repair.
 - At least one 125-volt 15 or 20 ampere receptacle on a general purpose branch circuit shall be located a minimum of 6ft but not more than 10ft from the inside wall of the spa or hot tub.
 - Receptacles on the property shall be located at least 6ft measured horizontally from the inside edge of the pool.
 - Receptacles of 125-volts located within 10ft of the inside walls of the spas or hot tub shall be protected by a ground fault circuit interrupter.
 - Lighting Fixtures, lighting outlets and ceiling suspended (paddle) fans located directly over the spa or hot tub or within 5ft from the inside walls of the hot tub or spa shall be a minimum of 7ft 6in above the maximum water level and shall be protected by a ground fault circuit interrupter.
 - Lighting fixtures, lighting outlets and ceiling fans that are located 12ft or more above the maximum water level shall not require a ground fault circuit interrupter protection.
 - Lighting fixtures installed less than 7ft 6in and protected by a GFCI shall meet the following requirements:
 1. They shall be recessed fixtures with a glass or plastic lens and non-metallic or electrically isolated trim suitable for damp locations.
 2. Surface-mounted fixtures with a glass or plastic globe and a nonmetallic body or a metallic body isolated from contact. These fixtures shall be suitable for use in damp locations.
- Switches shall be located at least 5ft measured horizontally from the inside edge of the spa or hot tub.