Fume-A-Vent Hose Reel Installation Guide		
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Initial Set-Up and Inspection

1.1 Ceiling Inspection

To ensure that the Hose Reel is correctly supported, the ceiling construction and the joist slope (if any) must be known. Spacing of such joists and other information is needed to correctly obtain mounting hardware and supports. We recommend utilizing "Unistrut", or "B-Line" to create a rigid steel support structure that will be attached to the ceiling. Please let our experts know if you need help locating mounting hardware or would require it to be provided.

1.2 Ceiling Mounting

Unistrut will need to be mounted to the ceiling, then the Hose Reel will mount to the Unistrut. The following list will direct you to your ceiling type for the Unistrut Installation. Once Unistrut or an equal has been installed, you may refer to **Tab 3-I-10** for Hose Reel attachment.

Below references ceiling type locations:

- 1. I-Beam (Tab 3-I-2)
- 2. Concrete (Tab 3-I-4)
- 3. Bar Joist (Tab 3-I-6)
- 4. Truss (Tab 3-I-8)

If your roof type is not listed, please contact one of our experts to discuss options for mounting and installation.

1.4 Wall Mounting

Please refer to Tab 13-I-14 for wall mounting instructions

1.3 Important Notes

It is also critical to note any oddities or special information about the roof/ceiling. Obstructions, such as overhead doors, sprinkler systems, HVAC, and other items must be accounted for. These items can create mounting issues if not noted.





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Unistrut Mounting Procedure - I-Beam Mounting

2.1 This sheet will guide you to mounting Unistrut to I-Beams. Unistrut and Clamps can be self supplied, or provided. Please consult our experts to find the right size and length for your install.

NOTE: Two spans of Unistrut are required for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

1. Materials List -

The following is a list of the necessary hardware. All items available by going to www.unistrut.us. Hardware required is 3/8". This chart is for one Hose Reel only.

ITEM	QUANTITY	DESCRIPTION
Unistrut®	2	Sized and Cut to Applications Needs
Beam Clamps	4	Type A or B - Includes All Hardware
U-Bolt	4	Included with Beam Clamps
Hex Nuts	8	Included with Beam Clamps

2. Unistrut -

The Unistrut length should be cut to either set on top of the I-Beam lip, or below it, depending on the desired Clamp Type. Be sure to mount the two pieces of Unistrut in the exact desired Hose Reel drop down location.

3. Beam Clamps -

Several Beam Clamp options are available, please specify A or B if we are providing. With the Unistrut in its final position, slide the included 3/8" U-Bolt into the clamp, and slide the Hook Bolt into the single hole side of the clamp. Tighten with included 3/8" nuts. Unistrut should be facing upwards. (See Drawings on the next page)

5. Repeat and Secure -

This process should be repeated for each piece of Unistrut to be hung. The materials list is for two strut connection points. Additional hardware is needed for extra connections.

4. Inspection -

Ensure the Unistrut is in the correct location. Check that the installed Unistrut is secure and provides rigid support. Always consider push and pull forces from the Hose Reel.

5. Options -

Common utilized Beam Clamps shown below (more options and sizes available upon request)

A. # P2785 - Unistrut mounted on bottom of I-Beam lip B. # P2867 - Unistrut mounted on top of I-Beam lip

The next page will show detailed drawings of the I-Beam installation.



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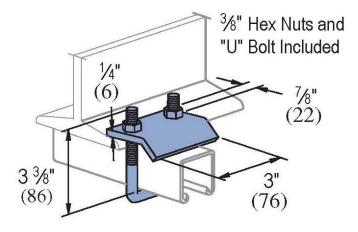
Unistrut Mounting Procedure - I-Beam Mounting

3.1 This sheet shows the two common options for I-Beam Unistrut mounting.

NOTE: Two spans of Unistrut are required for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

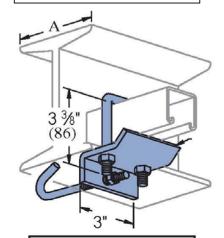
All items are avaliable at www.unistrut.us

A. Part Number - P2785 (Above I-Beam)



For use with I-Beams up to 3/4" thickness.

