

TECHNICAL SPECIFICATIONS

FLEXIBLE SPRINKLER DROPS

Braided Flexible Sprinkler Connection Data Sheet
(Ultra Performance) 1-1/4" Braided Flex Drop

Easyflex Flexible Sprinkler Drops are designed to significantly reduce labor and installation costs. By eliminating the need to cut pipes and mid line connections, you save valuable time and money.

Easyflex offers braided flexible hoses in 2', 3', 4', 5', and 6' lengths with a front loading bracket for suspended ceilings. The system is qualified to be installed in commercial buildings, hotels, retail stores, restaurants, cultural, entertainment, educational, government, healthcare and religious buildings.



EASYFLEX Flexible Sprinkler Drops Appliance Standards

National Fire Protection Association (NFPA):

- NFPA 13: Standard for installation of sprinkler systems
- NFPA 13D: Standard for the installation of sprinkler systems in one and two-family dwellings and manufactured homes
- NFPA 13R: Standard for installation of sprinkler systems in residential occupancies up to and including four stories in height
- NFPA 13 Section 9.2.1.3.3.3: Hangers are not required for flexible connections as long as the length does not exceed 6 ft.

American Society of Testing and Methods (ASTM):

- ASTM C635: Standard specifications for the manufacture, performance, and testing of metal suspension systems for acoustical tile and lay-in panel ceilings
- ASTM C636: Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels

Factory Mutual (FM), FM Class No. 1637:

- Approved standard for flexible sprinkler hose with threaded end fittings

Underwriters Laboratories, Inc. (UL), UL 2443:

- Standard for flexible sprinkler hose with fittings for fire protection service

International Building Code (IBC) Section 1621 / American Society of Civil Engineers (ASCE) 7 9.6.2.6.2 & 9.6.2.6.2.2:

- Flexible sprinkler connections are the alternative solution to install without seismic escutcheons (Oops Ring)

Job Name: _____

Engineer/Architect: _____

Job Location: _____

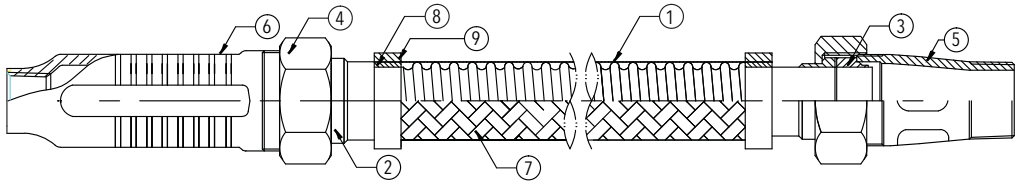
Wholesaler: _____

Submittal Date: _____

Contractor: _____

TECHNICAL SPECIFICATIONS

BRAIDED FLEXIBLE HOSE (Ultra Performance) 1-1/4" Braided Flex Drop



- 1. Tube
- 2. Isolation Ring
- 3. Sealing Gasket
- 4. Nut
- 5. Nipple (1")
- 6. Reducer
- 7. Braid
- 8. Press Ring (Inner)
- 9. Press Ring (Outer)

SPECIFICATIONS

Flex Hose ID	1-1/4"
Hose Type	Braided
Lengths Available	24", 36", 48", 60", and 72"
Connection	Inlet 1"NPT
	Outlet 1/2" or 3/4"NPT
Minimum Bend Radius	2.5"
	* DO NOT bend within 2.52 inches from connection nuts
Maximum K-Factor	1/2" K8.0
	3/4" K14.0

Max. Ambient Temperature Rating	300°F
Max. Working Pressure Rating	300 psig
Hose	Stainless Steel 304
Nut & Nipple	Zinc-Plated Steel
Sealing Gasket	Silicon
Isolation Ring	Nylon 66 + GF 30%

* Intended system type: wet, deluge, pre-action and dry.
Intended for direct connection to fire sprinklers.
No hangers and seismic escutcheons required.

FRICITION LOSS DATA EFB UP Series Braided Hose OGSB-02-OTBSL-PA- OHCB-PA- & OWMSB-PA Bracket Systems

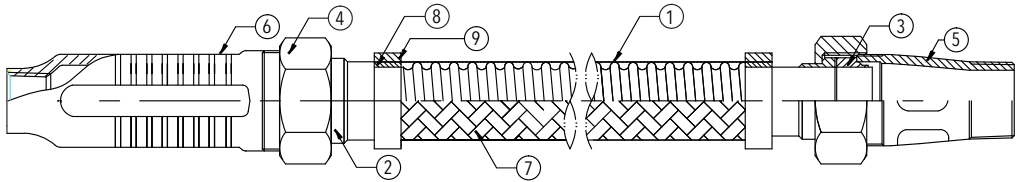


Length (in.)	Outlet Connection	Max. Number of 90° Bends	Equivalent Length of 1 in. Schedule 40 Pipe, ft.
24"	1/2"	2	3
	3/4"	2	10
36"	1/2"	5	12
	3/4"	5	22
48"	1/2"	8	19
	3/4"	8	34
60"	1/2"	10	26
	3/4"	10	40
72"	1/2"	12	37
	3/4"	12	46

* UL: 2.5" minimum bend radius, where C = 120
Flexibility Type: Limited

TECHNICAL SPECIFICATIONS

BRAIDED FLEXIBLE HOSE (Ultra Performance) 1-1/4" Braided Flex Drop



- 1. Tube
- 2. Isolation Ring
- 3. Sealing Gasket
- 4. Nut
- 5. Nipple (1")
- 6. Reducer
- 7. Braid
- 8. Press Ring (Inner)
- 9. Press Ring (Outer)

SPECIFICATIONS

Flex Hose ID	1-1/4"	Max. Ambient Temperature Rating	225°F
Hose Type	Braided	Max. Working Pressure Rating	225 psig
Lengths Available	24", 36", 48", 60", and 72"	Hose	Stainless Steel 304
Connection	Inlet 1"NPT or 1-1/4" Grooved Outlet 1/2" or 3/4"NPT	Nut & Nipple	Zinc-Plated Steel
Minimum Bend Radius	6.5" * DO NOT bend within 2.52 inches from connection nuts	Sealing Gasket	Silicon
Maximum K-Factor	1/2" K8.0 3/4" K14.0	Isolation Ring	Nylon 66 + GF 30%

*No Hangers and seismic escutcheons required

FRICTION LOSS DATA

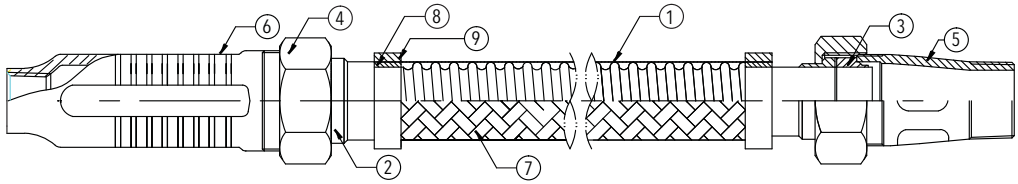


Length (in.)	Outlet Connection (Straight)	K-Factor	Max. Number of 90° Bends	Equivalent Length of 1 in. Schedule 40 Pipe, ft.
24"	1/2"	5.6 / 8.0	1	2.1 / 3.6
	3/4"	8.0 / 14.0	1	3.6 / 3.8
36"	1/2"	5.6 / 8.0	2	4.5 / 5.1
	3/4"	8.0 / 14.0	2	6.0 / 6.0
48"	1/2"	5.6 / 8.0	3	6.9 / 6.6
	3/4"	8.0 / 14.0	3	8.4 / 8.3
60"	1/2"	5.6 / 8.0	4	9.4 / 8.1
	3/4"	8.0 / 14.0	4	10.9 / 10.6
72"	1/2"	5.6 / 8.0	4	11.9 / 9.7
	3/4"	8.0 / 14.0	4	13.4 / 12.9

* FM: 6.5"minimum bend radius, where C = 120

TECHNICAL SPECIFICATIONS

BRAIDED FLEXIBLE HOSE (Ultra Performance) 1-1/4" Braided Flex Drop



- 1. Tube
- 2. Isolation Ring
- 3. Sealing Gasket
- 4. Nut
- 5. Nipple (1")
- 6. Reducer
- 7. Braid
- 8. Press Ring (Inner)
- 9. Press Ring (Outer)

SPECIFICATIONS

Flex Hose ID	1-1/4"	Max. Ambient Temperature Rating	225°F
Hose Type	Braided	Max. Working Pressure Rating	225 psig
Lengths Available	24", 36", 48", 60", and 72"	Hose	Stainless Steel 304
Connection	Inlet 1"NPT or 1-1/4" Grooved Outlet 1/2" or 3/4"NPT	Nut & Nipple	Zinc-Plated Steel
Minimum Bend Radius	6.5" * DO NOT bend within 2.52 inches from connection nuts	Sealing Gasket	Silicon
Maximum K-Factor	1/2" K8.0 3/4" K14.0	Isolation Ring	Nylon 66 + GF 30%

