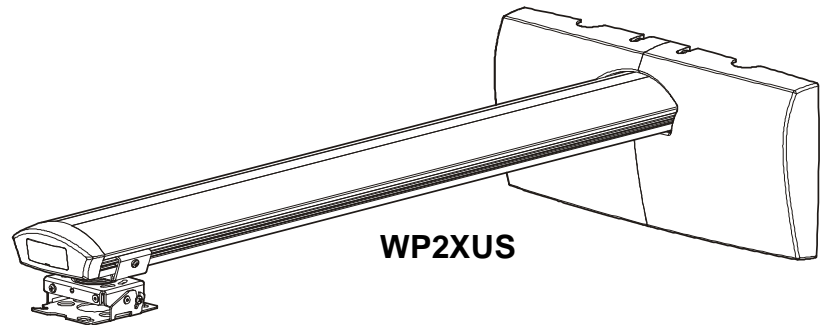
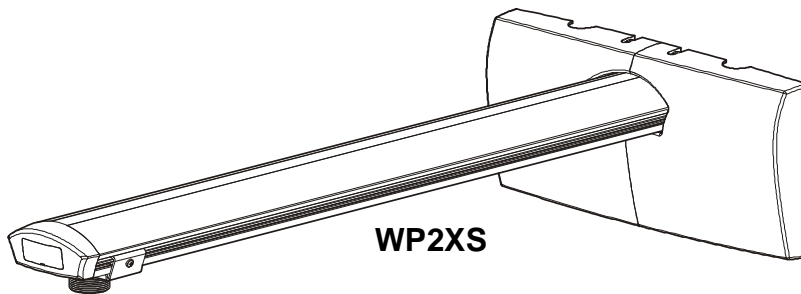


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# INSTALLATION INSTRUCTIONS

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## Short Throw Projector Wall Mounts

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## DISCLAIMER

Milestone AV Technologies and its affiliated corporations and subsidiaries (collectively "Milestone"), intend to make this manual accurate and complete. However, Milestone makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. Milestone makes no representation of warranty, expressed or implied, regarding the information contained herein. Milestone assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

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**WARNING:** Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.



**WARNING:** Do not use this product outdoors.

**IMPORTANT ! :** The WP2XS and WP2XUS mounts are designed to be mounted to:

- an 8" concrete wall;
- an 8"x8"x16" concrete block wall;
- a brick wall;
- a 2" x 4" wood studs (16" on center); or
- a 2" x 4"-25ga minimum steel studs wall.

**--SAVE THESE INSTRUCTIONS--**



## IMPORTANT WARNINGS AND CAUTIONS!



**WARNING:** A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.



**CAUTION:** A CAUTION alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.



**WARNING:** Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer's responsibility to make sure all components are properly assembled and installed using the instructions provided.



**WARNING:** Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component. The wall to which the mount is being attached may have a maximum drywall thickness of 5/8" (1.6cm) for wood stud installation, and 1/2" (1.3cm) for steel stud installation.



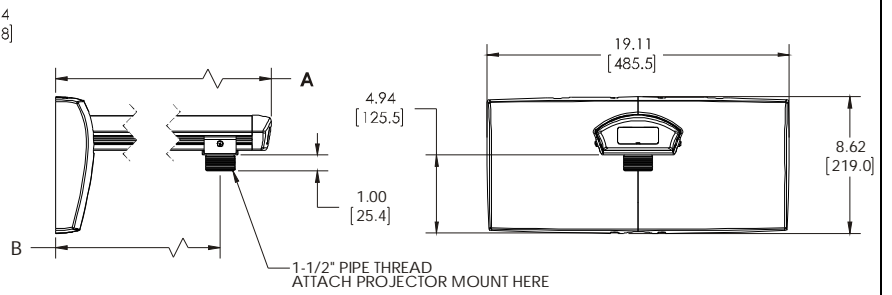
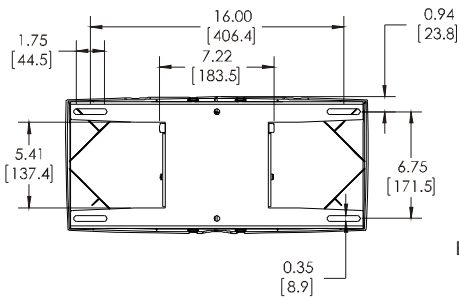
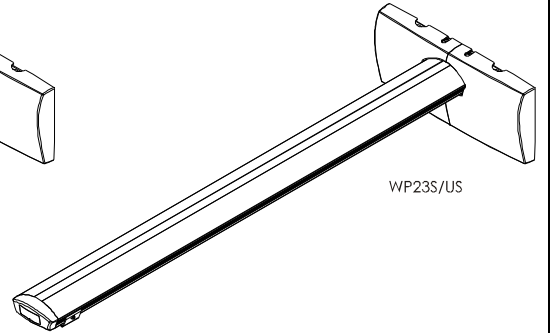
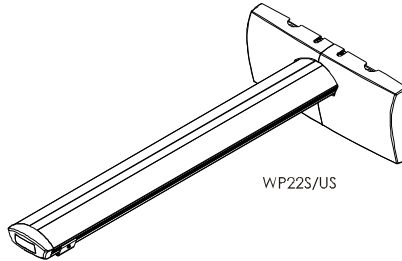
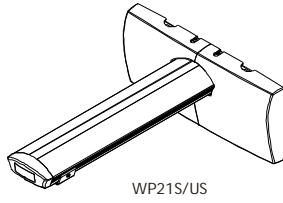
**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the weight of the projector does not exceed 25 lbs (11.3 kg).



**WARNING:** Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

**DIMENSIONS**

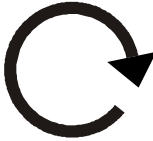




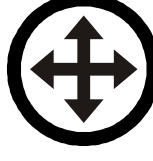






	DIMENSION A	DIMENSION B MIN	DIMENSION B MAX	WEIGHT CAPACITY
WP21S/US	24.36 [618.8]	3.62 [92.0]	22.12 [561.9]	25 LBS
WP22S/US	40.36 [1025.2]	3.62 [92.0]	38.12 [968.3]	25 LBS
WP23S/US	56.36 [1431.6]	3.62 [92.0]	54.12 [1374.7]	25 LBS



WP2XS REQUIRES A PROJECTOR MOUNT (PURCHASED SEPARATELY)  
 WP2XUS INCLUDES RSAUS UNIVERSAL MOUNT INSTALLED (NOT SHOWN)

