

CLUSTER PI

Recessed - Open Frame (OF)



! This product must be installed in accordance with the National Electrical Code and all applicable local codes, by a person familiar with the construction and operation of the product, and the hazards involved. Proper grounding is required for safety.

Ce produit doit être installé suivant le code national de l'électricité, ainsi que tous les codes locaux applicables, par une personne familière avec la construction et le fonctionnement du produit, ainsi que tous les risques qui y sont associés. La mise à terre électrique est obligatoire pour la sécurité.

! Wire dimming conductors as Class 1.

💡 For electrical connections, please refer to the [wiring diagram guide](#).



OVERVIEW

! Warnings

Install per national installation and accident prevention regulations.

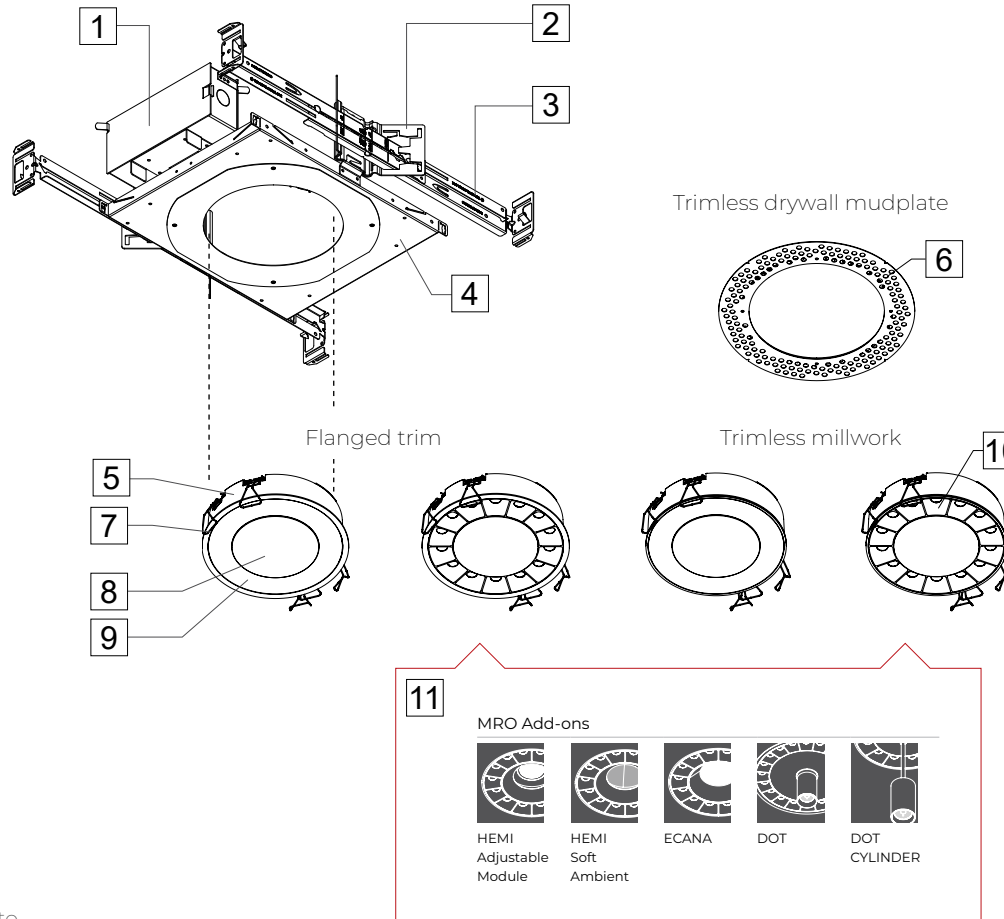
Clearance between sides of luminaire and parts of building must be 1/2" minimum; clearance to insulating materials to be 3" minimum.

Fixtures must be installed in applications where the ambient temperature does not exceed 40° C during normal operation.

Do not connect or disconnect LED board wire connector when the fixture is energized. This may result in permanent damage to the LED array.

Warranty claims will not be accepted if incorrect driver or light element is used.

Do not cover the light element lens or heatsink with any materials or adhesive tapes.



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ACB.....	P.4
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Light Element.....	P.9

Tools required

- Adjustable Hole Cutter
- Drywall Knife
- Hammer

For trimless millwork only:

- 5/16 miniature rabbeting bit with 1/8" cut depth (included)
- Jig (included)

Items list

1	Electrical box
2	Butterfly bracket
3	Hanger bar
4	Mounting frame
5	Light element
6	Mudplate
7	Mounting springs
8	Center blank
9	HRO/kVCO lens
10	MRO optic
11	MRO Add-ons

💡 Shown with CLUSTER PI M, applicable to CLUSTER S and L too.



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OVERVIEW - OPTIONS

CLUSTER PI S	CLUSTER PI M	CLUSTER PI L
	<p>TRM - Flanged trim</p> <p>TLMP - Trimless drywall mudplate</p>	
	<p>TLMW - Trimless millwork</p>	

PLENUM CLEARANCE HEIGHT DIMENSIONS	B MAXIMUM CEILING THICKNESS
A OPEN FRAME - REMOTE & INTEGRAL	
4 1/4" (3 3/4" for FMB)	11/8"

MOUNTING OPTIONS

ASB - ADJUSTABLE STANDARD BARS	
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ACB - ADJUSTABLE COMMERCIAL BARS	
	PAGE 4
AHC - ADJUSTABLE HAT CHANNEL BARS	
	PAGE 5
FMB - FLUSH MOUNT BARS	
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CLUSTER PI

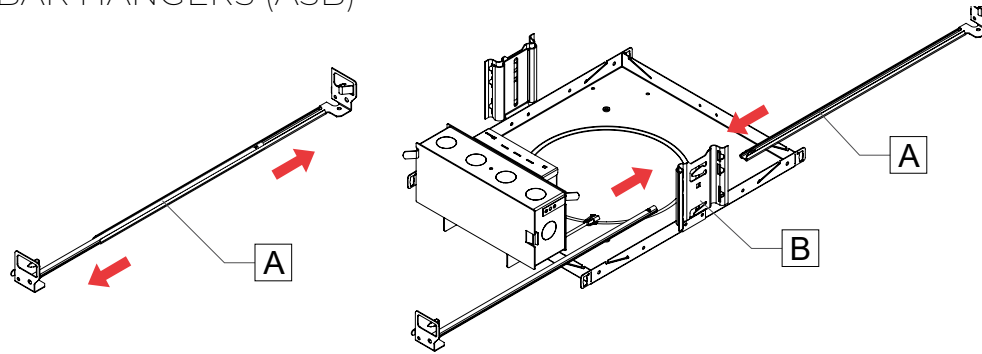
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ADJUSTABLE STANDARD BAR HANGERS (ASB)

1 ADJUST HANGER BARS.

Separate the hanger bars [A].
Insert the hanger bars [A] into the caterpillar brackets [B].

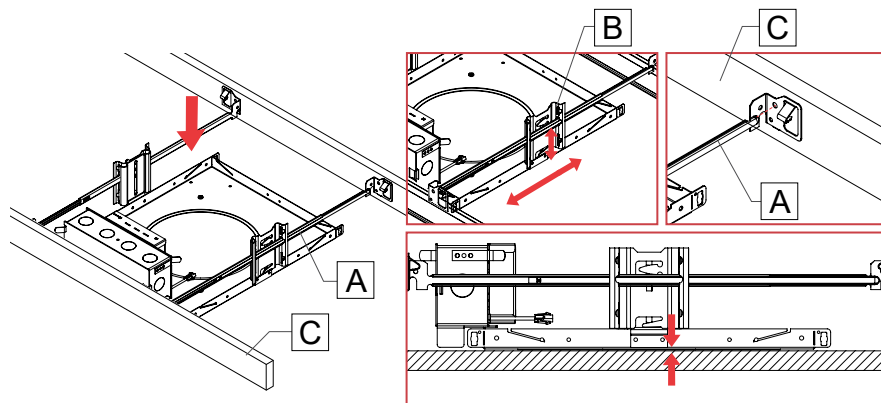


HOUSING

2 MOUNT HOUSING IN CEILING.

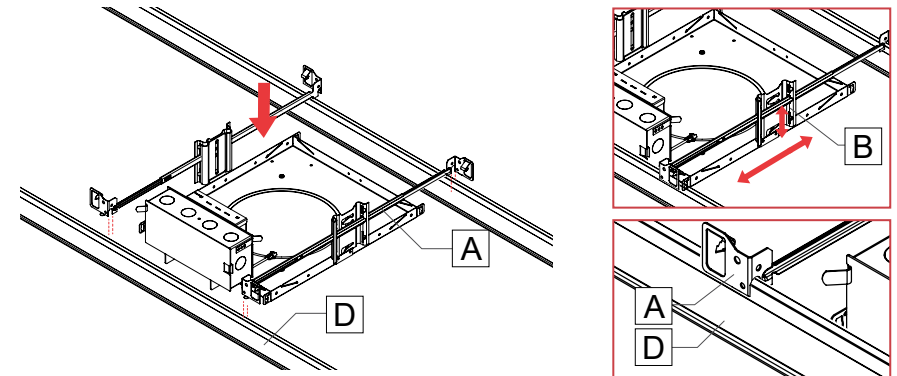
DRYWALL CEILING

Mount hanger bars [A] on supports [C] in ceiling. Adjust the caterpillar bracket [B] to align the bottom of the mounting plate to the top of the ceiling surface. The caterpillar bracket can be adjusted from 1" to 3". Adjust the housing position as well. Screw the hanger bars [A] to supports.



GRID CEILING

Mount hanger bars [A] on T-bar [D] in ceiling. Adjust the caterpillar bracket [B] to suit the ceiling thickness. The caterpillar bracket can be adjusted from 1" to 3". Adjust the housing position as well.



3 GO TO [PAGE 7](#) FOR ELECTRICAL CONNECTION INSTALLATION.



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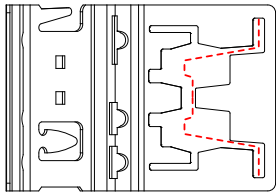


ADJUSTABLE COMMERCIAL BAR HANGERS (ACB)

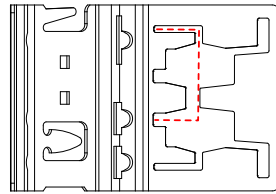
1 DETERMINE HANGER BARS POSITION.

Insert hanger bars into butterfly brackets according to hanger types used.

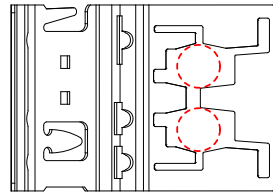
FURRING STRIP CHANNEL



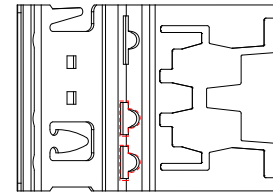
1/2" x 1/2" CHANNEL (2 POSITIONS)



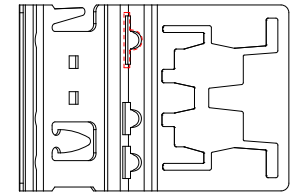
1/2" DIAMETER EMT



1/2" HANGER BARS 1287 & 1240



5/8" - 3/4" HANGER BARS

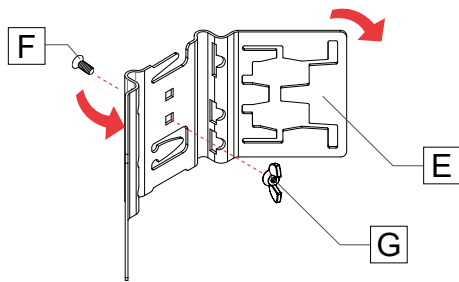


2 PREPARE BUTTERFLY BRACKET.

Squeeze the edges of the butterfly bracket [E] to unlock.

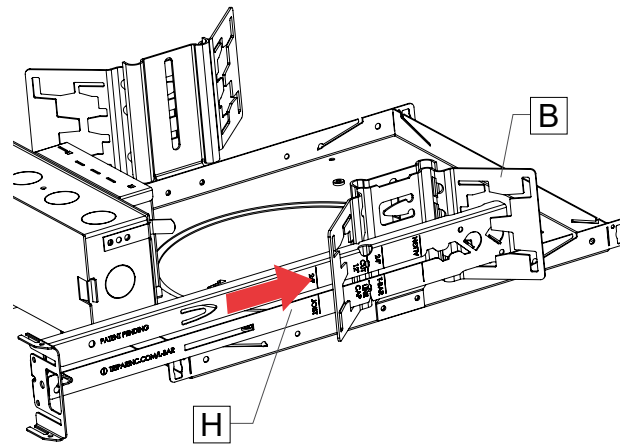
Mount butterfly bracket [E] to housing bracket with screw [F] and wing nut [G].

Note: This step applies to all variation of hanger bars installed into this bracket.



3 INSTALL HANGER BARS

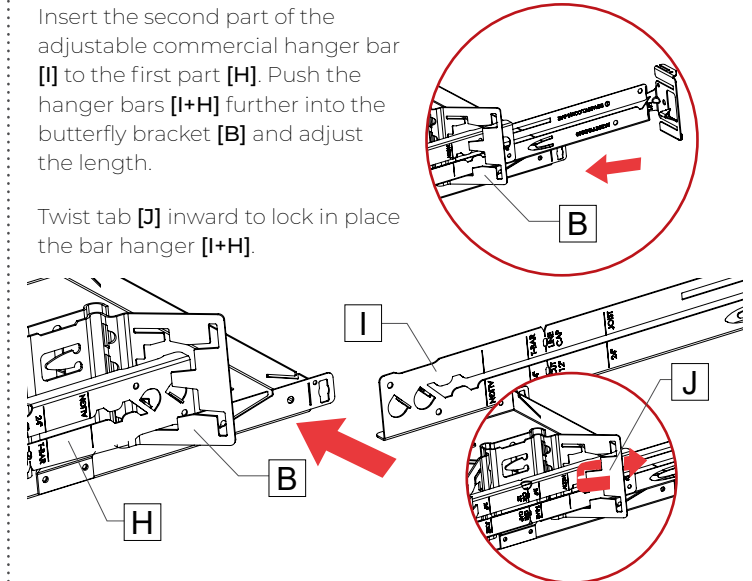
Slide in the first part of the adjustable commercial hanger bar [H] into the butterfly bracket [B].



4 ADJUST AND SET HANGER BARS

Insert the second part of the adjustable commercial hanger bar [I] to the first part [H]. Push the hanger bars [I+H] further into the butterfly bracket [B] and adjust the length.

Twist tab [J] inward to lock in place the bar hanger [I+H].



5 GO TO [PAGE 7](#) FOR ELECTRICAL CONNECTION INSTALLATION.



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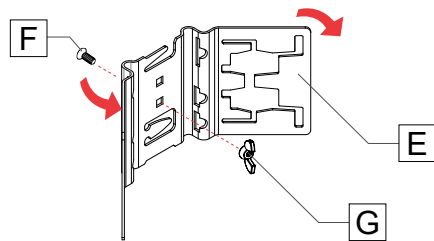


ADJUSTABLE HAT CHANNEL BAR HANGERS (AHC)

1 PREPARE BUTTERFLY BRACKET.

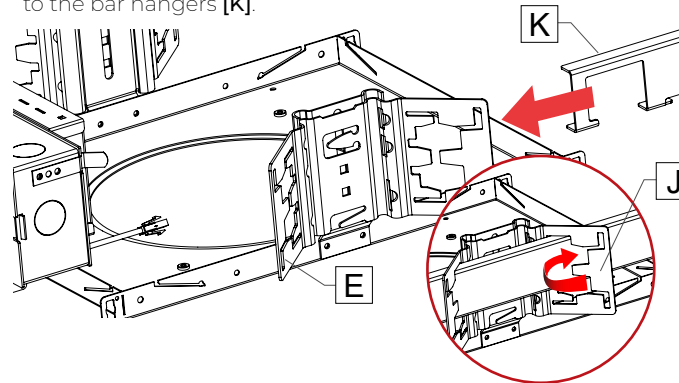
Squeeze the edges of the butterfly bracket [E] to unlock. Mount butterfly bracket [E] to housing bracket with screw [F] and wing nut [G].

Note: This step applies to all variation of hanger bars installed into this bracket.



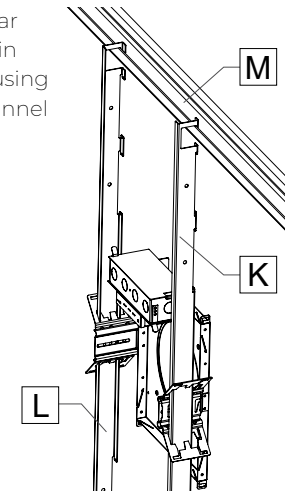
2 INSERT HANGER BARS.

Insert hat channel bar hanger [K] into the butterfly bracket [E]. Lock hat channel bar hangers in place in butterfly bracket by twisting the tab [J] inwards to the bar hangers [K].



3 HANG MOUNTING FRAME.

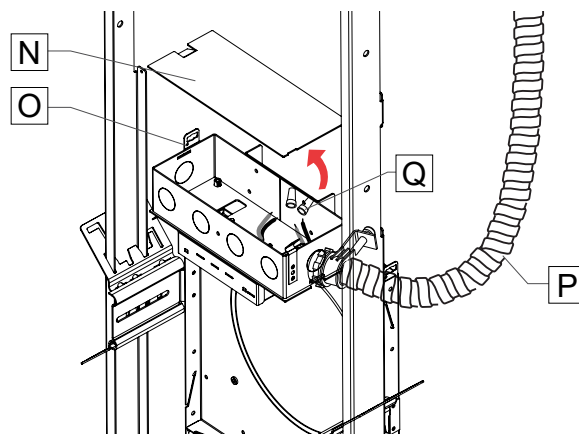
With hat channel bar hangers [K] locked in place, hang the housing [L] onto the hat channel [M] in ceiling.



4 MAKE ELECTRICAL CONNECTIONS.

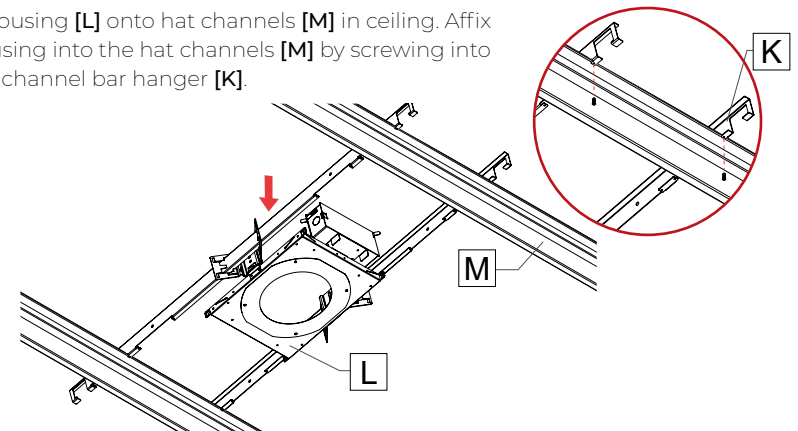
Unsnap the cover [N] from the hook [O] and pivot the cover to access the electrical box.

Install BX cable [P] to knockout and make the electrical connections with the marrettes [Q]. Snap the cover [N] back to the electrical box.



5 MOUNT ON HAT CHANNEL.

Place housing [L] onto hat channels [M] in ceiling. Affix the housing into the hat channels [M] by screwing into the hat channel bar hanger [K].



6 GO TO [PAGE 9](#) FOR LIGHT ELEMENT INSTRUCTIONS.



CLUSTER PI

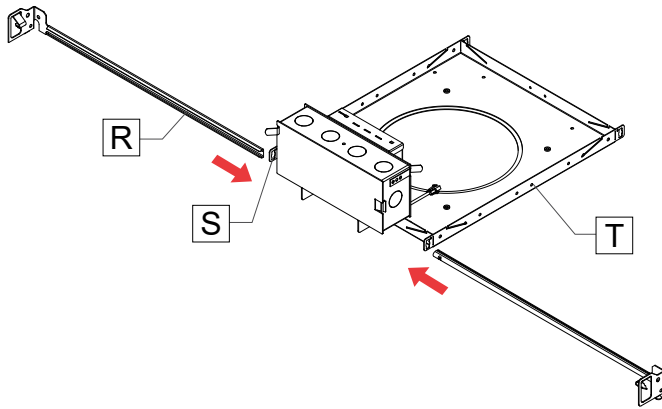
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FLUSH MOUNT BARS (FMB)

1 INSERT HANGER BARS.

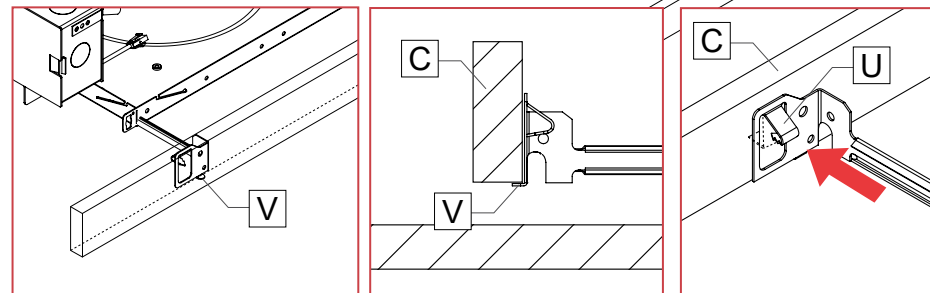
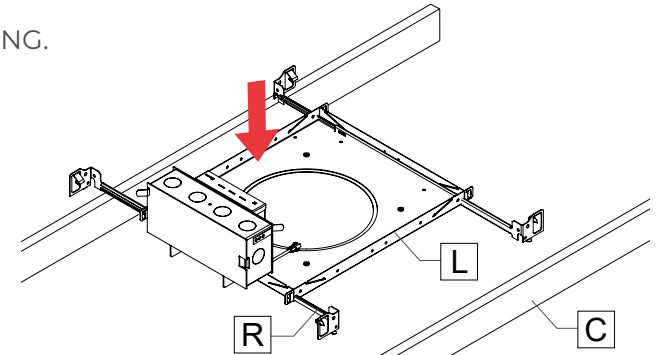
Insert flush mount bars [R] into slots [S] in the mounting frame [T].



2 MOUNT HOUSING IN CEILING.

Place housing [L] into ceiling next to ceiling supports [C]. Mount bar hangers [R] into supports by hammering in pin tab [U] into the supports [C].

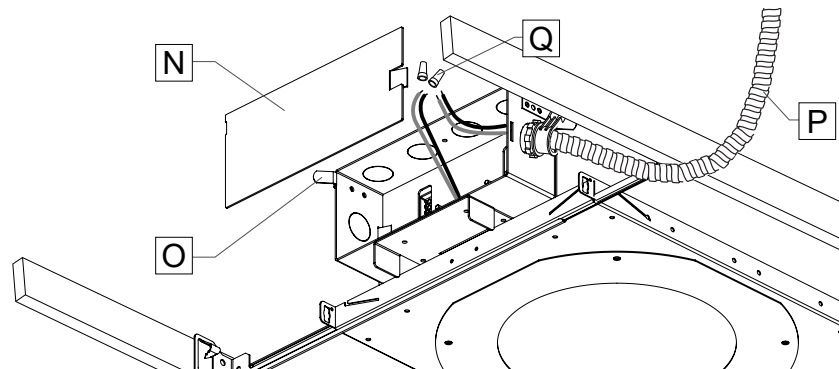
Note: Make sure to have tab [V] under supports [C] before hammering pin tab [U].



3 MAKE ELECTRICAL CONNECTIONS.

Unsnap the cover [N] from the hook [O] and pivot the cover to access the electrical box.

Install BX cable [P] to knockout and make the electrical connections with the marrettes [Q]. Snap the cover back to the electrical box.



4 GO TO [PAGE 9](#) FOR LIGHT ELEMENT INSTRUCTIONS.



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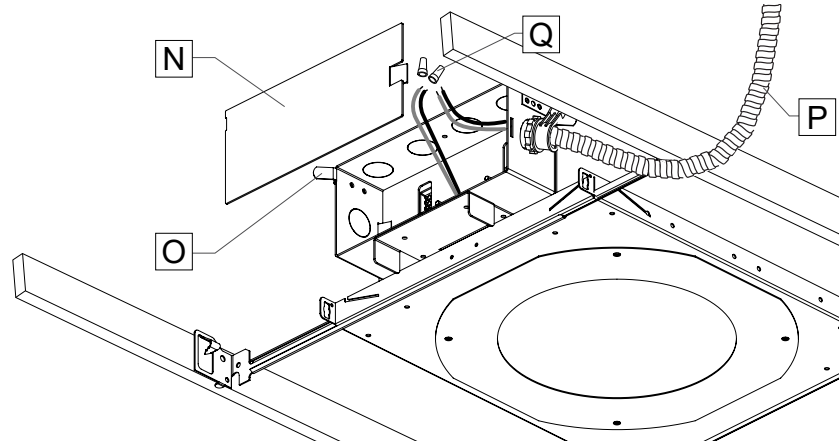


ELECTRICAL CONNECTION

Unsnap the cover [N] from the hook [O] and pivot the cover to access the electrical box.

Install BX cable [P] to knockout and make the electrical connections with the marrettes [Q].

Snap the cover [N] back to the electrical box.

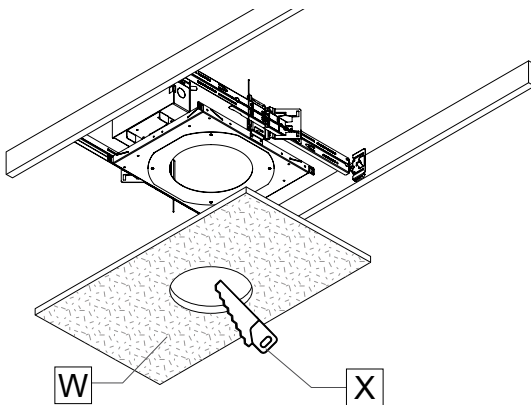


CEILING PREPARATION

1 CEILING CUT-OUTS.

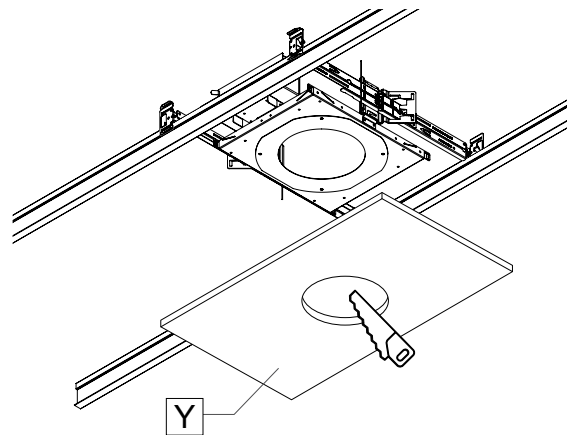
DRYWALL CEILING

Cut opening in drywall ceiling [W] drywall cutting tool [X].



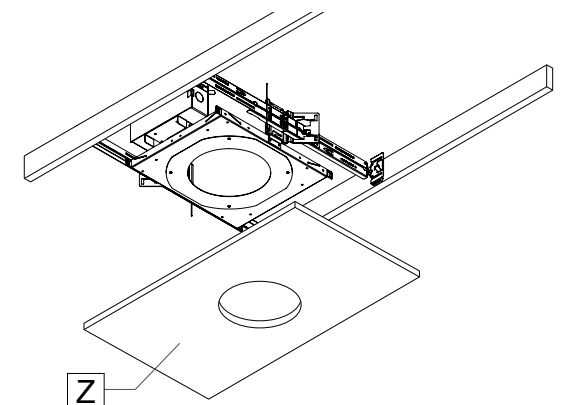
GRID CEILING

Cut opening in grid ceiling tile [Y].



MILLWORK CEILING

Cut opening in wood ceiling [Z].
See page 8 for details.



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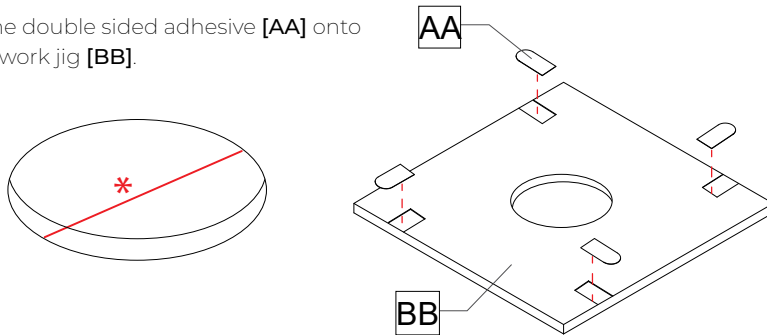


CEILING PREPARATION - MILLWORK

1 PREPARE TO CUT.

Prepare and clean wood surface. Refer to the table on [page 2](#) for dimensions.

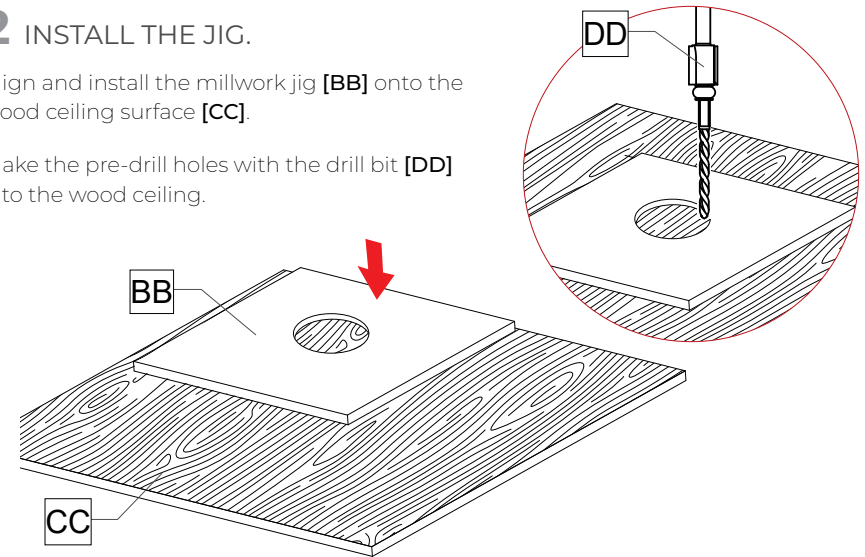
Place the double sided adhesive [AA] onto the millwork jig [BB].



2 INSTALL THE JIG.

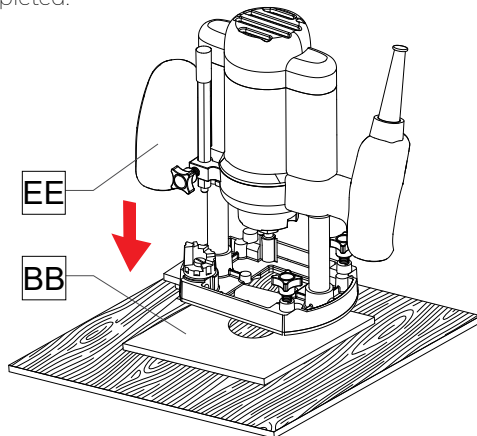
Align and install the millwork jig [BB] onto the wood ceiling surface [CC].

Make the pre-drill holes with the drill bit [DD] into the wood ceiling.



3 CUT OPENING.

Using the router [EE] cut the opening with the help of the millwork jig [BB]. Remove the millwork jig once cut has been completed.



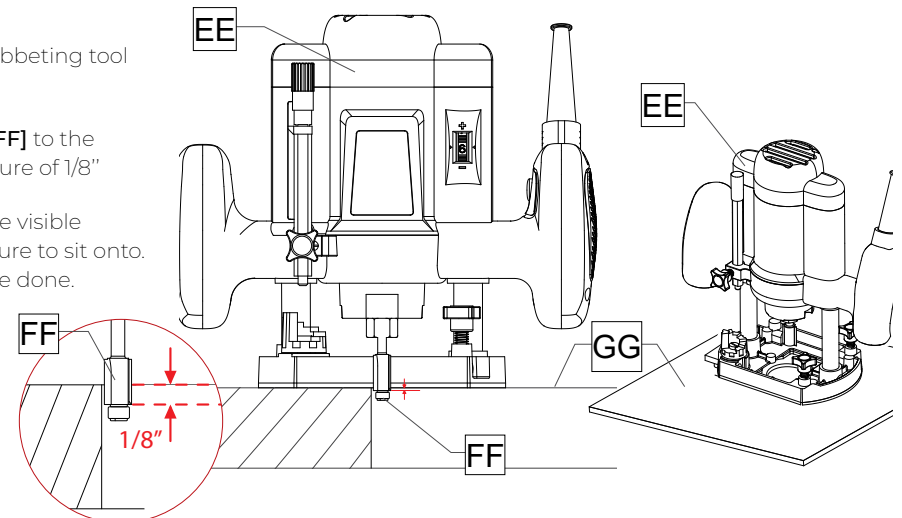
4 CREATE TRIM RECESS.

TRIMLESS ONLY

Install the 5/16" miniature rabbeting tool [FF] with a 1/16" cut depth.

Set depth of rabbeting bit [FF] to the height of the trim of the fixture of 1/8"

Create the trim recess on the visible surface side [GG] for the fixture to sit onto. Remove the router [EE] once done.



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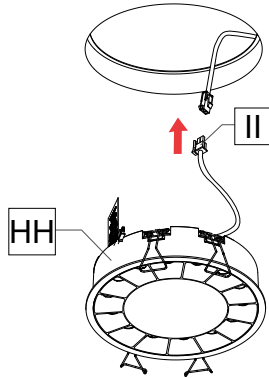
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LIGHT ELEMENT & BAFFLE

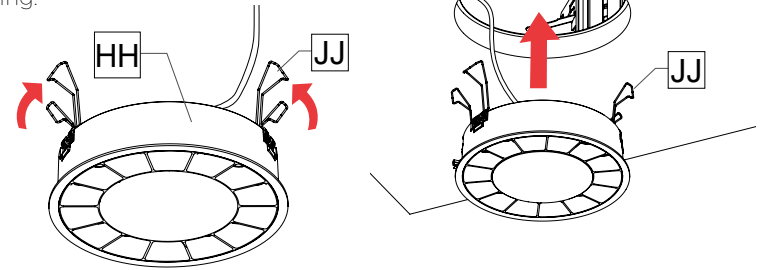
1 CONNECT LIGHT ELEMENT.

Bring the light element [HH] closer to the ceiling. Connect the light element to driver in housing with quick connectors [II].



2 INSTALL LIGHT ELEMENT.

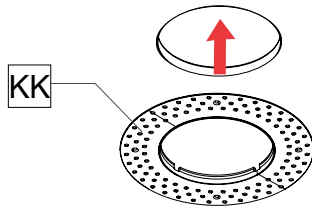
Squeeze spring clips [JJ] upwards onto light element [HH]. Insert light element into opening until mounting springs [JJ] snap back above the ceiling in the housing.



3 FINISH CEILING.

TRIMLESS DRYWALL MUDPLATE

Attach mudplate [KK] to ceiling with the double side tape.



Plaster and sand over mudplate [KK].

