THE CITY OF
DAVENPORT
IOWA | USA

Swimming Pool & Spa Codes

www.davenportiowa.com/build

Did you know?

A permit is required for any swimming pool or spa over 24 inches in depth, whether the pool is above ground or in-ground.

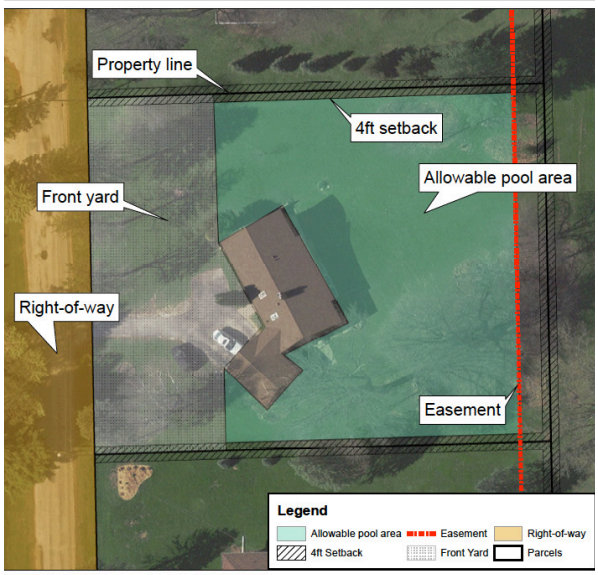
Things to know before you think about installing a pool

- A fence or other barrier that is at least 4 feet high is required around the pool.
- Pool gates are required, and must be self-closing and self-latching.
- Pools may only be located on the side or a rear yard of a property.
- Pools may not be located closer than 4’0” from the rear property line and no closer than 4’0” from the side property line.
- Before you build or purchase, know that a site plan and pool barrier design is required to obtain a permit. MidAmerican Energy also has specific requirements. See Process for Obtaining Pool Permits.
- Be sure to check the restrictive covenants/ homeowner’s association requirements. The City of Davenport does not review nor enforce any covenant requirements associated with private property. It is the property owner’s responsibility to ensure compliance with any applicable covenants.
- See the next page for more details, on pool barriers, outlets and other code requirements.

Fast Fact: The Davenport Fire Department does not fill pools.

Building codes exist to help protect public health and safety. Those codes also apply to swimming pools and spas. The City of Davenport has adopted the 2020 National Electrical Code and the 2021 International Building Code.

Site Plan Requirements



Process for Obtaining Pool Permits

1. Complete the MidAmerican Energy Approval Form found on pages 5 and 6 of this packet. Email the completed form to: **poolforms@midamerican.com.**
2. Submit site plan, barrier details, building permit application, and a copy of MidAmerican Energy’s Pool Approval. An electrical permit is also necessary for all new wiring/circuits.
3. Wait for an approved building permit application and/or submit any additional details needed for approval. This may take three to five days.

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Permit Approved | Time to Construct

1. Once you are ready to begin the pool installation, keep these key inspection requirements in mind.
2. For in-ground pools, contact Natural Resources at 563.326.7923 to arrange for a site inspection before any excavation work is started.
3. Call for a building and electrical inspection after the pool has been set up, with the electrical bonding in place - but NOT covered - and the ladder is on-site. Do not fill the pool more than 24 inches before step 4.
4. Call for inspection once the pool barrier is in place.
5. Call for final inspection. Once the pool has passed final inspection you are free to continue filling and enjoying your pool for years to come.
6. Properly drain and winterize your new pool in the fall to avoid fines for illicit discharge and keep your investment in good shape. Find out more at www.davenportiowa.com/poolwater.

Questions? Development and Neighborhood Services, 563.326.7745, Davenport, Public Works Center, 1200 E 46th St, Davenport, IA.

Swimming Pool Barrier / Fence

- Barrier/fence must be a minimum of 48 inches in height.
- Bottom of barrier/fence may be a maximum of 2 inches above grade.
- Barrier/fence openings must be a maximum of 4 inches.
- The barrier/fence must be difficult to climb over. The barrier should not be like a ladder.
- The barrier/fence must enclose or surround the entire pool.
- Openings in the barrier shall not allow passage of a 4 inch diameter sphere.