B. Part Number - P2867 (Over I-Beam)



Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2867	4"-6"	142 (64.4)
P2867-9	6"-9"	151 (68.5)
P2867-12	9"-12"	160 (72.6)
P2867-15	12"-15"	170 (77.1)
P2867-18	15"-18"	179 (81.2)

Hardware included with Beam Clamps



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Unistrut Mounting Procedure - Concrete

4.1 Although more uncommon, poured concrete ceilings are also possible locations to mount our Hose Reels. Unistrut can be self supplied, or provided. Please consult our experts to find the right size and length for your install.

NOTE: Two pieces of Unistrut will need to be mounted for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

1. Materials List -

The following is a list of the necessary hardware. This chart is only for one Hose Reel. Required hardware is typically 3/8".

ITEM	QUANTITY	DESCRIPTION
Unistrut®	2	Sized and Cut to Applications Needs
Concrete Anchor	4	3" Min Penetration
Hex Bolts	4	3" Min Length
Round Washer	4	3/8" Round Flat Washers
Lock Washer	4	3/8" Lock Washers

2. Unistrut -

The Unistrut support should be cut to the desired length or provided. Be sure to mount the two pieces of Unistrut in the exact location the Hose Reel should drop down.

3. Concrete Anchor -

Drill into concrete a 1/2" dia. by 3-1/2" deep hole with a hammer drill, and install a threaded expansion anchor, from Hilti Corp. or equal, with a 3" minimum depth. Use a hit pin to expand the anchor and check that it is flush with the concrete. A suggested minimum of 3 anchors per 4' section of Unistrut should be used.

4. Bolts/Hardware -

With adequate anchors installed, you can install the two cut lengths of Unistrut. With the Unistrut's flat end against the concrete, insert a 3/8" by 3" long Hex bolt into a 3/8" flat washer, then a 3/8" lock washer. Screw a bolt and washer assembly into each anchor and tighten (See Drawings on next page). Ensure the round washer is flush against the Unistrut and the lock washer is against the bolt head.

5. Repeat and Secure -

This process should be repeated for each piece of Unistrut to be hung. The materials list is for two strut connection points. Additional hardware is needed for extra connections.

6. Inspection -

Ensure the Unistrut is in the correct location and tighten the bolts. Check that the installed Unistrut is secure and rigid. Always consider push and pull forces from the Hose Reel.

See the next page for detailed drawings of this installation.



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Unistrut Mounting Procedure - Concrete

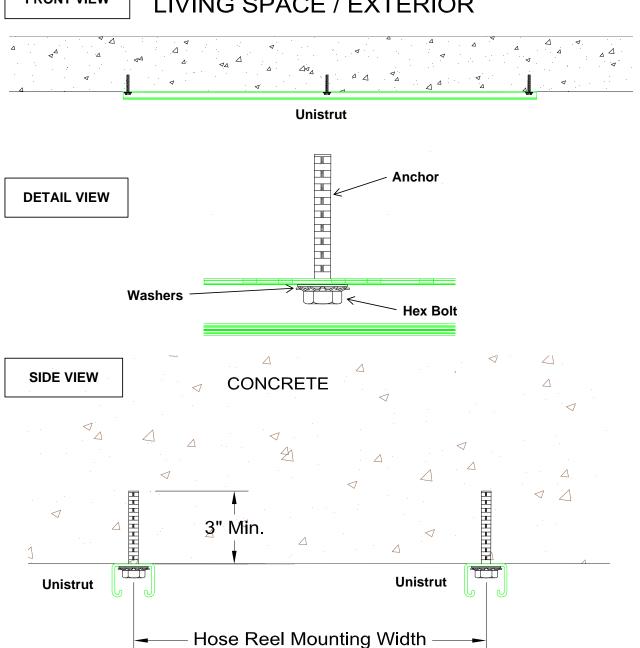
This page shows both front and side views as well as details of the concrete ceiling hardware installation.

NOTE: Two pieces of Unistrut will need to be mounted for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

All items available by going to www.unistrut.us/

FRONT VIEW

LIVING SPACE / EXTERIOR





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Date 12/12 Page 6 Hose Reel Installation TAB 3-I-6

Unistrut Mounting Procedure - Bar Joists

6.1 Bar Joist ceilings are the most common roof/ceiling type. The spacing, size, and other information about the joists should be known. This guide lays out the process for attaching Unistrut, which can be self supplied, or provided. Please consult our experts to find the right size and length for your install.

