



SpecMate Type 1 Wireway is provided in sizes ranging from 2" to 24" [51mm to 610mm] wide and from 2" to 12" [51mm to 305mm] deep, with a hinged cover. The Wireway may be provided with barriers. All SpecMate Wireway is listed by Underwriters Laboratories under File No. E137690 and CSA Certified under File No. LL59760 in compliance with the National and Canadian Electrical Code.

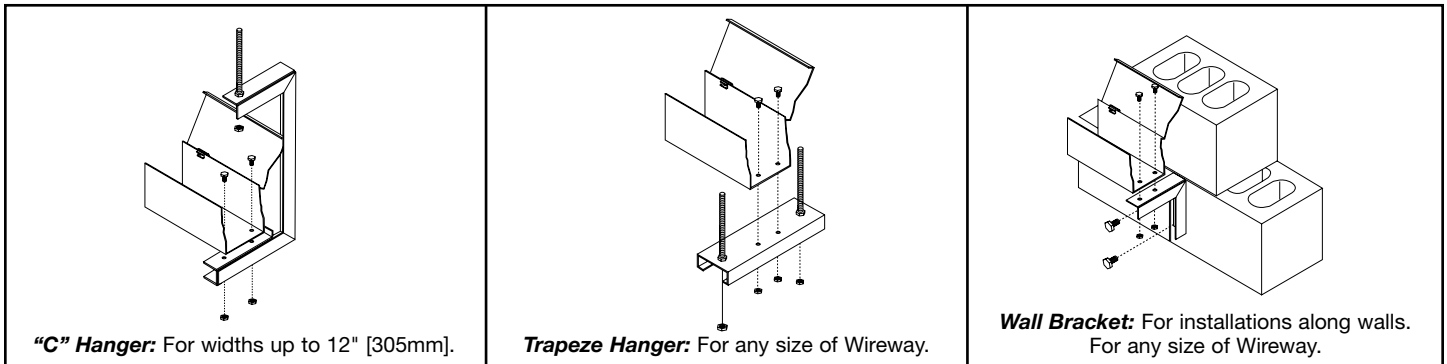


# SpecMate™ Wireway Systems

## INSTALLATION INSTRUCTIONS

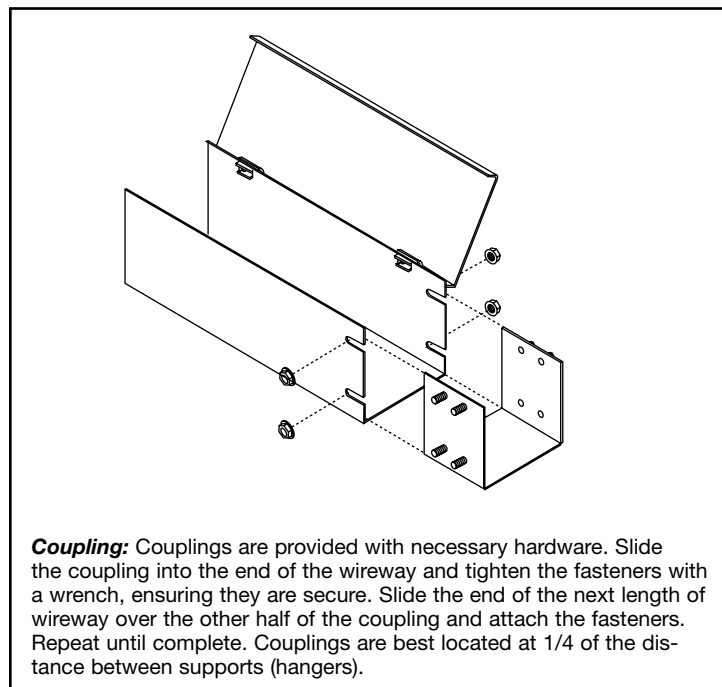
**Typical Installation:** The Wireway shall be installed as a complete system incorporating all fittings necessary to provide for directional changes. All connections shall be fastened securely with the fasteners provided by the manufacturer in order to ensure compliance with UL and CSA bonding requirements. Conductors of appropriate types as outlined by the applicable Electrical Code may be used in the Wireway following installation. Specific installation instructions are given below.

