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CALIFORNIA



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RESEARCH REPORT: 26208

Expires: January 20, 2023
Issued Date: January 20, 2022
Code: 2020 LABC

GENERAL APPROVAL- Unistrut and Power-Strut Hinged Rigid Brace Fittings

DETAILS

The Unistrut and Power-Strut Hinged Rigid Brace Fittings include the following part numbers:

PS 1354AW

The Power-Strut Hinged Rigid Brace Fitting is composed of two steel halves meeting the physical requirements of ASTM A1011 SS, Grade 33. Each half is formed, hinged, and welded to create the final product. The pin and ends of the hinge are welded to prevent loosening under load.

PS 3810

The Power-Strut Rigid Brace Fitting is composed of steel meeting the physical requirements of ASTM A1011 SS, Grade 33.

PS 3820

The Power-Strut Retrofit Rigid Brace Fitting is composed of steel meeting the physical requirements of ASTM A1011 SS, Grade 33. Each fitting is paired with a retrofit plate (part number P3860).

PS 3840

The Power-Strut Retrofit Rigid Brace Fitting is composed of steel meeting the physical requirements of ASTM A1011 SS, Grade 33. Each fitting is paired with a retrofit plate (part number P3860).

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RE: - Unistrut and Power-Strut Hinged Rigid Brace Fitting

PS 9403

The Power-Strut Hinged Rigid Brace Fitting is composed of two steel halves meeting the physical requirements of ASTM A1011 SS, Grade 33. Each half is formed, welded, and hinged with a SAE J429, Grade 5 bolt for maximum strength, and assembled with a lock nut to prevent loosening.

P1354AW

The Unistrut Hinged Rigid Brace Fitting is composed of two steel halves meeting the physical requirements of ASTM A1011 SS, Grade 33. Each half is formed, hinged, and welded to create the final product. The pin and ends of the hinge are welded to prevent loosening under load.

P3810

The Unistrut Rigid Brace Fitting is composed of steel meeting the physical requirements of ASTM A1011 SS, Grade 33.

P3820

The Unistrut Retrofit Rigid Brace Fitting is composed of steel meeting the physical requirements of ASTM A1011 SS, Grade 33. Each fitting is paired with a retrofit plate (part number P3860).

P3840

The Unistrut Retrofit Rigid Brace Fitting is composed of steel meeting the physical requirements of ASTM A1011 SS, Grade 33. Each fitting is paired with a retrofit plate (part number P3860).

The Unistrut and Power-Strut Hinged Rigid Brace Fitting component cyclic load holding capacities are listed in the tables included with below drawings. This approval includes the connection of each of the above fittings to 12-gauge channel using 12" channel nut and bolt.

The approval is subject to the following conditions:

1. This approval is limited to mechanical, electrical, and plumbing components.
2. The use of Unistrut and Power-Strut Hinged Rigid Brace Fitting is for interior use only.
3. The tabulated allowable loads shall not be increased for duration of loading.
4. The values listed are for the Unistrut and Power-Strut components when installed according to the manufacturer's instructions and the requirements herein with Factor of Safety of 1.5. A copy of this report and the installation instructions shall be provided at each job site by the manufacturer.

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RE: - Unistrut and Power-Strut Hinged Rigid Brace Fitting

5. Prior to installation, calculations and details demonstrating compliance with this approval letter and the 2020 Los Angeles Building Code must be submitted the structural plan check division for review. The calculations and details must be prepared by a licensed civil or structural engineer registered in the state of California.
6. The Unistrut and Power-Strut Hinged Rigid Brace Fitting Assemblies installation shall be in accordance with the manufacturer's instructions and the requirements herein. A copy of this report and the installation instructions shall be provided at each job site by the manufacturer.
7. Periodic Special Inspection required during installation and anchorage of piping and ductwork designed to carry hazardous material in structures in accordance with LABC 1705.12.6.

DISCUSSION

The report is in compliance with the 2020 City of Los Angeles Building Code.