NOTE: Two pieces of Unistrut will need to be mounted for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

1. Materials List -

The following is a list of neccessary hardware. This chart is only for one Hose Reel. All hardware is typically 3/8"

ITEM	QUANTITY	DESCRIPTION
Unistrut®	2	Sized and Cut to Applications Needs
Hex Bolts	4	3" Min Length
Round Washer	4	3/8" Round Flat Washers
Channel Nut	4	3/8" Unistrut Channel Nut

2. Unistrut -

Cut Unistrut should be ready to install, (length based distance between joists); place the two cut pieces of Unistrut over top of the Ceiling Joists, face down directly over the desired drop location (See Drawing on Next Page).

3. Bolts/Hardware -

Using a 3/8" Hex bolt that is long enough to reach the Unistrut, insert it into a 3/8" square no-twist washer, in the middle opening of the joist, upward, and through the Unistrut. Screw the bolt with washer into a 3/8" Unistrut Channel Nut.

4. Repeat and Secure -

This process should be repeated for each piece of Unistrut to be hung. Two bolts should be secured into each piece of Unistrut. If three connection points are to be made, additional hardware will be needed.

6. Inspection -

Ensure the Unistrut is in the correct location and tighten the bolts. Check that the installed Unistrut is secure and rigid. Always consider push and pull forces from the Hose Reel.

See the next page for detailed drawings of this installation.



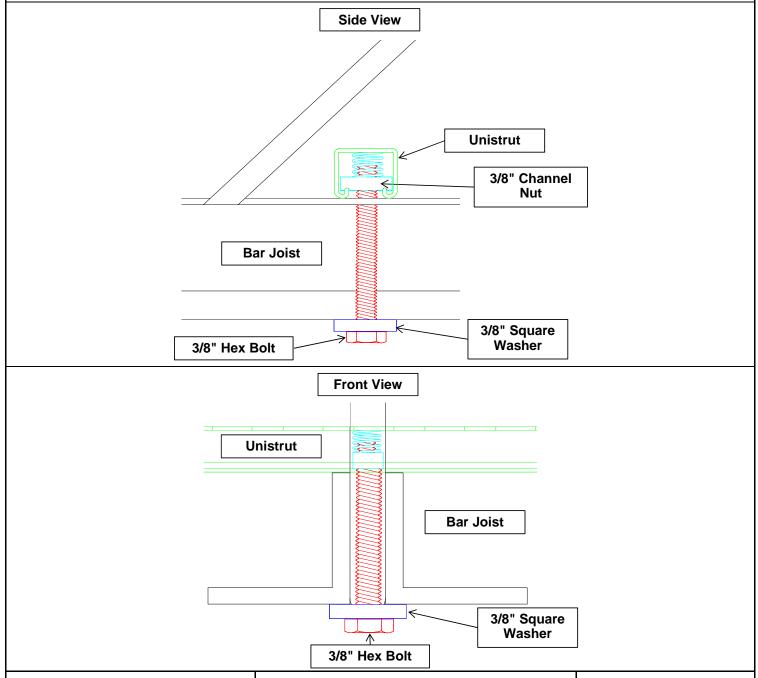
Date 12/12 Page 7 Hose Reel Installation TAB 3-I-7

Unistrut Mounting Procedure - Bar Joists

7.1 Bar Joist ceilings are the most common roof/ceiling type. The spacing, size, and other information about the joists should be known. This guide lays out the process for attaching Unistrut, which can be self supplied, or provided. Please consult our experts to find the right size and length for your install.

NOTE: Two pieces of Unistrut are required for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

All items avaliable by going to www.unistrut.us/





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Date 12/12 Page 8 Hose Reel Installation TAB 3-I-8

Unistrut Mounting Procedure - Wood Truss

8.1 Wood Truss ceiling types have a simple, and easy installation for Unistrut. This sheet will guide you to mounting Unistrut along Wood Truss ceiling types.

NOTE: Two pieces of Unistrut will need to be mounted for each Hose Reel, spaced accordingly to it's four pre-drilled 9/16" mounting holes.

1. Materials List -

The following is a list of the neccessary hardware. This chart is only for one Hose Reel. Required hardware is typically 3/8".

ITEM	QUANTITY	DESCRIPTION
Unistrut®	2	Sized and Cut to Applications Needs
Hex Bolts	4	3" Min Length
Round Washer	4	3/8" Round Flat Washers
Lock Washer	4	3/8" Lock Washers
No-Twist Washer	4	(Optional) 3/8"No-Twist Square

2. Unistrut -

The Unistrut should be in the exact location the Hose Reel will drop down at. Confirm mounting location and mark centerlines. With correct provided information, pre-cut Unistrut should be supplied.