*No Hangers and seismic escutcheons required

FRICTION LOSS DATA



Length (in.)	Outlet Connection (With Elbow)	K-Factor	Max. Number of 90° Bends	Equivalent Length of 1 in. Schedule 40 Pipe, ft.
24"	1/2"	5.6 / 8.0	1	7.9 / 7.9
	3/4"	8.0 / 14.0	1	8.8 / 8.5
36"	1/2"	5.6 / 8.0	2	9.9 / 9.9
	3/4"	8.0 / 14.0	2	10.6 / 10.8
48"	1/2"	5.6 / 8.0	3	11.9 / 11.9
	3/4"	8.0 / 14.0	3	12.4 / 13.2
60"	1/2"	5.6 / 8.0	4	13.9 / 14
	3/4"	8.0 / 14.0	4	14.3 / 15.5
72"	1/2"	5.6 / 8.0	4	16 / 16.1
	3/4"	8.0 / 14.0	4	16.2 / 17.9

* FM: 6.5"minimum bend radius, where C = 120

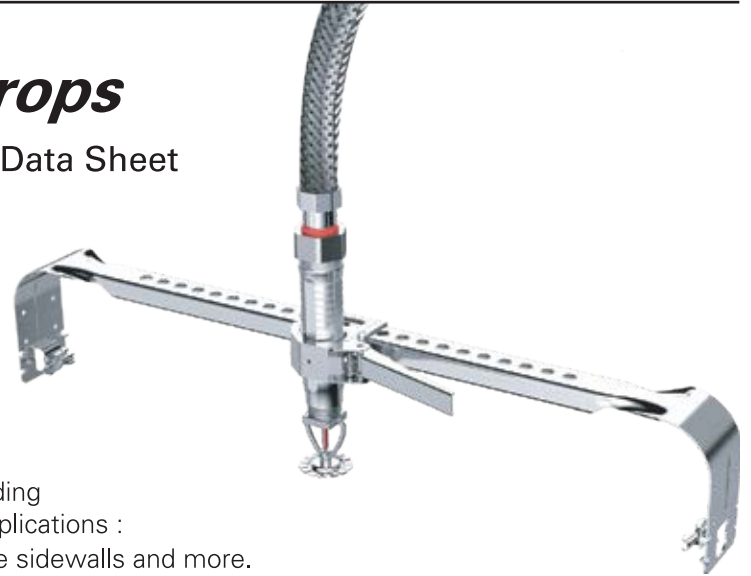


Flexible Sprinkler Drops

Braided Flexible Sprinkler Connection Data Sheet

EASYFLEX Flexible Sprinkler Drops are designed to significantly reduce labor and installation costs. By eliminating the need for pipe cutting and midline connections, you save valuable time and money.

Easyflex flexible sprinkler connections offer braided and unbraided flexible hoses in 2', 3', 4', 5' and 6' with top loading or front loading brackets for variety of ceiling and wall applications : T-Bars, metal studs, hat channels, wood beams, concrete sidewalls and more. The system is qualified to be installed at commercial, hotel, retail, restaurants, cultural, entertainment, educational, government, healthcare and religious buildings.



EASYFLEX Flexible Sprinkler Drops Appliance Standards

National Fire Protection Association (NFPA) :

- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 13D: Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes
- NFPA 13R: Standard for Installation of Sprinkler Systems in residential Occupancies up to and including four stories in height
- NFPA 13 Section 9.2.1.3.3.3: No hangers are required for flexible connections as long as the length does not exceed 6ft.

American Society for Testing and Methods (ASTM) :

- ASTM C635: Standard specifications for the manufacture, performance, and testing of metal suspension systems for acoustical tile and lay-in panel ceilings
- ASTM C636: Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels

Factory Mutual (FM), FM Class No, 1637 :

- Approved standard for flexible sprinkler hose with threaded end fittings

Underwriter's Laboratories, Inc. (UL), UL 2443 :

- Standard for flexible sprinkler hose with fittings for fire protection service.

International Building Code (IBC) Section 1621 / American Society of Civil Engineers (ASCE) 7 9.6.2.6.2 & 9.6.2.6.2.2 :

- Flexible Sprinkler Connections are the alternative Solution to install without Seismic Escutcheons (Oops Ring)

Job Name :

Engineer / Architect :

Job Location :

Wholesaler :

Submittal Date :

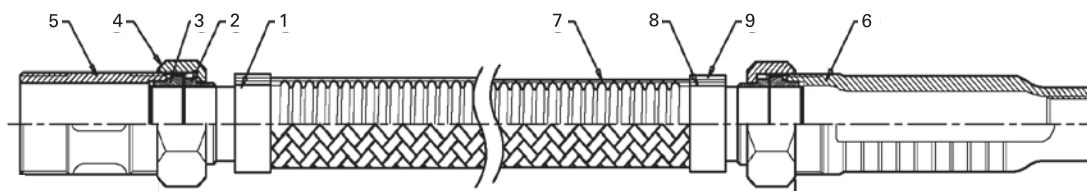
Contractor :

TECHNICAL SPECIFICATIONS

FLEXIBLE SPRINKLER CONNECTION



BRAIDED FLEXIBLE HOSE



1. TUBE
2. ISOLATION RING
3. SEALING GASKET
4. NUT
5. NIPPLE (1")
6. REDUCER
7. BRAID
8. PRESS RING (INNER)
9. PRESS RING (OUTER)

SPECIFICATIONS

Lengths Available	24", 36", 48", 60" and 72"
Outlet	1/2" or 3/4"
Hose Type	Braided
Max. Ambient Temperature Rating	225°F
Max. Working Pressure Rating	175 psig

* No hangers and seismic escutcheons required

Hose	Stainless Steel 304
Nut & Nipple	Zinc-Plated Steel
Sealing Gasket / Isolation Ring	EPDM/ NYLON
Minimum Bend Radius	4" (UL/ULC) and 8" (FM) * DO NOT bend within 2.52 inches from connection nuts
Connection	Inlet 1"NPT
	Outlet 1/2" or 3/4"NPT

FRICITION LOSS DATA EFB Series Braided Hose TBS Bracket Systems.



Length (in.)	Outlet Connection	K-Factor	Max. Number of 90° Bends	Equivalent Length of 1 in. Schedule 40 Pipe, ft.
24"	1/2"	5.6	1	18
	3/4"	8.0	1	18
36"	1/2"	5.6	2	31
	3/4"	8.0	2	34
48"	1/2"	5.6	3	48
	3/4"	8.0	3	51
60"	1/2"	5.6	4	60
	3/4"	8.0	4	65
72"	1/2"	5.6	4	71
	3/4"	8.0	4	72

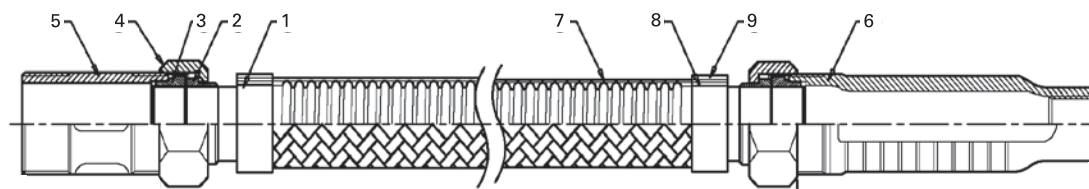
* UL : 4" minimum bend radius, where C=120

TECHNICAL SPECIFICATIONS

FLEXIBLE SPRINKLER CONNECTION



BRAIDED FLEXIBLE HOSE



1. TUBE
2. ISOLATION RING
3. SEALING GASKET
4. NUT
5. NIPPLE (1")
6. REDUCER
7. BRAID
8. PRESS RING (INNER)
9. PRESS RING (OUTER)

SPECIFICATIONS

Lengths Available	24", 36", 48", 60" and 72"
Outlet	1/2" or 3/4"
Hose Type	Braided
Max. Ambient Temperature Rating	225°F
Max. Working Pressure Rating	175 psig

* No hangers and seismic escutcheons required

Hose	Stainless Steel 304
Nut & Nipple	Zinc-Plated Steel
Sealing Gasket / Isolation Ring	EPDM/ NYLON
Minimum Bend Radius	4" (UL/ULC) and 8" (FM) * DO NOT bend within 2.52 inches from connection nuts
Connection	Inlet 1"NPT Outlet 1/2" or 3/4"NPT

FRICTION LOSS DATA EFB Series Braided Hose OGSB, TBS Bracket Systems.



