

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

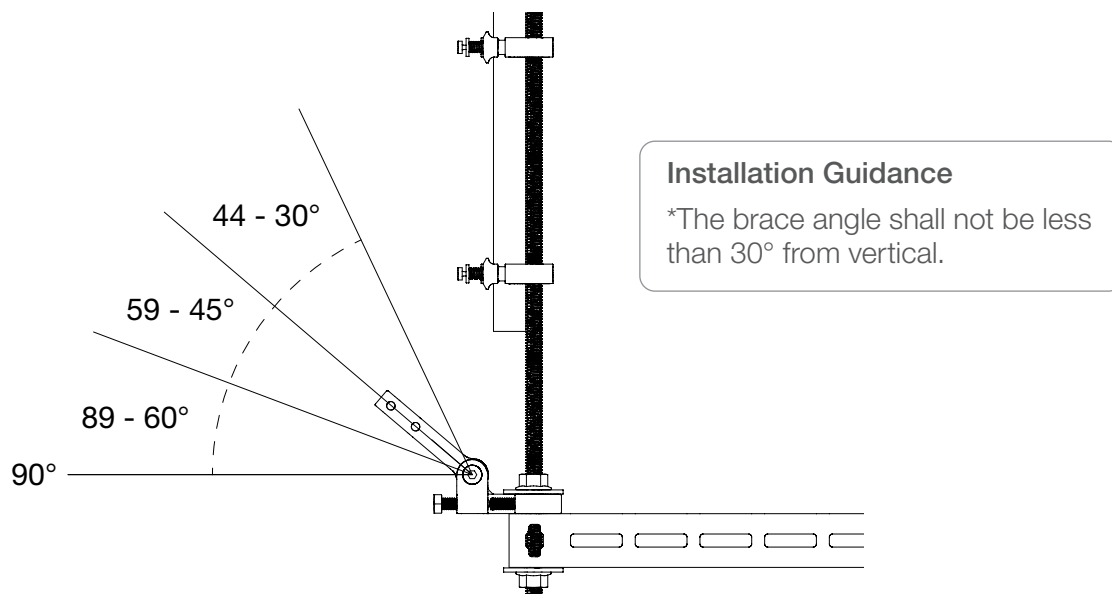
IAPMO-UES Evaluation Report ER-577 establishes compliance with:

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

and many other state and municipal building codes and standards.



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



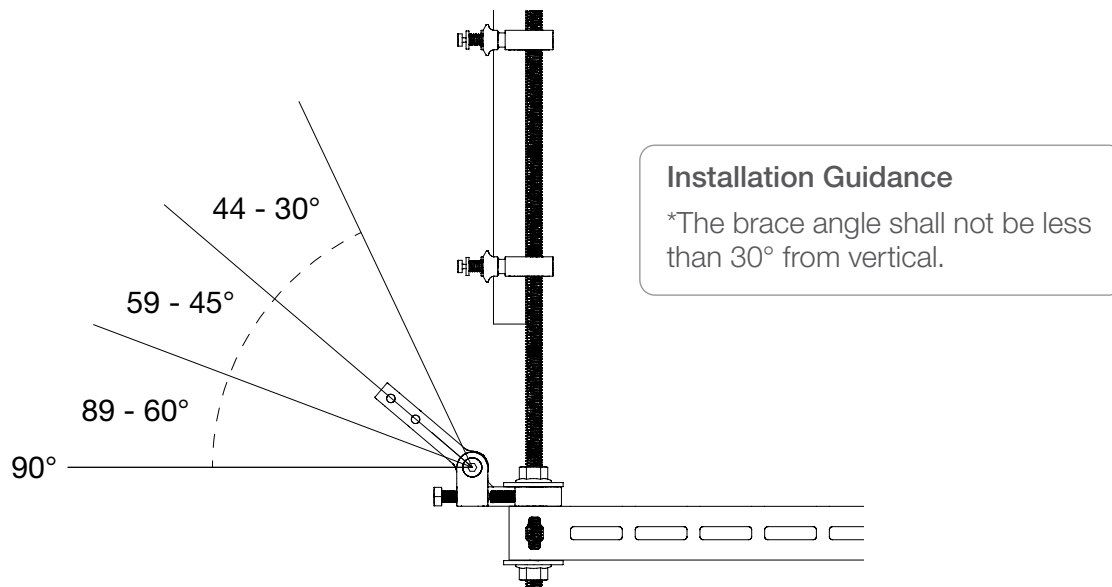
TecLoc Rigid Bracing Brackets LRFD Design Strengths (One Way Tension-Compression Bracing)

