Carlon[®] Flex-Plus[®] Blue[™] **Electrical Nonmetallic** Tubing (ENT) and Accessories

ENT Tubing Adapters & Couplings Mud Box Assemblies Stub Downs Outlet and Switch Boxes

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Carlon[®] Flex-Plus[®] Blue[™] Electrical Nonmetallic Tubing (ENT) and Accessories

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Flex-Plus[®] Blue[™] ENT



Standard Stock – Reels

Flex-Plus[®] Blue[™] ENT

is a nonmetallic flexible raceway for use in walls, floors, and non-plenum ceilings. It's lightweight, hand bendable, and free from sharp edges, which reduces installation time and saves money.

See pages 31–32 for technical information.

Options:



• Sizes 1/2" through 2"

Colors:

- Yellow color for communication circuits and signaling cable
- Red color for fire alarm circuits
- Blue color for power circuits
- Packaging: Coils or Reels

| | Color | Part No. | Nom. I.D. | Nom. O.D. | Pull Tape | Min. Bend Radius | Reel Size (F x W) | Reel Type (W=Wood) | Reel Length | Reel Wt. (lbs.) | Wt. per 100 ft. (lbs.) |
|---------------------------|--------|-------------|--------------|--------------|--------------|---------------------|----------------------|-----------------------|----------------|--------------------|---------------------------|
| | Blue | 12005AK-001 | .56 | .84 | Empty | 6" | 36" x 24" | W | 1500 | 40 | 10 |
| 1/2" | Yellow | 1205AKY-001 | .56 | .84 | Empty | 6" | 36" x 24" | W | 1500 | 40 | 10 |
| . – | Red | 1205AKR-001 | .56 | .84 | Empty | 6" | 36" x 24" | W | 1500 | 40 | 10 |
| | Blue | 12007AA-001 | .76 | 1.05 | Empty | 6" | 36" x 24" | W | 1000 | 40 | 14 |
| 3/4" | Yellow | 1207AAY-001 | .76 | 1.05 | Empty. | 6" | 36" x 24" | W | 1000 | 40 | 14 |
| | Red | 1207AAR-001 | .76 | 1.05 | Empty | 6" | 36" x 24" | W | 1000 | 40 | 14 |
| | Blue | 12008-750 | 1.00 | 1.315 | Empty | 6" | 36" x 24" | W | 750 | 40 | 20 |
| 1" | Yellow | 12008Y-750 | 1.00 | 1.315 | Empty | 6" | 36" x 24" | W | 750 | 40 | 20 |
| | Red | 12008R-750 | 1.00 | 1.315 | Empty | 6" | 36" x 24" | W | 750 | 40 | 20 |
| 1 ¹ /4" | Blue | 12009-750 | 1.402 | 1.66 | Empty | 7" | 48" x 32" | W | 750 | 90 | 19 |
| 1 ¹ /2" | Blue | 12010-750 | 1.554 | 1.90 | Empty | 8 ¹ /4" | 48" x 32" | W | 750 | 90 | 39 |
| 1 1/2 | Yellow | 12010Y-750 | 1.554 | 1.90 | Empty | 8 ¹ /4" | 48" x 32" | W | 750 | 90 | 39 |
| 2" | Blue | 12011-500 | 2.030 | 2.375 | Empty | 9 ¹ /2" | 48" x 32" | W | 500 | 90 | 32 |
| _ | Red | 12011R-500 | 2.030 | 2.375 | Empty | 9 ¹ /2" | 48" x 32" | W | 500 | 90 | 32 |
| | Yellow | 12011Y-500 | 2.030 | 2.375 | Empty | 9 ¹ /2" | 48" x 32" | W | 500 | 90 | 32 |

*1-1/4" - 2" available in yellow & red, made to order; consult factory.

Standard Stock – Coils

| | Color | Part No. | Nom. I.D. | Nom. O.D. | Pull Tape | Min. Bend Radius | Coil Length (ft.) | Wt. per 100 ft. (lbs.) |
|------------------|--------|------------|--------------|--------------|--------------|---------------------|----------------------|---------------------------|
| 47.11 | Blue | 12005-200 | .56 | .84 | Empty | 6" | 200 | 10 |
| ¹ /2" | Yellow | 12005Y-200 | .56 | .84 | Empty | 6" | 200 | 10 |
| | Red | 12005R-200 | .56 | .84 | Empty | 6" | 200 | 10 |
| | Blue | 12007-100 | .76 | 1.05 | Empty | 6" | 100 | 14 |
| 3/4" | Yellow | 12007Y-100 | .76 | 1.05 | Empty | 6" | 100 | 14 |
| /4 | Red | 12007R-100 | .76 | 1.05 | Empty | 6" | 100 | 14 |
| | Blue | 12008-100 | 1.00 | 1.315 | Empty | 6" | 100 | 22 |
| 1" | Yellow | 12008Y-100 | 1.00 | 1.315 | Empty | 6" | 100 | 22 |
| • | Red | 12008R-100 | 1.00 | 1.315 | Empty | 6" | 100 | 22 |

