

# Flexible Cable (Romex ®) Safety



- ❑ Flexible cable, such as Romex ®, is used as temporary wiring.
- ❑ Romex ® is a brand name for a type of plastic insulated wire, sometimes called non-metallic sheathed cable.
- ❑ Romex ® is suitable for use in dry, protected areas that are not subject to mechanical damage or excessive heat.

All temporary wiring must meet OSHA standard requirements.

*See 29 CFR 1926.405 (a) (2)*

Shop-made cord sets must meet OSHA standard requirements.

*See 29 CFR 1910.305 (a) (2)*

## Romex® Safety

- When using Romex ® cable as a temporary extension cord, it must be treated as an electric cord.
- All components must be approved for the purpose by a nationally recognized testing laboratory.
- Individual components must be compatible for use with other components of the assembly.
- Avoid using staples to adhere the cable to surfaces.
- When using Romex ® cable to string temporary lighting, use junction boxes.
- Do Not use Romex ® cable in the construction of a temporary panel box.
- Where the cable is run through studs, joists or similar wooden members, the outer surface of the cable must be kept at least 32mm/1.25" (NEC) from the edges of the wooden members, or the cable should be protected from mechanical injury.
- Cable can be protected from mechanical injury by using metal plates or conduit.
- Cable should be protected against mechanical damage where it passes through floors or on the surface of walls.
- Where cable is suspended, the wire should be protected, such as with a junction or outlet box on the wall, and a short length of cable in flexible conduit.
- Cable should never be buried in plaster, cement or similar finish, except where required by code.

## Common Cable Problems



### **Cable Damage**

A flexible cable may be damaged by door or window edges, by staples and fastenings, by abrasion from adjacent materials, or simply by aging. If the electrical conductors become exposed, there is a danger of shocks, burns, or fire.



### **Strain Relief**

To reduce hazards, flexible cables must connect to devices and to fittings in ways that prevent tension at joints and terminal screws.

### **Wet Conditions**

When a cable connector is wet, electric current can leak to the equipment-grounding conductor, and to humans who pick up that connector if they provide a path to ground. Such leakage can occur not just on the face of the connector, but at any wetted portion. Limit exposure of connectors and tools to excessive moisture by using watertight or sealable connectors.

*See 29 CFR 1926.405*