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Carlton® ENT (Electrical Non-Metallic Tubing)

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K-1



Carlton®

Flex-Plus® ENT

Flex-Plus® ENT



Flex-Plus® ENT is a non-metallic 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.

Options:

- Sizes ½" through 2"
- Colors can designate different voltages.
Examples:
– Yellow color for communication circuits and signaling cable
– Red color for fire alarm circuits
– Blue color for power circuits
- Packaging: coils or reels



LR83580
FT-4 Rated
where
noted by

Standard Stock — Reels

CAT. NO.	SIZE (IN.)	COLOR	NOM. I.D. (IN.)	NOM. O.D. (IN.)	PILL TAPE	MIN. BEND RADIUS (IN.)	REEL SIZE (IN.) (F X W)	REEL TYPE (W=WOOD)	REEL LENGTH	REEL WT. (LBS.)	WT. PER 100 FT. (LBS.)
12005AK-001	½	Blue	.56	.84	Empty	6	36 x 24	W	1500	40	10
1205AKY-001	½	Yellow	.56	.84	Empty	6	36 x 24	W	1500	40	10
1205AKR-001	½	Red	.56	.84	Empty	6	36 x 24	W	1500	40	10
12005AKC-001	½	Blue	.56	.84	Empty	6	36 x 24	W	1500	40	10
12007AA-001	¾	Blue	.76	1.05	Empty	6	36 x 24	W	1000	40	14
1207AAY-001	¾	Yellow	.76	1.05	Empty	6	36 x 24	W	1000	40	14
1207AAR-001	¾	Red	.76	1.05	Empty	6	36 x 24	W	1000	40	14
1207AAC-001	¾	Blue	.76	1.05	Empty	6	36 x 24	W	1000	40	14
12008-750	1	Blue	1.00	1.315	Empty	6	36 x 24	W	750	40	20
12008Y-750	1	Yellow	1.00	1.315	Empty	6	36 x 24	W	750	40	20
12008R-750	1	Red	1.00	1.315	Empty	6	36 x 24	W	750	40	20
12008C-750	1	Blue	1.00	1.315	Empty	6	36 x 24	W	750	40	20
12009-750	1¼	Blue	1.402	1.66	Empty	7	48 x 32	W	750	90	19
12010-750	1½	Blue	1.554	1.90	Empty	8¼	48 x 32	W	750	90	39
12010Y-750	1½	Yellow	1.554	1.90	Empty	8¼	48 x 32	W	750	90	39
12011-500	2	Blue	2.030	2.375	Empty	9½	48 x 32	W	500	90	32
12011R-500	2	Red	2.030	2.375	Empty	9½	48 x 32	W	500	90	32
12011Y-500	2	Yellow	2.030	2.375	Empty	9½	48 x 32	W	500	90	32

* 1¼"-2" available in yellow & red, made to order; consult factory.

Canada Only

Standard Stock — Coils

CAT. NO.	SIZE (IN.)	COLOR	NOM. I.D. (IN.)	NOM. O.D. (IN.)	PILL TAPE	MIN. BEND RADIUS (IN.)	COIL LENGTH (FT.)	WT. PER 100 FT. (LBS.)
12005-200	½	Blue	.56	.84	Empty	6	200	10
12005Y-200	½	Yellow	.56	.84	Empty	6	200	10
12005R-200	½	Red	.56	.84	Empty	6	200	10
12005C-370	½	Blue	.56	.84	Empty	6	200	10
12007-100	¾	Blue	.76	1.05	Empty	6	100	14
12007Y-100	¾	Yellow	.76	1.05	Empty	6	100	14
12007R-100	¾	Red	.76	1.05	Empty	6	100	14
12007C-240	¾	Blue	.76	1.05	Empty	6	100	14
12008-100	1	Blue	1.00	1.315	Empty	6	100	22
12008Y-100	1	Yellow	1.00	1.315	Empty	6	100	22
12008R-100	1	Red	1.00	1.315	Empty	6	100	22
12008C-160	1	Blue	1.00	1.315	Empty	6	100	22

Canada Only

10-ft. Lengths

CAT. NO.	SIZE (IN.)	COLOR	NOM. I.D. (IN.)	NOM. O.D. (IN.)	STD. CTN.	STD. WT. (LBS.)
12005-UPC	½	Blue	.56	.84	10 ft.	1.02
12007-UPC	¾	Blue	.76	1.05	10 ft.	1.46
12008-010	1	Blue	1.00	1.315	10 ft.	2.93

NOTE: The solid blue color of ENT conduit is a registered trademark of Carlton®. ENT may show color deterioration in direct sunlight when stored outdoors over an extended period of time. It is suggested that all ENT products not be stored outside. 362.12(9) of the NEC® prohibits ENT to be used in areas exposed to direct sunlight.