10 ft. Lengths

| | Color | Part No. | Nom. I.D. | Nom. O.D. | Std. Ctn. Qty. | Std. Ctn. Wt. (lbs.) |
|--------------|-------|-----------|-----------|-----------|----------------|----------------------|
| 1/2 " | Blue | 12005-UPC | .56 | .84 | 10 ft. | 1.02 |
| 3/4" | Blue | 12007-UPC | .76 | 1.05 | 10 ft. | 1.46 |
| 1" | Blue | 12008-010 | 1.00 | 1.315 | 10 ft. | 2.93 |

NOTE: The solid blue color of ENT conduit is a registered trademark of Carlon.

ENT may show color deterioration in direct sunlight over an extended period of time. It is suggested that all ENT products not be stored outside. Since this product is not intended for use outdoors, it should not be exposed to extended periods of direct sunlight.

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Stub Downs

Vertical Stub Down

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Carlon Vertical Stub Downs are designed to provide a quick, easy connection to a wood deck or transition from slab-to-slab using Carlon's "Quick Connect" snap-in design...simply snap the ENT in place. The integral snaps provide a secure mount – preventing the ENT from pulling out while maintaining the ability for easy removal of the fitting once the deck is removed. All in a concrete tight application. The underside of this fitting provides ample room to attach a Carlon coupling to the ENT to continue the run. Carlon Vertical Stub Downs are manufactured out of a highly engineered thermoplastic material to provide extra strength and durability, and are available in sizes 1/2", 3/4" and 1".

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|------|----------------|--------------------|
| A210D | 1/2" | 50 | 3.8 |
| A210E | 3/4" | 50 | 3.7 |
| A210F | 1" | 50 | 4.8 |

Patent Pending

Vertical Stub Down Transition Adapter



CARLON NONMETALLIC EXCLUSIVE...Carlon Vertical Stub Down Transition Adapters like our Vertical Stub Downs, provide a means to transition from ENT to another wire management product where code requires other wire management means i.e. "area of physical damage" (ref. NEC 352.12C). The integral snaps provide a secure mount – preventing the ENT from slipping or pulling out, while the deck mount flange has a threaded port allowing connection to other conduit system using a terminal adapter. Carlon Vertical Stub Down Transition Adapters are manufactured out of polycarbonate material to provide extra strength and durability. They're concrete tight, and available in sizes 1/2", 3/4" and 1".

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|--|----------------|--------------------|
| A200D | ¹ /2" Female ENT to NPSC (Female) | 50 | 2.3 |
| A200E | ³ /4" Female ENT to NPSC (Female) | 50 | 2.8 |
| A200F | 1" Female ENT to NPSC (Female) | 50 | 3.9 |

45° Stub Down

Carlon 45 Degree Stub Downs are designed to allow a smooth transition from cross deck ENT runs to vertical applications. The integral snaps provide a secure mount – preventing the ENT from slipping or pulling out- but also allow the stub to easily be removed. The underside of this fitting provides ample room to attach a Carlon coupling to the ENT to continue the run. Carlon 45 Degree Stub Downs are manufactured out of a highly engineered thermoplastic material to provide extra strength and durability. They're concrete tight, and available in sizes 1/2", 3/4" and 1".

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|------|----------------|--------------------|
| A220D | 1/2" | 25 | 1.8 |
| A220E | 3/4" | 25 | 2.0 |
| A220F | 1" | 25 | 2.6 |

Patent Pending

90° Stub Down Transition Adapter



CARLON NONMETALLIC EXCLUSIVE...Carlon 90 Degree Stub Downs are designed to allow a smooth transition from cross deck ENT runs to vertical applications where code requires other wire management means, i.e. "area of physical damage" (ref. NEC 352.12C). The integral snaps provide a secure mount – preventing the ENT from slipping or pulling out, while the deck mount flange has a threaded port allowing connection to any conduit system using a terminal adapter. Carlon 90 Degree Stub Downs are manufactured out of polycarbonate material to provide extra strength and durability. They're concrete tight, and available in sizes 1/2", 3/4" and 1".

