## Installation Instructions - Define Geo - Suspended Mounting

**IMPORTANT:** Read carefully before installing product. Retain for future reference.

## 



Risk of Fire, Electrical Shock, Cuts or other Casualty Hazards- Installation and maintenance of this product must be performed by a qualified electrician. This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and hazards involved.



<u>Risk of Fire and Electric Shock-</u> Make certain power is OFF before starting installation or attempting any maintenance. Disconnect power at fuse or circuit breaker.

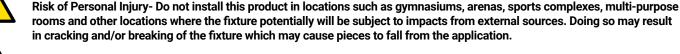


Risk of Fire- Minimum 90°C supply conductors.

Risk of Burn- Disconnect power and allow product to cool before handling or servicing.



Risk of Personal Injury- Due to sharp edges, handle with care.





<u>Risk of Personal Injury-</u>Failure to comply with these instructions may result in death, serious bodily injury and property damage.

**DISCLAIMER OF LIABILITY:** Cooper Lighting Solutions assumes no liability for damages or losses of any kind that may arise from the improper, careless, or negligent installation, handling or use of this product.

**IMPORTANT:** Read carefully before installing fixture. Retain for future reference.

CAUTION: Fixture may become damaged and/or unstable if not installed properly.

NOTE: Specifications and dimensions subject to change without notice.

**NOTE:** These instructions do not claim to cover all details or variations in the equipment, procedure or process described, nor to provide directions for every possible contingency during installation, operation, or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for user purpose, please contact your nearest representative.

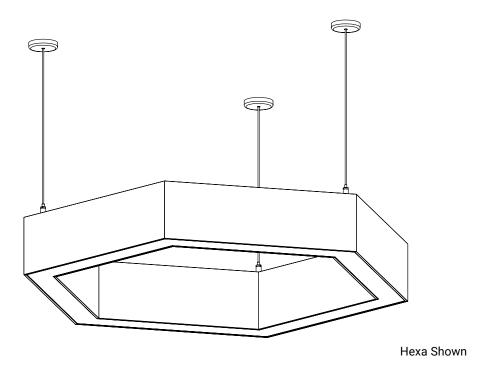
**ATTENTION Receiving Department:** Note actual fixture description of any shortage or noticeable damage on delivery receipt. File claim for common carrier (LTL) directly with carrier. Claims for concealed damage must be filed within 15 days of delivery. All damaged material, complete with original packing must be retained.



## **SAVE THESE INSTRUCTIONS**

This installation instruction is for the Define Geo Suspended.

The purpose of this document is to provide sufficient detailed instructions for installation and basic troubleshooting.

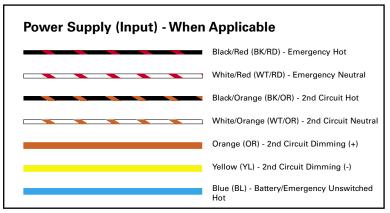


## **Wiring Table**



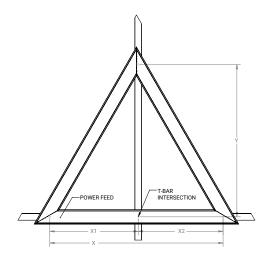
## **Mounting Options**

- A. T-Bar & Grid Clips
- B. Junction Box Structure
- C. Junction Box Ceiling

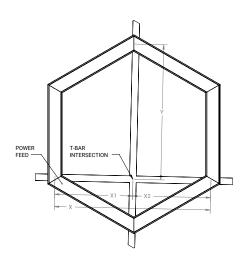


## A. T-Bar & Grid Clips on Grid Mounting

- Installation requires a 2-person lift and install
- · Locate the power feed point on the grid
- Install junction box at the power feed point and grid clips at all provided mounting points.
- · Dimensions show installed fixture viewed from below



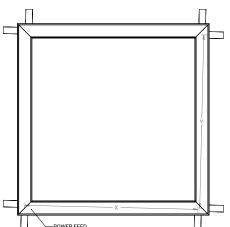
T-BAR INTERSECTION —	
X1 X POWER FEED	X2



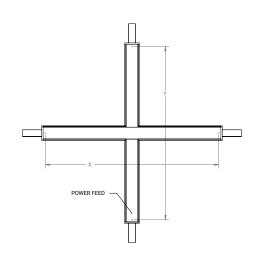
Direction	2F0	3F0	4F0
Х	24"	33"	43"
X1	12.5"	16.75"	21.75"
X2	11.5"	16.25"	21.25"
Y	21.125"	29.375"	37.625"

Direction	2F0	3F0	4F0
Х	15.75"	21.875"	28"
X1	8.25"	11.25"	14.375"
X2	7.5"	10.625"	13.625"
Υ	23.25"	32.625"	42.125"