**Hanging Method:** Three styles of hangers may be purchased with SpecMate Wireway Systems.

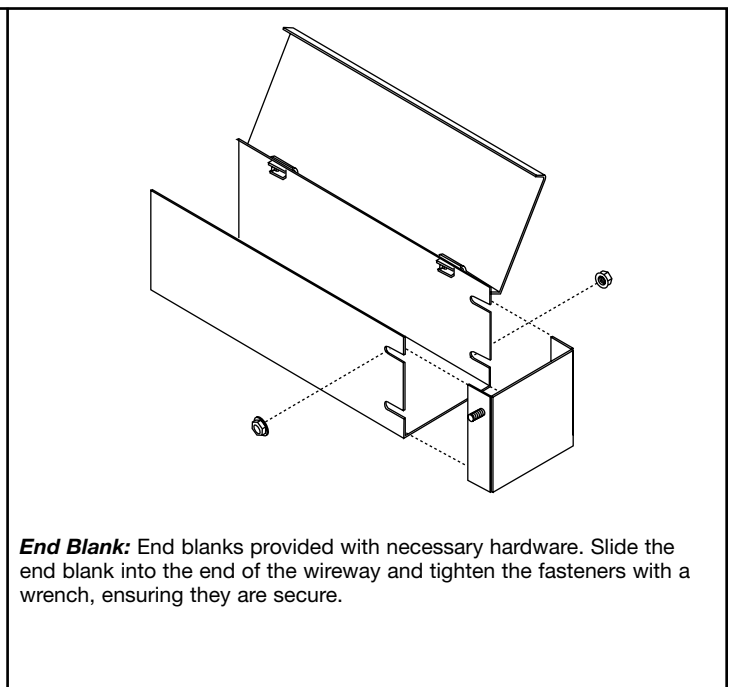


**Installation:** For "C" Hangers, Trapeze Hangers, threaded rod should be cut to the appropriate length and fastened to a structural member. The hanger should then be bolted to the threaded rod through the holes provided, ensuring that it is level and in line with the other hangers. Wall-mounted hangers should be fastened to structural members in the wall in a manner ensuring sufficient support strength. Once the Wireway is in place, it must be fastened to the hanger by any structurally sound method. Most installations use 1/4" [6.4mm] nuts and bolts, fastened through holes drilled in the Wireway Base. No sharp edges shall be allowed in the Wireway as a result of fastening. Fastening hardware for hangers is not provided. UL listed Wireway with square cross sections of 2.5, 4, and 6 inches [64, 102 and 152mm] may be supported on maximum spans of 10 feet [3 meters]. All other Wireway shall be supported on spans of 5 feet [1.5 meters] or less.

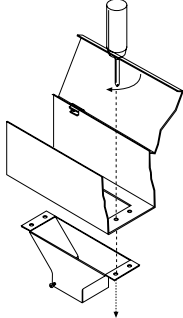
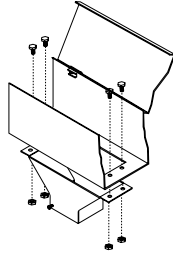
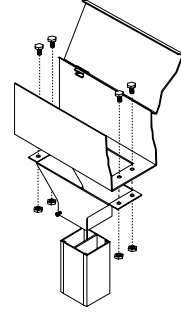
### Installation of couplings:



### Installation of end blanks:



## Installation of Tele-Power Pole Adapter:

 <p><b>1.</b> Locate the Pole Adapter on the Wireway. Drill holes in the appropriate locations to match the holes in the Pole Adapter. Cut and grommet hole to match Pole Adapter Entrance Feed.</p>	 <p><b>2.</b> Bolt the Pole Adapter to the underside of the Wireway. No sharp edges should remain in the Wireway. (Bolts not furnished.)</p>	 <p><b>3.</b> Insert the Wiremold NP600 Series Tele-Power Pole into the underside of the Pole Adapter. Tighten the two set screws (furnished) onto the pole.</p>
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### National Electrical Code (NEC):

Article 362-5 of the NEC (1999) states that "The sum of cross-sectional areas of all contained conductors at any cross section of the wireway shall not exceed 20 percent of the interior cross-sectional area of the wireway" and that "Wireways shall not contain more than thirty current carrying conductors at any cross section." An important exception to this is that "where the derating factors specified in Article 310 – 15(b)(2)(a), are applied, the number of current-carrying conductors shall not be limited, but the sum of the cross-sectional areas of all contained conductors at any cross section of the wireway shall not exceed 20 percent of the interior cross-sectional area of the wireway."

Where the conductors enter the wireway through the bottom or the sides, the maximum conductor size is limited due to the need to control the bend radius of the conductor. See the chart entitled "Conductor Size Based on Bending Space," for the maximum conductor size applicable for this situation.

Please see Article 362 of the NEC for more details if required.

### Canadian Electrical Code (CEC):

The rules in CEC 12-2104 regarding conductors in wireways are as follows:

- (1) Conductors used in wireways shall be the insulated types indicated in Table 19 (CEC) as being suitable for use in raceways.
- (2) Except as permitted in Subrule (4) wireways shall contain not more than 200 conductors and the aggregate cross-sectional area of the conductors and their insulation shall not exceed 20% of the interior cross-sectional area of the wireway.
- (3) No conductor larger than 500 kcmil (MCM) copper or 750 kcmil (MCM) aluminum shall be installed in any wireway.
- (4) Wireways containing only signal and control conductors may contain any number of conductors but the aggregate cross-sectional area of the conductors and their insulation shall not exceed 40% of the interior cross-sectional area of the wireway.
- (5) The cross-sectional area for conductors in Subrules (2) and (4) shall be determined in accordance with Rule 12-1014(4).

Please see Section 12-2100 of the CEC for more details if required.

Conductor size is based upon the bending space.

Smaller Inside Dimensions of Wireway		Maximum Conductor Size AWG or MCM	
Inches	[mm]	Conductor	[mm <sup>2</sup> ]
1 1/4	31.8	6	13.3
2	50.8	3	26.7
2 1/2	63.5	2	33.6
3	76.2	1	42.4
3 1/2	88.9	2/0	67.4
4	102.0	4/0	107.2
4 1/2	114.0	250	127.0
5	127.0	350	177.0
6	152.0	500	253.0
8	203.0	900	456.0
10	254.0	1250	633.0
12	305.0	2000	1013.0

**Exception:** Conductors that enter only at the ends of the run are limited in size only by the 20% fill requirements of the National and Canadian Electrical Codes.

**For wirefill charts and other technical information, see The Wiremold Company's Buyers Guide.**



#### 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

In Canada:

850 Gartshore Street • Fergus, Ontario N1M 2W8

1-800-741-7957 • FAX 519-843-5980

**INS00007R1 – Updated June 2001 – For latest specs visit [www.wiremold.com](http://www.wiremold.com)**

