

  
CATALOG

# **Carlon® low-voltage structured cable management and ENT systems**



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**Thomas & Betts is now ABB**

**Installation Products, but our long legacy of quality products and innovation remains the same. From connectors that help wire buildings on Earth to cable ties that help put machines in space, we continue to work every day to make, market, design and sell products that provide a smarter, safer and more reliable flow of electricity, from source to socket.**

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## Overview

### **Your complete low-voltage system solution**

The Carlon low-voltage structured cable management system makes it easy for you to run wiring and install outlets for data, voice and cable TV in walls or floors in any room. Lightweight, hand-bendable Resi-Gard® flexible raceway protects the wiring. And an innovative



array of boxes and brackets offers you the right solution for any outlet — even in ceramic tile walls or situations where you need to accommodate high- and low-voltage devices in the same box.



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## Low-voltage adjustable brackets

### Ideal for use with backsplash

Our low-voltage adjustable brackets are the perfect solution for tile, paneling or stucco. A bracket enables quick, easy stud mounting and a turn of the screw adjusts to any wall thickness. It's great for retrofit/



installation upgrades. Replace the single-gang bracket with a two-gang bracket or switch services to a high-voltage Adjust-A-Box® device.



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## Low-voltage adjustable brackets



1



2



3

Our low-voltage adjustable brackets simplify installation with tile, paneling or stucco to save you time and effort. Just use the quick-mount bracket to clip it to the stud (1), add a screw for extra support if you want it (2), then use the adjustment screw to accommodate wall thickness (3).

- Accommodates varying finished-wall thicknesses — ideal for wood paneling, tile or stucco walls
- With the turn of a screw, adjust to any wall thickness
- Steel mounting bracket provides a secure mount
- Backless design accommodates large/deep low-voltage devices
- Eliminates cutting the backs off electrical boxes
- Accommodates bend-radius requirements for low-voltage cabling
- Provides ample space for installation
- Removable bracket and interchangeable mounting bracket — upgrade from a one-gang to a two-gang anytime



Cat. no.	Size cu. in.	Mounting means	Description	Dimensions (in.)	Std. ctn.
SC100ADJC•	21	Adjustable bracket	1-Gang	3.56 L x 3.88 W x 1.69 D	24
SC200ADJC•	34	Adjustable bracket	2-Gang	3.56 L x 5.63 W x 1.69 D	20

• UL® Listed E216492.



SC100ADJC



SC200ADJC

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## Recessed dual-voltage 3-gang old work plate

### **Simplify today's in-home entertainment and networking needs**

The Carlon RDV 3-gang old work plate has been developed to simplify today's in-home entertainment/networking needs. The box is designed to accommodate the wires, cables and cords used with flat-panel display installations.



It features a two-gang low-voltage opening and a one-gang opening for an outlet/switch box (boxes, devices and plates not included).



## Recessed dual-voltage 3-gang old work plate



Fig. 1



Fig. 2



Fig. 3

1. Locate studs and determine if they are 16" or 24" apart. If 16" apart, measure a maximum of 3" from edge of stud to determine plate location. If 24" apart, center plate between studs.

Note: High-voltage side must be 3" from stud.

2. Place SC300PRB or SC300PRR face down against the wall. Using a hammer, tap around the edge of the plate to mark area to be cut out (Fig. 1). Remove plate from wall, a line should be visible on the drywall. Cutout should be approximately 6.25" x 9.25".
3. Carefully cut out area of drywall with a utility knife or drywall saw.
4. Place SC300PRB or SC300PRR in wall and secure by tightening down all four zip-mount retainers (Fig. 2).
5. Select device and outlet/switch box, cat. no. B114R (14 cu. in.) or B120R (20 cu. in.), based on wire fill needs (Fig. 3).



Fig. 4



Fig. 5



Fig. 6



Fig. 7

6. Insert wires through boxes (B114R or B120R and SC300PRB or SC300PRR). Make sure high- and low-voltage wires do not come in contact with one another.

7. Install Carlon Old Work Zip Box®, model B114R or B120R (Fig. 4).

8. Install receptacle and faceplate per manufacturer's instructions (Fig. 5).

9. Install low-voltage devices and faceplate per manufacturer's instructions (Fig. 6 and Fig. 7).

Note: When preparing for later installation of low-voltage devices, use a 2-gang blank plate to cover wall opening for a clean finished look.

## Installed



Top view showing ample room between drywall and studs.

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## Recessed dual-voltage 3-gang old work plate



- 3-gang dual-service capability: accommodates one line voltage and two low-voltage services using one plate
- Recessed low-profile design eliminates unsightly wires and plug heads
- Universal 1-gang outlet/switch opening
- Pre-assembled box and frame reduces labor time and saves money
- Shallow design provides ample room behind the drywall and between studs and accommodates cable bend requirements
- Four swing-out clamps lock the plate securely to the wall — horizontal or vertical mount
- Superior hi-gloss, paintable finish: professional appearance and blends with any décor
- Non-metallic, ABS material: lightweight and easy to handle

