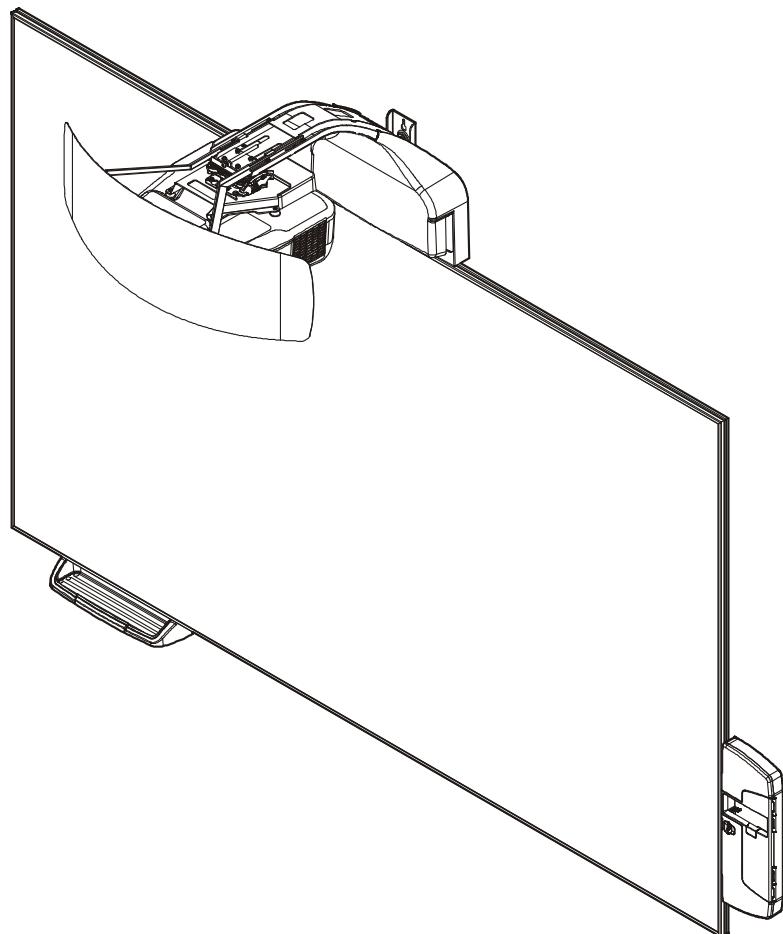

INSTALLATION INSTRUCTIONS



All-in-One System

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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IMPORTANT SAFETY INSTRUCTIONS



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 **minimum** drywall thickness of 1/2" (12.7mm) for wood and steel stud walls, and **NO** drywall on concrete walls.



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



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.

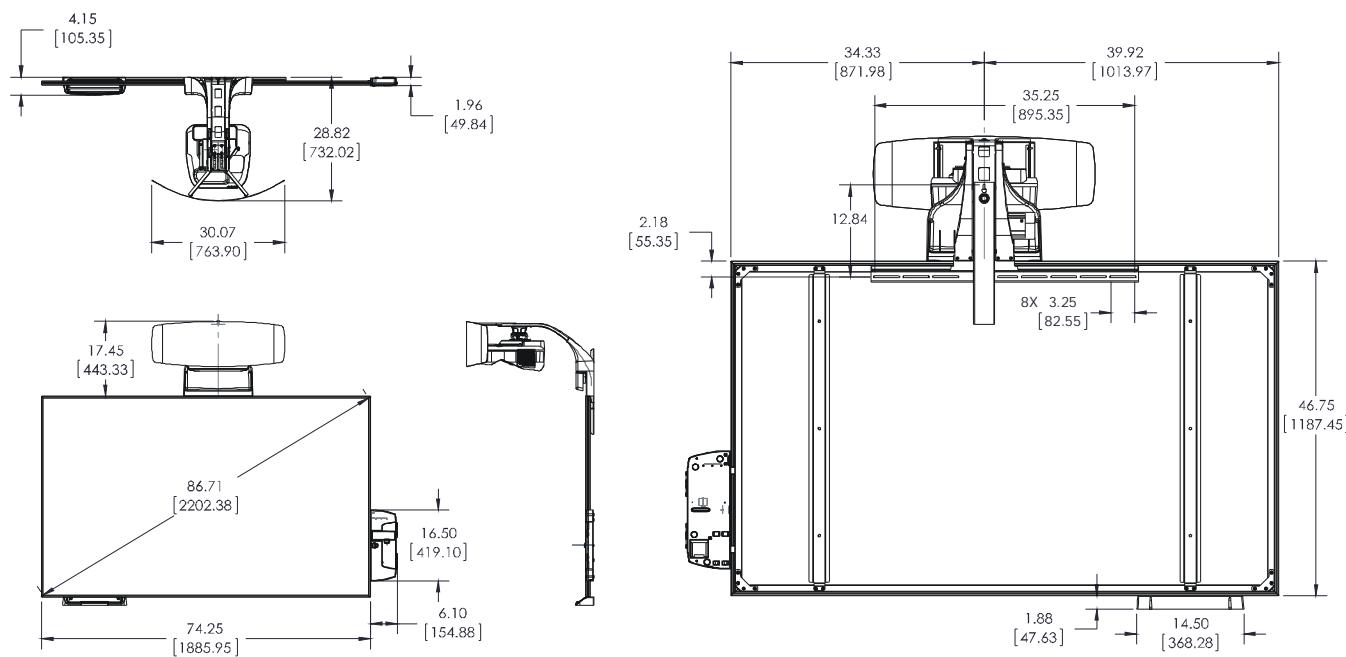
IMPORTANT ! : The AN2BA Series includes the AN2BA8 and AN2BA100 mounts. These mounts are designed to be used **ONLY** with the following Epson projector models:

- BrightLink Pro 1430Wi
- BrightLink Pro 1420Wi
- BrightLink 595Wi
- BrightLink 585Wi

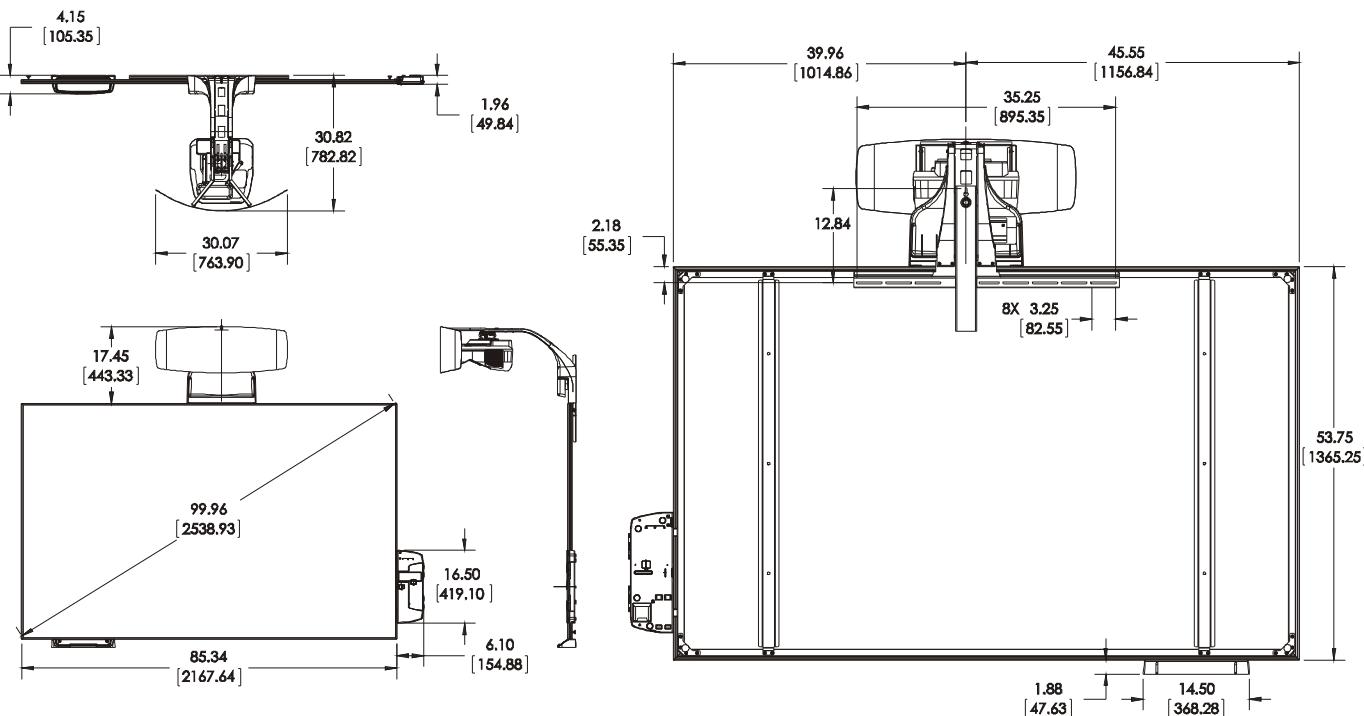
IMPORTANT ! : The AN2BA Series systems are designed to be mounted to:

- a bare 8" concrete or 8"x8"x16" concrete block wall;
- a 2" x 4" wood studs (16" on center minimum to 24" on center maximum) wall with a minimum drywall thickness of 1/2" (12.7mm);
- a 2" x 4"-25ga minimum steel studs (16" on center minimum to 24" on center maximum) wall with a minimum drywall thickness of 1/2" (12.7mm).

