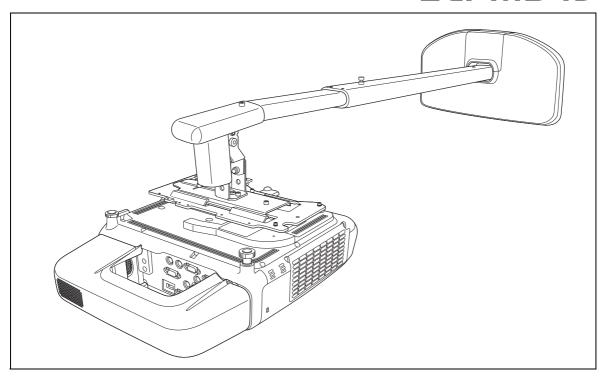


# **ELPMB45**



**Short Throw Projector Wall Mount Installation Manual** 

# **Safety Instructions**

Before using the wall mount, make sure you read all of the safety instructions below and then save this manual for later reference. Incomplete or incorrect installation could cause damage to the product or result in personal injury or property damage. Keep this installation manual at hand for later reference.

For additional information, see the *User's Guide* and *Safety Instructions* included with your projector.

### **Explanation of Symbols**

The warning symbols shown below are used throughout this installation manual to prevent the possibility of personal injury or property damage. Make sure you understand these warnings when reading this installation manual.

<b>⚠</b> Warning	Warnings indicate information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
<b>⚠</b> Caution	Cautions indicate information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.
$\Diamond$	Symbol indicating an action that must not be done
0	Symbol indicating an action that should be done

### **Safety Precautions for Installation**

<u></u> Warning	
The wall mount weighs approximately 11 kg. To prevent injury, handle the mount carefully.	0
This product is meant for mounting the projector and optional accessories only. Do not attach anything heavier than the projector and optional accessories to the product.  Doing so could cause the product to fall and cause personal injury or property damage.	$\bigcirc$
Installation of the product on the wall should be performed by at least two qualified technicians using only approved mounting equipment. Incomplete or incorrect installation could cause the product to fall and cause personal injury or property damage. For additional help, contact the customer support office listed in the projector's <i>User's Guide</i> .	0
Make sure you follow the instructions in this guide to install the wall mount.  Otherwise, the wall mount may fall and result in personal injury or property damage.	0
Turn off the projector when installing the mount to avoid fire or electric shock.	0
Handle the power cord carefully to avoid fire or electric shock.  Observe the following precautions when handling:  • Do not handle the cord with wet hands.  • Do not use a cord that is damaged or modified.  • Do not pull the cord with too much force when routing it through the arm unit.	0
When installing the product, do not hold on to the cable cover to position the mount.  Doing so could cause the cable cover to detach, resulting in personal injury or property damage.	$\bigcirc$
When you mount the projector on the wall with the wall mount, the wall requires enough strength to hold the projector, the wall mount, and cables. This wall mount should be installed on a concrete wall. Confirm the weight of the projector, the wall mount, and cables before installation, and maintain the strength of the wall. If the wall is not strong enough, reinforce the wall before installation.	0
Do not install the product in a location where it might be exposed to vibration or shock, which could cause damage to the projector or mounting surface.  It could also cause the product to fall, resulting in personal injury or property damage.	$\Diamond$

### **Marning** Install the mount firmly to hold the weight of the projector and the mount, and to resist horizontal vibration. Use M8 nuts and bolts. Otherwise, the projector or wall mount may fall and cause personal injury or property damage. Epson accepts no responsibility for any damage or injury caused by lack of wall strength or inadequate installation. If you need to loosen any screws while installing, be careful not to drop the projector or the mount. If the projector or the mount falls, it could cause personal injury or property damage. Do not use the mount when damaged and confirm on a regular basis that there are no damaged parts. Never modify the mount. Do not hang on the mount or hang a heavy object on it. If the mount or the projector falls, it could cause personal injury or property damage. Stop using the mount and contact Epson Customer Service if any of the following occur: • The mount is dropped or damaged during installation. • The arm unit detaches from the wall or falls. If you apply adhesives to prevent the screws from loosening, or if you use lubricants or oils on the wall mount plate fixing points, the housing may crack and cause the projector to fall, resulting in personal injury or property damage. Do not use adhesives, lubricants or oils to install or adjust the mount. Tighten all screws firmly after adjustment. Otherwise, the projector or wall mount may fall and cause personal injury or property damage. Never loosen the bolts and nuts after installation. Confirm on a regular basis that the screws have not become loose. If you find any loose screws, tighten them firmly. Otherwise, the projector or wall mount may fall and cause personal injury or property damage.