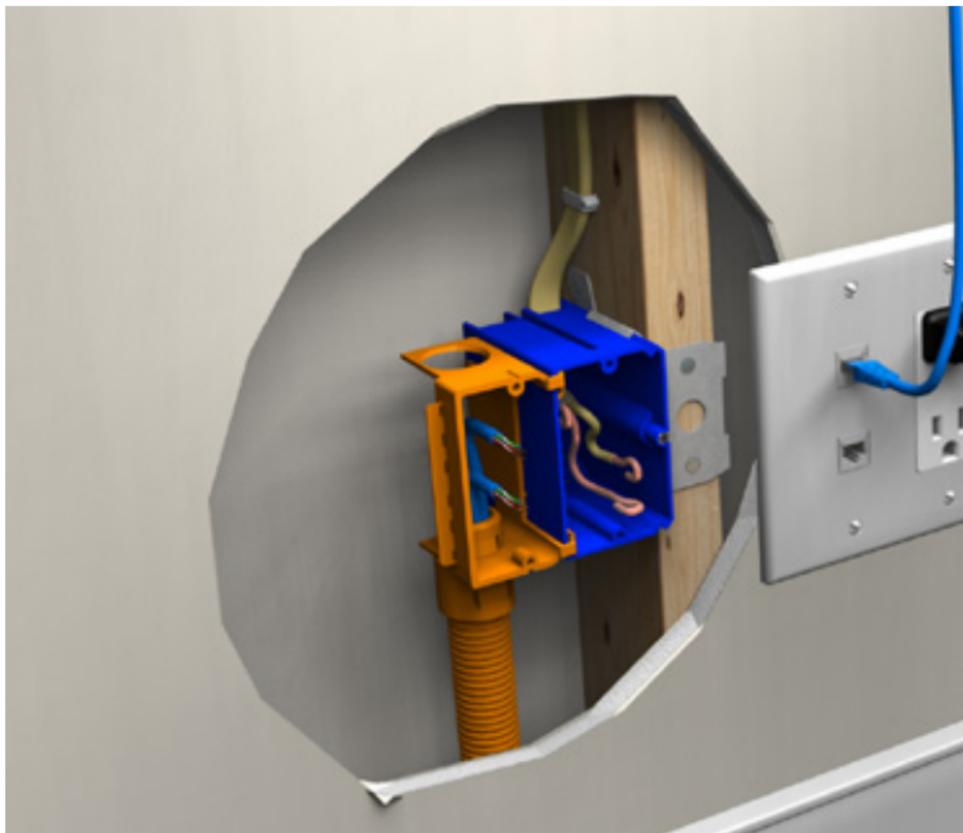
<b>Cat. no.</b>	<b>Size cu. in.</b>	<b>Mounting means</b>	<b>Description</b>	<b>Dimensions (in.)</b>	<b>Std. ctn.</b>
SC300PRB	N/A	Zip-mount retainers	RDV 3-gang old work plate	6.75 L x 10.5 W x 2.72 D	20
SC300PRR	N/A	Zip-mount retainers	RDV 3-gang old work plate with outlet box (B114R)	6.75 L x 10.5 W x 2.72 D	3

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## Low-voltage add-on bracket

### Provide low-voltage outlets in the wall

This low-voltage bracket provides a low-voltage outlet next to a previously installed high-voltage outlet. Great for both new construction and rework, it attaches easily to most electrical boxes and is designed to fit a standard two-gang faceplate. Resi-Rings accept  $\frac{3}{4}$ " Resi-Gard® fittings only.



Carlson low-voltage old work brackets are specifically designed for the installation of low-voltage devices such as cable television, data communications or telephone jacks in an existing wall. The backless feature provides the space needed for the bend radius requirements of coaxial or data communication cables. It also eliminates the need for metal plates, lags or screws.



## Low-voltage add-on bracket and old work bracket

### Low-voltage add-on bracket

- Dual-voltage capability accommodates high-and low-voltage devices in the same box
- Attaches to virtually any non-metallic electrical box as long as there's a side for the tape to stick to
- Accepts a two-gang faceplate
- $\frac{3}{4}$ " Resi-Rings
- Enables the installation of most rectangular yoke plates



SC100SC



1



2



3



Attaching the add-on bracket is a “snap.” Just remove the back of the double-sided tape (1), clip the bracket in place (2) and press on the bracket to secure it against the box (3). Enables the installation of most rectangular yoke plates.



Cat. no.	Size cu. in.	Mounting means	Description	Dimensions (in.)	Std. ctn.
SC100SC•	N/A	Tape	1-gang	3.68 L x 2.36 W x 3.10 D	24

• UL Listed E216492.

## Old work bracket



SC100RR



SC200RR

- Rectangular flange for faster/easier installation
- Shallow bracket — less material, easier to work with
- Marking hole for wall opening
- Thinner flange for less protrusion on the wall
- Single-gang only — clamps stop at center point to prevent the bracket from twisting or bending



Cat. no.	Size cu. in.	Mounting means	Description	Dimensions (in.)	Std. ctn.
SC100RR•	N/A	Adjustable bracket	1-Gang	4.32 L x 2.52 W x 1.66 D	12
SC200RR•	N/A	Adjustable bracket	2-Gang	4.28 L x 4.28 W x 1.66 D	6

• UL Listed E216492.

