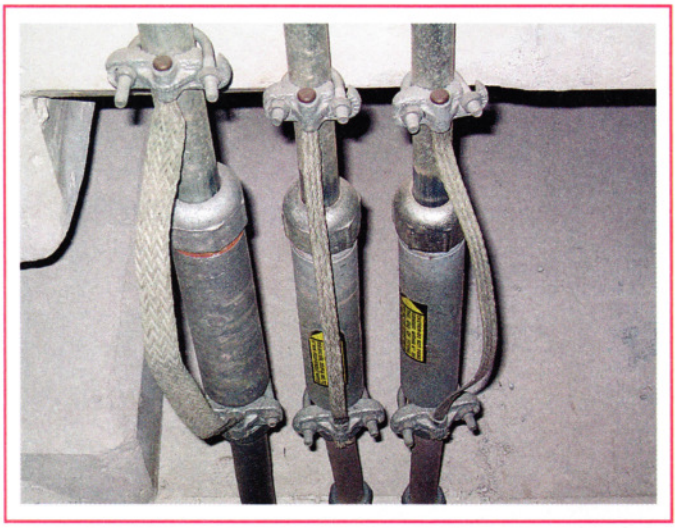

EXHIBIT 100.6 Equipment bonding jumpers installed to maintain electrical continuity around conduit expansion fittings. *(Courtesy of the International Association of Electrical Inspectors)*

Exhibit 100.7 shows a main bonding jumper that provides the connection between the grounded service conductor and the equipment grounding conductor at the service by connecting between the neutral bus and the equipment grounding bus. Bonding jumpers can be located throughout the electrical system, but a main bonding jumper is located only at the service.

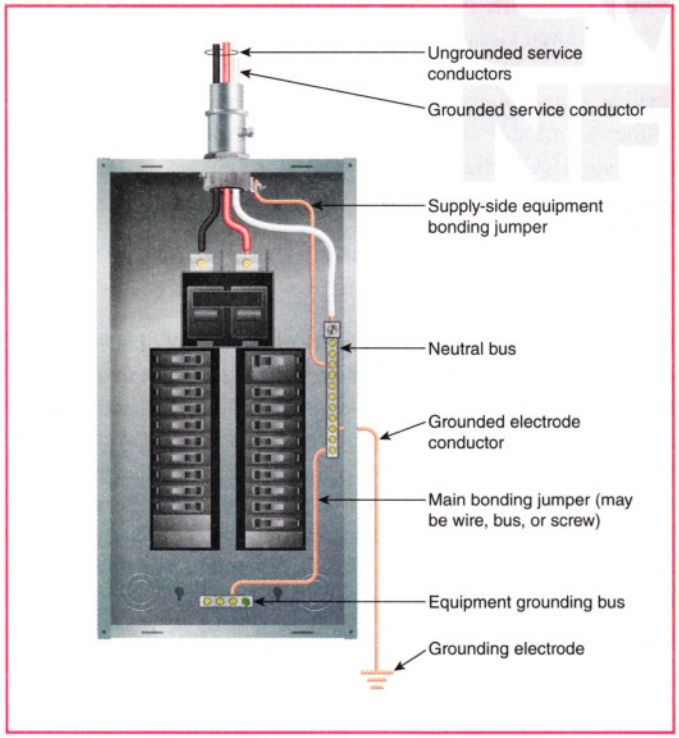

EXHIBIT 100.7 A main bonding jumper installed at the service between the grounded service conductor and the equipment grounding conductor.

See also

250.28 for main bonding jumper requirements

Bonding Jumper, Supply-Side. (Supply-Side Bonding Jumper) A conductor installed on the supply side of a service or within a service equipment enclosure(s), or for a separately derived system, that ensures the required electrical conductivity between metal parts required to be electrically connected. (CMP-5)

Metal equipment enclosures, metal raceways, and metal cable trays are examples of equipment containing supply-side conductors that are required to be bonded. Where bonding jumpers are used, they are required to be installed and sized as specified in 250.102(A), (B), (C), and (E). Bonding jumpers installed on the load side of a service, feeder, or branch-circuit overcurrent protective device (OCPD) are *equipment bonding jumpers.*

Bonding Jumper, System. (System Bonding Jumper) The connection between the grounded circuit conductor and the supply-side bonding jumper, or the equipment grounding conductor, or both, at a separately derived system. (CMP-5)

A system bonding jumper is used to connect the equipment grounding conductor(s) or the supply-side bonding jumper to the grounded conductor of a separately derived system either at the source (see Exhibit 250.14) or at the first system disconnecting means (see Exhibit 250.15). A system bonding jumper is used at the derived system if the derived system contains a grounded conductor.

Like the main bonding jumper at the service equipment, the system bonding jumper provides the necessary link between the equipment grounding conductors and the system grounded conductor in order to establish an effective path for ground-fault current to return to the source.

See also

250.30(A)(1) for system bonding jumper requirements

N **Border Light.** A permanently installed overhead strip light. (520) (CMP-15)

N **Bottom Shield.** A protective layer that is installed between the floor and flat conductor cable (Type FCC) to protect the cable from physical damage and may or may not be incorporated as an integral part of the cable. (324) (CMP-6)

Branch Circuit (Branch-Circuit). The circuit conductors between the final overcurrent device protecting the circuit and the outlet(s). (CMP-2)

Exhibit 100.8 shows the difference between branch circuits and feeders. Conductors between the overcurrent devices in the panelboards and the duplex receptacles are branch-circuit conductors. The overcurrent devices at the panelboards are the *final* OCPD for the circuit and duplex receptacles. Conductors between the service equipment, or source of separately derived systems, and the panelboards are feeders.