Length (in.)	Outlet Connection	K-Factor	Max. Number of 90° Bends	Equivalent Length of 1 in. Schedule 40 Pipe, ft.
24"	1/2"	5.6	1	27.0
	3/4"	8.0	1	18.6
36"	1/2"	5.6	2	37.4
	3/4"	8.0	2	30.4
48"	1/2"	5.6	3	54.9
	3/4"	8.0	3	48.3
60"	1/2"	5.6	4	72.5
	3/4"	8.0	4	66.2
72"	1/2"	5.6	4	90.5
	3/4"	8.0	4	83.0

* FM : 8" minimum bend radius, where C=120



Flexible Sprinkler Connection Parts List

UNBRAIDED FLEXIBLE HOSE

Image	Part #	Description	Part #	Description
	EFU 228	1/2"x28" Unbraided hose	EFU 328	3/4"x28" Unbraided hose
	EFU 240	1/2"x40" Unbraided hose	EFU 340	3/4"x40" Unbraided hose
	EFU 248	1/2"x48" Unbraided hose	EFU 348	3/4"x48" Unbraided hose
	EFU 260	1/2"x60" Unbraided hose	EFU 360	3/4"x60" Unbraided hose
	EFU 267	1/2"x67" Unbraided hose	EFU 367	3/4"x67" Unbraided hose

BRAIDED FLEXIBLE HOSE

Image	Part #	Description	Part #	Description
	EFB 224	1/2"x24" Braided hose	EFB 324	3/4"x24" Braided hose
	EFB 236	1/2"x36" Braided hose	EFB 336	3/4"x36" Braided hose
	EFB 248	1/2"x48" Braided hose	EFB 348	3/4"x48" Braided hose
	EFB 260	1/2"x60" Braided hose	EFB 360	3/4"x60" Braided hose
	EFB 272	1/2"x72" Braided hose	EFB 372	3/4"x72" Braided hose

BRAIDED FLEXIBLE HOSE (Ultra Performance)

Image	Part #	Description	Part #	Description
	EFB 224 UP	1/2"x24" Braided hose	EFB 324 UP	3/4"x24" Braided hose
	EFB 236 UP	1/2"x36" Braided hose	EFB 336 UP	3/4"x36" Braided hose
	EFB 248 UP	1/2"x48" Braided hose	EFB 348 UP	3/4"x48" Braided hose
	EFB 260 UP	1/2"x60" Braided hose	EFB 360 UP	3/4"x60" Braided hose
	EFB 272 UP	1/2"x72" Braided hose	EFB 372 UP	3/4"x72" Braided hose

PARTS LIST



Reducer & Nipple

Image	Part #	Description
	RDL 12	Reducer 1/2" × 6"TXT (MXF)
	RDL 34	Reducer 3/4" × 6"TXT (MXF)
	LRDS 12 or 34 LRDL 12 or 34	Elbow Reducer Short Elbow Reducer Long

Image	Part #	Description
	RD 127 or 347	7" Reducer
	RD 128 or 348	8" Reducer
	RD 129 or 349	9" Reducer
	NP 1	Nipple 1" × 2-3/8"
	SQ25	25" Stock Bar
	SQ50	50" Stock Bar

Center Bracket & End Bracket & One Piece Bracket

Image	Part #	Description
	SSB	Snap Clamp Center Bracket For Stock Bar
	OSSB	Open Gate Snap Center Bracket For Stock Bar
	OSSBW	Open Gate Snap Side Wall Bracket For Stock Bar
	OSSBJ	Open Gate Bracket With Mounting Threaded Rod
	TBS	Snap On T-Bar End Bracket (for recessed or concealed heads)
	HCB	Hat Furring Channel End Bracket

Image	Part #	Description
	WMSB	Metal Stud End Bracket
	WSB	Wood Beam Stud End Bracket
	OTBS-PA	Pre-assembled 24" or 48"
	OTBSL-PA	Pre-assembled 24" or 48"
	OGSB-02	Open Gate Snap System Bracket

Image	Part #	Description
	GR	EPDM Gasket

Image	Part#	Description
	PR	NYLON Isolation Ring



Flexible Sprinkler Connection

for Commercial Application

Bracket for Suspended Ceilings | OGSB - 02



WARNING

- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drop System components.
- Failure to follow these instructions could cause improper operation resulting in serious injury of person, property or worse.
- We recommend wearing safety glasses, a hard hat and foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided / Unbraided)

OGSB One Piece Bracket

REQUIRED TOOL

Pipe Wrench

PTFE Tape

- 1 Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



- 2 Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly.
Reconnect Outlet Reducer to the Flexible Hose.



- 3 Apply 7 to 10 wraps of PTFE tape on the Inlet Nipple Thread. Use pipe wrench to connect the Inlet Nipple to the branch line. Torque range should be minimum of 50 to maximum of 58 ft·lbs. Make sure both end threads are clean without any damage.



- 4 Use the pipe wrench to connect the Flexible Hose to the Outlet Nipple. Torque range should be a minimum of 50 to a maximum of 58 ft·lbs.



• DO NOT use PTFE tape on the Outlet Nipple thread to connect to the Flexible Hose.



INSTALLATION INSTRUCTIONS



- 5** Place the OGSB-02 at the desired position on the ceiling grid.



- 6** Once OGSB-02 is positioned, tighten the wing bolts to secure onto the grid.



- 7** When securely latched on, open the center bracket gate and load the hose.



- 8** Close the gate of the center bracket from left to right.



- 9** Firmly push the lever toward the stock bar to secure the flexible drop.



- 10** Installation is complete!



Guidelines for ceiling tile installation after Easyflex flexible hose and OGSB02 have been installed

- Height of the t-bar needs to be equal or greater than 1-3/8"
- Cut the largest recommended hole from the sprinkler manufacturer's installation instructions (a size that escutcheon will still cover)
- #1 square bits are recommended when maximizing the tightening of wingnuts towards the t-bar to create more room for tile installation
- Evaluate the installation with concealed sprinkler if ceiling tile thickness is greater than 3/4"

When it is necessary to re-position the flexible drop, follow the below steps to release the center gate.



Locate the ring-shaped wire hook on the bracket. (pictured above)



Push the wire hook and grab the lever.



Pull the lever until the gate opens.

INSTALLATION INSTRUCTIONS



FLEXIBLE SPRINKLER CONNECTION

For Commercial Applications

Bracket for Suspended Ceilings | OTBSL-PA



WARNING

- You must read and understand all instructions and warnings before attempting to install any Easyflex sprinkler drop system components.
- Failure to follow these instructions can lead to improper operation, resulting in serious injury, death, or property damage.
- We recommend wearing safety glasses or goggles, a hard hat, and shoes with foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided)

OTBSL-PA Pre-assembled Bracket

REQUIRED TOOLS

Pipe Wrench, Screwdriver, Allen Wrench (3mm)

PTFE Tape

- 1 Inspect the Easyflex sprinkler drop system components for any sign of physical damage. Make sure all components are included and in the proper order.



- 2 Disconnect the inlet nipple and outlet reducer from the flexible hose and check that each sealing gasket is in place properly. Reconnect outlet reducer to the flexible hose.



- 3 Ensure that both end threads are clean without any damage. Apply PTFE tape to the inlet nipple threads. Use a pipe wrench to connect the inlet nipple to the branch line.



- 4 Use a pipe wrench to connect the flexible hose to the inlet nipple. Torque range should be a minimum of 50 to a maximum of 58 ft-lbs.



DO NOT use PTFE tape on the inlet nipple thread to connect to the flexible hose.



INSTALLATION INSTRUCTIONS

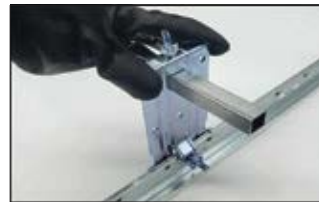


- 5** Place the OTBSL-PA bracket in the desired position on the ceiling grids.

If the distance between the T-bar grids is smaller or bigger than 24", loosen the wing bolt and lever on the adjustable end bracket and adjust the width.



- 6** Press the bracket down against the T-bar grid to position the leg of the bracket to be fully seated on the grid without any spacing.



- 7** Tighten the wing bolts to secure the end brackets onto the grid. The recommended torque is 1.40 -1.48 ft-lbs (190-200 cN • m).



DO NOT over tighten the wing bolt with tools. This may cause damage to the wing bolt.

Make sure to latch down the lever and tighten the top wing bolt on the end bracket. The recommended torque is 1.40-1.48 ft-lbs (190-200 cN • m)

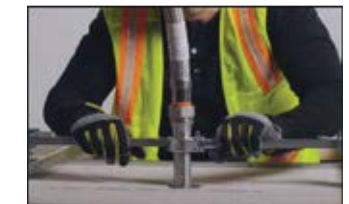


- 8** Press the release pin and open the center bracket. Load the flex hose at the appropriate height position, based on the type of sprinkler head being used.

Close the gate of the center bracket from left to right, and firmly push the lever towards the stock bar until it clicks to secure the outlet reducer.



- 9** Verify the location marking on the outlet reducer and match the outlet location for the remaining head installations.





Flexible Sprinkler Connection

for Commercial Application

Bracket for Suspended Ceilings | TBS



WARNING

- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drop System components.
- Failure to follow these instructions could cause improper operation resulting in serious injury of person, property or worse.
- We recommend wearing safety glasses, a hard hat and foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided / Unbraided)

TBS End Brackets, SSB or OSSB, SQ 25 or 50

REQUIRED TOOL

Pipe Wrench

PTFE Tape

- 1 Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



- 2 Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly.
Reconnect Outlet Reducer to the Flexible Hose.



- 3 Apply 7 to 10 wraps of PTFE tape on the Inlet Nipple Thread. Use pipe wrench to connect the Inlet Nipple to the branch line. Torque range should be minimum of 50 to maximum of 58 ft·lbs. Make sure both end threads are clean without any damage.



- 4 Use the pipe wrench to connect the Flexible Hose to the Outlet Nipple. Torque range should be a minimum of 50 to a maximum of 58 ft·lbs.



• DO NOT use PTFE tape on the Outlet Nipple thread to connect to the Flexible Hose.



INSTALLATION INSTRUCTIONS



- 5** Attach TBS mounting bracket to the T-Bar ceiling grid. Fasten TBS bracket into the T-Bar ceiling grid until the clip is fully latched onto the T-Bar. Hand tighten the wing bolt on the TBS bracket to tightly secure on the grid. Insert Stock Bar into the TBS mounting brackets.