**DIMENSIONS: INCHES  
 [MILLIMETERS]**

**LEGEND**

	<p><b>Tighten Fastener</b></p> <p>Apretar elemento de fijación</p> <p>Befestigungsteil festziehen</p> <p>Apertar fixador</p> <p>Serrare il fissaggio</p> <p>Bevestiging vastdraaien</p> <p>Serrez les fixations</p>		<p><b>Pencil Mark</b></p> <p>Marcar con lápiz</p> <p>Stiftmarkierung</p> <p>Marcar com lápis</p> <p>Segno a matita</p> <p>Potloodmerkteken</p> <p>Marquage au crayon</p>
	<p><b>Loosen Fastener</b></p> <p>Aflojar elemento de fijación</p> <p>Befestigungsteil lösen</p> <p>Desapertar fixador</p> <p>Allentare il fissaggio</p> <p>Bevestiging losdraaien</p> <p>Desserrez les fixations</p>		<p><b>Drill Hole</b></p> <p>Perforar</p> <p>Bohrloch</p> <p>Fazer furo</p> <p>Praticare un foro</p> <p>Gat boren</p> <p>Percez un trou</p>
	<p><b>Phillips Screwdriver</b></p> <p>Destornillador Phillips</p> <p>Kreuzschlitzschraubendreher</p> <p>Chave de fendas Phillips</p> <p>Cacciavite a stella</p> <p>Kruiskopschroevendraaier</p> <p>Tournevis à pointe cruciforme</p>		<p><b>Adjust</b></p> <p>Ajustar</p> <p>Einstellen</p> <p>Ajustar</p> <p>Regolare</p> <p>Afstellen</p> <p>Ajuster</p>
	<p><b>Open-Ended Wrench</b></p> <p>Llave de boca</p> <p>Gabelschlüssel</p> <p>Chave de bocas</p> <p>Chiave a punte aperte</p> <p>Steeksleutel</p> <p>Clé à fourche</p>		<p><b>Remove</b></p> <p>Quitar</p> <p>Entfernen</p> <p>Remover</p> <p>Rimuovere</p> <p>Verwijderen</p> <p>Retirez</p>
	<p><b>By Hand</b></p> <p>A mano</p> <p>Von Hand</p> <p>Com a mão</p> <p>A mano</p> <p>Met de hand</p> <p>À la main</p>		<p><b>Optional</b></p> <p>Opcional</p> <p>Optional</p> <p>Opcional</p> <p>Opzionale</p> <p>Optie</p> <p>En option</p>
	<p><b>Hex-Head Wrench</b></p> <p>Llave de cabeza hexagonal</p> <p>Sechskantschlüssel</p> <p>Chave de cabeça sextavada</p> <p>Chiave esagonale</p> <p>Zeskantsleutel</p> <p>Clé à tête hexagonale</p>		<p><b>Security Wrench</b></p> <p>Llave de seguridad</p> <p>Sicherheitsschlüssel</p> <p>Chave de segurança</p> <p>Chiave di sicurezza</p> <p>Veiligheidsleutel</p> <p>Clé de sécurité</p>

**TOOLS REQUIRED FOR INSTALLATION**

5/32"  
5/32" (security) (included)  
1/4" (included)

3/8"

1/2"

**Hardware required, not included:**  
**Steel Stud Install**  
 4 - Toggler® 1/4-20 (BB) Snap-Toggle  
 4 - Grade 2 or better 1/4-20 x 1-3/4" Phillips pan head screws  
 4 - Grade 2 or better 1/4" washer

**PARTS**

**ALL MODELS**

A (1) [Projector arm]  
 (WP21S shown) OR (WP21US shown)

B (1) [Wall plate cover - left]  
 C (1) [Wall plate cover - right]  
 D (1) [End cap]

E (1) [Wall plate]

F (4) 5/16"  
 G (4) 5/16" x 2-1/2"

H (1) M5 x 35mm  
 J (8) M5 x 12mm  
 K (4) [Anchor]

L (1) 5/32" (security)  
 M (4) 10-24 x 3/8" (security)  
 N (1) 5/16-18 x 1/2" (security)  
 P (2) 10-24 x 3/8"  
 All-Points Security Kit Card

Q (4) M3x25mm  
 R (4) M4x25mm  
 S (4) M5x25mm  
 T (4) M6x25mm  
 U (4) .500x.257x.625  
 V (4) [Thumb nuts]

**WP2XUS MODELS ONLY**

W (1) [SSB cover]  
 X (1) [Base plate]  
 Y (4) [SSB leg]

AA (4) 8-32 x 1/4"  
 AB (4) M2.5x10mm  
 AC (4) M3x10mm  
 AD (4) M4x10mm  
 AE (4) 8-32 x 3/8"  
 AF (4) M5x14mm  
 AG (4) M6x14mm  
 AH (4) 1/4-20  
 AI (4) M4  
 AJ (1) 1/4"  
 AK (1) 5/32" (security)

## INSTALLATION

The WP2XS/WP2XUS short throw projector mounts are designed to be mounted to an 8" concrete, 8"x8"x16" concrete block, brick, 2" x 4" wood studs (16" on center), or steel studs wall.

**NOTE:** Proceed to the **Concrete, Concrete Block or Brick, Wood Studs or Steel Studs Installation** section, as appropriate for installation.

### Concrete, Concrete Block or Brick Installation

1. Determine mounting location on wall.
2. Using wall plate (E) as a template, mark four holes through mounting holes in wall plate. (See Figure 1)
3. Drill four 3/8" holes at marked locations in wall. (See Figure 1)
4. Install four anchors (K) into drilled holes. (See Figure 1)
5. Install four 5/16 x 2-1/2" hex head lag screws (G) through four 5/16" washers (F), holes in wall plate (E) and into four anchors (K). (See Figure 1)

**NOTE:** Proceed to **Install Short Throw Projector Arm to Wall Plate** section to continue installation.

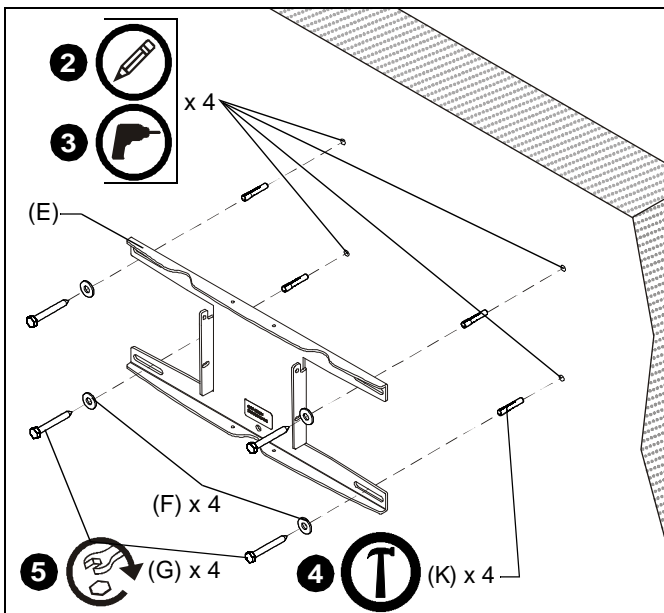


Figure 1

### Wood Studs Installation

1. Determine mounting location on wall. Use a stud finder to locate studs.
2. Using wall plate (E) as a template, mark four holes through mounting holes in wall plate. (See Figure 2)
3. Drill four 7/32" holes at marked locations in wall. (See Figure 2)
4. Install four 5/16 x 2-1/2" hex head lag screws (G) through four 5/16" washers (F), holes in wall plate (E) and into four pilot holes. (See Figure 2)