--SAVE THESE INSTRUCTIONS--

DIMENSIONS**AN2BA87**

NOTE: PROJECTOR NOT INCLUDED

DIMENSIONS: INCHES
[MILLIMETERS]**AN2BA100**

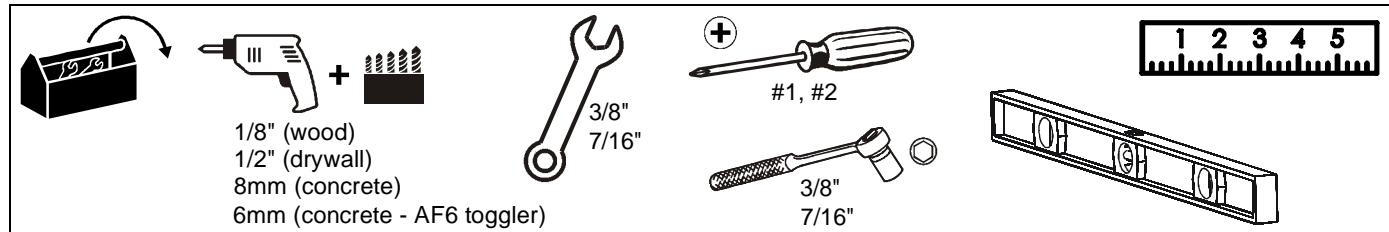
NOTE: PROJECTOR NOT INCLUDED

DIMENSIONS: INCHES
[MILLIMETERS]

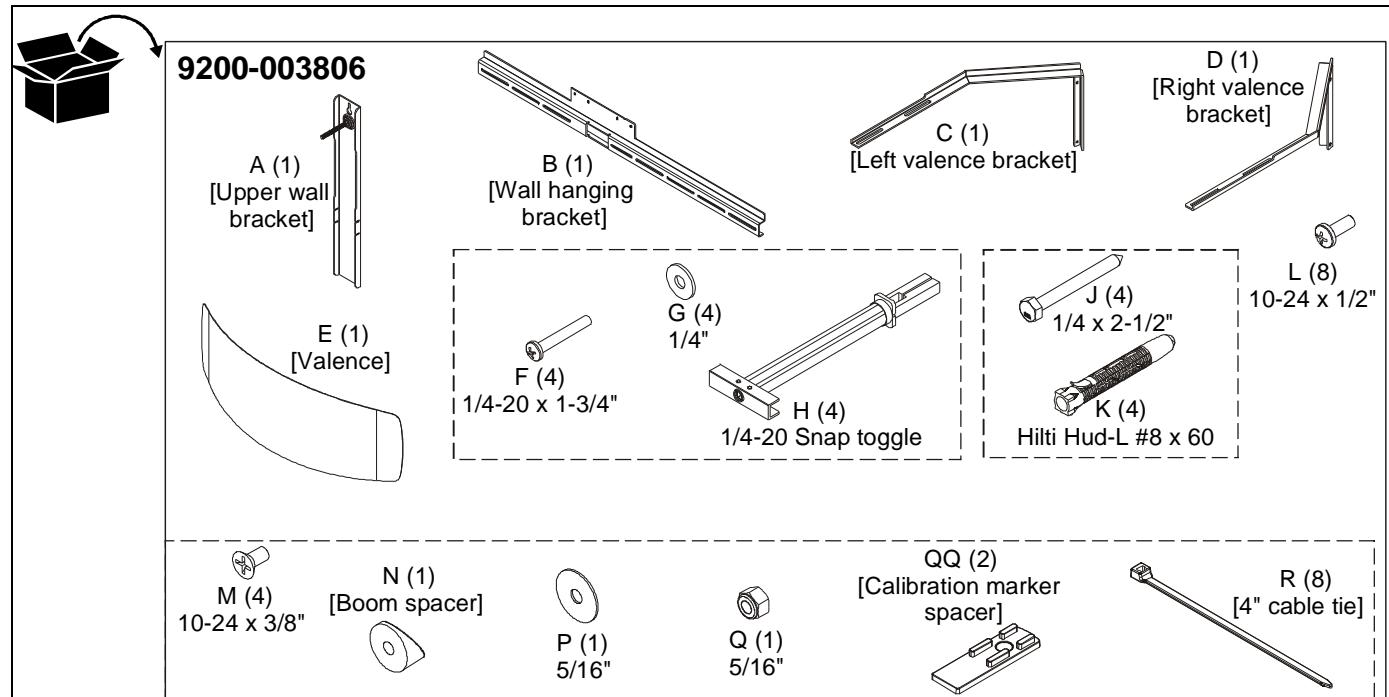
LEGEND

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

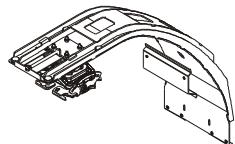
TOOLS REQUIRED FOR INSTALLATION



PARTS

**9200-003807**

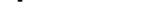
S (1) [Boom projector mount]



T (1) [Projector interface]



U (1) [Sensor cover]



V (4) M4 x 12mm

W (2) M4 x 30mm

X (4) 10-24 x 1-3/4"

Y (1) 5/32"

AA (2) 3/16"

BB (4) Toggler AF6

EE (1) [Control panel assembly]



FF (1) [Marker tray]

9200-003805

HH (1) [Marker kit]



JJ (5) #8 x 1/2"

KK (5) Toggler AF6

LL (5) #8 x 1-1/2"

GG (1) [Screen]

MM (5) [Screen bracket]



NN (1) [IR Cable]

OUTSIDE BOX

PP (4) [Leveling feet]



INSTALLATION

Determining Location

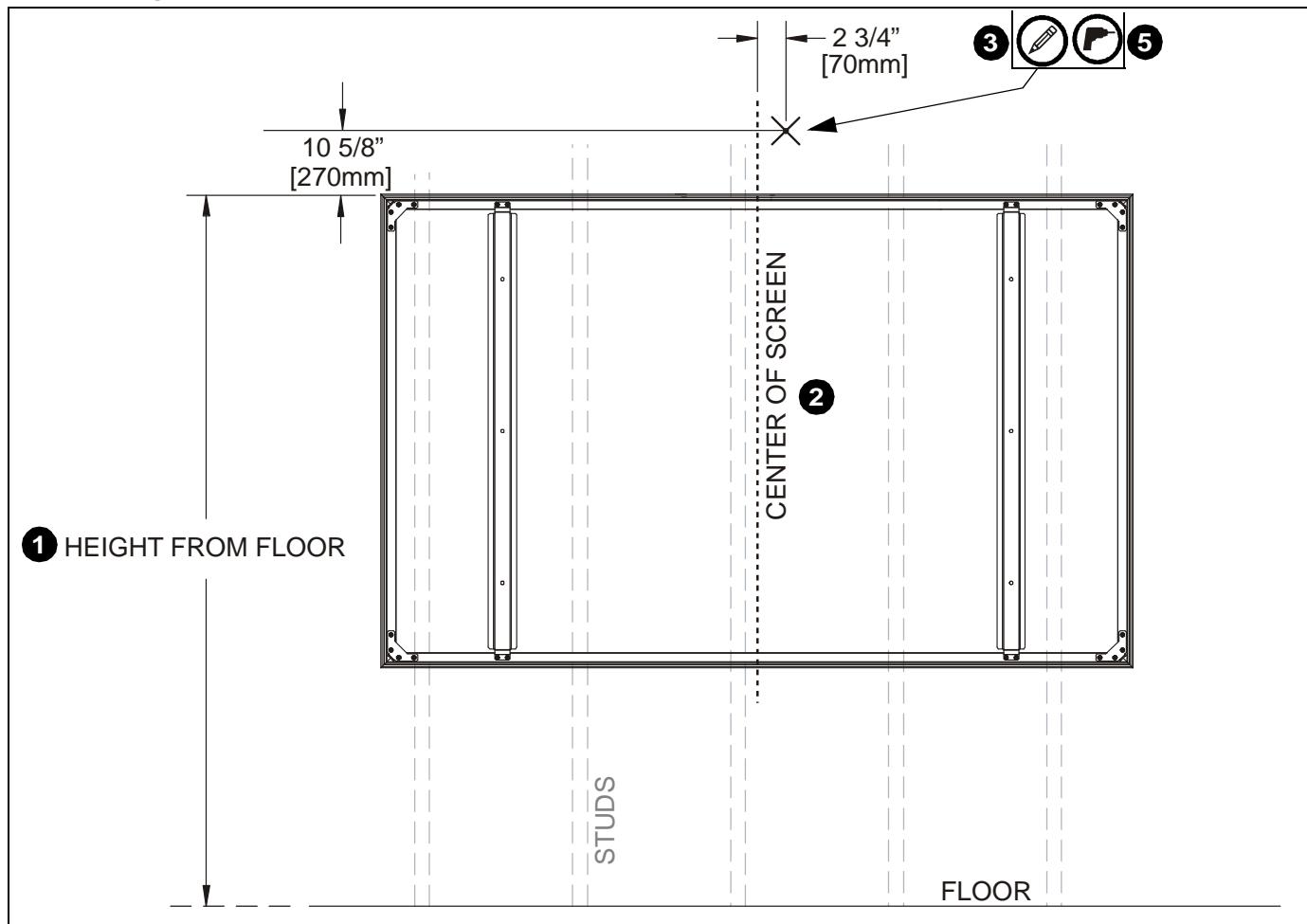


Figure 1

1. Determine desired height of screen (measured from floor). (See Figure 1)

2. Determine desired center of screen. (See Figure 1)

3. Measure **10-5/8 inches (270mm)** up from desired height (top) of screen and **2-3/4 inches (69mm)** to the right of center of screen and mark location. (See Figure 1)

NOTE: This pilot hole may be placed in drywall only, if necessary.

