



Interpole®

Installation Instructions



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Using the Interpole® Installation Instructions and Parts Manual

An Overview

Each section of the Installation Instructions and Parts Manual contains information to guide you through installations and to help you determine which parts you may need to order as replacements or to supplement reconfigurations.

Each page contains the following sections: The Parts List section contains a lettered list of the essential component parts required for the application's installation. Items required that may vary in size, (i.e. cabinet cases or screen boards), have not been lettered, and replacements should be ordered by contacting Knoll Field Service.

The **Tools Needed** section contains a list of the installation tools that will be required on site for the proper installation of the application or configuration.

A **Graphic** section has been included, to the right of the Parts List, depicting images of the component parts with lettered codes that correspond to those in the Parts List. Each part is shown with its associated part number above.

NOTE: Part numbers with an asterisk, i.e. *, after the number require a paint finish code to be added to the end of the pattern number to be orderable as a replacement part. Please refer to the Finish Code listing at the end of this page for the available codes.

NOTE: Part numbers with empty brackets, i.e. (), after the pattern number indicate that a laminate or veneer finish code must be added to the end of the pattern number to be orderable as a replacement part. Please refer to the Finish Code listing in the Interpole® Price List for the available finish codes for those products.

Please note that not all parts are available in all finishes. Finish options available for component parts match those available when ordered with the complete items' pattern number per the Interpole® Price List.

The **Steps** section details step-by-step instructions for the installation of the application selected. Each step includes references to the lettered items noted in the Parts List at the top of the page and in the graphic section.

A **Drawings** section follows the steps section providing detailed assembled and exploded drawings to further assist in installation and in determining replacement parts required.

How to Order Parts

1. Look in this document's bookmarks to locate the configuration which best fits the application.
2. Go to the page where that application is described and thoroughly review all installation instructions to determine the part number(s) needed.
3. Unless otherwise noted, the standard package quantity is one (1). When ordering products where the quantity per package is listed, please indicate the number of packages required in the quantity column of your order.
4. Be sure to add "KR" to the beginning of each part number.
5. Be sure to include any finish codes required to complete the pattern number(s).
6. Complete a Knoll Service order, which can be sent to your Knoll Customer Service Representative.

If you have any questions about the contents of this manual, please call your Customer Service Representative or Field Service at 800-343-5665.

Pole without Covers

Pattern Numbers Represented:

Pole without covers, IPSN144 _

Parts List:

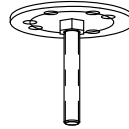
Power Pole Nut-plate (A)
2-1/4" Ceiling Mount Stem Plate (B)
Shroud, Power Pole Mount (C)
1-1/4" Floor Mount Stem Plate (D)
8-32 x 1/2" Type F Machine Screw (E)
Jam Nut (F)
Washer (G)
M8 Flex Nut (H)
M8 x 25mm Set Screw (I)
Vertical Power Pole

Also required: Hardware items, NOT INCLUDED, to make attachments to the building (see Step 5).

(A) 3AB5118



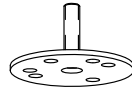
(B) 3AB5063



(C) 3AB5064*



(D) 3AB5083



(E) 3AB5081



(F) 3AB5217



(G) 3AB5306



(H) 3AA4020



(I) 3AB5305



Tools Needed:

Ladder
Tape Measure
Miter Saw with Aluminum-cutting Blade
Eye & Hearing Protection
Laser Level with Vertical Planes (or a Plumb Bob and Bubble Level)
Electric Drill with 21/64" Drill Bit
Power Driver with Phillips #2 Bit
9/16" Open-end Wrench
5/8" Open-end Wrench
4mm Allen Wrench
Long Nose Pliers
For One-person Installations: Tape (i.e. Masking Tape or Duct Tape)

Pole without Covers

Steps:

1. Install nut-plate (A) to the bottom of the pole using (4) 8-32x $\frac{1}{2}$ " type F machine screws (E).
2. Determine the vertical power pole location, ensuring that the 2- $\frac{1}{4}$ " ceiling mount stem plate (B) and 1- $\frac{1}{4}$ " floor mount stem plate (D) mounting locations are precisely aligned vertically, and mark on both ceiling and floor.

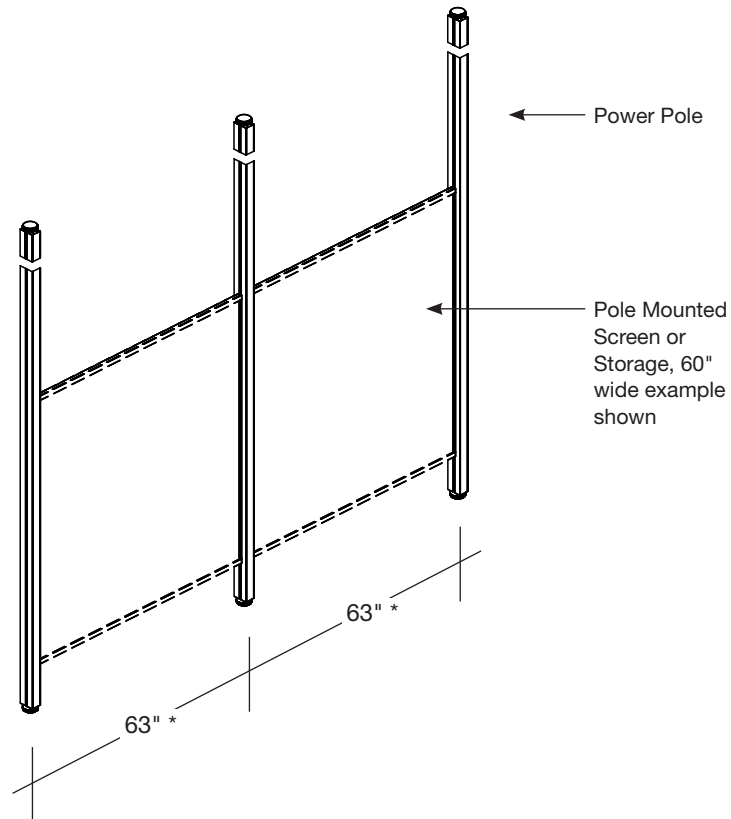
Note: For applications with Interpole storage or screens mounted between poles, the poles must be located module-width + 3" apart. For example, if using 60" screens, the two poles are to be mounted 63" apart on center. Measure height from floor to ceiling at each mounting location. If height is 12' 3- $\frac{1}{4}$ " or less, continue with instructions below. For greater heights, refer to Instructions for Extension Pole.
3. Cut the power pole to size as follows: Using a miter saw with aluminum-cutting blade, cut off the TOP of the power pole so that the length is 3- $\frac{1}{4}$ " less than distance measured from floor to ceiling.

Note: Always cut off the top end of poles; never cut the bottom end.
4. Drill a $\frac{21}{64}$ " (.328") hole $\frac{1}{2}$ " down from the top of the pole in the center of the nut slot. Ensure the hole goes all the way to the center of the pole, notching the edges of the split groove at the pole center. This hole will be for the anti-rotation flex nut and set screw (H & I) used in Step 11.
5. Refer to the markings from Step 2 and attach the mounting plates to ceiling and floor using appropriate fasteners NOT provided by Knoll. Consult an architectural engineering service to ensure fasteners are appropriate for the application.

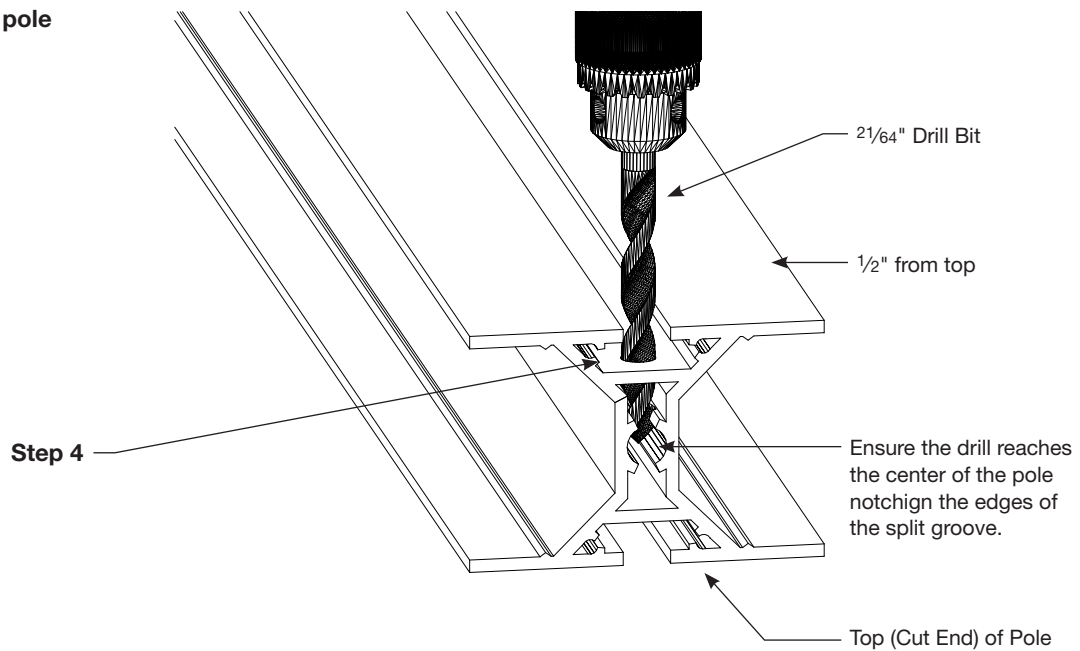
Note: Plates contain both a three-bolt and four-bolt hole pattern, each on a 2" bolt circle. All holes are .320" diameter.
6. Spin a shroud (C) downwards on the stem of the floor mount plate (D), followed by a jam nut (F). Position the top of the jam nut $\frac{41}{64}$ " above the top of the shroud.
7. Spin another shroud (C) upwards on the stem of the ceiling mount plate (B), followed by a jam nut (F). Note: for one-person installations you may tape the washer (G) in place beneath the jam nut.
8. Slide the washer (G) onto the ceiling stem (B), followed by the top of the power pole, ensuring that the stem is inserted into the center groove in the power pole, and NOT one of the other cavities. Swing the bottom of the pole atop the floor stem (D) and spin the pole clockwise (looking downward), allowing the nut-plate (A) to thread onto the floor stem. Thread the pole down until the nut-plate hits the jam nut, and the bottom of the pole itself is 1- $\frac{1}{2}$ " above the floor (1" above the shroud).
9. Orient the pole, keeping the bottom as close to 1- $\frac{1}{2}$ " above the floor as possible. Holding the nut-plate weld nut (A) with a $\frac{5}{8}$ " wrench, tighten the jam nut (F) into the nut-plate weld nut (A), ensuring that the desired pole orientation is maintained.
10. At the top of the pole, spin the jam nut (F) downwards, and tighten it against the washer (G) at the top of the pole. (Remove tape from washer, if used in Step 4.)
11. Remove the steel leaf spring from the back of the M8 flex nut (H) with pliers. Insert the nut into the slot at the top of the pole aligned with the predrilled $\frac{21}{64}$ " hole in the pole. Insert the M8 x 25 mm set screw (I) and, while maintaining correct orientation of the pole, tighten the screw into the ceiling stem to prevent rotation of the pole.

