

CITY OF TROY SWIMMING POOL REGULATIONS

Swimming pools shall be constructed in accordance with Appendix G of the 2003 Michigan Residential Code.

A Building Permit is required for all swimming pools with a depth of 24 inches or more.

Safety devices (Including alarms, enclosures, fences, covers, etc.) shall conform to Sections AG105 of the 2003 Michigan Residential Code.

Plumbing, Electrical, and Heating Permits shall be obtained when applicable.

Swimming pools are considered structures; therefore, their locations would have to conform to the zoning Ordinance. Pools would not be allowed in any yards except the rear.

	IN GROUND	ABOVE GROUND
<u>DISTANCE</u>		
Side and Rear lot lines	6 feet	6 feet
Corner lot - Outside Lot Line (not a double front lot)	10 feet	10 feet
From buildings (recommended)	10 feet	10 feet
<u>FENCE</u>	If applicable under Troy City Code, Chapter 83	If applicable under Troy city Code, Chapter 83
<u>YEARLY INSPECTION</u>	No	Yes, if relocated
<u>PERMIT FEE</u>	Based on value of pool	Based on value of pool

Pool permits will not be issued for new home sites that have not had final grading completed and approved by the City.

ELECTRICAL

NOTE: Each location will be judged on its own merits. Installation shall conform to Chapter 41 of the 2003 Michigan Residential Code.

THE BUILDING INSPECTOR PRIOR TO ISSUANCE MAY REQUIRE A SITE CHECK.

CITY OF TROY
BUILDING DEPARTMENT

POOL NOTES

IN AN EFFORT TO EXPEDITE THE PROCESSING OF BUILDING PERMITS, THIS SHEET IS BEING ATTACHED RATHER THAN WRITING THESE NOTES DIRECTLY ON THE DRAWINGS. **IT SHALL BE CONSIDERED PART OF YOUR APPROVED BUILDING PERMIT. CHECK DRAWINGS FOR ANY ADDITIONAL NOTES:**

1. PROTECT ALL EXCAVATED AREAS TO 4 FEET AT ALL TIMES.
2. SAFETY DEVICES AND ENCLOSURE MUST BE IN PLACE BEFORE POOL IS IN USE. A FENCE PERMIT IS REQUIRED.
3. POOL MUST COMPLY WITH SECTION AG105 OF APPENDIX G OF THE 2003 MICHIGAN RESIDENTIAL CODE.
4. ELECTRICAL AND HEATING PERMITS MUST BE OBTAINED FOR POOL FILTER AND HEATER.
5. POOL FILTERS AND POOL HEATER SHALL NOT BE LOCATED IN REQUIRED SIDE YARDS.
6. SEE DEPARTMENT OF PUBLIC WORKS LETTER REGARDING TEMPORARY STORAGE OF CONSTRUCTION MATERIAL ON PUBLIC PROPERTY.

**ABOVE GROUND SWIMMING POOL ELECTRICAL WIRING REQUIREMENTS
2003 MICHIGAN RESIDENTIAL CODE**

CHAPTER 41 - SWIMMING POOLS

ARTICLE 4101.1 The provisions of this article shall apply to the construction and installation of electrical wiring for and equipment in or adjacent to all swimming, wading, therapeutic, and decorative pools, fountains, hot tubs and spas, whether permanently installed or storable, and to metallic auxiliary equipment, such as pumps, filters, and similar equipment.

E4101.2 - DEFINITIONS:

1. Permanently installed swimming, wading and therapeutic pools. Those that are constructed in the ground, on the ground, or in a building in such a manner that the pool cannot be readily disassembled for storage whether or not served by electrical circuits of any nature.
2. Storable swimming or wading pool. A pool with a maximum dimension of 18 feet and a maximum wall height of 42 inches and so constructed that it may be readily disassembled for storage or reassembled to its original integrity.

E4103 – EQUIPMENT LOCATIONS AND CLEARANCES

1. **Receptacles on the property shall be located at least 10 feet from the inside wall of the pool**

E4103.1.1 Receptacle(s) that provide power for water-pump motor(s) for a permanently installed pool, shall be permitted between 5 and 10 feet (1.52 and 3.05m) from the inside walls of the pool, shall be single and of the locking and grounding types, and shall be protected by ground-fault interrupter(s).

2. E4103.1.2 Where permanently installed pool is installed in a dwelling unit(s), at least one 125-volt convenience receptacle shall be located a minimum of 10 feet from and not more than 20 feet from the inside wall of the pool
3. All 125-volt receptacles located within 20 feet of the inside walls of a pool shall be protected by a ground fault circuit-interrupter. (Proper receptacle covers for damp and wet locations)

E4103.1.2 - LIGHTING FIXTURES AND OUTLETS

1. Lighting fixtures and lighting outlets, and ceiling fans shall not be installed over the pool or the area extending 5 feet horizontally from the inside walls of a pool unless 12 feet above the maximum water level.