<b>⚠</b> Caution	
Install the product in a location free from humidity and dust to prevent the projector's lens and optical components from becoming dirty.	0
Do not install the product in a location where the operating temperature of the projector might be exceeded. Otherwise, damage may result.	$\Diamond$
Do not install the product in a location where there is excessive humidity or dust, near cooking or heating appliances, or in a location exposed to smoke or steam.  Fire or electric shock may result.	$\Diamond$
Do not use excessive force when adjusting the product. Using too much force could result in personal injury or property damage.	$\Diamond$

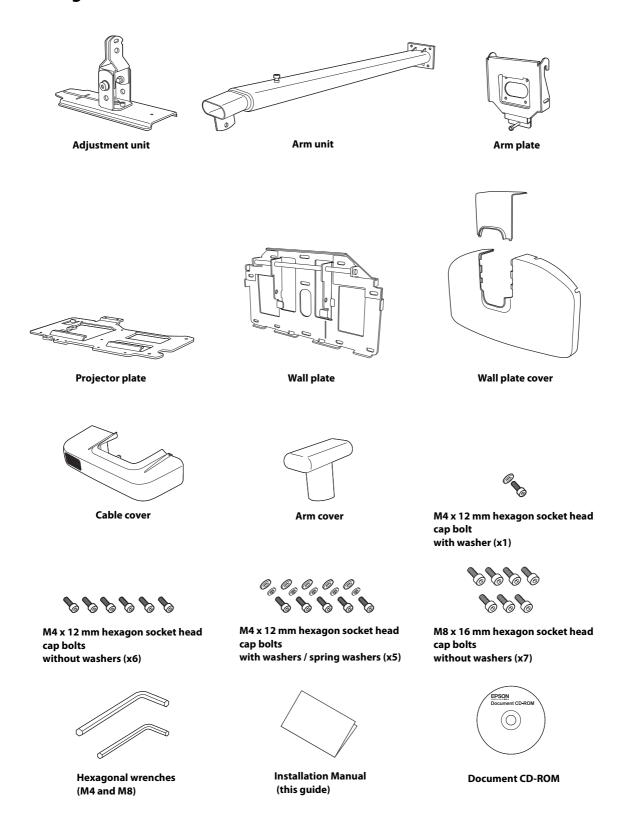
### **Before Use**

This product is used for mounting Epson short throw projectors to a wall.

### **Choosing a Location**

- Determine where you will install the wall mount and prepare the location in advance. Also, make sure there is a gap of 410 to 660 mm from the top of the image projected onto the white board to the ceiling. See "Screen Size and Projection Distance" on page 7 for more details.
- Do not install the product in a location where it might be exposed to vibration or shock, which could cause damage to the projector or mounting surface. It could also cause the product to fall, resulting in serious injury or death.
- Install the product in a location away from direct sunlight and other electric devices such as fluorescent lights or air conditioning. Direct sunlight and some kinds of fluorescent lights could interfere with the remote control of the projector.
- It is recommended to keep connection cable length less than 20 meters to reduce the external noise.

### **Package Contents**



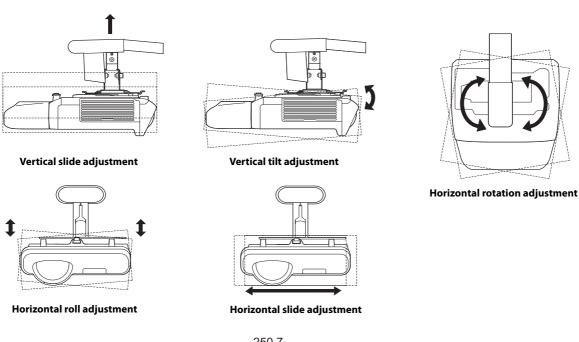
- Use only the supplied bolts to install the wall mount. Do not substitute these bolts with any other types.
- You need to use commercially available M8 x 60 mm anchors (at least 3) to attach the wall plate to the wall.
- Gather the tools and parts you need before you begin installation.

