TecLoc Rigid Bracing Brackets

Seismic Bracing Restraint Solution

Designed to secure non-structural equipment during seismic events or blast impacts.

- **Ease of use**
  Reduces the prying effect and allowing for smaller anchors to be used
- **Adjustable**
  Top structure brackets offer dual fixing points, allowing for flexible installation for various anchor sizes
- **Versatile**
  Cast fork design allows for use with multiple bracing substrates including strut, EMT and pipe
- **Adaptable**
  Fully retrofit bottom service bracket, allowing for the seismic brace to be installed after the services are suspended

Product Specification

Material - Structural Bracket

- Structure Bracket - Plated Steel
- Seismic Spacer - Steel
- Bracket Pin - Steel
- Flanged Button Head - Steel
- Universal Fork - Iron Oxide Coated Carbon Steel
- 3/8” Hex Head Self-Drill Screws - Steel

Material - Retrofit Service Bracket

- Retrofit Service Bracket - Iron Oxide Coated Carbon Steel
- Universal Fork - Iron Oxide Coated Carbon Steel
- Universal Fork Bolt Pin - Steel
- 9/16” Hex Head 3/8” UNC x 2 1/2" bolt - Stainless Steel
- 3/8” Hex Head Self-Drill Screws - Steel

Approvals

- FM-1950 Tested

IAPMO-UES Evaluation Report ER-577 establishes compliance with:

- 2021 International Building Code
- 2022 California Building Code
- 2023 City of LA Building Code

and many other state and municipal building codes and standards.

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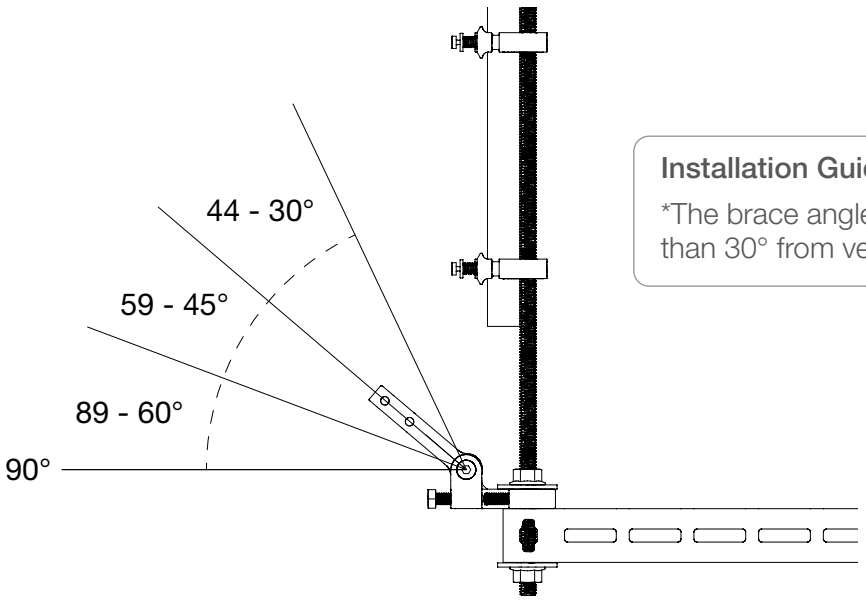
Load and Resistance Factor Design Values (LRFD) with EMT Conduit



Installation Guidance

*The brace angle shall not be less than 30° from vertical.