4. Determine location of studs behind drywall.
5. Drill one pilot hole (see Table 1 for size) at location marked in Step 3 (See Figure 1) and follow fastener information (appropriate for wall type) located in Table 1.

IMPORTANT ! : See Fastener Installation Methods at end of Installation Instructions for details on installing product into various wall types.

Table 1: Fastener Information

WALL TYPE	PILOT HOLE	FASTENERS (see PARTS drawing)
Drywall only- (boom attach only) / Steel studs	1/2"	1/4-20 Toggler anchor kit (F, G, H) - 1/4-20 x 1-3/4" Phillips screw (F) - 1/4" washer (G) - 1/4-20 Snap toggler (H)
Wood stud	1/8"	1/4 x 2-1/2" hex head lag (J) 1/4" washer (G) - OPTIONAL
Concrete	8mm x 80mm (Only for installing screen bracket into concrete) 6mm x 45mm	1/4 x 2-1/2" hex head lag (J) Hilti Hud-L #8x60 anchor (K) #8-9x1-1/2" Phillips screw (Z) Toggler AF6 (BB) or (KK)

Installing Wall Bracket

1. Slide the tabs on the upper wall bracket (A) into the slots on wall hanging bracket (B). (See Figure 2)

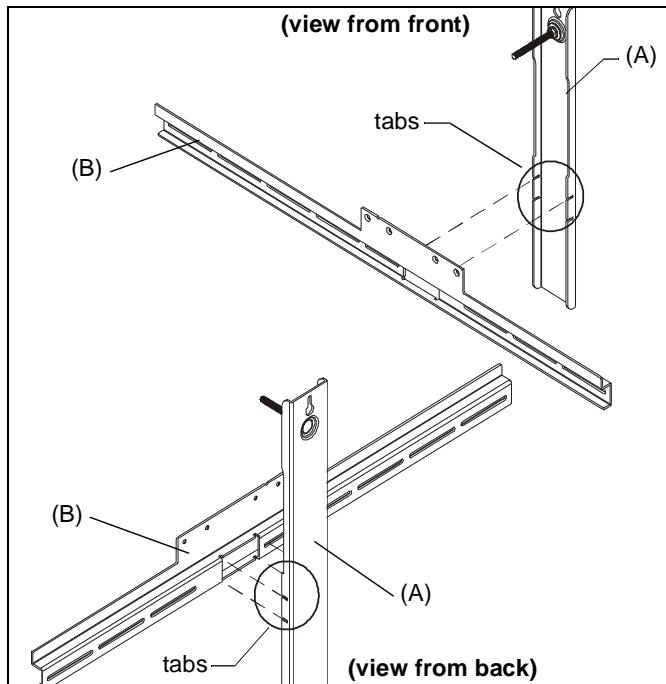


Figure 2

2. Install one fastener (See Table 1) into previously drilled hole, leaving 1/2" of fastener extending from wall. (See Figure 3)
3. Hang wall bracket assembly onto fastener. (See Figure 3)

NOTE: Notch in wall bracket assembly indicates center of screen.

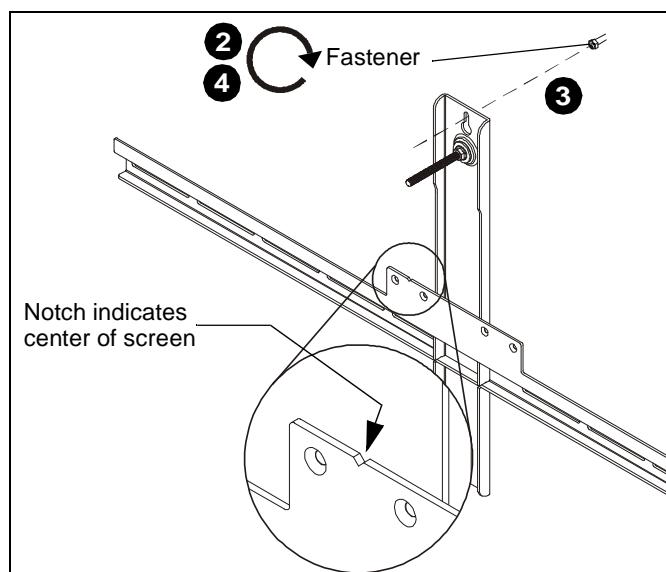


Figure 3

4. Level wall bracket assembly.

5. Tighten fastener against wall bracket. (See Figure 3)
6. Determine location of studs behind drywall, and mark a **minimum** of two locations for wall bracket attachment over studs. (See Figure 4)

NOTE: For wood or steel stud walls, mark at least two locations for attachment a minimum of 16" apart and a maximum of 24" apart, AND within slots on wall bracket assembly.

NOTE: For concrete walls, mark at least two locations for attachment a minimum of 16" apart, AND within slots on wall bracket assembly.

7. Drill one pilot hole (see Table 1 for size) at each location marked in Step 5 (See Figure 4) and follow fastener information (appropriate for wall type) located in Table 1.

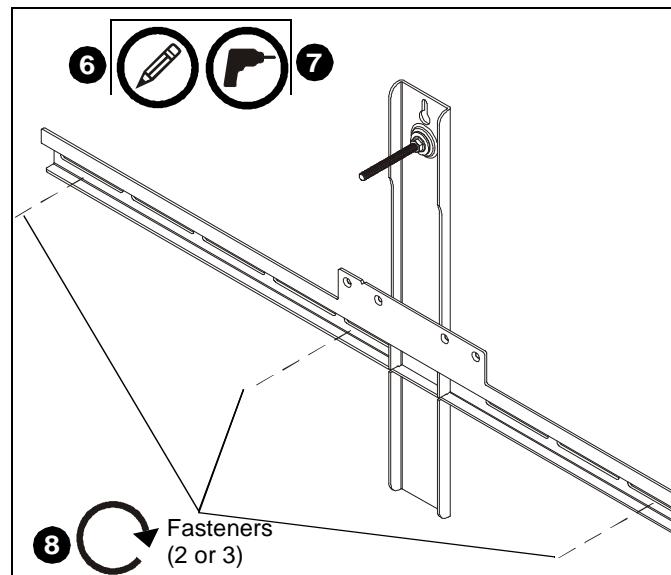


Figure 4

NOTE: Proceed to **Fastener Installation Methods** section at end of Installation Instructions.

8. Fasten wall bracket assembly to wall using fasteners appropriate to wall type (See Table 1). (See Figure 4)

Installing Boom Projector Mount

IMPORTANT ! : The boom projector mount ships ready to install for the AN2BA87.

- **AN2BA87:** Proceed to **Step 6.**
- **AN2BA100:** Proceed to **Step 1.**

1. Support the projector mount from underneath the boom arm while removing the four nuts from top of boom arm. (See Figure 5)

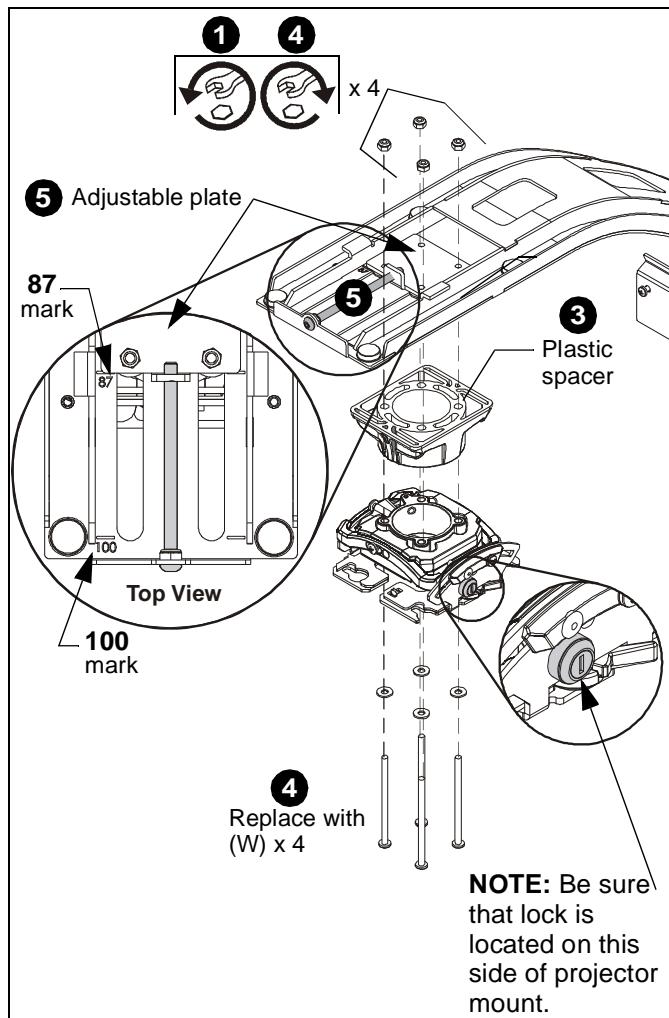


Figure 5

2. Lower projector mount and hardware from underneath boom arm.
3. Remove and discard plastic spacer. (See Figure 5)
- IMPORTANT !** : Make sure that lock on projector mount is located on correct side of boom arm. (See Figure 5)
- IMPORTANT !** : Make sure that shoulder washers on top of boom arm haven't shifted. Be sure to fasten Phillips machine screws (W) through the shoulder washers.
4. Replace long fasteners with four 10-24 x 1-3/4" Phillips machine screws (W), and refasten projector mount to boom arm. (See Figure 5)

