COR-LINE ENT & KWIKON FITTINGS



Noncorroding and nonconducting Cor-Line® Electrical Nonmetallic Tubing (ENT) and Kwikon® fittings, slab boxes and accessories are engineered for the rugged day-to-day challenges of the construction industry - whether encased in concrete, concealed in walls or ceilings, or in direct burial applications.

Cor-Line ENT's corrugated construction allows it to be bent easily by hand. No special bending equipment is required. And our patented Kwikon couplings and connectors, with their unique 360° locking tabs, provide for snap-on, lock-in installation that exceeds CSA and UL requirements for conduit pullout.

Add our innovative form stubbys and Kwikon concrete-tight slab boxes, (available with or without integral 1/2", 3/4" or 1" molded hub connectors) and you've got a total integrated system that saves you time and money on the job. Available in 1/2" to 2" sizes, Cor-Line ENT is FT-4 rated for use in non-combustible construction.

APPLICATIONS

- Residential (low or high rise)
- Commercial (low or high rise)
- Institutional (Prisons, Schools, Universities)
- Hospitals and Nursing Homes
- Stadiums and Arenas

STANDARDS







CSA Standards C22.2

NEMA TC-13

ADVANTAGES

Concrete-Tight

Every contractor's worst nightmare is a product that doesn't work or hold up in poured concrete; the costs of replacement and repair can be tremendous. Cor-Line ENT and Kwikon fittings are concrete-tight, requiring no solvent welding or tape around the connections, or paper stuffed inside.

Pull Resistant $(\mathbf{2})$

Once a length of Cor-Line tubing is connected to a coupling or connector, it stays connected, thanks to our unique six locking tab design. With a pull-out resistance of up to 175 lbs., our patented snap-on, lock-in system provides a seal that easily meets CSA requirements for conduit pullout.

Fire Resistant

Cor-Line ENT tubing and Kwikon fittings and slab boxes are approved for use in noncombustible 2 hour and 4 hour fire-rated floor/ceiling assemblies.

Impact Resistant

Cor-Line ENT is made of impact resistant PVC, so it won't break or crack if an object is dropped on it or someone steps on it.

Strong Fittings

Kwikon's strong, solid fittings meet all CSA requirements.

Flexible Flexible enough to be bent by hand, Cor-Line ENT is tough enough to withstand crushing and breaking.



INSTALLING IS THIS EASY

1. Unroll Cor-Line to desired length

Available in convenient coil and reel lengths up to 1,500 ft., Cor-Line gives you the flexibility to measure out exactly the amount of tubing you need. Cor-Line requires fewer couplings for long spans than metal conduit. It's recommended ENT be securely fastened at 2-3 ft. intervals.

2. Cut Cor-Line with an Ent Cutter

For straight cuts every time use the Kwikon scissor-style cutting tool. However, no special tools or cutting equipment are necessary. Cor-Line can even be cut with a standard utility knife.

3. Make bends and turns by hand

Unlike metal which has to be cut to fit tight spaces, Cor-Line can be bent, turned and manipulated by hand to wind around irregular curves and corners. When bending, ensure the radius of the curve is at least six times the diameter of the tubing.

4. Simply snap connections together

With no special tools or equipment needed, Kwikon's unique snap-on fittings quickly and easily join or terminate Cor-Line ENT and provide a concrete-tight connection.

5. Pull Cable through Cor-Line

Cor-Line's interior corrugated surface significantly reduces the amount of friction when pulling cables through long runs, even in runs with 90° bends. With Cor-Line, you can pull longer runs of cable without worrying about damage.



SHORT FORM SPECIFICATIONS

GENERAL

1.1 References

- A. Standards referred to in this section are:
 - 1. CSA Standards C22.2, No. 227.1 and C22.2 No. 85.
 - 2. NEMA TC-13 Electrical Nonmetallic Tubing.

