

# FortiCam CD51/CD55 Mounting Guide



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# Change Log

| Date       | Change Description |
|------------|--------------------|
| 2021-09-17 | Initial release.   |
|            |                    |

## Warnings and Cautions

- **Handle the camera carefully**

Do not abuse the camera. The camera can be damaged by improper handling or storage.

- **Do not disassemble the camera**

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Ask a qualified service person for servicing.

- **Do not operate the camera beyond the specified temperature, humidity, or power source ratings**

Use the camera under conditions where temperature is between -40°C ~ 50°C (-40°F ~ 122°F), and relative humidity is below 90%.

- **Do not expose the camera to rain or moisture, or try to operated it in wet conditions**

This product is designed for indoor use or locations where it is protected from rain and moisture. Turn the power off immediately if the camera is wet and ask a qualified service person for servicing. Moisture can damage the camera and also cause electric shock.

- **Do not use strong or abrasive detergents when cleaning the camera body**

Use a dry cloth to clean the camera when it is dirty. In case the dirt is hard to remove, use a mild detergent and wipe the camera gently.

- **Never face the camera toward the sun**

Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, the camera may be smeared or damaged.

- **Only remove the protective wrap from the camera lens when the entire installation is completed**

The clear bubble needs to be protected to avoid damage and scratches.

- **Ensure the inside of the dome cover is free of dust and particles**

Gently wipe the inside with a clean lint free cloth or blow the dust away before installing the dome cover and removing the protective wrap.

- **Ensure no moisture gets trapped inside the camera**

Replace the dry pack found inside the camera with the fresh one from the protective pouch in the box.

- **Avoid IR light reflecting back into lens at night**

If close objects are illuminated by the IR LEDs at night, it may cause reflections in the video image. To avoid this blur, position the camera with a free view even outside the optical view cone.

The CD55 has a zoom lens that may have to be set to a more narrow tele angle for optimum night image quality.

## Available Mounting Accessories

FortiCam CD51 and FortiCam CD55 come with a number of accessories that allow installation in most locations.

- EMT adapter (for 3/4" pipes)
- Mounting plate
- Ceiling tile clips

You can additionally order any of the following mounting accessories for your installation requirements:

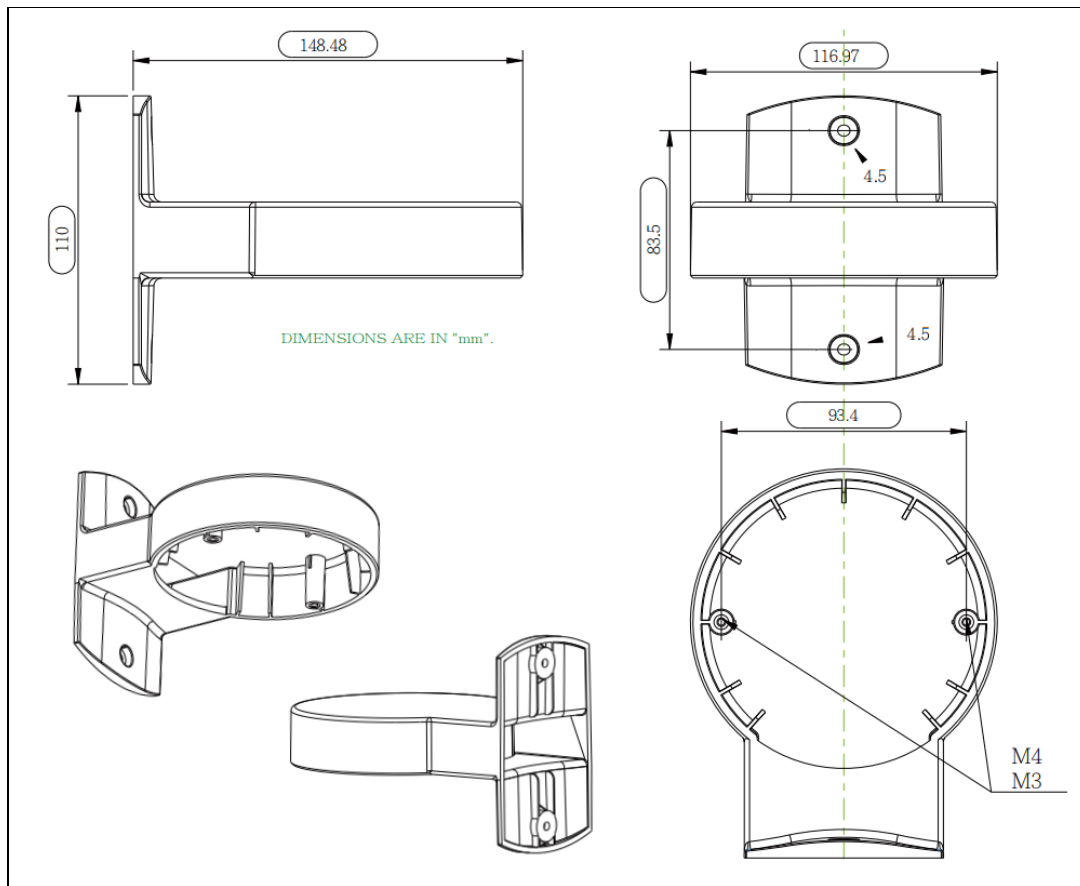
- **FortiCam-CD5-Mount-WMT**

SKU: FCM-CD5-WMT-8

Wall Mount Kit for FCM-CD51/CD55 (set of 8)

Included: 2x screw and plug kit, 2x M4 bolts.