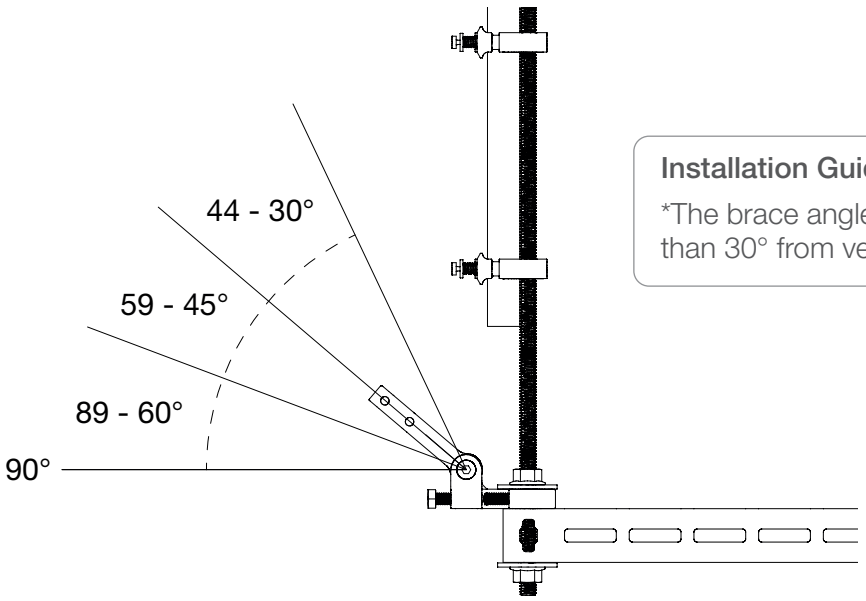
TecLoc Rigid Bracing Brackets LRFD Design Strengths (One Way Tension-Compression Bracing)

Length (ft)	1 " EMT Conduit				1.5" EMT Conduit			
	LRFD Brace Capacity (lbf)				LRFD Brace Capacity (lbf)			
	30 to 44 degrees	45 to 59 degrees	60 to 89 degrees	90 degrees	30 to 44 degrees	45 to 59 degrees	60 to 89 degrees	90 degrees
1	1895	2419	2618	2178	1895	2419	2618	2178
2	1895	2419	2618	2178	1895	2419	2618	2178
3	1895	2419	2618	2178	1895	2419	2618	2178
4	1895	2419	2618	2178	1895	2419	2618	2178
5	1895	1905	1905	1905	1895	2419	2618	2178
6	1323	1323	1323	1323	1895	2419	2618	2178
7	972	972	972	972	1895	2419	2618	2178
8	744	744	744	744	1895	2419	2618	2178
9	588	588	588	588	1895	2327	2327	2178
10	476	476	476	476	1885	1885	1885	1885

Rigid Bracing Brackets LRFD Design Strengths (Two Way Tension Only Bracing)

Length (ft)	1" Conduit				1.5" Conduit			
	LRFD Capacity (lbf)				LRFD Capacity (lbf)			
	30 to 45 degrees	46 to 60 degrees	61 to 90 degrees	90 degrees	30 to 45 degrees	45 to 60 degrees	61 to 90 degrees	90 degrees
Any Length	1895	2419	2618	2178	1895	2419	2618	2178

Load and Resistance Factor Design Values (LRFD) with Schedule. 40 Pipe



Installation Guidance

*The brace angle shall not be less than 30° from vertical.

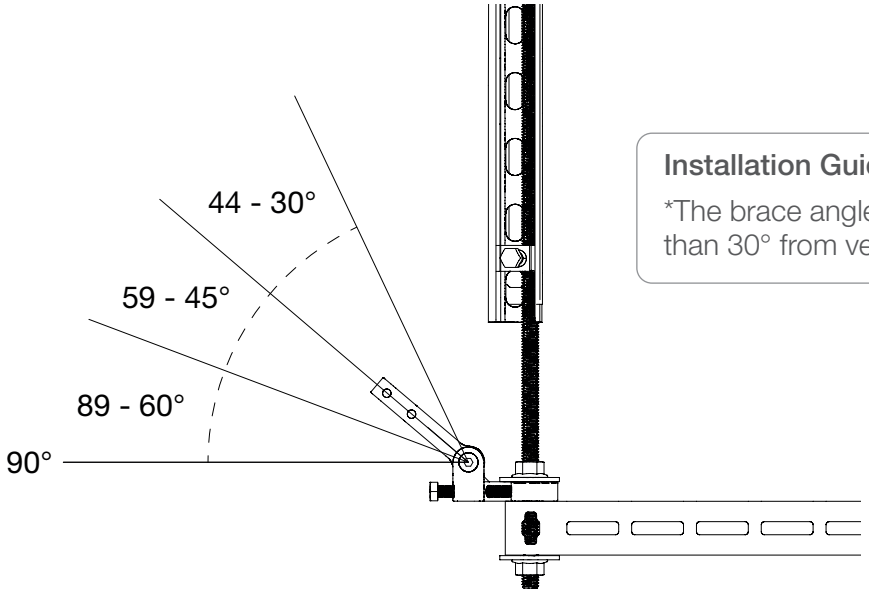
TecLoc Rigid Bracing Brackets LRFD Design Strengths (One Way Tension-Compression Bracing)