Direction	2F0	3F0	4F0
Х	21.625"	31.75"	40.25"
X1	10.813"	15.875"	20.125"
X2	10.813"	15.875"	20.125"
Y	18.75"	27.5"	34.875"



POWER FEED			Ц
Direction	2F0	3F0	4F0
Х	24"	34.25"	44.5"
Y	24"	34.25"	44.5"



Direction	2F0	3F0	4F0
Х	24"	36"	48"
Y	24"	36"	48"

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#### INSTALLATION

## Standard Grid Interface (Connection at Ceiling) Aircraft Cable Mounting

#### **Mount Details**

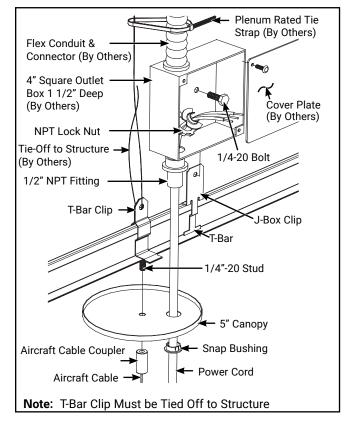


Figure 1. Power

#### **Fixture Installation Sequence**

- 1. Layout mounting locations. (Figure 1.)
- 2. Install the power feed.

**Note:** Power feed: to be installed to local/national electrical codes by a Certified Electrician.

- 3. Install T-bar clip to T-bar and tie back to structure.
- Place canopy and caddy clip stud and attach aircraft cable.
- 5. At the end of the 4x4 square outlet box break KO in corner and secure 1/2" NPT fitting to box.
- 6. Clip J-Box Clip to T-Bar.
- 7. Secure J-Box to J-Box Clip using 1/4"-20 bolt.
- Secure snap bushing to canopy and align up to NPT fitting.
- Install solid or flexible conduit from power source to 1/2" cable fitting and secure to tie wire using Plenum Rated Tie Strap.

- Feed power cord through canopy and J-Box, then install metal strain relief.
- Attach wires ensuring all connections are properly matched.
- 12. Cover J-Box using appropriate cover plate.

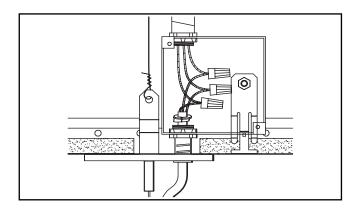


Figure 2. Power

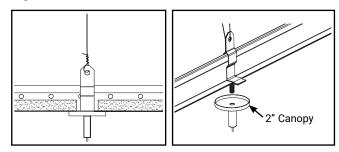


Figure 3. Non-Power

Figure 4. Non-Power

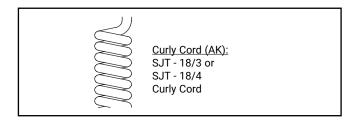


Figure 5. Options

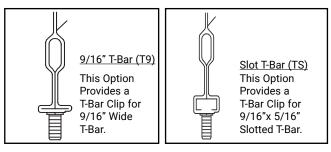


Figure 6.

Figure 7.

**NeoRay Define Geo - Suspended Mounting** 

## \*\* Tegular Ceiling Interface (Connection at Ceiling) Aircraft Cable Mounting

#### **Mount Details**

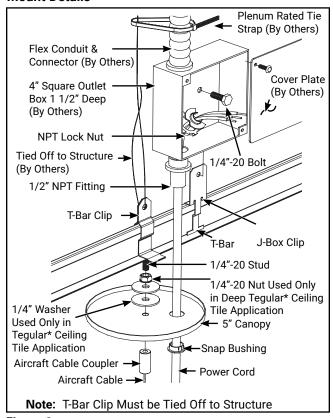


Figure 8. Power

#### **Fixture Installation Sequence**

- Layout mounting locations. (Figure 8.)
- Ensure that power feed is at the UL end of the fixture.

Note: Power feed: to be installed to local/national electrical codes by a Certified Electrician.

- Install T-bar clip to T-bar and tie back to structure. 3.
- 4. Place canopy and caddy clip stud and attach aircraft

**Note:** For Tegular Ceiling Tile applications use (2) 1/4" washers (supplied) for spacing between the canopy and the ceiling tile.

Note: For Deep Tegular Ceiling Tile applications use 1/4"-20 nut (supplied) for spacing between the canopy and the ceiling.

- At the end of the 4x4 square outlet box break KO in corner and secure 1/2" NPT fitting to box. 5.
- 6. Clip J-Box Clip to T-Bar.
- Secure J-Box to J-Box Clip using 1/4"-20 bolt. 7.
- 8. Secure snap bushing to canopy and align up to NPT fitting.
- Install solid or flexible conduit from power source to 1/2" cable fitting and secure to tie wire using Plenum Rated Tie Strap.
- 10. Feed power cord through canopy and J-Box, then install metal strain relief.
- 11. Attach wires ensuring all connections are properly matched.
- Cover J-Box using appropriate cover plate.