3. Bolts/Hardware -

Pre-Drill mounting holes for the Unistrut. Two mounting holes per 4' Unistrut span minimum. Three recommended for 6' spans. (See Drawing on next page)

Insert a 3/8" hardened steel Hex Bolt, accompanied by a 3/8" flat round and 3/8" lock washer. A minimum length of 6" should be used, with 3" min. penetration into the truss.

4. Optional Mounting -

A No-Twist 3/8" square washer may be used and mounted on the outer side of the Unistrut (See Optional Drawing). This can prevent hang-ups and create a more clean appearance if desired.

5. Repeat and Secure -

This process should be repeated for each piece of Unistrut being hung. Two bolts should be secured into each piece of Unistrut. If three Hex bolts are to be used, additional hardware is needed.

6. Inspection-

Be sure to place the lock washer between the flat washer and Hex bolt, and the round washer should be flush with the Unistrut. Tighten all hardware. Ensure that the Unistrut is rigid and secure to the ceiling, and in the correct location.

See the next page for detailed drawings of this installaion.



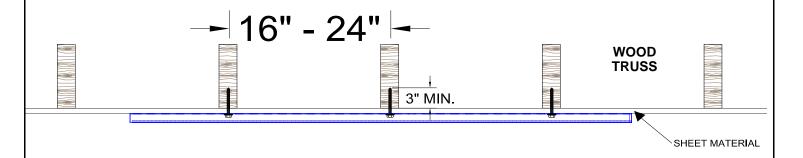
Date 12/12 Page 9 Hose Reel Installation TAB 3-I-9

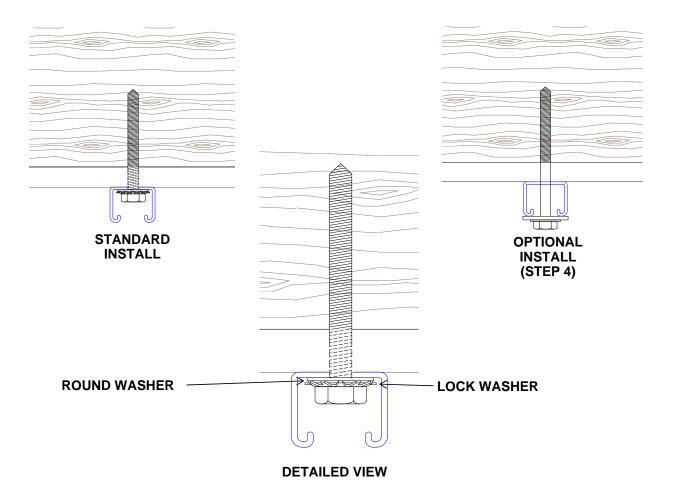
Unistrut Mounting Procedure - Wood Truss

9.1 This page shows full side and front views of truss installation as well as a detailed view to show hardware location.

NOTE: Two pieces of Unistrut will need to be mounted for each Hose Reel, spaced accordingly to the four pre-drilled 9/16" mounting holes.

All items available by going to www.unistrut.us/







Date 12/12 Page: 10 Hose Reel Mounting TAB 3-I-10

Mounting Hose Reel to Installed Unistrut

10.1 This page will guide you to mounting Hose Reels to Unistrut. This process and materials are for **one** hose reel. This process must be repeated for each Hose Reel mounted.

NOTE: Two pieces of Unistrut will need to be mounted for each Hose Reel, spaced accordingly to the four pre-drilled 9/16" mounting holes in its frame.

1. Material List-

The following is a list of the necessary Hardware. Please let our experts know if you prefer to obtain these materials externally, or would like us to order them for you.

DESCRIPTION	QUANTITY	SIZE
Unistrut® (Installed)	2	Varies per Building (2 per Hose Reel)
Channel Nuts	4	3/8" w/ Threaded Hole
Bolt	6	3/8" Threaded Steel Hex Bolt
Round Washer	4	3/8" - Flat Round
Lock Washer	4	3/8" - Lock
Square Washer	4	3/8" - Flat Square

2. Location -

Two pieces of Unistrut should already be mounted based on the ceiling, and spacing of the 9/16" mounting holes that are pre-drilled into the Hose Reel steel frame. Four mounting holes are pre-drilled in each reel.