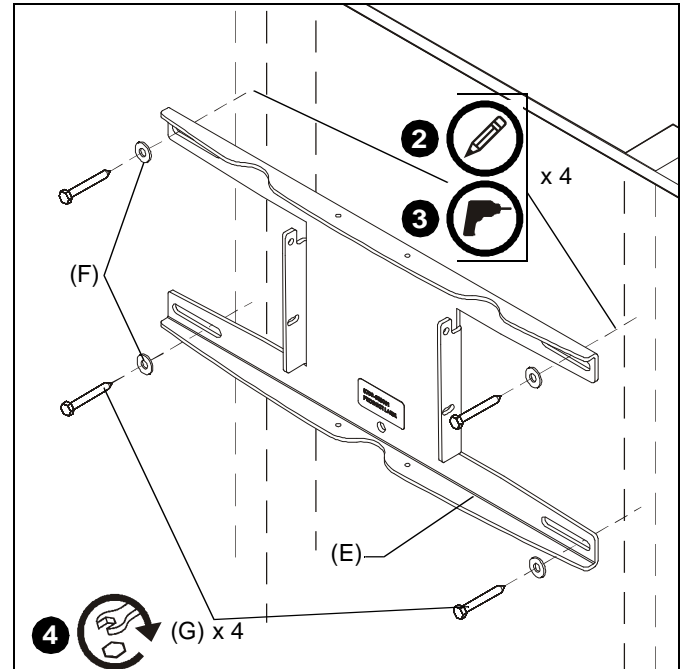


Figure 2

**NOTE:** Proceed to **Install Short Throw Projector Arm to Wall Plate** section to continue installation.

### Steel Studs Installation



**WARNING:** IMPROPER INSTALLATION CAN LEAD TO EQUIPMENT FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! The following figure identifies the minimum requirements for installation of mount onto a steel stud structure. If the structure or its components do not meet these requirements contact the mount manufacturer for specific instructions before attempting installation. It should also be noted that no other equipment should be mounted to the same stud. (See Figure 3)

Site Requirements

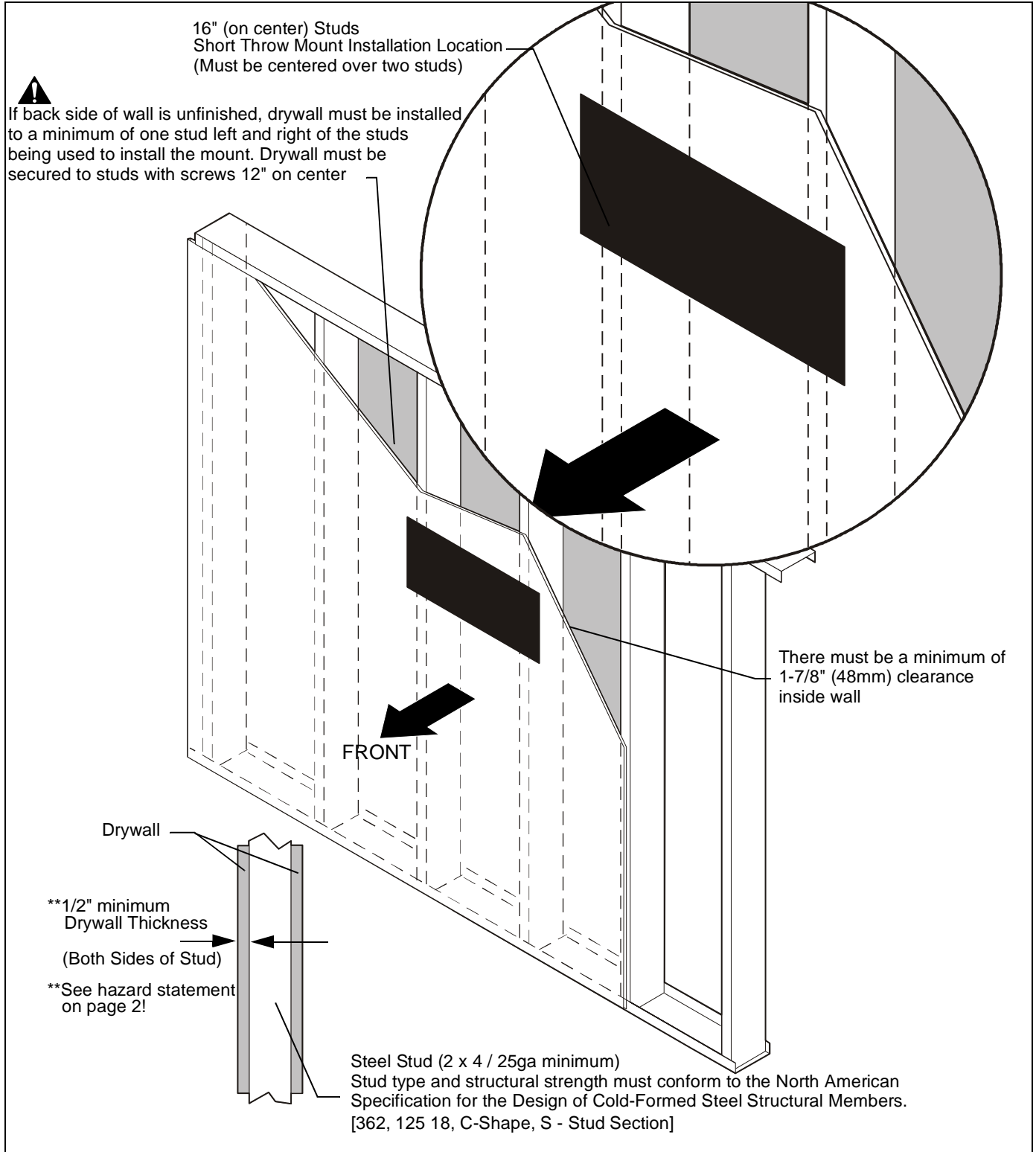
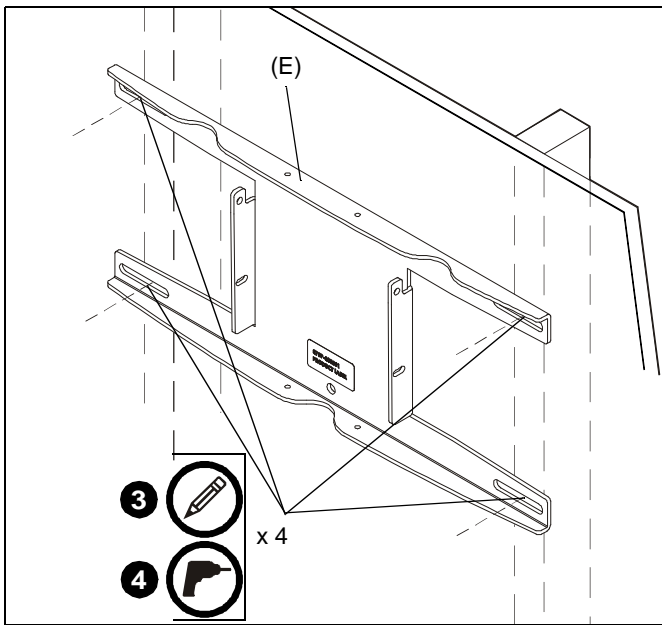