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Stub Downs

Vertical Stub Down



Carlton® Vertical Stub Downs are designed to provide a quick, easy connection to a wood deck or transition from slab-to-slab using Carlton'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 enabling 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 Carlton® coupling to the ENT to continue the run. Carlton® Vertical Stub Downs are manufactured out of a highly engineered thermoplastic material to provide extra strength and durability and are available in sizes ½", ¾" and 1".

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A210D	½	50	3.8
A210E	¾	50	3.7
A210F	1	50	4.8

Vertical Stub Down Transition Adapter



Carlton® Non-Metallic Exclusive... Carlton® 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. The integral snaps provide a secure mount — preventing the ENT from slipping or pulling out, while the deck mount flange has a threaded port, enabling connection to other conduit system using a terminal adapter. Carlton® 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 ½", ¾" and 1".

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A200D	½" Female ENT to NPSC (Female)	50	2.3
A200E	¾" Female ENT to NPSC (Female)	50	2.8
A200F	1" Female ENT to NPSC (Female)	50	3.9

45° Stub Down



Carlton® 45° Stub Downs are designed to provide 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 enable the stub to easily be removed. The underside of this fitting provides ample room to attach a Carlton® coupling to the ENT to continue the run. Carlton® 45° 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 ½", ¾" and 1".

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A220D	½	25	1.8
A220E	¾	25	2.0
A220F	1	25	2.6
A220G	1¼	25	2.8
A220H	1½	25	3.3
A220J	2	25	4.1

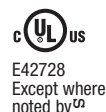
90° Stub Down Transition Adapter



Carlton® Non-Metallic Exclusive... Carlton® 90° Stub Downs are designed to provide a smooth transition from cross-deck ENT runs to vertical applications where code requires other wire-management means. The integral snaps provide a secure mount — preventing the ENT from slipping or pulling out, while the deck mount flange has a threaded port, enabling connection to any conduit system using a terminal adapter. Carlton® 90° Stub Downs are manufactured out of polycarbonate material to provide extra strength and durability. They're concrete tight and available in sizes ½", ¾" and 1".

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A230D	½" Female ENT to NPSC (Female)	25	2.0
A230E	¾" Female ENT to NPSC (Female)	25	2.4
A230F	1" Female ENT to NPSC (Female)	25	3.3

**Cement Caps
Included**



Mud Box Assemblies

Carlton® Mud Box Assemblies are available in five unique styles...blank, ceiling ring, one-gang, two-gang and 4-inch 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 ¾" and four ½". Using our new ENT Reducers, this product will meet ANY jobsite application.

Mud Box Base with Blank Cover

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A863BC	Mud Box with Blank Cover	24	12.3



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.

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A863CF	Mud Box with Blank Cover	24	15.5
A863CFG	Mud Box with Ceiling Ring & Ground Lug	24	16.1



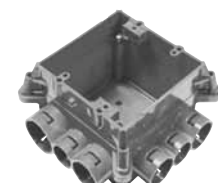
Mud Box with One-Gang Ring

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A863S	Mud Box with One-Gang Ring	24	16.8
A863SG	Mud Box with One-Gang Ring & Ground Lug	24	16.2



Mud Box with Two-Gang Ring

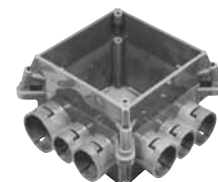
CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A863D	Mud Box with Two-Gang Ring	24	15.8
A863DG	Mud Box with Two-Gang Ring & Ground Lug	24	16.6