**Note:** Dimensions in the diagram are in mm.



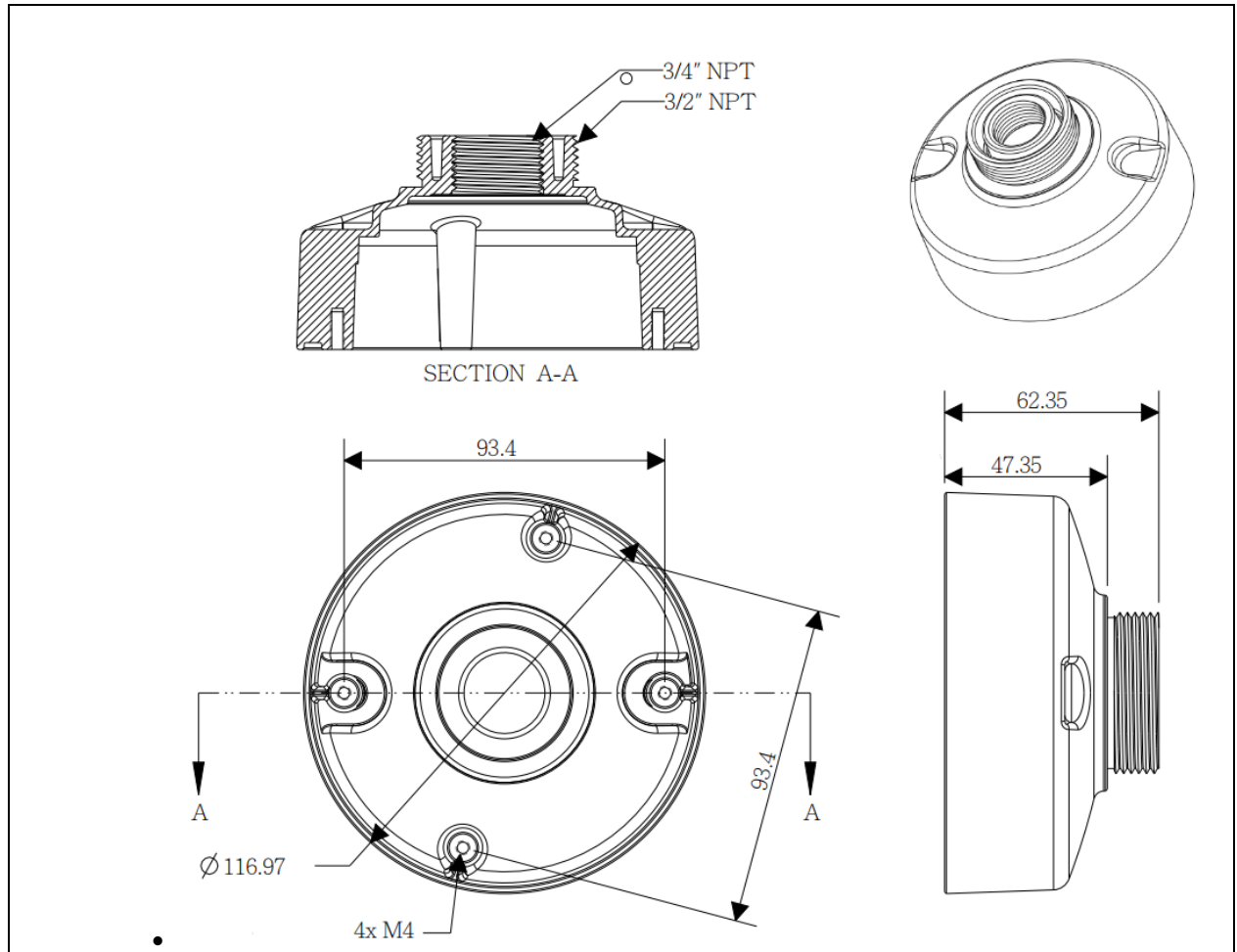
- **FortiCam-CD5-Mount-PCP**

SKU: FCM-CD5-PCP-8

Pendant Cap Mount Kit for FCM-CD51/CD55 (set of 8)

Included: 2x M4 bolts, silicone rubber ring.

**Note:** Dimensions in the diagram are in mm.



## Mounting options covered in the Quick Start Guide

For standard mounting instructions without using the additional accessories described in this Mounting Guide, see the FortiCam CD51/CD55 Quick Start Guide in the [Fortinet document library](#).

The Quick Start Guide includes the following mounting scenarios:

- Direct Wall or ceiling mount using the Mounting plate. Cable through back or side.
- Direct Wall or ceiling mount using the Mounting plate. Cable connected to EMT tubing.
- Direct Wall or ceiling mount without Mounting plate. Cable through back or side.
- Direct Wall or ceiling mount without Mounting plate. Cable connected to EMT tubing.
- Ceiling mount using T-bar clips

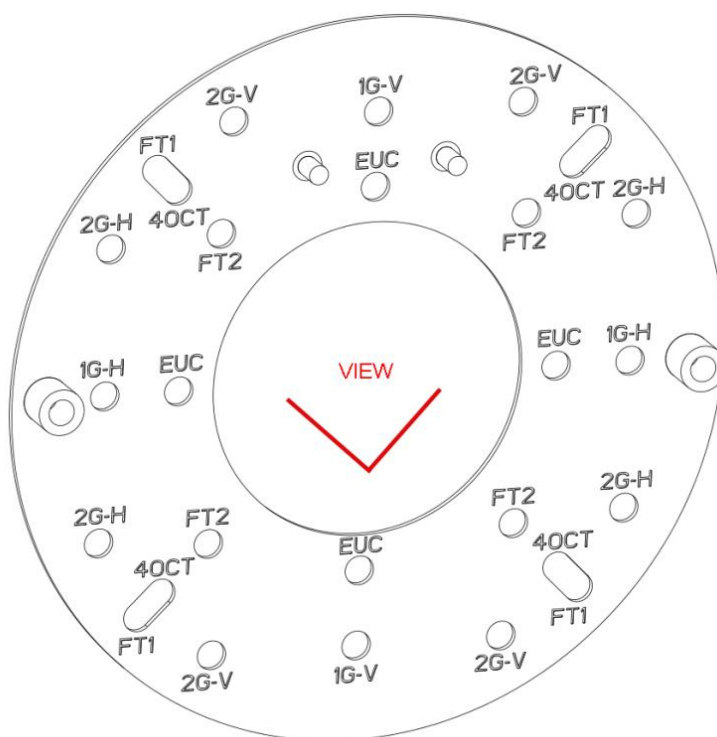


## Mounting plate usage

The included mounting plate allows universal attachment to a wide range of surfaces and devices. It is recommended to mount the plate first and prepare all cabling before bringing the camera to the installation site. In this manner everything can be prepared while the camera is protected from the construction. Mounting the camera to the plate is quick and easy with the two M4 sockets.