3. Lift -

With the Unistrut installed in the correct position, lift the hose reel to its mounting level via Cherry Picker or Scissor Lift that can support the weight and move in place.

4. Bolts and Hardware -

In each mounting hole, insert a 3/8" Threaded Hex Bolt, accompanied by a square washer, lock washer, and a round flat washer into a Channel Nut. All hardware should be 3/8". The lock washer should be closest to the head of the bolt, and the square washer against the Unistrut, with the round in the middle. Tighten this hardware into the Unistrut Channel Nut.

5. Repeat -

This process and materials list should be repeated for each Hose Reel installation.

6. Inspection -

Check that all hardware is tightened; the Hose Reel is in the correct location; and any push, pull, or lateral forces will not jeopardize the reels rigid mounting. Ensure the hose will reach all vehicles to be exhausted.

See the next page for detailed drawings of the Hose Reel installation.

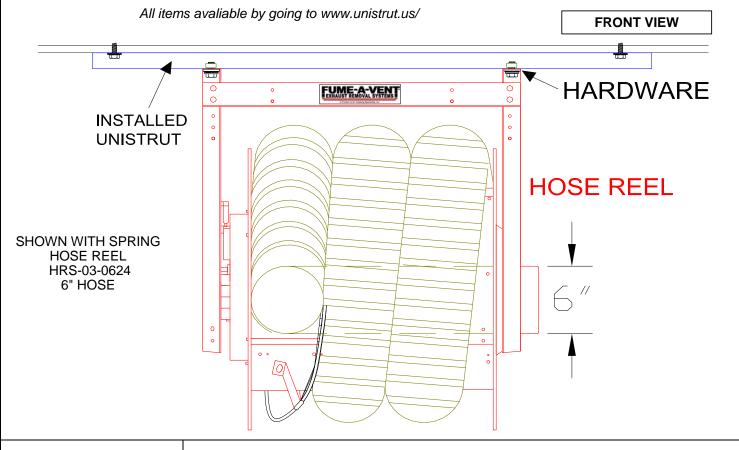


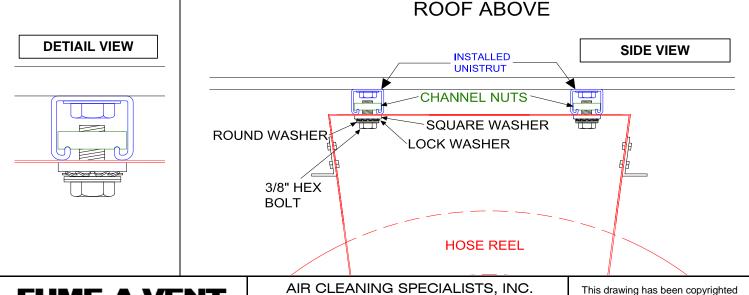
Date 12/12 Page: 11 Hose Reel Mounting TAB 3-I-11

Mounting Hose Reel to Installed Unistrut

11.1 The drawings below show several views and details of the Hose Reel Mounting. Spacing between Unistrut will vary per Hose Reel.

NOTE: Two pieces of Unistrut will be required for each Hose Reel. Connection to ceiling varys per building.





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Date 12/12 Page: 12 Hose Reel Installation TAB 3-I-12

Dropping Hose Reel Elevation

12.1 Threaded rod or 1-5/8" Strut can be used to drop down one or both ends of the Hose Reel for sloped ceilings, tall ceilings, or obstructions. 3/8" hardware minimum.

Vertical runs of Unistrut or equal is required for drops over six (6) inches.

NOTE: Unistrut Should already be secured to the Hose Reel, along the side of the reel, in line with it's pre-drilled mounting holes. (See next page drawings)

1. Measure -

Determine the length of threaded rod or strut required for drop down.1-5/8" Strut or SHORT runs of 3/8" threaded rod is recommended. Lateral support will be fabricated at 45 degree angles. Lengths of rod may be different for each mounting location.

2. Attaching Threaded Rod or Strut -

Strut should already be installed to the ceiling/roof. Secure the newly cut Threaded Rod or Strut to the installed Strut along the ceiling. This can be done with 90 degree fittings and hardware for Strut, or secure with a channel nut, lock washer, and Hex nut for Threaded Rod.

