

or comply with 314.27(C) where a ceiling (paddle) fan either will be installed initially or might be installed in the future. Outlet boxes specifically listed to support ceiling-mounted paddle fans are available, as are several alternative and retrofit methods that can provide suitable support for a paddle fan. Exhibit 314.9 illustrates two methods of supporting a fan from an outlet box listed for fan support. In new residential construction, it is common to provide a wall-mounted switch(s) with wiring to allow for the future installation of paddle fans or paddle fans with light kits. Such installations are required to have an outlet box or outlet box system that is listed for the sole support of a fan.

(D) Utilization Equipment. Boxes used for the support of utilization equipment other than ceiling-suspended (paddle) fans shall meet the requirements of 314.27(A) for the support of a luminaire that is the same size and weight.

Exception: Utilization equipment weighing not more than 3 kg (6 lb) shall be permitted to be supported on other boxes or plaster rings that are secured to other boxes, provided the equipment or its supporting yoke is secured to the box with no fewer than two No. 6 or larger screws.

Δ (E) Weight-Supporting Ceiling Receptacles (WSCR) and Weight-Supporting Attachment Fittings (WSAF). Outlet boxes required in 314.27 shall be permitted to support listed weight-supporting ceiling receptacles (WSCR). A WSCR shall be used in combination with compatible weight-supporting attachment fittings (WSAF) that are identified for the support of equipment within the weight and mounting orientation limits of the listing. Where the WSCR is installed, it shall be included in the box fill calculation covered in 314.16(B)(4).

Listed WSCR used in combination with compatible WSAF shall be permitted to be installed in outlet boxes for the sole support of ceiling-suspended (paddle) fans, in accordance with 314.27(C).

Informational Note: See ANSI/NEMA WD-6, American National Standard for Wiring Devices—Dimensional Specifications, for standard configurations of weight-supporting ceiling receptacles and weight-supporting attachment fittings.

This section permits a combination of a weight-supporting ceiling receptacle and a weight-supporting attachment fitting mounted to an outlet box. It allows a quick connect/disconnect for a luminaire or ceiling fans. The quick connection combination locks the device in place and supports its weight as well as acts as a load make-and-break mechanism.

314.28 Pull and Junction Boxes and Conduit Bodies. Boxes and conduit bodies used as pull or junction boxes shall comply with 314.28(A) through (E).

Exception: Terminal housings supplied with motors shall comply with the provisions of 430.12.

(A) Minimum Size. For raceways containing conductors of 4 AWG or larger that are required to be insulated, and for cables containing conductors of 4 AWG or larger, the minimum dimensions of pull or junction boxes installed in a raceway or cable run shall comply with 314.28(A)(1) through (A)(3). Where an enclosure dimension is to be calculated based on the diameter of entering raceways, the diameter shall be the metric designator (trade size) expressed in the units of measurement employed.

Section 314.28(A) addresses raceways or cables that contain conductors 4 AWG or larger and are required to be insulated. One conductor that is not required to be insulated is a grounding electrode conductor (GEC). Thus, where a GEC is installed as the sole conductor within a raceway, conduit bodies used as part of that raceway system are not required to comply with enclosure dimensions in 314.28(A).

(1) Straight Pulls. In straight pulls, the length of the box or conduit body shall not be less than eight times the metric designator (trade size) of the largest raceway.

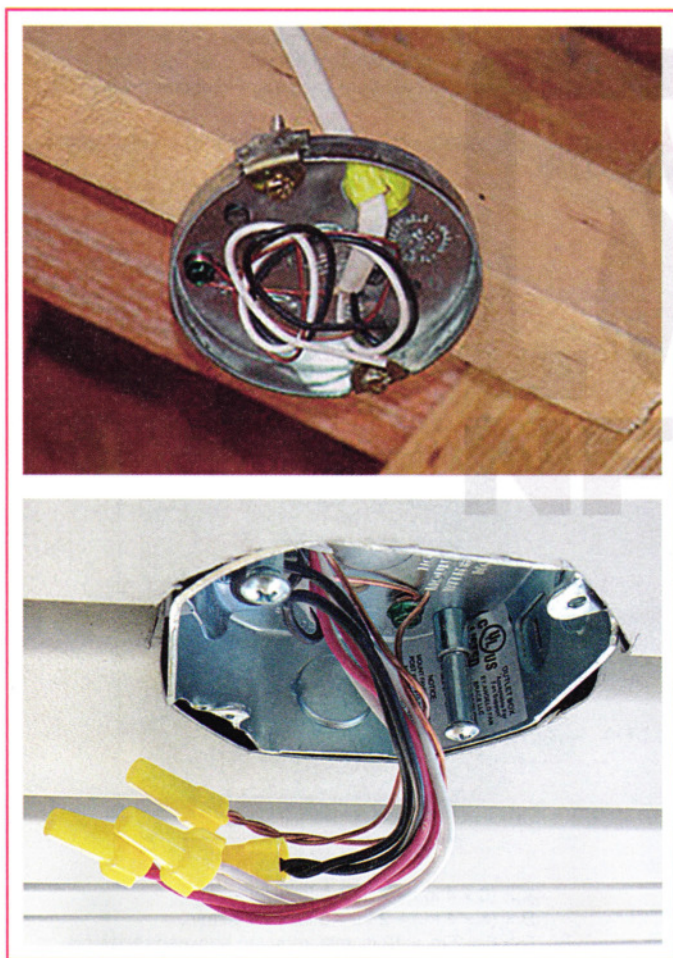


EXHIBIT 314.9 Two methods of supporting a ceiling fan from a listed outlet box. (Top) A listed outlet box used as the sole support of a ceiling-suspended (paddle) fan. Note the two clamps on the perimeter of the box that will support a fixture. (Courtesy of the International Association of Electrical Inspectors). (Bottom) A box listed for supporting a ceiling-suspended (paddle) fan (35 pounds or less). (Courtesy of Hubbell Incorporated)