

# COR-LINE ENT & KWIKON FITTINGS

1/2" - 2-1/2" (12mm - 65mm)



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.

## ADVANTAGES

- 1 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.
- 2 Pull Resistant**  
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.
- 3 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.
- 4 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.
- 5 Strong Fittings**  
Kwikon's strong, solid fittings meet all CSA requirements.
- 6 Flexible**  
Flexible enough to be bent by hand, Cor-Line ENT is tough enough to withstand crushing and breaking.

## 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

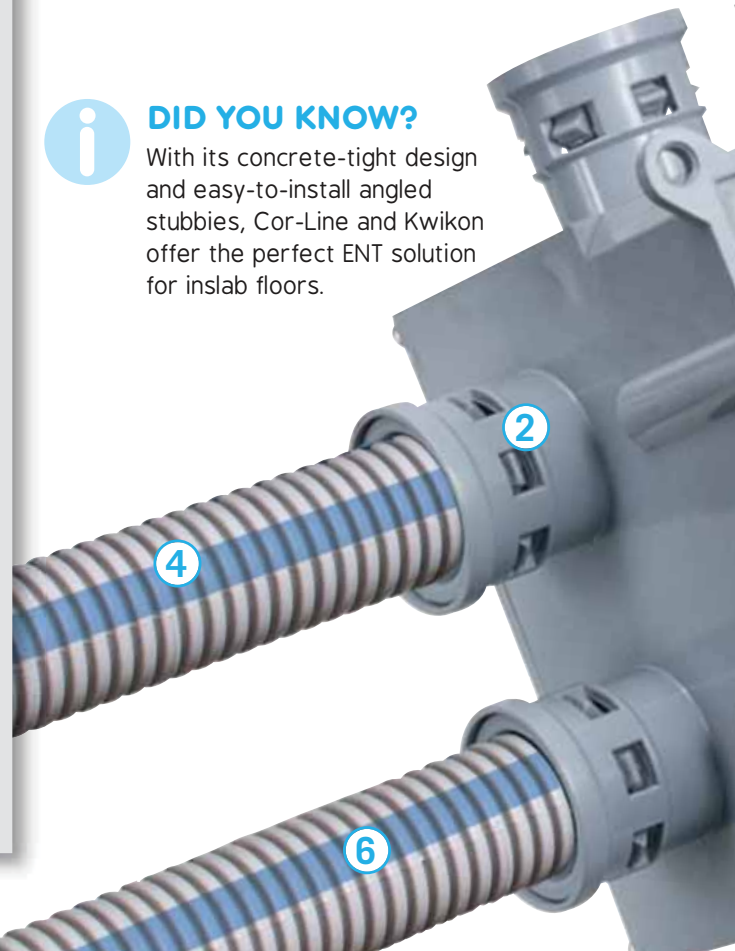
## STORAGE & HANDLING

- NOT to be installed, stored, or handled in cold temperatures below -20°C (-4°F)
- NOT to be stored outside



## DID YOU KNOW?

With its concrete-tight design and easy-to-install angled stubbies, Cor-Line and Kwikon offer the perfect ENT solution for inslab floors.



## 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.
  - 2. 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

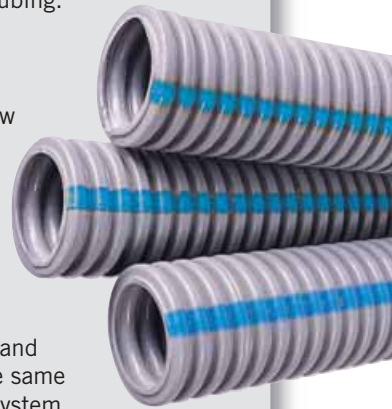
- A. ENT boxes shall be manufactured of high-impact PVC,
- B. ENT Slab Box and Wall Box requirements:
  - 1. Slab Boxes shall be approved for the purpose and concrete-tight.
  - 2. Round Slab Boxes shall be approved for use with luminaires up to 50 lbs and ceiling fans up to 35 lbs.
  - 3. Round Slab 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.