Length (ft)	1" Schedule. 40 Pipe				1.5" Schedule. 40 Pipe			
	LRFD Capacity (lbf)				LRFD Capacity (lbf)			
	30 to 44 degrees	45 to 59 degrees	60 to 89 degrees	90 degrees	30 to 44 degrees	45 to 59 degrees	60 to 89 degrees	90 degrees
1	1597	2185	2776	2042	1597	2185	2776	2042
2	1597	2185	2776	2042	1597	2185	2776	2042
3	1597	2185	2776	2042	1597	2185	2776	2042
4	1597	2185	2776	2042	1597	2185	2776	2042
5	1597	2185	2776	2042	1597	2185	2776	2042
6	1597	2185	2776	2042	1597	2185	2776	2042
7	1597	2185	2776	2042	1597	2185	2776	2042
8	1597	2135	2135	2042	1597	2185	2776	2042
9	1597	1687	1687	1687	1597	2185	2776	2042
10	1367	1367	1367	1367	1597	2185	2776	2042
11	1130	1130	1130	1130	1597	2185	2776	2042
12	950	950	950	950	1597	2185	2776	2042
13	809	809	809	809	1597	2185	2776	2042
14	697	697	697	697	1597	2185	2480	2042
15	607	607	607	607	1597	2185	2160	2042

Rigid Bracing Brackets LRFD Design Strengths (Two Way Tension Only Bracing)

Length (ft)	1 inch Pipe				1.5 inch Pipe			
	LRFD Capacity (lbf)				LRFD Capacity (lbf)			
	30 to 45 degrees	46 to 60 degrees	61 to 90 degrees	90 degrees	30 to 45 degrees	45 to 60 degrees	61 to 90 degrees	90 degrees
Any Length	1597	2185	2776	2042	1597	2185	2776	2042

Load and Resistance Factor Design Values (LRFD) with 12 gauge strut



Installation Guidance

*The brace angle shall not be less than 30° from vertical.

TecLoc Rigid Bracing Brackets LRFD Design Strengths (One Way Tension-Compression Bracing)