The approval is based on tests.

This general approval will remain effective provided the Report is maintained valid and unrevised with the issuing organization. Any revisions to the report must be submitted to this Department for review with appropriate fee to continue the approval of the revised report.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

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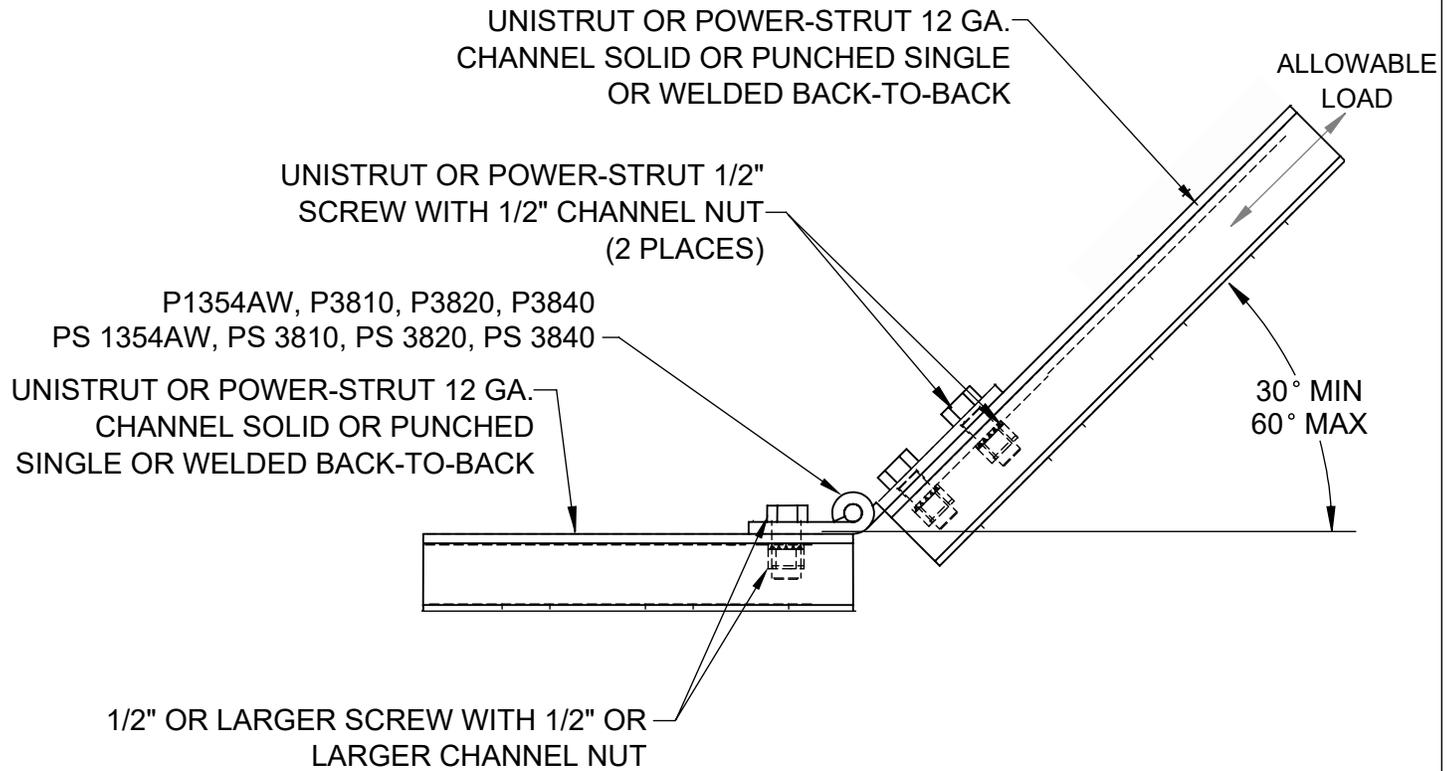
This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this Approval have been met in the project in which it is to be used.