\*\* All tegular installs must consult factory. Depth of tegular tile will dictate length of 1/4"-20 stud and a 1/4-20" nut may be required. Depth of tegular tile is required upon sign-off.

Tegular Depth:

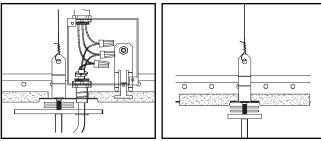


Figure 9. Power Tegular\*\*

Figure 10. Non-Power Tegular\*\*

Figure 11. Power Deep Tegular\*\*

Figure 12. Non-Power Deep Tegular\*\*

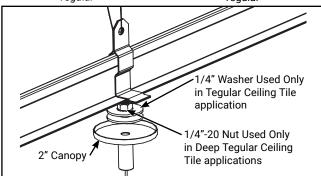


Figure 13. Non-Power

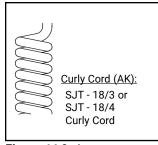


Figure 14.Options

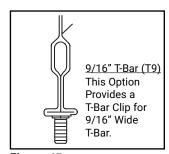


Figure 15.

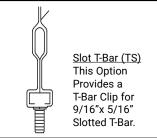
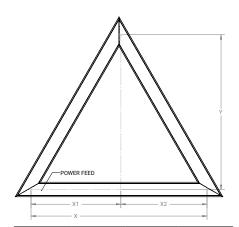


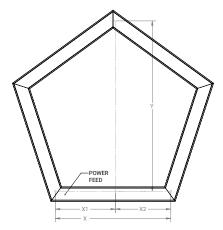
Figure 16.

## **B Junction Box Structure or C Junction Box Ceiling**

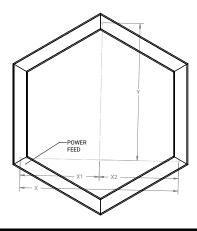
- · Locate the power feed point on the grid
- Install junction box at the power feed point and grid clips at all provided mounting points.
- · Dimensions show installed fixture viewed from below



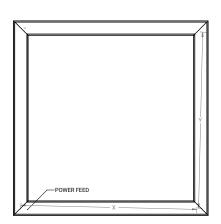
Direction	2F0	3F0	4F0
х	24"	33"	43"
X1	12.5"	16.75"	21.75"
X2	11.5"	16.25"	21.25"
Y	21.125"	29.375"	37.625"



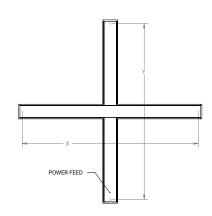
Direction	2F0	3F0	4F0
Х	15.75"	21.875"	28"
X1	8.25"	11.25"	14.375"
X2	7.5"	10.625"	13.625"
Y	23.25"	32.625"	42.125"



Direction	2F0	3F0	4F0
Х	21.625"	31.75"	40.25"
X1	10.813"	15.875"	20.125"
X2	10.813"	15.875"	20.125"
Υ	18.75"	27.5"	34.875"







Direction	2F0	3F0	4F0
Х	24"	36"	48"
Y	24"	36"	48"

**NeoRay Define Geo - Suspended Mounting** 

## **INSTALLATION Structure Ceiling AC Cable Interface**

#### **Mount Details**

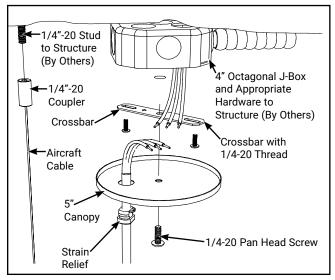


Figure 1 Power **Connection at Ceiling** 

- Layout mounting locations. (Figure 1.)
- Ensure that power feed is at the UL end of the fixture.

Note: Power feed: to be installed to local/national electrical codes by a Certified Electrician.

- 3. Secure junction box and 1/4-20 stud to structure.
- Secure crossbar to junction box. 4.
- 5. Feed power cables through canopy and install strain relief.
- Connect power cable in junction box, ensuring all connections are properly matched.
- Place canopy over junction box & fasten with 1/4"-20 pan head screw.
- Install 1/4"-20 coupler with aircraft cable to 1/4"-20 stud.