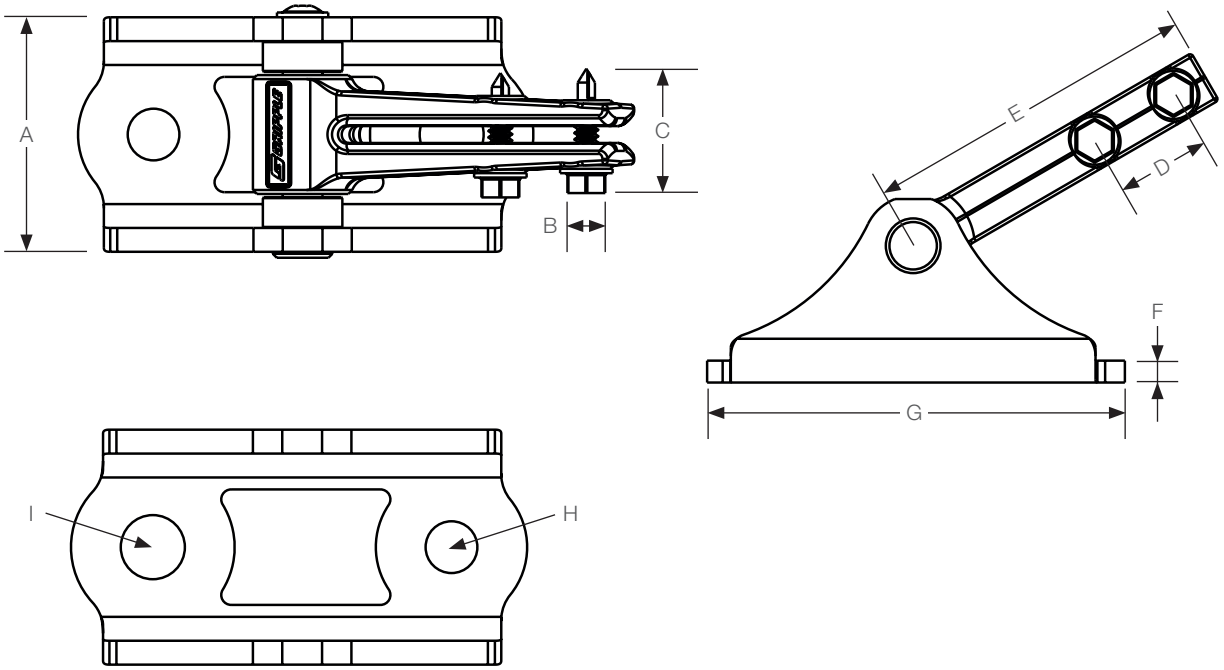
Length (ft)	1-5/8" x 1-5/8" 12 Gauge Strut				1-5/8" x 1-5/8" 12 Gauge Back-to-Back Strut			
	LRFD Brace Capacity (lbf)				LRFD Brace Capacity (lbf)			
	30 to 44 degrees	45 to 59 degrees	60 to 89 degrees	90 degrees	30 to 44 degrees	45 to 59 degrees	60 to 89 degrees	90 degrees
1	1862	2183	2671	2251	1862	2183	2671	2251
2	1862	2183	2671	2251	1862	2183	2671	2251
3	1862	2183	2671	2251	1862	2183	2671	2251
4	1862	2183	2671	2251	1862	2183	2671	2251
5	1862	2183	2671	2251	1862	2183	2671	2251
6	1862	2183	2671	2251	1862	2183	2671	2251
7	1862	2183	2671	2251	1862	2183	2671	2251
8	1862	2183	2671	2251	1862	2183	2671	2251
9	1862	2183	2671	2251	1862	2183	2671	2251
10	1862	2183	2671	2251	1862	2183	2671	2251
11	1862	2183	2671	2251	1862	2183	2671	2251
12	1862	2183	2475	2251	1862	2183	2671	2251
13	1862	2109	2109	2109	1862	2183	2671	2251
14	1819	1819	1819	1819	1862	2183	2671	2251
15	1584	1584	1584	1584	1862	2183	2671	2251

Rigid Bracing Brackets LRFD Design Strengths (Two Way Tension Only Bracing)

Length (ft)	12 Gauge Strut			
	LRFD Capacity (lbf)			
	30 to 45 degrees	46 to 60 degrees	61 to 90 degrees	90 degrees
Any Length	1862	2183	2671	2251