Mud Box with 4 Square Ring

- 4 Square Ring not for luminaire

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A863-4SQ	Mud Box with 4-Inch Square Ring	24	15.2

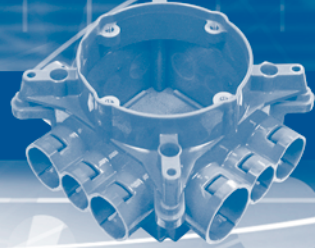


Mud Box Assemblies with Mounting Feet

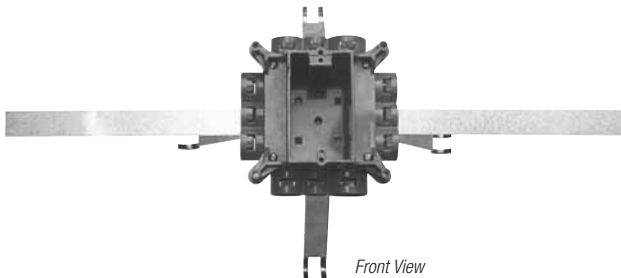
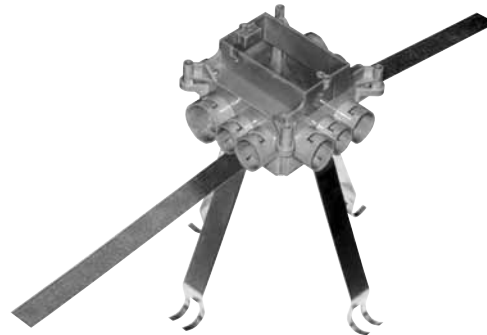
Carlton® Mud Box Assemblies with Mounting Feet are specifically engineered and designed for use in Tunnel Form applications. The mounting feet are located on all four corners and enable the box to attach directly to the wall of the form using pop rivets. The pop rivets help keep the box in position during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

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
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

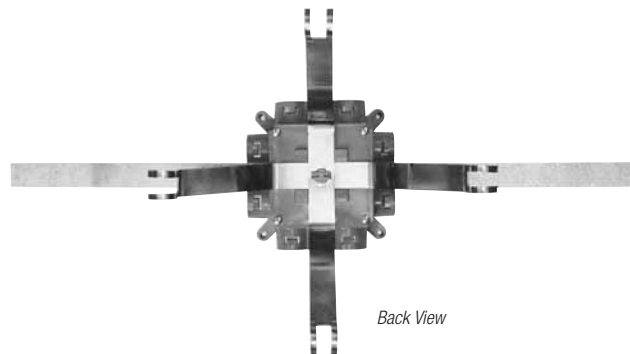




Mounting Brackets



Front View



Back View

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 enables the outlet box to be secured to rebar. The bracket combination ensures a straight box opening and a concrete-tight fit. Mud Box not included.

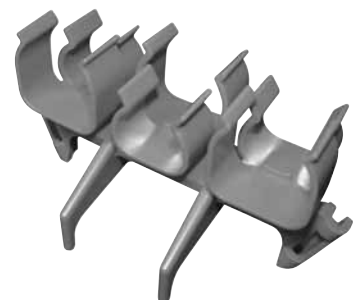
**Carlon
Exclusive**

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A863MB	Mud Box Mounting Kit	1	.98

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 ½", ¾" and 1". (The Carlon® ENT bridge can be used with rigid non-metallic conduit too.)

**Carlon
Exclusive**



CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A293DEF	ENT Bridge	50	9.0

Transition Adapters

Male ENT to Schedule 40 & 80 PVC Conduit

CARLON® EXCLUSIVE...Carlton® Male ENT to Schedule 40 & 80 PVC Conduit Transition Adapters are designed to connect Schedule 40 conduit to Carlton® Flex-Plus® Blue™ ENT boxes and fittings. Simply solvent cement the PVC adapter to the Schedule 40 conduit and snap the adapter into Carlton's® "Quick Connect" snap-in connector on the box or fitting. Carlton® Male ENT to Schedule 40 & 80 Adapters are concrete tight and available in sizes ½", ¾" and 1".