5. Turn adjustment bolt to move projector mount towards end of boom arm, until front of adjustable plate lines up with "100" marking on boom arm. (See Figure 5)
6. Hang boom projector mount (S) over bolt on wall bracket assembly and loosely fasten (hand tighten) using boom spacer (N), 5/16" washer (P) and 5/16" nut (Q). (See Figure 6)
7. Align four fastener holes along bottom of boom projector mount behind four holes in wall bracket. (See Figure 6)
8. Install and tighten four 10-24 x 3/8" Phillips flat head screws (M) through wall bracket assembly into boom projector arm (S). (See Figure 6)

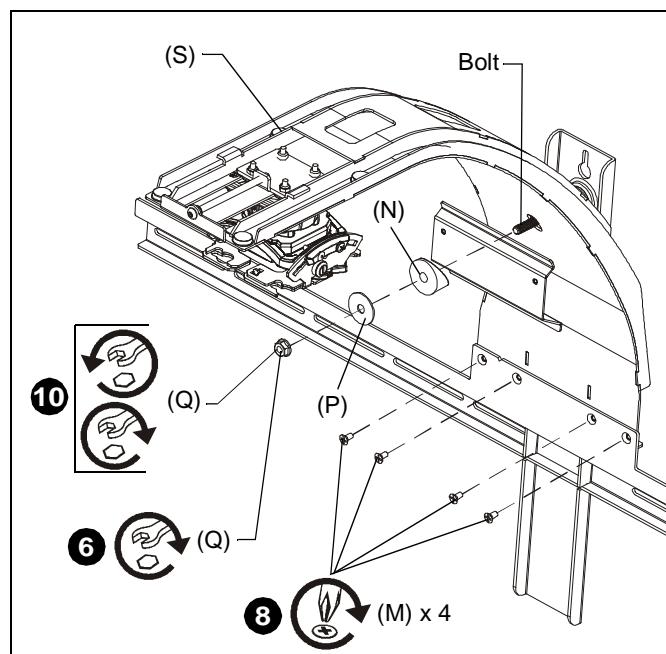


Figure 6

9. Place level lengthwise on top of boom projector arm (S).
10. Level boom projector arm (S) by loosening or tightening the 5/16" nut (Q) on the bolt from the wall bracket assembly. (See Figure 6)

Installing Screen and Sensor

IMPORTANT ! : Use at least two people when lifting and installing screen. Handle the frame and back of screen, and avoid touching the front of screen as much as possible.

1. Lay box flat and open.
2. Stand screen up and add leveling feet (PP) to each corner on the back of screen. Do not over tighten. (See Figure 7)
3. Hang screen (GG) onto wall bracket assembly using pre-installed bracket on back of screen assembly. (See Figure 7)

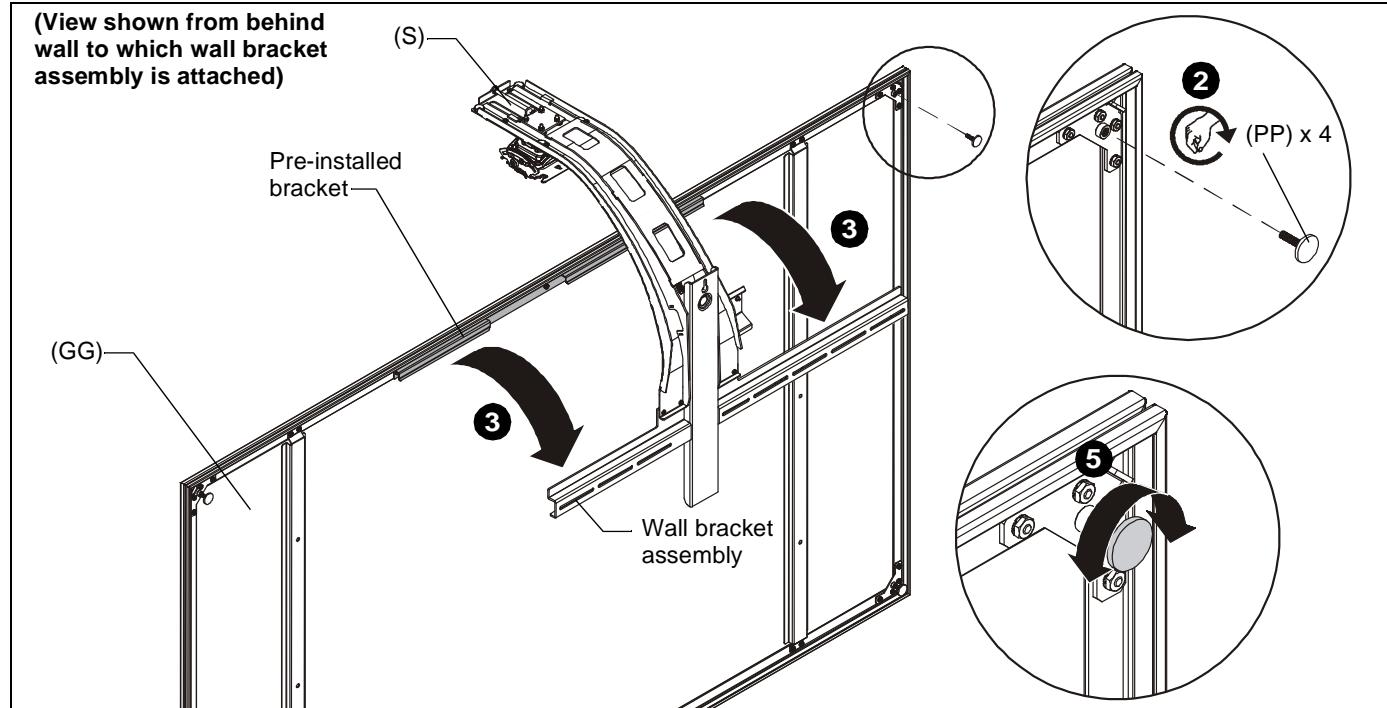


Figure 7

4. Center screen assembly on wall bracket.
5. Level the screen against the wall by placing a level against the front of it, and adjusting the leveling feet. (See Figure 7)
6. Continue to adjust until screen is leveled with the wall.

NOTE: Notch in wall bracket assembly indicates center of screen.

7. Remove and keep one fastener from bottom of sensor.

NOTE: The sensor is included with the Epson projector, not the AN2BA Series mount.

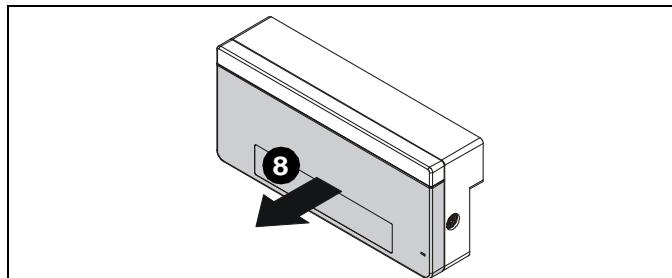


Figure 8

8. Remove and keep sensor cover. (See Figure 8)

9. Attach sensor to boom arm bracket using two M4 x 30mm Phillips cap head screws (W). (See Figure 9)

NOTE: Insert the two Phillips screws into sensor. The magnets on the sensor will hold the sensor in place on the bracket while fastening the screws.