Figure 3

**Steel Studs**

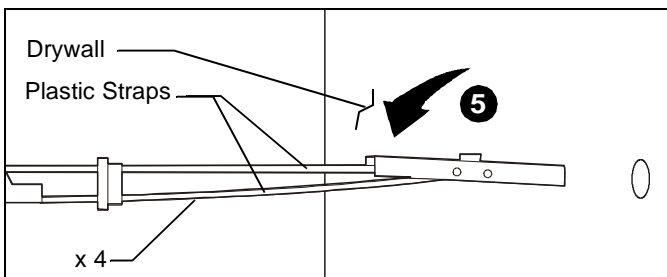
**IMPORTANT ! :** See **Site Requirements** section before proceeding with Steel Studs installation to ensure installation site meets requirements! The drywall must have a minimum thickness of 1/2"!

1. Determine mounting location on wall. Use stud finder to locate steel studs.
2. Line up four holes on wall plate (E) with center of studs at desired mounting location. (See Figure 4)
3. Using wall plate as a template, mark four holes at the four holes in wall plate. (See Figure 4)
4. Drill four 1/2" holes at marked locations on wall. (See Figure 4)



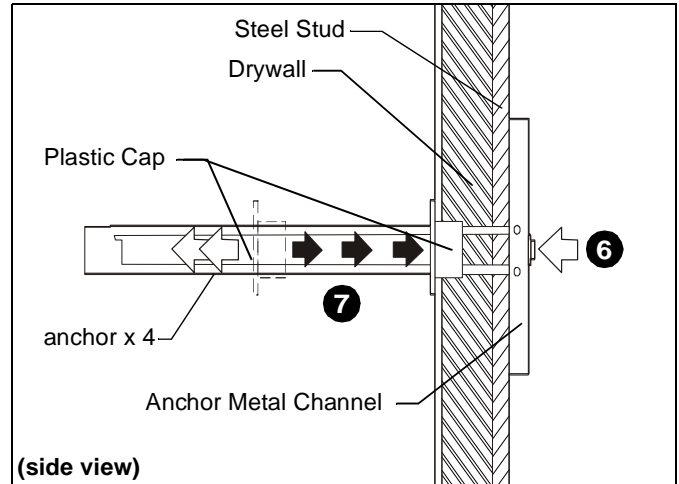
**Figure 4**

5. Hold metal channel on Toggler® 1/4-20 (BB) Snap-Toggle (not included) flat alongside plastic straps and slide channel through hole. (See Figure 5)



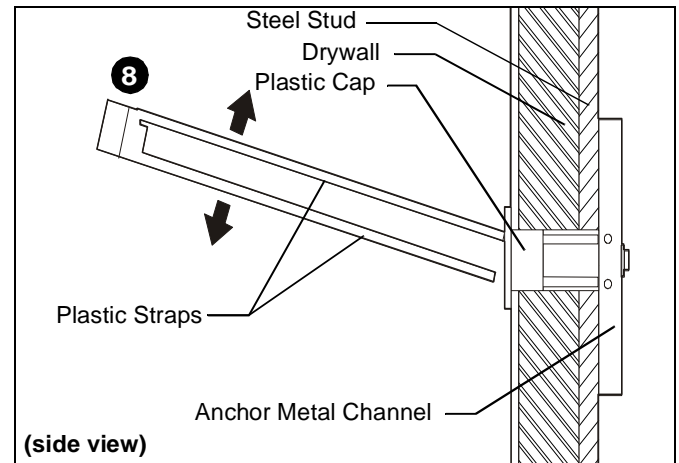
**Figure 5**

6. Holding plastic straps on anchor, pull anchor away from wall until channel rests flush behind wall making sure anchor channel is positioned vertically on stud. (See Figure 6)
7. Slide plastic cap on anchor towards wall until flange of cap is flush with wall. (See Figure 6)



**Figure 6**

8. Snap off plastic straps on anchor at wall by pushing side to side, snapping off straps level with flange of plastic cap. (See Figure 7)
9. Repeat Steps 6 through 8 for each mounting hole.



**Figure 7**



10. Place wall plate (E) over anchors and align mounting holes in wall plate with holes in anchors. (See Figure 8)
11. Insert Grade 2 or better 1/4-20 x 1-3/4" Phillips pan head screws (not included) through Grade 2 or better 1/4" washer (not included), corresponding mounting hole on wall bracket and into Snap-Toggle (not included) and tighten until flush against mount. DO NOT overtighten! (See Figure 8)
12. Repeat Steps 10 and 11 for remaining 3 mounting holes.



**WARNING:** IMPROPER INSTALLATION CAN LEAD TO EQUIPMENT FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! Overtightening of mounting hardware can damage the steel studs. DO NOT overtighten mounting hardware!