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|--|----------------|--------------------|
| A230D | ¹ /2" Female ENT to NPSC (Female) | 25 | 2.0 |
| A230E | ³ /4" Female ENT to NPSC (Female) | 25 | 2.4 |
| A230F | 1" Female ENT to NPSC (Female) | 25 | 3.3 |







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Accessories - Mud Box Assemblies















Mud Box Assemblies



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Carlon Mud Box Assemblies are available in five unique styles...blank, ceiling ring, one-gang, two-gang and 4 square. All Mud Box Assemblies are manufactured out of polycarbonate material to provide extra strength and durability, are concrete tight, and have twelve integral connectors...two-1", six-3/4", and four-1/2". Using our new ENT Reducers, this product will meet ANY jobsite application.

Mud Box Base with Blank Cover

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|----------------|------------------------|----------------|--------------------|
| ► A863BC | Mud Box w/ Blank Cover | 24 | 12.3 |
| Patant Panding | | | |

Patent Pending

Mud Box with Ceiling Ring

• Threaded brass inserts for fan (#10-32 screws) and fixture (#8-32 screws) mountings

• Listed for fixture support up to 50 lbs. • Listed for ceiling fans up to 35 lbs.

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|----------------|--------------------------------------|----------------|--------------------|
| ► A863CF | Mud Box w/ Ceiling Ring | 24 | 15.5 |
| A863CFG | Mud Box w/ Ceiling Ring & Ground Lug | 24 | 16.1 |
| Patent Pending | | • | |

Patent Pending

Mud Box with One-Gang Ring

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|----------------|---------------------------------------|----------------|--------------------|
| ► A863S | Mud Box w/ One-Gang Ring | 24 | 16.8 |
| A863SG | Mud Box w/ One-Gang Ring & Ground Lug | 24 | 16.2 |
| Patent Pending | | | |

Mud Box with Two-Gang Ring

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|---------------------------------------|----------------|--------------------|
| ►A863D | Mud Box w/ Two-Gang Ring | 24 | 15.8 |
| A863DG | Mud Box w/ Two-Gang Ring & Ground Lug | 24 | 16.6 |

Patent Pending

Mud Box with 4 Square Ring

• 4 Square Ring not for luminaries.

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|----------------|-------------------------------|----------------|--------------------|
| ►A863-4SQ | Mud Box w/ 4 Inch Square Ring | 24 | 15.2 |
| Patent Pending | | | |

Mud Box Assemblies with Mounting Feet Carlon Mud Box Assemblies w/ Mounting Feet are specifically engineered and designed for use in Tunnel Form applications. The

Carlon Mud Box Assemblies w/ Mounting Feet are specifically engineered and designed for use in Tunnel Form applications. The mounting feet are located on all four corners and allow the box to attach directly to the wall of the form using pop rivets. The pop rivets help keep the box in position during the pour and provide a safe, secure, and rust resistant mount.

| Part. No. | Size | Size Std. Ctn. Qty. | |
|----------------|-----------------------------|---------------------|-------|
| A863-4SQF | 4-Square Ring | 24 | 17.15 |
| A863CFF | Ceiling Ring | 24 | 16.61 |
| A863CFGF | Ceiling Ring and Ground Lug | 24 | 17.46 |
| A863DF | Double Gang | 24 | 17.42 |
| A863DGF | Double Gang and Ground Lug | 24 | 17.99 |
| A863SF | Single Gang | 24 | 17.15 |
| A863SGF | Single Gang and Ground Lug | 24 | 17.44 |
| Patent Pending | | | |

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CARLON EXCLUSIVE...The Carlon ENT Mounting Bracket is specifically designed for use with Carlon ENT Mud Box Assemblies in vertical concrete walls where one- or two-gang boxes are needed. The stainless steel spring-loaded mechanism provides a secure outlet box between concrete forms while the soft steel strap allows for the outlet box to be secured to rebar. The bracket combination assures a straight box opening and a concrete tight fit. Mud Box not included.

| Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|----------------------|----------------|--------------------|
| Mud Box Mounting Kit | 1 | .98 |
| | | |

Patent Pending

ENT Bridge





CARLON EXCLUSIVE...The Carlon ENT Bridge is designed to support long ENT runs in concrete pour applications. This makes pulling wire/cable a snap. Installation is easy...simply mount the ENT bridge, using nails or screws, to the wood deck mounting and snap the ENT into place. The bridge is designed to hold the conduit in place while minimizing dips in the conduit over long runs. The Carlon ENT Bridge is manufactured out of a highly engineered thermoplastic material to provide extra strength and durability, and can accommodate ENT sizes 1/2", 3/4", and 1".