3. Lifting Hose Reel -

With the vertical Threaded Rod or Strut attached to the ceiling, lift the Reel up to the rod's height via Cherry Picker Scissor lift.

4. Attaching Hose Reel -

With the same process as before, utilize 90 degree fittings for strut, or insert a Channel Nut into the Strut, and screw the threaded rod into the reel side. Secure with a square No-Twist washer, lock washer, and Hex nut.

5. Lateral Support -

The Hose Reel will may need lateral support braces for drops more than 6".

- B. Decide where the lateral supports will connect to the ceiling. This will be different for each ceiling type. Generally, the hardware can either be installed into an additional short run of mounted Unistrut, directly bolted into the ceiling, or per the customers preference. This step will be custom for every application.
- C. Measure at a 45° angle, the distance from the leg to the mounting location of each lateral support. Cut 1" Conduit to the desired length, and flatten both ends with a hammer or mallet.
- D. Two lateral supports should be used for each reel, opposite of the press and directions. A 45° angle should be used for best support.
- E. Drill a 3/8" hole into each end of the flattened Conduit, and affix one end to the ceiling/Strut, and the other end shall mount to strut on the Hose Reel via 3/8" hardware. Both connections are essential for stability.
- 6. Inspection -

Check that all hardware is tightened; the Hose Reel is in the correct location; and any push, pull, or lateral forces will not jeopardize the reels rigid support.

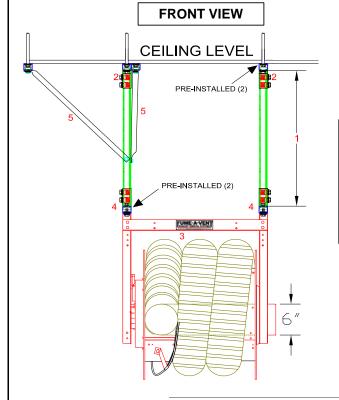
DRAWINGS ON NEXT PAGE FOR REFERENCE

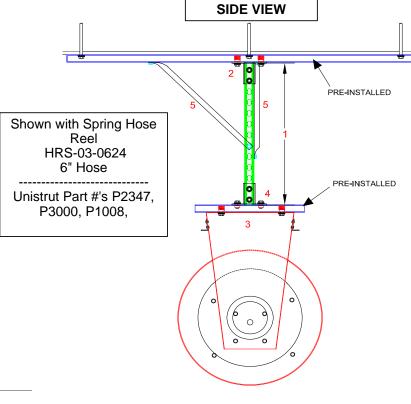


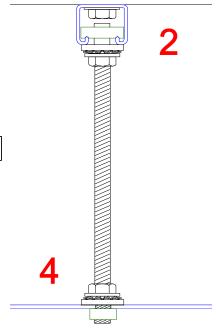
Date 12/12 Page: 13 Hose Reel Installation TAB 3-I-13

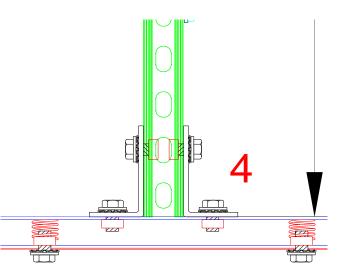
Adding Threaded Rod to Hose Reels

13.1 The drawings below show Threaded Rod and Strut installtion for Drop Downs. Both front and side views are shown. A detail of the hardware is also shown. Slanted ceilings can also be utilized with Threaded Rod. www.unistrut.us/









3



DETAILED VIEW

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Date 12/12 Page: 14 Hose Reel Installation TAB 3-I-14

Mounting Hose Reel to Walls

14.1 This guide is only intended for suggestive means of mounting a Hose Reel to a wall. There is a large number of factors in wall strength, hose reel variance, and building conditions, please consult an expert to help decide if a mounting location is appropriate.

PLEASE NOTE: Not all applications are the same. This guide assumes normal CMU or concrete block walls. I-Beams, wood stud, brick, and other mounting locations can work with proper hardware installation.

1. Measure -

Obtain the wall thickness where the Hose Reel is to be mounted. Ensure the wall can handle the weight and pull/press forces from the reel. Actual Hose `Reel weights available on request.