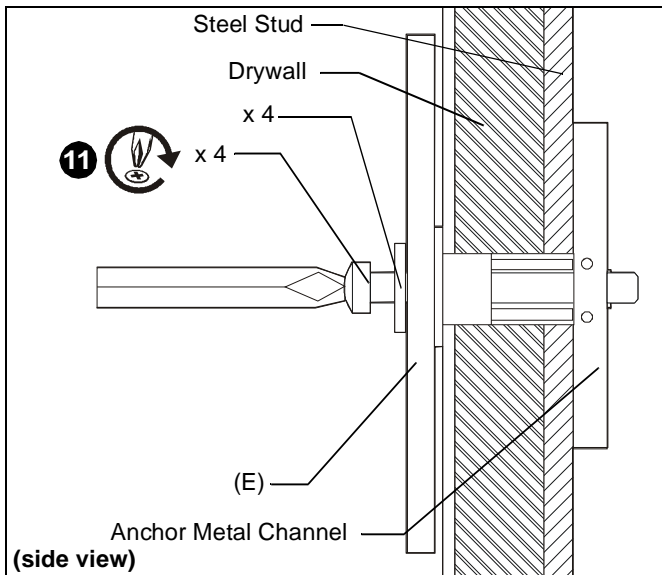


Figure 8

**Installing Short Throw Projector Arm to Wall Plate**

1. Lower projector arm (A) onto wall plate (E), ensuring that tabs on projector arm slide into slots on wall plate. (See Figure 9)
2. Fasten projector arm (A) to wall plate (E) using four M4 x 12mm Phillips head cap screws (J). (See Figure 9)

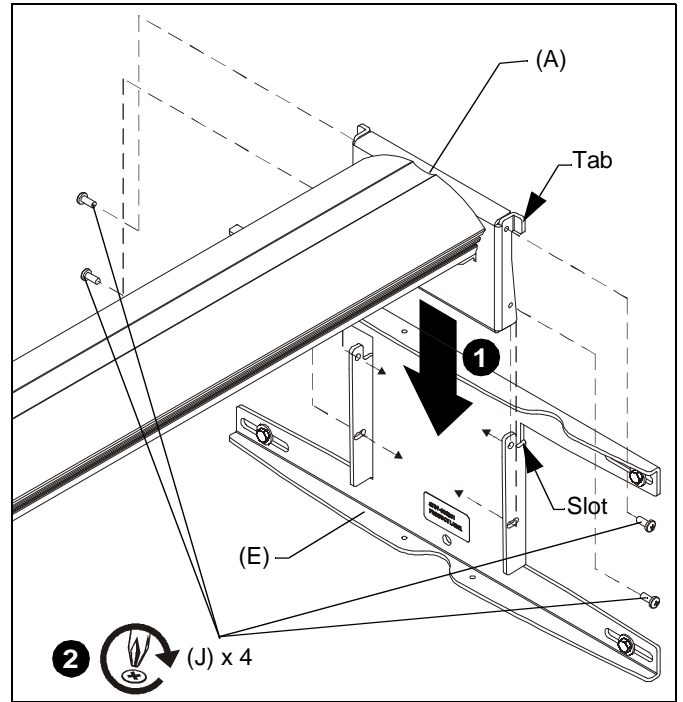


Figure 9

3. Insert and slightly tighten one M5 x 35mm Phillips head cap screw (H) into wall plate (E). (See Figure 10)

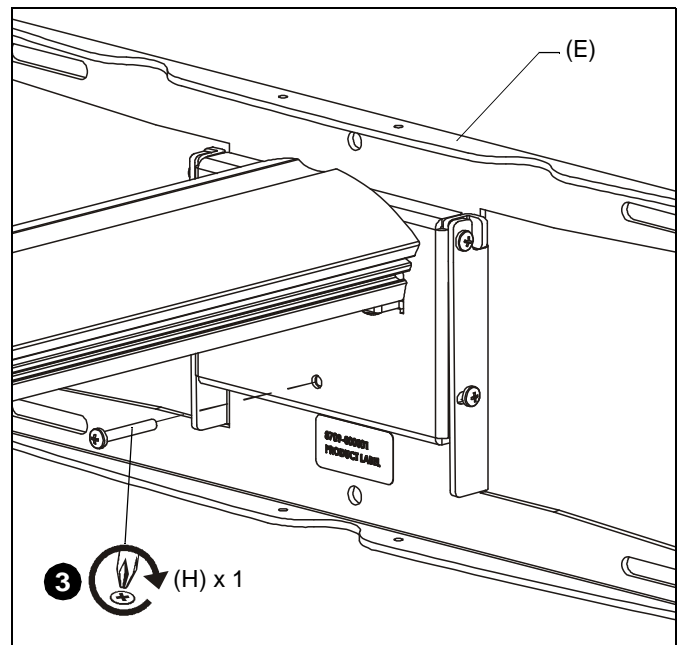


Figure 10

**Projector Installation (WP2XUS Models Only)**

**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the weight of the projector does not exceed 25 lbs (11.3 kg).

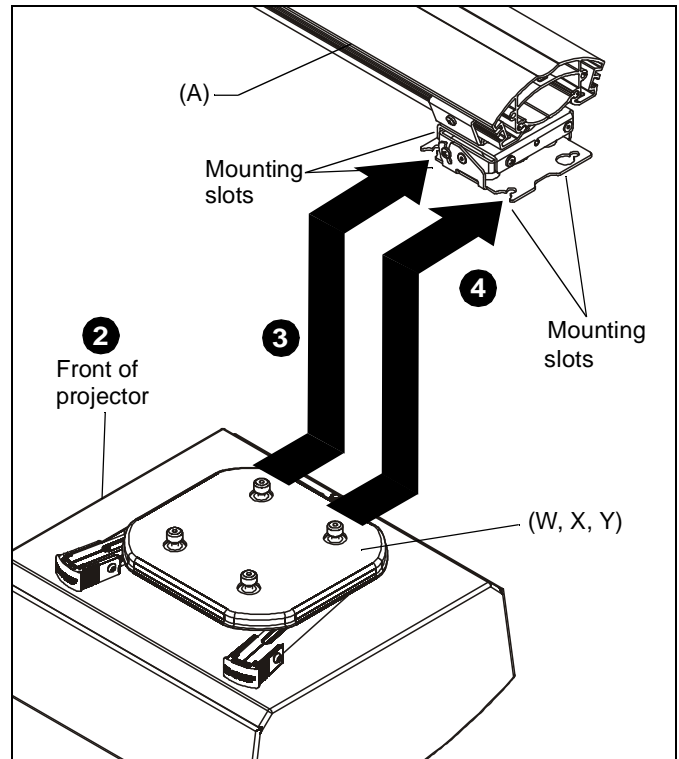
1. Assemble and attach SSBU (W, X and Y) to projector following instructions included with SSBU.