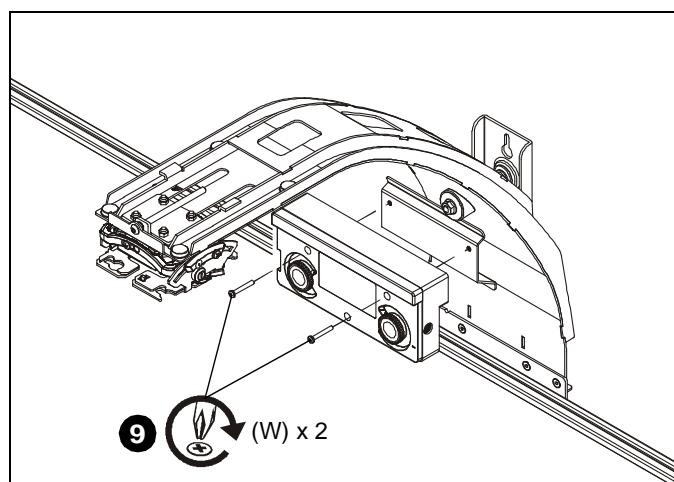


Figure 9

Installing Projector

1. Attach projector interface (T) to projector using four M4 x 12mm Phillips cap head screws (V). (See Figure 10)

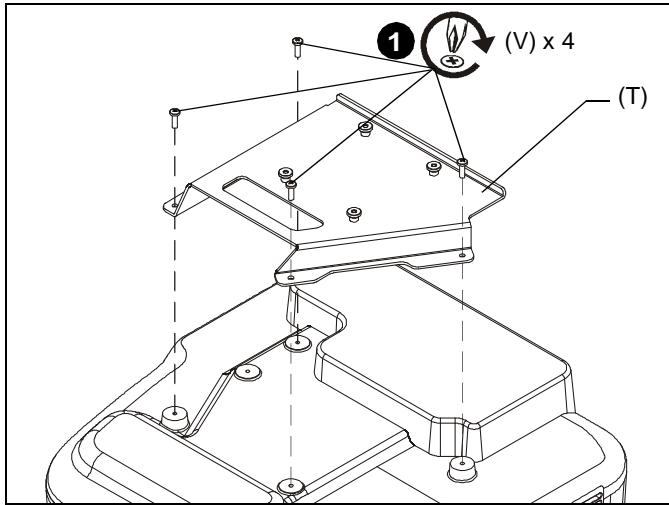


Figure 10

NOTE: Make sure projector mount is in UNLOCKED position and remove key from projector mount. (See Figure 11) Lift projector with attached interface (T) and slide buttons on interface into slots on boom projector mount (S). (See Figure 11)

2. Slide latch to LOCKED position to lock projector in place. (See Figure 11)
3. Add and route cables following instructions included with the projector.

NOTE: Do NOT place extra cable length behind the sensor bracket.

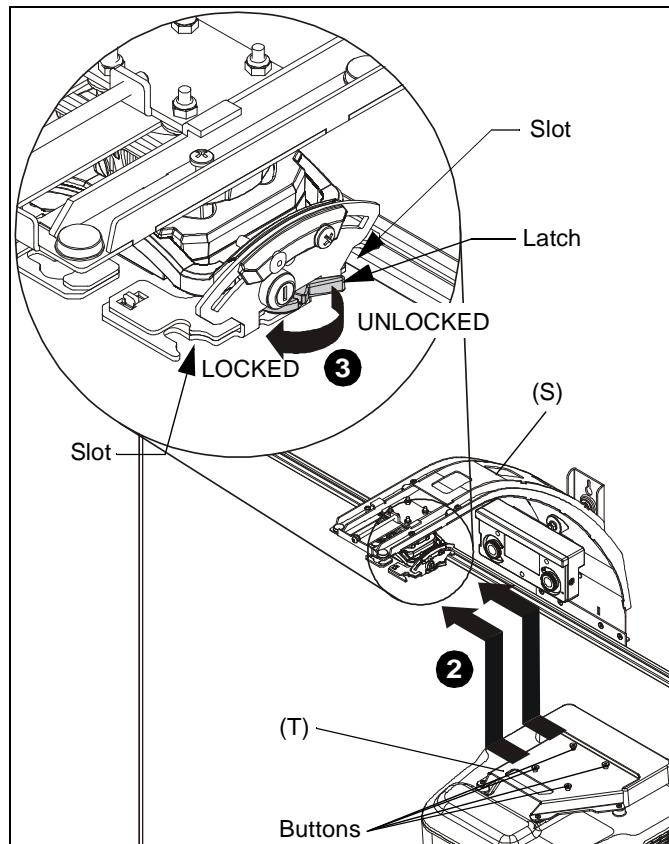


Figure 11

4. Place a level on top of the boom arm mount and level the mount after the projector is installed. (See Figure 12)
 - 4A. Tighten nut to increase boom arm angle.
 - 4B. Loosen nut to decrease boom arm angle.
5. Place a level on top of interface (T) and level. (See Figure 12)



CAUTION: While leveling mount:

- Ensure nut is fully engaged onto bolt, and **AT LEAST ONE** thread appears through nut.
- **DO NOT** over tighten nut! Over tightening **WILL** damage wall behind mount.

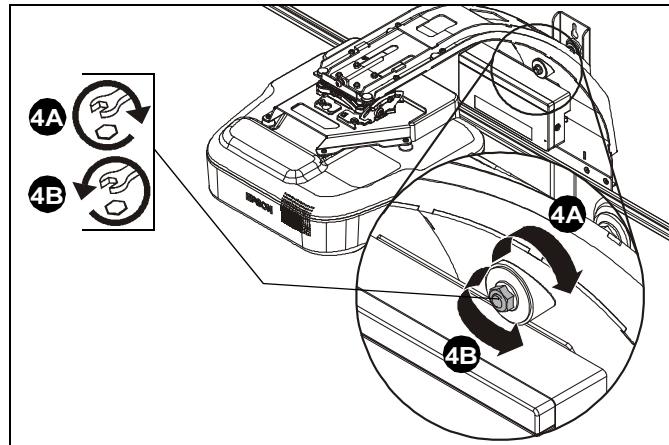


Figure 12

Align Projector Image

Using remote control included with projector:

1. Select **MENU**
2. Select **SETTINGS**
3. Select **PATTERN**
4. Select **TEST PATTERN**
5. Use the test pattern projected on the screen to roughly align image to screen, and make the necessary projector adjustments following instructions included with Epson projector and using the following adjustment instructions for the mount.

IMPORTANT ! : The projected image should NEVER project onto the screen frame. An image overlapping onto the screen frame may prevent the projector touch sensor from working properly.

Projector Adjustments

Roll Adjustment (Horizontal Tilt)

Adjust projector so that the left and right vertical lines of the test pattern are parallel with each other and each side of screen.

1. Loosen **ROLL** adjustment locking screw using a #2 Phillips screwdriver. (See Figure 13)
2. Turn **ROLL** micro-adjustment screw right or left using a #2 Phillips screwdriver until image is properly aligned on target.
3. Tighten **ROLL** adjustment locking screw using a #2 Phillips screwdriver.

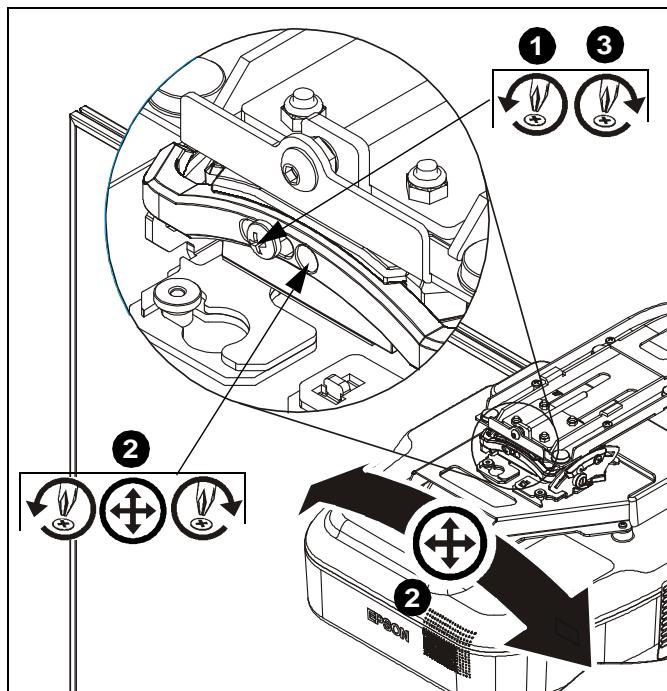


Figure 13

Yaw Adjustment (Rotation)

Adjust projector so that the top and bottom horizontal lines of the test pattern are parallel with each other and with top and bottom of screen.

1. Loosen yaw adjustment locking screw using a #2 Phillips screwdriver. (See Figure 14)
2. Turn yaw micro-adjustment screw right or left using a #2 Phillips screwdriver until image is properly aligned on target.
3. Tighten yaw adjustment locking screw using a #2 Phillips screwdriver. (See Figure 14)

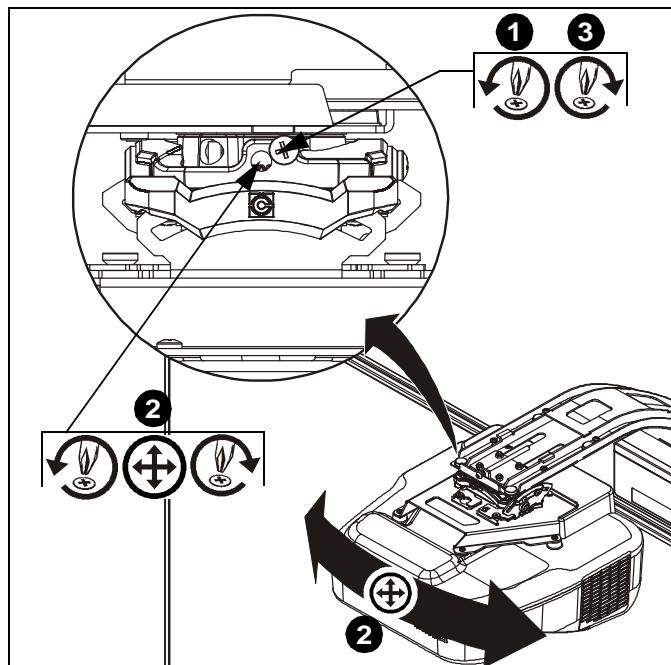


Figure 14

Pitch Adjustment (Vertical Elevation)

Adjust projector so that the top and bottom horizontal lines of the test pattern are parallel with each other and with top and bottom of screen.