DO NOT

over tighten the wing bolt with tools.
This may cause damage to the wing bolt.



- 6** Insert Stock Bar (SQ 25 or SQ 50) through the SSB Center Snap Clamp Bracket



- 7** Hand tighten the wing bolt on the TBS bracket to tightly secure on the grid. Adjust the Stock Bar for proper position and push the levers in the TBS brackets towards the inside of the configuration to secure with Stock Bar.



- 8** Place the SSB Center Bracket at the desired position and insert the Outlet Reducer from the Flexible Hose into the SSB. Adjust height for proper position and push down the lever of the SSB to secure the hose in place.



- 9** Install sprinkler head.
Use PTFE tape or a non-hardening pipe-joint compound. Refer to the NFPA guidelines and sprinkler head manufacturer's installation instructions for proper installation.





Flexible Sprinkler Connection

For Commercial Applications/Low Profile

Bracket for Suspended Ceilings | OTBSS-PA-24



WARNING

- You must read and understand all instructions and warnings before attempting to install any Specflex sprinkler drop system components.
- Failure to follow these instructions can lead to improper operation, resulting in serious injury, death, or property damage.
- We recommend wearing safety glasses or goggles, a hard hat, and shoes with foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided)

OTBSS-PA-24 Pre-assembled Bracket

REQUIRED TOOLS

Pipe Wrench, Screwdriver, Allen Wrench (3mm)

PTFE Tape

- 1 Inspect the Specflex sprinkler drop system components for any sign of physical damage. Make sure all components are included and in the proper order.



- 2 Disconnect the inlet nipple and outlet reducer from the flexible hose and check that each sealing gasket is in place properly. Reconnect outlet reducer to the flexible hose.



- 3 Ensure that both end threads are clean without any damage. Apply PTFE tape to the inlet nipple threads. Use a pipe wrench to connect the inlet nipple to the branch line.



- 4 Use a pipe wrench to connect the flexible hose to the inlet nipple. Torque range should be a minimum of 50 to a maximum of 58 ft-lbs.



DO NOT use PTFE tape on the inlet nipple thread to connect to the flexible hose.



INSTALLATION INSTRUCTIONS



- 5** Place the OTBSS-PA-24 bracket in the desired position on the ceiling grids.

If the distance between the T-bar grids is smaller or bigger than 24", loosen the wing bolt on the adjustable end bracket and adjust the width.



- 6** Press the bracket down against the T-bar grid to position the leg of the bracket to be fully seated on the grid without any spacing.



- 7** Tighten the hex bolts to secure the end brackets onto the grid. The recommended torque is 1.70 -1.77 ft-lbs (230-240 cN • m).

Make sure to tighten the top wing bolt on the adjustable end bracket. The recommended torque is 1.40-1.48 ft-lbs. (190-200 cN • m).

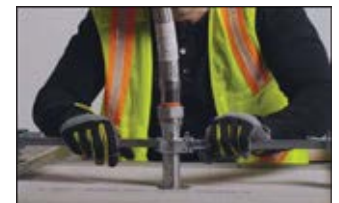


- 8** Press the release pin and open the center bracket. Load the flex hose at the appropriate height position, based on the type of sprinkler head being used.

Close the gate of the center bracket from left to right, and firmly push the lever towards the stock bar until it clicks to secure the outlet reducer.



- 9** Verify the location marking on the outlet reducer and match the outlet location for the remaining head installations.





Flexible Sprinkler Connection

for Commercial Application

Brackets for Hard Lid Ceilings | HCB



WARNING

- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drop System components.
- Failure to follow these instructions could cause improper operation resulting in serious injury of person, property or worse.
- We recommend wearing safety glasses, a hard hat and foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided / Unbraided)

HCB End Brackets, SSB or OSSB, SQ 25 or 50

REQUIRED TOOL

Pipe Wrench

PTFE Tape

- 1 Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



- 2 Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly.
Reconnect Outlet Reducer to the Flexible Hose.



- 3 Apply 7 to 10 wraps of PTFE tape on the Inlet Nipple Thread. Use pipe wrench to connect the Inlet Nipple to the branch line. Torque range should be minimum of 50 to maximum of 58 ft-lbs. Make sure both end threads are clean without any damage.



- 4 Use the pipe wrench to connect the Flexible Hose to the Outlet Nipple. Torque range should be a minimum of 50 to a maximum of 58 ft-lbs.



• **DO NOT** use PTFE tape on the Outlet Nipple thread to connect to the Flexible Hose.



INSTALLATION INSTRUCTIONS



- 5** Attach HCB to hat channel. Make sure a slot in HCB fits with the wing of hat channel grid. Hand tighten the wing bolt into the hat channel. Repeat for the other bracket.



DO NOT

over tighten the wing bolt with tools.
This may cause damage to the wing bolt.



- 6** Insert Stock Bar (SQ 25 or SQ 50) through SSB.



- 7** Insert Stock Bar through the Hat Channel Brackets. Adjust the stock bar for proper position and push the levers in HCB to secure with Stock Bar.



- 8** Insert the Outlet Reducer from Flexible Hose in to the center bracket and adjust height for proper position. Pull up the lever in SSB to secure.



- 9** Install sprinkler head.
Use PTFE tape or a non-hardening pipe-joint compound. Refer to the NFPA guidelines and sprinkler head manufacturer's installation instruction for proper installation.





FLEXIBLE SPRINKLER CONNECTION

For Commercial Applications

Bracket for Hard Lid Ceilings | OWMSB-PA



WARNING



- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drop System components.
- Failure to follow these instructions could cause improper operation resulting in serious injury (or worse) of person or property.
- We recommend wearing safety glasses, a hard hat, and foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided)

OWMSB-PA Pre-assembled Bracket

REQUIRED TOOLS

Pipe Wrench, Screwdriver, Allen Wrench (3mm)

PTFE Tape

- 1 Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



- 2 Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly. Reconnect Outlet Reducer to the Flexible Hose.



- 3 Per the manufacturer's instructions, apply PTFE tape on the Inlet Nipple Thread. Use a pipe wrench to connect Inlet Nipple to the branch line. Make sure both end threads are clean without any damage.



- 4 Use the pipe wrench to connect the Flexible Hose to the Inlet Nipple. Torque range should be a minimum of 50 to a maximum of 58 ft-lbs.



DO NOT use PTFE tape on the Inlet Nipple thread to connect to the Flexible Hose.





OWMSB-PA on the Metal Studs

- 5** Loosely assemble the adjustable end bracket based on the distance between the metal studs. Place OWMSB -PA on the metal studs.



- 6** Install OWMSB -PA on the metal studs .Ensure that the slot on each OWMSB end bracket is fully engaged with the metal studs and tighten the top wing bolts to secure the bracket .The recommended torque is 1.40-1.48ft-lbs (190-200cN•m).



- 7** Press the release pin and open the center bracket . Load the flex hose on the proper height position in accordance with the type of sprinkler head used.

Close the gate of the center bracket from left to right and firmly push the lever towards the stock bar until it clicks to secure the outlet reducer.



- 8** Verify the location marking on the outlet reducer and match the outlet location for the remaining head installations.



INSTALLATION INSTRUCTIONS



FLEXIBLE SPRINKLER CONNECTION

For Commercial Applications

Bracket for Hard Lid Ceilings | OWMSB-PA



WARNING



- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drop System components.
- Failure to follow these instructions could cause improper operation resulting in serious injury (or worse) of person or property.
- We recommend wearing safety glasses, a hard hat, and foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided)

OWMSB-PA Pre-assembled Bracket

REQUIRED TOOLS

Pipe Wrench, Screwdriver, Allen Wrench (3mm)

PTFE Tape

- 1** Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



- 2** Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly. Reconnect Outlet Reducer to the Flexible Hose.



- 3** Per the manufacturer's instructions, apply PTFE tape on the Inlet Nipple Thread. Use a pipe wrench to connect Inlet Nipple to the branch line. Make sure both end threads are clean without any damage.



- 4** Use the pipe wrench to connect the Flexible Hose to the Inlet Nipple. Torque range should be a minimum of 50 to a maximum of 58 ft-lbs.



DO NOT use PTFE tape on the Inlet Nipple thread to connect to the Flexible Hose.





OWMSB-PA on the Side of Metal Studs

- 5** Loosely assemble the adjustable end bracket based on the distance between the metal studs. Place OWMSB -PA on the side of metal studs.



- 6** Secure OWMSB -PA on the metal studs using 2 screws on each end brackets. The recommended torque is 1.40-1.48ft-lbs (190-200 cN • m).

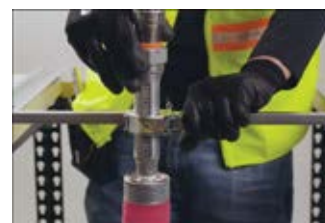
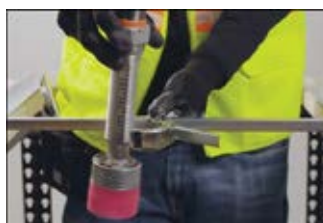


- 7** Tighten the top wing bolt on both end brackets to secure the end brackets onto the stock bar. The recommended torque is 1.40-1.48 ft-lbs (190-200cN • m)



- 8** Press the release pin and open the center bracket. Load the flex hose on the proper height position in accordance with the type of sprinklerhead used.