- Solid barriers which do not have openings, such as a masonry or stone walls, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
- If the barrier is composed of horizontal and vertical members, such as a wood fence, the horizontal members must be located on the swimming pool side of the fence. Spacing between vertical members must not exceed 1 ¾ inches. If there are decorative cutouts within vertical members, spacing within the cutouts must not exceed 1 ¾ inches in width if the horizontals are 45 inches or less from top to top.
- Maximum mesh size for chain link fences shall be a 1 ¾ inch square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1 ¾ inches.
- If the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 ¾ inches.

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Swimming Pool Gates

- Access gates shall comply with the previous requirements and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and must be self-closing and have a self-latching device. If the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism and openings shall comply with the following:
  - The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate, AND
  - The gate and barrier shall have no opening larger than ½ inch within 18 inches of the release mechanism.
  - Gates other than pedestrian access gates do not require a self-closing or self-latching device and shall remain locked when not in use.

- If the dwelling wall acts as part of the pool barrier:
  - Doors that provide access to the pool require audible alarms capable of being heard in all areas of the house and must be listed and labeled as a water hazard entrance alarm in accordance with UL2017. Door alarms shall always be "on" and automatically reset under all conditions. Deactivation button must be installed a minimum of 54” above the floor.
  - Home security door alarms are noncompliant.
- For an above-ground pool with a barrier mounted to the top of the pool wall structure, and the means of access is a ladder or steps, the ladder or steps shall be surrounded by a barrier which meets all the barrier requirements outlined above OR the ladder must be removed when not in use.

Required Receptacles

- Pool equipment and fixtures must have at least one GFCI listed weather resistant receptacle. The receptacle must be a minimum of 6 feet and a maximum of 20 feet from pool walls with an ‘in-use’ cover.
- No poolside outlets are allowed unless they can be located more than 6 feet from pool walls.
- All grade accessible listed weather resistant receptacle outlets must be GFCI protected with an ‘in-use’ cover.
- Receptacles that provide power for water-pump motors or for other loads directly related to the circulation and sanitation system must be located at least ten feet from the inside walls of the pool, or not less than six feet from the inside walls of the pool if they meet all of the following conditions:
  - Receptacles are of the grounding type
  - Receptacles have GFCI protection

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Lighting and Outlets

- Outdoor lighting outlets must be no less than five feet horizontal to pool walls unless the lights are greater than 12 feet above pool walls.
- GFCI-protected fixtures must be no less than five feet from pool walls.
- Existing secure fixtures may be located less than five feet horizontal to the pool walls, but must be greater than five feet vertically if GFCI protected.
- Indoor lighting outlets located over water must be a minimum of seven feet six inches, GFCI protected and enclosed.

Grounding

- There may be no splicing of grounds.
- Bond all metal less than five feet away from the pool with #8 copper.
- PVC to underwater lights require a #8 insulated ground.
- Perimeter surface must be bonded on installed pools to ensure proper grounding.
- Pool water must be bonded on permanent in-ground and above ground pools.

IMPORTANT NOTE!

As a condition of the City's federal stormwater permit, the city has adopted and must enforce an Illicit Discharge Detection and Elimination ordinance pertaining to the storm sewer system.

Discharging chlorinated (or other chemically saturated) pool and spa water to a storm drain without following water quality recommendations is considered an illicit discharge, and regulated under the stormwater permit.

You could be fined.

Learn more at www.davenportiowa.com/poolwater

Did you know?