1. Loosen pitch adjustment locking screw using a #2 Phillips screwdriver. (See Figure 15)
2. Turn pitch micro-adjustment screw right or left using a #2 Phillips screwdriver until image is properly aligned on target.
3. Tighten pitch adjustment locking screw using a #2 Phillips screwdriver.

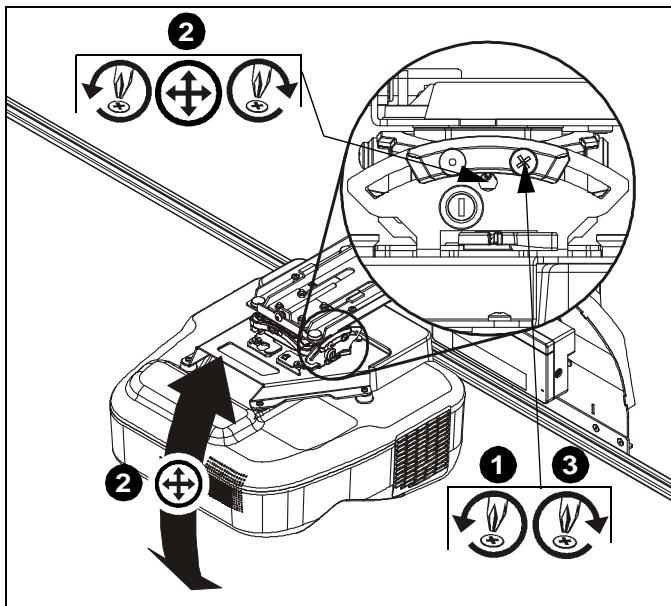


Figure 15

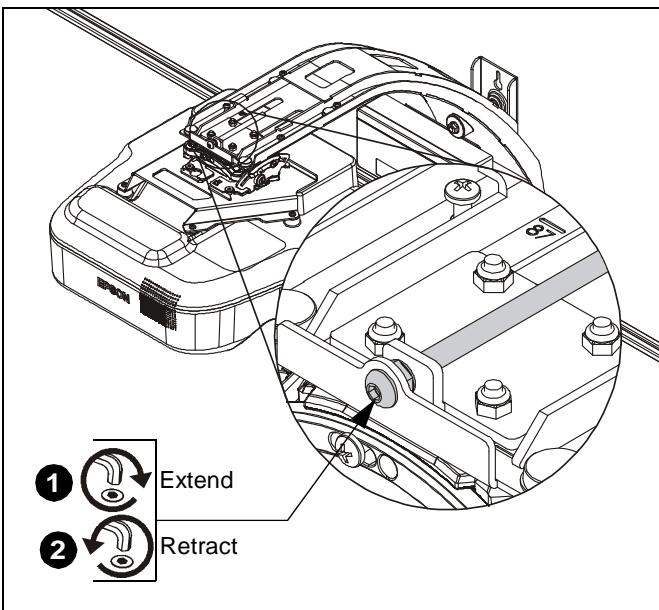


Figure 16

Installing Control Pad

1. Open lower cover on control pad (included with projector). (See Figure 17)
2. Insert control pad into control housing (EE) by sliding it up under tabs inside housing. (See Figure 17)

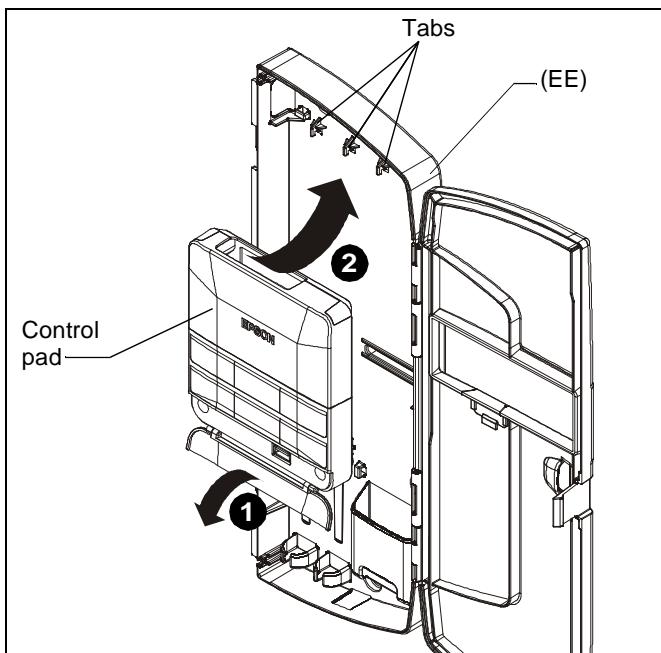


Figure 17

Micro Adjustment

IMPORTANT ! : The projected image should NEVER project onto the screen frame. An image overlapping onto the screen frame may prevent the projector touch sensor from working properly.

1. If required, turn the micro adjust fastener **clockwise** to extend projector further from wall. (See Figure 16)
2. If required, turn the micro adjust fastener **counterclockwise** to retract projector closer to wall.

3. Align holes in control pad with bosses in control housing and push control pad into place. (See Figure 18)
4. Secure control pad into place using two #4-24 x 1/4" Phillips pan head screws (DD). Do NOT over tighten. (See Figure 18)
5. Close lower cover of control pad. (See Figure 18)
6. Attach all cables, including IR cable (NN), to control pad following instructions included with projector/control pad.
7. Use cable ties (R), as necessary, to secure the cables within control panel. (See Figure 18)

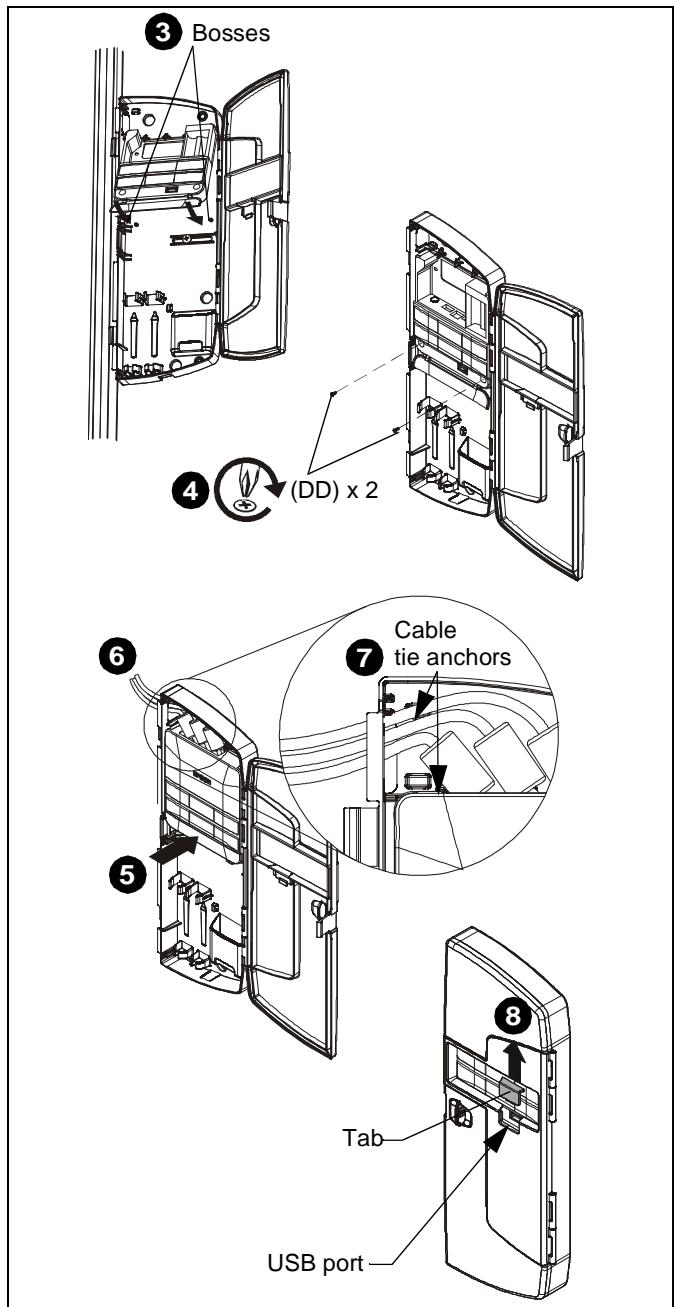


Figure 18

8. **OPTIONAL:** The tab in the control panel assembly door may be removed to allow attachment to the USB port. (See Figure 18)

Installing Control Housing

1. Open door on control panel assembly (EE).
2. Insert edges of control panel assembly (EE) into groove in screen frame, with tab placed behind screen. (See Figure 19)
3. Slide control panel assembly up along side of screen to the desired height. (See Figure 19)
4. Determine attachment location on wall. (See Figure 19)
5. Mark attachment hole through slot in control panel assembly (EE). (See Figure 19)
6. Slide control panel assembly up or down, away from marked hole.
7. Drill one pilot hole (see Table 1 for size) at location marked in Step 5 (See Figure 19) and follow fastener information (appropriate for wall type) located in Table 1.
8. Proceed to **Fastener Installation Methods** section at end of Installation Instructions.