**Example Power Pole spacing dimensions
when used with Pole Mounted Screens
or Storage.**

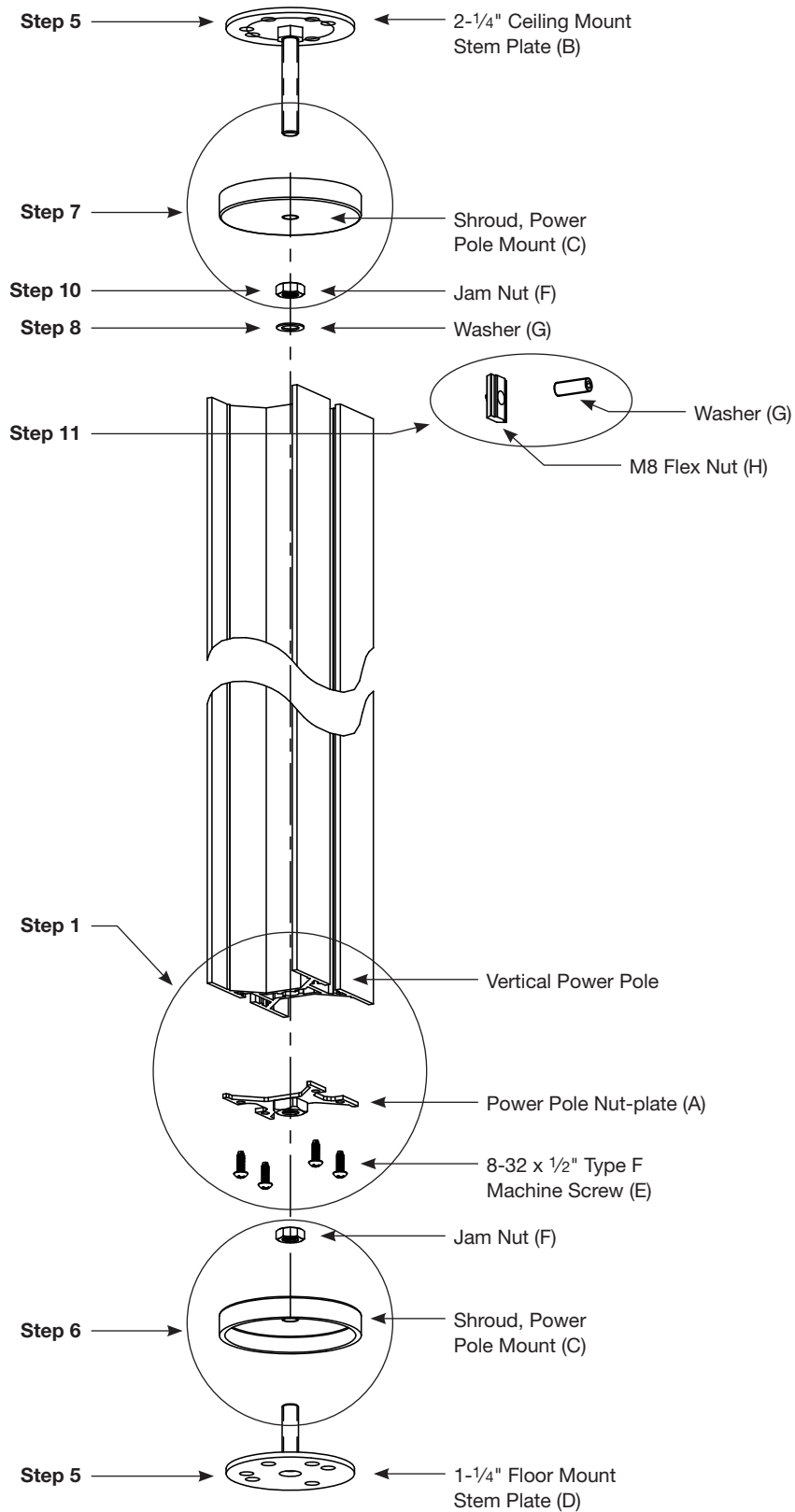
***60"W screen example shown (Step 2)**



Drilling the top of the pole



Exploded Pole Assembly



Pole with Covers, No Outlet Openings, and/or Grommet Located at Bottom of One Cover

Pattern Numbers Represented:

Pole with covers, no outlet openings,

IPSCNN144_

Pole with covers, grommet in one cover,

IPSCNG144_

Parts List:

Power Pole Nut-plate (A)

2-1/4" Ceiling Mount Stem Plate (B)

Shroud, Power Pole Mount (C)

1-1/4" Floor Mount Stem Plate (D)

8-32 x 1/2" Type F Machine Screw (E)

Jam Nut (F)

Washer (G)

M8 Flex Nut (H)

M8 x 25mm Set Screw (I)

Pole Cover Without Grommet (J)

Pole Cover With Grommet (K)

Vertical Power Pole

Also required: Hardware items, NOT INCLUDED, to make attachments to the building (see Step 5).

Tools Needed:

Ladder

Tape Measure

Miter Saw with Aluminum-cutting Blade

Eye & Hearing Protection

Laser Level with Vertical Planes (or a

Plumb Bob and Bubble Level)

Electric Drill with 21/64" Drill Bit

Power Driver with Phillips #2 Bit

9/16" Open-end Wrench

5/8" Open-end Wrench

4mm Allen Wrench

Long Nose Pliers

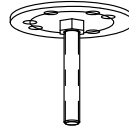
For One-person Installations: Tape (i.e.

Masking Tape or Duct Tape)

(A) 3AB5118



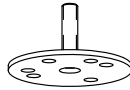
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(C) 3AB5064*



(D) 3AB5083



(E) 3AB5081



(F) 3AB5217



(G) 3AB5306



(H) 3AA4020



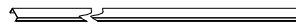
(I) 3AB5305



(J) 3AB5305



(J) 3AB510101*



(K) 3AB510106*



Pole with Covers, No Outlet Openings, and/or Grommet Located at Bottom of One Cover

Steps:

1. Install nut-plate (A) to the bottom of the pole using (4) 8-32x $\frac{1}{2}$ " type F machine screws (E).
2. Determine the vertical power pole location, ensuring that the 2- $\frac{1}{4}$ " ceiling mount stem plate (B) and 1- $\frac{1}{4}$ " floor mount stem plate (D) mounting locations are precisely aligned vertically, and mark on both ceiling and floor.

Note: For applications with Interpole storage or screens mounted between poles, the poles must be located module-width + 3" apart. For example, if using 60" screens, the two poles are to be mounted 63" apart on center.

Measure height from floor to ceiling at each mounting location. If height is 12' 3- $\frac{1}{4}$ " or less, continue with instructions below. For greater heights, refer to Instructions for Extension Pole.

3. Pressure fit both pole covers (J, K) onto pole and, using a miter saw with aluminum-cutting blade, cut the pole and cover assembly to length, if necessary, as follows: Using a miter saw with aluminum-cutting blade, cut off the TOP of the power pole assembly so that the length is 3- $\frac{1}{4}$ " less than distance measured from floor to ceiling.

Before cutting, ensure alignment of the bottom of the covers (J, K) with the bottom of the pole.

Note: Always cut off the top end of covers and poles; never cut the bottom end.

4. Drill a 2 $\frac{1}{64}$ " (.328") hole $\frac{1}{2}$ " down from the top of the pole in the center of the nut slot. Ensure the hole goes all the way to the center of the pole, notching the edges of the split groove at the pole center. This hole will be for the anti-rotation flex nut and set screw (H & I) used in Step 11.
5. Refer to the markings from Step 2 and attach the mounting plates to ceiling and floor using appropriate fasteners NOT provided by Knoll. Consult an architectural engineering service to ensure fasteners are appropriate for the application.

Note: Plates contain both a three-bolt and four-bolt hole pattern, each on a 2" bolt circle. All holes are .320" diameter.

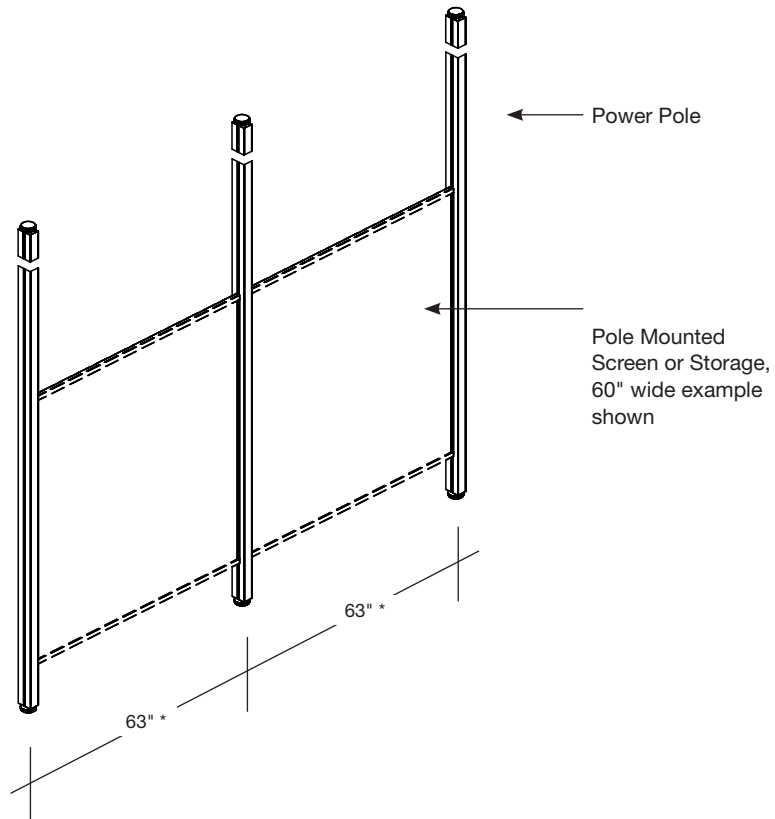
6. Spin a shroud (C) downwards on the stem of the floor mount plate (D), followed by a jam nut (F). Position the top of the jam nut 4 $\frac{1}{64}$ " above the top of the shroud.
7. Spin another shroud (C) upwards on the stem of the ceiling mount plate (B), followed by a jam nut (F). Note: for one-person installations you may tape the washer (G) in place beneath the jam nut.
8. Slide the washer (G) onto the ceiling stem (B), followed by the top of the power pole, ensuring that the stem is inserted into the center groove in the power pole, and NOT one of the other cavities. Swing the bottom of the pole atop the floor stem (D) and spin the pole clockwise (looking downward), allowing the nut-plate (A) to thread

onto the floor stem. Thread the pole down until the bottom of the pole itself is 1- $\frac{1}{2}$ " above the floor (1" above the shroud).

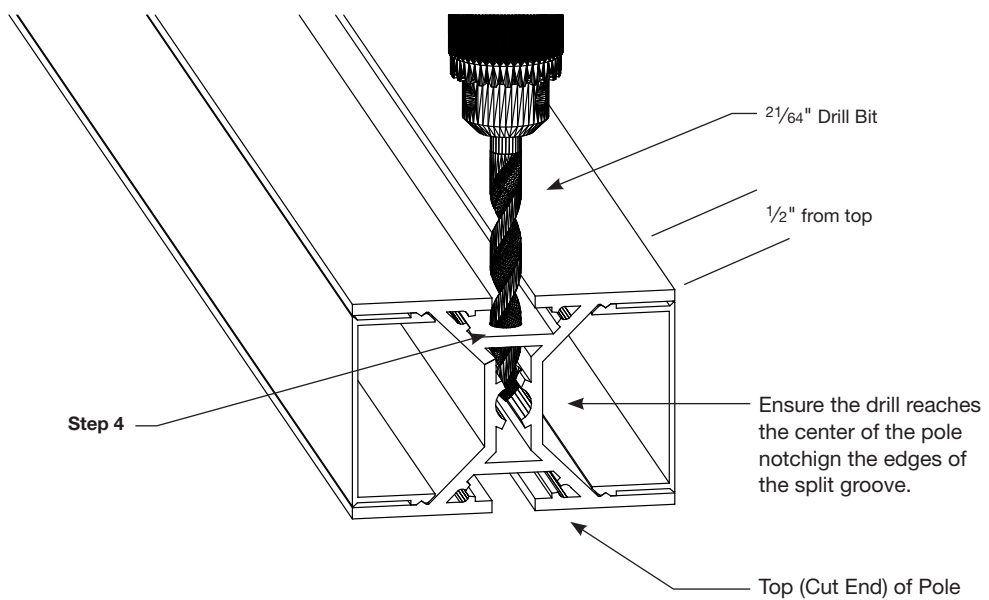
9. Orient the pole, keeping the bottom as close to 1- $\frac{1}{2}$ " above the floor as possible. Holding the nut-plate weld nut (A) with a $\frac{5}{8}$ " wrench, tighten the jam nut (F) into the nut-plate weld nut (A), ensuring that the desired pole orientation is maintained.
10. At the top of the pole, spin the jam nut (F) downwards, and tighten it against the washer (G) at the top of the pole. (Remove tape from washer, if used in Step 4.)
11. Remove the steel leaf spring from the back of the M8 flex nut (H) with pliers. Insert the nut into the slot at the top of the pole aligned with the predrilled 2 $\frac{1}{64}$ " hole in the pole. Insert the M8 x 25 mm set screw (I) and, while maintaining correct orientation of the pole, tighten the screw into the ceiling stem to prevent rotation of the pole.

**Example Power Pole spacing dimensions
when used with Pole Mounted Screens
or Storage.**

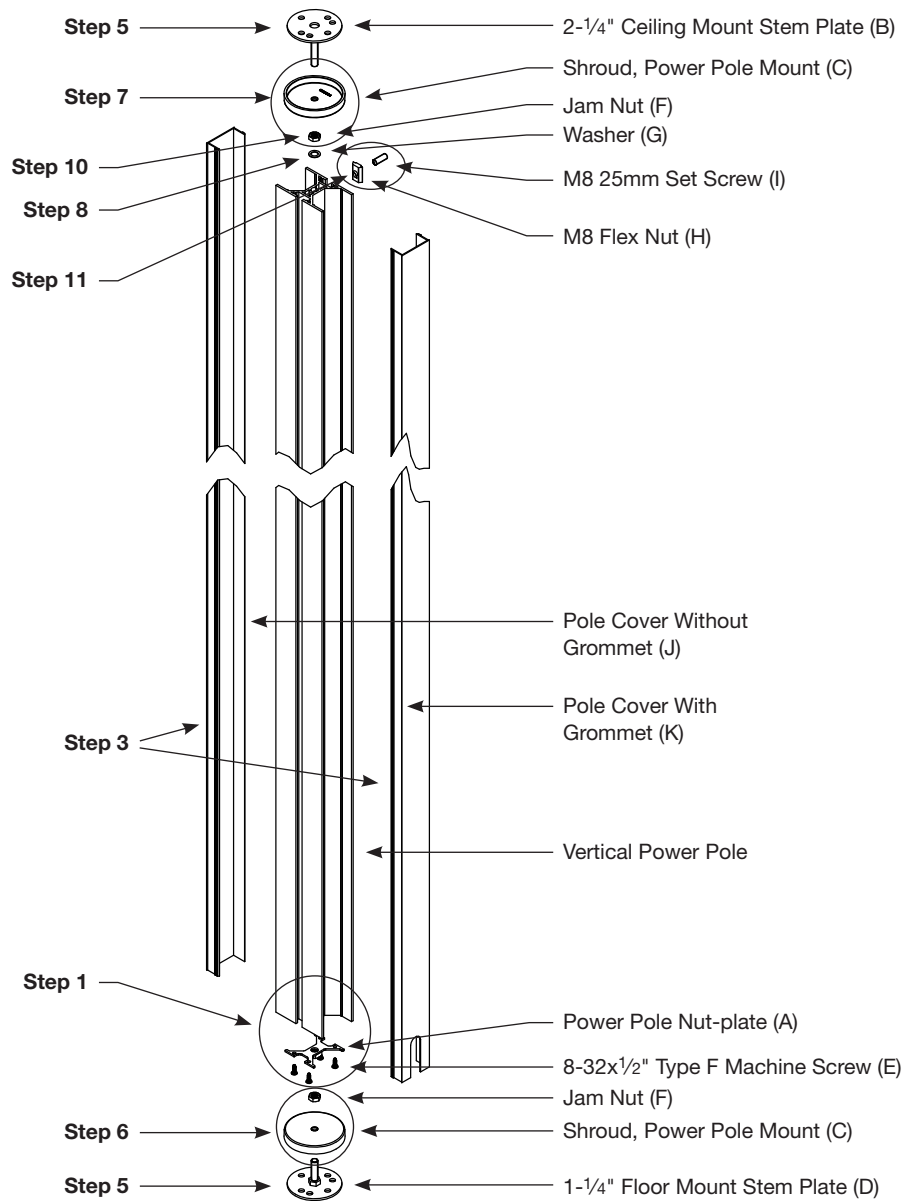
***60"W screen example shown (Step 2)**



Drilling the top of the pole



**Exploded Pole Assembly,
with Covers without Outlet
Openings**



Pole with Covers, with Field Located Grommet

Pattern Numbers Represented:

Pole with covers, grommet in one cover, IPSCNG144_

Parts List:

Power Pole Nut-plate (A)
2-1/4" Ceiling Mount Stem Plate (B)
Shroud, Power Pole Mount (C)
1-1/4" Floor Mount Stem Plate (D)
8-32 x 1 1/2" Type F Machine Screw (E)
Jam Nut (F)
Washer (G)
M8 Flex Nut (H)
M8 x 25mm Set Screw (I)
Pole Cover Without Grommet (J)
Pole Cover With Grommet (K)
Vertical Power Pole

Also required: Hardware items, NOT INCLUDED, to make attachments to the building (see Step 5).

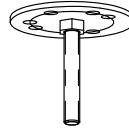
Tools Needed:

Ladder
Tape Measure
Miter Saw with Aluminum-cutting Blade
Eye & Hearing Protection
Laser Level with Vertical Planes (or a Plumb Bob and Bubble Level)
Electric Drill with 21/64" Drill Bit
Power Driver with Phillips #2 Bit
9/16" Open-end Wrench
5/8" Open-end Wrench
4mm Allen Wrench
Long Nose Pliers
For One-person Installations: Tape (i.e. Masking Tape or Duct Tape)

(A) 3AB5118



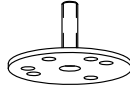
(B) 3AB5063



(C) 3AB5064*



(D) 3AB5083



(E) 3AB5081



(F) 3AB5217



(G) 3AB5306



(H) 3AA4020



(I) 3AB5305



(J) 3AB5305



(J) 3AB510101*



(K) 3AB510106*



Pole with Covers, No Outlet Openings, and/or Grommet Located at Bottom of One Cover

Steps:

1. Install nut-plate (A) to the bottom of the pole using (4) 8-32x $\frac{1}{2}$ " type F machine screws (E).
2. Determine the vertical power pole location, ensuring that the 2- $\frac{1}{4}$ " ceiling mount stem plate (B) and 1- $\frac{1}{4}$ " floor mount stem plate (D) mounting locations are precisely aligned vertically, and mark on both ceiling and floor.

Note: For applications with Interpole storage or screens mounted between poles, the poles must be located module-width + 3" apart. For example, if using 60" screens, the two poles are to be mounted 63" apart on center.

Measure height from floor to ceiling at each mounting location. If height is 12' 3- $\frac{1}{4}$ " or less, continue with instructions below. For greater heights, refer to Instructions for Extension Pole.

3. Pressure fit the cover without grommet (J) onto pole and, using a miter saw with aluminum-cutting blade, cut to the pole and cover assembly to length, if necessary, as follows: Using a miter saw with aluminum-cutting blade, cut off the TOP of the power pole assembly so that the length is 3- $\frac{1}{4}$ " less than distance measured from floor to ceiling.

Before cutting, ensure alignment of the bottom of the cover (J) with the bottom of the pole.

Note: Always cut off the top end of covers and poles; never cut the bottom end.

4. Drill a 2 $\frac{1}{64}$ " (.328") hole $\frac{1}{2}$ " down from the top of the pole in the center of the nut slot. Ensure the hole goes all the way to the center of the pole, notching the edges of the split groove at the pole center. This hole will be for the anti-rotation flex nut and set screw (H & I) used in Step 11.

5. Refer to the markings from Step 2 and attach the mounting plates to ceiling and floor using appropriate fasteners NOT provided by Knoll. Consult an architectural engineering service to ensure fasteners are appropriate for the application.

Note: Plates contain both a three-bolt and four-bolt hole pattern, each on a 2" bolt circle. All holes are .320" diameter.

6. Spin a shroud (C) downwards on the stem of the floor mount plate (D), followed by a jam nut (F). Position the top of the jam nut $\frac{41}{64}$ " above the top of the shroud.
7. Spin another shroud (C) upwards on the stem of the ceiling mount plate (B), followed by a jam nut (F). Note: for one-person installations you may tape the washer (G) in place beneath the jam nut.
8. Slide the washer (G) onto the ceiling stem (B), followed by the top of the power pole, ensuring that the stem is inserted into the center groove in the power pole, and NOT one of the other cavities. Swing the bottom of the pole atop the floor stem (D) and spin the pole clockwise (looking downward),

allowing the nut-plate (A) to thread onto the floor stem. Thread the pole down until the bottom of the pole itself is 1- $\frac{1}{2}$ " above the floor (1" above the shroud).

9. Orient the pole, keeping the bottom as close to 1- $\frac{1}{2}$ " above the floor as possible. Holding the nut-plate weld nut (A) with a $\frac{5}{8}$ " wrench, tighten the jam nut (F) into the nut-plate weld nut (A), ensuring that the desired pole orientation is maintained.
10. At the top of the pole, spin the jam nut (F) downwards, and tighten it against the washer (G) at the top of the pole. (Remove tape from washer, if used in Step 4.)
11. Remove the steel leaf spring from the back of the M8 flex nut (H) with pliers. Insert the nut into the slot at the top of the pole aligned with the predrilled 2 $\frac{1}{64}$ " hole in the pole. Insert the M8 x 25 mm set screw (I) and, while maintaining correct orientation of the pole, tighten the screw into the ceiling stem to prevent rotation of the pole.

TO MODIFY AND ATTACH THE GROMMETED COVER (K):

Note: Always install adjacent furniture so grommet location can be established.

12. Determine the height at which the bottom of the grommet in the cover (K) is to be located on the pole. Measure from the bottom of the pole extrusion to the bottom of the grommet location. Take note of that measurement.

Steps continued on next page >

Pole with Covers, No Outlet Openings, and/or Grommet Located at Bottom of One Cover

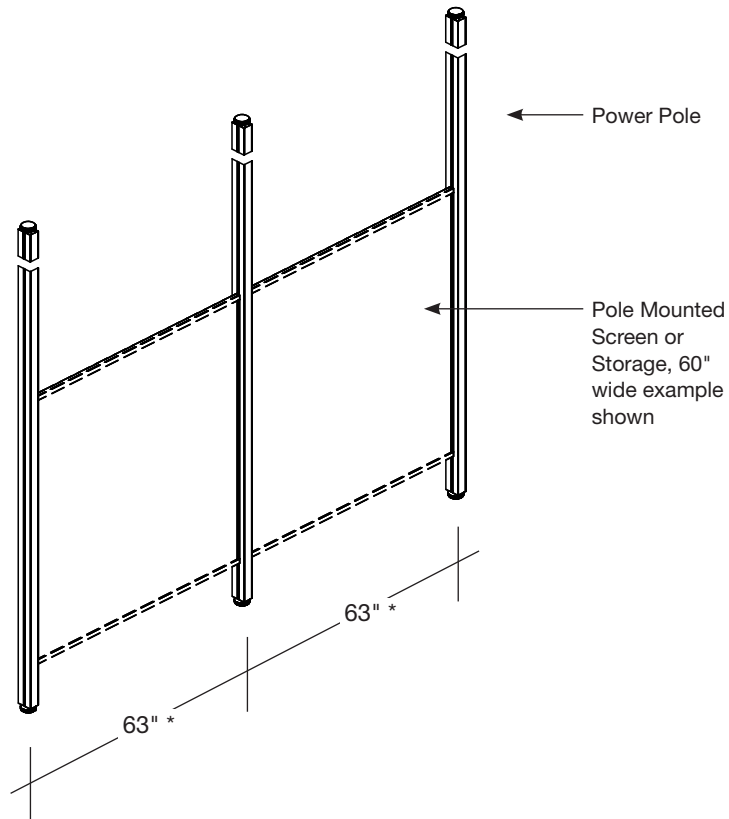
13. Measure the height from the bottom of the grommet location to the top of the pole. Take note of that measurement.
14. Using a miter saw with aluminum-cutting blade, cut the cover (K) to the length determined in Step 13, preserving the top section of the cover.
15. Using the miter saw, and cutting from the bottom portion of the reserved section, cut the reserved section to the length determined in Step 12, so that it will fit beneath the grommet and align with the bottom of the pole.

Note: For Step 15, the bottom portion of the cover is to be cut, so that a clean, factory edge remains to be placed beneath the grommated portion of the cover.

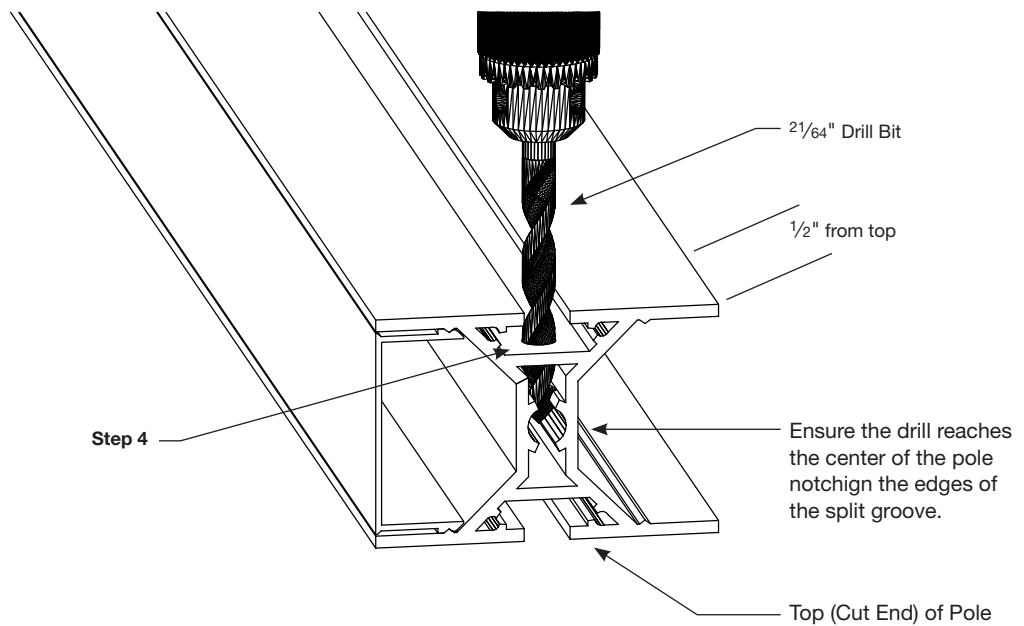
16. With the cut edge at the bottom, pressure fit the reserved section of the cover onto the bottom of the pole, ensuring the alignment of the bottom of the cover with the bottom of the pole.
17. Pressure fit the grommated section of the cover onto the top of the pole, so the bottom of the grommet is flush against the top of the lower section.

**Example Power Pole spacing dimensions
when used with Pole Mounted Screens
or Storage.**

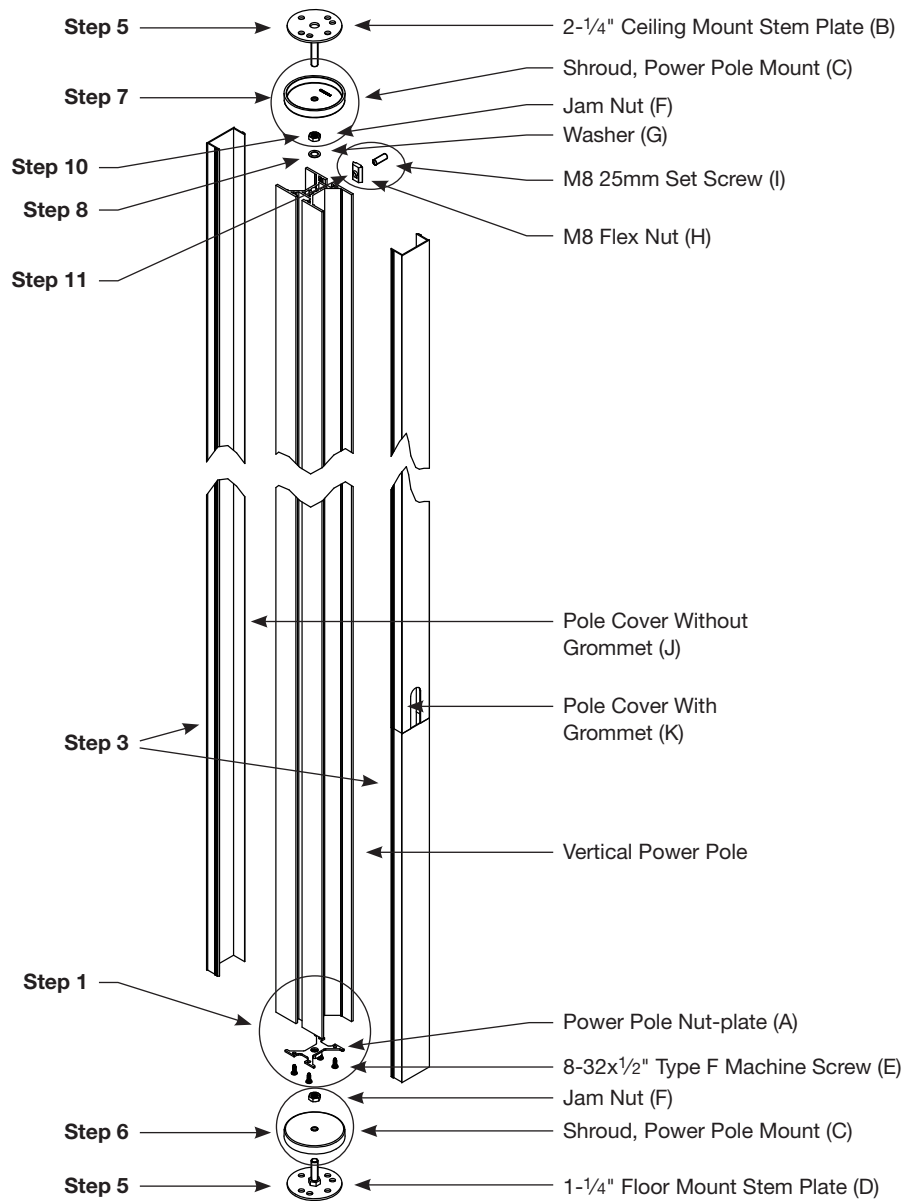
***60"W screen example shown (Step 2)**



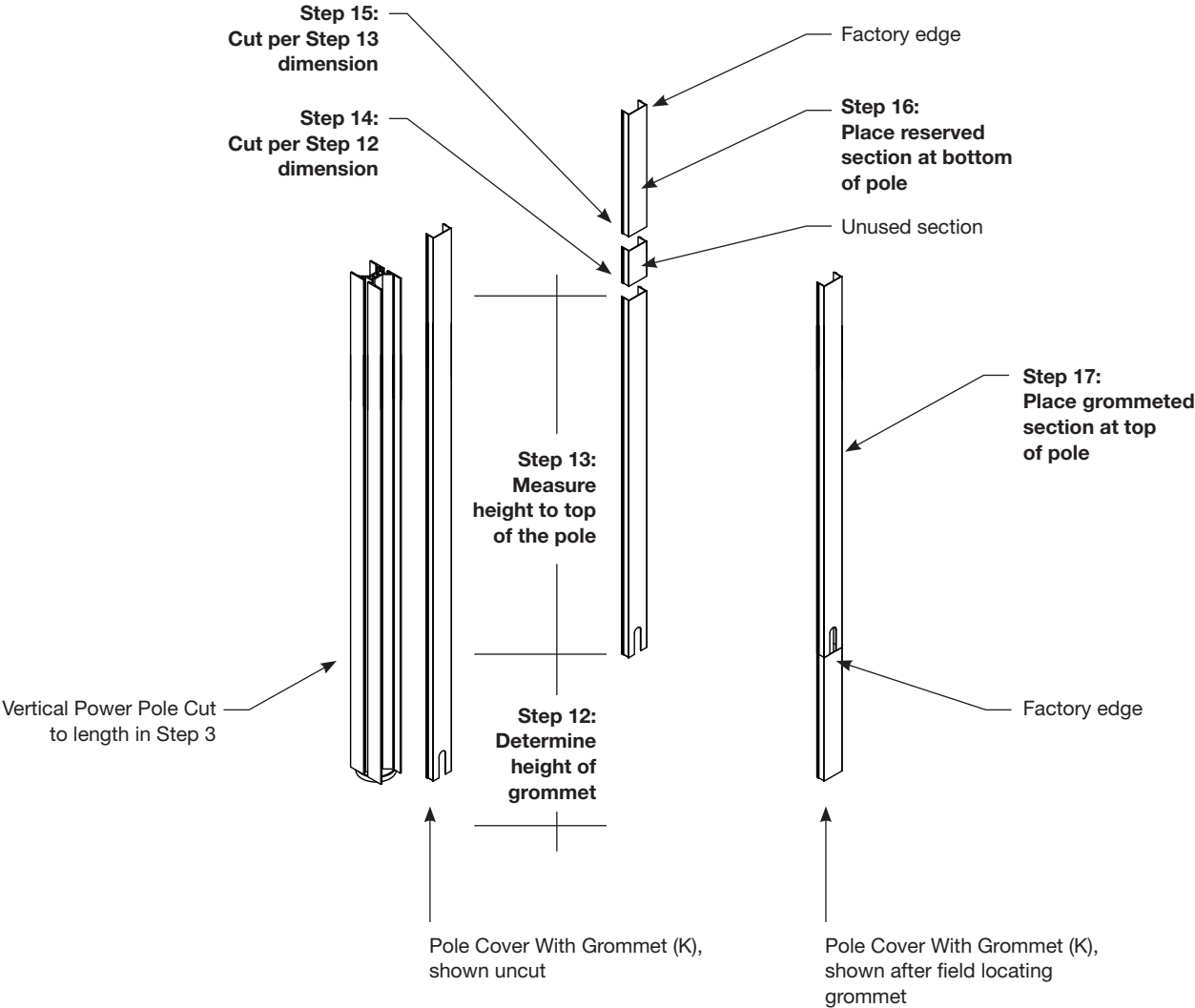
Drilling the top of the pole



**Exploded Pole Assembly,
with Covers with Field Located
Grommet**



Raising Grommet in Field Detail



Pole with Covers, with Outlet Openings

Pattern Numbers Represented:

Pole with covers, with outlet openings one side, IPSCN(H/L/M)144 _

Pole with covers, with outlet openings both sides, IPSC(HH/LL/MM)144_

Parts List:

Power Pole Nut-plate (A)

2-1/4" Ceiling Mount Stem Plate (B)

Shroud, Power Pole Mount (C)

1-1/4" Floor Mount Stem Plate (D)

8-32 x 1/2" Type F Machine Screw (E)

Jam Nut (F)

Washer (G)

M8 Flex Nut (H)

M8 x 25mm Set Screw (I)

Pole Cover Without Knockouts (J)

Pole Cover With Low Knockouts (K)

Pole Cover With Mid-Range Knockouts (L)

Pole Cover With High Knockouts (M)

Vertical Power Pole, One Side Drilled

Also required: Hardware items, NOT INCLUDED, to make attachments to the building (see Step 5).

Tools Needed:

Ladder

Tape Measure

Miter Saw with Aluminum-cutting Blade

Eye & Hearing Protection

Laser Level with Vertical Planes (or a Plumb Bob and Bubble Level)

Electric Drill with 21/64" and #19 (.166") Drill Bits

Power Driver with Phillips #2 Bit

9/16" Open-end Wrench

5/8" Open-end Wrench

4mm Allen Wrench

Long Nose Pliers

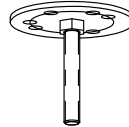
For One-person Installations: Tape (i.e.

Masking Tape or Duct Tape)

(A) 3AB5118



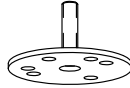
(B) 3AB5063



(C) 3AB5064*



(D) 3AB5083



(E) 3AB5081



(F) 3AB5217



(G) 3AB5306



(H) 3AA4020



(I) 3AB5305



(J) 3AB5305



(K) 3AB510101*



(L) 3AB510103*



(M) 3AB510104*



(N) 3AB510106*



Pole with Covers, with Outlet Openings

Steps:

1. Power poles intended to receive receptacles have sixteen holes through one wall of the pole channel. The three standard receptacle configurations (low, mid, and high-range) utilize the holes in groups of four; the bottom group is used in all three configurations.

For double-sided receptacles, the power pole must be prepared in the field: Lay the pole on the ground horizontally and drill straight through the appropriate holes with a #19 (.166") drill bit, creating corresponding holes in the opposite wall of the pole channel.

2. Install nut-plate (A) to the bottom of the pole using (4) 8-32x 1/2" type F machine screws (E).
3. Determine the vertical power pole location, ensuring that the 2-1/4" ceiling mount stem plate (B) and 1-1/4" floor mount stem plate (D) mounting locations are precisely aligned vertically, and mark on both ceiling and floor.

Note: For applications with Interpole storage or screens mounted between poles, the poles must be located module-width + 3" apart. For example, if using 60" screens, the two poles are to be mounted 63" apart on center.

Measure height from floor to ceiling at each mounting location. If height is 12' 3-1/4" or less, continue with instructions below. For greater heights, refer to Instructions for Extension Pole.

4. Pressure fit two pole covers (J, K, L, M) onto pole and, using a miter saw with aluminum-cutting blade, cut the pole and cover assembly to length, if necessary, as follows: Using a miter

saw with aluminum-cutting blade, cut off the TOP of the power pole assembly so that the length is 3-1/4" less than distance measured from floor to ceiling.

Before cutting, ensure alignment of the bottom of the covers (J, K, L, M) with the bottom of the pole.

Note: Always cut off the top end of covers and poles; never cut the bottom end.

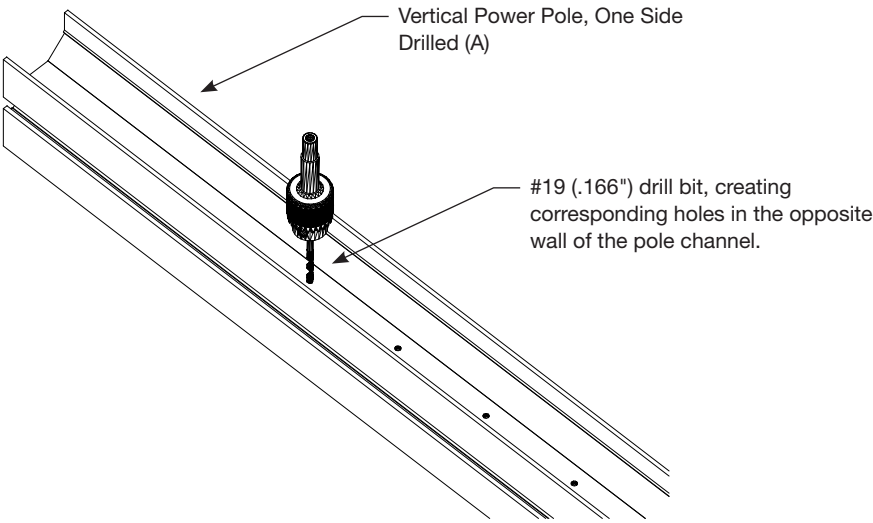
5. Drill a 21/64" (.328") hole 1/2" down from the top of the pole in the center of the nut slot. Ensure the hole goes all the way to the center of the pole, notching the edges of the split groove at the pole center. This hole will be for the anti-rotation flex nut and set screw (H & I) used in Step 12.
6. Refer to the markings from Step 3 and attach the mounting plates to ceiling and floor using appropriate fasteners NOT provided by Knoll. Consult an architectural engineering service to ensure fasteners are appropriate for the application.

Note: Plates contain both a three-bolt and four-bolt hole pattern, each on a 2" bolt circle. All holes are .320" diameter.

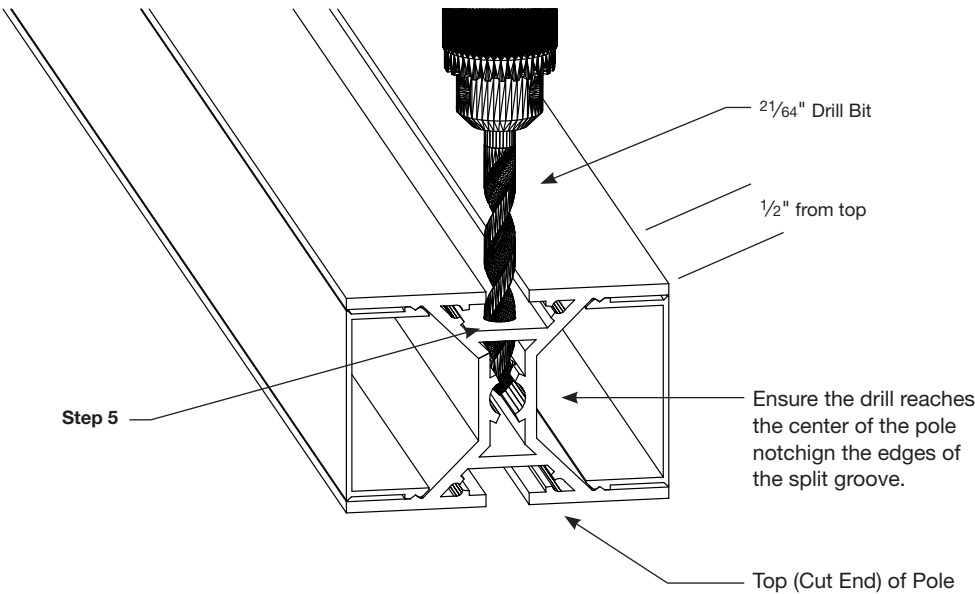
7. Spin a shroud (C) downwards on the stem of the floor mount plate (D), followed by a jam nut (F). Position the top of the jam nut 41/64" above the top of the shroud.
8. Spin another shroud (C) upwards on the stem of the ceiling mount plate (B), followed by a jam nut (F). Note: for one-person installations you may tape the washer (G) in place beneath the jam nut.

9. Slide the washer (H) onto the ceiling stem (B), followed by the top of the power pole, ensuring that the stem is inserted into the center groove in the power pole, and NOT one of the other cavities. Swing the bottom of the pole atop the floor stem (D) and spin the pole clockwise (looking downward), allowing the nut-plate (A) to thread onto the floor stem. Thread the pole down until the bottom of the pole itself is 1-1/2" above the floor (1" above the shroud).
10. Orient the pole, keeping the bottom as close to 1- 1/2" above the floor as possible. Holding the nut-plate weld nut (A) with a 5/8" wrench, tighten the jam nut (F) into the nut-plate weld nut (A), ensuring that the desired pole orientation is maintained.
11. At the top of the pole, spin the jam nut (F) downwards, and tighten it against the washer (G) at the top of the pole. (Remove tape from washer, if used in Step 4.)
12. Remove the steel leaf spring from the back of the M8 flex nut (H) with pliers. Insert the nut into the slot at the top of the pole aligned with the predrilled 21/64" hole in the pole. Insert the M8 x 25 mm set screw (I) and, while maintaining correct orientation of the pole, tighten the screw into the ceiling stem to prevent rotation of the pole
13. Remove the pole covers (J, K, L, M) as required for electrical component installation (refer to electrical installation), then replace the covers onto the poles. Ensure alignment of the bottom of the covers (J, K, L, M) with the bottom of the pole.

**Drilling Power Pole for Double Sided
Electrical Receptacles (Step 1)**

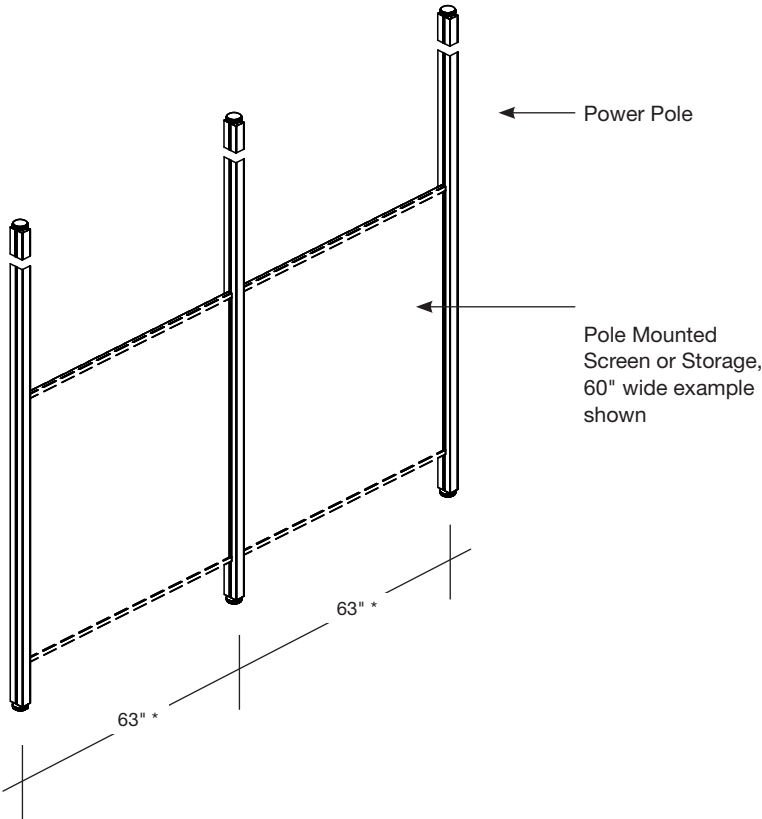


Drilling the top of the pole

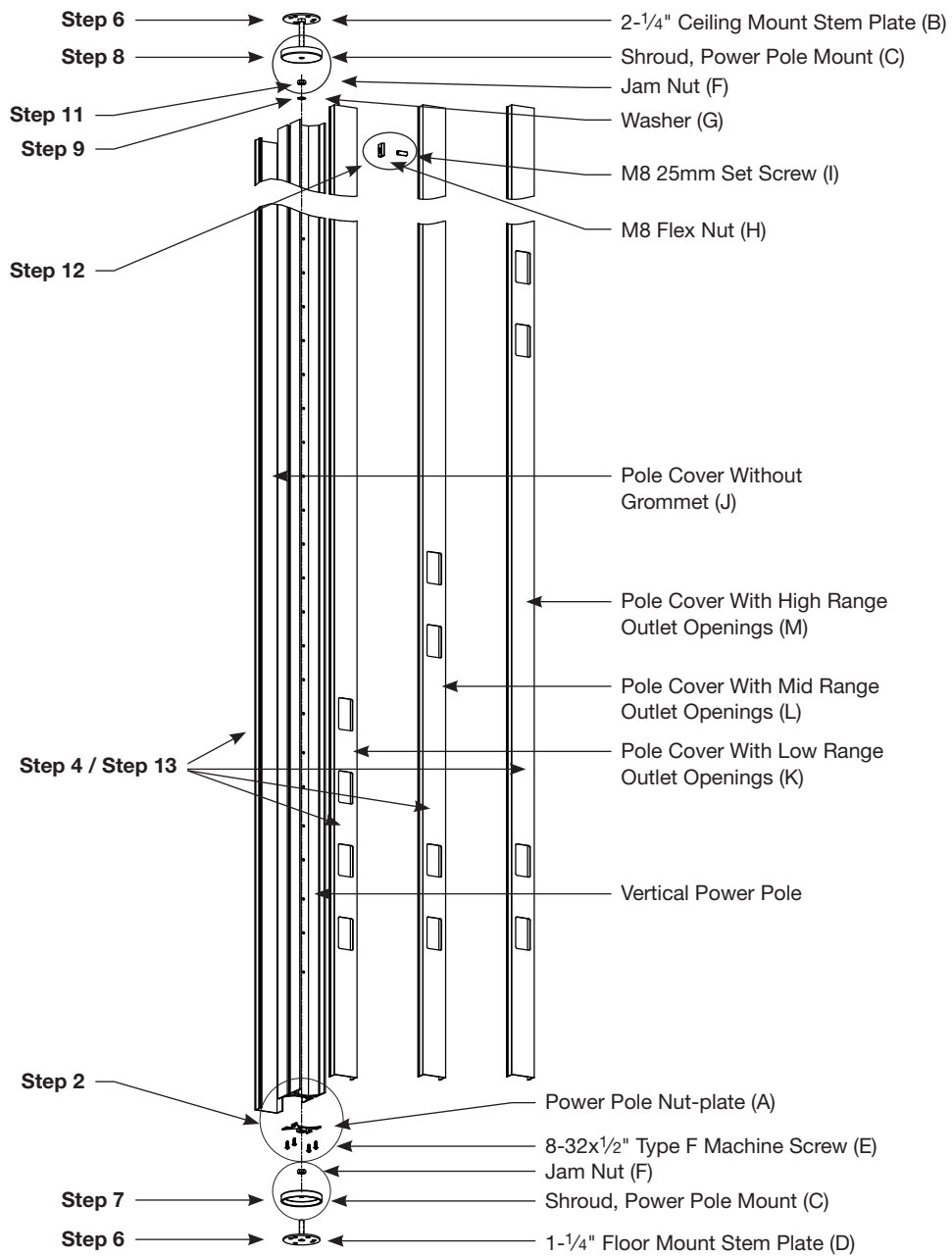


**Example Power Pole spacing dimensions
when used with Pole Mounted Screens
or Storage.**

***60"W screen example shown (Step 3)**



**Exploded Pole Assembly,
with Covers with Outlet
Openings**



Pole with Accessory Outlet Covers

Pattern Numbers Represented:

IPOC6_
IPOC12_

Parts List:

Outlet Cover, One Opening (A)
Outlet Cover, Two Opening (B)
Pole Cover Without Grommet (C)

Tools Needed:

Ladder
Tape Measure
Miter Saw with Aluminum-cutting Blade
Eye & Hearing Protection

Note: Additional tools are needed for installation of pole assembly (see pole installation instructions).

(A) IPOC6*



(B) IPOC12*



(C) 3AB5064*



Steps:

1. Determine location of poles and install as per pole without covers instructions, Steps 1 through 11.

TO MODIFY AND ATTACH THE COVER:

Note: Always install adjacent furniture so opening location can be established.

2. Temporarily hold the outlet cover (A/B) against the pole, at the desired height. Measure from the bottom of the cover (A/B) to the bottom of the pole extrusion. Take note of that measurement.
3. Measure from the top of the outlet cover (A/B) to the top of the pole extrusion. Take note of that measurement.
4. Using the miter saw with aluminum-cutting blade, and cutting from the top portion of the cover (C), cut a section

to the length determined in Step 2, so that it will fit beneath the outlet cover (A/B) and align with the bottom of the pole.

5. Using the miter saw, and cutting from the bottom portion of the cover, cut a section of cover to the length determined in Step 3, so that it will fit above the outlet cover (A/B) and align with the top of the pole.

Note: For Step 6, the bottom portion of the cover is to be cut, so that a clean, factory edge remains to be placed above the outlet cover.

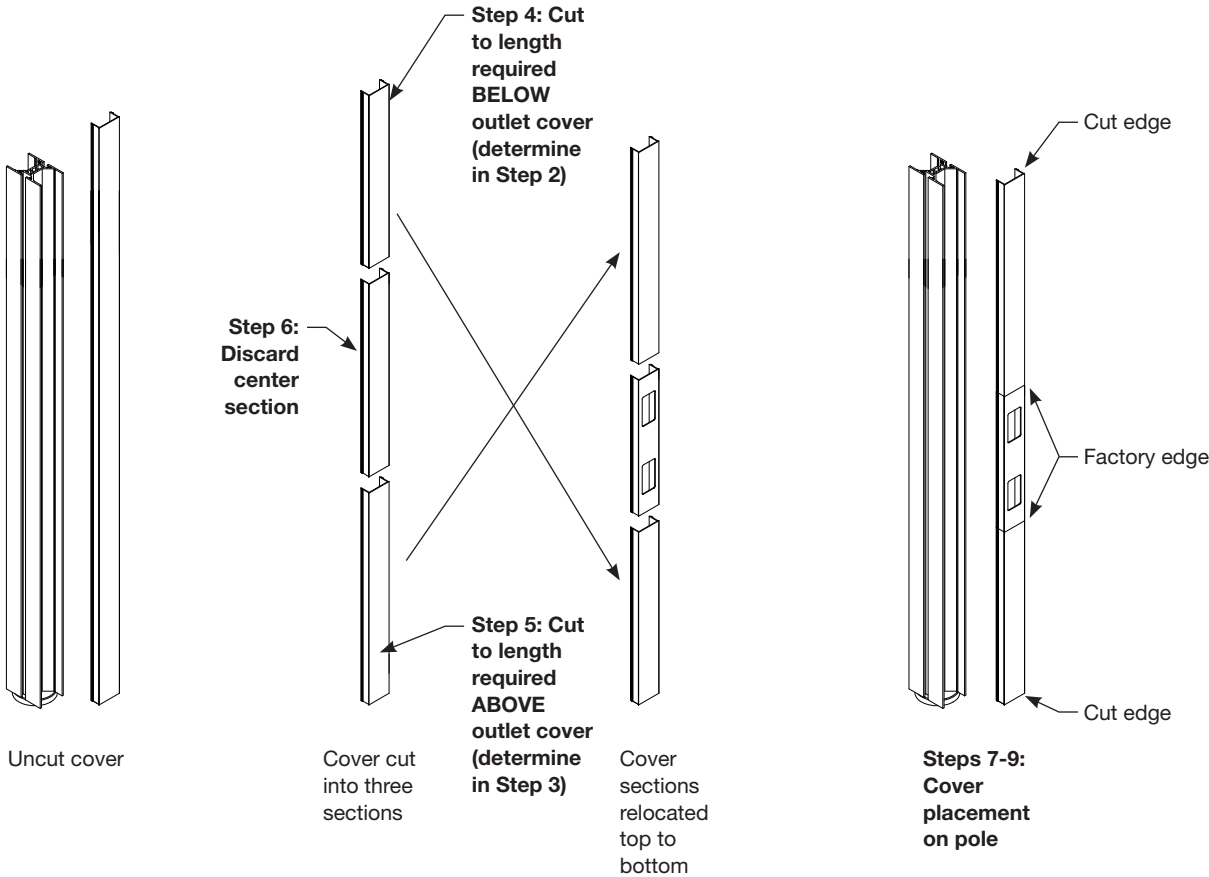
6. Discard the unneeded, center section of the cover.
7. With the cut edge at the bottom, pressure fit the section cut from the top of the cover onto the bottom of the pole, ensuring the alignment of the bottom of the cover with the bottom of the pole.

8. Pressure fit the outlet cover (A/B) onto the pole, so the bottom of the cover is flush against the top of the lower section.

9. With the cut edge at the top, pressure fit the section cut from the bottom of the cover onto the top of the pole, ensuring the alignment of the bottom of the section with the top of the outlet cover.

10. Remove the pole cover sections, as required, for data component installation, then replace the covers onto pole and ensure cover alignment.

**Cutting Pole Cover for Use with
Accessory Outlet Covers**



Extension Pole with Covers

Pattern Numbers Represented:

Extension Pole with Covers, IPESCNN47_
Extension Pole Extra Hardware Kit, IPEX

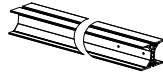
Parts List:

Extension Pole (A)
Extension Pole Cover (B)
Extension Pole Splice Plate(C)
10-24 x3/8" Type F Machine Screw (D)

Tools Needed:

Tape Measure
Miter Saw with Aluminum-cutting Blade
Eye & Hearing Protection
Electric Drill with .166 #19 Drill Bit
Power Driver with #2 Phillips Bit
Marker Pen

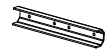
(A) 3AB510005



(B) 3AB510105*



(C) 3AB5074



(D) 3AB5079



Steps:

Note: If, after measuring the height from floor to ceiling at the pole mounting location, height is more than 12' 3-1/4", follow the instructions below to achieve the correct pole height before returning to the pole installation instructions.

Note: For applications where the floor to ceiling height is between 12' 3 1/4" and 12' 9 1/4", both the 12' pole and the 47" extension must be cut. The minimum length of extension pole is 6", this way the splice screws do not interfere with the stem of the ceiling mount.

1. Position an extension pole splice plate (C) at the bottom of the extension pole (A), and attach with (2) 10-24 x 3/8" type F machine screws (D). Repeat on the other side of the extension pole (A).
2. Join the extension pole assembly with the top of the pole needing additional length, positioning the splice plates in the channels of the pole to be extended.
3. Mark the hole locations through the splice plate(C) on one side of the pole, and set pole extension assembly aside.

For reference, holes should be marked 1-1/8" from the top of the pole, and spaced 3" apart, on center.

4. Drill a .166" #19 hole through each marked location. Ensure the hole goes all the way through to the other side of the pole.
5. Reposition the extension pole assembly at the top of the pole, and attach each splice plate (C) with (2) 10-24 x 3/8" type F machine screws (D).
6. Pressure fit both extension pole covers (B) onto the extension pole assembly and, using a miter saw with aluminum-cutting blade, cut the extended pole and cover assembly to length, if necessary, as follows: Using a miter saw with aluminum-cutting blade, cut off the TOP of the extended pole assembly so that the length is 3-1/4" less than distance measured from floor to ceiling. Reserve the excess portion of the extension pole and covers.

Before cutting, ensure alignment of the bottom of the covers (B) with the bottom of the extension pole (A).

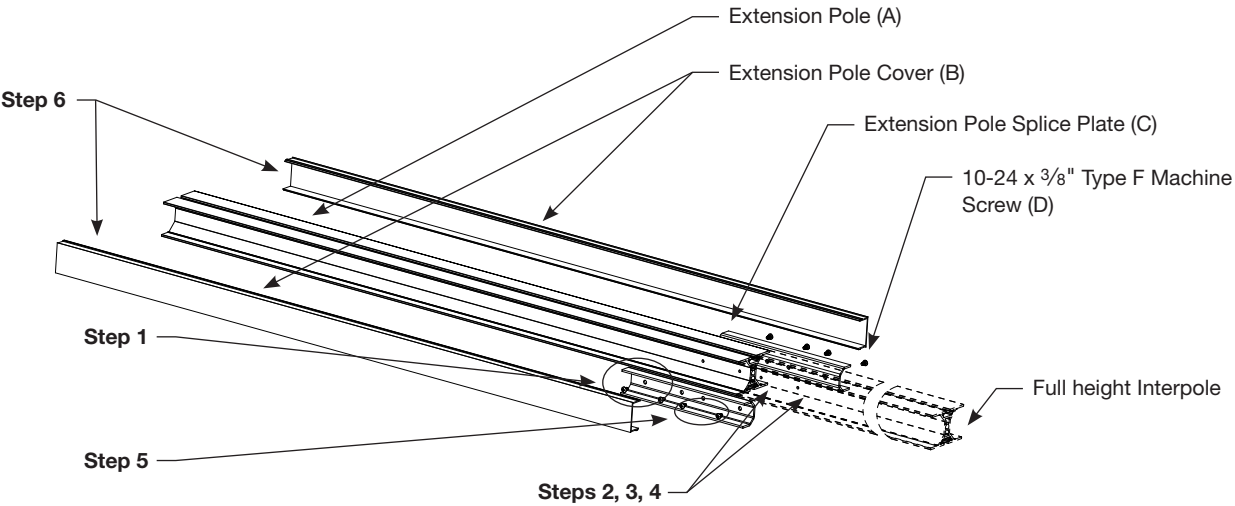
Note: Always cut off the top end of extension covers and poles; never cut the bottom end.