**NOTE:** SSBU bracket may also be installed using the optional All-Points Security Kit (L-P).

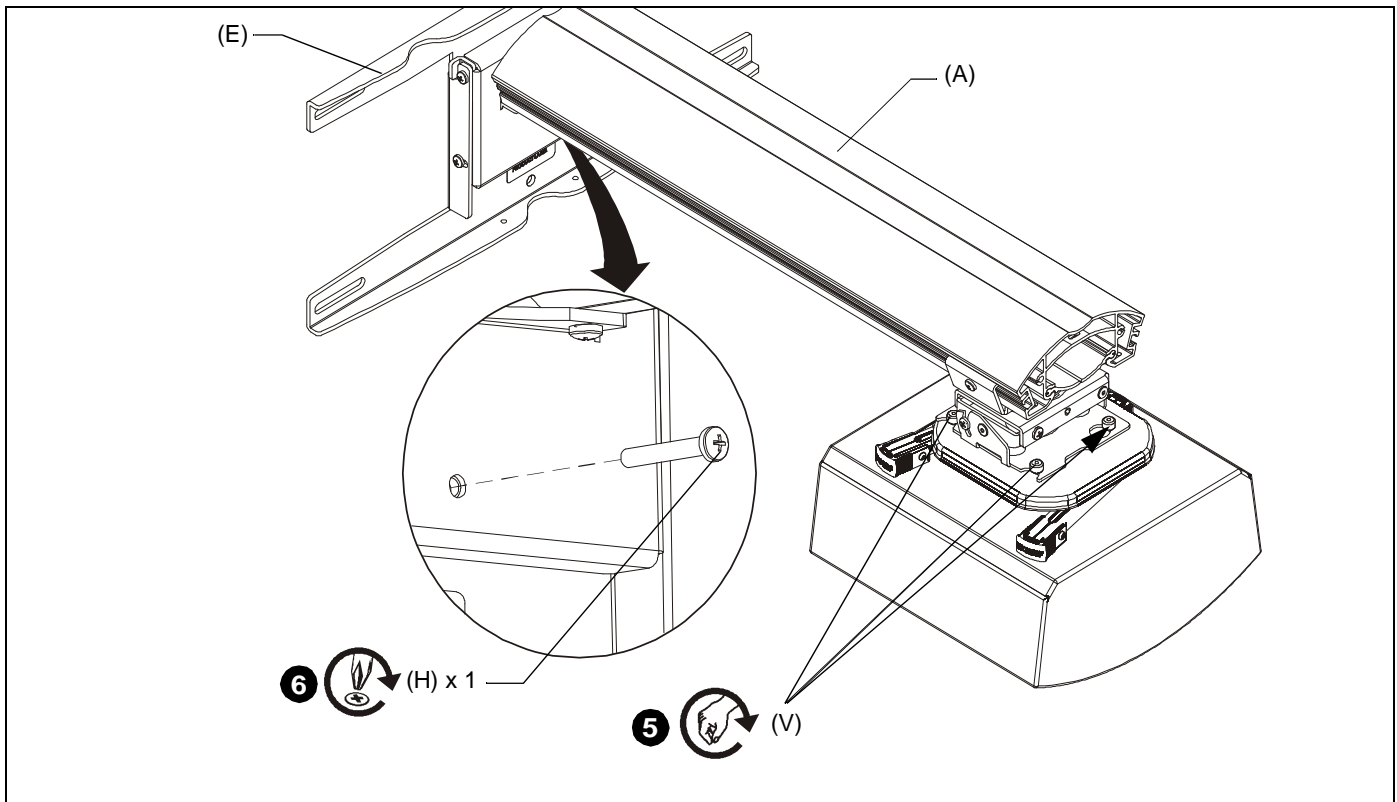
**WARNING:** IMPROPER INSTALLATION CAN LEAD TO PROJECTOR FALLING RESULTING IN SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT. Ensure that mounting slots in mount base slide under thumb screws and that screws are seated in the back of slots.

2. Orient projector with attached SSBU bracket so that front of projector faces wall. (See Figure 11)
3. Lift projector so that screws with thumb nuts (V) in SSBU are aligned with mounting slots in projector arm base. (See Figure 11)
4. Slide projector with SSBU bracket onto mounting slots in projector arm base until screws are seated against the back of mounting slots. (See Figure 11)
5. Turn thumb nuts until tight to secure projector to projector arm. (See Figure 12)
6. Tighten the M5x35mm button head cap screw (H) on the wall plate (E). (See Figure 12)

**NOTE:** Proceed to **Adjustments** section to continue installation.



**Figure 11**



**Figure 12**

**Projector Installation (WP2XS Models Only)**



**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the weight of the projector does not exceed 25 lbs (11.3 kg).

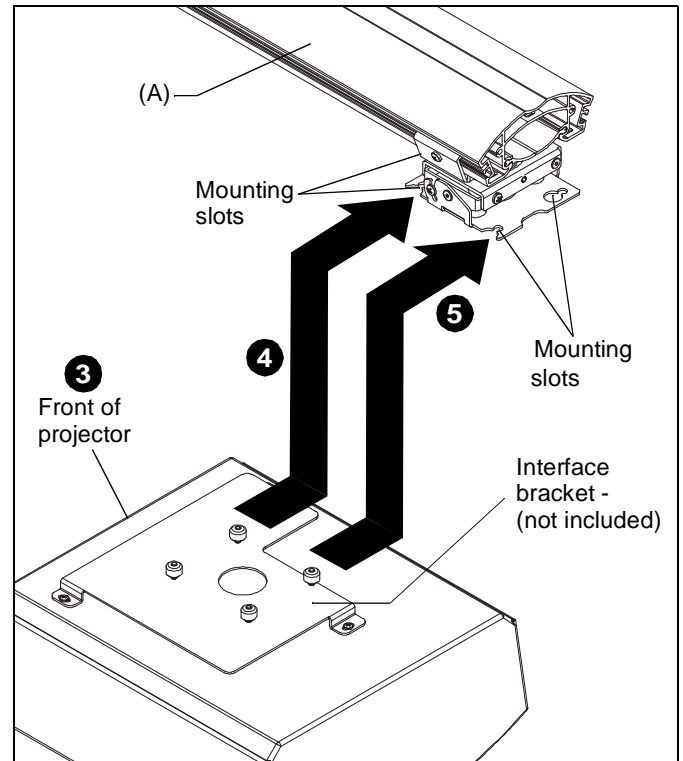
1. Assemble and attach RSA (not included) to short throw projector arm threaded end following instructions included with RSA.
2. Attach required interface bracket (not included) to projector following instructions included with interface bracket.