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|------------|------------|----------------|--------------------|
| A293DEF | ENT Bridge | 50 | 9.0 |
| B () B (! | | • | |

Patent Pending

Transition Adapters





CARLON EXCLUSIVE...Carlon Male ENT to Schedule 40 & 80 PVC Conduit Transition Adapters are designed to connect Schedule 40 conduit to Carlon Flex-Plus® Blue™ ENT boxes and fittings. Simply solvent cement the PVC adapter to the Schedule 40 conduit and snap the adapter into the Carlon's "Quick Connect" snapin connector on the box or fitting. Carlon Male ENT to Schedule 40 & 80 Adapters are concrete tight and available in sizes 1/2", 3/4" and 1".





Patent Pending



ENT to EMT

Carlon ENT to EMT Transition Adapters are designed to easily transition from Carlon Flex-Plus[®] Blue[™] ENT to EMT using Carlon's "Quick Connect" snap-in design. The EMT is held securely in place using the small screw provided. This helps prevent the EMT from slipping/shifting out of the adapter. All ENT to EMT adapters are manufactured out of polycarbonate material to provide extra strength and durability. They're concrete tight, and available in sizes 1/2", 3/4" and 1".



| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|--|----------------|--------------------|
| A245D | ¹ /2" ENT to ¹ /2" EMT | 100 | 3.4 |
| A245E | ³ /4" ENT to ³ /4" EMT | 100 | 4.1 |
| A245F | 1" ENT to 1" EMT | 100 | 5.4 |



Reducers

CARLON EXCLUSIVE...Carlon ENT Reducers are designed to provide an easy transition from 1 " Carlon ENT to 3/4" ENT or from 3/4" Carlon ENT to 1/2" ENT. They're concrete tight, and manufactured out of polycarbonate material to provide extra strength and durability. Carlon ENT Reducers provide flexibility while on the jobsite by minimizing the need to carry size specific boxes and fittings. Carlon ENT Reducers provide the versatility to convert Carlon fittings and boxes to many different sizes and configurations.





Patent Pending

Outlet and Switch Boxes - Eccentric Knockouts



Carlon ENT Outlet and Switch Boxes with Eccentric Knockouts are designed to allow selective ENT openings – 1/2", 3/4" and 1" – based on application needs. They provide the largest capacity available in the market today - 22 cu. in. Single Gang, and 38 cu. in. Double Gang – and can be mounted to wood or steel studs. Carlon ENT Outlet and Switch Boxes with Eccentric Knockouts are manufactured out of a highly engineered thermoplastic material to provide extra strength and durability, and are available in single gang and double gang styles. Note: The double gang version is also a 4 square box.





Single Gang – 22 cu. in.

| Part. No. | Size | Capacity Cu. in. | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|----------------|-------------|------------------|----------------|--------------------|
| A122 | Single-Gang | 22 | 25 | 6.8 |
| Patent Pending | | | | |



Combination Two Gang/Four Square Box – 38 cu. in.

| Part. No. | No. Size Capacity Cu. in. | | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. | |
|----------------|---------------------------|----|----------------|--------------------|--|
| A238 | Two-Gang | 38 | 25 | 8.9 | |
| Patent Pending | | | | | |





Carlon ENT Outlet Box Divider is specifically designed for applications where a combined high and low voltage closed back box is needed such as placement in a fire-rated wall. Just slip the divider into place, to give you the split box you need. The Carlon ENT Outlet Box Divider is UL Recognized for use with Carlon A238 Box only.



| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. lbs. |
|-----------|------|----------------|--------------------|
| A238DIV | _ | 50 | 1.87 |

Accessories - Couplings

Quick Connect Adapters & Couplings



- Carlon one piece ENT Quick Connect Couplings, Threaded Adapters and Snap-In Terminator Adapters are suitable for damp locations. Quick Connect Couplings and Threaded Adapters are concrete-tight when used with Carlon ENT.
- All Schedule 40 fittings are compatible with ENT when using ENT cement.



- Use of ENT Blue Quick-Set Cement is required. See page 13 for details.
- When One Piece Quick Connect Snap-In Terminator Adapters are installed in a concrete application, Carlon's flat sealing washers must be used on the box connection ends.