7. Return to the pole installation instructions and continue with the steps, completing the pole installation.

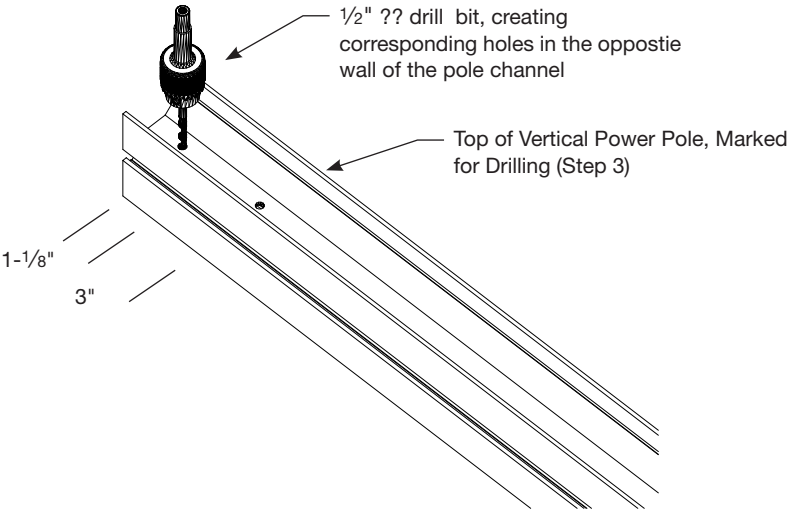
Note: The excess portion of the extension pole may be cut again, and utilized on top of another pole with the use of the "Extension Pole Extra Hardware Kit". The kit includes (2) extension pole splice plates (C) and (8) 10-24 x 3/8" type F machine screws (D).

Additional holes will need to be marked and drilled in the field to attach the splice plates to both the pole and the pole extension. Splice plates should be centered over the pole/extension pole joint. Again, holes should be marked 1-1/8" from the end of the poles, and spaced 3" apart, on center.

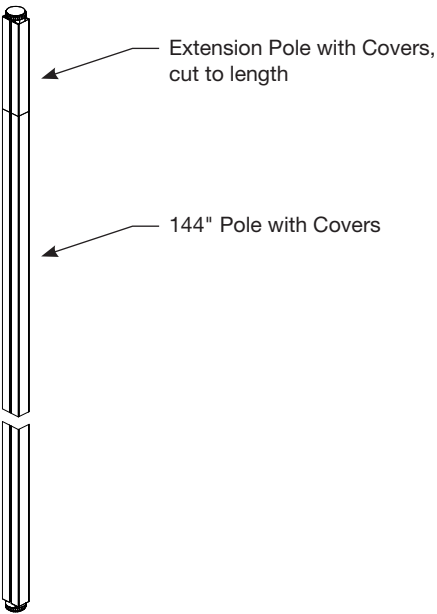
Exploded Pole Assembly Detail



**Drilling Top of 144" Power Pole
for Extension Pole Splice Plate
(Step 4)**



**Assembled Interpole with
Extension Pole with Covers**



Ceiling Tile Trim

Pattern Numbers Represented:

Ceiling Tile Trim, IPCT

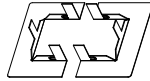
Parts List:

Power Pole Ceiling Tile Trim (A)

Tools Needed:

Ladder
Tape Measure
Cardboard (non-corrugated)
Pencil
Utility Knife
48" (min) Steel Rule

(A) 3AB5095* Note: two shown



Steps:

Note: Ceiling tiles in pole locations should be removed prior to installation of the Interpole, and reserved for replacement.

Note: An adjacent ceiling tile will also need to be removed for adequate access to the pole ceiling hardware.

Note: Two installers are required for installation.

1. Create a cardboard template for the Interpole cutout. The rectangular template should be exactly 3.5" (89mm) x 2.42" (61mm). See template drawing included below.
2. Determine location of pole and install pole (temporarily) as per "Pole with Covers" instructions. Ensure the final desired pole orientation is achieved.

Note: "Pole with Covers" Steps 10 & 11 may be skipped at this point.
3. Measure from the each pole face to the L-angles of the opposing suspended ceiling grid members. Deduct ¼" from the dimensions.
4. Place the removed ceiling tile face up on a flat hard surface. Place the template on the tile so that the distances from the edges of the

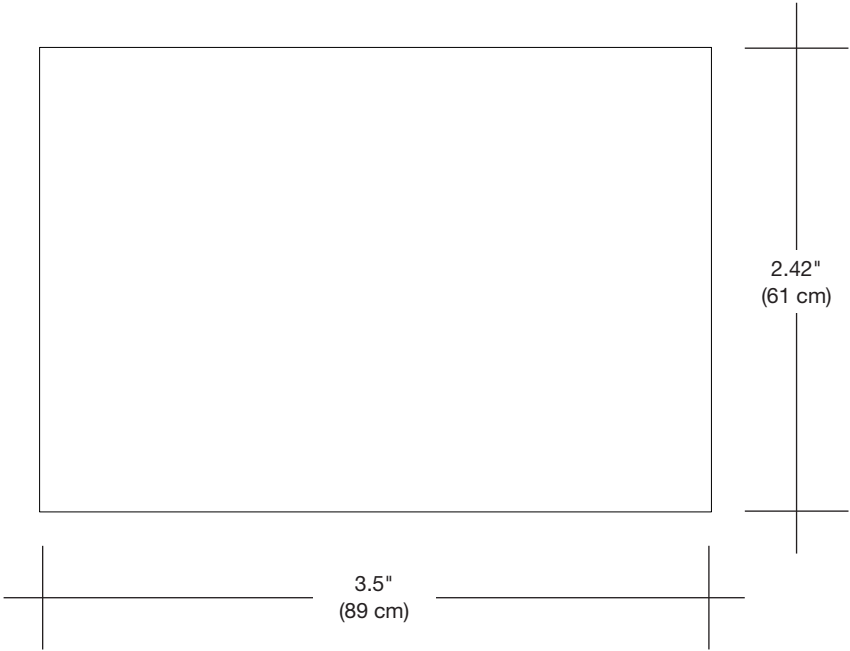
template to the edges of the tile match the distances calculated in Step 3.

5. Draw four pencil lines around the edges of the template on the face of the ceiling tile.
6. With steady pressure, pull a utility knife along the steel rule to score the tile along the four line.
7. Continue making passes with the utility knife until you have completely cut through the ceiling tile at all scored lines. Pop out the template sized piece from the ceiling tile.
8. Rub your hand lightly along the cut edges to remove loose tile particles.
9. Remove the pole from its temporarily installed position, leaving the floor and ceiling mounting stem plates in place with their corresponding jam nuts and lower shroud.
10. Carefully insert the cut tile back into the suspended ceiling.
11. One installer will now hold the ceiling tile high around the ceiling mount stem plate in position above the tile opening.
12. A second installer will replace the pole onto the stems (be sure to include the

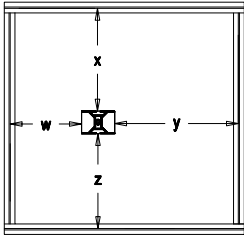
ceiling stem washer) and rotate the pole back into the correct orientation.

13. The installer at the ceiling will lower the tile onto the pole and carefully slide the tile down the pole until it is fully seated back in the ceiling grid.
14. Tighten the attachments at the ceiling, and complete the "Pole with Covers" installation including Steps 10 & 11.
15. Replace the adjacent removed ceiling tile.
16. With the tabs oriented upward, insert both of the power pole ceiling tile trim (A) between the pole and the cut ceiling tile edges. When cut correctly, the friction of the pole and the ceiling tiles will hold the power pole ceiling tile trim (A) tightly in place.

Step 1: Ceiling Tile Trim Template
Scale 1:1

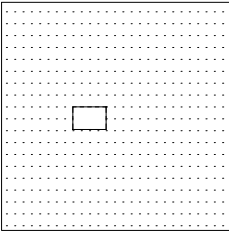


**Measure Field Dimensions and
Cut Ceiling Tile Using Template**



**Step 3: Measure from
each pole face**

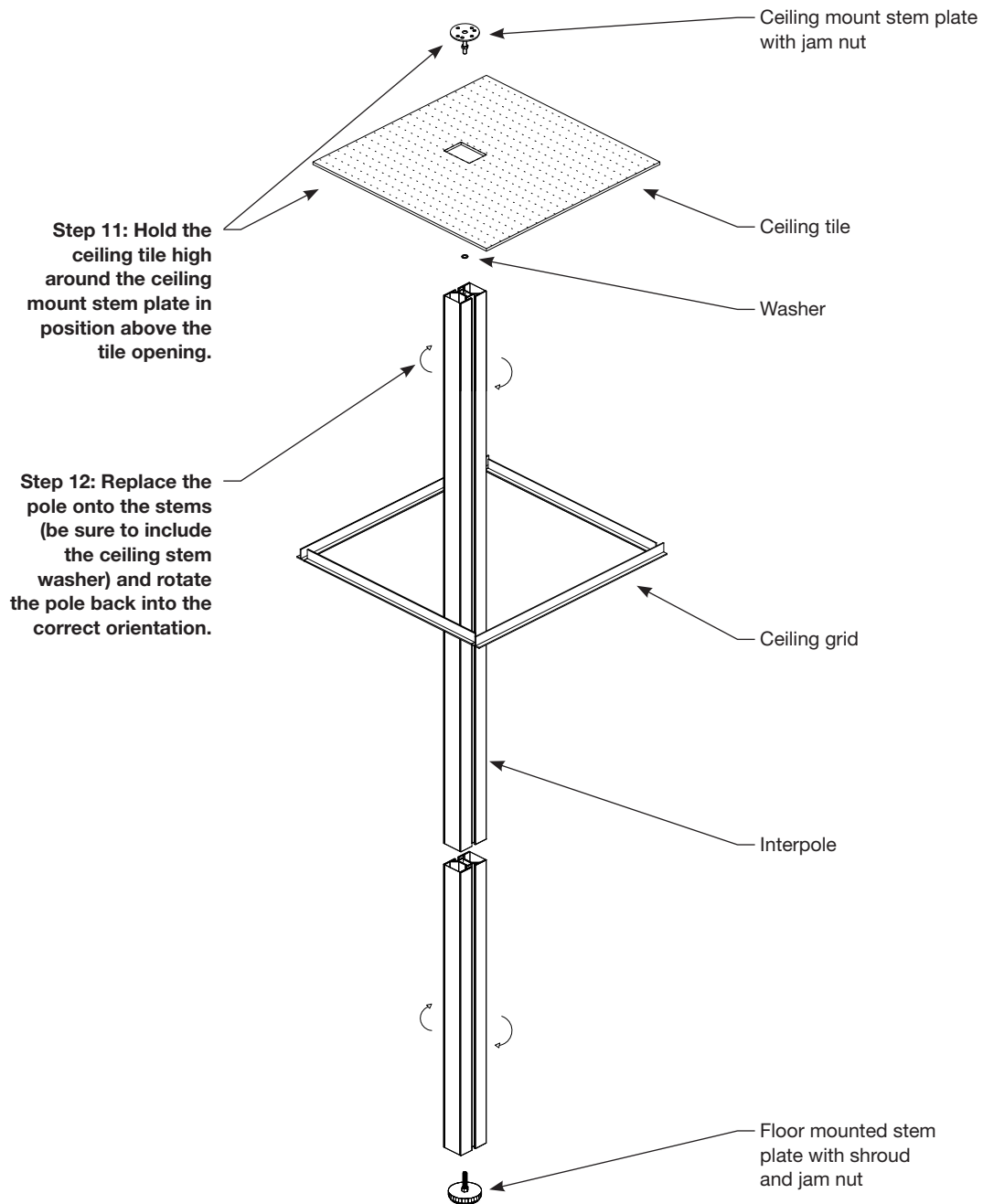
**Detail of Ceiling Trim Mounted
on Pole with Covers**



**Step 4-8: Use
template to cut tile**

Insert drawing from p. 190 of Antenna
Workspaces Price List

**Exploded Pole with Suspended
Ceiling Tile Assembly**



Cantilever Shelf

Pattern Numbers Represented:

Cantilever Shelf, IPCS1212_

Parts List:

Cantilever Shelf (A)

Mounting Bracket (B)

M6 Flex Nut (C)

1/4-20 x 5/8" Machine Screw (D)

M6 x 14mm Machine Screw (E)

Tools Needed:

Screw Driver #3 Phillips

4mm Allen Wrench

(A) 3AB5196*



(B) 3AB4178*



(C) 3AB4021



(D) 7189140



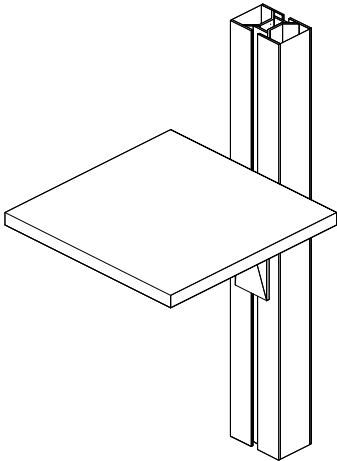
(E) 3AB4056



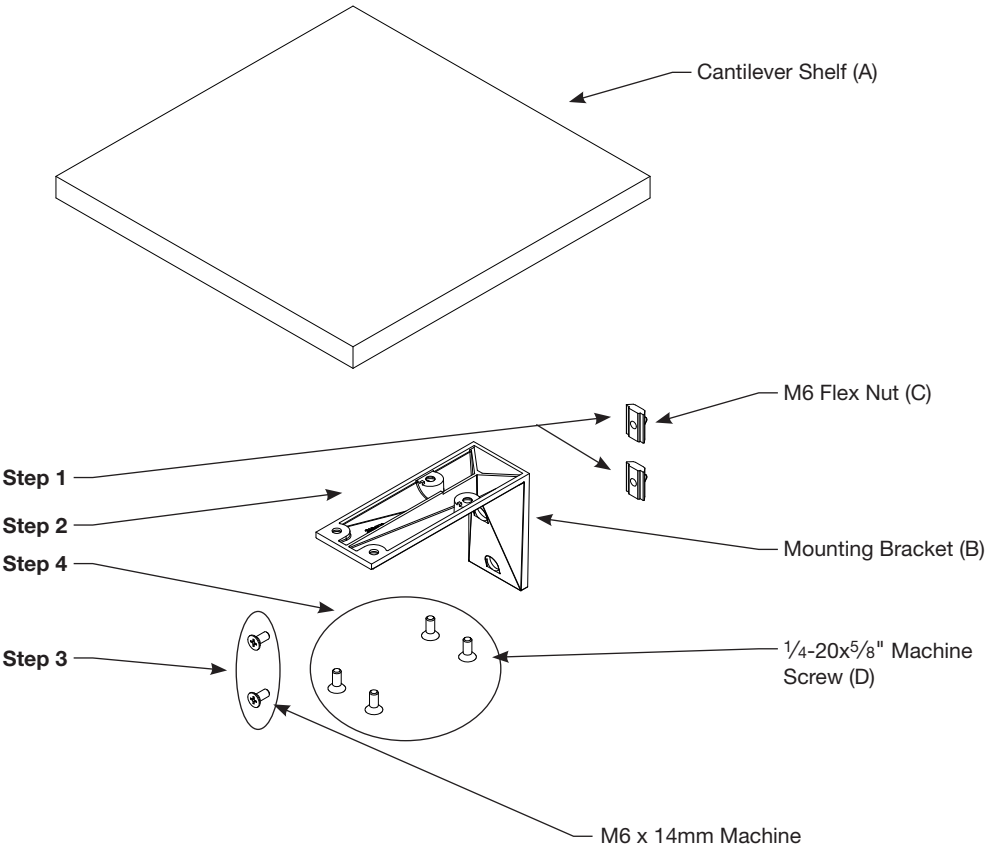
Steps:

1. Slide (2) M6 flex nuts (C) into the slot on the side of the pole where the cantilever shelf is to be mounted.
2. Place the mounting bracket (B) in front of the flex nuts (C), and adjust the nuts so they align with the bracket.
3. Secure the bracket (B) to the flex nuts (C) with (2) M6 x 14mm machine screws (E).
4. Mount the cantilever shelf (A) onto the mounting bracket (B), from below, with (4) 1/4-20 x 5/8" machine screws (D).

**Cantilever Shelf Mounted to Interpole,
Shown With Pole Covers**



Exploded Cantilever Shelf



Bag Hook & Coat Hook Accessories

Pattern Numbers Represented:

Bag Hook, IPBH
Coat Hook, IPCH

Parts List:

For Bag Hook:

Bag Hook (A)
Mounting Block (C)
M6 Flex Nut (D)
M6 x 30mm Flat Head Screw (E)
M8 x 10mm Set Screw (F)

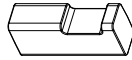
For Coat Hook:

Coat Hook (B)
Mounting Block (C)
M6 Flex Nut (D)
M6 x 30mm Flat Head Screw (E)
M8 x 8mm Set Screw (G)

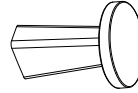
Tools Needed:

4mm Allen Wrench

(A) 3AB8028*



(B) 3AB8061*



(C) 3AB8060



(D) 3AB4021



(E) 3AB8106



(F) 3AB8102



(G) 3AB8103

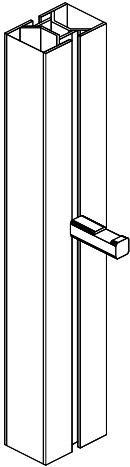


Steps:

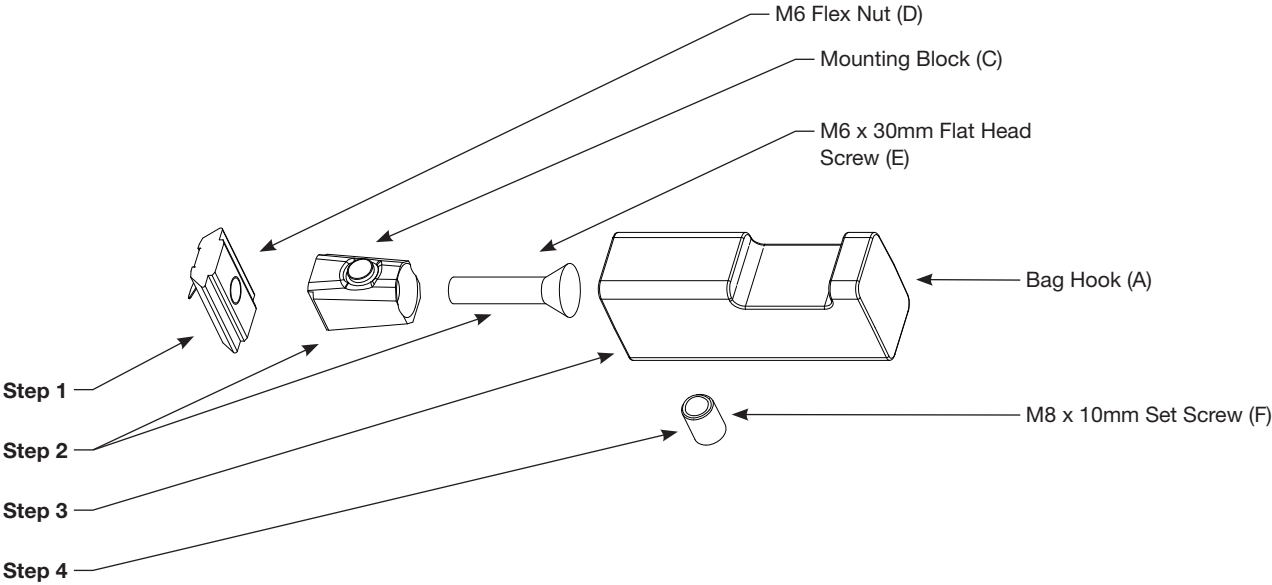
1. Slide (1) M6 flex nut (D) into the slot on the side of the pole where the hook is to be mounted.
2. Place the mounting block (C) in front of the flex nut (D), and secure the mounting block (C) with (1) M6 x 30mm flat head screw (E). Be sure the hole for the set screw is facing downward.
3. Slide the bag hook or coat hook (A/B) onto the mounting block (C). Be sure the hole for the set screw is facing downward.
4. For a bag hook: Secure the bag hook (A) to the mounting block (C) with a M8 x 10mm set screw (F).

For a coat hook: Secure the coat hook (B) to the mounting block (C) with a M8 x 8mm set screw (G).

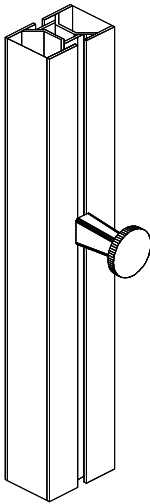
**Bag Hook Mounted to Interpole, Shown
With Pole Covers**



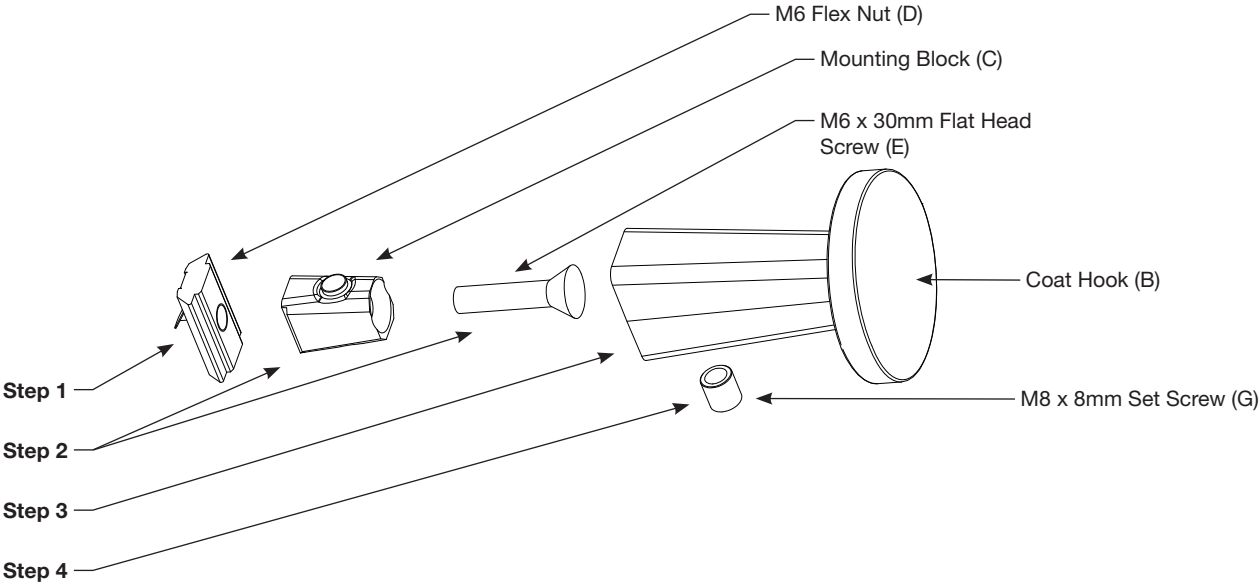
Exploded Bag Hook Assembly



**Coat Hook Mounted to Interpole,
Showm With Pole Covers**



Exploded Coat Hook Assembly



Accessory Cup

Pattern Numbers Represented:

Accessory Cup, ACTCUPIP

Parts List:

Cup Bracket (A)

Cup (B)

M6 Flex Nut (C)

M6 x 14mm Button Head Screw (D)

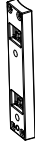
M6 x 10mm Button Head Screw (E)

Felt Pad (F)

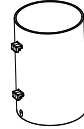
Tools Needed:

M4 Allen Wrench (ball-end)

(A) 3AB5114*



(B) 3AB5113*



(C) 3AB4021



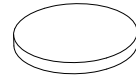
(D) 3AB5278



(E) 3AB5277



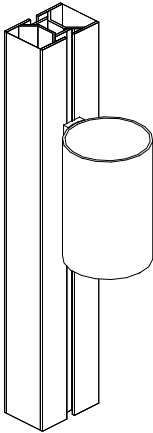
(F) 3AB5289v



Steps:

1. Slide (2) M6 flex nuts (C) into the slot on the side of the pole where the cup is to be mounted.
2. Place the cup bracket (A) in front of the flex nuts (C), and adjust the nuts so they align with the bracket.
3. Secure the bracket (A) to the flex nuts (C) with (2) M6 x 14mm button head screws (D).
4. Hang the cup (B) onto the tabs in the cup bracket (A) by pushing the cup toward the bracket, then pulling the cup downward to lock into place.
5. Secure the cup (B) to the bracket with a M6 x 10mm button head screw (E) inserted through the hole located under the cup.
6. Place the felt pad (F) into the bottom of the cup.

**Cup Accessory Mounted to Interpole,
Shown With Pole Covers**



Exploded Accessory Cup Assembly