2. Unistrut -

The wall must be sandwiched between four cut pieces of Unistrut; two on the interior and two exterior. The spans should be cut at least a few inches longer than the Hose Reel is wide. Make sure to note/mark the pre-drilled reel mounting hole locations. (9/16")

3. Building Attachment -

The cut Unistrut shall be installed horizontally with the flat ends against the wall surface. (See Drawings on next page). A minimum of three wall penetrations per piece of Unistrut is required. Drill 9/16" holes through the wall for installation. See hardware required

4. Hardware -

Using a cut threaded rod, long enough to fully penetrate the wall, affix the Unistrut, accompanied by a lock washer, flat washer, and a Hex nut on each end. Ensure the Unistrut is rigid. Wall sealants may be needed for around the threaded rod.

4. Attaching Hose Reel -

In each mounting hole, insert a 3/8" X 1.5" threaded Hex Bolt, accompanied by a square washer, lock washer, and a round flat washer into a Channel Nut. All hardware should be 3/8". The lock washer should be against the head of the bolt, and the square washer against the Unistrut, with the round in the middle. Tighten this hardware assembly into the Unistrut Channel Nut.

5. Repeat -

The previous process should be repeated for each Hose Reel. Ensure hardware is available for each installation.

5. Inspection -

Check that all hardware is tightened; the Hose Reel is in the correct location; and any push, pull, or lateral forces will not jeopardize the reels rigid support.

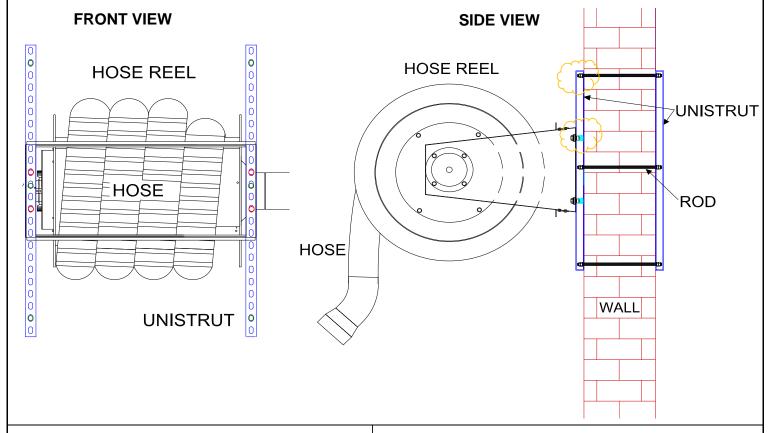
Please see the next page for detailed drawings.

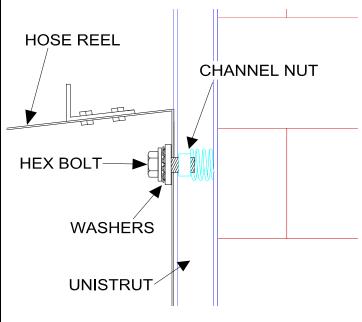


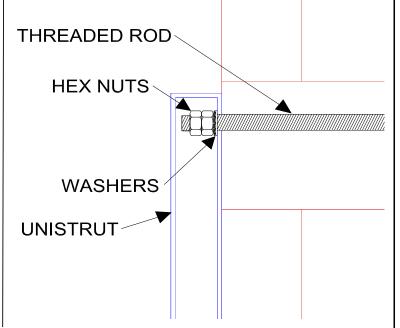
Date 12/12 Page: 15 Hose Reel Installation TAB 3-I-15

Mounting Hose Reel to Walls

15.1 Drawings show Hose Reel mounted to wall. Side views, front views, and details shown.









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Hose Reel Weight

5" Spring Hose Reels		
SKU	Weight (lbs)	
HRS-X-0516	112	
HRS-X-0520	124	
HRS-X-0524	124	
HRS-X-0525	124	
HRS-X-0530-W	132	
HRS-X-0532-W	132	
HRS-X-0535-W	132	
HRS-X-0536-W	132	

6" Spring Hose Reels		
SKU	Weight (lbs)	
HRS-X-0616	124	
HRS-X-0620	124	
HRS-X-0624	132	
HRS-X-0625	132	
HRS-X-0630-W	168	
HRS-X-0632-W	168	
HRS-X-0635-W	168	
HRS-X-0636-W	168	

8" Spring Hose Reel		
SKU	Weight (lbs)	
HRS-X-0820-L	193	
HRS-X-0824-L	193	
HRS-X-0830-L	193	
HRS-X-0836-L	193	
HRS-X-0844-L	193	