



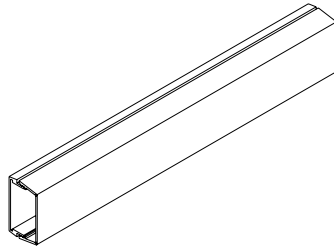
# AL2400 Aluminum Surface Raceway

## INSTALLATION INSTRUCTIONS

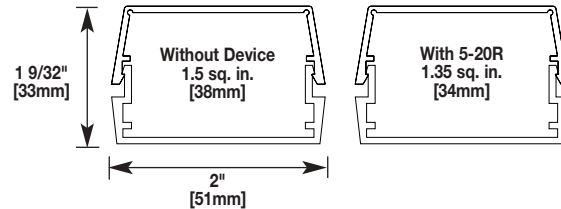
Installation Instruction No.: INST007 R1 – Updated October 2003

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

All electrical products may represent a possible shock or fire hazard if improperly installed or used. Wiremold electrical products are UL listed, made for interior use and should be installed by qualified electrical people in conformance with current local and/or the National Electrical Code.



### MAXIMUM CROSS SECTION



**Note:** Raceway may be configured in single or multiple channels to accommodate power or communications wiring.

### AL2400 RACEWAY WIRE FILL CAPACITIES FOR POWER

	WIRE TYPE	TW	THW	RHH/RHW	THHN/THWN
POWER WIRING WITHOUT DEVICE 1.7 sq. in. cross section	6 AWG	8	8	5	13
	8 AWG	14	11	8	18
	10 AWG	31	22	15	37
	12 AWG	40	27	24	58
	14 AWG	50	33	30	78
POWER WIRING AWG WITH DEVICE 5-20R duplex devices 1.35 sq. in. cross section	6 AWG				3
	8AWG	3			4
	10 AWG	6	5	3	8
	12 AWG	8	6	5	12
	14 AWG	10	7	6	16

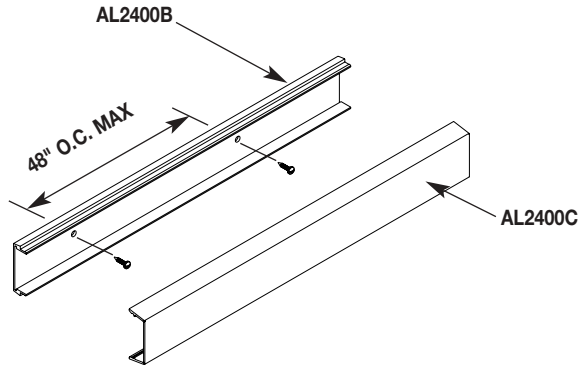
### AL2400 RACEWAY WIRE FILL CAPACITIES FOR DATA/COMMUNICATION

CABLE/WIRE SIZE	OD		20% FILL*	40% FILL**
	[In.]	[mm]		
UNSHELD TWISTED PAIR	4-pair, 24 AWG, Cat. 5	0.220 [5.6]	8	17
	4-pair, 24 AWG, Cat. 3	0.190 [4.8]	11	23
	4-pair, 24 AWG, Cat. 6	0.250 [6.3]	6	13
TELEPHONE	2-pair, 24 AWG	0.140 [3.6]	22	44
	3-pair, 24 AWG	0.150 [3.8]	19	38
	4-pair, 24 AWG	0.190 [4.8]	11	24
	25-pair, 24 AWG	0.410 [10.4]	2	5
COAXIAL	RG58/U	0.195 [5.0]	11	22
	RG59/U	0.242 [6.1]	7	14
	RG62/U	0.242 [6.1]	7	14
	RG6/U	0.270 [6.9]	5	11
TWINAXIAL	100 Ohm	0.330 [8.4]	3	7
SHELD TWISTED PAIR	Type 1	0.390 [9.9]	2	5
	Type 2	0.465 [11.8]	2	4
	Type 3	0.245 [6.2]	7	14

**NOTE:** \* 20% cable fill is calculated to approximate reduction in cable capacity due to connectors mounted within raceway and fittings that may restrict cross sectional area.