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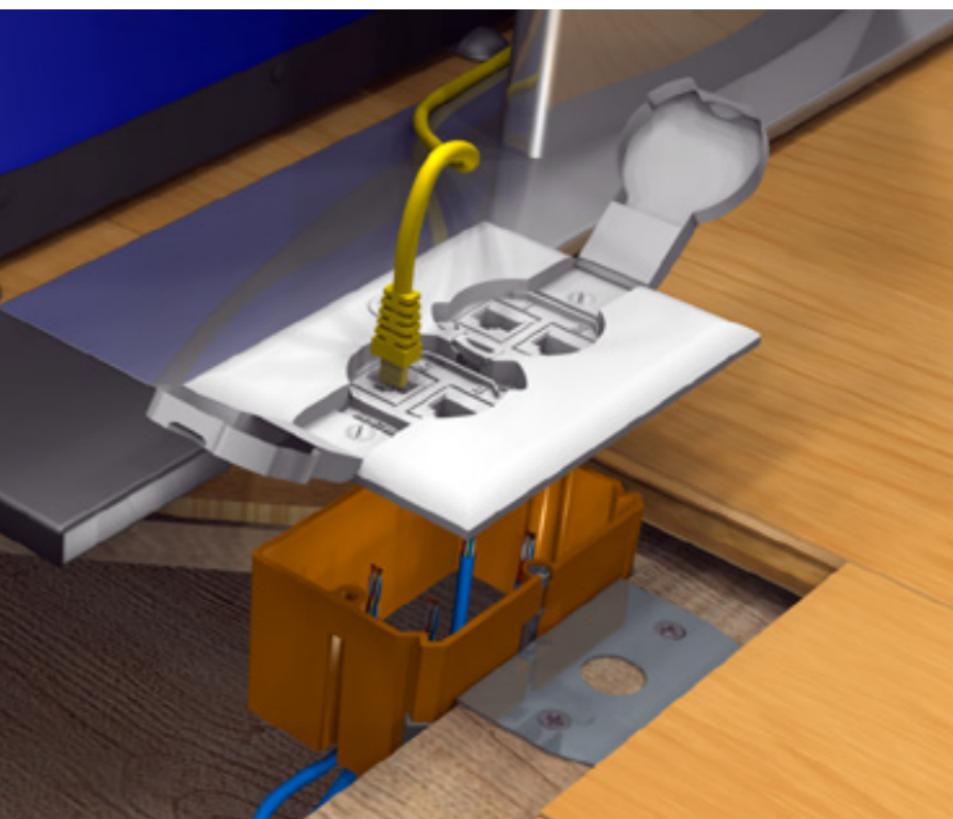
## Low-voltage adjustable floor bracket with cover

### Provide low-voltage outlets in the floor

The Carlon low-voltage adjustable floor bracket is specifically designed for the low-voltage, structured cabling market. The floor bracket is industry-standard orange to identify low-voltage applications, the open design provides the space needed for low-voltage bend radius requirements, and the Leviton QuickPort® Quad 106 insert provides up to four low-voltage outlet ports. The Carlon low-voltage adjustable floor bracket is ideal for any residential or commercial low-voltage application.



The floor bracket also features a unique screw design, enabling it to be adjusted to most finished-floor heights by simply turning the screw clockwise or counterclockwise and adjusting flush to the floor.



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## Low-voltage adjustable floor bracket with cover



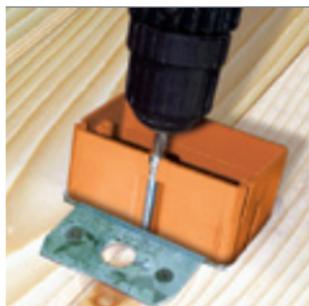
- White, ivory or brass cover
- Orange color — identifies low-voltage installations
- Open-design floor bracket — accommodates low-voltage bend radius requirements
- Adjustable screw bracket adjusts to most finished-floor depths
- Leviton QuickPort® Quad 106 insert — install up to four low-voltage inserts
- Two-door design
- cUL-US Listed

QuickPort® is a registered trademark of Leviton Manufacturing Co., Inc.

## Installation



Install clip over subfloor.



Screw in to adjust to height of flooring or carpet.



Beautiful flush fit every time!

### One-gang adjustable



Cat. no.	Size cu. in.	Mounting means	Cover description	Dimensions (in.)	Std. ctn.
SC100FBWC•	N/A	Adjustable bracket	Non-metallic — white	2.80 L x 4.36 W x 1.72 D	8
SC100FBVC•	N/A	Adjustable bracket	Non-metallic — ivory	2.80 L x 4.36 W x 1.72 D	8
SC100FBBC•	N/A	Adjustable bracket	Brass	2.80 L x 4.36 W x 1.72 D	8

• UL Listed E216492.

## Other boxes and brackets

### Low-voltage brackets and mud ring

#### Low -voltage brackets



SC100A



SC200A



SC300A

Here's the fast installation choice when only low voltage is required. Designed to fit standard one-, two- or three-gang faceplates, the brackets feature an easy nail-on mounting or screw-in bracket. A hard shell provides durability and no racking. Resi-Rings accept  $\frac{3}{4}$ ", 1" and  $1\frac{1}{4}$ " Resi-Gard® fittings (one- and two-gang versions only).

- Backless design accommodates large/deep low-voltage devices
- Eliminates cutting the backs off electrical boxes
- Accommodates bend-radius requirements for low-voltage cabling
- Provides ample space for installation
- Mounting flange for steel stud application

#### **One- and two-gang versions only:**

- Resi-Rings with concentric knockouts
- Accepts  $\frac{3}{4}$ ", 1" and  $1\frac{1}{4}$ " Resi-Gard®
- Horizontal mounting bracket (one-gang only)
- Breakaway drywall support flange provides easy alignment for  $\frac{1}{2}$ " drywall
- Screw-mount option
- Breakaway vertical mounting flange
- Breakaway feature enables the use of the low-voltage add-on bracket



Cat. no.	Size cu. in.	Mounting means	Description	Dimensions (in.)	Std. ctn.
SC100A•	—	Captive nails	¾", 1", 1¼" Resi-Rings	3.73 L x 2.32 W x 3.15 D	24
SC200A•	—	Captive angled nails	¾", 1", 1¼" Resi-Rings	3.77 L x 4.07 W x 3.15 D	24
SC300A▶	44	Captive angled nails	—	3.69 L x 5.81 W x 1.50 D	5

• UL Listed E216492.

### Mud ring (4" square ½" raised cover)



Cat. no.	Description	Std. ctn.
SCA410•	1-gang	20

• Note: Classified for two-hour fire-resistive wall assemblies when used with two-gang quick-connect outlet and switch boxes.  
UL Listed E11461.

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## Other boxes and brackets

### Dual-voltage box/brackets



E-18-4-DV



SC200DV



SN-21-DV

Here's a smart alternative for where you would normally use separate high- and low-voltage boxes. Designed to fit a standard two-gang faceplate, this component combines an electrical box and low-voltage bracket into a single unit for fast, easy installation. No alignment tools are required and easy nail-on mounting provides precise placement and a professionally finished appearance. Resi-Rings accept  $\frac{3}{4}$ " Resi-Gard® fittings only.