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A263D	½" ENT to ½" Sch. 40 or Sch. 80	100	2.4
A263E	¾" ENT to ¾" Sch. 40 or Sch. 80	100	3.2
A263F	1" ENT to 1" Sch. 40 or Sch. 80	100	4.5

ENT to EMT

Carlton® ENT to EMT Transition Adapters are designed to easily transition from Carlton® Flex-Plus® Blue™ ENT to EMT using Carlton'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 ½", ¾" and 1".

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A245D	½" ENT to ½" EMT	100	3.4
A245E	¾" ENT to ¾" EMT	100	4.1
A245F	1" ENT to 1" EMT	100	5.4

Reducers

CARLON® EXCLUSIVE...Carlton® ENT Reducers are designed to provide an easy transition from 1" Carlton® ENT to ¾" ENT or from ¾" Carlton® ENT to ½" ENT. They're concrete tight and manufactured out of polycarbonate material to provide extra strength and durability. Carlton® ENT Reducers provide flexibility while on the jobsite by minimizing the need to carry size-specific boxes and fittings. Carlton® ENT Reducers provide the versatility to convert Carlton® fittings and boxes to many different sizes and configurations.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A273DE	¾-½	100	3.2
A273EF	1-¾	100	2.4



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Exclusive**



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Outlet and Switch Boxes — Eccentric Knockouts

Carlton® ENT Outlet and Switch Boxes with Eccentric Knockouts are designed to enable selective ENT openings — ½", ¾" and 1" — based on application needs. They provide the largest capacity available on the market today — 22 cu. in. Single-Gang, and 38 cu. in. Double-Gang — and can be mounted to wood or steel studs. Carlton® 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-in. square box.

Carlton®
Exclusive



Single-Gang — 22 Cu. In.

CAT. NO.	SIZE	CAPACITY CU. IN.	STD. CTN.	STD. WT. (LBS.)
A122	Single-Gang	22	25	6.8

UL Classified for 2-hour-or-less fire-resistant fire wall assemblies.



Combination Two-Gang/Four-Inch Square Box — 38 Cu. In.

CAT. NO.	SIZE	CAPACITY CU. IN.	STD. CTN.	STD. WT. (LBS.)
A238	Two-Gang	38	25	8.9

UL Classified for 2-hour-or-less fire-resistant fire wall assemblies.



Outlet Box Divider

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



CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A238DIV	—	50	1.87



Carlon®

Accessories — Adapters and Couplings

Quick Connect Adapters and Couplings



LR92248

E86720

- 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 sizes of rigid non-metallic conduit fittings are compatible with ENT when using ENT cement

- Rigid non-metallic conduit fittings are recommended for use with Carlon® 1¼"–2" Flex-Plus® Blue™ ENT
- Use of ENT Blue™ Quick-Set Cement is required. See **page K-12** 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

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A240D	½	150	2.90
A240E	¾	100	3.00
A240F	1	50	2.30



Threaded Adapters

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A243D	½	150	2.55
A243E	¾	100	2.30
A243F	1	50	2.00



Snap-In Adapters

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A253D	½	150	2.70
A253E	¾	100	2.90
A253F	1	50	2.30



Rigid Non-Metallic Conduit Adapters and Couplings



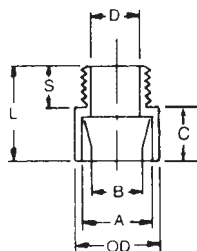
LR31146

E32447

Male Terminal Adapters



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

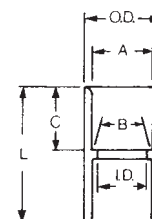


Standard Couplings

All socket fittings should be attached using Carlon® solvent cement. Using Carlon® fittings with Carlon® non-metallic conduit ensures system integrity.



Socket type for joining non-metallic conduit.



CAT. NO.	SIZE	STD. CTN.	TYPICAL		MIN. D	MAX. OD	TYPICAL			STD. WT. (LBS.)
			A	B			C	S	L	
E943D	½	150	.852	.836	.597	1 ½	¾	¾	1 ½	2.8
E943E	¾	125	1.064	1.046	.800	1 ½	¾	¾	1 ½	3.5
E943F	1	50	1.330	1.310	1.018	1 ½	1	1 ½	1 ½	3
E943G	1 ¼	50	1.677	1.655	1.332	2 ½	1	¾	1 ½	4
E943H	1 ½	25	1.918	1.894	1.566	2 ½	1 ½	¾	2 ½	2.5
E943J	2	50	2.393	2.369	2.000	2 ½	1 ½	¾	2 ½	7

*All measurements in inches, unless otherwise noted.