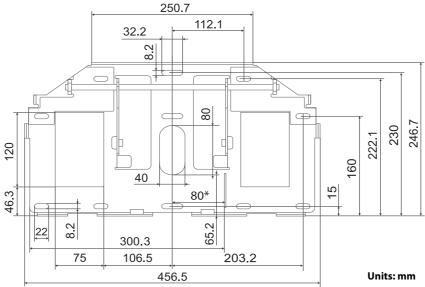
# **Specifications**

Weight	Approx. 11 kg
Maximum load capacity	5.5 kg
Arm length	1000 to 1510 mm
	(from wall plate attachment point to arm cover point)
Vertical slide adjustment range	0 to 134 mm (arm length minimum)
	0 to 230 mm (arm length maximum)
Vertical tilt adjustment range	-7 to 17° (arm length minimum)
	-17 to 7° (arm length maximum)
Horizontal rotation adjustment range	± 5°
Horizontal roll adjustment range	± 5°
Horizontal slide adjustment range	± 45 mm

### **⚠** Caution

Keystone correction cannot be performed correctly if you setup the projector outside the projector usage range. Check the range in which correction can be performed in the *User's Guide* supplied with the projector.



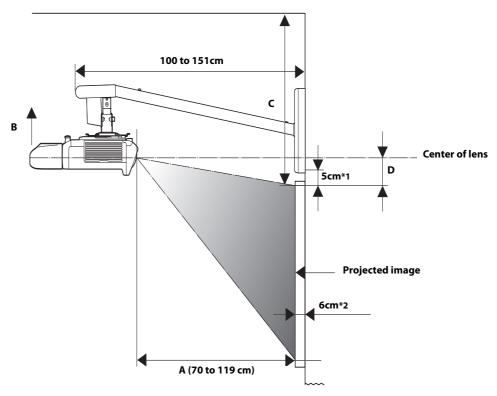


<sup>\*</sup>Offset value for the center of the projection screen and the center of the wall plate

# **Screen Size and Projection Distance**

Refer to the tables on the following pages and install the mount and projector to project images at the appropriate size. The values are only a guide.

The recommended projection distance (A) is 70 to 119 cm.



- \*1 Allow at least 5 cm space between the top of the image projected onto the whiteboard and the bottom of the wall plate.
- \*2 The thickness of the whiteboard should be no more than 6 cm. (The values in the projection distance table are based on a whiteboard with a thickness of 6 cm.)

# ∞ WXGA projectors: EB-536Wi/EB-535W/EB-525W and others

Screen size		16:10	16:10 WXGA			16:9 Wic	16:9 Widescreen			4:3 XGA	(GA	
	Projection distance (A) Minimum (Wide)	Vertical slide adjustment (B)	Distance from top of projected image to ceiling (C)	Distance from top of projected image to center of lens (D)	Projection distance (A) Minimum (Wide)	Vertical slide adjustment (B)	Distance from top of projected image to ceiling (C)	Distance from top of projected image to center of lens (D)	Projection distance (A) Minimum (Wide)	Vertical slide adjustment (B)	Distance from top of projected image to ceiling (C)	Distance from top of projected image to center of lens (D)
09	,						1		70	4	43	111
61"	1	1	1			1	1		71	5	44	11
62"	1	1			1	1			72	5	44	11
63"						1			74	5	44	11
64"	1	1	1		1	1	1		75	5	44	11
.29	1	1	1		1	1	1		92	5	44	12
99	1	1	1		70	6	48	15	77	5	45	12
	1	1			71	10	49	16	26	5	45	12
89	70	4	43	111	72	10	49	16	80	5	45	12
69	71	5	44	111	73	10	49	16	81	5	45	12
70"	72	5	44	11	74	10	49	16	82	5	45	13
71"	73	5	44	11	75	10	50	16	83		46	13
72"	74	5	44	111	77	10	50	17	85	5	46	13
73"	75	5	44	12	78	10	50	17	98	5	46	13
74"	22	5	45	12	62	10	50	17	87	9	46	13
75"	28	5	45	12	08	10	50	17	88	9	46	13
92	62	5	45	12	81	11	51	18	06	9	47	14
77"	08	5	45	12	82	11	51	18	91	9	47	14
78"	81	5	45	12	83	11	51	18	92	9	47	14
62	82	5	45	12	84	11	51	18	93	9	47	14
08	83	5	46	13	85	11	52	19	94	9	47	14
81"	84	5	46	13	28	11	52	19	96	9	47	15
82"	85	9	46	13	88	11	52	19	26	9	47	15
83"	98	9	46	13	68	11	52	19	86	9	47	15
84"	87	9	46	13	06	11	53	19	66	9	47	15
85"	88	9	46	13	91	12	53	20	101	9	48	15
.98	06	9	47	14	92	12	53	20	102	9	49	15
87"	91	6		14	93	12	53	20	103	9	49	16
.88	92	9		14	94	12	53	20	104	7	49	16
.68	93	6	47	14	95	12	54	21	105	7	49	16
.06	94	6		14	97	12	54	21	107	7	49	16
91"	95	9	48	14	86	12	54	21	108	7	50	16