PRODUCTS

2.1 Manufacturers

- A. Acceptable manufacturers are listed below
 - 1. Electrical Nonmetallic Tubing:
 - a. Cor-Line by IPEX
 - 2. Electrical Nonmetallic Tubing Fittings: a. Kwikon by IPEX
 - 3. Electrical Nonmetallic Tubing Boxes: a. Kwikon by IPEX
- B. All ENT tubing, ENT fittings, ENT boxes and accessories shall be manufactured by the same company so as to form a complete ENT system.
- C. ENT systems shall be approved for use in fire resistance rated concrete floor-ceiling assemblies with fire resistance ratings up to 4 hours.

2.2 Raceways

B. ENT raceway shall be listed to CSA C22.2 No. 227.1 and manufactured in accordance with NEMA TC-13.

2.3 Fittings

- A. ENT Fittings shall be manufactured of high-impact PVC,
- B. ENT Fittings shall meet the following requirements:
 - 1. Six locking tabs located every 60° providing 360° contact.
 - Locking tabs shall provide a conduit pullout of a minimum 175 ft-lb force.
 - 3. Concrete tight without the need for taping.
 - 4. When transitioning to EMT conduit, the transition fitting shall have six locking tabs for ENT connection and set-screw connection for EMT.

2.4 Boxes

- A. ENT boxes shall be manufactured of high-impact PVC.
- B. ENT Slab Box and Wall Box requirements:
 - 1. Slab Boxes shall be approved for the purpose and concrete-tight.
 - 2. Round Slab Boxes shall be approved for use with luminaires up to 50 lbs and ceiling fans up to 35 lbs.
 - 3. Round Slab Boxes shall have threaded brass inserts for the attachment of luminaires or ceiling fans.
 - 4. Slab Boxes shall have eight (8) integrally molded ENT hub connectors with six locking tabs for ENT raceway connection.

INSTALLATION

3.1 Installation

- A. ENT raceways, fittings, boxes and accessories shall be installed in accordance with the 2009 Canadian Electrical Code, Part 1 C22.1-02 (CEC) and the 1995 National Building Code of Canada (NBC).
- B. Where ENT penetrates a fire-rated wall, floor or ceiling assembly, an approved firestop system is CSA certified to CSA Standards C22.2, No. 211.0.

See Codes & Standards for additional installation information.

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Size ID OD Length Product inches inches inches feet Code

Cor-Line ENT Coils - Blue Stripe



		-		
1/2	0.578	0.840	370	012000
3/4	0.778	1.050	240	012008
1	1.000	1.315	160	012018
1-1/4	1.345	1.660	500	012046
1-1/2	1.574	1.900	300	012032
2	2.025	2.375	225	012043

Kwikon Couplings

KWIKON FITTINGS

inches



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	1/2	KC10	089000		
	3/4	KC15	089001		
	1	KC20	089002		
	1-1/4	KC25	189670		
	1-1/2	KC30	189671		
	2	KC35	189672		

Part Number

Product Code

Cor-Line ENT Reels - Blue Stripe



		•		
1/2	0.578	0.840	1500	012004
3/4	0.778	1.050	1000	012009
1	1.000	1.315	750	012019
1-1/4	1.345	1.660	1000	012047
1-1/2	1.574	1.900	750	012033
2	2.025	2.375	500	012044

Kwikon Snap-in Connectors

Kwikon Connectors*



1/2	KTS10	089146
3/4	KTS15	089147
1	KTS20	089148

Crate

Size

1/2	KTA10	089006
3/4	KTA15	089007
1	KTA20	089008
1-1/4	KTA25	189680
1-1/2	KTA30	189681
2	KTA35	189682

^{*}KTA connectors are supplied with locknuts.

COR-LINE ENT 10' Sticks - Blue Stripe

Size

inches



		-	
1/2	10	012005	3600
3/4	10	012006	2200
1	10	012007	1800

Product

Code

Storage of Kwikon ENT Tubing

Length

feet

Manufacturer recommends that ENT tubing should not be stored outdoors where subjected to direct sunlight without protective covering, i.e. packaging or tarps.

Kwikon Transition Couplings



1/2	KTC10	089012
3/4	KTC15	089013
1	KTC20	089014