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QN
RR25322
TLB2100104
R10/10/2021
104.2.6, ASCE7-16 section 13.6, 1705.12.6

Attachments: 1. Unistrut and Power-Strut Hinged Rigid Brace Fitting Drawings with Capacities
2. Power-Strut Hinged rigid brace Fitting PS 9403

UNISTRUT/POWER-STRUT HINGED RIGID BRACE FITTING



Allowable Loads:		
Angle "A" from Horizontal	Design Load (lbs)	F_P (lbs)
30° ^{+5°} / _{-.25°}	2,136	1,850
45° ^{+5°} / _{-.10°}	1,397	985
60° ^{+0°} / _{-.10°}	1,462	730

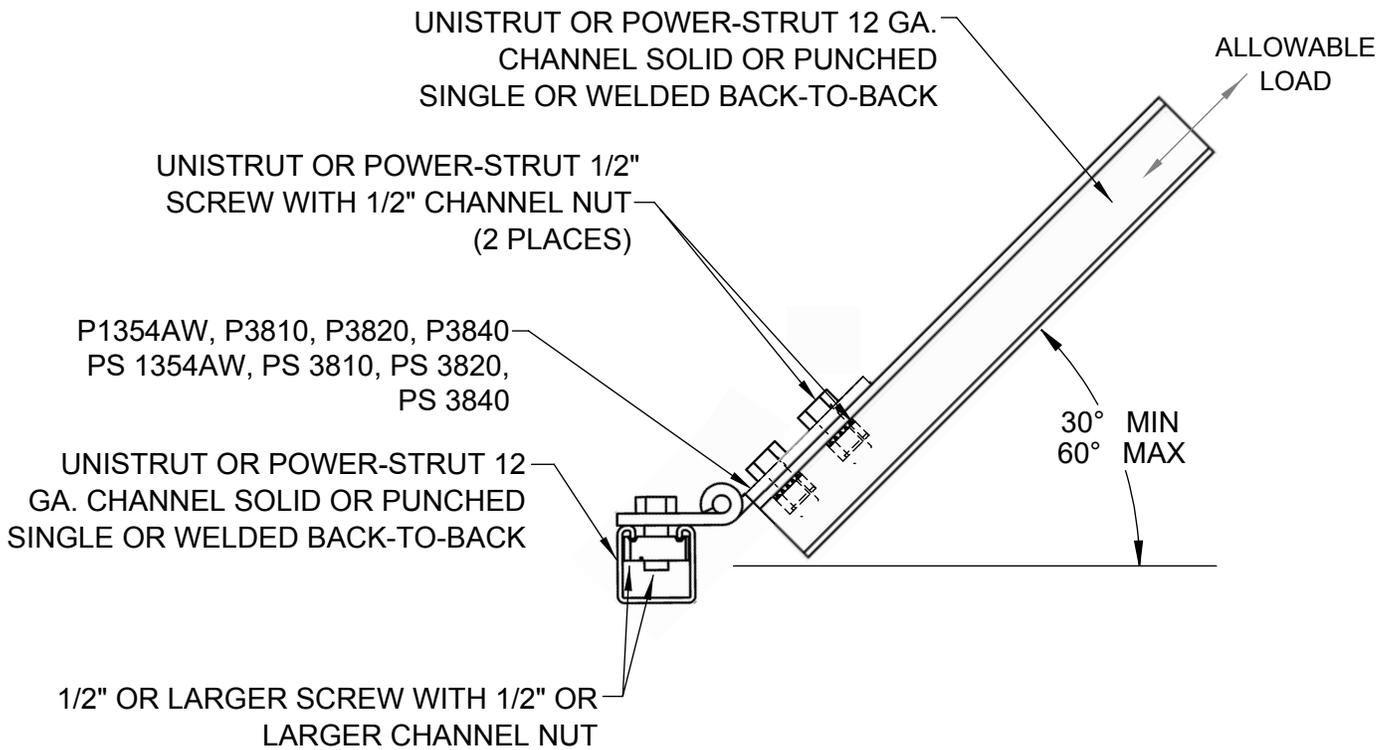
Factor of Safety: 1.5