The mounting plate is used to attach the camera to:

- Walls and ceilings
- Commercially available junction and switch boxes (see list below)
- Fortinet pendant cap (FCM-CD5-PCP)
- L-type wall mount (FCM-CD5-WMT)
- Fortinet junction box (FCM-FB5-JBX)



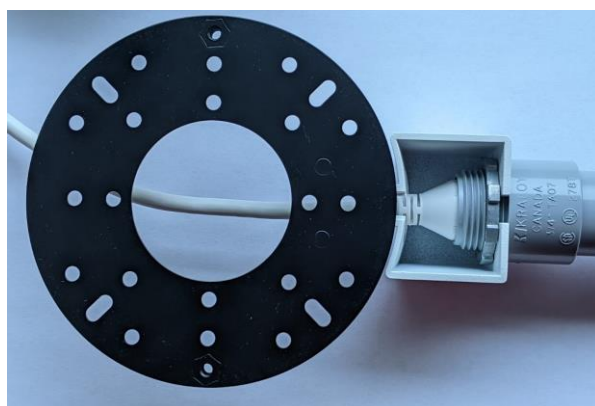
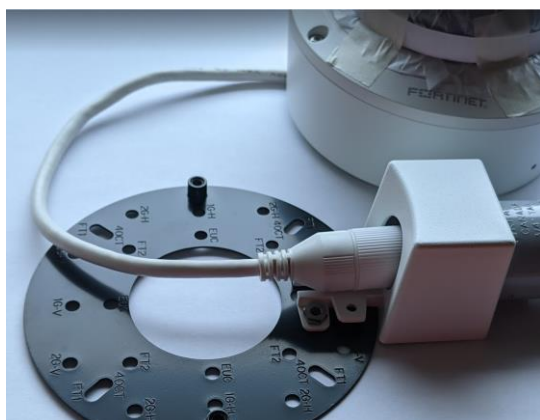
| Hole | Function  |
|------|---|
| 1G-V | 1-gang NA junction box, vertical mount  |
| 1G-H | 2-gang NA junction box, horizontal mount  |
| 2G-V | 2-gang NA junction box, vertical mount  |
| 2G-H | 2-gang NA junction box, horizontal mount  |
| 4OCT | 4" octagon NA junction box  |
| EUC  | EU/UK/China junction box  |
| FT1  | General wall or ceiling mount,<br>Fortinet pendant cap (FCM-CD5-PCP) and<br>L-type wall (FCM-CD5-WMT) mount |
| FT2  | Fortinet junction box (FCM-FB5-JBX) mount   |

## EMT adapter usage

The included EMT adapter is used to attach the camera to electro mechanical tubing, a common installation technique in commercial sites. It allows clean and secure cable runs.

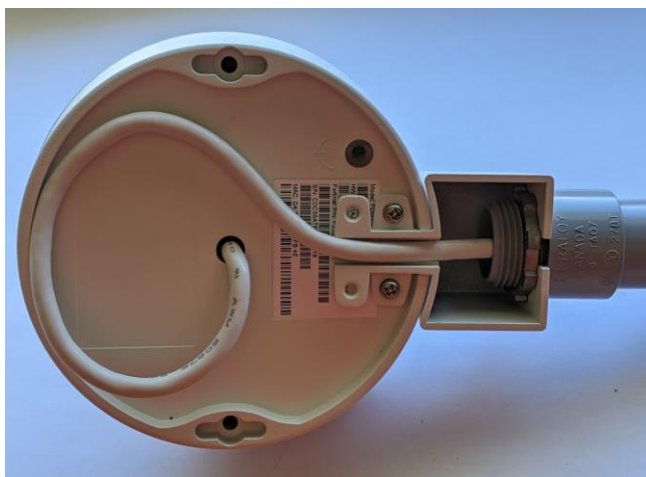
The EMT adapter fits 3/4" size tubing which is large enough to hold the weatherproof Ethernet connector inside the tubing.

Adapter plate, EMT adapter, and tubing can be pre-installed on location without the cameras.



Optionally, the EMT adapter can replace the mouse hole-cover directly at the camera body.

Installation is easier when the 3/4" locking nut is not used.