Design & Dimensions

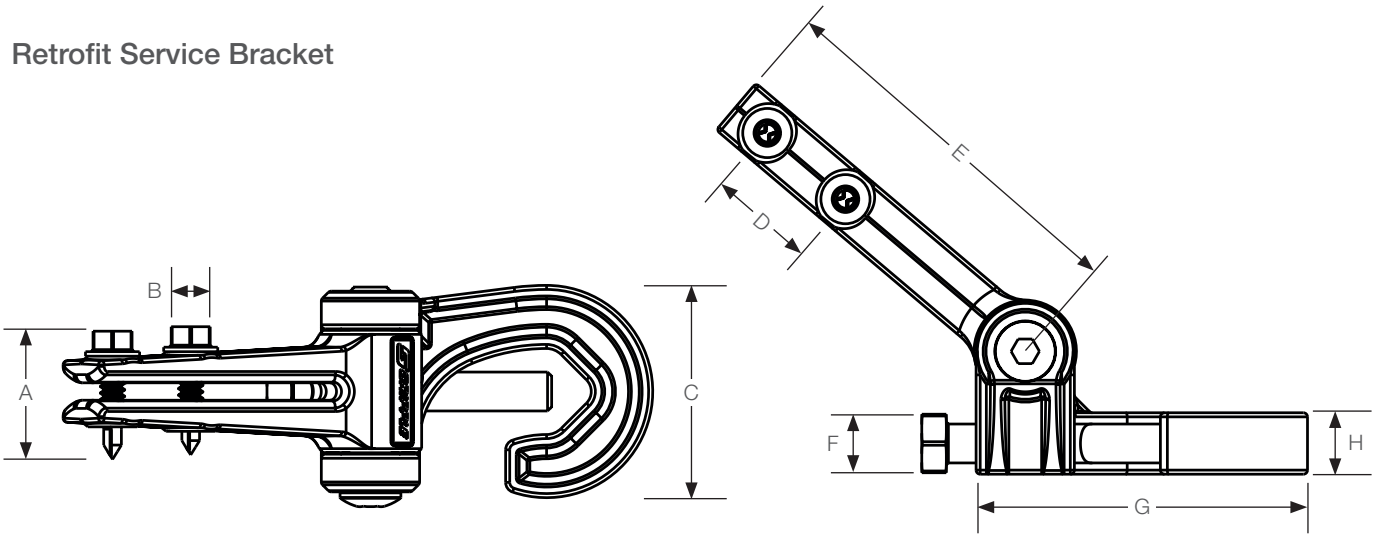
Structural Bracket



	3/8" - 1/2" Structural Bracket	1/2" - 5/8" Structural Bracket
	in	in
A	2.5	2.5
B	3/8" hex head	3/8" hex head
C	1	1
D	1	1
E	4.1	4.1
F	0.2	0.2
G	4.1	4.5
H	3/8" Ø	1/2" Ø
I	1/2" Ø	5/8" Ø

Design & Dimensions

Retrofit Service Bracket



	in
A	1
B	3/8" hex head
C	2.1
D	1
E	4.1
F	9/16" hex head
G	3.2
H	0.6

*Retrofit Service Bracket is compatible with 3/8" to 3/4" rod diameters

Packaging

Kit Contents

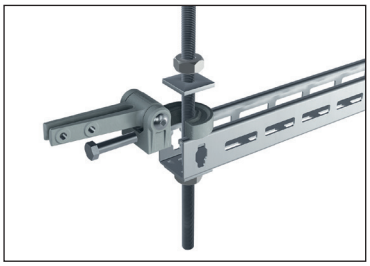
- 1 x Structural Bracket Pre-attached to Universal Fork
- 1 x Retrofit Service Bracket Pre-attached to Universal Fork
- 4 x Self Drilling Tek Screw 1/4" x 1" 3/8" Hex Head

Product Codes

- TL-RB-3812 (indicates 3/8” and 1/2” structure bracket)
- TL-RB-1258 (indicates 1/2” and 5/8” structure bracket)

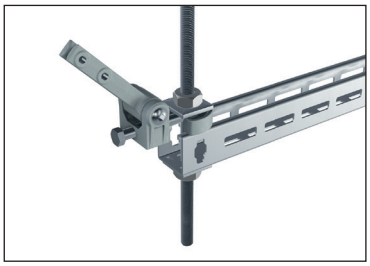
Installation

1



To install the retrofit bracket, back the nut and washer (round or square washer is acceptable) up and slide the bracket around the rod. Tighten the nut to secure washer and bracket.

2



Adjust the bracket to desired angle ensuring bracing angles are aligned, tighten the bolt to secure against the rod.