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Atkore™
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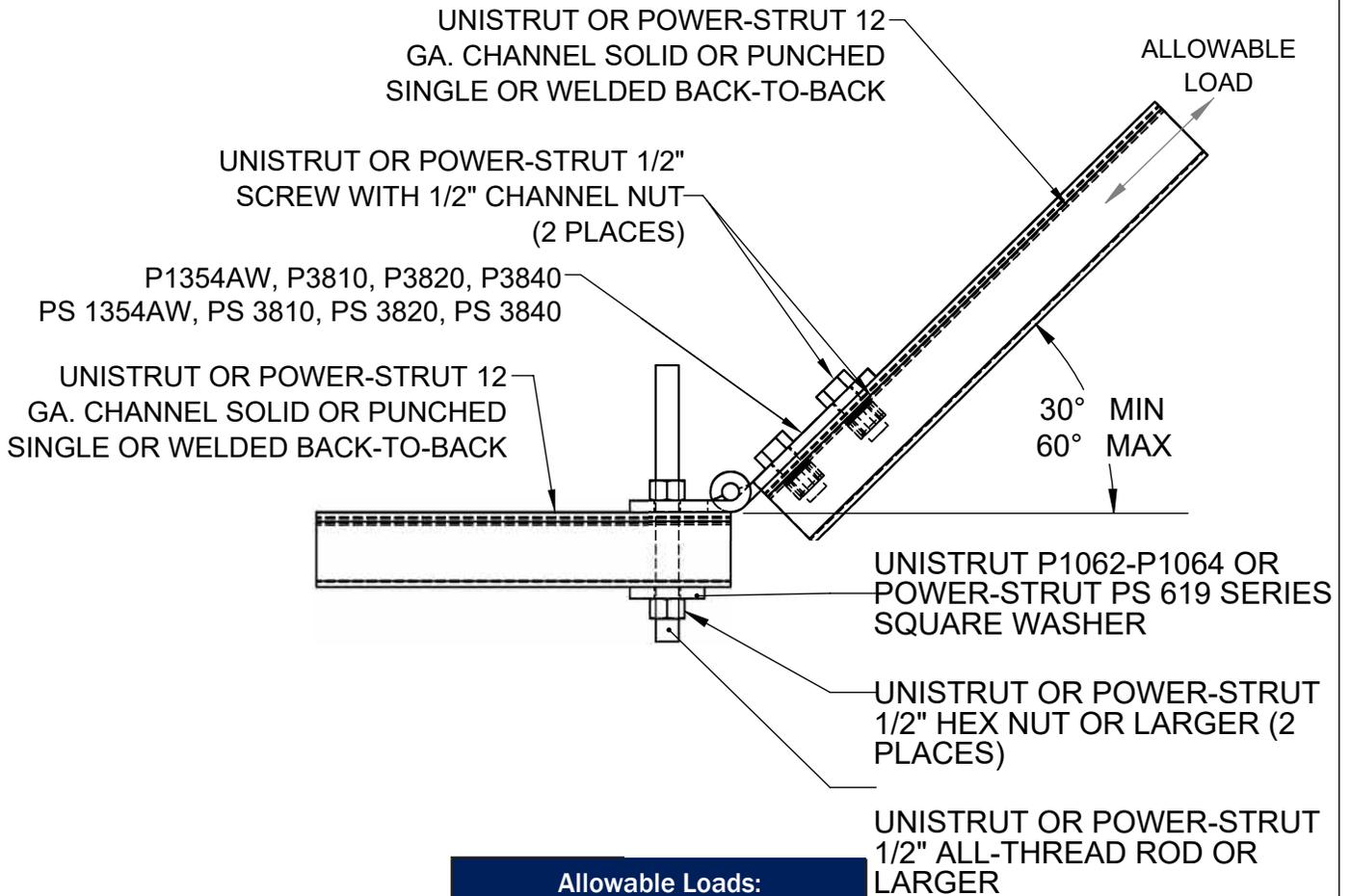
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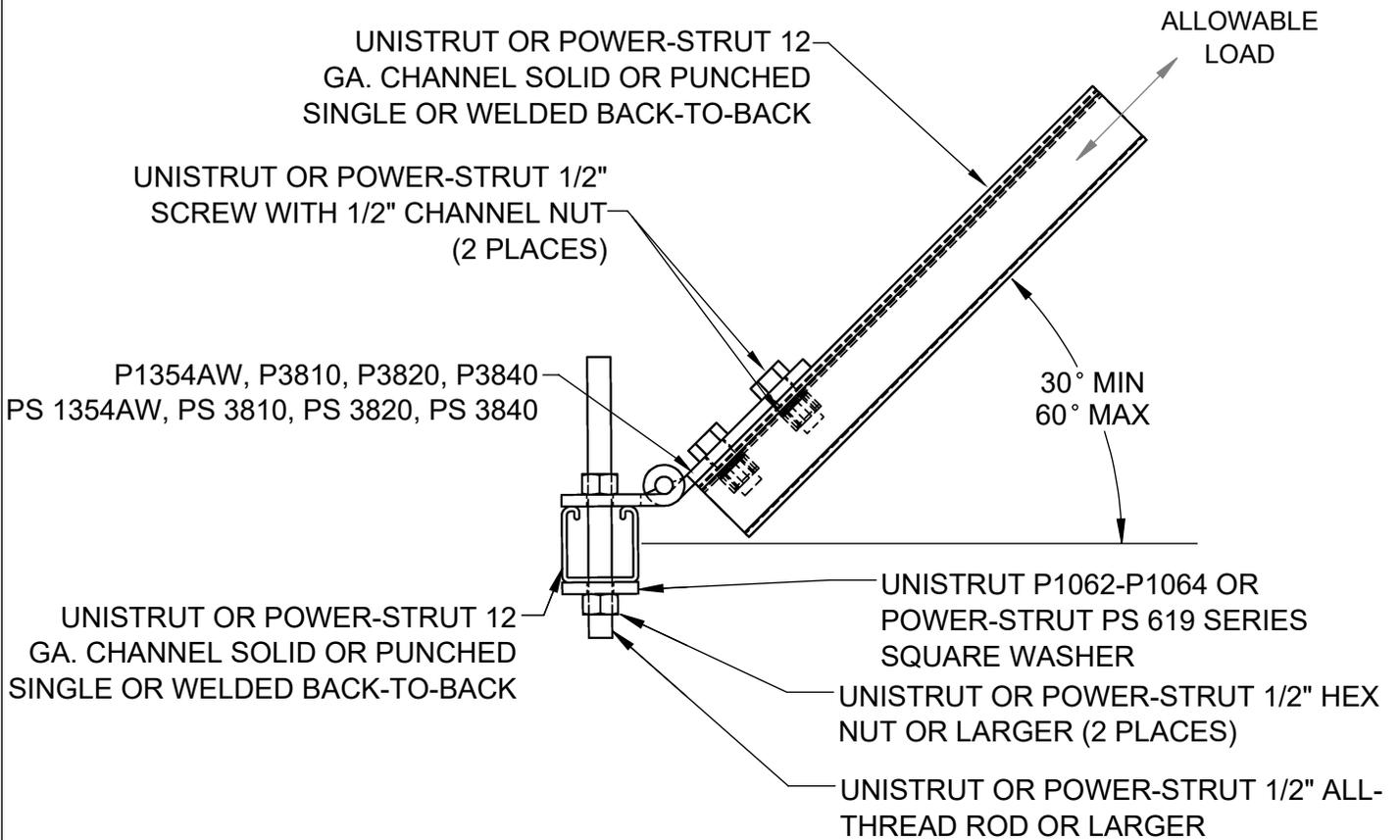
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