CONNECTION GUIDE

The following guide illustrates the recommended primary connection types to Polargy's PICS Global Ceiling Grid. Ceiling should not be loaded until fully installed. Threaded rod is not to be installed directly into threaded slot of grid.

3/8" STRUT NUT CONNECTION

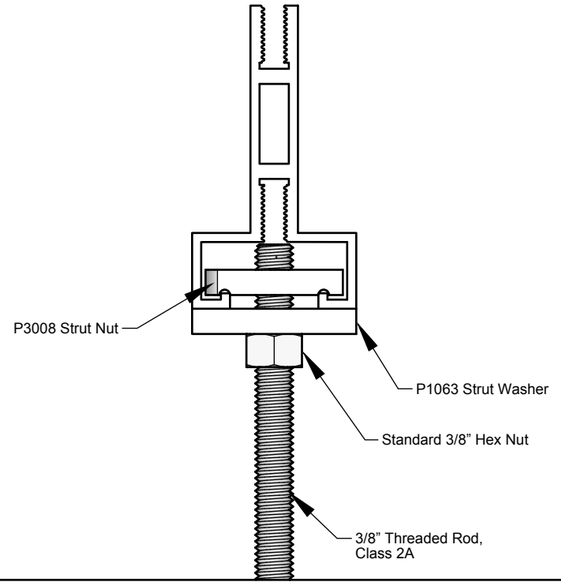
- Use Unistrut fittings P3008 & P1063, or equivalents.

- Attachment Hardware
  - One (1) P3008 3/8" strut nut
  - One (1) P1063 3/8" strut washer
  - One (1) standard 3/8" hex nut

- Torque nut to 19ft-lbs.

- Pass threaded rod through strut washer and connect to strut nut. Threaded rod should extend beyond strut nut leaving only a small gap between rod and extrusion.

Notes:
1. Torque not to exceed 25ft-lbs at the risk of stripping the strut nut. Appropriate care should be taken to not exceed this limit.
2. Only strut hardware to be used in strut channel.



1/2" STRUT NUT CONNECTION

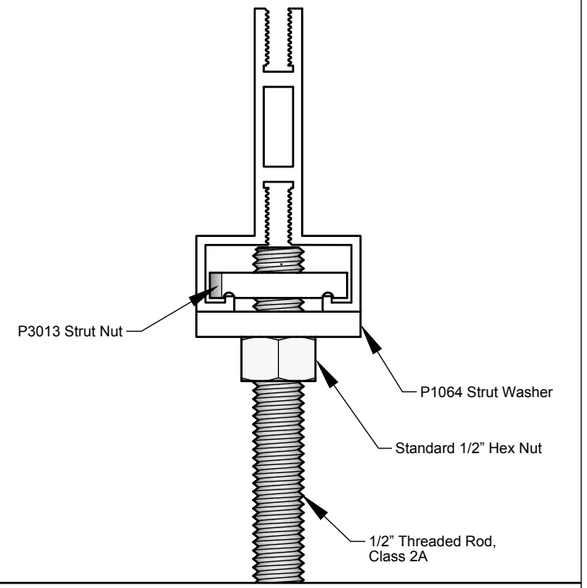
- Use Unistrut fittings P3013 & P1064, or equivalents.

- Attachment Hardware
  - One (1) P3013 1/2" strut nut
  - One (1) P1064 1/2" strut washer
  - One (1) standard 1/2" hex nut

- Torque nut to 50ft-lbs.

- Pass threaded rod through strut washer and connect to strut nut. Threaded rod should extend beyond strut nut leaving only a small gap between rod and extrusion.

Notes:
1. Torque not to exceed 70ft-lbs at the risk of stripping the strut nut. Appropriate care should be taken to not exceed this limit.
2. Only strut hardware to be used in strut channel.



HOT AISLE CONTAINMENT CONNECTION

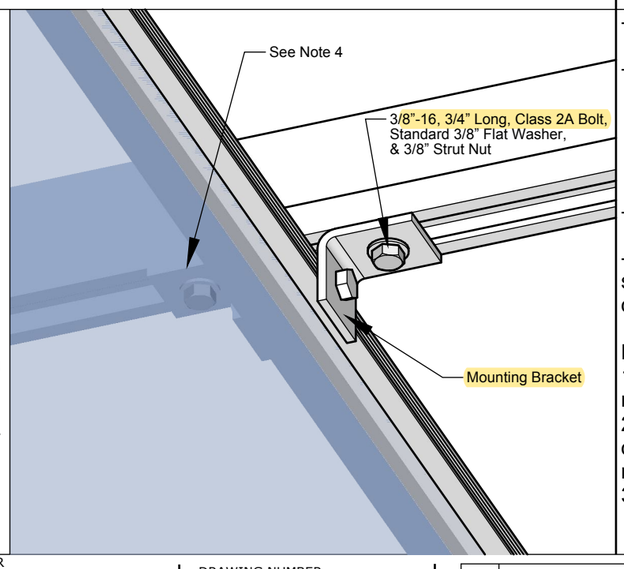
- Use one (1) mounting bracket per connection point.