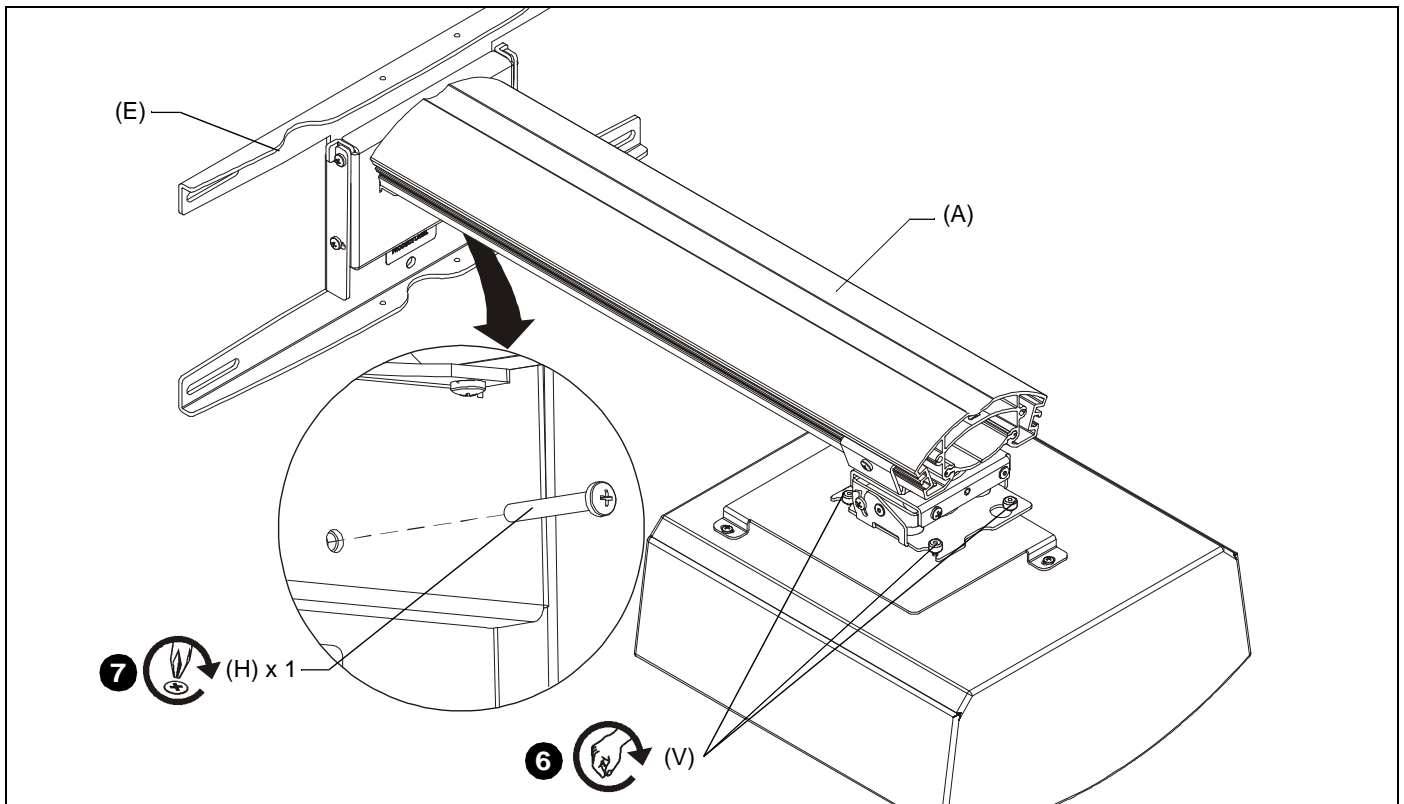
**WARNING:** IMPROPER INSTALLATION CAN LEAD TO PROJECTOR FALLING RESULTING IN SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT. Ensure that mounting slots in RSA slide under thumb screws and that screws are seated in the back of slots.

3. Orient projector with attached bracket so that front of projector lines up with front of projector arm. (See Figure 13)
4. Lift projector so that screws with thumb nuts (V) in interface bracket are aligned with mounting slots in projector arm base. (See Figure 13)
5. Slide projector with interface bracket onto mounting slots in projector arm base until screws are seated against the back of mounting slots. (See Figure 13)
6. Turn thumb nuts until tight to secure projector to projector arm. (See Figure 14)

7. Tighten the M5x35mm button head cap screw (H) on the wall plate (E). (See Figure 14)



**Figure 13**



**Figure 14**

**Adjustments**

**Distance from Wall / Screen Size (See Figure 15)**

1. Loosen two Phillips screws (one on left, one on right).
2. Slide the RSA mount along the projector arm (A), as required.
3. Tighten two Phillips screws.

**Yaw Adjustment (See Figure 15)**

4. Loosen yaw adjustment screw using a 5/32" hex key.



**WARNING:** Do NOT turn the RSA to the end of the pipe threads. The projector, interface bracket and RSA will fall from the pipe if it is unthreaded too far!

5. Adjust projector by turning the RSA on the pipe to the desired position.
6. Tighten yaw adjustment locking screw using a 5/32" hex key.

**Pitch Adjustment (See Figure 15)**

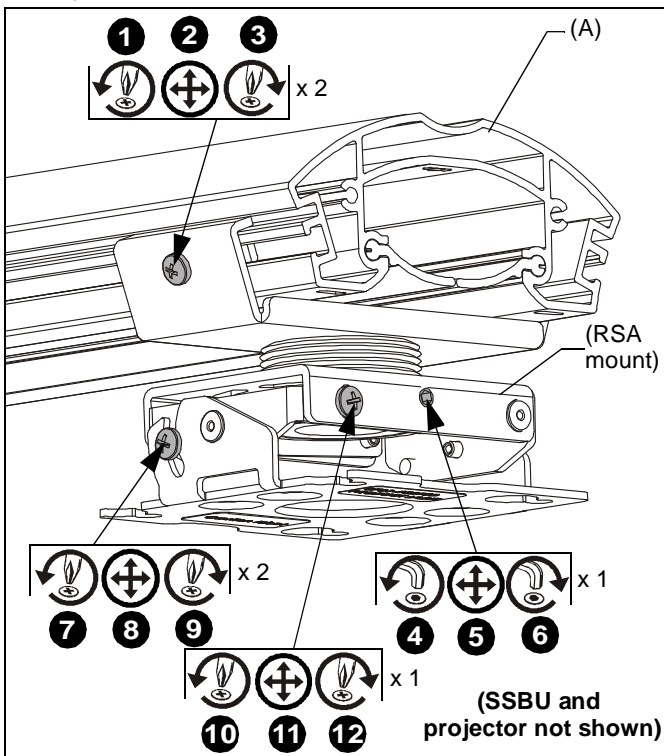
**NOTE:** Use a level to make this process easier.

7. Loosen two Phillips screws (one on right, one on left).
8. Tip up or down, as required.
9. Tighten two Phillips screws.

