



# DRILL-TEC™ CD-10 FASTENER

## Description

The Drill-Tec™ 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" (51 mm - 305 mm) lengths. The CD-10 is Factory Mutual and Miami-Dade County Product Control approved.

## Application

Pre-drill a  $\frac{7}{32}$ " (5.56 mm) hole using a carbide drill bit. The fastener is then installed with a 2-lb. (.9 kg) short handle sledge hammer.

Minimum fastener embedment into the deck should be 1" (25.4 mm). The pre-drilled hole must be a minimum of  $\frac{1}{2}$ " (12.7 mm) deeper than fastener embedment.

**Note:** Be careful not to overdrive the fastener, causing subsequent damage to the insulation facer.

## Code Approvals



## Advantages

- Diamond point allows for 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 pull-out values in cured concrete (3000 psi) are 800 lbs. to 1200 lb. (363 kg - 544 kg) A pull-out test is recommended.
- The Drill-Tec™ CD-10 is FM and Miami-Dade County Product Control approved.

## Plates & Accessories

- 3" (76 mm) steel or plastic plates, depending on application.
- Use a  $\frac{7}{32}$ " (5.56 mm) carbide tip SDS or straight shank drill bit.

## Specifications

The fastener will be a Drill-Tec™ CD-10 with a split diameter of .270/.277 (6.86/7.04 mm) and a 45° point angle. The fastener material must be a hard carbon steel per specification RM-03. The Drill-Tec™ CD-10 fastener will be used with a Factory Mutual-approved Drill-Tec™ round pressure plate. The fastener must be Factory Mutual-approved.

## Coating Requirement

The fastener will be coated with the Drill-Tec™ 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.

## Product Data

Head Diameter	.435" (11.04 mm)
Head Height	.115" (2.92 mm)
Head Style	Flat Top Pan
Split Diameter	.270"/.277" (6.86/7.04 mm)
Coating	CR-10
Point Angle	45°

Length	Packaging (Box)	Weight
2" (51 mm)	500	13 lbs (5.9 kg)
2 1/2" (64 mm)	500	15 lbs (6.80 kg)
3" (76 mm)	500	18 lbs (8.2 kg)
3 1/2" (89 mm)	500	21 lbs (9.53 kg)
4" (102 mm)	500	22 lbs (9.98 kg)
4 1/2" (114 mm)	500	25 lbs (11.34 kg)
5" (127 mm)	500	28 lbs (12.7 kg)
5 1/2" (140 mm)	500	30 lbs (13.61 kg)
6" (152 mm)	500	33 lbs (14.97 kg)
7" (178 mm)	500	39 lbs (17.69 kg)
8" (203 mm)	500	44 lbs (19.96 kg)
9" (227 mm)	250	25 lbs (11.34 kg)
10" (254 mm)	250	28 lbs (12.7 kg)
11" (279 mm)	250	31 lbs (14.06 kg)
12" (305 mm)	250	33 lbs (14.97 kg)

Note: All sizes are nominal.

Drill-Tec™  
CD-10 Fastener



## Example: Drill-Tec™ CD-10 Length Selection Procedure

1. If applicable, determine thickness of existing roofing material.
2. Add thickness of new insulation.
3. Add 1" (25.4 mm) minimum fastener penetration.
4. If odd size requirement, always size up in length, not down. See example below.

### Example

Existing Roofing:	1 3/4" (44.4 mm)
New Insulation:	+ 1/2" (12.7 mm)
Min. Embedment:	+ 1" (25.4 mm)
Total Fastening Range:	= 3 1/4" (82.6 mm)

The proper CD-10 for the example is 3 1/2" (89 mm).

### Use this format to calculate correct fastener size:

Existing Roof:	
New Insulation:	+
Min. Embedment:	+ 1" (25.4 mm)
Total Fastening Range:	=

The proper CD-10 Fastener is: