AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

LUMENWERX

⚠ 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.

💡 Shown with 4" round adjustable fixture. Applicable to 3", and all types and shapes for 3" and 4".

OVERVIEW

⚠ Warnings

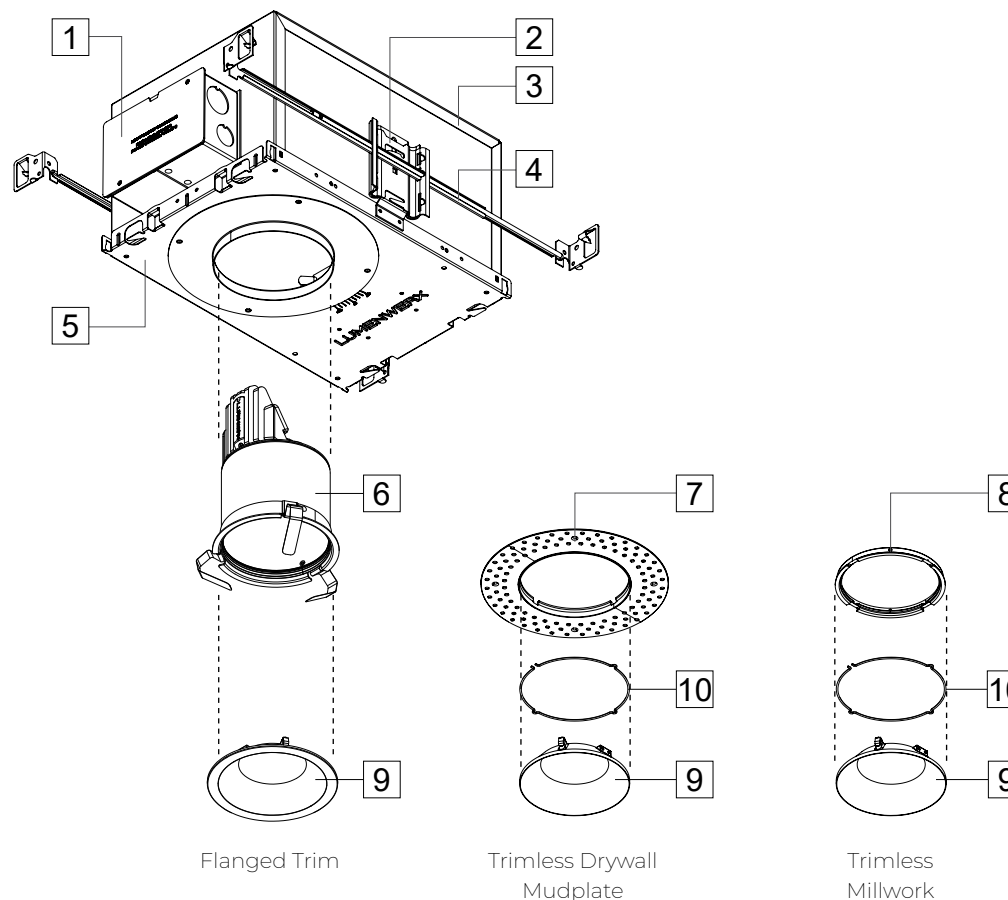Install per national installation and accident prevention regulations.

Clearance between sides of luminaire and parts of building must be 1/2" minimum; clearance to insulating materials to be 3" minimum, unless luminaires is IC rated.

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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9

Flanged Trim

Trimless Drywall Mudplate

Trimless Millwork

Index

Go to pages related to product configuration.

[1] For Aera 4" only.

🔧 Tools Required

Allen Key 1/16" [1]
Adjustable Hole Cutter
Drywall Knife [2]
Hammer

[1] For millwork adapter only.
[2] Or router.

Items List

[1] - Electrical Box
[2] - Butterfly Bracket
[3] - IC/CP Box
[4] - Hanger Bar
[5] - Mounting Frame
[6] - Light Element
[7] - Mudplate
[8] - Millwork Adapter
[9] - Baffle
[10] - Spring Ring

ETL Intertek

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

LUMENWERX

OVERVIEW - OPTIONS

INSTALLATION TYPES
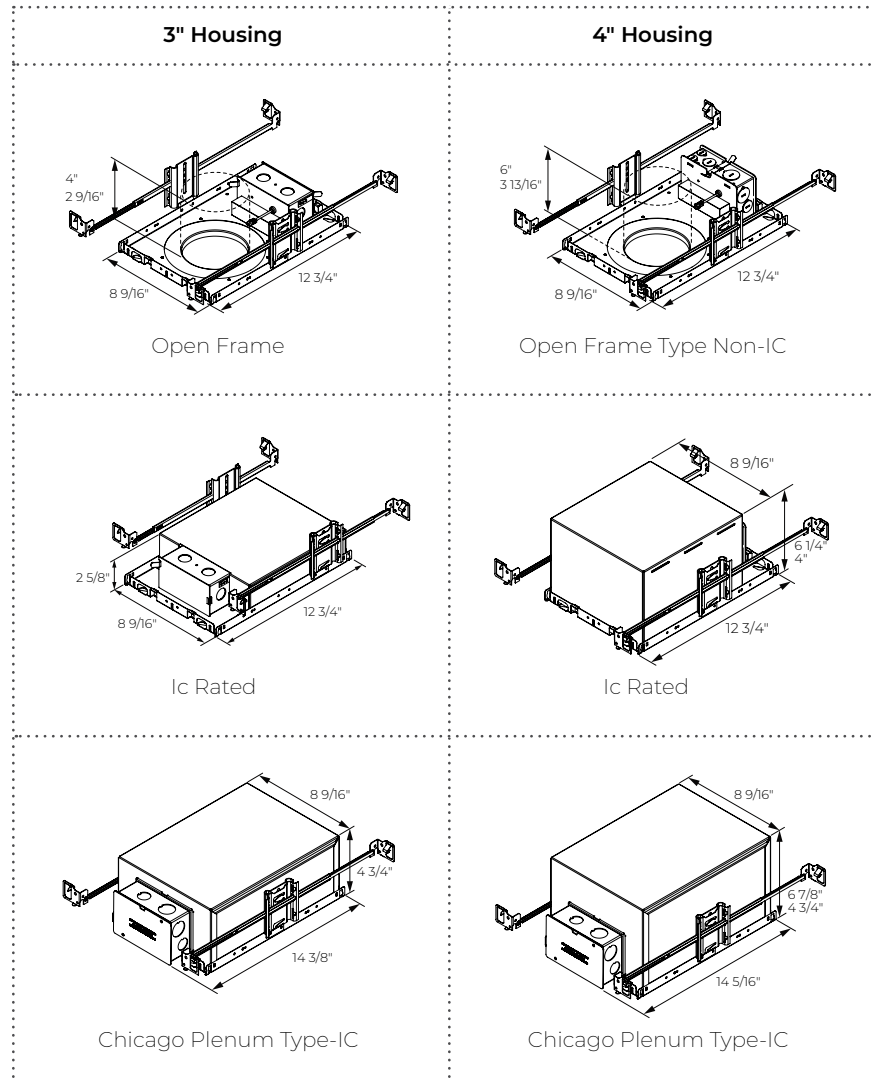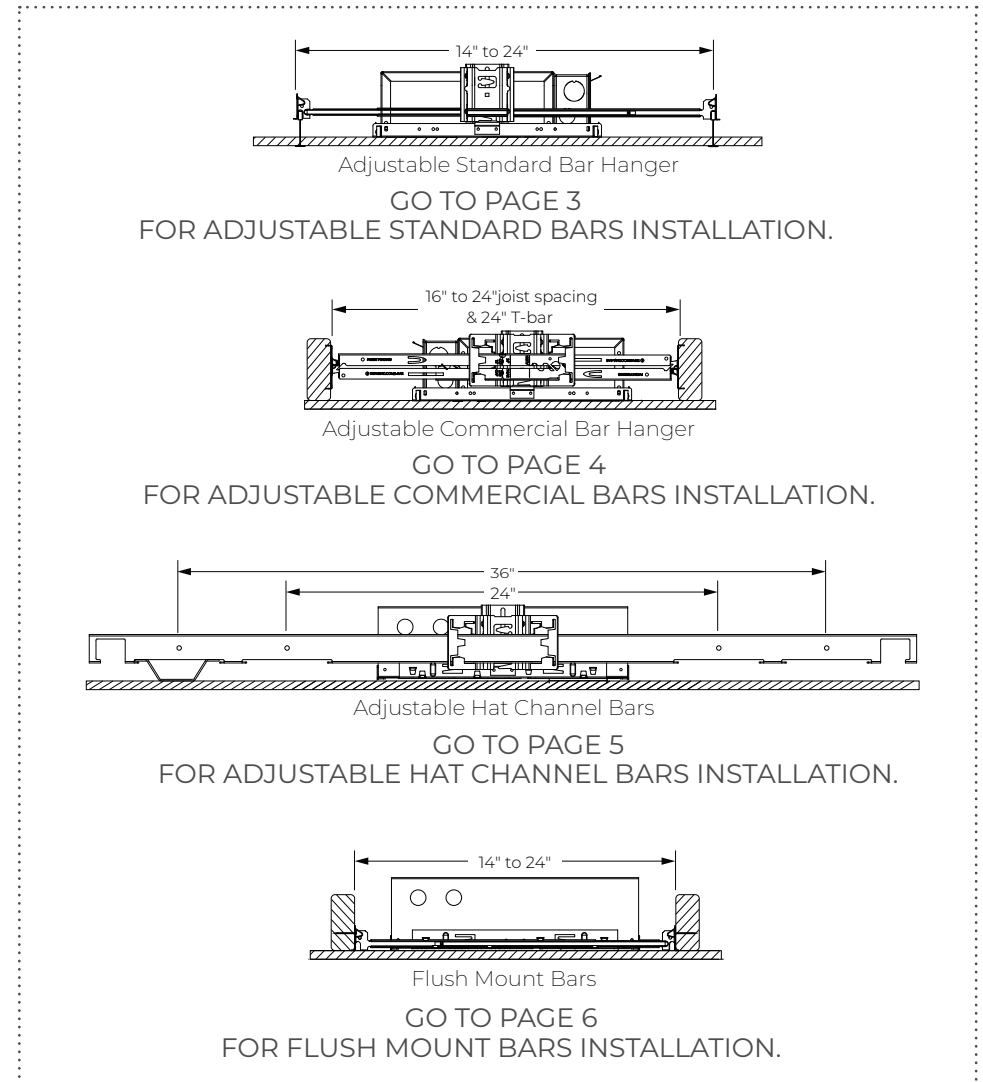
3" Housing	4" Housing
Open Frame	Open Frame Type Non-IC
Ic Rated	Ic Rated
Chicago Plenum Type-IC	Chicago Plenum Type-IC

MOUNTING OPTIONS

Adjustable Standard Bar Hanger

GO TO PAGE 3
FOR ADJUSTABLE STANDARD BARS INSTALLATION.

Adjustable Commercial Bar Hanger

GO TO PAGE 4
FOR ADJUSTABLE COMMERCIAL BARS INSTALLATION.

Adjustable Hat Channel Bars

GO TO PAGE 5
FOR ADJUSTABLE HAT CHANNEL BARS INSTALLATION.

Flush Mount Bars

GO TO PAGE 6
FOR FLUSH MOUNT BARS INSTALLATION.

AERA 3-4
Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

LUMENWERX

ADUSTABLE STANDARD BAR HANGERS (ASB)

1 ADJUST HANGER BARS.

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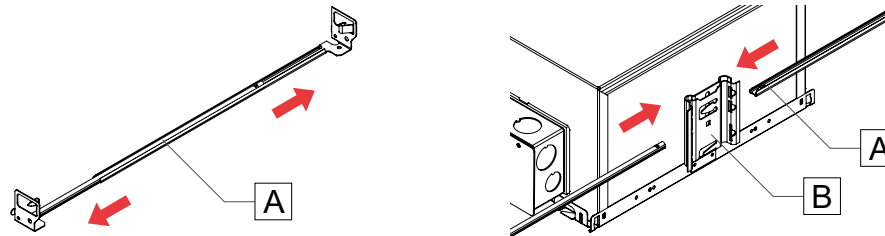
HOUSING

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.
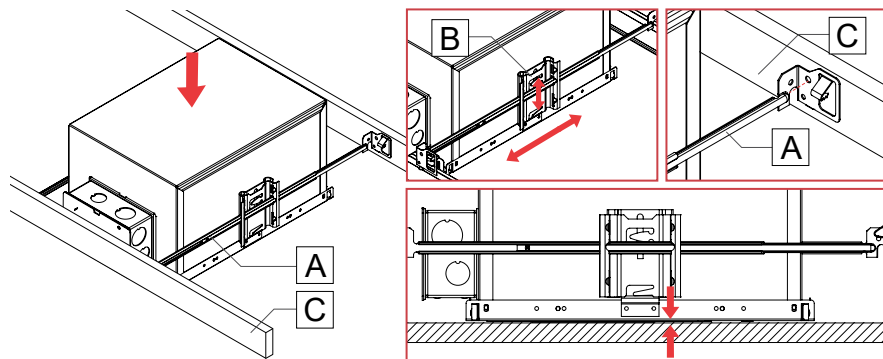
GRID CEILING

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.
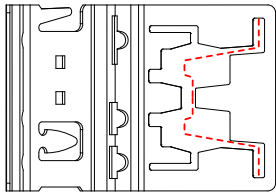

3

ETL Intertek

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

LUMENWERX

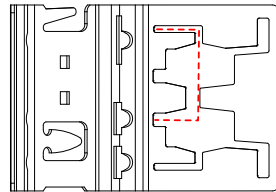## ADJUSTABLE COMMERCIAL BAR HANGERS (ACB)

1 DETERMINE HANGER BARS POSITION.

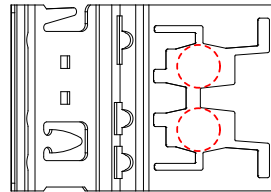Insert hanger bars into butterfly brackets according to hanger types used.
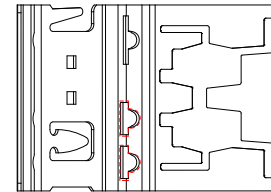
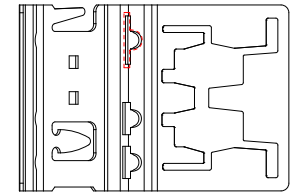**FURRING STRIP CHANNEL**

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

1/2" DIAMETER EMT

1/2" HANGER BARS 1287 & 1240
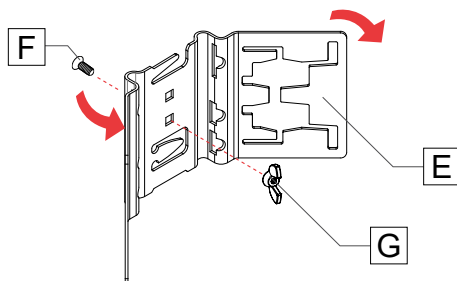
5/8" - 3/4" HANGER BARS

2 PREPARE BUTTERFLY BRACKET.
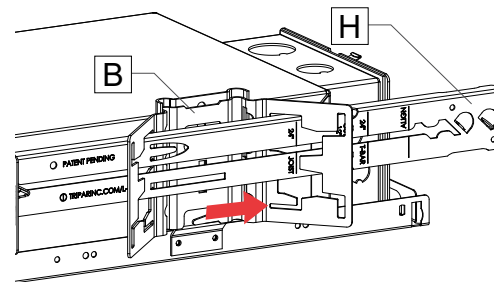
Squeeze the edges of the butterfly bracket **[E]** to unlock.

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.
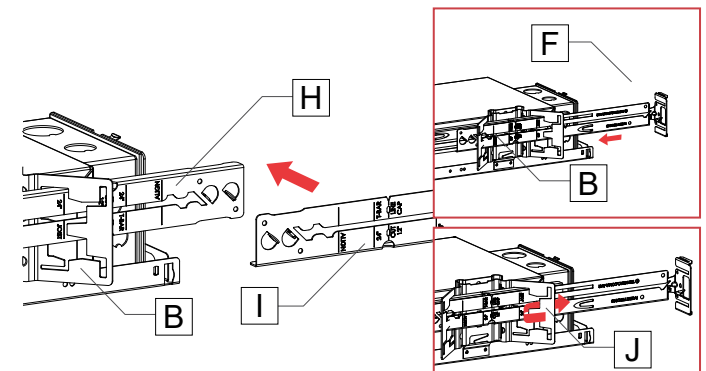

3 INSTALL HANGER BARS

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.

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

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.
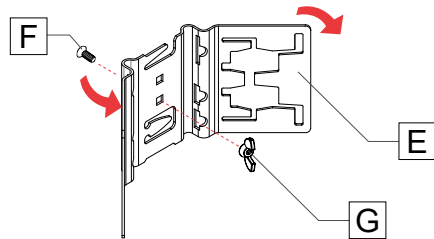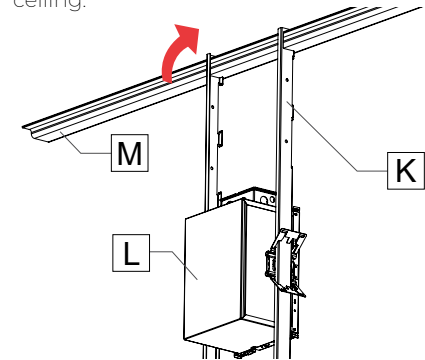
2 INSERT HANGER BARS.

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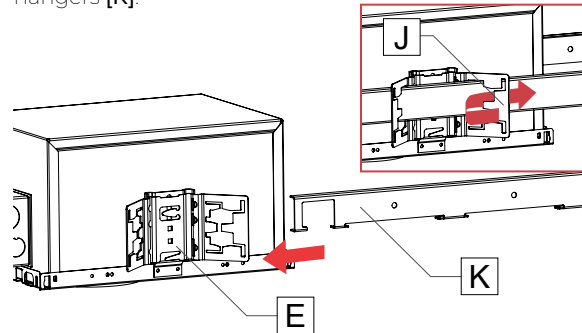
3 HANG MOUNTING FRAME.

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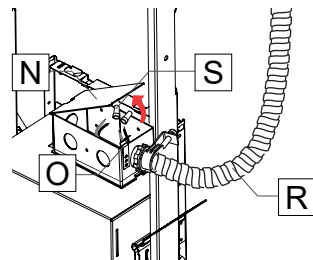
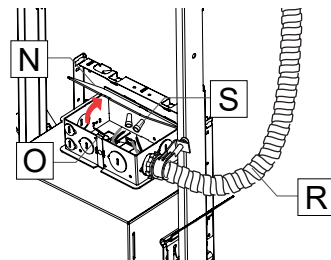**4** MAKE ELECTRICAL CONNECTIONS.

Unsnap the cover **[N]** from the hook **[O]** and pivot the cover. For Chicago Plenum, remove screws **[P]** to access the electrical box **[Q]**.

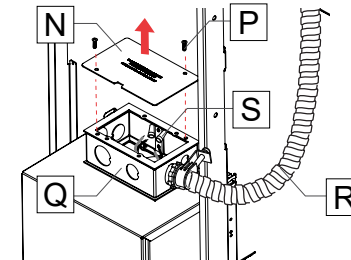Install BX cable **[R]** to knockout and make the electrical connections with the marrettes **[S]**. Snap the cover **[N]** back to finish.

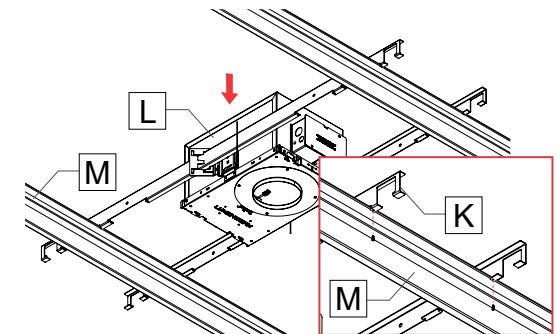**5** MOUNT ON HAT CHANNEL.

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]**.

3" OPEN FRAME / TYPE-IC

4" OPEN FRAME / TYPE-IC

3-4" CHICAGO PLENUM

6 GO TO PAGE 12 FOR LIGHT ELEMENT & BAFFLE INSTRUCTIONS.

FLUSH MOUNT BARS (FMB)

1 INSERT HANGER BARS.

Insert flush mount bars **[T]** into slots **[U]** in the mounting frame **[V]**.

2 MOUNT HOUSING IN CEILING.

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

Note: Make sure to have tab **[Y]** under supports **[C]** before hammering pin tab **[X]**.
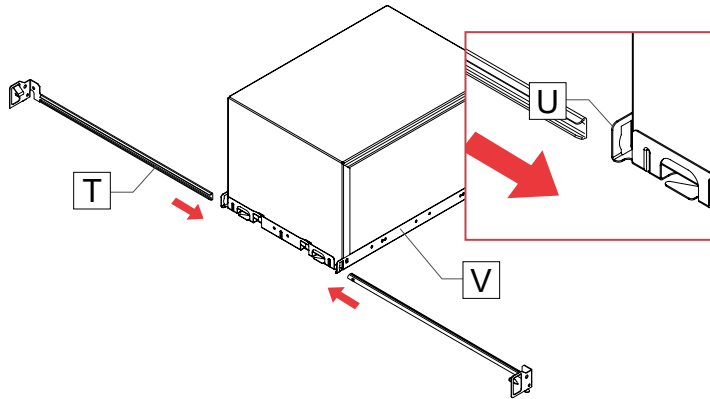
3 LOCK HANGER BARS.

Lock flush mount bars **[T]** in place by twisting tabs **[W]** inwards to the bar hangers **[T]**.
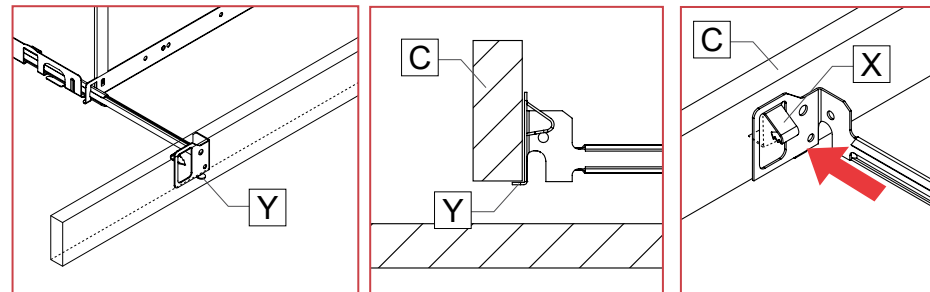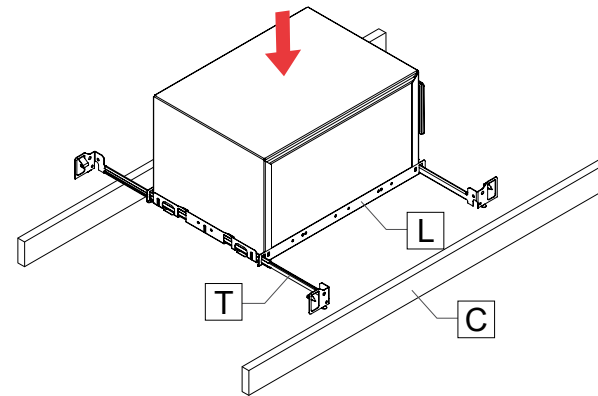
4 GO TO PAGE 7 FOR ELECTRICAL CONNECTION INSTALLATION.

AERA 3-4

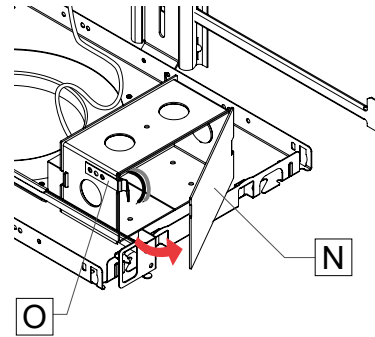## Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)
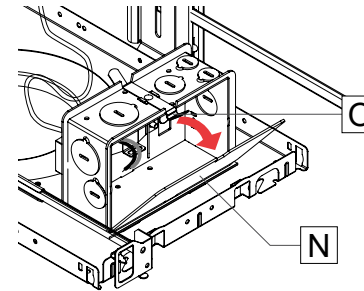
ELECTRICAL CONNECTION

1 UNSNAP COVER.

Unsnap the cover **[N]** from the hook **[O]** and pivot the cover. For Chicago Plenum, remove screws **[P]** to access the electrical box **[Q]**.
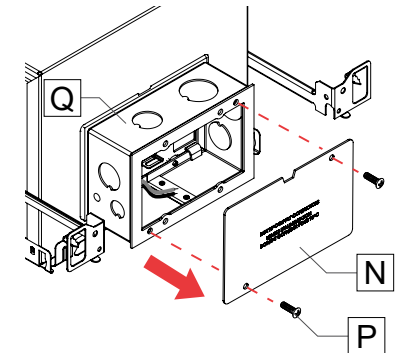
3" OPEN FRAME / TYPE-IC

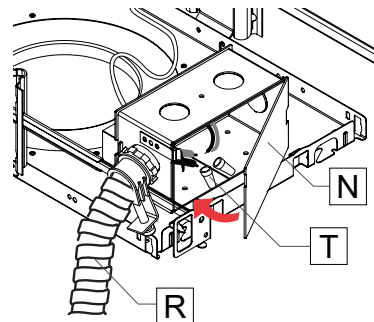**4" OPEN FRAME / TYPE-IC**

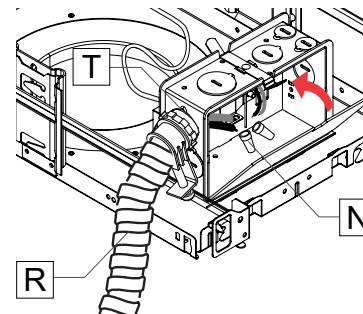**3-4" CHICAGO PLENUM**

2 MAKE ELECTRICAL CONNECTIONS.

Install BX cable **[R]** to knockout and make the electrical connections with the marrettes **[T]**.
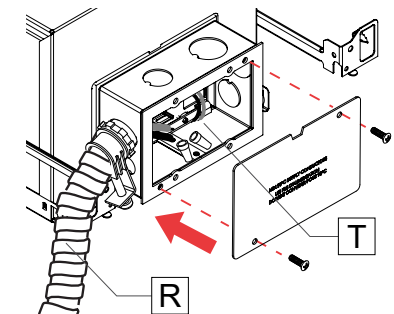
Snap the cover **[X]** back to finish.

3" OPEN FRAME / TYPE-IC

4" OPEN FRAME / TYPE-IC
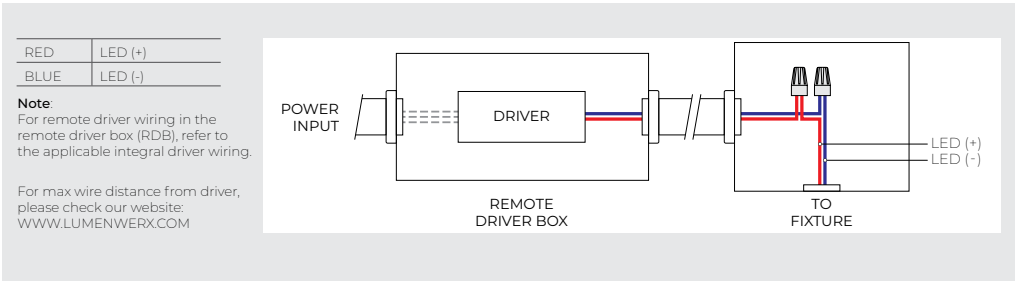
3-4" CHICAGO PLENUM

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)
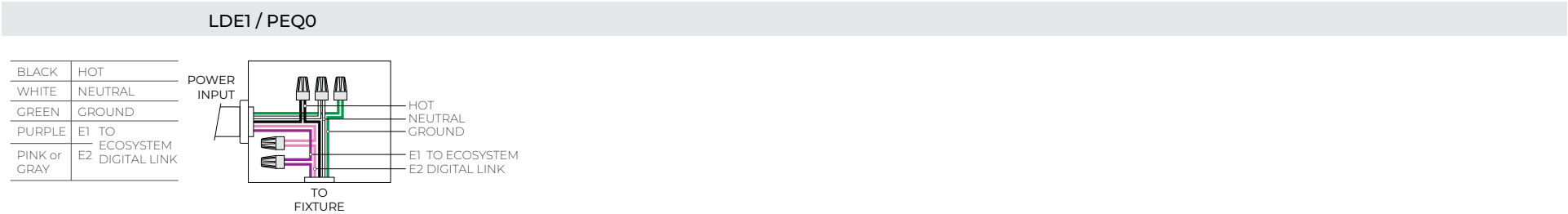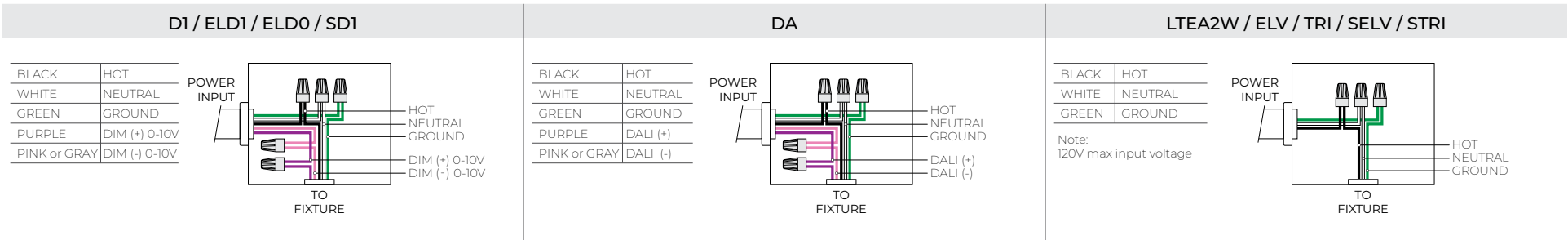
LUMENWERX

WIRING DIAGRAMS (1 Circuit)

For electrical connections, follow the wiring diagrams according to specified drivers in product configuration.

REMOTE DRIVER - STATIC WHITE, SOLA

RED	LED (+)
BLUE	LED (-)

Note:
For remote driver wiring in the remote driver box (RDB), refer to the applicable integral driver wiring.

For max wire distance from driver, please check our website: WWW.LUMENWERX.COM

INTEGRAL DRIVER - STATIC WHITE, SOLA

D1 / ELD1 / ELD0 / SD1

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
PURPLE	DIM (+) 0-10V
PINK or GRAY	DIM (-) 0-10V

DA

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
PURPLE	DALI (+)
PINK or GRAY	DALI (-)

LTEA2W / ELV / TRI / SELV / STRI

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND

Note:
120V max input voltage

LDE1 / PEQ0

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
PURPLE	E1 TO ECOSYSTEM
PINK or GRAY	E2 DIGITAL LINK

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

REMOTE DRIVER - DUO

RED	LED (+)
BLUE	LED (-)

Note:
For remote driver wiring in the remote driver box (RDB), refer to the applicable driver wiring.

For max wire distance from driver, please check our website:
WWW.LUMENWERX.COM

POWER INPUT — DRIVER — REMOTE DRIVER BOX — TO FIXTURE — LED (+) / LED (-)

RDD1

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
PURPLE	DIM (+) 0-10V
RED	CCT (+) 0-10V
PINK or GRAY	DIM & CCT (-) 0-10V

POWER INPUT — HOT / NEUTRAL / GROUND — DIM (+) 0-10V / CCT (+) 0-10V / DIM & CCT (-) 0-10V — TO DRIVER

Note:
Common negative for dimming & CCT

RDDA / RDDA8

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
PURPLE	DALI (+)
PINK or GRAY	DALI (-)

POWER INPUT — HOT / NEUTRAL / GROUND — DALI (+) / DALI (-) — TO DRIVER

RPSQ0

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
PURPLE	T1
PINK or GRAY	T2

TO DIGITAL LINK

POWER INPUT — HOT / NEUTRAL / GROUND — T1 TO / T2 DIGITAL LINK — TO DRIVER

RDMX

BLACK	HOT
WHITE	NEUTRAL
GREEN	GROUND
BLUE	DMX (+)
BLUE/WHITE	DMX (-)
BARE	SHIELD
BLUE	DMX (+)
BLUE/WHITE	DMX (-)
BARE	SHIELD

POWER INPUT — HOT / NEUTRAL / GROUND — TO DRIVER — DMX IN — DMX (+) / DMX(-) / SHIELD — DMX OUT — DMX (+) / DMX(-) / SHIELD

Note:
- Must follow DMX wiring architecture
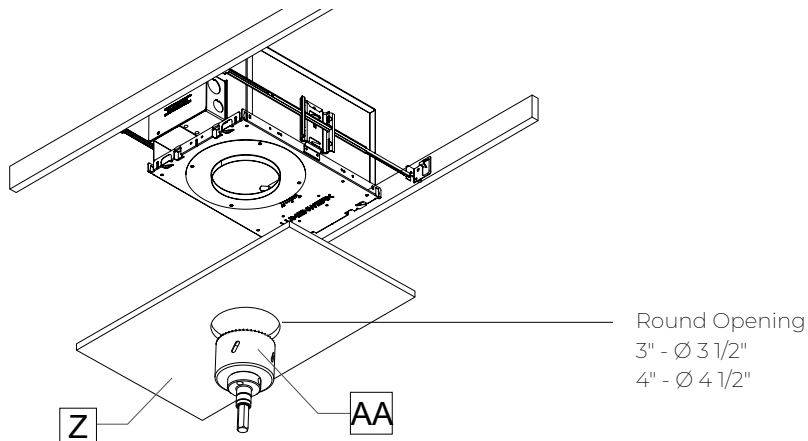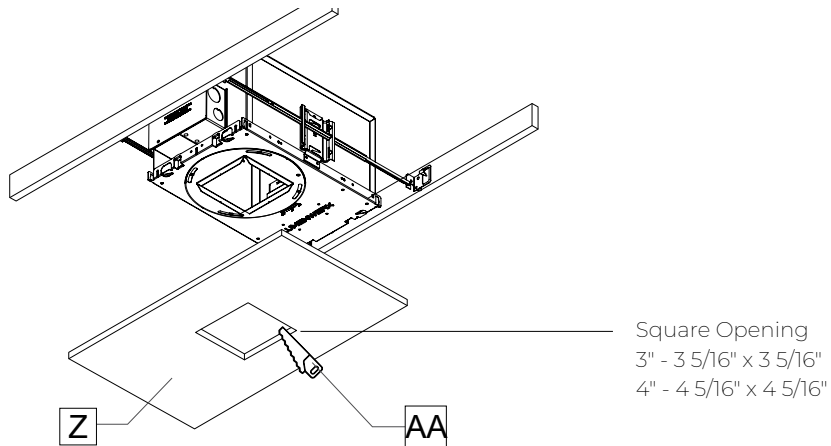- Use low capacitance wiring for DMX network

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)
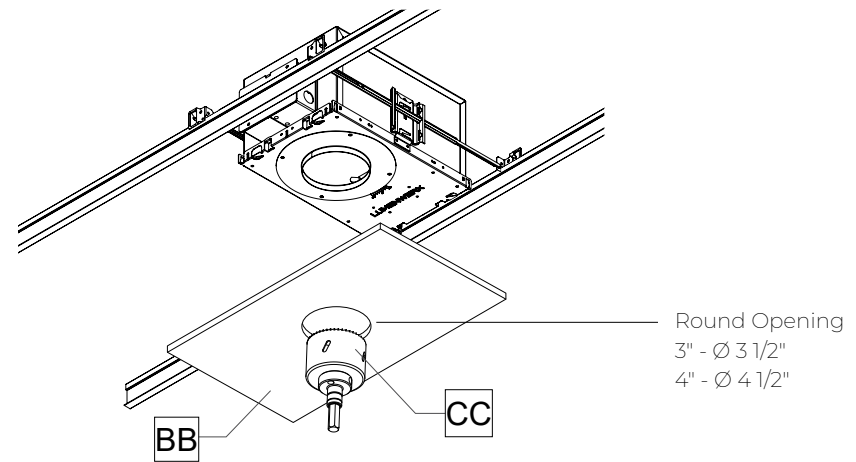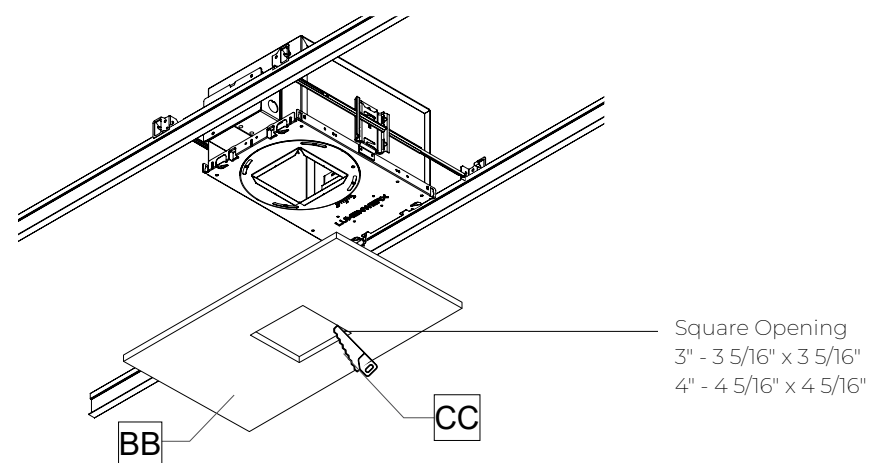
CEILING PREPARATION

1 CEILING CUT-OUTS.

DRYWALL CEILING

Cut opening in drywall ceiling **[Z]** with drywall knife **[AA]**.

Square Opening
3" - 3 5/16" x 3 5/16"
4" - 4 5/16" x 4 5/16"

Z   AA

Round Opening
3" - Ø 3 1/2"
4" - Ø 4 1/2"

Z   AA

GRID CEILING

Cut opening in grid ceiling tile **[BB]** with router **[CC]**.

Square Opening
3" - 3 5/16" x 3 5/16"
4" - 4 5/16" x 4 5/16"

BB   CC

Round Opening
3" - Ø 3 1/2"
4" - Ø 4 1/2"

BB   CC

AERA-3-4-DL-RECESSED-OF-IC-CP-INST-REV4
October 26, 2023
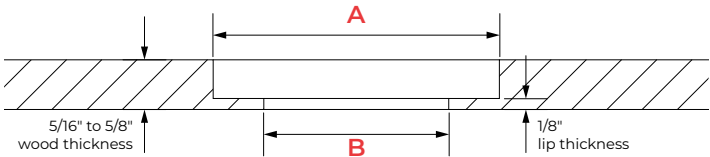
1 CEILING CUT-OUTS.