Couplings

| Part. No. | Size | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|------|-----------------------------|----------------------------------|
| A240D | 1/2" | 150 | 2.90 |
| A240E | 3/4" | 100 | 3.00 |
| A240F | 1" | 50 | 2.30 |

Threaded Adapters

| Part. No. | Size | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|------|-----------------------------|----------------------------------|
| A243D | 1/2" | 150 | 2.55 |
| A243E | 3/4" | 100 | 2.30 |
| A243F | 1" | 50 | 2.00 |

Snap-In Adapters

| Part. No. | Part. No. Size Quantity | | Standard Carton Weight (lbs.) | | |
|-----------|-------------------------|-----|----------------------------------|--|--|
| A253D | 1/2" | 150 | 2.70 | | |
| A253E | 3/4" | 100 | 2.90 | | |
| A253F | 1" | 50 | 2.30 | | |

Schedule 40 Adapters and Couplings



Male Terminal Adapters



For adapting nonmetallic conduits to boxes, threaded fittings, metallic systems. Male threads on one end, socket end on other.



| Part No. | Size | Std. Ctn. Qty. | А Тур | B ical | Min. D | Max. OD | С | S Typica | L | Std. Ctn. Wt. (Ibs.) |
|-------------|-------------------|----------------------|----------|-----------|-----------|---------------------------------|--------------------|------------------|---------------------|----------------------------|
| E943D | 1/2 | 150 | .852 | .836 | .597 | 1 ¹ /8 | 5/8 | ^{9/} 16 | 1 ⁵ /16 | 2.8 |
| E943E | 3/4 | 125 | 1.064 | 1.046 | .800 | 111/32 | 3/4 | ^{9/} 16 | 1 ³ /8 | 3.5 |
| E943F | 1 | 50 | 1.330 | 1.310 | 1.018 | 15/8 | 1 | 11/16 | 1 ^{25/32} | 3 |
| E943G | 11/4 | 50 | 1.677 | 1.655 | 1.332 | 21/32 | 1 | 3/4 | 1 ¹⁵ /16 | 4 |
| E943H | 1 ¹ /2 | 25 | 1.918 | 1.894 | 1.566 | 2 ⁵ /32 | 1 ³ /16 | 3/4 | 2 ¹ /16 | 2.5 |
| E943J | 2 | 50 | 2.393 | 2.369 | 2.000 | 2 ²¹ / ₃₂ | 13/16 | 3/4 | 21/8 | 7 |

Standard Couplings

All socket fittings should be attached Using Carlon solvent cement. Using Carlon fittings with Carlon nonmetallic conduit insures system integrity.



Socket type for joining nonmetallic conduit.



| | | | | <u>.</u> | _ u_ | | | | |
|-------------|------|----------------------|----------|-----------|-----------|------------|----------|-----------|----------------------------|
| Part No. | Size | Std. Ctn. Qty. | А Тур | B ical | Min. D | Max. OD | С Тур | L ical | Std. Ctn. Wt. (lbs.) |
| E940D | 1/2 | 150 | .852 | .836 | .728 | 17/64 | 11/16 | 11/2 | 4.1 |
| E940E | 3/4 | 100 | 1.064 | 1.046 | .840 | 15/16 | 3/4 | 15/8 | 4.4 |
| E940F | 1 | 50 | 1.330 | 1.310 | 1.210 | 15/8 | 15/16 | 2 | 3.5 |
| E940G | 11/4 | 30 | 1.677 | 1.655 | 1.535 | 163/64 | 1 | 21/8 | 3.5 |
| E940H | 11/2 | 25 | 1.918 | 1.894 | 1.755 | 215/64 | 11/8 | 23/8 | 3.9 |
| E940J | 2 | 30 | 2.393 | 2.369 | 2.190 | 247/64 | 13/16 | 21/2 | 5.25 |

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21/2" & 4" Mud Boxes and Covers



Base Rings Listed for use with ceiling fans up to 35 lbs. and for fixture support

| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. |
|--------------|--------------------|-------------------|------------------|
| A861 | Without ground lug | 10 | 2.5 |
| CA861G | With ground lug | 10 | 2.0 |



| Part. No. | Size | Std. Ctn. Qty. | Std. Ctn. Wt. |
|--------------|--|-------------------|------------------|
| A862D | 2 ¹ /2" Deep (¹ /2" KO's) | 10 | 2.5 |
| A862E | 2 ¹ /2" Deep (³ /4" KO's) | 10 | 2.1 |
| A864D | 4" Deep (1/2" KO's) | 10 | 2.9 |
| A864E | 4" Deep (³ /4" KO's) | 10 | 2.9 |
| A864F | 4" Deep (1" KO's) | 10 | 3.0 |

E42728

LR31146

Quick Connect Outlet and Switch Boxes

- Suitable for masonry walls
- Meets NEMA OS-2





Single Gang – 16 cu. in.