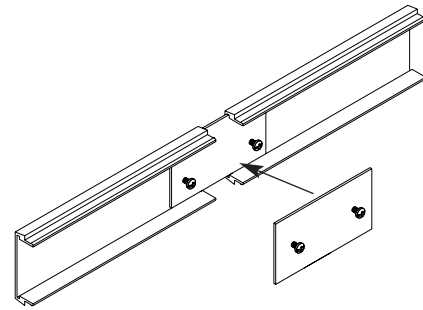
\*\* 40% cable fill is the maximum designed cable fill base on a proposed revision to TIA/EIA 569-A.

## AL2400B BASE and AL2400C COVER



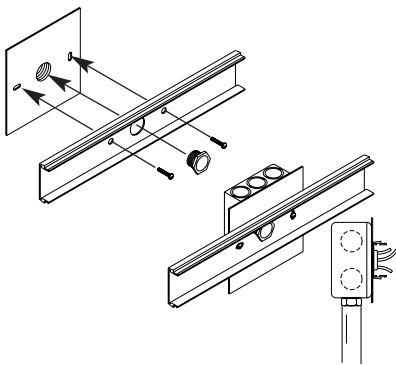
To attach AL2400B base section to mounting surface, drill 9/32" holes in the base (approx. 48" o/c.) fasten base with #8 head screws. Snap AL2400C cover to complete installation.

## AL2401 COUPLING



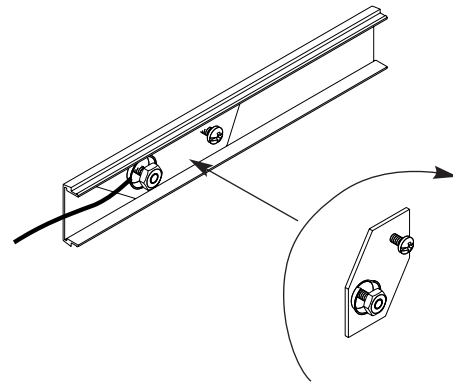
At AL2400B base section butt joints, slide AL2401 Coupling into flathead first base section than slide next base to surface. Center coupling on joint. Tighten locking screws.

## AL2451H BOX ADAPTER



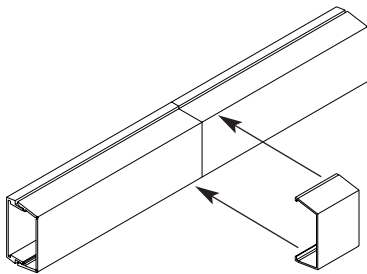
Use for feed raceway from existing wall outlet box. To install, attach adapter to outlet box with two screws. This system is designed with capacity for additional feed or circuitry conductors.

## AL2409 GROUND ADAPTER



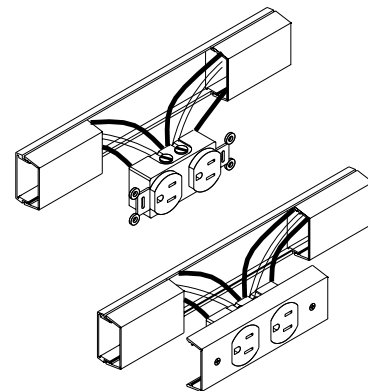
Position AL2409 Ground Clamp into rib in AL2400 raceway base. Tighten locking screw. attach ground wire using brass cup washer and green hex nut to ground lug.

## AL2406 COVER CLIP



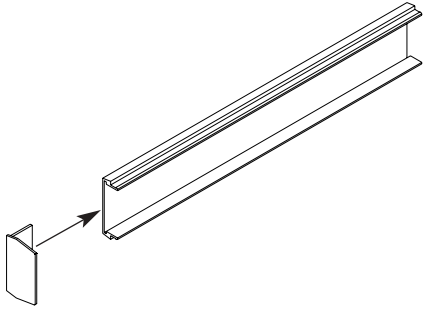
To close any gaps at either the base or the cover that occur from field cutting, Snap AL2406 Cover Clip over the joints on the assembled raceway.

## AL2400P-D SERIES



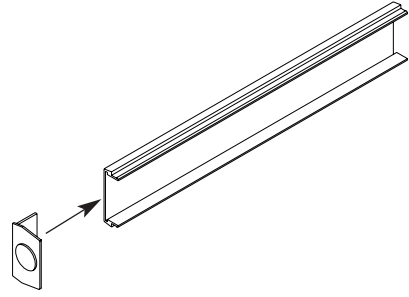
For AL2400P-D series duplex plates, Install wiring to devices as required. Attach device to plate using #6 screws and "Kep"nut (Provided) Snap device plate onto AL2400B raceway base.

