

# WIREMOLD



## NP800 Series Jumbo Tele-Power® Pole INSTALLATION INSTRUCTIONS

Installation Instruction No.: INS00006R1 – Updated April 2005

Wiremold Electrical Systems conform to and should be installed and properly grounded in compliance with requirements of the current National Electrical Code, Canadian Electrical Code or codes administered by local authorities.

All electrical products may represent possible shock or fire hazard if improperly installed or used. Wiremold electrical products are UL Listed to U.S. and Canadian safety standards, made for interior use only, and should be installed in conformance with current local and/or the National Electrical Code.

NP800 Series Tele-Power Poles are provided standard with an anodized aluminum finish or may be painted any number of color selected from a full array of powder coat finishes. Standard poles have two channels of different depths. These channels may be divided at various locations by snap-in dividers to form additional channels. All channels may enclose either power or communication wiring. Wire fill capacities are outlined below, followed by illustrations of standard pole hardware, and instructions for a typical installation (over). Poles may be supplied with box ends of various sizes. Walkerflex™ Manufactured Wiring System Connectors or with 10' [3.04m] cord ends (cUL only).

DATA/COMMUNICATION: MAXIMUM WIRE FILLS FOR UL AND cUL LISTED TELE-POWER POLES														
CABLE TYPE	UNSHIELDED TWISTED PAIR					SHIELDED TWISTED PAIR			COAX				TWINAX	
DESCRIPTION	CAT 3 4 PAIR	CAT3 25 PAIR	CAT5e 4 PAIR	CAT5 25 PAIR	CAT6 4 PAIR	TYPE 1 22 AWG	TYPE 2 22 AWG	TYPE 9 22 AWG	RG58/U 20 AWG	RG59/U 22 AWG	RG62 22 AWG	RG6U 18 AWG	100 OHM	
NOMINAL O.D. (In.)	0.19	0.36	0.21	0.337	0.25	0.39	0.465	0.275	0.195	0.242	0.242	0.27	0.24	
CAPACITY OF CROSS SECTION (in <sup>2</sup> )	2.4	25.0	7.0	20.0	8.0	14.0	6.0	4.0	12.0	24.0	15.0	15.0	12.0	15.0
	2.8	29.0	8.0	24.0	9.0	17.0	7.0	4.0	14.0	28.0	18.0	18.0	14.0	18.0
	3.2	33.0	9.0	27.0	10.0	19.0	8.0	5.0	16.0	32.0	20.0	20.0	16.0	21.0
	4.2	44.0	12.0	36.0	14.0	25.0	10.0	7.0	21.0	42.0	27.0	27.0	22.0	27.0
	4.3	45.0	12.0	37.0	14.0	26.0	10.0	7.0	21.0	43.0	28.0	28.0	22.0	28.0
	4.8	50.0	14.0	41.0	16.0	29.0	12.0	8.0	24.0	48.0	31.0	31.0	25.0	31.0
	5	52.0	14.0	43.0	16.0	30.0	12.0	8.0	25.0	50.0	32.0	32.0	26.0	33.0
	5.2	55.0	15.0	45.0	17.0	31.0	13.0	9.0	26.0	52.0	33.0	33.0	27.0	34.0
	5.8	61.0	17.0	50.0	19.0	35.0	14.0	10.0	29.0	58.0	37.0	37.0	30.0	38.0
	6.2	65.0	18.0	53.0	20.0	37.0	15.0	10.0	31.0	62.0	40.0	40.0	32.0	41.0
	7	74.0	20.0	60.0	23.0	42.0	17.0	12.0	35.0	70.0	45.0	45.0	36.0	46.0
	7.7	81.0	22.0	66.0	25.0	47.0	19.0	13.0	38.0	77.0	50.0	50.0	40.0	51.0
	8	84.0	23.0	69.0	26.0	48.0	20.0	14.0	40.0	80.0	52.0	52.0	41.0	52.0
	12	126.0	35.0	103.0	40.0	73.0	30.0	21.0	60.0	120.0	78.0	78.0	62.0	79.0

**NOTE:** Capacity range is calculated at 30% of raceway areas as stated in the Commercial Buildings Standard for Telecommunication Pathways and Spaces, EIA/TIA-569.

These are the approximate diameter and cross-sectional areas for typical cables in each category. Check with the cable manufacturer for more accurate dimensions.

### SNAP-IN DIVIDERS AREAS OF CROSS SECTIONS

#### Large Compartment

<p>5" [127mm] 12 sq. in. [7742mm<sup>2</sup>] 2 13/16" [71mm]</p>	<p>1 5/8" [41mm] 7.7 sq. in. [4698mm<sup>2</sup>] 4.3" sq. in. [2774mm<sup>2</sup>]</p>	<p>2 3/16" [71mm] 6.2 sq. in. [4000mm<sup>2</sup>] 5.8" sq. in. [3742mm<sup>2</sup>]</p>	<p>3 1/8" [79mm] 7 sq. in. [4516mm<sup>2</sup>] 5" sq. in. [3226mm<sup>2</sup>]</p>	<p>1 5/8" [41mm] 4.3 sq. in. [2774mm<sup>2</sup>] 3.4" sq. in. [2194mm<sup>2</sup>]</p>
---	---	--	---	---