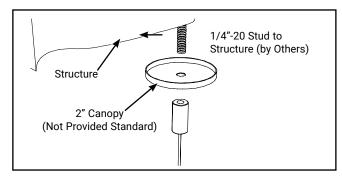


Figure 2 Non-Power

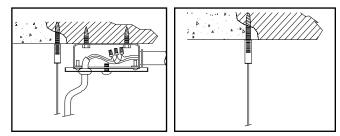


Figure 3 Power (2-D)

Figure 4 Non-Power (2-D)

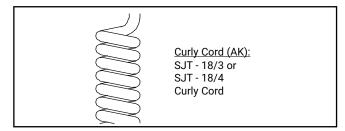


Figure 5 Options

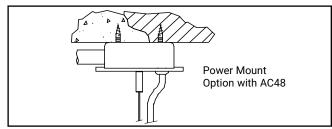


Figure 6

**NeoRay** 

# INSTALLATION J-Box Ceiling AC Cable Interface

#### **Mount Details**

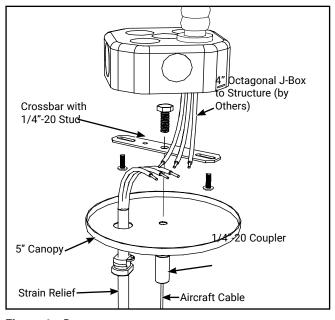


Figure 1 Power

#### **Connection at Ceiling**

- 1. Layout mounting locations. (Figure 1.)
- 2. Ensure that power feed is at the UL end of the fixture.

**Note:** Power feed: to be installed to local/national electrical codes by a Certified Electrician.

- 3. Install 1/4"-20 crossbar to the junction box.
- Feed power cables through canopy and install strain relief.
- Connect power cable in junction box, ensuring all connections are properly matched.
- Place canopy over 1/4"-20 stud and attach aircraft cable.

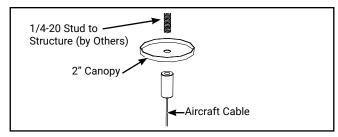


Figure 2 Non-Power

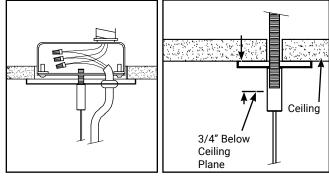


Figure 3 Power (2-D)

Figure 4 Non-Power (2-D)

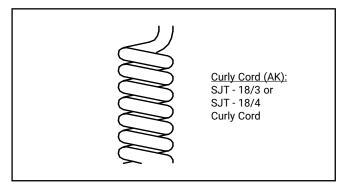


Figure 5 Options

Define Geo - Suspended Mounting NeoRay

## **Install Aircraft Cable at Fixture**

- 1. Install grip locks.
- 2. Push aircraft cable through grip locks and adjust to desired height. (Figure 1)
- Twist out KO if needed. Remove access plate by removing four #8 screws.
- 4. Install strain relief as shown. (Figure 2)
- 5. Wire fixture following the wiring chart shown on page 2.
- 6. Reattach access plate. Do not overtighten screws. (Figure 3)

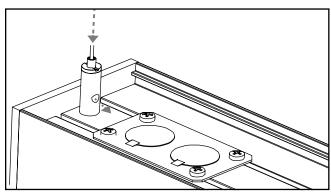


Figure 1

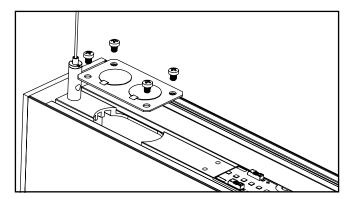


Figure 2

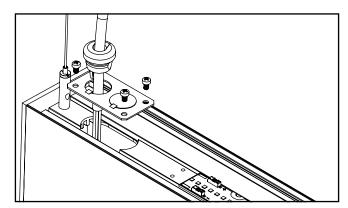
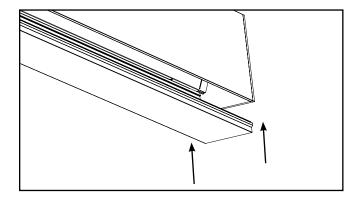


Figure 3

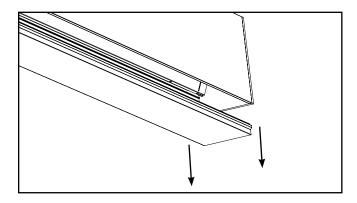
#### Install the Bottom Diffuser - If needed

- Starting at one end, gently guide the legs of the diffuser into the extruded channel until flat face is flush with housing.
- 2. Work down the length of the lens until the entire lens is flush with the housing.



#### Removal of the Bottom Diffuser - If needed

- Wear gloves to keep the diffuser surface clean.
- Using provided tool, pull the end of the diffuser away from extruded housing channel.
- Remove the lens gradually down the length to prevent chipping or cracking



## **Warranties and Limitation of Liability**

Please refer to www.cooperlighting.com/global/warranty for our terms and conditions.

## Garanties et limitation de responsabilité

Veuillez consulter le site www.cooperlighting.com/global/warranty pour obtenir les conditions générales.

## Garantías y Limitación de Responsabilidad

Visite www.cooperlighting.com/global/warranty para conocer nuestros términos y condiciones.