- Draining swimming pools and spas to storm drains can pollute creeks, streams, rivers and lakes with copper, chlorine and other chemicals.
- Storm drains flow directly into our waterways without treatment!
- Chlorine and copper are toxic at low levels to aquatic life.
- Bromine and peroxide are also disinfectants and oxidizers and will have the same effect in our waters as chlorine.
- Chlorine is toxic to fish and other aquatic life at very low levels. Chlorine burns the gills and fins of fish, destroys sensory organs, interferes with the ability of fish to find food, and causes internal organ damage. If the receiving water contains a lot of decaying, organic matter (from decaying plants, algae and bacteria) and chlorine it can combine with the byproducts to form compounds called trihalomethanes, which are persistent in the aquatic environment and post a health threat to living things for a long time.
- Copper is found in pipes and used as an algaecide in swimming pools. It is a pollutant that directly threatens aquatic life. Excess copper in water causes the formation of acid pH levels, burns the gills of fish, interferes with respiration, and causes internal organ damage.

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Draining Pools and Spas

www.davenportiowa.com/naturalresources

Your pool and spa water can be toxic to aquatic life in our creeks and streams. Drain pools and spas responsibly.

Recommended Procedure for draining pools and spas

Chlorinated Pools

- Drain pools and spas to your sanitary sewer cleanout when possible, and after taking the proper precautions. If this is not an option, discharge over land.
- Before draining, ensure chlorine level is <1ppm, pH is between 6.5 and 8.5 and the total suspended solids (TSS) is <60 mg/l. Chlorine levels can be reduced with three to four days of sunlight. (Leaving the pool without chlorine longer than three to four days may encourage growth of bacteria).

Salt Water Pools

- Never drain to the street, gutter or storm drain! Discharge water to a sanitary sewer clean out. If you do not have sanitary sewer clean out, contact Public Works at 563.326.7923 to seek assistance with locating a sanitary outlet.

Never drain pool water to the street, gutter or storm drain!

Draining to the sanitary sewer system not an option? Drain the water over at least 15 feet of grassy landscape. Keep the water flow low, about 12 gallons per minute to prevent erosion of soil and vegetation.

Tips for Finding your Sanitary Sewer Clean Out:

- If your kitchen or bathroom is on an exterior wall of your house, look along that wall for the clean out.
- Check your property or sidewalk for a small concrete or metal cover marked “sewer”.
- Look for a small circular cap on a pipe. This may be located on the ground or the side of your home.
- If you can’t locate the clean out, contact the Public Works Department at 563.326.7923.

Chemicals used in pools and spas can be toxic to our waterways. Take steps to properly dispose pool and spa water and protect our creeks and streams.

Chemicals such as chlorine and copper contained in pool water burn the gills and fins of fish when introduced into our waterways. Water from salt water pools can be equally damaging, because the byproduct of the salt water process, bromoform, is also harmful to aquatic life. Learn more about the harmful effects of pool water on our environment on the reverse.

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- Copper is found in pipes and used as an algaecide in swimming pools. It is a pollutant that directly threatens aquatic life. Excess copper in water causes the formation of acid pH levels, burns the gills of fish, interferes with respiration, and causes internal organ damage.
- A salt water pool is a swimming pool filled with a mild salt solution. A public misconception is that salt water pools provide a more environmentally friendly alternative to chlorine. Salt water pools use a chlorine generator to produce its own chlorine by breaking down salt (sodium hypochlorite). Salt must be added to the pool to keep the salt solution strong enough for the chlorine generator to work. Salt water pools generate the chemical byproduct bromoform. Bromoform is a persistent organic pollutant that accumulates in the environment and is very harmful to aquatic life.

Other Pool Tips that Reduce Corrosion and Water Pollution

- Manage pH and water hardness to minimize copper corrosion in pipes that can stain your pool.
- Copper algaecide can collect in the pool filter. Rinse cartridge filters or clean diatomaceous sand filters onto a dirt area and spade the residue into the soil.
- Consider using alternatives to copper-based algaecides such as sodium bromide.

Installing a pool? Permits are required for any swimming pool over 18 inches deep, above or in-ground. Find more information on pool codes, gate, barrier, and other location requirements at https://davenportiowa.com/common/pages/DisplayFile.aspx?itemId=16863733.

Fast Fact: The Davenport Fire Department does not fill pools.

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