CAT. NO.	SIZE	STD. CTN.	TYPICAL		MIN. D	MAX. OD	TYPICAL		STD. WT. (LBS.)
			A	B			C	L	
E940D	½	150	.852	.836	.728	1 ¼	1 ½	1 ½	2.8
E940E	¾	100	1.064	1.046	.840	1 ½	¾	1 ½	3.5
E940F	1	50	1.330	1.310	1.210	1 ½	1 ½	2	3
E940G	1 ¼	30	1.677	1.655	1.535	1 ¾	1	2 ½	4
E940H	1 ½	25	1.918	1.894	1.755	2 ¾	1 ½	2 ½	2.5
E940J	2	30	2.393	2.369	2.190	2 ¾	1 ½	2 ½	7

*All measurements in inches, unless otherwise noted.

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Accessories — Mud Boxes, Outlet and Switch Boxes

2½" and 4" Mud Boxes and Covers

- UL Classified for 2-hour-or-less fire-resistant floor/ceiling assemblies



Base Rings

Listed for use with ceiling fans up to 35 lbs. and for fixture support up to 50 lbs.

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A861	Without Ground Lug	10	2.5
C861G	With Ground Lug	10	2.0



Covers

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A862D	2½ Deep (½" KOs)	10	2.5
A862E	2½ Deep (¾" KOs)	10	2.1
A864D	4 Deep (½" KOs)	10	2.9
A864E	4 Deep (¾" KOs)	10	2.9
A864F	4 Deep (1" KOs)	10	3.0



Quick-Connect Outlet and Switch Boxes

- Suitable for masonry walls
- Meets NEMA OS-2
- UL Classified for 2-hour-or-less fire-resistant wall assemblies



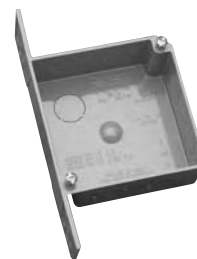
Single-Gang — 16 Cu. In.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A58381D	3 x 2¼ x 3 (½" KOs)	25	4.6
A58381E	3 x 2¼ x 3 (¾" KOs)	25	4.6



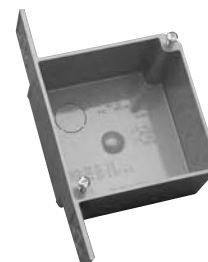
4-Inch Square — 20 Cu. In.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A52151D	4 x 4 x 1½ (½" KOs)	100	22.6
A52151E	4 x 4 x 1½ (¾" KOs)	100	22.6
A521DE	4 x 4 x 1½ (½" & ¾" KOs)	100	22.6



4-Inch Square — 30.3 Cu. In.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A52171D	4 x 4 x 2½ (½" KOs)	25	7.6
A52171E	4 x 4 x 2½ (¾" KOs)	25	7.6
A5217DE	4 x 4 x 2½ (½" & ¾" KOs)	25	7.6



Carlton ENT (Electrical Non-Metallic Tubing)



Carlton®

ENT Box with Adapters, ENT Extenders

ENT Box with Adapters

- UL Classified for 2-hour-or-less fire-resistant wall assemblies

4-Inch Square — 24.75 Cu. In. ENT Box with Adapters



CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A5329DE	4 x 4 x 1 1/4 (1/2" & 3/4" KOs)	50	14.8

UL Listed E42728.