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|--|-----------------------------|----------------------------------|
| A58381D | 3 x 2 ¹ /4 x 3 (¹ /2" KO's) | 25 | 4.6 |
| A58381E | 3 x 2 ¹ /4 x 3 (³ /4" KO's) | 25 | 4.6 |



4 Inch Square – 20 cu. in.

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|---|-----------------------------|----------------------------------|
| A52151D | 4 x 4 x 1 ¹ /2 (¹ /2" KO's) | 100 | 22.6 |
| A52151E | 4 x 4 x 1 ¹ /2 (³ /4" KO's) | 100 | 22.6 |
| A521DE | 4 x 4 x 1 ¹ /2 (¹ /2" & ³ /4" KO's) | 100 | 22.6 |



4 Inch Square – 30.3 cu. in.

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|--|-----------------------------|----------------------------------|
| A52171D | 4 x 4 x 2 ³ /8 (¹ /2" KO's) | 25 | 7.6 |
| A52171E | 4 x 4 x 2 ³ /8 (³ /4" KO's) | 25 | 7.6 |
| A5217DE | 4 x 4 x 2 ³ /8 (1/2" & ³ /4" KO's) | 25 | 7.6 |

Accessories

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ENT Box with Adapters



4 Inch Square – 24.75 cu. in. ENT Box with Adapters

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|---|-----------------------------|----------------------------------|
| A5329DE | 4 x 4 x 1 ³ /4 (¹ /2" & ³ /4" KO's) | 50 | 14.8 |

Box Back Wall Support

Rise

1/2"

5/8"

3/4"

1"

11/4"

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|----------------------------|-----------------------------|----------------------------------|
| ► A540DS | For use with 1/2" Knockout | 100 | 2.1 |

Cu. in.

3.5

4.2

5.0

6.6

8.1

ENT Box Extenders



Standard Carton

Quantity

100

50

50

40

30

Standard Carton

Quantity

100

100

Standard Carton Weight (lbs.)

7.7

4.6

5.1

5

4.4

ŰL

LISTED





Two Gang

Single Gang

Part. No.

A410

A411

A412

A413

A414

| - | | | | | |
|-----------|-------|---------|-----------------------------|----------------------------------|--|
| Part. No. | Rise | Cu. in. | Standard Carton Quantity | Standard Carton Weight (lbs.) | |
| A400 | Blank | - | 100 | 7.7 | |
| A420 | 1/2" | 6.1 | 75 | 5.0 | |
| A421 | 5/8" | 7.4 | 50 | 4.2 | |
| A422 | 3/4" | 8.8 | 50 | 4.8 | |

Round Covers for Octagon Ceiling Boxes

A472



Standard Carton Weight (lbs.)

3.3

3.7

Round Plaster RingsSuitable for fixture support

Rise

1/2"

3/4"





Round Blank Covers

| Part. No. | Rise | Cu. in. | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|--------------------------------|---------|-----------------------------|----------------------------------|
| E460R-CAR | Blank | - | 35 | 2.2 |
| A470D | Blank with ¹ /2" KO | - | 100 | 6.2 |

Cu. in.

3.2

4.0

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Quick Connect 4'' Octagon Ceiling Boxes

- Carlon ceiling boxes and round plaster rings are produced from a special high heat resistant engineered plastic material developed specifically for fixture support.
- Listed for fixture support up to 50 lbs.





| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|-----------------------------------|-----------------------------|----------------------------------|
| A615D | 4 - 21/8" Deep (1/2" KO's) | 50 | 6.4 |
| A615E | 4 - 21/8" Deep (3/4" KO's) | 50 | 6.4 |
| A615DE | 4 - 21/8" Deep (1/2" & 3/4" KO's) | 50 | 6.4 |

E42728

Except where noted by



Ceiling Box with J Mount – 20.5 cu. in.

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) |
|-----------|--|-----------------------------|----------------------------------|
| A615DJ | 4 - 2 ¹ /8" Deep (¹ /2" KO's) | 50 | 18.7 |



Ceiling Box with L Bracket – 20.5 cu. in.

| Part. No. | Description | Standard Carton Quantity | Standard Carton Weight (lbs.) | |
|-----------|--|-----------------------------|----------------------------------|--|
| A615DL | 4 - 2 ¹ /8" Deep (¹ /2" KO's) | 50 | 6.4 | |

Ceiling Box with Adjustable Hanger Bar – 20.5 cu. in.