- Dual-voltage capability
- Accepts a two-gang faceplate
- $\frac{3}{4}$ " Resi-Rings
- Backless design accommodates large/deep low-voltage devices
- Eliminates cutting the backs off electrical boxes
- Accommodates bend-radius requirements for low-voltage cabling
- Provides ample space for installation



Why waste time mounting, then trying to line up separate high-voltage and low-voltage boxes, and still end up with something not quite right? Our dual-voltage box/bracket lets you do it all in one fast, easy step with perfect alignment every time.



Cat. no.	Size cu. in.	Mounting means	Dimensions (in.)	Std. ctn. qty.
E-18-4-DV•	18.0	Dual voltage	3¾ L x 4 W x 3 D	50
SC200DV•	20.5	Angled side nails	3.69 L x 4.04 W x 3.67 D	16
SN-21-DV•	20.5	Angled side nails	3⅝ L x 4 W x 3⅞ D	50

• UL Listed E11461.

Permissible for use with 90° C insulated conductors.

80° C heat-rated material.

## Other boxes and brackets

Carlton® multipurpose non-metallic electrical boxes

### Large-capacity single- and double-gang boxes

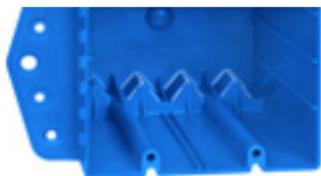
- The Carlton brand's largest-capacity single- and double-gang non-metallic boxes
- Ideal for use with speakers and large devices
- Use for both new and old work
- Molded bracket for use with wood or steel studs
- Mount horizontally or vertically
- Internal mounts allow for changing depth of installation
- Voltage separator may be added to double-gang box for dual-voltage applications



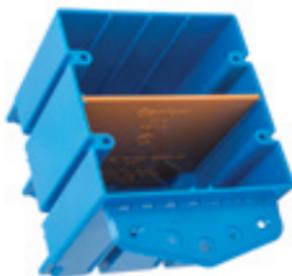
Molded bracket for mounting to steel or wood studs



Mount vertically or horizontally



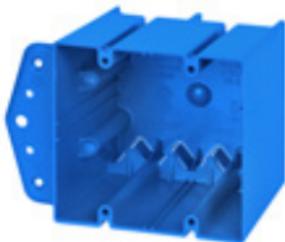
Internal mounts allow for changing depth of installation



Voltage separator available for dual-voltage applications



B125AB



B249B



SCDIVS



Cat. no.	Size	Mounting means	Description	Std. ctn.
	cu. in.			
B125AB	24.5	Captive nails, side flange, internal screws	Single-gang box	24
B249B	48.2	Side flange, internal screws	Double-gang box	12
SCDIVS	—	Insert into B249B	Voltage separator for double-gang box	5

## Other boxes and brackets

### Carlton® PVC boxes

#### Single-gang for old work



B108R-UPC



B117RSW closed



B114R-UPC



B117RSW open

#### One-gang 8.0–17.0 cu. in.

Cat. no.	Size cu. in.	Mounting means	Description	Dimensions (in.)	Std. ctn.
B108R-UPC •	8.0	Mounting ears	—	3 <sup>5</sup> / <sub>8</sub> L x 2 <sup>3</sup> / <sub>8</sub> W x 1 <sup>1</sup> / <sub>4</sub> D	25
B114R-UPC •	14.0	Mounting ears and swing clamps	—	4 <sup>1</sup> / <sub>8</sub> L x 2 <sup>1</sup> / <sub>4</sub> W x 2 <sup>3</sup> / <sub>4</sub> D	50
B117RSW •	17.0	Mounting ears and swing clamps	Access panel	3.64 L x 4.07 W x 2.00 D (2.20 opening)	30

• Not UL Classified for Fire Resistance.



E-18-4



B120R

### One-gang 18.0–20.0 cu. in.

Cat. no.	Size cu. in.	Mounting means	Description	Dimensions (in.)	Std. ctn.
E-18-4	18.0	Thermoplastic molded ears	Integral molded V-clamp	$3\frac{25}{32}$ L x $2\frac{7}{32}$ W x $2\frac{1}{4}$ D	100
B120R •	20.0	Mounting ears and swing bracket	—	$4\frac{1}{8}$ L x $2\frac{5}{16}$ W x $3\frac{5}{8}$ D	50

• Not UL Classified for Fire Resistance.



B1EXT-CRD



B1MGEXT-2

### Box extender



Cat. no.	Size cu. in.	Mounting means	Description	Std. ctn.
B1EXT-CRD	6.16	Screw	One-gang	12
B1MGEXT-2	4.89/gang	Screw	One-gang, gangable (2/pkg.)	10

UL Listed E11461.

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## Residential floor boxes

### Adjust-A-Box<sup>®</sup>

#### 1- and 2-gang adjustable residential floor boxes

Carlson Adjust-A-Box floor boxes make installing floor outlets fast and easy by providing maximum installation flexibility. The box features an adjustment screw designed to adjust the box from 0" to 1 $\frac{3}{4}$ " by simply turning the screw clockwise or counterclockwise, providing a flush mount every time.

Covers are available in three types: non-metallic, brass and stainless steel. They feature two hinged doors to protect unused devices and to keep out dust and scrubwater. Because the doors are attached, they won't get lost or misplaced while the outlet is in use.



Double-gang  
(devices not included)

Single-gang

The Adjust-A-Box® is available in two sizes, single-gang and double-gang. The single-gang box has a 20 cubic inch capacity and includes a duplex receptacle, and the double-gang box has a 34 cubic inch capacity and comes with a divider for dual-voltage capabilities.