Close the gate of the center bracket from left to right and firmly push the lever towards the stock bar until it clicks to secure the outlet reducer.



- 9** Verify the location marking on the outlet reducer and match the outlet location for the remaining head installations.



INSTALLATION INSTRUCTIONS



FLEXIBLE SPRINKLER CONNECTION

For Commercial Applications

Bracket for Hard Lid Ceilings | OWMSB-PA



WARNING



- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drop System components.
- Failure to follow these instructions could cause improper operation resulting in serious injury (or worse) of person or property.
- We recommend wearing safety glasses, a hard hat, and foot protection during installation.

REQUIRED SYSTEM PARTS

Flexible Hose (Braided)

OWMSB-PA Pre-assembled Bracket

REQUIRED TOOLS

Pipe Wrench, Screwdriver, Allen Wrench (3mm)

PTFE Tape

- 1** Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



- 2** Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly. Reconnect Outlet Reducer to the Flexible Hose.



- 3** Per the manufacturer's instructions, apply PTFE tape on the Inlet Nipple Thread. Use a pipe wrench to connect Inlet Nipple to the branch line. Make sure both end threads are clean without any damage.



- 4** Use the pipe wrench to connect the Flexible Hose to the Inlet Nipple. Torque range should be a minimum of 50 to a maximum of 58 ft-lbs.



DO NOT use PTFE tape on the Inlet Nipple thread to connect to the Flexible Hose.





OWMSB-PA on the Flat Surface of Wood Joists/ Studs

- 5** Loosely assemble the adjustable end bracket based on the distance between the wood joists. Place OWMSB -PA on the flat surface of wood joists.



- 6** Secure OWMSB -PA on the wood joists using 2 screws on each end brackets and fully penetrate through the framing. The recommended torque is 1.40-1.48ft-lbs (190- 200 cN • m).

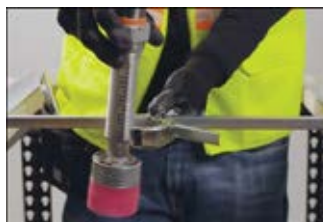


- 7** Tighten the top wing bolt on both end brackets to secure the end brackets onto the stock bar. The recommended torque is 1.40-1.48 ft-lbs (190-200cN • m)



- 8** Press the release pin and open the center bracket. Load the flex hose on the proper height position in accordance with the type of sprinklerhead used.

Close the gate of the center bracket from left to right and firmly push the lever towards the stock bar until it clicks to secure the outlet reducer.



- 9** Verify the location marking on the outlet reducer and match the outlet location for the remaining head installations.





Flexible Sprinkler Connection

for Commercial Application

Brackets for Hard Lid Ceilings | WSB

Required System Parts

- Qty. 1 Flexible Hose (EFB or EFU)
- Qty. 2 WSB Side Brackets
- Qty. 1 Stock Bar (25" or 50")
- Qty. 1 SSB or OSSB Center Bracket

Required Tools

- Pipe Wrench
- PTFE Tape



- You must read and understand all instructions and warnings before attempting to install any EASYFLEX Sprinkler Drops system components.
- Failure to follow these instructions could cause improper operation resulting in serious personal injury of self, property, damage, or worse.
- We recommend wearing safety glasses, a hardhat, and foot protection during installation.

1

Inspect the EASYFLEX sprinkler drop system components for any sign of physical damage. Make sure all components are in proper place.



Disconnect the Inlet Nipple and Outlet Reducer from the Flexible Hose and check that a Sealing Gasket is in each place properly. Reconnect Outlet Reducer to the Flexible Hose.



2

Apply PTFE tape on the Inlet Nipple Thread. Use pipe Wrench to connect the Inlet Nipple to the branch line. Make sure both end threads are clean without any damage.



3

Use the pipe wrench to connect the Flexible Hose to the Outlet Nipple.

DO NOT use PTFE tape on the Outlet Nipple thread to connect to the Flexible Hose.



INSTALLATION INSTRUCTIONS



- 4** Attach WSB mounting brackets to the wood ceiling framing. Mark on the wood to properly align and locate the WSB end brackets on each side. Use a pair of #12 x 1" wood screws to attach both wings of WSB on the wood ceiling framing.



- 5** Insert Stock Bar (SQ25 or SQ50) through the Center Bracket.



- 6** Insert Stock Bar into the WSB mounting brackets. Adjust the Stock Bar for proper position and fasten wingnut screws on the WSB brackets to secure with Stock Bar.



- 7** Place the Center Bracket at the desired position and insert the Outlet Reducer from the Flexible Hose into the Center Bracket

Adjust height for proper position and push down the lever of the SSB to secure the hose in place.



- 8** Install the sprinkler head. **USE PTFE tape** or a non-hardening pipe-joint compound.

Refer to the NFPA guidelines and sprinkler head manufacturer's installation instructions for proper installation.

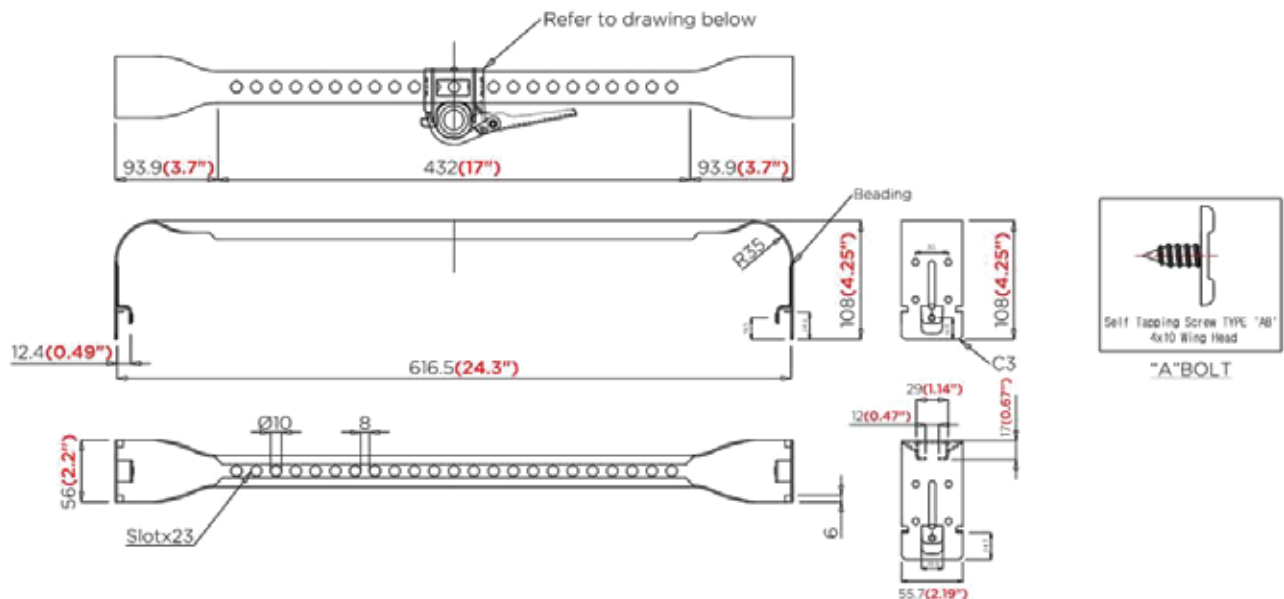
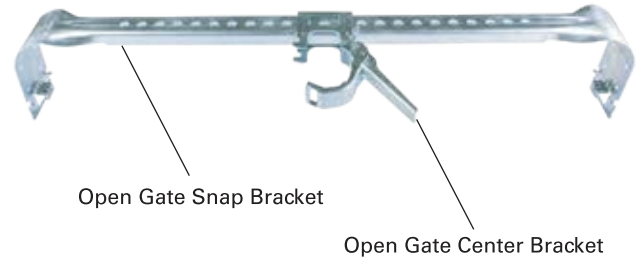


PRODUCT DETAILS

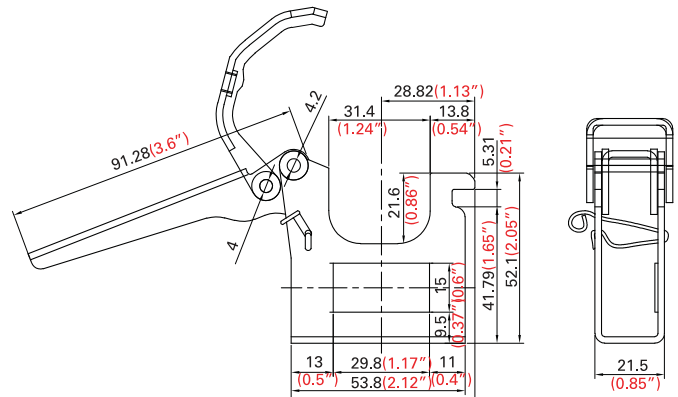
FLEXIBLE SPRINKLER CONNECTION

Open Gate Snap Bracket | **OGSB-02**

Scale	NS
Material	ASTM A-366
Tolerance	2.0mm, ± 0.05
Spec.	Zinc Plated
Coating durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test.