Length (ft)	1 inch EMT Conduit								1.5 inch EMT Conduit							
	LRFD Brace Capacity - lbf (Kgf)								LRFD Brace Capacity - lbf (Kgf)							
	30° to 44°		45° to 59°		60° to 89°		90°		30° to 44°		45° to 59°		60° to 89°		90°	
1	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
2	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
3	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
4	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
5	1895	(859)	1905	(864)	1905	(864)	1905	(864)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
6	1323	(600)	1323	(600)	1323	(600)	1323	(600)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
7	972	(441)	972	(441)	972	(441)	972	(441)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
8	744	(337)	744	(337)	744	(337)	744	(337)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)
9	588	(267)	588	(267)	588	(267)	588	(267)	1895	(859)	2327	(1055)	2327	(1055)	2178	(988)
10	476	(216)	476	(216)	476	(216)	476	(216)	1885	(855)	1885	(855)	1885	(855)	1885	(855)

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

Length (ft)	1 inch Conduit								1.5 inch Conduit							
	LRFD Brace Capacity - lbf (Kgf)								LRFD Brace Capacity - lbf (Kgf)							
	30° to 45°		46° to 60°		61° to 90°		90°		30° to 45°		46° to 60°		61° to 90°		90°	
Any Length	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)	1895	(859)	2419	(1097)	2618	(1187)	2178	(988)

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



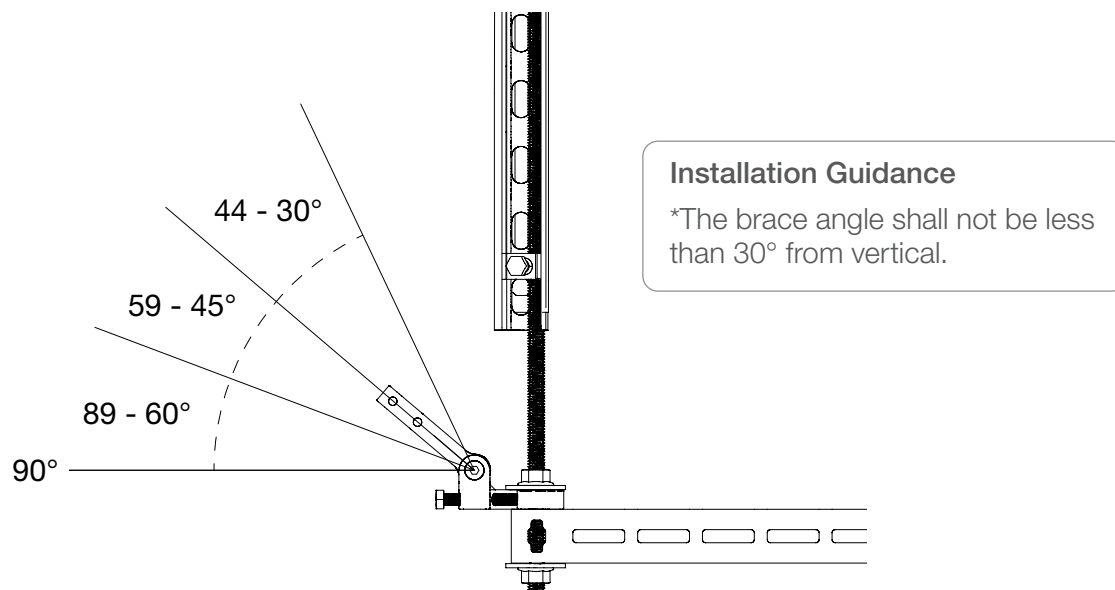
TecLoc Rigid Bracing Brackets LRFD Design Strengths (One Way Tension-Compression Bracing)

Length (ft)	1 inch Schedule. 40 Pipe								1.5 inch Schedule. 40 Pipe							
	LRFD Brace Capacity - lbf (Kgf)								LRFD Brace Capacity - lbf (Kgf)							
	30° to 44°		45° to 59°		60° to 89°		90°		30° to 44°		45° to 59°		60° to 89°		90°	
1	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
2	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
3	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
4	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
5	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
6	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
7	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
8	1597	(724)	2135	(968)	2135	(968)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
9	1597	(724)	1687	(765)	1687	(765)	1687	(765)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
10	1367	(620)	1367	(620)	1367	(620)	1367	(620)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
11	1130	(512)	1130	(512)	1130	(512)	1130	(512)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
12	950	(431)	950	(431)	950	(431)	950	(431)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
13	809	(367)	809	(367)	809	(367)	809	(367)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)
14	697	(316)	697	(316)	697	(316)	697	(316)	1597	(724)	2185	(991)	2480	(1125)	2042	(926)
15	607	(275)	607	(275)	607	(275)	607	(275)	1597	(724)	2185	(991)	2160	(980)	2042	(926)