Carlson® Adjust-A-Box® residential floor boxes are ideal for residential and home office applications and provide a clean, aesthetically pleasing floor outlet anywhere you need it.

### **Features**

- Listed floor boxes in accordance with section 314.27(B) of the NEC®
- Adjustment screw adjusts depth (from 0" to 1<sup>3</sup>/<sub>4</sub>" )
- Cover options include: non-metallic, brass and stainless steel covers
- Covers have two (non-removable) hinged doors
- Solid brushed brass and stainless steel covers have a light lacquer finish for extra protection
- Non-metallic covers are available in white and ivory (single-gang box only)
- Two-gang version features dual-service capabilities (requires use of dual-service divider)

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## Residential floor boxes

### Adjust-A-Box<sup>®</sup>

#### 1- and 2-gang adjustable residential floor boxes (continued)

- Integral cable clamps
- Ideal for new work and retrofit applications
- UL<sup>®</sup> Listed
- UL scrubwater tested

#### Adjust-A-Box installation

##### 1- and 2-gang



1  
Install clip over subfloor.



2  
Screw in to adjust to  
height of flooring  
or carpet.



3  
Beautiful flush fit  
every time!

NEC and National Electrical Code are registered trademarks of the National Fire Protection Association, Inc.



One-gang

Two-gang



E11461

Cat. no.	Size	Cover	Cubic in.	Std. ctn.	Std. wt. (lbs.)
<b>Non-metallic</b>					
B121BFBRW	One-gang	White	20	8	7.1
B121BFBR	One-gang	Ivory	20	8	6.9
<b>Brass</b>					
B121BFBB	One-gang	Brass	20	8	15.0
B234BFBB	Two-gang	Brass	34	4	10.7
<b>Stainless steel</b>					
B121BFSS	One-gang	Stainless steel	20	8	13.7
B234BFSS	Two-gang	Stainless steel	34	4	9.8

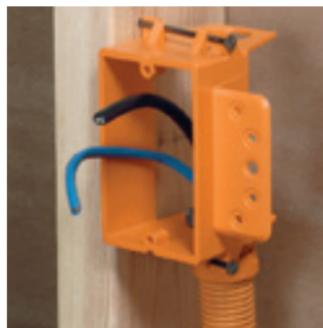
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## Resi-Gard® flexible raceway system

### Raceway coils and reels

#### Resi-Gard flexible raceway and fittings

Available in five sizes from ¾" to 2", with factory-installed pull tape in sizes 1" to 2", our Resi-Gard flexible raceway provides a main chase from the main distribution panel to a secondary hub in the attic or basement. Ideal for easy access to add cable or service upgrades or leave empty for future expansion.



Our complete line of quick-connect couplings, adapters, cable clips, conduit clamps and solvent cement make for quick, easy professional installation of Resi-Gard flexible raceway.

### Resi-Gard flexible raceway

Ideal for providing a main chase from the main distribution panel to a secondary hub in the attic or basement, Resi-Gard non-metallic flexible raceway is available in ¾" to 2" diameter sizes with factory-installed pull tape in sizes 1" to 2". The raceway is hand bendable, lightweight and easily cut to length to reduce scrap. Bright orange color clearly signifies a low-voltage installation.



### Standard-length coils



Cat. no.	Size (in.)	Pull tape	Description	Reel length (ft.)
SCE4X1-100•	¾	Empty*	Flexible raceway	100
SCF4X1C-100•	1	900 lbs.	Flexible raceway	100
SCG4X1C-100•	1¼	900 lbs.	Flexible raceway	100
SCH4X1C-50•	1½	900 lbs.	Flexible raceway	50
SCJ4X1C-100•	2	900 lbs.	Flexible raceway	50

• UL Listed E151168.

FT-1 Rated

\* If installing own tape, a lubricated polyester is recommended.

### Standard-length reels\*



Cat. no.	Size (in.)	Pull tape	Description	Reel length (ft.)
SCE4X1-1000•	¾	Empty	Flexible raceway	1000
SCF4X1C-1500•	1	900 lbs.	Flexible raceway	1500
SCJ4X1C-500•	2	900 lbs.	Flexible raceway	500

\* Made to order

• UL Listed E151168.

FT-1 Rated

## Resi-Gard® flexible raceway system

### Resi-Gard fittings

#### Quick-connect coupling



Cat. no.	Size (in.)	Std. ctn.
SCA240E•	$\frac{3}{4}$	25
SCA240F•	1	20

• UL Listed E86720

#### Quick-connect threaded adapter



Cat. no.	Size (in.)	Std. ctn.
SCA243E•	$\frac{3}{4}$	25
SCA243F•	1	20

• UL Listed E86720

## Quick-connect snap-in adapter



Cat. no.	Size (in.)	Std. ctn.
SCA253E•	¾	25
SCA253F•	1	20

• UL Listed E86720

## Male terminal adapter\*



Cat. no.	Size (in.)	Std. ctn.
SCE943G•	1¼	50
SCE943H•	1½	25
SCE943J•	2	50

• UL Listed E23018.

\* Must be cemented to Resi-Gard® flexible raceway using only Resi-Gard® solvent cement.

## Resi-Gard® flexible raceway system

### Resi-Gard fittings and cable clips

#### Standard couplings\*



Cat. no.	Size (in.)	Std. ctn.
SCE940G•	1¼	30
SCE940H•	1½	25
SCE940J•	2	30

• UL Listed E23018.

\* Must be cemented to Resi-Gard® flexible raceway using only Resi-Gard® solvent cement.

#### PVC lock nut



Cat. no.	Size (in.)	Std. ctn.
LT9E•	¾	700
LT9F•	1	600

• UL Recognized.