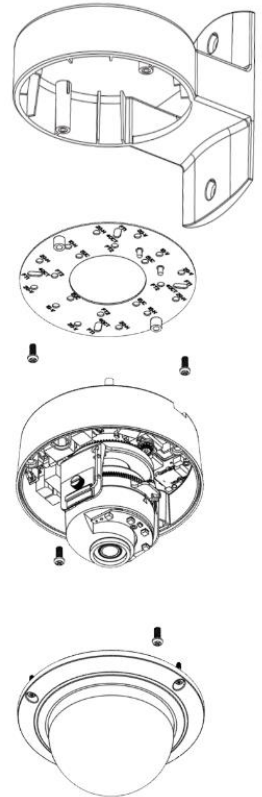
## L-type bracket for Wall Mounting

The L-type bracket FortiCam-CD5-Mount-WMT offers a convenient and aesthetically pleasing option for wall mounting. It offers:

- space to store the Ethernet connector, and
- distance from the adjacent wall to improve IR reflections

### To install with the L-type bracket:

1. Thread the cable through the bracket.
2. Mount the bracket on the wall with the included screws and anchors.
3. Attach the mounting plate to the bracket with two of the supplied machine bolts (M4 x 10mm) using opposing FT1 positions.
4. Connect the cable with the camera optionally using the waterproof connector. Tug the connector into the top of the bracket.
5. Open camera housing using the three cover screws without removing the protective wrap from the lens.
6. Place the camera on the mounting plate so the sockets fit into the matching recesses on the camera bottom.
7. Fasten the camera with two of the supplied machine bolts (M4 x 10mm) to the sockets.
8. Adjust the camera's pan, tilt, and rotation angle.
9. Replace the dry pack found inside the camera with the fresh one from the protective pouch in the box. Ensure no moisture gets trapped inside the camera.
10. Ensure the inside of the dome cover is free of dust and particles by gently wiping the inside with a clean lint free cloth or blowing the dust away.
11. Install the dome cover and remove the protective wrap.

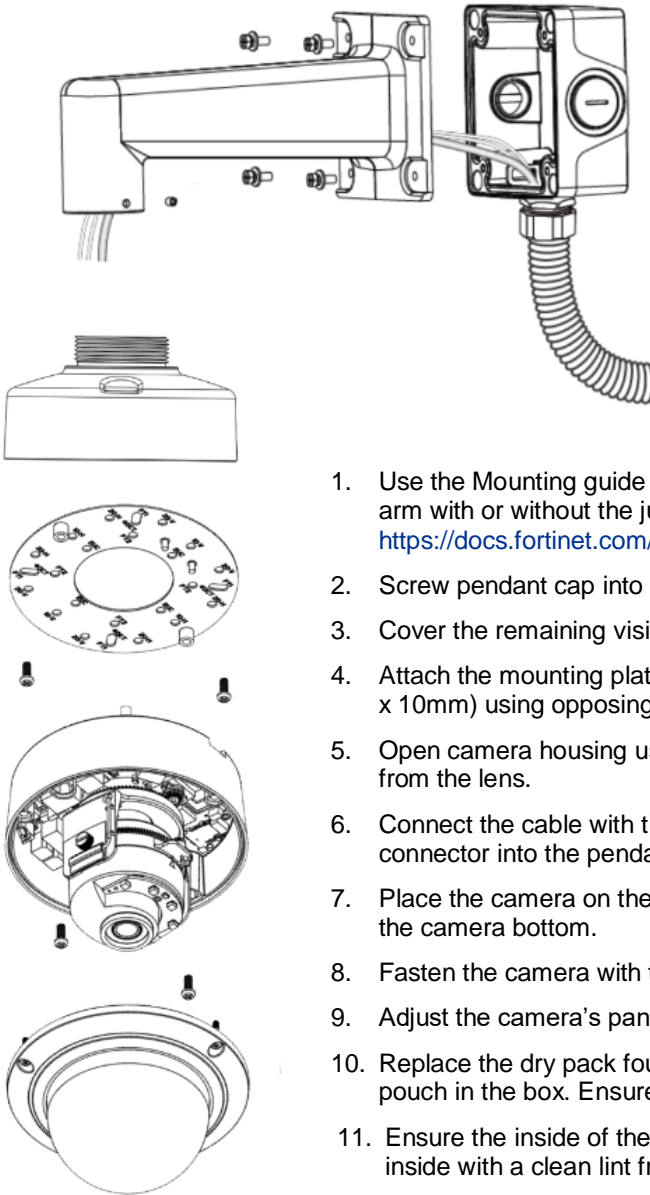


# Pendant cap

The pendant cap FortiCam-CD5-Mount-PCP allows combining FortiCam CD51/55 cameras with threaded mounting accessories like pendant arm or drop ceiling tubes.