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

Length (ft)	1 inch Conduit								1.5 inch Conduit							
	LRFD Brace Capacity - lbf (Kgf)								LRFD Brace Capacity - lbf (Kgf)							
	30° to 45°		46° to 60°		61° to 90°		90°		30° to 45°		46° to 60°		61° to 90°		90°	
Any Length	1597	(724)	2185	(991)	2776	(1259)	2042	(926)	1597	(724)	2185	(991)	2776	(1259)	2042	(926)

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



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

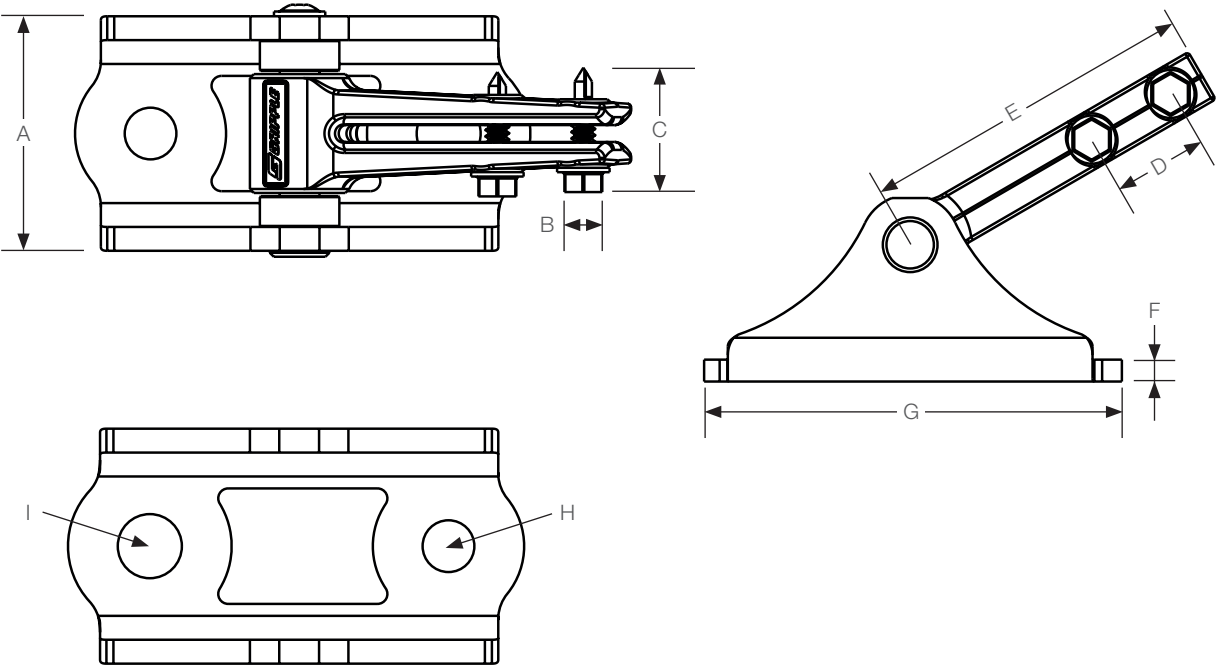
Length (ft)	1-5/8 x 1-5/8 inch 12 Gauge Strut								1-5/8 x 1-5/8 inch 12 Gauge Back-to-Back Strut							
	LRFD Brace Capacity - lbf (Kgf)								LRFD Brace Capacity - lbf (Kgf)							
	30° to 44°		45° to 59°		60° to 89°		90°		30° to 44°		45° to 59°		60° to 89°		90°	
1	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
2	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
3	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
4	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
5	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
6	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
7	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
8	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
9	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
10	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
11	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
12	1862	(844)	2183	(990)	2475	(1122)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
13	1862	(844)	2109	(956)	2109	(956)	2109	(956)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
14	1819	(825)	1819	(825)	1819	(825)	1819	(825)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)
15	1584	(718)	1584	(718)	1584	(718)	1584	(718)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)

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

Length (ft)	1 inch Conduit								1.5 inch Conduit							
	LRFD Brace Capacity - lbf (Kgf)								LRFD Brace Capacity - lbf (Kgf)							
	30° to 45°		46° to 60°		61° to 90°		90°		30° to 45°		46° to 60°		61° to 90°		90°	
Any Length	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)	1862	(844)	2183	(990)	2671	(1211)	2251	(1021)

