

provisions for locking shall remain in place with or without the lock installed.

Exception: Locking provisions for a cord-and-plug connection shall not be required to remain in place without the lock installed.

The means to lock the switch or circuit breaker in the open position must be an integral part of the enclosure or be an accessory that is not readily removed from the switch or circuit breaker. Portable locking mechanisms that are intended for temporary applications are not acceptable means of compliance.

Part II. 1000 Volts, Nominal, or Less

110.26 Spaces About Electrical Equipment. Working space, and access to and egress from working space, shall be provided and maintained about all electrical equipment to permit ready and safe operation and maintenance of such equipment. Open equipment doors shall not impede access to and egress from the working space. Access or egress is impeded if one or more simultaneously opened equipment doors restrict working space access to be less than 610 mm (24 in.) wide and 2.0 m (6½ ft) high.

Spaces about electrical equipment are divided into two separate and distinct categories: working space and dedicated equipment space. The term *working space* generally applies to the protection of the worker, and *dedicated equipment space* applies to the space reserved for future access to electrical equipment and to protection of the equipment from intrusion by nonelectrical equipment. Storage of material that blocks access or prevents safe work practices must always be avoided. The performance requirements for all spaces about electrical equipment are set forth in this section.

(A) Working Space. Working space for equipment operating at 1000 volts, nominal, or less to ground and likely to require examination, adjustment, servicing, or maintenance while energized shall comply with the dimensions of 110.26(A)(1), (A)(2), (A)(3), and (A)(4) or as required or permitted elsewhere in this *Code*.

Informational Note: See NFPA 70E-2021, *Standard for Electrical Safety in the Workplace*, for guidance, such as determining severity of potential exposure, planning safe work practices including establishing an electrically safe work condition, arc flash labeling, and selecting personal protective equipment.

The intent is to provide enough space for the performance of any of the operations listed without jeopardizing workers. Minimum working clearances are not required if the equipment is not likely to require examination, adjustment, servicing, or maintenance while energized. However, access and working space are still required by the opening paragraph of 110.26.

Examples of such equipment include panelboards, switches, circuit breakers, controllers, and controls on heating and air-conditioning equipment. Note that the word “examination” includes tasks such as checking for the presence of voltage using a portable voltmeter.

(1) Depth of Working Space. The depth of the working space in the direction of live parts shall not be less than that specified in Table 110.26(A)(1) unless the requirements of 110.26(A)(1)(a), (A)(1)(b), or (A)(1)(c) are met. Distances shall be measured from the exposed live parts or from the enclosure or opening if the live parts are enclosed.

TABLE 110.26(A)(1) Working Spaces

Nominal Voltage to Ground	Minimum Clear Distance		
	Condition 1	Condition 2	Condition 3
0–150	900 mm (3 ft)	900 mm (3 ft)	900 mm (3 ft)
151–600	900 mm (3 ft)	1.0 m (3 ft 6 in.)	1.2 m (4 ft)
601–1000	900 mm (3 ft)	1.2 m (4 ft)	1.5 m (5 ft)

Note: Where the conditions are as follows:

Condition 1 — Exposed live parts on one side of the working space and no live or grounded parts on the other side of the working space, or exposed live parts on both sides of the working space that are effectively guarded by insulating materials.

Condition 2 — Exposed live parts on one side of the working space and grounded parts on the other side of the working space. Concrete, brick, or tile walls shall be considered as grounded.

Condition 3 — Exposed live parts on both sides of the working space.

Table 110.26(A)(1) provides requirements for clearances from equipment to grounded or ungrounded objects and exposed live parts based on the circuit voltage to ground. See Exhibit 110.11 for the general working clearance requirements for each of the three conditions listed in Table 110.26(A)(1).

Examples of common electrical supply systems covered in the 0 to 150 volts-to-ground group are 120/240-volt, single-phase, 3-wire and 208Y/120-volt, 3-phase, 4-wire systems. Examples of common electrical supply systems covered in the 151 to 1000 volts-to-ground group are 240-volt, 3-phase, 3-wire; 480Y/277-volt, 3-phase, 4-wire; and 480-volt, 3-phase, 3-wire (ungrounded and corner grounded) systems. Where an ungrounded system is used, the voltage to ground (by definition) is the greatest voltage between the given conductor and any other conductor of the circuit. For example, the voltage to ground for a 480-volt ungrounded delta system is 480 volts. For assemblies such as switchboards, switchgear, or motor-control centers that are accessible from the back and expose live parts, the working clearance dimensions are required at the rear of the equipment. For Condition 3, where enclosures are on opposite sides of the working space, the clearance for only one working space is required.

(a) Dead-Front Assemblies. Working space shall not be required in the back or sides of assemblies, such as dead-front switchboards, switchgear, or motor control centers, where all connections and all renewable or adjustable parts, such as fuses or switches, are accessible from locations other than the back or sides. Where rear access is required to work on nonelectrical parts on the back of enclosed equipment, a minimum horizontal working space of 762 mm (30 in.) shall be provided.