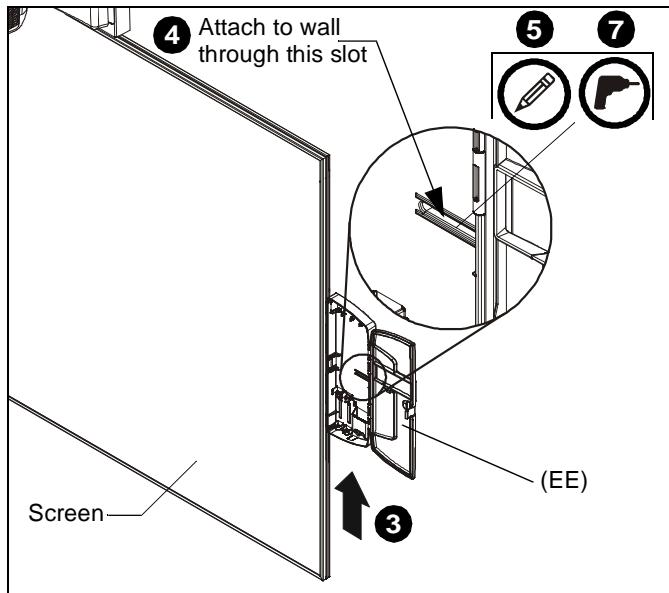


Figure 19

Adding Screen Brackets to Screen

NOTE: Use 3 screen brackets (minimum of 2 brackets) along bottom of screen, and locate brackets as close to outer corners as possible. Remaining brackets may be used along sides of screen, as desired.

1. Install screen brackets (MM) using:
 - **Wood/steel studs/drywall:** one #8 x 1-1/2" screw (LL) into back of each screen bracket.
 - **Concrete wall:** one #8 x 1-1/2" screw (LL) into back of each screen bracket, and into installed AF6 toggler (KK).
2. Fasten to screen frame using one #8 x 1/2" self-drilling screw (JJ) per screen bracket (MM).

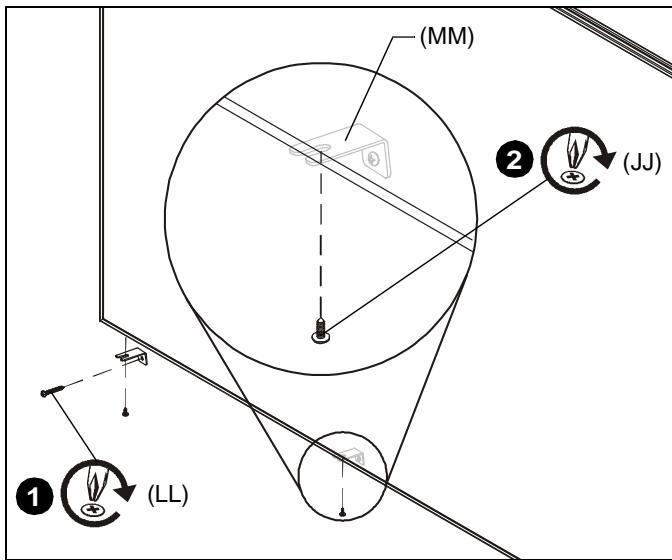


Figure 20

Attaching Valence

1. Align right valence bracket (D) along **outside** of right brace on back of valence (E), and fasten with two 10-24 x 1/2" Phillips pan head machine screws (L). (See Figure 21)
2. Align left valence bracket (C) along **outside** of left brace on back of valence (E), and fasten with two 10-24 x 1/2" Phillips pan head machine screws (L). (See Figure 21)
3. Slide the valence (E) with attached brackets into the boom projector mount (S), sliding brackets under tabs in boom and adjust distance as required. (See Figure 22)
4. Fasten through bracket slots into boom mount using four 10-24 x 1/2" Phillips pan head machine screws (L). (See Figure 22)

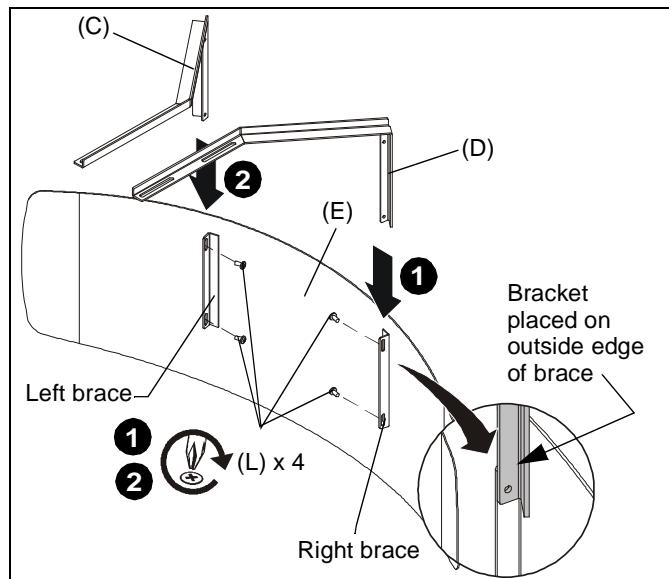


Figure 21

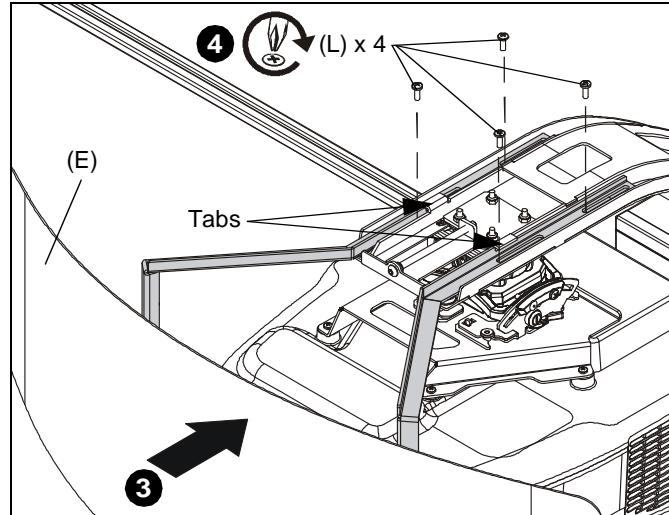


Figure 22

5. Readjust projector following instructions in the **Align Projector Image** section.

Calibrating Finger Touch Unit (FTU)

1. Snap calibration marker spacers (QQ) into bottom of calibration markers included with Epson projector. (See Figure 23)

NOTE: Ensure that magnet on calibration marker spacer (QQ) lines up with target on calibration marker. (See Figure 23)

