

**ORDINANCE NO. 1456 - 14**

**AN ORDINANCE AMENDING THE ELECTRICAL CODE AS SET FORTH IN  
SECTION 18-106 OF THE CODE OF ORDINANCES OF THE CITY OF  
MUSCLE SHOALS, ALABAMA**

---

**BE IT ORDAINED** by the Council of the City of Muscle Shoals, Alabama that Ordinance Number 1244-01 approved and adopted by the City Council of the City of Muscle Shoals, Alabama on January 22, 2001 and as amended by Ordinance Number 1347-05 approved and adopted by the City Council of the City of Muscle Shoals, Alabama on August 8, 2005 and as amended by Ordinance Number 1363-06 approved and adopted by the City Council of the City of Muscle Shoals, Alabama on March 7, 2006 is hereby amended to read in its entirety as follows, to wit:

**ARTICLE V. ELECTRICAL CODE**  
Sec. 18-106. Electrical Code Adopted.

The 2005 edition of the National Electrical Code, with the following modifications, is adopted by reference:

(a) Section 680.26 Equipotential Bonding shall become effective on January 1, 2006. Equipotential Bonding Grid. The parts specified in 680.26 (b) shall be connected to an equipotential bonding grid with a solid copper conductor, insulated, covered, or bare, not smaller than 8 AWG or rigid metal conduit of brass or other identified corrosion-resistant metal conduit. Connection shall be made by exo-thermic welding or by listed pressure connectors or clamps that are labeled as being suitable for the purpose and are of stainless steel, brass, copper, or copper alloy. The equipotential bonding grid shall conform to the contours of the pool and shall extend within or under paved walking surfaces for 1 m (3 ft.) horizontally beyond the inside walls of the pool and shall be permitted to be any of the following:

Exception: The equipotential bonding grid shall not be required to be installed under the bottom of or vertically along the walls of vinyl lined polymer wall, fiberglass composite, or other pools constructed of nonconductive materials. Any metal parts of the pool, including metal structural supports, shall be bonded in accordance with 680.26 (b). For purposes of this section, poured concrete, pneumatically applied (sprayed) concrete and concrete block, with painted or plastered coatings, shall be considered conductive material. Structural Reinforcing Steel. The structural reinforcing steel of a concrete pool or deck where the reinforcing rods are bonded together by the usual steel tie wires or the equivalent. Where deck reinforcing steel is not an integral part of the pool, the deck reinforcing steel shall be bonded to other parts of the bonding grid using a minimum 8AWG solid copper conductor. Connection shall be per 680.26 (D).

(b) Notwithstanding any provision of the said 2005 National Electrical Code to the contrary, or any provision herein, the following requirements or prohibitions shall apply within the corporate limits of the City of Muscle Shoals, Alabama:

- (1) No aluminum wire shall be used in the construction of residential or commercial structures.
- (2) Smoke detectors shall be located in every bedroom and adjacent to sleeping quarters. Said smoke detectors shall be hard wired and equipped with battery backup. Said smoke detectors shall be interlinked.
- (3) Carbon monoxide detectors shall be installed in new homes that are equipped with gas appliances. Said carbon monoxide detectors shall be hard wired and equipped with battery backup.
- (4) No 14 gauge wiring shall be used in residential construction.

Exception: Smoke & carbon monoxide detectors and switch legs will be allowed to be no. 14 copper wire.

- (5) No 100 or 125 amp services shall be allowed in residential or commercial construction if the structure is heated or cooled with electricity. In such residential or commercial construction heated or cooled by electricity only a 200 amp minimum service shall be allowed.

Exception: Any multi tenant residential apartment greater in number than a duplex. A State of Alabama electrical engineer must certify electrical load calculations for each apartment before this will be accepted.

- (6) The enforcement of the four wire system, so that each circuit will have a dedicated neutral and ground, is required.
- (7) All service panels used in residential and commercial construction shall be equipped with a separate grounding and neutral bar.

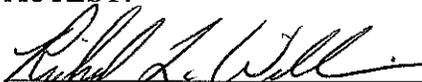
**BE IT FURTHER ORDAINED** that this Ordinance, and its provisions, shall become effective upon publication or posting pursuant to law or as otherwise provided for by law.

**ADOPTED AND APPROVED** this 21<sup>st</sup> day of January, 2014.

**COUNCIL OF THE CITY OF MUSCLE SHOALS,  
ALABAMA**

By:   
**JAMES E. HOLLAND**, President of the Council

ATTEST:

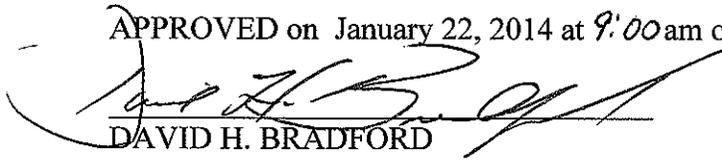
  
**RICHARD L. WILLIAMS**  
City Clerk

TRANSMITTAL

I hereby certify that the above ordinance was passed on the 21<sup>st</sup> day of January, 2014 by the Council of the City of Muscle Shoals and was transmitted to the Mayor on the 22<sup>nd</sup> day of January, 2014 at 9:00 am o'clock.

  
\_\_\_\_\_  
City Clerk

APPROVED on January 22, 2014 at 9:00 am o'clock.

  
\_\_\_\_\_  
DAVID H. BRADFORD  
Mayor of the City of Muscle Shoals, Alabama