

# STRUCTURAL CONCRETE



## Thermoplastic Single Ply and Multi-Ply Roofing Systems

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### PRODUCT DESCRIPTION

The Flex CD-10 is a hammer-in, non-threaded fastener designed to secure insulation and single-ply membrane to structural concrete. This fastener is available in 2" – 12" lengths.

### APPLICATION

Predrill a 7/32" hole using a carbide drill bit. The fastener is then installed with a 2 lb. short handle sledge hammer.

Minimum fastener embedment into the deck should be 1". The predrilled hole must be a minimum of 1/2" deeper than fastener embedment.

**Note:** Prior to job start, contact Flex to perform a pullout test to determine the pullout values. Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer.

### PHYSICAL DATA

The data below is constant for each Flex CD-10.

**Head Diameter:** .435  
**Head Height:** .115  
**Head Style:** Flat Top Pan  
**Split Diameter:** .270/.277  
**Coating:** CR-10

Cat. No.	Length	Packaging	Weight
CD002	2"	500	13 lb
CD212	2½"	500	16 lb
CD003	3"	500	18 lb
CD312	3½"	500	21 lb
CD004	4"	500	23 lb
CD412	4½"	500	25 lb
CD005	5"	500	28 lb
CD512	5½"	500	31 lb
CD006	6"	500	33 lb
CD007	7"	500	38 lb
CD008	8"	500	44 lb
CD009	9"	250	25 lb
CD010	10"	250	28 lb
CD011	11"	250	31 lb
CD012	12"	250	33 lb

## CD-10



### Fast Facts

The Flex CD-10 is designed for attaching insulation and single-ply membrane to structural concrete.

### FEATURES & BENEFITS

- Diamond point allows easier installation and less chance of hole damage.
- Split bulb exerts pressure on walls of hole, producing remarkable holding power.
- Strongest hammer-in fastener available.
- Typical pullout values in cured concrete (3000 psi) are over 800 lbs. A pullout test is recommended.

### COATING

Flex CR-10 corrosion resistant coating exhibits less than 15% red rust after 30 Kesternich cycles. CR-10 coating exceeds F.M. Approval Standard 4470.

### PLATES & ACCESSORIES

Appropriate steel or plastic plates, depending on application. See Plates section. Use a 7/32" carbide tip SDS or straight shank drill bit.

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## CD-10

### SPECIFICATION

The fastener will be a Flex CD-10 with a split diameter of .270/.277 and a 45° point angle. The fastener material must be a hard carbon steel per specification RM-03. The Flex CD-10 fastener will be used with a Factory Mutual approved, Flex round pressure plate. The fastener must be Factory Mutual approved and made in America.

### COATING REQUIREMENT

The fastener will be coated with the Flex CR-10 corrosion resistant coating. When subjected to 30 Kesternich cycles (DIN 50018), the fastener must show less than 15% red rust and surpass Factory Mutual Approval Standard 4470.

### APPLICATION

Predrill a 7/32" hole using a carbide tip SDS or straight shank bit. The CD-10 is then installed with a 2 lb. short handle sledge hammer.

Minimum fastener embedment into the deck should be 1". The predrilled hole must be a minimum of 1/2" deeper than fastener embedment.

Note: Prior to job bid, contact Flex to perform a pullout test to determine the pullout values. Also, care must be taken not to overdrive the fastener causing subsequent damage to the insulation facer.

### PHYSICAL DATA

Head Diameter: .435    Head Style: Flat Top Pan    Head Height: .115    Split Diameter: .270/.277  
Point Angle: 45°    Packaging: 500, 250/carton

### CD-10 LENGTH SELECTION PROCEDURE

1. If applicable, determine thickness of existing roofing material.
2. Add thickness of new insulation.
3. Add 1" minimum fastener penetration.
4. If odd size requirement, always size up in length, not down. See example.

#### **Example**

Existing Roofing: 1 3/4"

New Insulation: 1/2"

Min. Embedment: 1"

Total Fastening 3 1/4"

Range:

The proper CD-10 for this example is 3 1/2".

Existing Roofing: \_\_\_\_\_

New Insulation: \_\_\_\_\_

Min. Embedment: 1"

Total Fastening \_\_\_\_\_

Range:

Use this format to calculate your correct fastener size.



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