MILLWORK CEILING

Cut opening in wood ceiling **[DD]** with router **[EE]**.


DD   EE

DD   EE
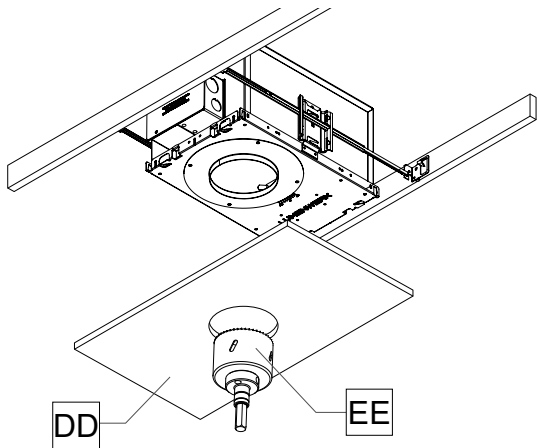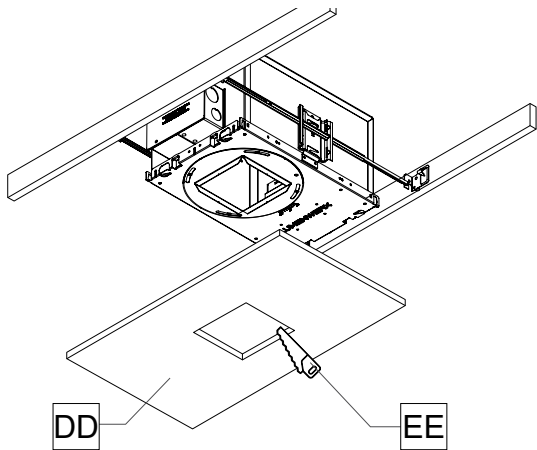
Follow the table for dimensions based on size and baffle shape.
Note: The baffle opening is cut-through, but the collar opening is a step-hole that is at the back face of the ceiling.
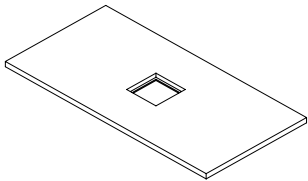

5/16" to 5/8" wood thickness

A

B

1/8" lip thickness

	A	B
	Collar Opening	Baffle Opening
3" Round	Ø 3 1/2"	Ø 3 1/16"
3" Square	3 1/2" x 3 1/2"	3 1/16" x 3 1/16"
4" Round	Ø 4 1/2"	Ø 4 1/16"
4" Square	4 1/2" x 4 1/2"	4 1/16" x 4 1/16"

BACK FACE OF CEILING
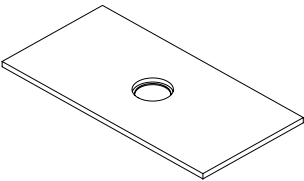
Round

Square

AERA 3-4

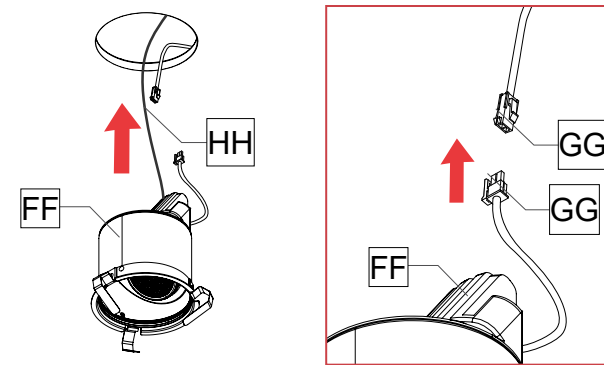## Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

LUMENWERX

LIGHT ELEMENT & BAFFLE

1 INSTALL LIGHT ELEMENT.

FLANGED TRIM

Bring the light element **[FF]** closer to the ceiling. Connect the light element **[FF]** to driver in housing with quick connectors **[GG]**.

Attach the safety cable **[HH]** to a suitable point in the ceiling.

Squeeze spring clips **[II]** upwards onto light element **[FF]**. Insert light element **[FF]** into opening until spring clips **[II]** snap back above the ceiling in the housing.
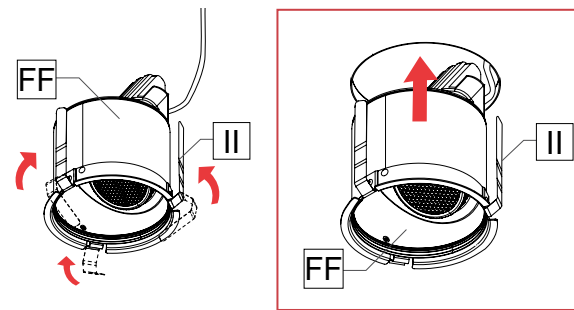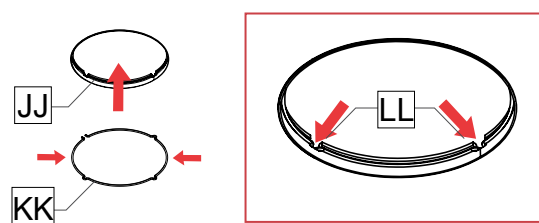
TRIMLESS DRYWALL MUDPLATE

Attach mudplate **[JJ]** to ceiling and screw onto ceiling. Plaster and sand over mudplate **[JJ]**. Insert light element **[FF]** into opening.

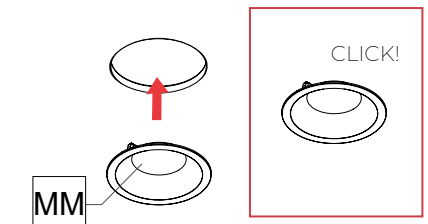Attach the safety cable **[HH]** to a suitable point in the ceiling.
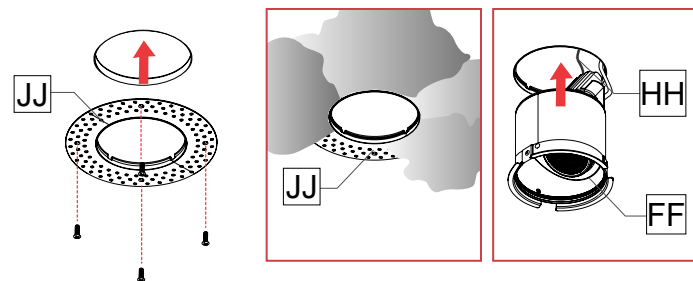
Squeeze spring ring **[KK]** into the mudplate **[JJ]** at the edge. Spring ring **[KK]** will snap into the mudplate notches **[LL]** around the mudplate edge.
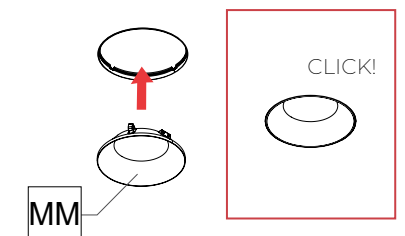
2 INSTALL BAFFLE.