Open Gate Center Bracket | **OSSB**

Scale	NS
Material	ASTM A-526
Tolerance	± 0.3
Thickness	2.0mm, ± 0.05
Spec.	Zinc Plate
Coating durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test



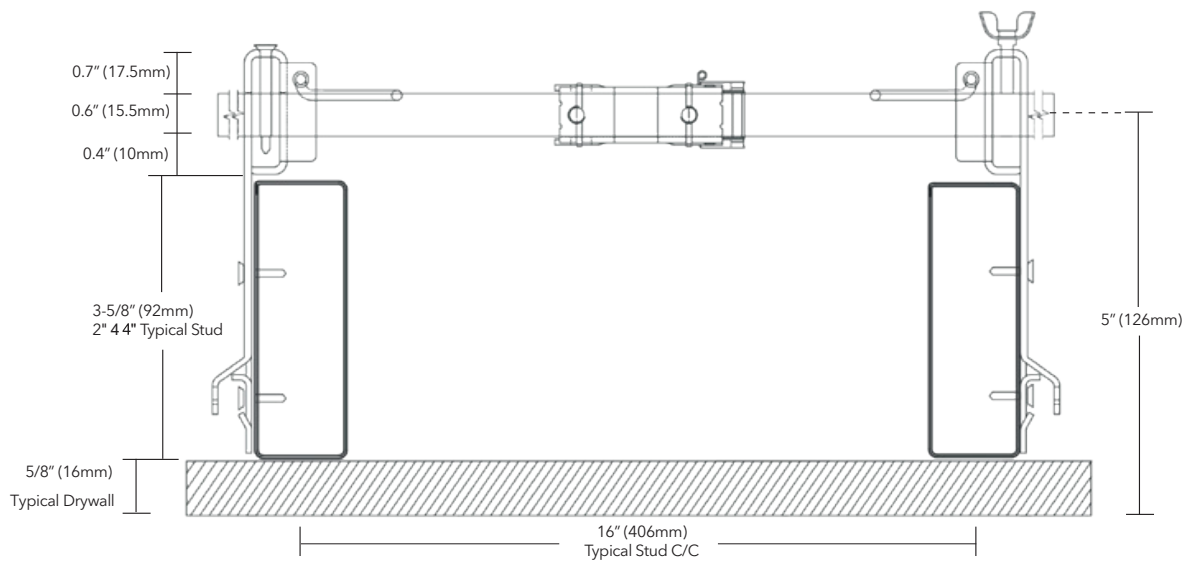
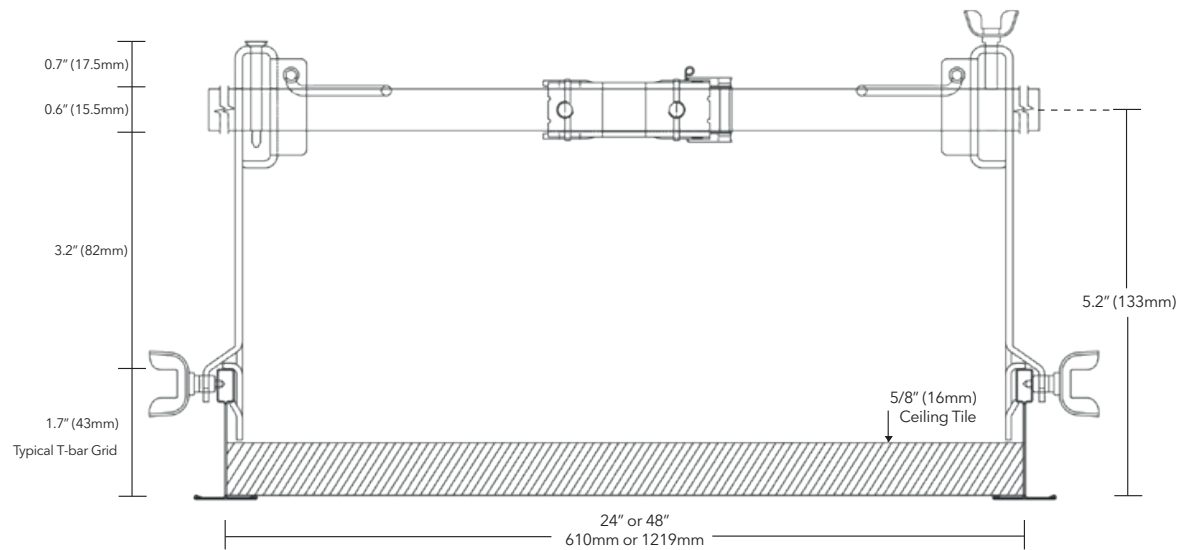
PRODUCT DETAILS

FLEXIBLE SPRINKLER CONNECTION



T-Bar Bracket | **OTBSL-PA**

Scale	NS
Material	ASTM A-366
Tolerance	± 0.3
Thickness	2.0mm, ± 0.05mm
Spec.	Zinc Plated
Coating Durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test

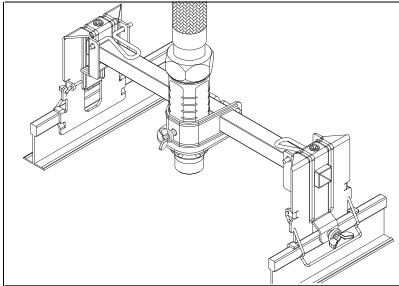


PRODUCT DETAILS

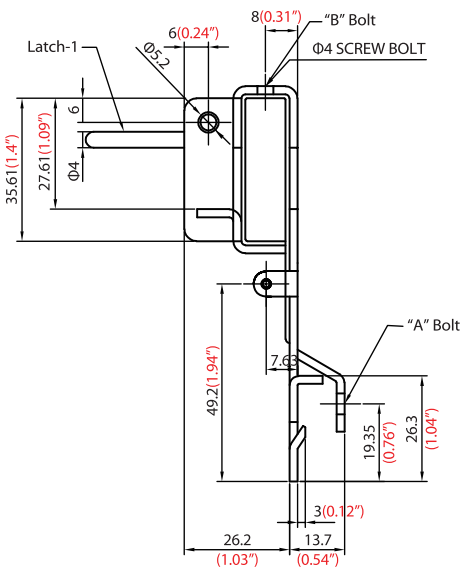
FLEXIBLE SPRINKLER CONNECTION

T - Bar Bracket | **TBS**

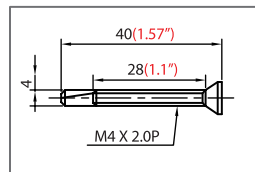
Scale	NS
Material	ASTM A-366
Tolerance	±0.3
Thickness	2.0mm, ±0.05
Spec.	Zinc Plated
Coating Durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test.



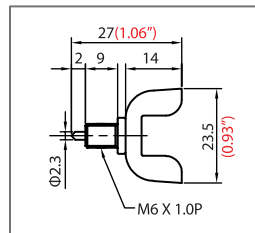
TBS : T-Bar Bracket for Concealed or Recessed Heads



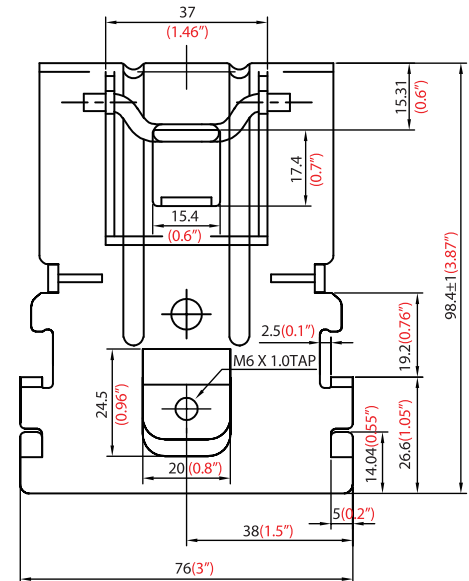
"A" BOLT MATERIAL: ASTM A-36
 "B" BOLT MATERIAL: ANSI 1010
 LATCH-1 MATERIAL: ASTM A-603