## AL2410B BLANK END FITTING



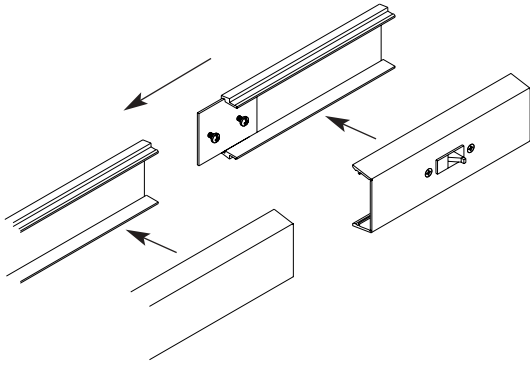
At end of AL2400B raceway run, slide AL2410B Blank End Fitting in last base section. Secure in place by tightening two #8-32 screws.

## AL2410B2 FEED END FITTING



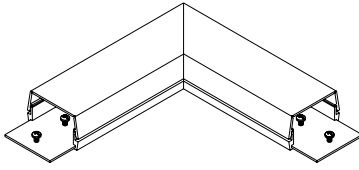
At end of AL2400B Raceway run, slide AL2410B2 Feed End in last base section. Secure in place by tightening two #8-32 set screws. This system is designed with capacity for additional feed or circuitry conductors.

## AL2440A IN-LINE SINGLE POLE SWITCH



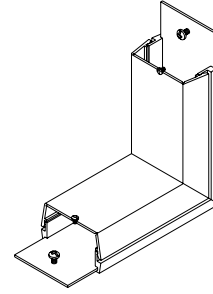
Single Pole Switch 15A. 120V. To Install slide coupler into groove of AL2400B raceway base and push base section together. Tighten screws, connect all wires and snap in cover to complete installation.

### AL2411 90° FLAT ELBOW



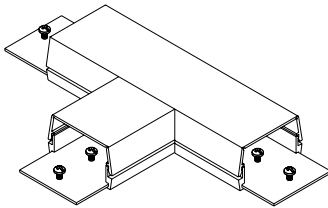
At 90° turn on same surface, position AL2411 Flat Elbow at end of AL2400 base. Position next bases section onto other end of AL2499B. Center couplings over base joints and tighten screws. Install fitting cover after wiring.

### AL2417 INTERNAL ELBOW



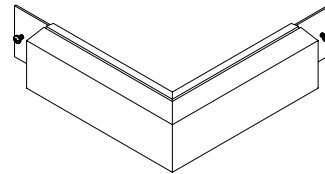
Install AL2400 to raceway base BEFORE mounting raceway base. Fasten base section to surface joints, tighten setscrews. Center couplings over base joints and tighten screws. Install fitting cover after wiring.

### AL2415 TEE ELBOW



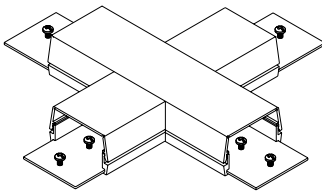
AL2415 tee fitting, position fitting at end of AL2400 base. Install other base section to other end of fitting. Center couplings on joints and tighten screws. Install fitting cover after wiring.

### AL2418 EXTERNAL ELBOW



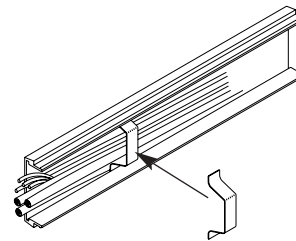
At 90° outside corner, position AL2418 external elbow at end of joints and tighten screws. Install fitting cover after wiring.

### AL2416 CROSS ELBOW



AL2416 cross Elbow, position fitting at end of AL2400B base. Install other base sections to other ends of the fitting. Center Couplings on joints and tighten screws. Install cover fitting after wiring.

### AL2400WC WIRE CLIP



For retaining wires in long raceway run, Snap-in AL2400WC Wire Clip approx. 30" apart into AL2400 base.



*The Wiremold Company*

*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*

