



City of Urbandale
3600 86th Street
Urbandale, IA 50322-4057
www.urbandale.org
Building Department 515-278-3930



Hot Tub & Spa Handout

Definition

Hot Tub or Spa - Factory fabricated unit consisting of a spa or hot tub vessel with all the water circulating, heating, and control equipment integral to the unit.



Spa



Hot tub

Spas and Hot Tub Electrical Requirements NEC 680 Parts I, II & IV

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| <ol style="list-style-type: none">1. Must have a disconnecting means that must be readily accessible and must be at least 5 ft. away, and within sight of the spa. NEC 680.13<ul style="list-style-type: none">• If a cord & plug is used the length cannot exceed 15 ft.• (Non- Single Family Homes) installations must also comply with NEC 680.412. Provide at least one receptacle, locate at least 6 ft. away and no more than 20 ft. of the inside walls of the spa and must be less than 6.5 ft. above grade3. Equipotential bonding may be required. Spas and Hot Tubs must meet all the conditions in NEC 680.42(B) to be exempt. (<i>Typical of in ground spa installations</i>) | <ol style="list-style-type: none">5. GFCI Protection and Clearances<ul style="list-style-type: none">• Spas and Hot Tubs equipment must be GFCI protected• Receptacles must be 6ft away and if located within _____ of the inside walls of the spa/hot tub must be GFCI protected.
20 ft. (<i>When installed outdoors</i>)
10 ft. (<i>When installed indoors</i>)• Switches must be at least 5 ft. away and GFCI protected if within 10 ft• Luminaries and fans must comply with NEC 680.43. GFCI protected if within 12 ft. but may not be less than 7.5 ft. from water surface |
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Location

Property corner pins need to be located prior to first inspection. If the property corner pins cannot be found by the owner or contractor, it is the applicant's responsibilities to have a registered land surveyor establish the property corner pins. Hot tubs and spas must be set back a minimum of 10 ft from all property lines, as measured to the closest edge of the water, any structures such as decks, equipment sheds, slides, diving boards, ect. appurtenant to the hot tub or spa must also not be located within any front setback or street side yard setback that zoning requirements do not allow to be fenced. Urbandale Ordinance. 160.36

Access barrier required IBC 3109.4.1

One or more of the following methods must be provided to prevent access to the hot tub or spa

1. **Safety cover as a barrier** - A power safety cover complying with ASTM F 1346
2. **Fence as a barrier** - A minimum 48in. high non-climbable fence. See handout link below
3. **Pool Structure as a barrier** - Must be minimum 48in above grade. See handout link below
4. **Dwelling as a barrier** - See handout link below

Information on Access barriers, see handout link [Residential Swimming Pool Fences and Safety Devices](#)

Discharge

- Salt water hot tubs or spas must drain and discharge to the sanitary sewer per DNR regulations.
- Chlorinated hot tubs or spas may drain to the sanitary sewer or discharge onto the homeowner's yard provided the chlorine has dissipated to a minimal level similar to drinking water. De-chlorinated drainage from hot tubs and spas onto yards must not affect neighboring properties or flow across public walks. Discharge rates to the sanitary sewer must be reviewed and approved by Urbandale Engineering before a permit is issued.

See separate handout [Draining Pools and Spas](#)

Additional permits may be required

- **Deck permit** - a deck permit and plan review is required for a pool deck. – See references below for link
- **Fence permit** - a fence permit is required if planned. – See references below for link
- **Electrical permit** - are required when applicable
- **Plumbing permit** - are required when applicable

Before you dig

Call "One Call" for utility locations before you dig at 811. Utility locations are typically completed within 48 hours of your request. Underground utility location prior to digging is required by state law. This service is free of charge.

Required Inspections

1. **Foundation (to verify approved placement)** - property corner pins are required to be located prior to inspection
2. **Electric Rough-In** - installation of electrical for pool equipment
3. **Plumbing Rough-In** - observe pool discharge method
4. **Deck footings** - if applicable
5. **Deck framing** - if applicable
6. **Final Building (For all applicable permits)** - Pool, deck, fence, electric & plumbing

References

- **Swimming Pools- Dangers of Electrocutation**
<https://mikeholt.com/newsletters.php?action=display&letterID=1792>
- **Article 680 – Pools, Spas, Hot tubs, Fountains and Similar**
https://www.mikeholt.com/files/PDF/Swimming_Pools_Spas_2017NEC.pdf
- **Deck Plan Review and Inspections**
<https://www.urbandale.org/DocumentCenter/View/4647/Deck-Framing-Design-handout?bidId=>
- **Residential Swimming Pool Fences and Safety Devices**
<http://www.urbandale.org/DocumentCenter/View/4657/Pool---Residential-Fences---Alarms-2016?bidId=>