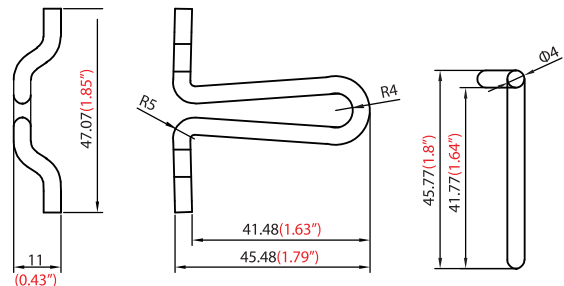
"B" Bolt



"A" Bolt



Scale	NS
Material	ASTM A-603
Tolerance	±1.0

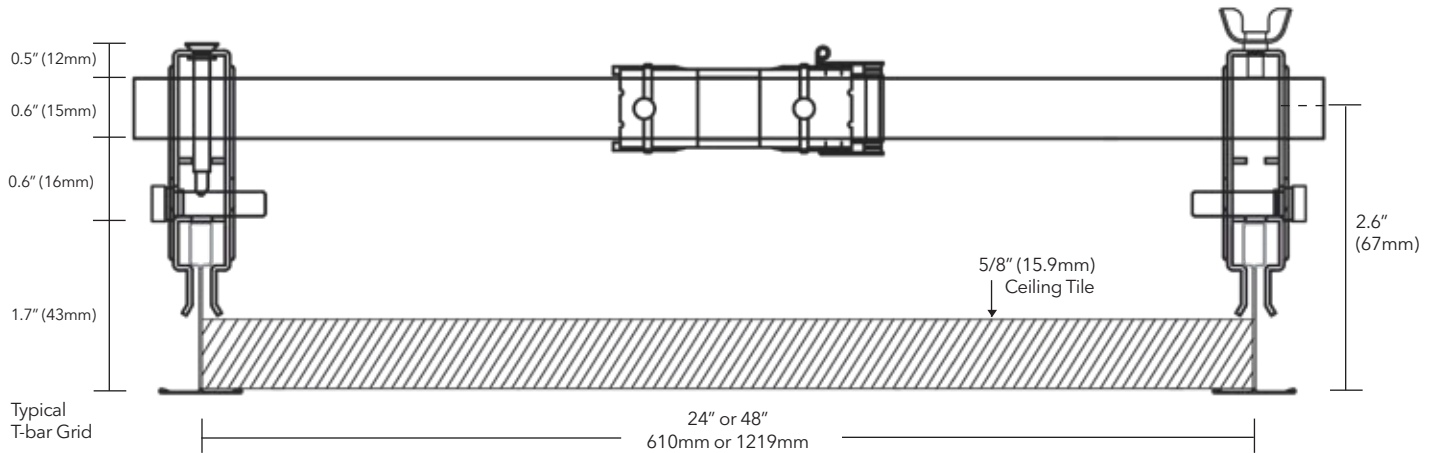


PRODUCT DETAILS

FLEXIBLE SPRINKLER CONNECTION

Low Profile T-Bar Bracket | **OTBSS-PA**

Scale	NS
Material	ASTM A-366
Tolerance	±0.3
Thickness	2.0mm, ±0.05
Spec.	Zinc Plated
Coating Durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test.



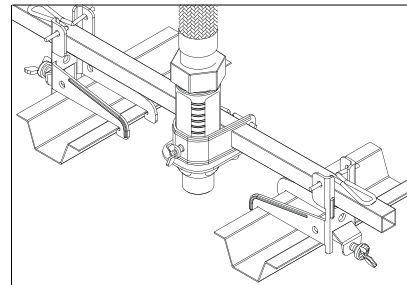
PRODUCT DETAILS

FLEXIBLE SPRINKLER CONNECTION

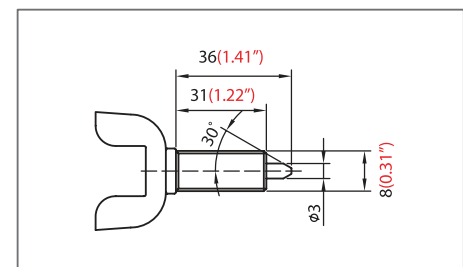
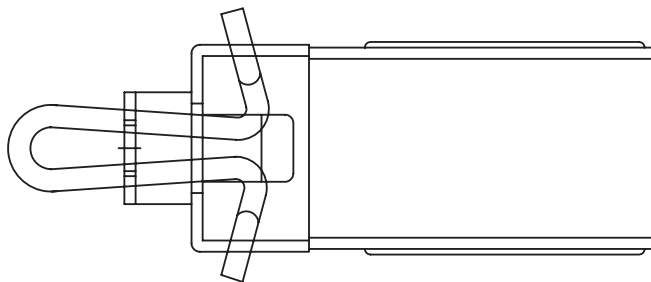
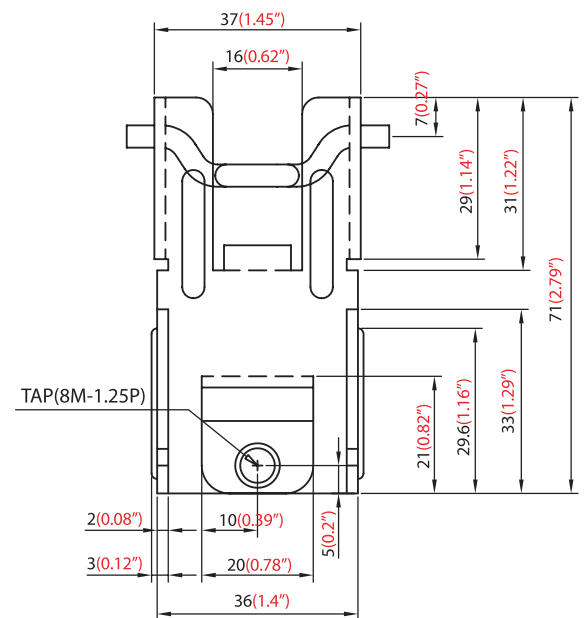
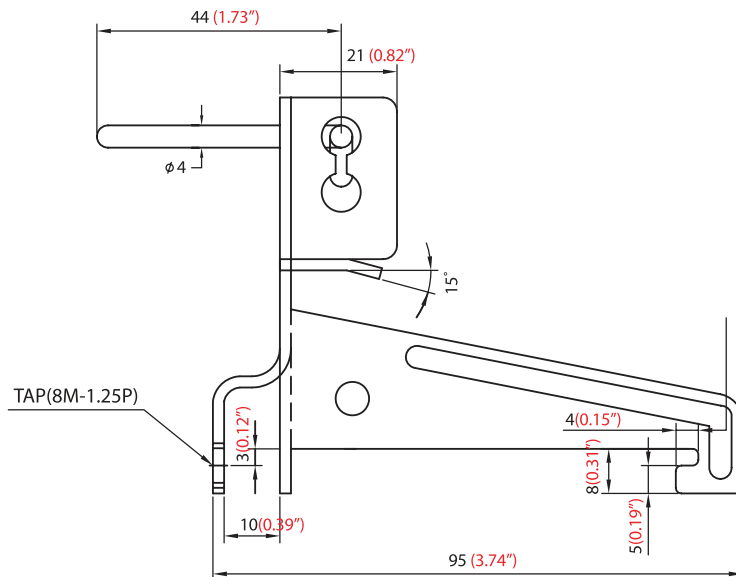


Hat Channel Bracket | *HCB*

Scale	NS
Material	ASTM A-366
Tolerance	±0.2
Thickness	2.0mm
Spec.	Zinc Plated
Coating durability	No indication of peeling
Anti-Corrosion	Anti-Corrosion No indication of corrosion with salt spray test.



HCB : Hat Channel Bracket



High tensile bolt(S45C) M8x1.25P

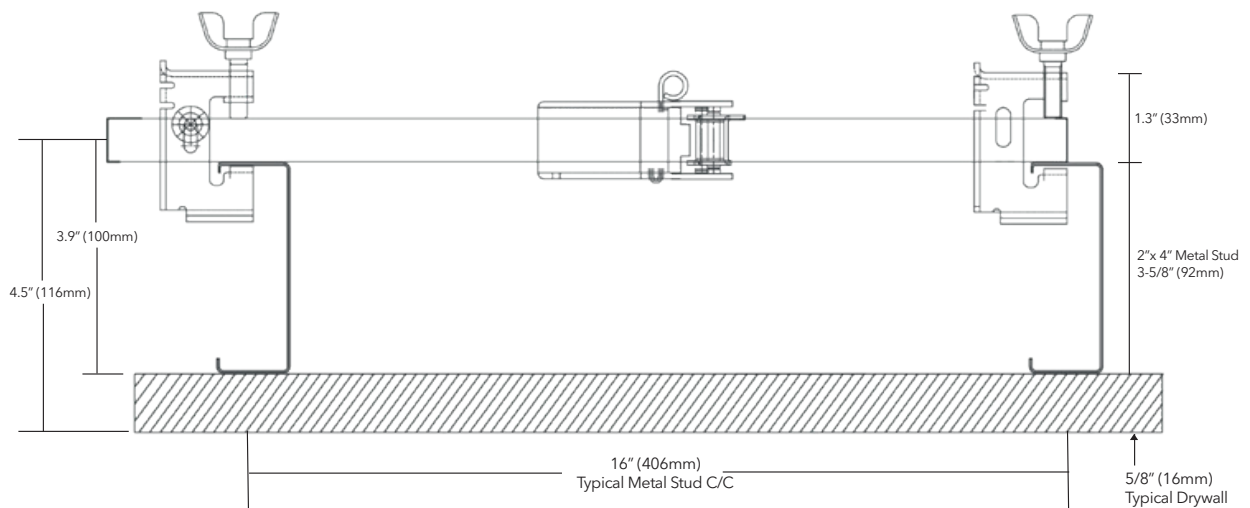
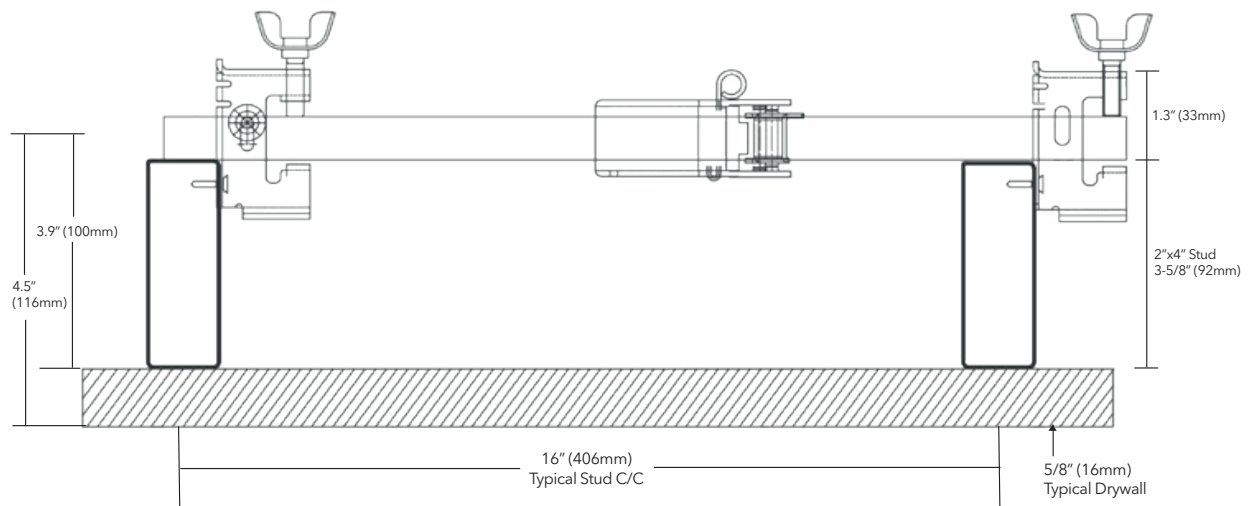
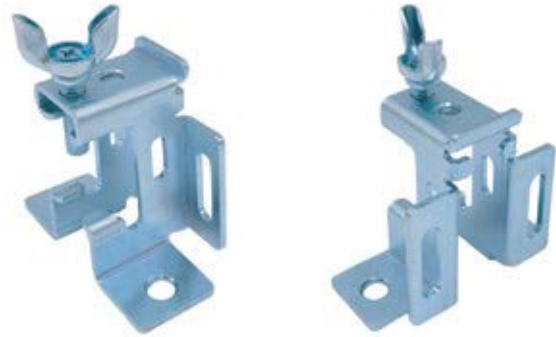
PRODUCT DETAILS