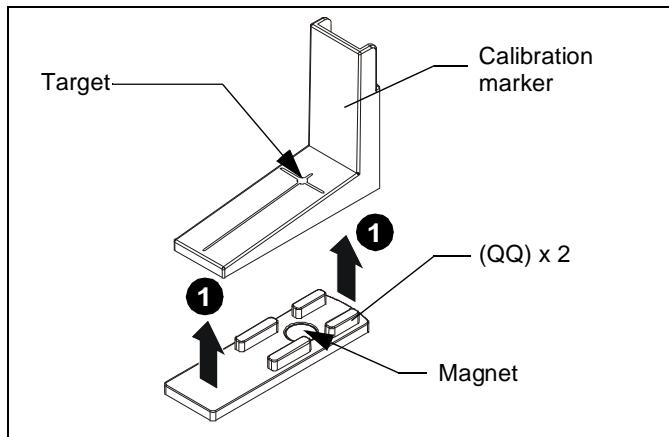


Figure 23

2. Calibrate the finger touch unit (FTU) following instructions included with the Epson projector.

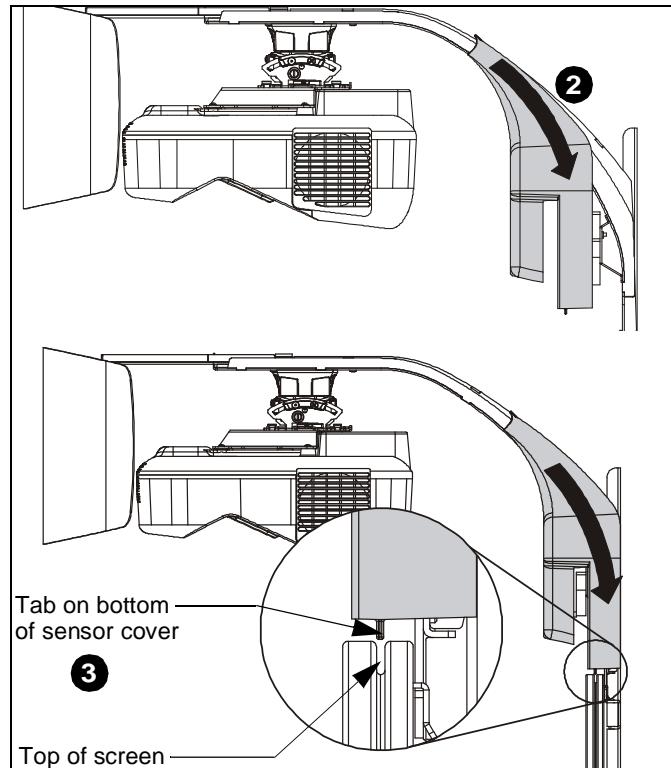


Figure 25

Attaching Sensor Cover and Outer Cover

1. Reattach the sensor cover, using the fastener previously removed. (See Figure 2)

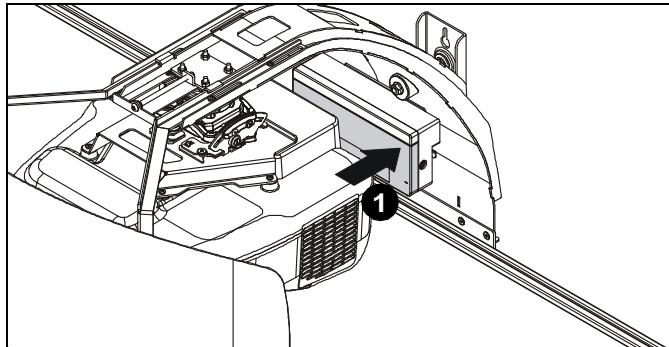


Figure 24

2. Hold sensor outer cover (U) under boom projector mount and begin sliding downward toward top of screen. (See Figure 25)
3. Continue sliding cover downward until tabs at bottom of cover slip into slot on top of screen. (See Figure 25)

Attaching Marker Tray

1. Attach marker tray (FF) at any point along bottom of screen using two #8 x 1/2" self-drilling screws (CC). (See Figure 26)

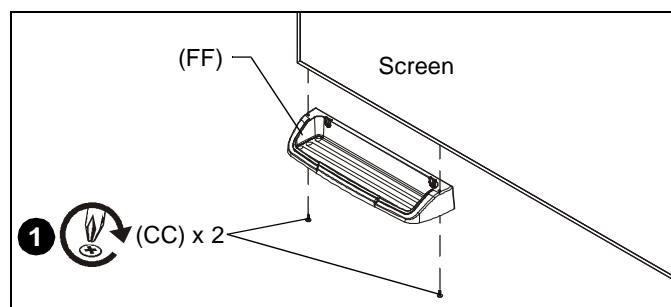


Figure 26

FASTENER INSTALLATION METHODS

NOTE: Refer to Table 1 for appropriate hardware and pilot hole sizes for various wall types.

Steel Stud / Drywall

1. Hold metal channel on anchor (H) flat alongside plastic straps and slide channel through hole. (See Figure 27)

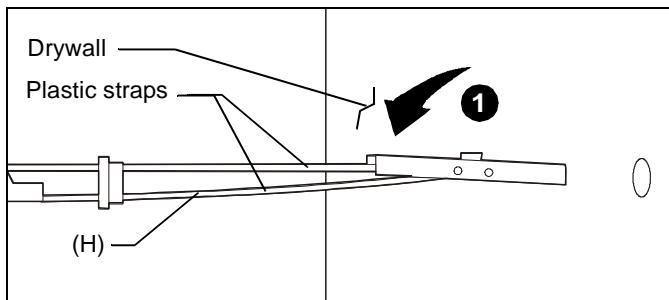


Figure 27

2. Holding plastic straps on anchor (H), pull anchor away from wall until channel rests flush behind wall making sure anchor channel is positioned vertically on drywall, or steel stud (if present). (See Figure 28)
3. Slide plastic cap on anchor (H) towards wall until flange of cap is flush with wall. (See Figure 28)

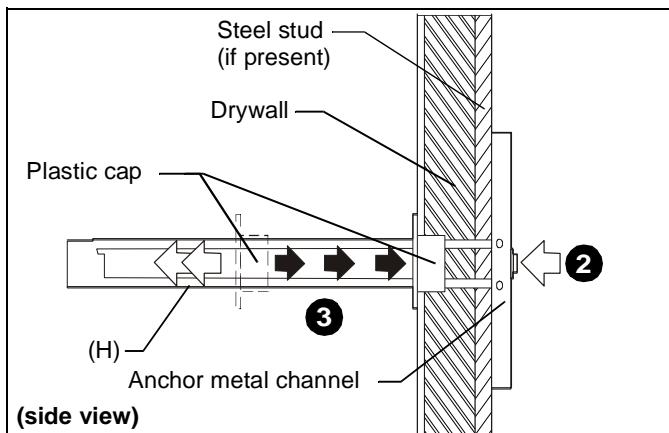


Figure 28

4. Snap off plastic straps on anchor at wall by pushing side to side, snapping off straps level with flange of plastic cap. (See Figure 29)

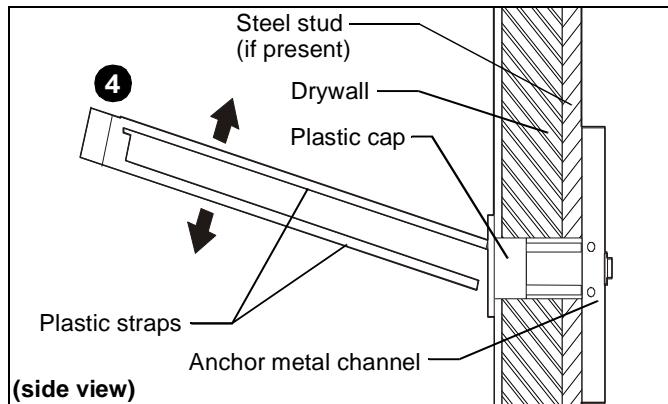


Figure 29

5. Line up anchor with attachment point.
6. Insert 1/4-20 x 1-3/4" Phillips pan head screw (F) through 1/4" washer (G), corresponding mounting hole in product and into anchor (H), and tighten until flush against product. DO NOT over tighten! (See Figure 30)

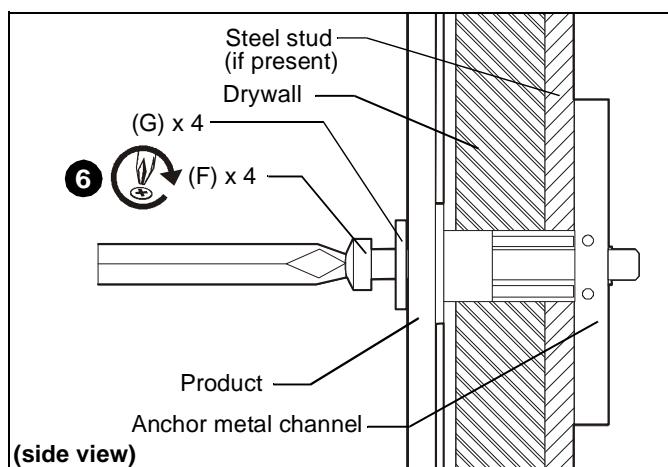


Figure 30

Wood Stud

NOTE: Refer to Table 1 for appropriate hardware and pilot hole sizes for various wall types.

1. Use one 1/4 x 2-1/2" lag bolt (J) through product and into pilot hole. (See Figure 31)
2. Repeat for remaining pilot hole.

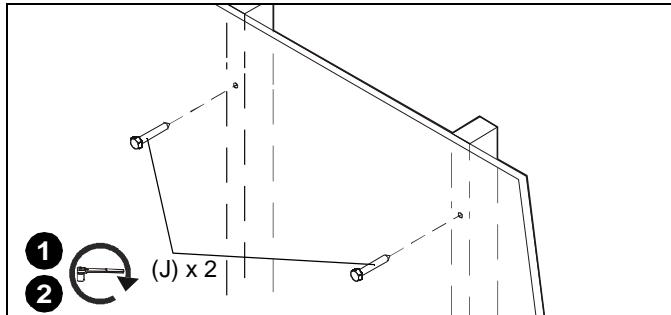


Figure 31

Concrete

NOTE: Refer to Table 1 for appropriate hardware and pilot hole sizes for various wall types.

1. Install an anchor (K) into each pilot hole using a hammer, making sure that the anchor is flush with the wall.
2. Use one 1/4 x 2-1/2" lag bolt (J) through product into each anchor in wall.

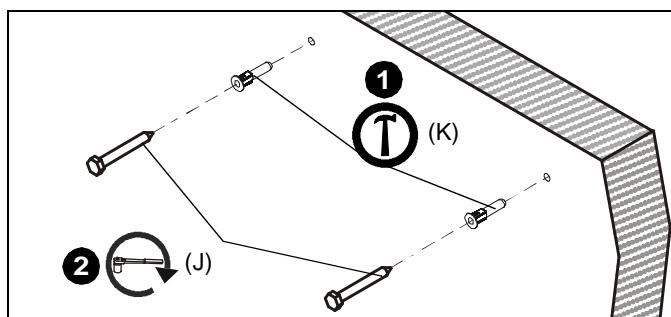


Figure 32



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