Screen size		16:10	16:10 WXGA			16:9 Wid	16:9 Widescreen			4:3 XGA	(GA	
	Projection	Vertical slide	Distance from	Distance from	Projection	Vertical slide	Distance from	Distance from	Projection	Vertical slide	Distance from	Distance from
	distance (A)	adjustment (B)	top of	top of	distance (A)	adjustment (B) top of	top of	top of	distance (A)	adjustment (B) top of		top of
	Minimum			projected	Minimum		projected	projected	Minimum		projected	projected
	(Wide)			image to	(Wide)		image to	image to	(Wide)			image to
			ceiling (C)	center of lens			ceiling (C)	center of lens			ceiling (C)	center of lens
				(D)				(D)				(D)
95"	96	9	48	15	66	12	54	21	601	2	50	16
93"	26	9	48	15	100	13	55	22	110	7	50	17
94"	86	9	48	15	101	13	55	22	111	7	50	17
95"	66	9	48	15	102	13	55	22	113	7	50	17
96	100	9	48	15	103	13	55	22	114	2	51	17
	101	7	49	15	104	13	55	22	115	7	51	17
86	102	7	49	16	105	13	56	23	116	2	51	18
,,66	104	7	49	16	106	13	56	23	118	2	51	18
100"	105	7	49	16	108	13	56	23	119	2	51	18
101"	106	7	49	16	109	13	56	23	1	1	1	
102"	107	7	49	16	110	14	57	24	-	1	1	
103"	108	7	50	16	111	14	57	24	-	1	1	
104"	109	7	50	16	112	14	22	24	-	-	-	
105"	110	7	50	17	113	14	22	24	-	-	-	
.901	111	7	50	17	114	14	58	25	-	-	-	
107"	112	7	50	17	115	14	28	25	-	-	-	
108"	113	7	51	17	116	14	58	25	-	-	-	
109"	114	7	51	17	118	14	58	25		1	1	
110"	115	7	51	17	119	14	58	25	-	-	-	
111"	116	7	51	18	-	-	-		-	-	-	
112"	118	7	51	18	_	-	-		-	-	-	
113"	119	7	51	18	1	-	-		-	-	-	

Units: cm

	Screen size	Projection distance (A)	Vertical slide adjustment	Distance from top of
		Maximum (Tele)	(B)	projected image to ceiling
				(O)
16:10 WXGA*	50"	70	0	51
	84"	119	17	99
16:9 Widescreen*	48"	69	5	45
	82"	119	23	09
4:3 XGA*	44"	69	0	51
	74"	119	17	99

<sup>\*</sup> Allow at least 14 cm space between the top of the image projected onto the whiteboard and the bottom of the wall plate.