## KWIKON SLAB BOXES

### STANDARD SLAB BOXES

- Approved for support of ceiling fans up to 35 lbs. and luminaires up to 50 lbs.
- Concrete-tight.
- Corner and traditional mounting tabs offer contractors two options when installing to the slab deck
- Angled design guides the nail into position within the trim cover area
- All molded connectors have 360° locking tabs that exceed UL and CSA requirements for pull-out.
- Manufactured from high-impact PVC.
- Nonmetallic/non-conducting/non-corroding.
- Threaded brass inserts. (10/32 for ceiling fans, 8/32 for luminaires).
- Supplied as a fully assembled one piece unit.

Size inches	Part Number	Product Code
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### Kwikon Slab Boxes w/ Molded Connectors – Volume 44 cu in.



8 x 1/2	SMB-H-10	089455
8 x 3/4	SMB-H-15	089459
4 x 1/2, 4 x 3/4	SMB-H-10/15	089457
4 x 1/2, 2 x 3/4, 2 x 1	SMB-H-10/20	089456
4 x 3/4, 4 x 1	SMB-H-15/20	089463

### Kwikon Slab Boxes w/ Knockouts (w/o Molded Connectors)

– Volume 44 cu in.



8 x 1/2	SMB-10	089450
4 x 1/2, 2 x 3/4, 2 x 1	SMB-10/20	089451

### SQUARE SLAB BOXES

- Direct mounting of 4" devices and 4" square covers.
- Mounting feet are located on corners for quicker positioning and securing to form.
- Standard dimension 2-gang cover plates cover all exposed surfaces.

Size inches	Part Number	Product Code
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### Kwikon Square Slab Boxes w/ Molded Connectors

– Volume 44 cu in.



8 x 1/2	SSBH-10	089452
8 x 3/4	SSBH-15	089453
4 x 1/2, 4 x 3/4	SSBH-10/15	089454
4 x 3/4, 4 x 1	SSBH-15/20	089471

### SHALLOW SLAB BOXES

- Threaded brass inserts (10/32 for ceiling fans, 8/32 for luminaires).
- Approval for support of ceiling fans up to 35 lbs and luminaires up to 50 lbs.
- Overall height of box (2-7/8") allows for use in thinner slabs.
- Clear Vue vacuum formed removable covers

Size inches	Part Number	Product Code
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### Kwikon Shallow Slab Boxes w/ Molded Connectors

– Volume 36 cu in.



8 x 1/2	SMBS-H-10	089485
8 x 3/4	SMBS-H-15	089487
4 x 1/2, 4 x 3/4	SMBS-H-10/15	089486
4 x 1/2, 2 x 3/4, 2 x 1	SMBS-H-10/20	089488
4 x 3/4, 4 x 1	SMBS-H-15/20	089489

### CONCRETE WALL BOXES

- Fully assembled and installation ready
- Perfectly suited for deep or shallow construction preferences
- Kwikon hubs do not protrude inside the box
- Clear Vue vacuum formed removable covers

Size inches	Part Number	Product Code
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### Kwikon Concrete 3-1/2" Deep Concrete Wall Boxes



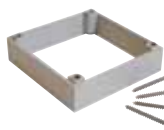
4 x 1/2, 4 x 3/4	SVDB-H-10/15	089496
4 x 3/4, 4 x 1	SVDB-H-15/20	089049
4 x 1/2, 2 x 3/4, 2 x 1	SVDB-H-10/20	089052
8 x 3/4	SVDB-H-15	089065

### Kwikon 2" Shallow Concrete Wall Boxes



4 x 1/2	SVSB-H-10	089054
4 x 3/4	SVSB-H-15	089053

### Kwikon Slab Box Extension Ring



SMBR 089494

Adjusts height of SMB/SMBH series slab boxes by 1"

- Easily installed.
- Quickly adjusts to new height.