(3) Plugs and receptacles used to connect the power-supply cords shall be listed and identified for the system voltage and current applied.

Informational Note No. 1: See UL 60950-1, *Safety of Information Technology Equipment — Safety — Part 1: General Requirements*; or UL 62368-1, *Audio/Video, Information and Communication Technology Equipment — Part 1: Safety Requirements*, for one method of determining if cords are of a permitted type.

Informational Note No. 2: See ANSI/NEMA WD-6, *Wiring Devices — Dimensional Specifications*, which identifies plug and receptacle configurations L25-30P and L25-30R for 240 Vac and L26-30P and L26-30R for 240/415 Vac.

(C) Interconnecting Cables. Separate information technology equipment units shall be permitted to be interconnected by means of listed cables and cable assemblies. The 4.5 m (15 ft) limitation in 645.5(B)(1) shall not apply to interconnecting cables.

(D) Physical Protection. Where exposed to physical damage, power-supply cords, branch-circuit supply conductors, and interconnecting cables shall be protected.

(E) Under Raised Floors. Where the area under the floor is accessible and openings minimize the entrance of debris beneath the floor, power-supply cords, communications cables, connecting cables, interconnecting cables, cord-and-plug connections, and receptacles associated with the information technology equipment shall be permitted under a raised floor of approved construction. The installation requirement shall comply with 645.5(E)(1) through (E)(3).

Δ **(1) Installation Requirements for Branch-Circuit Supply Conductors Under a Raised Floor.**

(a) The supply conductors shall be installed in accordance with 300.11.

(b) In addition to the wiring methods of 300.22(C), the following wiring methods shall also be permitted:

(1) Rigid metal conduit
(2) Rigid nonmetallic conduit
(3) Intermediate metal conduit
(4) Electrical metallic tubing
(5) Electrical nonmetallic tubing
(6) Metal wireway
(7) Nonmetallic wireway
(8) Surface metal raceway with metal cover
(9) Surface nonmetallic raceway
(10) Flexible metal conduit
(11) Liquidtight flexible metal conduit
(12) Liquidtight flexible nonmetallic conduit
(13) Type MI cable
(14) Type MC cable
(15) Type AC cable
(16) Associated metallic and nonmetallic boxes or enclosures
(17) Type TC power and control tray cable

Branch-circuit conductors installed under the raised floor of an ITE room using any of the wiring methods listed are required to conform to the specific article for the wiring method used.

See also

300.11(A), which requires raceways, cables, and boxes to be securely fastened in place, even though they are installed below a raised floor

Δ **(2) Installation Requirements for Power-Supply Cords, Data Cables, Interconnecting Cables, and Grounding Conductors Under a Raised Floor.** The following cords, cables, and conductors shall be permitted to be installed under a raised floor:

(1) Power-supply cords of listed information technology equipment in accordance with 645.5(B).
(2) Interconnecting cables enclosed in a raceway.
(3) Equipment grounding conductors.
(4) Where the air space under a raised floor is protected by an automatic fire suppression system, in addition to wiring installed in compliance with 722.135(B), Types CL2R, CL3R, CL2, and CL3 and substitute cables, including CMP, CMR, CM, and CMG, installed in accordance with 722.135(E) shall be permitted under raised floors.
(5) Where the air space under a raised floor is not protected by an automatic fire suppression system, in addition to wiring installed in compliance with 722.135(B), substitute cable Type CMP installed in accordance with 722.135(E) shall be permitted under raised floors.
(6) Listed Type DP cable having adequate fire-resistant characteristics suitable for use under raised floors of an information technology equipment room.

Informational Note: See CSA "Vertical Flame Test-Cables in Cable Trays" as described in CSA C22.2 No. 0.3, *Test Methods for Electrical Wires and Cables, for one* method of defining resistance to the spread of fire where the damage (char length) of the cable does not exceed 1.5 m (4 ft 11 in.) or "UL Flame Exposure, Vertical Flame Tray Test" in UL 1685, *Standard for Safety for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables*. The smoke measurements in the test method are not applicable.

Supply cords of ITE are permitted to be run through holes in a raised floor to connect to receptacles located below the raised floor. Openings in a raised floor through which cords and cables are run must be made so the cords and cables are not subject to abrasion. Allowing cords through openings in a raised floor is an amendment to the general prohibition of this practice found in 400.12.

Other than branch-circuit conductors and power supply cords, interconnecting cables used under raised floors are required to be enclosed in a raceway, be listed as Type DP (data processing) cables, or be of the appropriate cable type permitted by 645.5(E)(2)(4).

(3) Installation Requirements for Optical Fiber Cables Under a Raised Floor. The installation of optical fiber cables shall comply with either of the following:

(1) Where the air space under a raised floor is protected by an automatic fire suppression system, optical fiber cables installed in accordance with 770.113(C), Types OFNR,