고 XGA projectors: EB-530/EB-520 and others

Units: cm

Screen size		4:3 XGA	KGA			16:9 Widescreen	lescreen			16:10 WXGA	VXGA	
		V				1/						
	Projection distance (A)	vertical silde adjustment (B)	Distance from top of	Distance from top of	Projection distance (A)	vertical silde adjustment (B)	Distance from top of	Distance from top of	Projection distance (A)	verucai silde adiustment (B)	Distance Irom top of	Distance from
	Minimim		projected	ام	Minimim		ام	nrojected	Minimim		projected	nrojected
	(Wide)		imade to		(Wide)			image to	(Wide)		imade to	image to
	(2)		ceiling (C)	and	(2)			center of lens	(25)		ceiling (C)	renter of lens
			()	(D)			() B	(D)			(2) 6	(D)
58"		1			70	15	53	20	-		-	
59"	1	1	1		71	16	54	21	1			
.09	1	1	ı		72	16	54	21	70	11	49	16
61"	1	1	1		74	16	55	21	72	12	50	17
62"			1		75	16	55	22	73	12	50	17
63"	70	2	41	8	92	16	55	22	74	12	50	17
64"	71	2	42	8	77	17	56	22	75	12	51	17
.29	72	2	42	8	62	17	56	23	92	12	51	18
99	73	2	42	6	80	17	99	23	82	12	51	18
	74	2	42	6	81	17	57	23	62	13	51	18
89	75	2	42	6	82	17	57	24	80	13	52	18
69	77	2	42	6	84	18	57	24	81	13	52	19
70	78	2	42	6	85	18	58	24	83	13	52	19
71"	79	2	43	6	98	18	58	25	84	13	52	19
72"	80	2	43	6	28	18	58	25	85	13	53	20
73"	81	2	43	6	68	19	29	25	98	13	53	20
74"	82	2	43	10	06	19	59	26	87	14	53	20
75"	83	2	43	10	91	19	09	26	68	14	54	20
.92	85	2	43	10	92	19	09	26	06	14	54	21
77"	98	2	43	10	94	19	09	27	16	14	54	21
78"	28	2	44	10	95	20	09	27	62	14	54	21
64	88	2	44	10	96	20	09	28	94	14	55	21
08	68	2	44	10	86	20	09	28	26	14	55	22
81"	06	2	44	10	66	20	09	28	96	15	55	22
82"	92	2	44	11	100	20	09	59	26	15	26	22
83"	93	2	44	11	101	21	09	29	86	15	56	23
84"	94	2	44	11	103	21	09	29	100	15	56	23
85"	95	2	45	11	104	21	09	30	101	15	56	23
.98	96	2	45	11	105	21	09	30	102	15	57	23
	26	2	45	11	106	21	09	30	103	16	57	24
88	86	2	45	11	108	22	09	31	105	16	57	24

ı	c
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9	
	0
	-

		4:3 XGA	(GA			16:9 Widescreen	escreen			16:10 WXGA	WXGA	
Projection Vertical slide	Vertical slide		Distance from	Distance from	Projection	Vertical slide	Distance from	Distance from	Projection	Vertical slide	e from	Distance from
distance (A) adjustment (B) top of	adjustment (B)			top of	distance (A)	adjustment (B)	top of		distance (A)	adjustment (B) top of		top of
Minimum   F	0.	2	projected	projected	Minimum		projected	projected	Minimum		pə	projected
	<u>:=</u>	.=			(Wide)		image to		(Wide)			image to
<u>ŏ</u>	ŏ	ŭ		center of lens			ceiling (C)	center of lens				center of lens
				(D)				(D)				(D)
100 2 4		4	45	11	109	22	09	31	901	16	57	24
101 2 4		4	45	12	110	22	09	31	107	16	58	24
102 2		4.	45	12	111	22	09	32	108	16	58	25
103 2		4.	45	12	113	22	09	32	109	16	58	25
104 2 4		4	46	12	114	23	09	32	111	16	59	25
105 2 4		4	46	12	115	23	09	33	112	17	59	26
107 2		4.	46	12	116	23	09	33	113	17	59	26
108		4.	46	12	118	23	09	33	114	17	59	26
109		4.	46	13	119	23	09	34	116	17	09	26
110 2		٧.	46	13	1	1	1		117	17	09	27
111	2		46	13	-	-	_		118	17	09	27
112 2			47	13	1		-		119	17	09	27
114			47	13	-	-	_		-	-	-	
115 2	2		47	13	-	-	_		-	-	-	
116 2	2		47	13	-	-	-		-	-	-	
117 2	2	_	47	13	-	-	_		-	-	-	
118 2	2	-	47	14	-	-	-		-	-	-	
119 2	2		48	14	-	-	_		-	-	-	

Units: cm

	Screen size	Projection distance (A) Vertical slide	Vertical slide	Distance from top of
		Maximum (Tele)	adjustment (B)	projected image to
				ceiling (C)
4:3 XGA*	46"	69	5	45
	78"	118	22	09
16:9 Widescreen**	43"	70	5	45
	72"	119	23	09
16:10 WXGA**	44"	70	0	50
	74"	119	18	65

\* Allow at least 5 cm space between the top of the image projected onto the whiteboard and the bottom of the wall plate.
\*\* Allow at least 20 cm space between the top of the image projected onto the whiteboard and the bottom of the wall plate.

## **Assembly and Installation**

Make sure you follow the instructions below to install the wall mount. Otherwise, the wall mount may fall and result in personal injury or property damage.