FLEXIBLE SPRINKLER CONNECTION



Wood & Metal Stud Bracket | **OWMSB-PA**

Scale	NS
Material	ASTM A-366
Tolerance	± 0.3
Thickness	2.0mm
Spec.	Zinc Plated
Coating Durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test

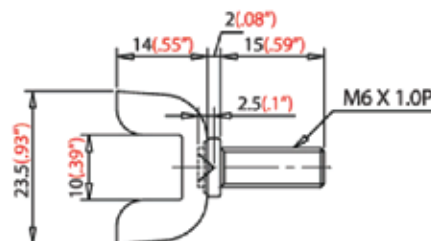
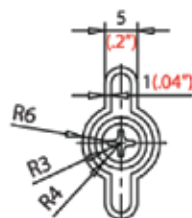
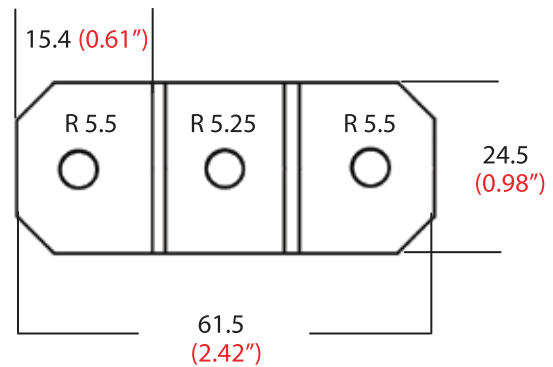
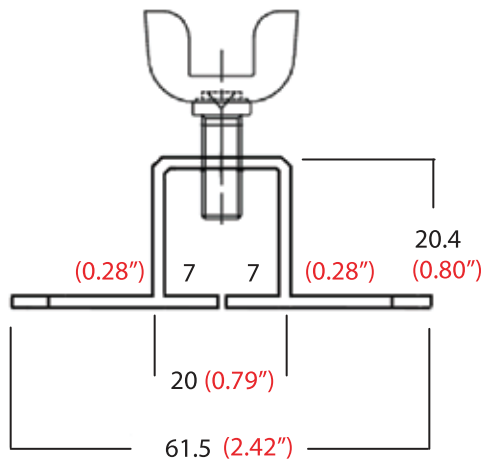
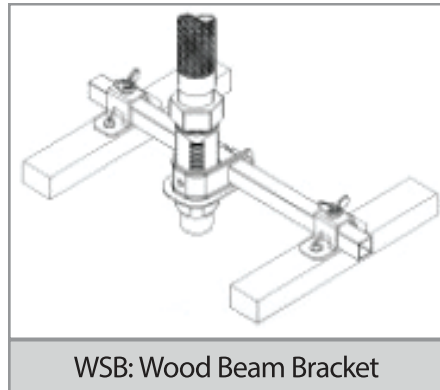


PRODUCT DETAILS

FLEXIBLE SPRINKLER CONNECTION

Brackets for Wood Beam | **WSB**

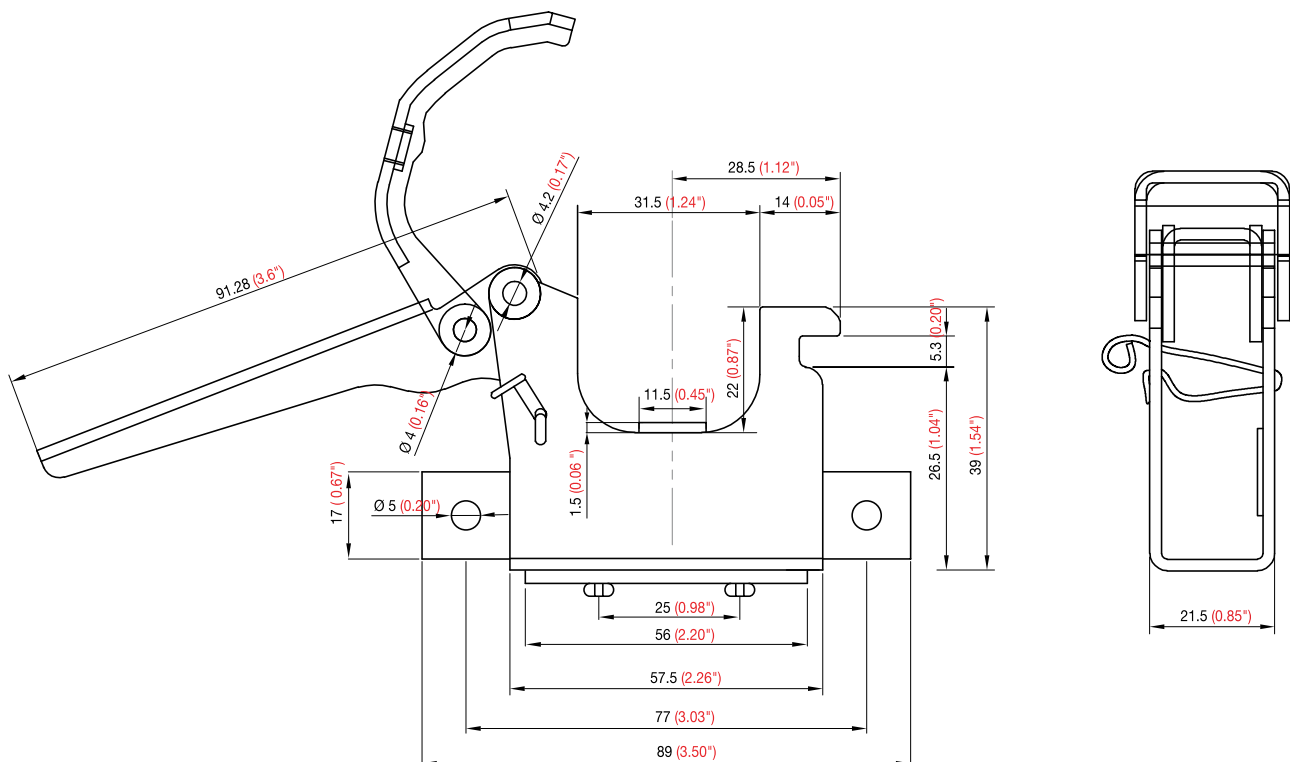
Title	Wood Beam Bracket (WSB)
Scale	NS
Material	ASTM A - 366
Tolerance	± 0.2
Thickness	2.0mm, ± 0.05
Spec.	Zinc Plate
Coating Durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test



PRODUCT DETAILS

Open Gate Snap Bracket for Side Wall | **OSSBW**

Scale	NS
Material	ASTM A-526
Tolerance	±0.3
Thickness	2.0mm, ±0.05
Spec.	Zinc Plated
Coating durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test.



PRODUCT DETAILS

FLEXIBLE SPRINKLER CONNECTION

Elbow Reducer | ***LRD (LRDS or LRDL)***

Scale	NS
Material	ASTM A-53, Gr A
Tolerance	±0.2
Thickness	12.7µm
Spec.	Zinc Plated
Coating durability	No indication of peeling
Anti-Corrosion	No indication of corrosion with salt spray test.