Box Back Wall Support

CAT. NO.	SIZE	STD. CTN.	STD. WT. (LBS.)
A540DS	For use with 1/2" Knockout	100	2.1



ENT Box Extenders

- UL Classified for 2-hour-or-less fire-resistant wall assemblies



E42728

Single-Gang

CAT. NO.	RISE (IN.)	CU. IN.	STD. CTN.	STD. WT. (LBS.)
A410	1/2	3.5	100	7.7
A411	3/4	4.2	50	4.6
A412	1	5.0	50	5.1
A413	1 1/4	6.6	40	5
A414	1 1/2	8.1	30	4.4



Two-Gang

CAT. NO.	RISE (IN.)	CU. IN.	STD. CTN.	STD. WT. (LBS.)
A400	Blank	—	100	7.7
A420	1/2	6.1	75	5.0
A421	3/4	7.4	50	4.2
A422	1	8.8	50	4.8





Round Covers for Octagon Ceiling Boxes



E42728

Round Plaster Rings

- Suitable for fixture support
- UL Classified for 2-hour-or-less fire-resistant assemblies

CAT. NO.	RISE (IN.)	CU. IN.	STD. CTN.	STD. WT. (LBS.)
A471	½	3.2	100	3.3
A472	¾	4.0	100	3.7



Round Blank Covers

CAT. NO.	RISE	CU. IN.	STD. CTN.	STD. WT. (LBS.)
E460R-CAR	Blank	—	35	2.2
A470D	Blank with ½" KO	—	100	4.7



Quick Connect 4" Octagon Ceiling Boxes

- Carlton® 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.
- UL Classified for 2-hour-or-less fire resistant floor/ceiling assemblies



E42728

Ceiling Box — 20.5 Cu. In.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A615D	(4) 2½ Deep (½" KOs)	50	6.4
A615E	(4) 2½ Deep (¾" KOs)	50	6.4
A615DE	(4) 2½ Deep (½" & ¾" KOs)	50	6.4



Ceiling Box with J Mount — 20.5 Cu. In.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A615DJ	(4) 2½ Deep (½" KOs)	50	18.7



Ceiling Box with L Bracket — 20.5 Cu. In.

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A615DL	(4) 2½ Deep (½" KOs)	50	6.4



Ceiling Box with Adjustable Hanger Bar — 20.5 Cu. In.

Adjust from 14¼" to 23¼"

CAT. NO.	SIZE (IN.)	STD. CTN.	STD. WT. (LBS.)
A615DH	(4) 2½ Deep (½" KOs)	25	13.6



Carlton® ENT (Electrical Non-Metallic Tubing)



Carlton®

Accessories

PVC Conduit Cutters

Small Cutter

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



CAT. NO.	SIZE (IN.)	STD. CTN.
CC120B	8	10

Medium Cutter

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



CAT. NO.	SIZE (IN.)	STD. CTN.
CC125	9	12

Large Cutter

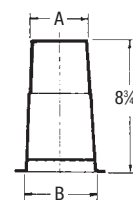
For clean cuts of conduit 1/2" through 2".



CAT. NO.	SIZE (IN.)	STD. CTN.
CC122	17 1/2	1

Concrete Sleeves

Non-metallic 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. Concrete sleeves are adjustable to any slab thickness.



CAT. NO.	MIN. O.D. A (IN.)	B (IN.)	STD. CTN.	STD. WT. (LBS.)
E92CSH	1 1/2	1 1/4	20	3
E92CSJ	2	2 1/2	25	6
E92CSL	3	3 1/2	25	8
E92CSN	4	4 1/2	18	8
E92CSP	5	5 1/2	15	8
E92CSR	6	6 1/2	12	8

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.



CAT. NO.	SIZE (IN.)	TENSILE STRENGTH (LBS.)	REEL LENGTHS (FT.)
TL14505	1/2	1250	5,000
TL14510	1/2	1250	10,000
TL38203	3/4	1800	3,000
TL38265	3/4	1800	6,500
TL38210	3/4	1800	10,000

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

Carlton® Cement

(MSDS sheets available at www.carlton.com)

All Weather — ENT Blue

RECOMMENDED PIPE APPLICATION AND SIZES	SET-UP TIME (EVAPORATION RATE)		RECOMMENDED INSTALLATION TEMP.	LAP SHEAR @ 73°F		VISCOSITY AT 75° AS MANUFACTURED
Required for use with Flex-Plus® ENT (Electrical Non-Metallic Tubing), Riser-Gard®, P&C Flex™ and Carlon® PVC fittings. <i>Up through 6" diameter.</i>	-5°-10°F	6-8 Minutes	-5° to 100°F	2 Hrs.	350 PSI	400-700 CPS
	10°-30°F	4-5 Minutes		16 Hrs.	800 PSI	
	30°-50°F	3-4 Minutes		72 Hrs.	1,500 PSI	
	50°-70°F	1-2 Minutes				
	70°-90°F	½-1½ Minutes				

CAT. NO.	SIZE	APPLICATOR	DESCRIPTION	STD. CTN.	STD. WT. (LBS.)
VC9992	Quart	Dauber	All-Weather "Quick-Set" Blue	12	29.0

Meets ASTM D-2564.