### **Marning**

- ☐ When you mount the projector on the wall with the wall mount, the wall requires enough strength to hold the projector, the wall mount, and cables. This wall mount should be installed on a concrete wall. Confirm the weight of the projector, the wall mount, and cables before installation, and maintain the strength of the wall. If the wall is not strong enough, reinforce the wall before installation.
- ☐ Before starting the installation, carefully check the construction, material, and strength of the wall.
- ☐ Install the mount firmly to hold the weight of the projector and the mount, and to resist horizontal vibration. Use M8 nuts and bolts. Nuts and bolts smaller than M8 could cause the mount to fall.
- ☐ Epson accepts no responsibility for any damage or injury caused by lack of wall strength or inadequate installation.



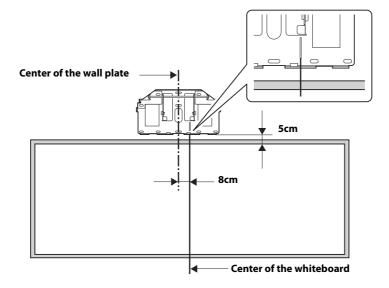
At the point where the wall mount is installed, make sure there is a gap of 410 to 660 mm from the top of the image projected onto the white board to the ceiling. See "Screen Size and Projection Distance" on page 7 for more details.

### 1. Installing the wall plate

1) Check the position where you want to install the wall plate, and then mark that position on the wall.

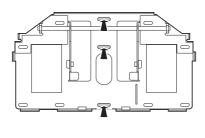
Attach the wall plate so that the center of the whiteboard and the marked gauge line of the wall plate are on the same line as shown in the following illustration. Allow at least 5 cm space between the top of the image projected onto the whiteboard and the bottom of the wall plate. However, if you are using minimum zoom (tele), refer to the tables on the previous pages.

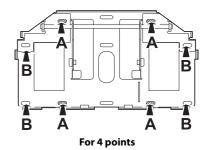
After installing, you can slide the projector horizontally 4.5 cm by using the slider on the adjustment unit. See step 10. on page 18 for more details.



2) Position the wall plate over the marks you made in step 1, and then mark the points where the wall plate will be secured as shown in the following illustration.

Insert the anchors into at least three points. If you insert at four points, use the four point **A**s or four point **B**s as shown below.

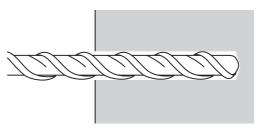




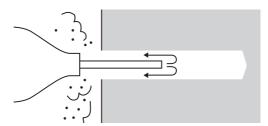
For 3 points

3) Drill holes of the following diameters and depths at the points you marked.

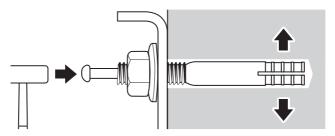
Drill diameter	8.5 mm
Pilot hole depth	40 mm
Anchor hole depth	35 mm



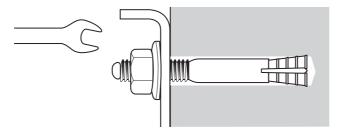
4) Use a device such as a dust pump to clean out concrete dust from the hole.



5) Position the wall plate on the wall and insert M8 x 60 mm expansion anchors into the holes. Attach the nut and tap it with a hammer until the core touches the top of the anchor.

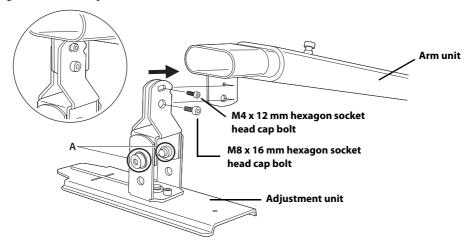


6) Tighten the nut with a spanner to secure the wall plate to the wall.



### 2. Assembling the wall mount

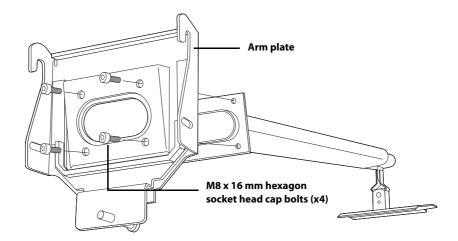
- 1) Attach the adjustment unit to the arm unit.
- 2) Secure temporarily using the hexagonal wrenches (M4 and M8) and M4 x 12 mm hexagon socket head cap bolt and M8 x 16 mm hexagon socket head cap bolt.



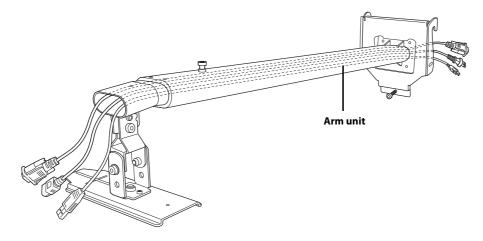


Except when using EB-536Wi/535W/525W/530/520 projectors, the positions for screw A differs. Contact your local dealer for more details.