#### Small Compartment

<p>5" [127mm] 8 sq. in. [5161mm<sup>2</sup>] 1 15/16" [49mm]</p>	<p>1 5/8" [41mm] 5.2 sq. in. [3355mm<sup>2</sup>] 2.8" sq. in. [1806mm<sup>2</sup>]</p>	<p>2 3/16" [71mm] 4.2 sq. in. [2710mm<sup>2</sup>] 3.8" sq. in. [2452mm<sup>2</sup>]</p>	<p>3 1/8" [79mm] 4.8 sq. in. [3097mm<sup>2</sup>] 3.2" sq. in. [2065mm<sup>2</sup>]</p>	<p>1 5/8" [41mm] 2.8 sq. in. [1806mm<sup>2</sup>] 2.4" sq. in. [1548mm<sup>2</sup>]</p>
--	---	--	---	---

NP800 Series Tele-Power Poles are provided with a maximum of four 4" x 2 3/8" x 1 7/8" or two 4 11/16" x 4 11/16" x 2 1/8" utility boxes. Various box configurations can be made to accommodate different numbers of circuits. Figures shown below are per utility box.

POWER: MAXIMUM WIRE FILLS FOR UL AND cUL LISTED TELE-POWER POLES (BOX ENDED)							
WIRE GAUGE	NO. OF CONDUCTORS & CIRCUITS	UL LISTED POLE (Complies with the National Electrical Code)			cUL LISTED POLE (Complies with the Canadian Electrical Code)		
		4" x 2 3/8" x 1 7/8" BOX (16.5 cu. in.)	4" x 4" x 2 1/8" BOX (30 cu. in.)	4 11/16" x 4 11/16" x 2 1/8" BOX (42 cu. in.)	4" x 2 3/8" x 1 7/8" BOX (16.5 cu. in.)	4" x 4" x 2 1/8" BOX (30 cu. in.)	4 11/16" x 4 11/16" x 2 1/8" BOX (42 cu. in.)
14	Conductors	6	15	21	10	20	28
	3 Wire CCTS	2	5	7	3	6	9
12	Conductors	5	13	18	9	17	24
	3 Wire CCTS	1	4	6	3	5	8
10	Conductors	5	12	16	7	13	18
	3 Wire CCTS	1	4	5	2	4	6
8	Conductors	4	10	11	5	10	11
	3 Wire CCTS	1	3	3	1	3	3
6	Conductors	2	6	6	3	6	8
	3 Wire CCTS	0	2	2	1	2	2

**NOTE:** Wires per channel are limited by wire fill in the utility box.  
15A, 125V Tele-Power Poles UL listed by Underwriters' Laboratories will be constructed with 12-gauge wire, and poles that are cUL Listed may be constructed with 14-gauge or 12-gauge wire. Higher amperage poles will be wired to meet applicable codes.

## STANDARD POLE HARDWARE

**Pole Foot** – Non-adjustable foot with velcro® supplied on base to secure pole to carpet.

**Tee Bar Clamp** – Clamp is used for quick and secure fastening of the top of the pole.

**Ceiling Tile trim** – The trim provides a finished appearance where pole passes through ceiling panel.

## WIRING OPTIONS

**Utility Box** – Box is mechanically fastened to pole and hard wired to receptacles. Box ended pole only.

**10' Cord End** – Cord is hard wired to receptacles in pole. Maximum of three cords per compartment. Cord-ended pole only.

**Walkerflex** – The Walkerflex Manufactured Wiring System can be used to feed receptacles in the power pole or to feed subsequent systems at ground level. Make all necessary connections to complete the circuit.

## STANDARD POLE HARDWARE

- Remove ceiling tile.
- Align pole vertically (using a level) with top of pole resting against ceiling T-bar. After aligning pole, anchor to the floor using the velcro pad. For carpeted floors, use a single swatch of velcro attached to the bottom of the foot. For tile, fasten the second swatch to the floor.
- Assemble the pole mounting bracket on the ceiling T-bar at approximate location as shown. Tighten bracket locking thumb screw loosely so bracket is free to slide on T-bar.
- Place pole in the mounting bracket, checking that receptacle orientation is as desired. Align pole vertically (using level) and tighten both pole and bracket locking thumb screws.
- Remove utility box cover and connect power leads from pole to overhead wiring system, using wiring methods of applicable electrical codes. Hook up cord ends, or Walkerflex Connectors to adjoining wiring systems.
- Install low potential cables by fishing them down through the opening in the top of the pole or by removing the cover, laying the cables in and replacing the cover.

Figure 1

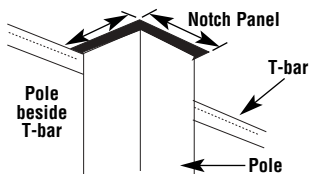


Figure 2

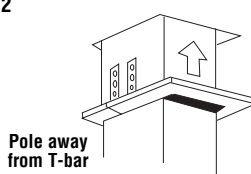
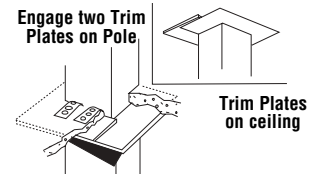


Figure 3



7. Notch ceiling panel (Figure 1). Install ceiling panel (Figure 2). Engage ceiling trim and slide up to finish installation (Figure 3).

**NOTE:** Velcro® is a registered trademark of Velcro Industries.

# WIREMOLD



**Wiremold / Legrand**  
U.S. and International:  
60 Woodlawn Street • West Hartford, CT 06110  
1-800-621-0049 • FAX 860-232-2062 • Outside U.S. 860-233-6251  
Canada:  
570 Applewood Crescent • Vaughan, Ontario L4K 4B4  
1-800-723-5175 • FAX 905-738-9721