## Cable clips

Pre-installed nails provide fast and easy installation for either a single cable, two to three cables or one bundled cable.



SC34CC



SC12CC



SC14CC

Cat. no.	Size (in.)	Standard bag quantity	Std. ctn.
SC14CC	$\frac{1}{4}$	1 Ea. (equals one bag of 100 clips)	10 bags of 100
SC12CC	$\frac{1}{2}$	1 Ea. (equals one bag of 25 clips)	10 bags of 25
SC34CC	$\frac{3}{4}$	1 Ea. (equals one bag of 10 clips)	20 bags of 10

## Resi-Gard® flexible raceway system

### Resi-Gard conduit clamps and cement

#### Conduit clamps

Designed to secure Resi-Gard raceway or bundled cable.



Cat. no.	Size (in.)	Standard bag quantity	Std. ctn.
SCE977EC	$\frac{3}{4}$	1 Ea. (equals one bag of five clamps)	20 bags of 5
SCE977FC	1	1 Ea. (equals one bag of five clamps)	12 bags of 5
SCE977GC	$1\frac{1}{4}$	1 Ea. (equals one bag of five clamps)	8 bags of 5
SCE977HC	$1\frac{1}{2}$	1 Ea. (equals one bag of five clamps)	6 bags of 5
SCE977JC	2	1 Ea. (equals one bag of five clamps)	6 bags of 5

Note: Each clamp requires two screws, two nuts and/or two bolts.

## Resi-Gard® solvent cement

Recommended application	Set-up time (evaporation rate)	Recommended installation temp.	Lap shear 73 °F	Viscosity at 75 °F as manufactured
For use with Resi-Gard®, Riser-Gard®, P&C Flex™ and Carlon PVC fittings up through 6" diameter.	10 °F–30 °F Use extra caution	40 °F–100 °F	2 hrs. 50 PSI	500–900 CPS
	30 °F–50 °F 5–6 minutes		16 hrs. 800 PSI	
	50 °F–70 °F 3–4 minutes	72 hrs. 1500 PSI		
	70 °F–90 °F 1–2 minutes			

Cat. no.	Size (in.)	Applicator	Description	Std. ctn.
VC9963SC	Pint	Brush	Clear	24

Meets ASTM D-2564.



## Flexible raceway systems

### Carlton® Plenum-Gard® raceway

Plenum-Gard® is a UL® Listed non-metallic corrugated flexible conduit for use in plenum, riser and general purpose applications. Plenum-Gard® is manufactured from PVDF resin, which is extremely durable and resistant to abrasion and mechanical damage before/after cable installation.

Plenum-Gard® is listed to UL® 2024 in accordance with the National Electrical Code® for plenum, riser, general purpose and other cabling/optical fiber/telecommunication applications as defined in Articles 725, 770, 800 and 820.

Important: Installed cables must be plenum rated and the UL® Listing must be printed on the product. Abandoned cables MUST be removed (reference NEC®).

#### Standard stock — reels

Cat. no.	Size (in.)	Color	Pull tape
CD4X1C-1500	1/2	Orange	200 lb.
CE4X1-1000		Orange	Empty
CE4X1-1000S	3/4	Orange	Empty/split
CE4X1C-1000		Orange	900 lb.
CF4X1C-500		Orange	900 lb.
CF4X1C-1000		Orange	900 lb.
CF4X1C-1500	1	Orange	900 lb.
CF4X1C-5200		Orange	900 lb.
CF4X1C-6500		Orange	900 lb.
CF4X1C-8000		Orange	900 lb.
CG4X1C-500		Orange	900 lb.
CG4X1-500S		Orange	Empty/split
CG4X1C-900		Orange	900 lb.
CG4X1C-1600	1 1/4	Orange	900 lb.
CG4X1C-3200		Orange	900 lb.
CG4X1C-6500		Orange	900 lb.
CG4X1-900S		Orange	Empty/split
CH4X1C-350		Orange	900 lb.



- Storage: -4 °F to 158 °F
- Handling: -4 °F to 104 °F
- No UV protection (not suitable for outdoor use)
- Do not store outside

Applications: Plenum, riser and general purpose

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## Technical info

UL Standard 2024	Value
Maximum flame propagation	5 ft.
Max. peak optical smoke density	0.5
Max. average optical smoke density	0.15



Reel size (F x W) (in.)	Reel type	Reel length (ft.)	Reel wt. (lbs.)	Reel wt. per 100 ft. (lbs.)
34 x 23	Wood	1,500	30	7
34 x 23	Wood	1,000	30	8
34 x 23	Wood	1,000	30	8
34 x 23	Wood	1,000	30	8
34 x 23	Wood	500	30	10
48 x 28	Wood	1,000	79	10
48 x 28	Wood	1,500	79	10
66 x 41	Wood	5,200	250	10
72 x 41	Wood	6,500	310	10
82 x 41	Wood	8,000	365	10
48 x 28	Wood	500	79	14
48 x 28	Wood	500	79	10
48 x 45	Wood	900	96	14
48 x 45	Wood	1,600	96	14
66 x 41	Wood	3,200	250	14
96 x 41	Wood	6,500	700	14
48 x 28	Wood	900	79	14
48 x 28	Wood	350	79	16

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## Flexible raceway systems

### Carlton® Plenum-Gard® raceway

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Cat. no.	Size (in.)	Color	Pull tape
CH4X1C-1200	1½	Orange	900 lb.
CH4X1C-4000		Orange	900 lb.
CJ4X1-200S		Orange	Empty/split
CJ4X1C-225		Orange	900 lb.
CJ4X1C-700	2	Orange	900 lb.
CJ4X1C-1400		Orange	900 lb.
CJ4X1C-2000		Orange	900 lb.
CJ4X1C-2800		Orange	900 lb.
CL4X1C-150	3	Orange	900 lb.