**Roll Adjustment (See Figure 15)**

**NOTE:** Use a level to make this process easier.

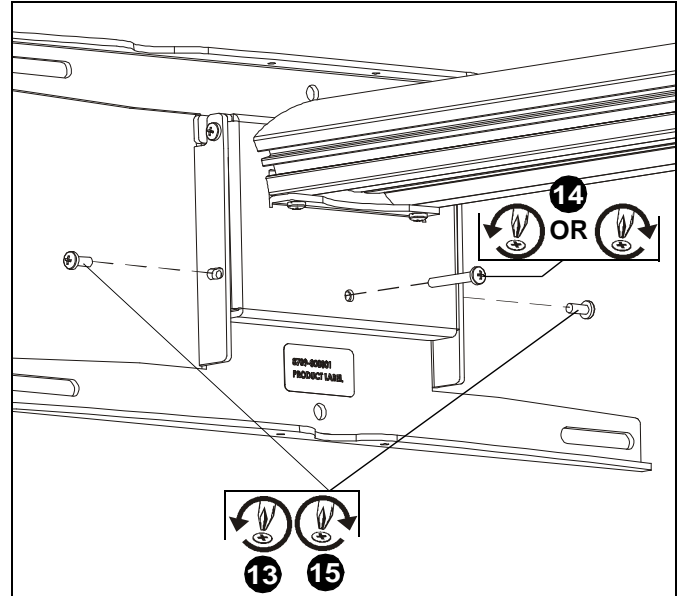
10. Loosen one Phillips screw.
11. Adjust horizontal tilt, as required.
12. Tighten one Phillips screw.



**Figure 15**

**Projector Arm Height Adjustment**

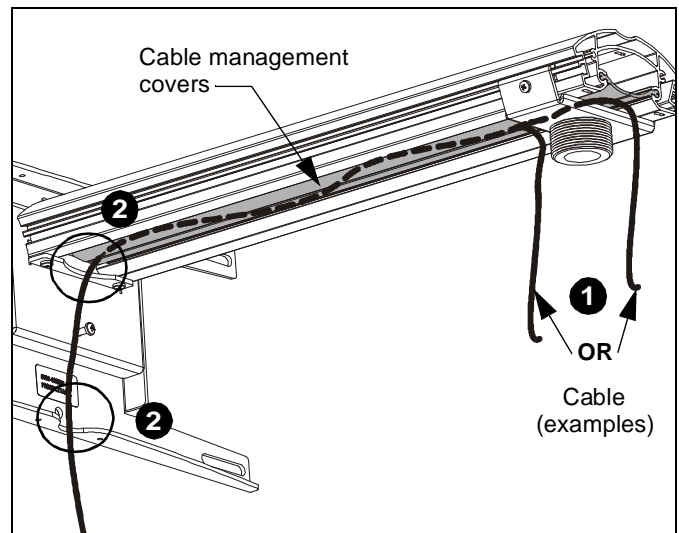
13. Loosen two Phillips screws (one on left, one on right) on sides of projector arm plate. (See Figure 16)
14. Adjust the angle of the projector arm to counteract the projector weight.
  - Turn **counterclockwise** to lower projector arm angle.
  - Turn **clockwise** to raise projector arm angle.
15. Tighten two Phillips screws (one on left, one on right) on sides of projector arm plate. (See Figure 16)



**Figure 16**

**Cable Management (Optional)**

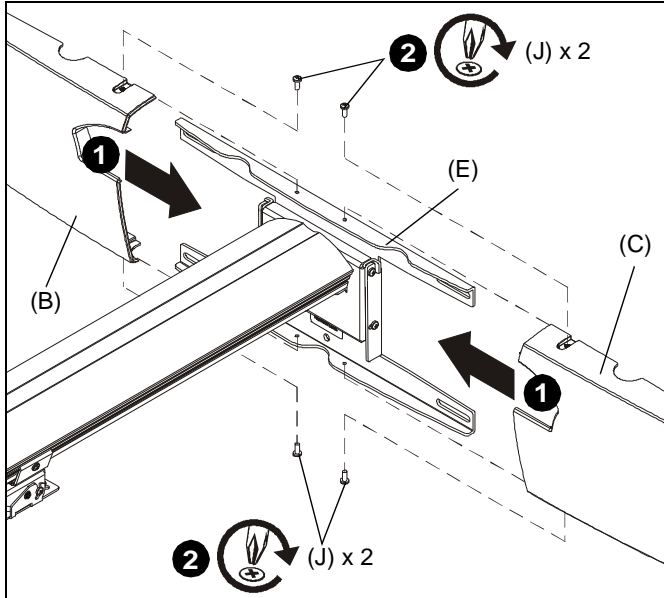
1. Route cables/cords from projector through opening on projector arm and route to wall. (See Figure 17)
2. Guide cables/cords from wall end of projector arm downward through slots in wall plate. (See Figure 17)



**Figure 17**

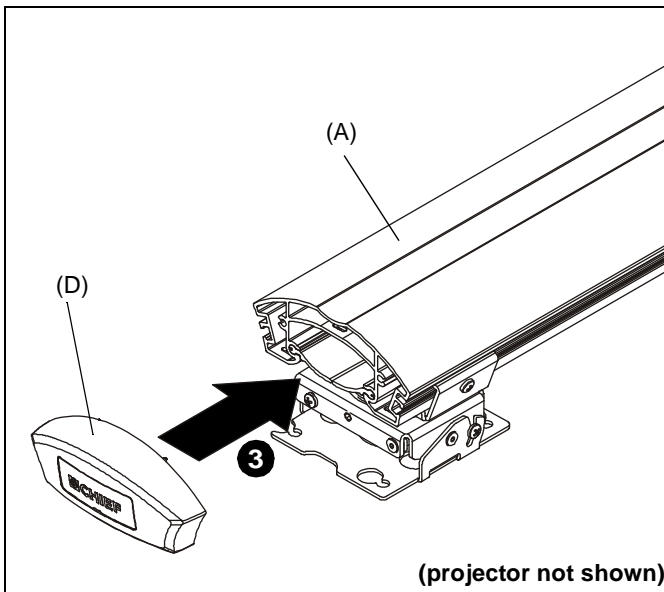
**Add Covers**

1. Add left and right wall plate covers (B and C) over wall plate (E). (See Figure 18)
2. Fasten covers using four M5 x 12mm Phillips cap head screws (J). (See Figure 18)



**Figure 18**

3. Add end cap (D) to end of short throw projector arm (A). (See Figure 19)



**Figure 19**







Our Mounts. **Your Vision.**

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	<b>F</b> 852 2145 4477