Adjust from 141/4" to 231/4"

| Part. No. Description | | Standard Carton Quantity | Standard Carton Weight (lbs.) | |
|-----------------------|--|-----------------------------|----------------------------------|--|
| A615DH | 4 - 2 ¹ /8" Deep (¹ /2" KO's) | 25 | 13.6 | |

HOLFORM[™] Concrete Sleeves

HOLFORM nonmetallic concrete sleeve forms are the easy way to form holes in concrete. They install in seconds with nails, screws or staples and are easily removed. Concrete will not adhere to them. HOLFORMS are adjustable to any slab thickness.

| | Part No. | Min. O.D. A | В | Std. Ctn. Qty. | Std. Ctn. Wt. (lbs.) | A |
|---|----------|-------------------|---------------------|----------------------|----------------------------|---|
| 1 | ► E92CSH | 11/2 | 13/4 | 20 | 3 | |
| | ► E92CSJ | 2 | 213/32 | 25 | 6 | |
| | ► E92CSL | 3 | 313/32 | 25 | 8 | |
| | ►E92CSN | 4 | 413/32 | 18 | 8 | |
| | ► E92CSP | 5 | 513/32 | 15 | 8 | |
| | ►E92CSR | 6 | 6 ¹³ /32 | 12 | 8 | B |

www.carlon.com Gross Automation (877) 268-3700 • www.carlonsales.com • sales@grossautomation.com

PVC Conduit Cutters

Small Cutter



For fast, smooth field cuts of 1/2" through 1" Flex-Plus® Blue™ ENT.

| Part No. | Size | Std. Ctn. Qty. |
|----------|------|-------------------|
| CC120B | 8" | 10 |

Medium Cutter



Hand held cutter makes fast square, smooth field cuts on conduit, sizes 1/2" through 11/4". Produces burr-free cut with no shavings. Fits into pocket or pouch.

| Part No. | Size | Std. Ctn. Qty. |
|----------|------|-------------------|
| CC125 | 9" | 12 |

Large Cutter



For clean cuts of conduit, sizes 1/2" through 2".

| Part No. | Size | Std. Ctn. Qty. |
|----------|---------------------|-------------------|
| CC122 | 17 ¹ /2" | 1 |

Tape



Prelubricated, woven polyester tape made from low friction, high abrasion resistant yarns providing a low coefficient of friction. Tape is printed with sequential footage markings for accurate measurements.

| Part. No. | Size | Tensile Strength | Reel Lengths |
|-----------|----------------------------|------------------|--------------|
| TL14505 | ¹ /2" 1250 lbs. | | 5,000 ft. |
| TL14510 | 1/2" | 1250 lbs. | 10,000 ft. |
| TL38203 | 5/8" | 1800 lbs. | 3,000 ft. |
| TL38265 | 5/8" | 1800 lbs. | 6,500 ft. |
| TL38210 | 5/8" | 1800 lbs. | 10,000 ft. |

Other tapes are available. Consult your sales service location for additional information.

Carlon® Cement

(MSDS sheets available at www.carlon.com) *Meets ASTM D2564

All-Weather ENT Blue "Quick-Set" Solvent **Cement with brush***

| Carlon Her Her Her | Part No. | Size | Std. Ctn. Qty. |
|---|-------------|----------------|-------------------|
| ENT BLUE "QUICK-SET" CEMENT | VC9992 | Quart | 12 |
| BECAULT FORMALITO FOR CARLON PAR when all many constraint and short instants. BARNEER, ternsolati rusananati - unreas tair caste fundo entri - sair anticet frei Aust and - saire ternsolation and entri all etheracion that and - solate ternsol | VC9993 | Pint | 24 |
| 32 FL 9Z. (1 QUALT / / MAK) | FNT cement | required for I | use with FI |

ENT cement required for use with ENT

| Recommended pipe application and sizes | Set-up time (Evaporation Rate) | Recommended installation temperature | Lap Shear @ 73°F | Viscosity at 75° as manufactured |
|---|---|--|--|--|
| Recommended for use with Flex-Plus [®] Blue™ ENT (Electrical Nonmetallic Tubing), Riser-Gard [®] , P&C Flex [®] , and Carlon PVC fittings. Up through 4" diameter. | 10°-30°F 4-5 minutes 30°-50°F 3-4 minutes 50°-70°F 1-2 minutes 70°-90°F ¹ /2-11/2 minutes | 4° to 100°F | 2 hrs. 350 psi 16 hrs. 800 psi 72 hrs. 1,500 psi | 400-700 cps |