E4103.1.3 SWITCHING DEVICES. Switching devices on the property shall be located at least 5 feet from the inside walls of a pool unless separated from the pool by a solid fence, wall, or other permanent barrier.

E4102.2.1 CORD- AND PLUG-CONNECTED EQUIPMENT. Fixed or stationary equipment rated 20 amperes or less, other than an underwater lighting fixture for a permanently installed pool, shall be permitted to be connected with a flexible cord to facilitate the removal or disconnection for maintenance or repair. For other than storable pools, the flexible cord shall not exceed 3 feet in length and shall have a copper equipment-grounding conductor not smaller than No. 12 with a grounding-type attachment plug.

E4103.5 OVERHEAD CONDUCTOR CLEARANCES. The following parts of pools shall not be placed under existing service-drop conductors or any other open overhead wiring; nor shall wiring be installed above the following:

ABOVE GROUND SWIMMING POOL - ELECTRICAL REQUIREMENTS PER 2003 MICHIGAN RESIDENTIAL CODE (cont'd)

- (1) pools and the area extending 10 feet (3.05m) horizontally from the inside of the walls of the pool;
- (2) diving structure;
- (3) observation stands, towers or platforms. (Underground wiring not allowed under pools or within 5 feet horizontally from pool walls).

E4104 The following parts shall be bonded together:

1. All metallic parts of the pool structure, including the reinforcing metal of the pool shell, copingstones, and deck.
2. All forming shells.
3. All metal fittings within or attached to the pool structure.
4. Metal parts of electrical equipment associated with the pool water circulating system including pump motor.
5. Metal parts of equipment associated with pool covers, including electric motors.
6. Metal-sheathed cables and raceways, metal piping, and all fixed metal parts that are within 5 feet (1.52m) horizontally of the inside walls of the pool and within 12 feet (3.66m) above the maximum water level of the pool or any observation stands, towers, or platforms, or from diving structures, and that are not separated from the pool by a permanent barrier.

E4104.3.1 COMMON BONDING GRID. These parts shall be connected to a common bonding grid with a solid copper conductor, insulated, covered, or bare, not smaller than No. 8. Connections shall be made by pressure connectors or clamps of stainless steel, copper, or copper alloy. The common bonding grid may be of any of the following:

- (1) The structural reinforcing steel of a concrete pool where the reinforcing rods are bonded together by the usual steel tie wires or the equivalent ; or
- (2) The wall of a bolted or welded metal pool; or
- (3) A solid copper conductor, insulated, covered, or bare, not smaller than No. 8.

CHAPTER 37 WIRING METHODS. Rigid metal conduit or intermediate metal conduit of brass or other identified corrosion-resistant metal or rigid nonmetallic conduit shall extend from the forming shell to a suitable junction box or other enclosure as provided for in CHAPTER 37. Where rigid nonmetallic conduit is used, a No. 8 insulated copper conductor shall be installed in this conduit with provisions for terminating in the forming shell and the junction box. The termination of the No. 8 conductor in the forming shell shall be covered with, or encapsulated in, a suitable potting compound to protect such connection from the possible deteriorating effect of pool water

4105.1 METHODS OF GROUNDING:

- (a) General. The following provisions shall apply to the grounding of underwater lighting fixtures, junction boxes, metal transformer enclosures, panelboards, motors or other electrical equipment.
- (b) 4105.2 Pool Lighting Fixtures and Related Equipment.

- (1) Wet-niche, dry-niche, or no-niche lighting fixtures shall be connected to an equipment grounding conductor sized in accordance with Table 3808.12 but not smaller than No. 12. It shall be an insulated copper conductor and shall be installed with the circuit conductor in rigid metal conduit, intermediate metal conduit, or rigid nonmetallic conduit.
- (2) The junction box, transformer enclosure, or other enclosure in the supply circuit to a wet-niche or no-niche lighting fixture and the field-equipment grounding terminal or the panelboard. This terminal shall be directly connected to the panelboard enclosure. The equipment grounding conductor shall be installed without joint or splice.

4105.5 Motors. Pool-associated motors shall be connected to an equipment-grounding conductor sized in accordance with Table 3808.12 but not smaller than No. 12. It shall be an insulated copper conductor and shall be installed with the circuit conductors in rigid metal conduit, intermediate metal conduit, or rigid non-metallic conduit.

Table 41036 requires nonmetallic raceways listed for direct burial shall be 18 inches below the top surface of the finished grade.