3) Attach the arm plate using a hexagonal wrench (M8) and four M8 x 16 mm hexagon socket head cap bolts.



### 3. Routing the cables through the arm unit

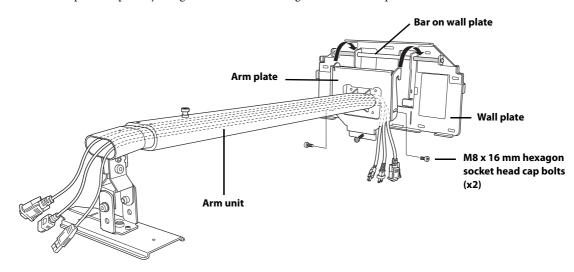


### **⚠** Caution

Problems may occur if you use this product without routing the cables through the arm unit.

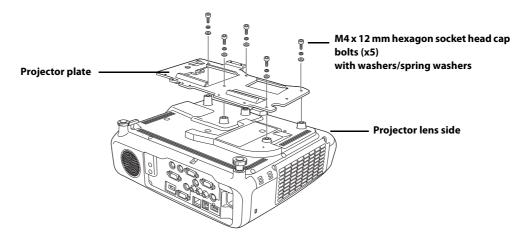
### 4. Attaching the arm unit to the wall plate

- Attach the hook on the arm plate to the bar on the wall plate.
   Be careful not to pinch cables between the arm plate and the wall plate.
- 2) Secure the arm plate temporarily using two M8 x 16 mm hexagon socket head cap bolts.



### 5. Attaching the projector plate to the projector

- 1) Place the projector upside down.
- 2) Attach the projector plate to the projector using the hexagonal wrench (M4) and five M4 x 12 mm bolts with washers/spring washers.



### **Marning**

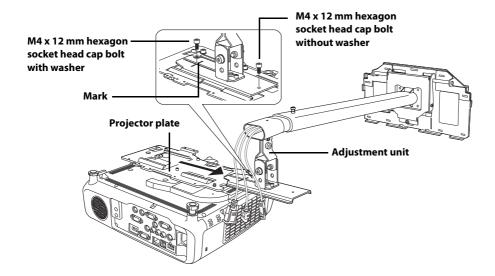
If you apply adhesives to prevent the screws from loosening, or if you use lubricants or oils on the wall mount plate fixing points, the housing may crack and cause the projector to fall, resulting in personal injury or property damage. Do not use adhesives, lubricants or oils to install or adjust the mount.



Tighten the screws firmly.

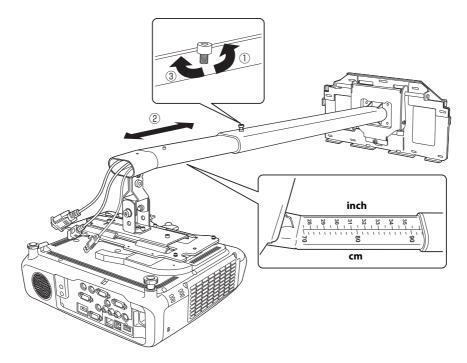
### 6. Attaching the projector to the adjustment unit

- 1) Slide the projector plate onto the adjustment unit as shown below.
- 2) Secure the adjustment unit temporarily at the points marked using two M4 x 12 mm hexagon socket head cap bolts as shown below.



### 7. Extending the arm, adjusting the length, and securing temporarily

- 1) Loosen the screw on the arm.(1)
- 2) Adjust the length of the arm using the measure on the bottom to match the projection distance recommended in "Screen Size and Projection Distance" on page 7.(②)
- 3) After adjusting the length, secure the arm position temporarily by tightening the screw on top. (3)

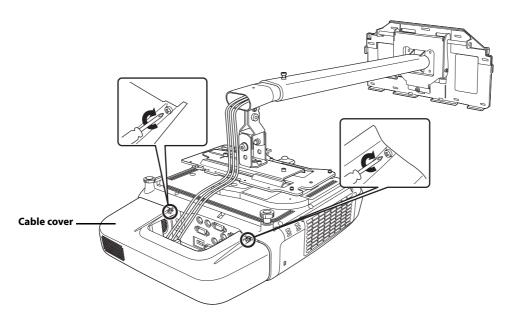


### 8. Connecting the cables

Connect the power cord and other cables to the projector.