- Attachment Hardware
  - One (1) 3/8"-16, 3/4" long, Class 2A bolt
  - One (1) standard 3/8" flat washer
  - One (1) P3008 3/8" strut nut

- Connect HAC to ceiling grid using one (1) bracket at a maximum span of every 4' (when possible).

- Torque bolts to 19ft-lbs.

Notes:
1. Torque not to exceed 25ft-lbs at the risk of stripping the strut nut. Appropriate care should be taken to not exceed this limit.
2. 3/4" length bolts are appropriate for all connections in which the plate/bracket/washer combined thicknesses are less than or equal to a 1/4".
3. Bolt thread should never exceed 5/8" long from bottom of extrusion to top of strut channel (bolt should never bottom out against extrusion).
4. If additional loads are to be supported by the HAC, a second mounting bracket can be added to the inside as an extra connection point to the ceiling.



MISC. CONNECTION

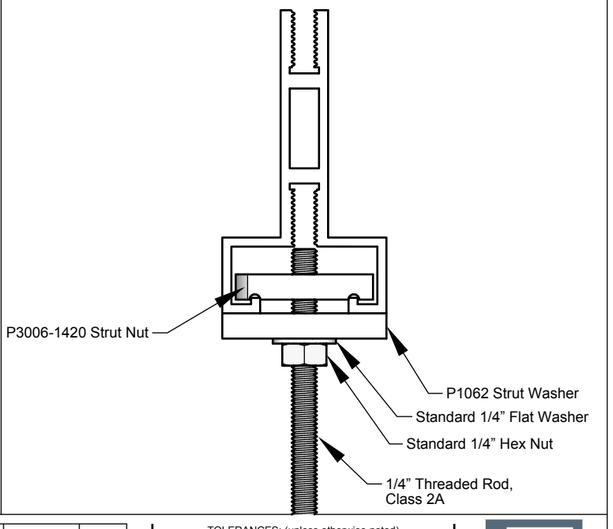
- Use Unistrut fittings P3006-1420 & P1062, or equivalents.

- Attachment Hardware
  - One (1) P3006-1420 1/4" strut nut
  - One (1) 5/16" strut washer
  - One (1) standard 1/4" flat washer
  - One (1) standard 1/4" hex nut

- Torque nut to 6ft-lbs.

- Pass threaded rod through flat & strut washers and connect to strut nut. Threaded rod should extend beyond strut nut leaving only a small gap between rod and extrusion.

Notes:
1. Torque not to exceed 7ft-lbs at the risk of stripping the strut nut. Appropriate care should be taken to not exceed this limit.
2. 1/4" rod should never be installed directly into threaded slot of grid (threaded slot is only for connecting ceiling grid members to each other).
3. Only strut hardware to be used in strut channel.



REV. 0
PAGE 01

TITLE
PICS Global Ceiling Grid Connection Manual

PART NUMBER
N/A

DATE CREATED
NOVEMBER 10, 2022

PRODUCT FAMILY
PICS GLOBAL

DRAWING NUMBER
B/CD00026

DRAWN BY
EK

REV.	DESCRIPTION	DATE	APPR.
A	REVISED PER SALES.	24MAR23	EK

TOLERANCES: (unless otherwise noted)
DO NOT SCALE THIS DRAWING

Decimal: .X = ±.015" | .XX = ±.010" | .XXX = ±.005"
Metric: .X = ±.38mm | .XX = ±.25mm | .XXX = ±.13mm
Angles: ±1/2°
Finish: 64
Fractional: ±1/64"
Break corners & edges .010" [.25mm] max.
Remove all burrs.
All dimensions in inches unless otherwise specified.

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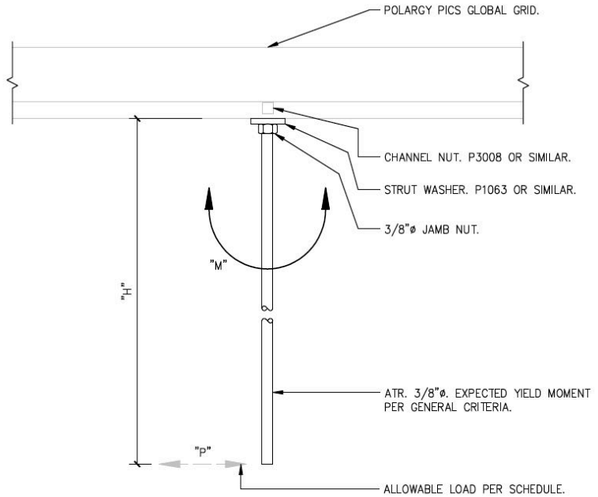
CONNECTION CAPACITY

The following diagrams & tables illustrate the maximum suitable capacity limits during construction/abuse loading for both of the primary connection types to Polargy's PICS Global Ceiling Grid. Note: ATR performance is an approximate real world limit and exceeds code.