Design & Dimensions

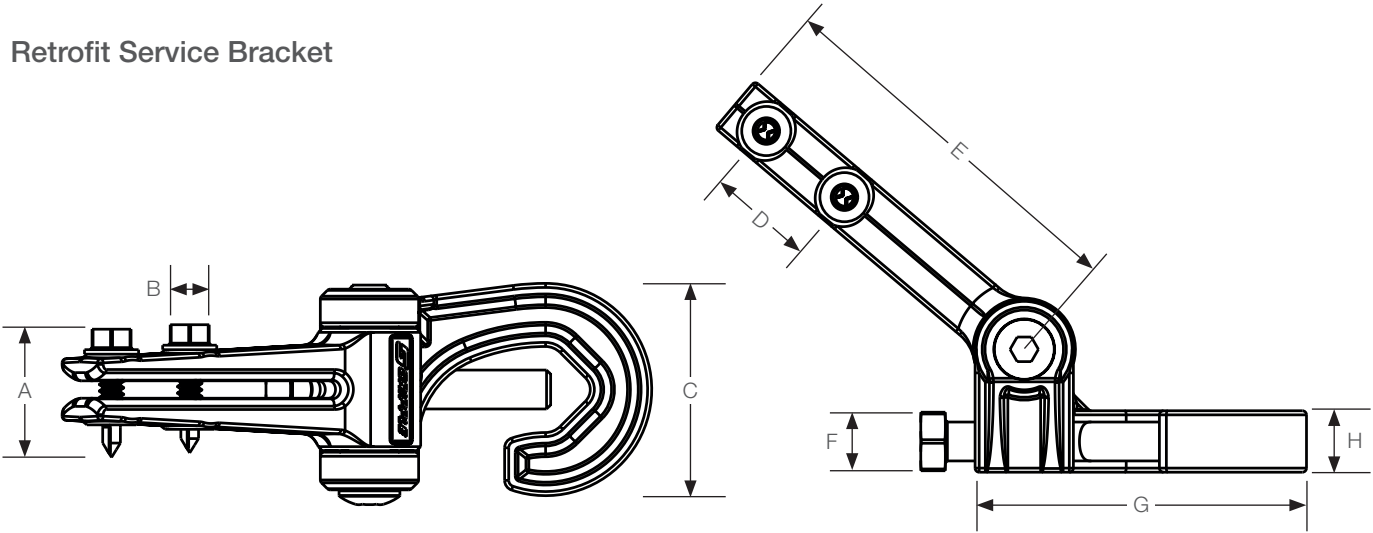
Structural Bracket



	3/8 - 1/2 inch Structural Bracket		1/2 - 5/8 inch Structural Bracket	
	in	mm	in	mm
A	2.5	63.5	2.5	63.5
B	3/8" hex head	3/8" hex head	3/8" hex head	3/8" hex head
C	1	25	1	25
D	1	25	1	25
E	4.1	104	4.1	104
F	0.2	5	0.2	5
G	4.1	104	4.5	104
H	3/8" Ø	3/8" Ø	1/2" Ø	3/8" Ø
I	1/2" Ø	1/2" Ø	5/8" Ø	1/2" Ø

Design & Dimensions

Retrofit Service Bracket



	in	mm
A	1	25
B	3/8" hex head	3/8" hex head
C	2.1	53
D	1	25
E	4.1	104
F	9/16" hex head	9/16" hex head
G	3.2	81
H	0.6	15

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

Packaging

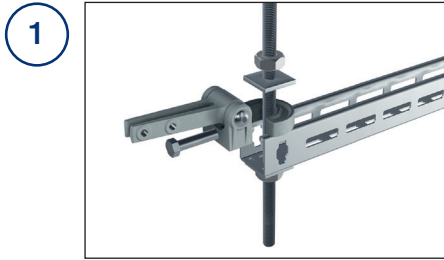
Kit Contents

- 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.



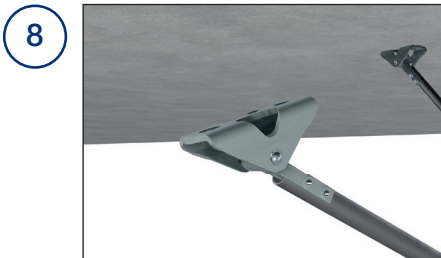
5 Allow for any additional adjustments, and once ready to secure the bracing assembly, screw down both self tapping screws to the rigid substrate at the top and bottom locations.



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.



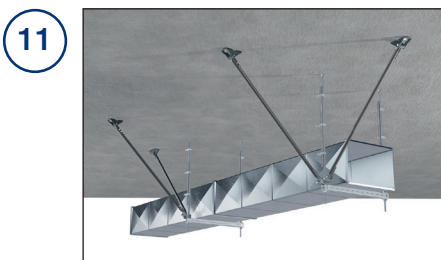
8 Fit the measured and pre-cut bracing substrate (strut or pipe) into the bottom retrofit bracket. Rotate and lift accordingly, measure and mark up the location if no existing anchor is available. (You can move away to allow for any drilling).



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 adjustments, and once ready to secure the bracing assembly, screw down both self tapping screws to the rigid substrate at the top and bottom locations.



11 Allow for any additional adjustments, and once ready to secure the bracing assembly, 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

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.



STORING

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



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.



SWIMMING POOLS

Not suitable for swimming pools.



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