3

Fit the measured and pre-cut bracing substrate (strut or pipe) into the bottom retrofit bracket. Rotate and lift accordingly, measure and mark up the location if no existing anchor is available using the top structure bracket as your guide. (You can move away to allow for any drilling)

4

Secure the structure bracket to the anchor location using the appropriate fixing as per the engineered design. Ensure to use the correct hole size for the fixing point. (Position this hole fixing furthest away from the brace to allow for low-pry load as per the installation requirements). This has been designed for either or scenario on total # anchors.

5

Allow for any additional adjusments, and once ready to secure the bracing assembly, screw down both self tapping screws to the rigid substrate at the top and bottom locations.

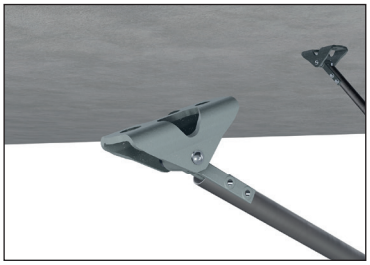
6

Lateral bracing install is complete, repeat the same process for a longitudinal brace, marking up locations and measuring accordingly.

7

If you require both lateral and longitudinal bracing, repeat steps 1-5, and add the secondary bracket on the service.

8

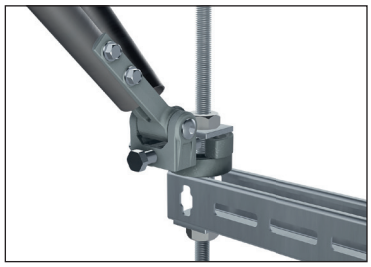


Fit the measured and pre-cut bracing substrate (strut or pipe) into the bottom retrofit bracket. Rotate and lift accordingly, measure and mark up the location if no existing anchor is available. (You can move away to allow for any drilling).

9

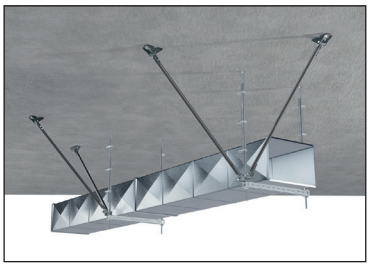
Secure the structure bracket to the anchor location using the appropriate fixing as per the engineered design. Ensure to use the correct hole size for the fixing point. (Position this hole fixing furthest away from the brace to allow for low-pry load as per the installation requirements).

10



Allow for any additional adjusments, and once ready to secure the bracing assemlby, screw down both self tapping screws to the rigid substrate at the top and bottom locations.

11



Allow for any additional adjusments, and once ready to secure the bracing assemlby, screw down both self tapping screws to the rigid substrate at the top and bottom locations.

Installation Guidance

- Before beginning the installation, make note and review where the bracing will go. We recommend to mark up the location as these measurements will help to speed up the installation
- Sub assembly of the seismic brackets onto the strut or conduit (using screws to secure brackets to brace arm) can be done before installation if confident measurements are all accurate

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Key Recommendations

Failure to comply with these recommendations may result in product malfunction and possible damage to property or person and will invalidate the Gripple guarantee. Gripple products are guaranteed to be free from defects in materials and workmanship in accordance with our terms and conditions. No other warranty, whether express or implied, including any warranty of merchantability or fitness for purpose shall exist in connection with the sale or use of any Gripple product.

Full technical information and installation instructions should be obtained directly from Gripple Limited, Gripple Europe, Gripple Inc., Gripple Japan, Gripple Poland, Gripple India, Gripple Germany, any regional Gripple office, or via our website www.gripple.com.

INSTALLATION

Do not walk or stand on the Gripple product installation. Gripple products must not be used for personal suspension, fall protection or harnessing people.

LOADS

Always operate the product within its stated safe working load range. Suspend static loads only. Do not subject to shock loading. Do not adjust under load.

REPAIR, MODIFICATION AND RE-USE

Do not repair, modify or re-use Gripple products. If you have any queries regarding product performance, please contact TechnicalServices@gripple.com

STORING

Do not store the product outdoors, or in damp or abnormal conditions.

SWIMMING POOLS

Not suitable for swimming pools.