3/8" STRUT NUT CONNECTION



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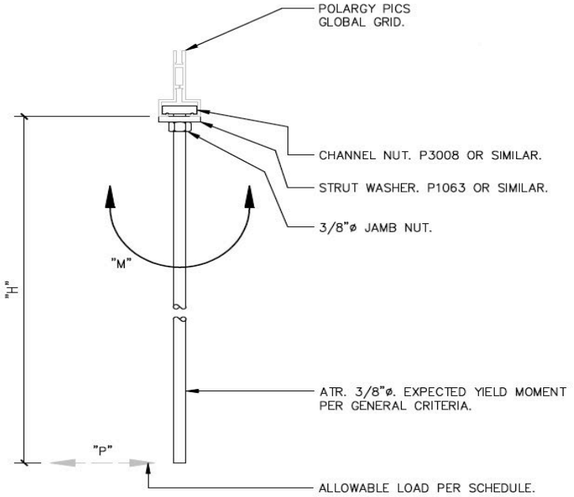

LOAD PERPINDICULAR w/ STICK:

3/8" Strut Nut Connection Longitudinal Maximum Loading Schedule

Max. Height "H"	Allowable Load "P"	3/8" ATR Performance
6"	107lbs	Yield at 50lbs
12"	53lbs	Yield at 25lbs
18"	36lbs	Yield at 17lbs
24"	27lbs	Yield at 13lbs
30"	21lbs	Yield at 10lbs
36"	18lbs	Yield at 8lbs
42"	15lbs	Yield at 7lbs
48"	13lbs	Yield at 6lbs
54"	12lbs	Yield at 6lbs
60"	11lbs	Yield at 5lbs

3/8" Strut Nut Connection Transverse Maximum Loading Schedule

Max. Height "H"	Allowable Load "P"	3/8" ATR Performance
6"	107lbs	Yield at 50lbs
12"	53lbs	Yield at 25lbs
18"	36lbs	Yield at 17lbs
24"	27lbs	Yield at 13lbs
30"	21lbs	Yield at 10lbs
36"	18lbs	Yield at 8lbs
42"	15lbs	Yield at 7lbs
48"	13lbs	Yield at 6lbs
54"	12lbs	Yield at 6lbs
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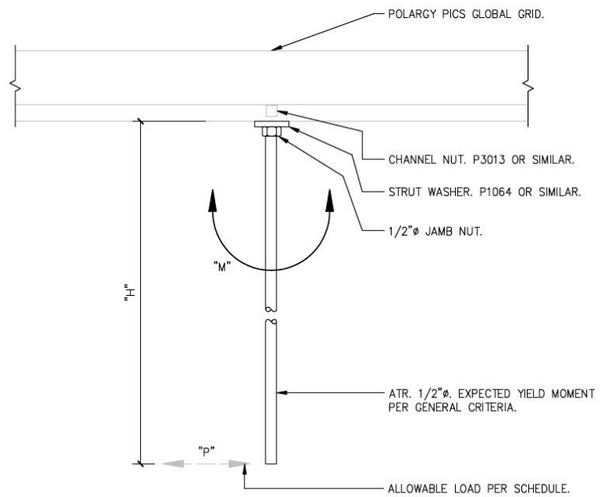
1/2" STRUT NUT CONNECTION



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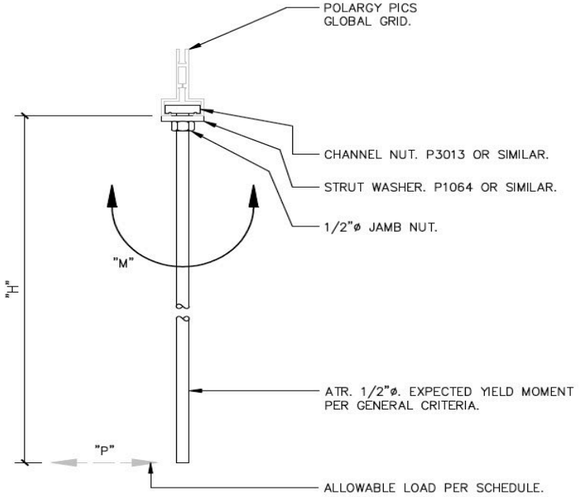

LOAD PERPINDICULAR w/ STICK:

1/2" Strut Nut Connection Longitudinal Maximum Loading Schedule

Max. Height "H"	Allowable Load "P"	1/2" ATR Performance
6"	107lbs	Good
12"	53lbs	Good
18"	36lbs	Good
24"	27lbs	Good
30"	21lbs	Good
36"	18lbs	Good
42"	15lbs	Good
48"	13lbs	Good
54"	12lbs	Good
60"	11lbs	Good

1/2" Strut Nut Connection Transverse Maximum Loading Schedule

Max. Height "H"	Allowable Load "P"	1/2" ATR Performance
6"	107lbs	Good
12"	53lbs	Good
18"	36lbs	Good
24"	27lbs	Good
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