Concrete Encasement Guidelines

- 1. Cut ENT square and cleanly.
- 2. Insert end into fitting, making sure two (2) full corrugations are snapped into fitting beyond flexible tabs (2 clicks).
- 3. ENT should be tied to rebar at 2-3 foot intervals to prevent flotation. Keep ENT straight. Small deflections over a long run may accumulate significant degrees of bend which will affect conductor installation. Suitable materials include wire, tie wraps, and tape.
- 4. When using UL solvent weld fittings for concrete tight performance:

- E. Promptly insert ENT into fitting while cement is wet, until the stop is reached, and give a quarter turn.
- F. Do not disturb until joint is set.





- A. Do not use chemical primer or cleaner.
- B. Apply a light, uniform coat of cement labeled for use with ENT on the coupling and ENT.
- C. Do not use a dauber.
 - D. Brush excess cement out of ENT grooves.

Specifications

- 1.1 Electrical Nonmetallic Tubing (ENT), is designed to replace EMT, flexible metal conduit or other raceway or cable systems, for installation in accordance with Article 362 of the National Electrical Code, other applicable sections of the Code, and local codes.
- 1.2 Any ENT used shall meet the requirements of UL Standard UL 1653 and shall be listed by Underwriters Laboratories, Inc., as suitable for its intended purpose.
- 1.3 ENT shall be recognized by a National Evaluation Report for use in 1-hour and 2-hour rated construction.
- 1.4 Penetration of fire rated walls, floors or ceilings shall use classified Through-Penetration Firestop Systems described in the current Underwriters Laboratories Fire Resistance Directory.
- 1.5 Fittings and outlet boxes shall be designed for use with ENT and listed by Underwriters Laboratories. All fittings, boxes and accessories shall be from one manufacturer.
- 1.6 Only Carlon ENT Blue cement recommended specifically for use with ENT shall be used.
- 1.7 Unless indicated differently on drawings, ENT systems shall be color coded: BLUE for branch and feeder circuit wiring, YELLOW for communications, and RED for fire alarm and emergency systems.
- 1.8 ENT, fittings, and accessories shall be manufactured by Carlon.

Features

- UL recognizes the use of PVC RNC cement type fittings with all sizes of ENT
- ENT rated for 90 deg C conductors
- One piece ENT Coupling, Threaded Terminator and RNC Transition Fitting are rated concrete tight without tape by UL
- Recognized for use in 2-hour fire resistive nonload bearing and load bearing wall assemblies
- Recognized for use in 1-hour fire resistive nonload bearing wall assemblies
- Recognized for use in a fire resistive ceiling assembly (up to 3 hours)
- Recognized for Through-Penetration Firestop systems as classified by UL to meet BOCA, SBCCI and ICBO codes.
- Conductors easily push through the raceway (up to approximately 50 feet)*
- For use in buildings in accordance with NEC Article 362
- Approved for installations of a one and two hour fire rated wall assembly and up to a three hour rated floor/ceiling assembly
- Outside Diameters meet IPS Dimensions
- Storage -4°F to 158°F
- Handling -4°F to 104°F

Approved Uses:

- Concrete slab NEC Article 362
- Walls wood stud, masonry and metal stud NEC Article 362.
- Ceilings permanent or dropped (free air only) NEC Article 362.
- Exposed NEC Article 362
- Public Assembly NEC Section 518.4, in nonfire rated and certain five rated structures
- Prewired NEC Article 362
- Classified by UL 1479 for Through Penetration Firestop Systems in UL Guide Category XHEZ and current UL Fire Resistance Directory
- Three hour rated floor/ceiling assemble
- Raised Floors NEC Section 645.5(D)(2)
- Exposed or concealed in building above three floors when a fire sprinkler system is installed in accordance with NFPA 13 NEC Section 362.10(2)
- For use in residential attics up to 3 feet above the bottom of the ceiling joist.

Typical Applications:

- Residential: Low or high rise multi or single family
- Commercial: Low or high rise office, retail, hotel/motel, restaurant, etc.
- Nursing Homes/Hospitals in nonpatient care areas only
- Schools, classrooms, dormitories, offices
- Fire Alarm Systems
- Recreational vehicles and parks
- Solar Photovoltaic systems
- Marinas and boatyards
- Other uses per the current NEC



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