#### Features:

- For use in plenum areas per NEC® Articles 725, 770, 800 and 820
- Sizes ½" through 3"
- Pre-installed pull tape available in sizes ½" through 3"

#### Standard stock — coils

Cat. no.	Size (in.)	Color
CD4X1C-500	½	Orange
CE4X1-350*	¾	Orange
CE4X1-350S		Orange
CF4X1C-100*		Orange
CF4X1-100S*		Orange
CF4X1C-250*	1	Orange
CF4X1-250		Orange
CF4X1-250S*		Orange
CG4X1C-200*	1¼	Orange
CG4X1-200S		Orange
CH4X1C-150*	1½	Orange
CH4X1-150S		Orange
CJ4X1C-100*	2	Orange
CJ4X1-100S		Orange

\* Overnight shippable

Reel size (F x W) (in.)	Reel type	Reel length (ft.)	Reel wt. (lbs.)	Reel wt. per 100 ft. (lbs.)
48 x 45	Wood	1,200	96	16
82 x 41	Wood	4,000	365	16
48 x 28	Wood	200	79	21
48 x 28	Wood	225	79	21
48 x 45	Wood	700	96	21
82 x 41	Wood	1,400	365	21
82 x 41	Wood	2,000	365	21
82 x 41	Wood	2,800	365	21
48 x 45	Wood	150	96	41

- Outside diameters meet IPS dimensions
- UL® Listed raceway meeting UL 2024
- Footage sequentially marked
- Single-peak design

Pull tape	Coil length (ft.)	Product wt. per 100 ft. (lbs.)
900 lb.	500	7
Empty	350	8
Empty/split	350	8
900 lb.	100	10
Empty/split	100	10
900 lb.	250	10
Empty	250	10
Empty/split	250	10
900 lb.	200	14
Empty/split	200	14
900 lb.	150	16
Empty/split	150	16
900 lb.	100	21
Empty/split	100	21

## Flexible raceway systems

### Carlton® Riser-Gard® raceway

Riser-Gard® is a non-metallic flexible raceway for use in riser and general purpose applications. Riser-Gard® is UL® Listed and is available with tape pre-installed. Riser-Gard is listed to UL® 2024 Standard for riser applications or optical fiber/communications raceways.

Riser-Gard® is listed to UL® 2024 in accordance with the National Electrical Code® per Articles 725, 770, 800 and 820 for riser, general purpose and other cabling/optical fiber/telecommunication applications. Riser-Gard® is suitable for use in vertical runs in a shaft or between floors, as well as areas other than the plenum.

Important: Installed cables must be of suitable rating for the application.

#### Standard stock — reels

Cat. no.	Size (in.)	Color	Pull tape
DE4X1-1000	¾	Orange	Empty
DF4X1C-500R		Orange	900 lb.
DF4X1C-1000		Orange	900 lb.
DF4X1C-1500		Orange	900 lb.
DF4X1C-2700	1	Orange	900 lb.
DF4X1C-5200		Orange	900 lb.
DF4X1C-6500		Orange	900 lb.
DF4X1C-7000		Orange	900 lb.
DF4X1C-9400		Orange	900 lb.
DG4X1C-900		Orange	900 lb.
DG4X1C-500R		Orange	900 lb.
DG4X1C-1500		Orange	900 lb.
DG4X1C-1600	1¼	Orange	900 lb.



- Storage: -4 °F to 158 °F
- Handling: -4 °F to 104 °F
- No UV protection (not suitable for outdoor use)
- Do not store outside

Applications: Riser and general purpose

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## Technical info

UL listed to 2024	Test method	Maximum value
Maximum flame propagation	UL 2024	6.0 ft.
Maximum air temperature at 12 ft.	UL 2024	372 °F



Reel size (F x W) (in.)	Reel type	Reel length (ft.)	Reel wt. (lbs.)	Reel wt. per 100 ft. (lbs.)
34 x 23	W	1,000	30	12
43 x 23	W	500	56	15
48 x 28	W	1,000	79	15
48 x 28	W	1,500	79	15
48 x 45	W	2,700	96	15
66 x 41	W	5,200	250	15
72 x 41	W	6,500	310	15
72 x 45	S	7,000	148	15
84 x 45	S	9,400	199	15
48 x 28	W	900	79	17
48 x 23	W	500	56	17
48 x 45	W	1,500	96	17
48 x 45	W	1,600	96	17

continued on next page

## Flexible raceway systems

### Carlton® Riser-Gard® raceway

continued from previous page

Cat. no.	Size (in.)	Color	Pull tape
DG4X1C-3200	1¼	Orange	900 lb.
DG4X1C-4500		Orange	900 lb.
DG4X1C-5600		Orange	900 lb.
DG4X1C-6500		Orange	900 lb.
DH4X1C-1200		Orange	900 lb.
DH4X1C-4000	1½	Orange	900 lb.
DH4X1C-4500		Orange	900 lb.
DJ4X1C-700		Orange	900 lb.
DJ4X1C-2000	2	Orange	900 lb.
DJ4X1C-2800		Orange	900 lb.
DL4X1C-750	3	Orange	900 lb.

W = Wood S = Steel

#### Features:

- For use in riser and general purpose areas per NEC® Articles 725, 770, 800 and 820
- Riser-Gard® is also suitable for direct burial, not approved for exposed applications

Note: UL has not evaluated Riser-Gard® for this application.