FLANGED TRIM

Snap in baffles **[MM]** in place into ceiling opening until audible click is heard.

TRIMLESS DRYWALL MUDPLATE

Snap in baffles **[MM]** in place into ceiling opening until audible click is heard.

AERA 3-4

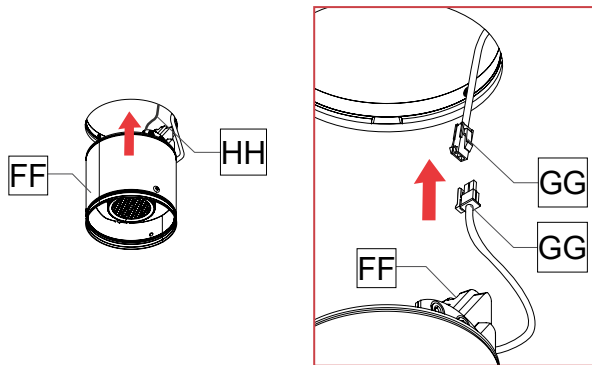## Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

1 INSTALL LIGHT ELEMENT.

TRIMLESS MILLWORK

Connect the light element **[FF]** to driver in housing with quick connectors **[GG]** and install from below.

Attach the safety cable **[HH]** to a suitable point in the ceiling.

Squeeze spring ring **[NN]** into the millwork adapter **[OO]** to keep the light module in place. Spring ring **[NN]** will snap into the millwork adapter notches **[PP]** around the millwork adapter edge.
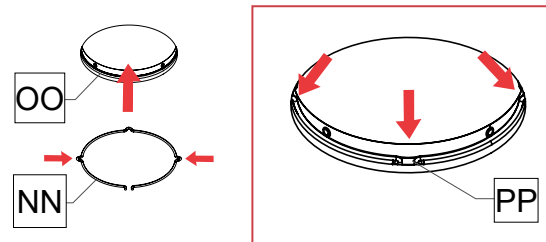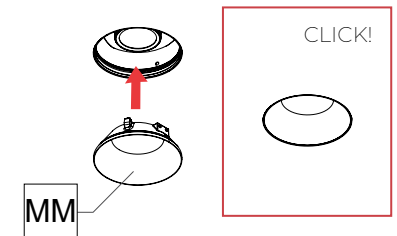
2 INSTALL BAFFLE.

TRIMLESS MILLWORK

Snap in baffles **[MM]** in place into ceiling opening until audible click is heard.

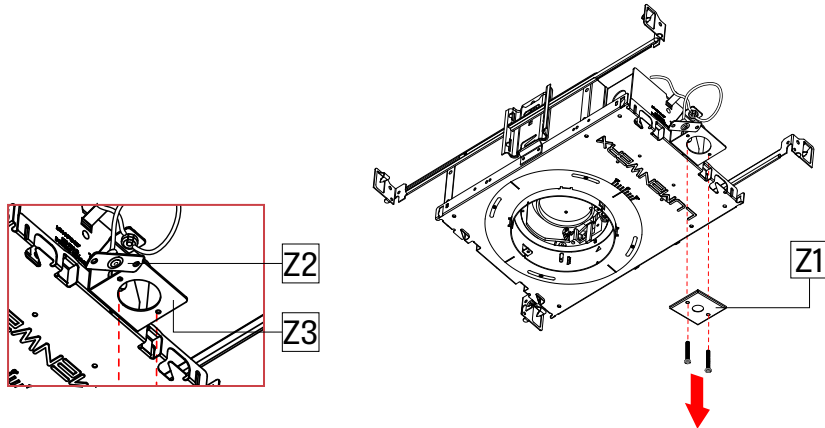**Note:** Edge of the trim should be flush with the surface.

CLICK!

AERA 3-4

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)
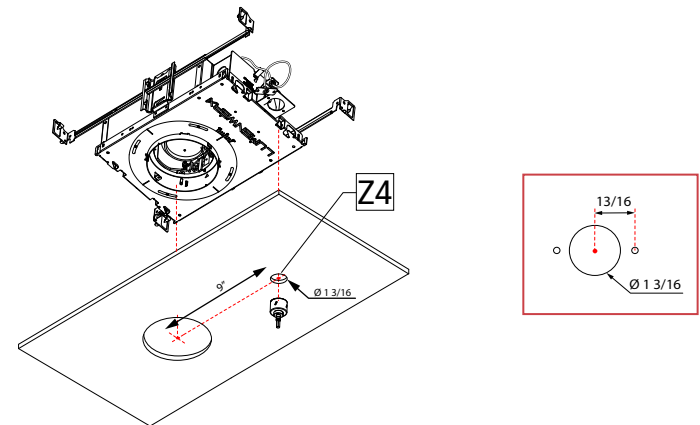
EMERGENCY BATTERY OPTION

1 REMOVE COVER PLATE.

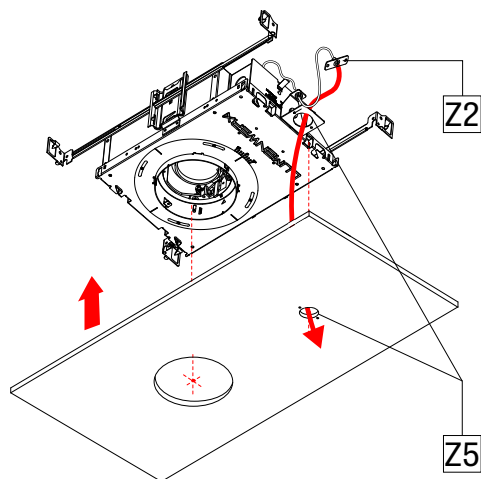Unscrew cover plate **[Z1]**. Make sure the test switch bracket **[Z2]** is mounted on magnet **[Z3]** on the housing.

2 CEILING CUT-OUT.

Cut the ceiling with the adjustable hole saw (Ø 1 3/16") **[Z4]** or a drywall router. Follow standard instructions for other steps.

3 BRING TEST SWITCH BRACKET THROUGH HOLE .

Take the test switch bracket **[Z2]** off the magnet and pull it out of the holes **[Z5]**.

4 INSTALL TEST SWITCH TO CEILING.

Screw cover plate **[Z1]** and test switch bracket **[Z2]** back after installing the ceiling panel.