ENT cement required for use with ENT and Rigid Non-Metallic Conduit fittings

Thomas & Betts

www.tnb.com

Corporate Office
Tel: 901.252.8000
800.816.7809
Fax: 901.252.1354

Customer Service
Tel: 800.816.7809
Fax: 800.816.7810

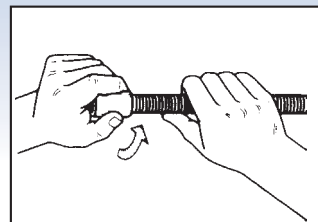
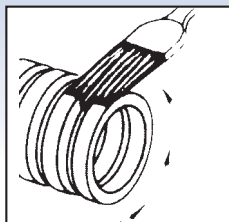
Technical Services
Tel: 888.862.3289
Fax: 901.252.1321

Tool Services
Tel: 800.284.8665



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 that will affect conductor installation. Suitable materials include wire, tie wraps and tape.
4. When using rigid non-metallic conduit fittings for concrete tight performance:



- A. Do not use chemical primer or cleaner.
- B. Use a brush to 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.
- 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.

Specifications:

- 1.1 Electrical Non-Metallic 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® Section 12-1500 of the CEC, other applicable sections of the Code and local codes.
- 1.2 Any ENT used shall be listed to the requirements of UL Standard UL 1653 in accordance with Article 362 of the NEC® and Section 12-1500 of the CEC.
- 1.3 Any ENT used shall meet the requirements of BI National Standard CAN/CSA-C22.2 No. 227.1-UL1653 and shall be Listed/Certified in accordance to the Electrical Codes.
- 1.4 Carlton® ENT shall be installed per the technical assessment prepared by fire cause analysis for use in 1-hour and 2-hour rated construction.
- 1.5 Penetration of fire-rated walls, floors or ceilings shall use Classified Through-Penetration Firestop Systems described in the current Underwriters Laboratories Fire Resistance Directory.
- 1.6 Fittings and outlet boxes designed for use with ENT shall be listed. All fittings, boxes and accessories shall be from one manufacturer.
- 1.7 Only Carlton® ENT Blue™ cement recommended specifically for use with ENT and rigid non-metallic fittings shall be used.
- 1.8 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, or colors can designate different voltages.
- 1.9 ENT, fittings and accessories shall be manufactured by Carlton®.

Features:

- Recognized for use with PVC rigid non-metallic conduit fittings with all sizes of ENT
- ENT rated for 90°C conductors U.S., and 75°C Canada
- One-piece ENT Coupling, Threaded Terminator and RNC Transition Fitting are rated concrete tight without tape
- 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 ICC building codes.
- Conductors easily push through the raceway (up to approximately 50 feet)*
- For use in buildings in accordance with NEC® Article 362/ CEC Section 12-1500
- Outside Diameters meet IPS Dimensions
- Storage -4°F to 158°F
- Handling -4°F to 104°F

Continued on next page



Carlton®

Technical Information (cont.)

Continued from previous page

Approved Uses:

- Concrete slab — NEC® Article 362/CEC Section 12-1500
- Walls — wood stud, masonry and metal stud — NEC® Article 362/CEC Section 12-1500
- Ceilings — permanent or dropped (free air only) — NEC® Article 362/CEC Section 12-1500
- Exposed — NEC® Article 362/CEC Section 12-1500
- Public assembly — NEC® Section 518.4, in non-fire rated and certain fire rated structures
- Prewired — NEC® Article 362/CEC Section 12-1500
- 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
- Maximum ambient temperature 140°F (60°C)

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 non-patient 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® and CEC

Carlton® ENT (Electrical Non-Metallic Tubing)

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