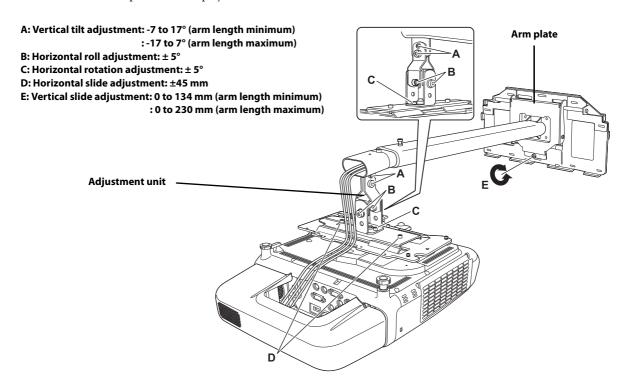
### 9. Attaching the cable cover

Take up the cable slack, and then secure the cable cover with the screws as shown below.



### 10. Turning on the projector and checking the screen

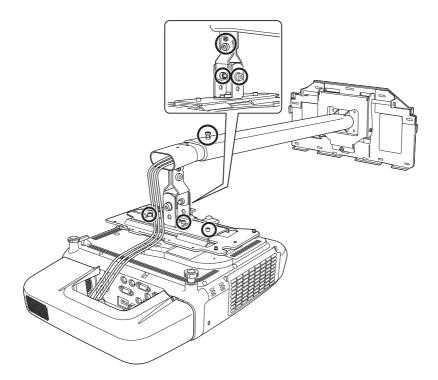
- 1) Plug in the projector.
- 2) Turn on the projector.
- 3) Adjust the vertical slide (arm angle) using screw (E) on the bottom of the arm plate. The arm rises when you tighten the screw, and lowers when you loosen it.
- 4) Loosen the screws (A, B, C, D) on the adjustment unit, and adjust the position of the projection screen while changing the direction and position of the projector.



5) Firmly tighten the screws on the arm unit and adjustment unit using the hexagonal wrenches (M4 and M8).

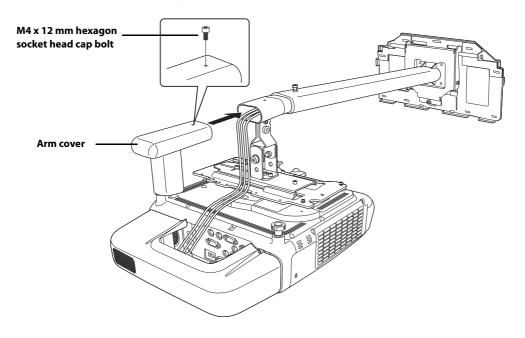
### **Marning**

Tighten all screws firmly. Otherwise, the projector or wall mount may fall and cause personal injury or property damage.



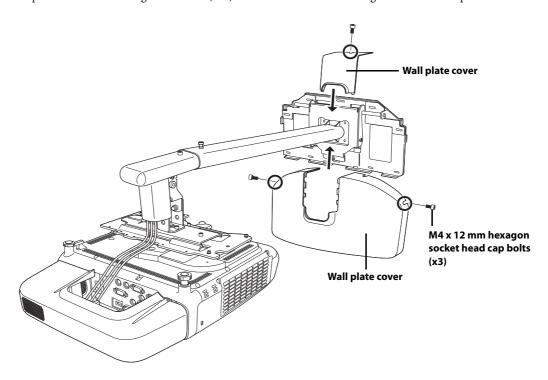
### 11. Attaching the arm cover

Secure the arm cover with a hexagonal wrench (M4) and an M4 x 12 mm hexagon socket head cap bolt.



### 12. Attaching the wall plate cover

Secure the wall plate cover with a hexagonal wrench (M4) and three M4 x 12 mm hexagon socket head cap bolts.





When cutting the thin section of the wall plate cover and passing the cables through, make sure you perform deburring to smooth off any sharp edges to prevent damaging the cables.

Installation, removal, and servicing of the projector should only be performed by a qualified technician. See the *User's Guide* included with your projector for information about maintenance and repairs.



- □ Never loosen the bolts and nuts after installation. Confirm on a regular basis that the screws have not become loose. If you find any loose screws, tighten them firmly. Otherwise, the projector or wall mount may fall and cause personal injury or property damage.
- ☐ Do not hang on the mount or hang a heavy object on it. If the mount or the projector falls, it could cause personal injury or property damage.