#### Standard stock — coils

Cat. no.	Size (in.)	Color
DE4X1-350*	¾	Orange
DF4X1C-125		Orange
DF4X1C-250*		Orange
DF4X1-250	1	Orange
DF4X1C-500		Orange
DF4X1-250S*		Orange

\* Overnight shippable

Reel size (F x W) (in.)	Reel type	Reel length (ft.)	Reel wt. (lbs.)	Reel wt. per 100 ft. (lbs.)
66 x 41	W	3,200	250	17
72 x 45	S	4,500	148	17
82 x 41	W	5,600	365	17
96 x 41	S	6,500	700	17
48 x 45	W	1,200	96	22
82 x 45	S	400	193	22
84 x 45	S	4,500	199	22
48 x 45	W	700	96	27
82 x 41	W	200	265	27
84 x 45	S	2,800	199	27
72 x 41	W	750	310	27

- UL® Listed raceway meeting UL 2024
- Available in sizes ¾" through 3"
- Pull tape can be factory pre-installed in 1" through 3"
- Outside diameters meet IPS dimensions
- Footage sequentially marked

Pull tape	Coil length (ft.)	Product wt. per 100 ft. (lbs.)
Empty	350	12
900 lb.	125	15
900 lb.	250	15
Empty	250	15
900 lb.	500	15
Empty/split	250	15

continued on next page

## Flexible raceway systems

### Carlton® Riser-Gard® raceway

continued from previous page

Cat. no.	Size (in.)	Color
DG4X1-200	1	Orange
DG4X1-200S*	1¼	Orange
DG4X1C-200*		Orange
DG4X1C-500		Orange
DH4X1-150S	1½	Orange
DH4X1C-150*		Orange
DJ4X1-100S	2	Orange
DJ4X1C-100*		Orange
DL4X1C-250	3	Orange

\* Overnight shippable

### Specifications

Size (in.)	I.D. min. ref. (in.)	Min. O.D. (in.)	Max. O.D. (in.)	Min. bend radius (in.)
¾	0.74	1.025	1.075	5
1	0.98	1.290	1.340	6
1¼	1.31	1.640	1.690	8
1½	1.54	1.880	1.930	10
2	2.00	2.350	2.400	12
3	3.00	3.422	3.452	18

<b>Pull tape</b>	<b>Coil length (ft.)</b>	<b>Product wt. per 100 ft. (lbs.)</b>
Empty	200	17
Empty/split	200	17
900 lb.	200	17
900 lb.	500	17
Empty/split	150	22
900 lb.	150	22
Empty/split	100	27
900 lb.	100	27
900 lb.	250	27

## Flexible raceway systems

### Carlton® hal-free Riser-Gard® raceway

Hal-free Riser-Gard® is a halogen-free non-metallic flexible raceway for use in riser and general purpose applications. In the event of a fire, this product will not release halogen elements into the air, which makes it ideal for applications in tunnels, laboratories and high-tech environments. Hal-free Riser-Gard® is listed to UL® 2024 in accordance with NEC® Articles 725, 770, 800 and 820. Custom lengths and split ducts are available upon request. Hal-free Riser-Gard® is available in white only.

#### Features:

- Free from halogen elements
- Compliant with NEC® Articles 725, 770, 800 and 820
- Available in sizes 1" through 2"
- Available in white only
- Sequentially marked footage

#### Standard stock — reels

Cat. no.	Size (in.)	Color	Nom. I.D. (in.)	Nom. O.D. (in.)	Pull tape
HF4X4C-5000	1	White	1.049	1.365	900 lb.
HG4X4C-4000	1¼	White	1.250	1.550	900 lb.
HH4X4C-2000	1½	White	1.500	1.850	900 lb.
HJ4X4C-2000	2	White	2.000	2.425	900 lb.



- Storage: -4 °F to 150 °F
- No UV protection (not suitable for outdoor use)
- Do not store outside

Applications: Riser and general purpose

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## Technical info

UL listed to 2024	Test method	Maximum value
Maximum flame propagation	UL 2024	3.5 ft.
Maximum air temperature	UL 2024	387 °F

  
 E13938  
 FT-6 Rated

Reel size (F x W) (in.)	Reel type	Reel length (ft.)	Reel wt. (lbs.)	Product wt. per 100 ft. (lbs.)
72" x 41"	Wood	5,000	310	7.5
72" x 41"	Wood	4,000	310	7.5
66" x 41"	Wood	2,000	250	12
82" x 41"	Wood	2,000	365	21

## Flexible raceway system accessories

For use with Riser-Gard®



LR31146

### Non-metallic adapters and couplings

#### Couplings



Cat. no.	Size (in.)	Color	Std. ctn.	Std. wt. (lbs.)
SCA240E	3/4	Orange	25	.783
SCA240F	1	Orange	20	.972

#### Threaded adapters



Cat. no.	Size (in.)	Color	Std. ctn.	Std. wt. (lbs.)
SCA243E	3/4	Orange	100	2.30
SCA243F	1	Orange	50	2.00

#### Snap-in adapters



Cat. no.	Size (in.)	Color	Std. ctn.	Std. wt. (lbs.)
SCA253E	3/4	Orange	100	2.90
SCA253F	1	Orange	50	2.30

For use with Plenum-Gard®



## Non-metallic adapters and couplings

### Couplings



Cat. no.	Size (in.)	Color	Std. ctn.	Std. wt. (lbs.)
A340F	1	Orange	50	2.50

### Threaded adapters



Cat. no.	Size (in.)	Color	Std. ctn.	Std. wt. (lbs.)
A343F	1	Orange	50	1.55

### Snap-in adapters



Cat. no.	Size (in.)	Color	Std. ctn.	Std. wt. (lbs.)
A353F	1	Orange	50	3.00

## Flexible raceway system accessories

### PVC conduit cutters

#### Small cutter

For fast, smooth field cuts of ½" through 1" Flex-Plus® Blue™ ENT.



Cat. no.	Size (in.)	Std. ctn.
CC120B	8	10

#### Large cutter

For clean cuts of conduit ½" through 2".



Cat. no.	Size (in.)	Std. ctn.
SX25-TB	17½	1

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DF4X1C-500	51	DJ4X1C-700	51
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