



MSCS ELECTRICAL STANDARDS AND REQUIREMENTS INFORMATION

All work requiring the modification of the existing wiring to any equipment, or any new installations must have an Electrical Permit from Shelby County Code Enforcement.

Copies of permits shall be sent to maintenance via email or Fax.

Any work that is considered a direct replacement may not require a permit based on size and scope of work, but maintenance must be notified of the work performed and shall be inspected by myself, or someone designated by me.

Email: chalkd@scsk12.org

Fax: (901)416-6925

1. Minimum ¾" trade size conduit, ½" is permissible for individual circuits branching from home run box.
2. No more than (3) current carrying conductors per circuit.
3. All conduit fittings shall be galvanized steel fittings, zinc die-cast fittings are not allowed.
4. All flexible liquid tight conduit shall be U.L. listed. Non-metallic flex is not permitted.
5. Cast zinc flexible liquid tight fittings are not permitted, fittings are to be cast iron or galvanized steel.
6. MC cable may only be used to fish a sheetrock wall. MC cable shall not extend more than three feet horizontally or vertically from the top of the wall where the drop is made.
7. Flexible metal conduit shall be permitted where conditions allow. Cast zinc fittings are permissible with flex (Greenfield).
8. Rubber cord is not permitted to be used to hook up equipment unless it is factory installed on the device.
9. Kitchen equipment shall be wired with fittings suitable to the environment. Condulets and outlet boxes to be malleable iron with gasketed covers. U.L listed liquid tight flexible metal conduit shall be used on all Kitchen equipment.
10. #14 AWG and larger wire shall be stranded.
11. All wiring devices shall be Industrial Grade 20A Back or Side wired. Where TVSS receptacles are required, if they are installed on a circuit with an isolated ground, Eaton TRIG5362RNS or equivalent shall be used. Where TVSS receptacles are installed WITHOUT an isolated ground wire, The TVSS shall be the color Blue and non-isolated ground, Eaton TR8362BLS or equivalent shall be used.

12. PVC pipe is permitted for underground installations providing the first and last 10' sections are ridged conduit that emerge to and from grade level. In areas where the piping is not subject to damage, the PVC may transition to EMT.
13. Regarding EMT sleeves, size pipe sleeves to provide 1/4-inch annular clear space between sleeve and cable unless sleeve seal is to be installed, or unless seismic criteria require different clearance.
14. Cut sleeves to extend 1" beyond wall to accommodate installation of plastic bushing.
15. Seal space outside of sleeves with grout for penetrations of concrete and masonry and with approved joint compound for gypsum board assemblies.
16. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at cable penetrations. Install sleeves and seal with fire stop materials according to current code requirements.
17. All exposed conduits 10 foot and lower must be strapped 18 inches either side of the box, 90-degree bend and every 5 foot with two hole straps.
18. All fire alarm wiring to be installed in accordance with The National Electrical Code, Article 760 with the following additional restrictions:
 - A. NEC 760.130(B)(2) is adjusted to the minimum height requirement for cable to be run exposed is 12 feet above finished floor.
 - B. Where esthetics require, as in architecturally designed open areas, cable must be run in EMT or RMC.
 - C. Fire alarm cables must be installed in EMT or RMC in all mechanical rooms where subject to damage.