Options include:

- Wall mount in combination with Pendant Arm FortiCam-FD50-Mount-PDT (SKU: FCM-FD5-PDT).
  - Optionally with junction box FortiCam-FB50-Mount-JBX (SKU: FCM-FB5-JBX).
- Drop ceiling mount on COTS 3/4" EMT tubing



1. Use the Mounting guide for FortiCam FD50 for instructions on how to mount the pendant arm with or without the junction box to a wall.  
<https://docs.fortinet.com/product/fortirecorder/hardware>
2. Screw pendant cap into pendant arm and secure with worm screw.
3. Cover the remaining visible thread with the white silicone ring.
4. Attach the mounting plate to the pendant cap with two of the supplied machine bolts (M4 x 10mm) using opposing FT1 positions.
5. Open camera housing using the three cover screws without removing the protective wrap from the lens.
6. Connect the cable with the camera optionally using the waterproof connector. Tug the connector into the pendant cap.
7. Place the camera on the mounting plate so the sockets fit into the matching recesses on the camera bottom.
8. Fasten the camera with two of the supplied machine bolts (M4 x 10mm) to the sockets.
9. Adjust the camera's pan, tilt, and rotation angle.
10. Replace the dry pack found inside the camera with the fresh one from the protective pouch in the box. Ensure no moisture gets trapped inside the camera.
11. Ensure the inside of the dome cover is free of dust and particles by gently wiping the inside with a clean lint free cloth or blowing the dust away.
12. Install the dome cover and remove the protective wrap.

## Junction box

In situations that require a larger space for cable routing, but not the pendant arm, it is possible to directly mount the CD51/55 camera to a FortiCam-FB50-Mount-JBX (SKU: FCM-FB5-JBX-4) Junction box.



1. Use the Mounting Guide for FortiCam FB50 for instructions on how to mount the junction box to a wall or ceiling. <https://docs.fortinet.com/product/fortirecorder/hardware>
2. Attach the mounting plate to the junction box cover with two of the supplied machine bolts (M4 x 10mm) using opposing FT2 positions.
3. Open camera housing using the three cover screws without removing the protective wrap from the lens.
4. Connect the cable with the camera optionally using the waterproof connector. The rubber plug in the central opening seals the cable from the camera. Keep the connector inside the junction box.
5. Place the camera on the mounting plate so the sockets fit into the matching recesses on the camera bottom.
6. Fasten the camera with two of the supplied machine bolts (M4 x 10mm) to the sockets.
7. Adjust the camera's pan, tilt, and rotation angle.
8. Replace the dry pack found inside the camera with the fresh one from the protective pouch in the box. Ensure no moisture gets trapped inside the camera.
9. Ensure the inside of the dome cover is free of dust and particles by gently wiping the inside with a clean lint free cloth or blowing the dust away.
10. Install the dome cover and remove the protective wrap.

# Combinations

## Wall mount

|  |                                       |
|--|---------------------------------------|
| └ Direct                                   | CD51/55                               |
| └ With adapter plate                       | CD51/55                               |
| └ With EMT adapter                         | CD51/55                               |
| └ On COTS junction box                     | CD51/55                               |
| └ With EMT adapter                         | CD51/55                               |
| └ L-type bracket                           | CD51/55 + CD5-WMT                     |
| └ Pendant cap + Pendant Arm                | CD51/55 + CD5-PCP + FD5-PDT           |
| └ Pendant cap + Pendant Arm + Junction box | CD51/55 + CD5-PCP + FD5-PDT + FB5-JBX |

## Ceiling mount

|                                       |                   |
|---------------------------------------|-------------------|
| └ Direct                              | CD51/55           |
| └ With adapter plate                  | CD51/55           |
| └ With EMT adapter                    | CD51/55           |
| └ On COTS junction box                | CD51/55           |
| └ With EMT adapter                    | CD51/55           |
| └ T-Bar tiled ceiling                 |                   |
| └ 3/4" bars                           | CD51/55           |
| └ 1" bars                             | CD51/55           |
| └ Drop pole                           |                   |
| └ With adapter plate                  |                   |
| └ With COTS junction box as cap       | CD51/55           |
| └ With pendant cap and 3/4 EMT tubing | CD51/55 + CD5-PCP |



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