



# **WhiteBoardScreen™ Series**

## **Dry-Erase Ambient Light Rejecting Projection Screen**

### **User's Guide**

Thank you for choosing the WhiteBoardScreen™ Series dry-erase whiteboard projection screen! Please read through this user guide before utilizing the screen. Correct usage and maintenance will ensure a long product life.

#### **Precautionary Notes:**

Before using the dry-erase function of your whiteboard screen, please make note of the following instructions to properly maintain and clean your dry-erase surface projection screen. (These Whiteboard cleaning tips are just as relevant with any dry-erase writing surface as they are with our Whiteboard-Projection Screens.)

1. Only use a high density foam eraser when removing dry-erase markings from the Whiteboard screen.
2. Do not use abrasive erasers as these may scratch the surface of the screen.
3. Never spray the whiteboard cleaner solution onto the surface while marker writing is present and then attempt to use a high density foam eraser to remove. This will only smear the dry-erase marker ink making the surface more difficult to clean and will likely ruin the foam eraser.
4. If there are any dry-erase markings left behind even after attempting to remove them using our high density erasers, spray our whiteboard cleaning solution directly onto the screen surface and use only a soft microfiber cloth to wipe-down and clean the area.

For a video demonstration, please visit: <http://www.elitescreens.com/whiteboardscreen-cleaning>

If replacement cleaning accessories are needed, please visit the Whiteboard cleaning accessories section of our website at <http://www.elitescreens.com/clean-whiteboard>

# Hardware and Parts List

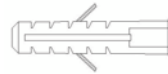
Please make sure all parts listed are included before proceeding with installation.



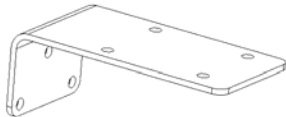
a



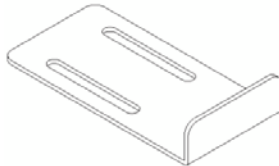
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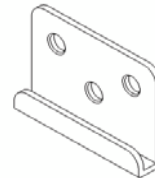
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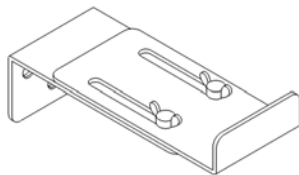
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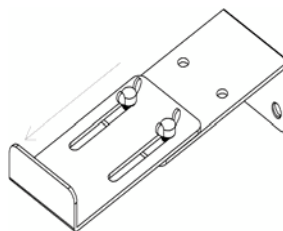
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f

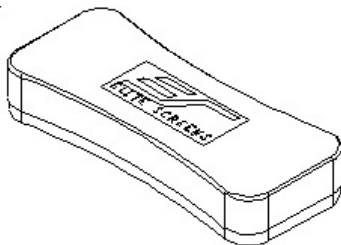


g

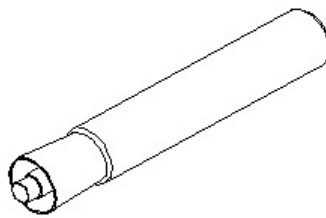


h

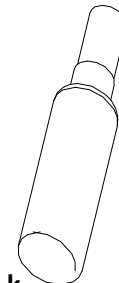
G and H are not Actual individual parts included but configurations only by combining parts (d) and (e) with the butterfly screw.



i



j



k

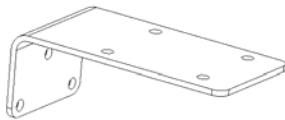
Note: The WhiteBoardScreen™ Series eraser should only be used for the WhiteBoardScreen™.

## Parts List

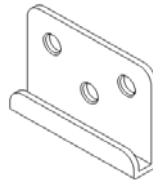
- a. Qty 4–Butterfly screw
- b. Qty 12–Wall screw
- c. Qty 12–Hollow wall (or drywall) anchor
- d. Qty 2–Top hanging wall brackets (to the wall)
- e. Qty 2–Top hanging whiteboard brackets (to the whiteboard)
- f. Qty 2–Bottom hanging bracket
- g. For whiteboard diagonal size 60 (4:3) inches
- h. For whiteboard diagonal 80(4:3), 96 (16:9) inches.
- i. Qty 2–whiteboard eraser
- j. Qty 2–Dry-erase pens
- k. Qty 1–WhiteBoardScreen™ cleaner

# Installation

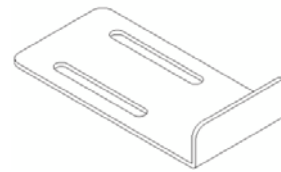
1. Mark the location the WhiteBoardScreen™ will be installed and drill your holes for all Top Hanging Wall Brackets (**fig.1**) and Bottom Frame Hanging Brackets (**fig.2**).
2. Attach the Top Hanging WhiteBoardScreen™ Brackets (**fig.3**) to the Top Hanging Wall Brackets (**fig.1**) with the Butterfly Screws according to the size of the WhiteBoardScreen™ as specified in **fig.4 and 5** below.
3. Next, affix the Top Hanging Wall Brackets (**fig.1**) and the Bottom Frame Hanging Brackets (**fig.2**) to the drilled locations and install the wall screws (**fig.6**).
4. Lastly, hang the WhiteBoardScreen™ on the brackets (**fig.7**).



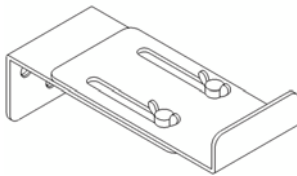
**Fig.1**



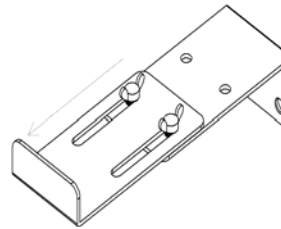
**Fig.2**



**Fig.3**



**Fig.4**

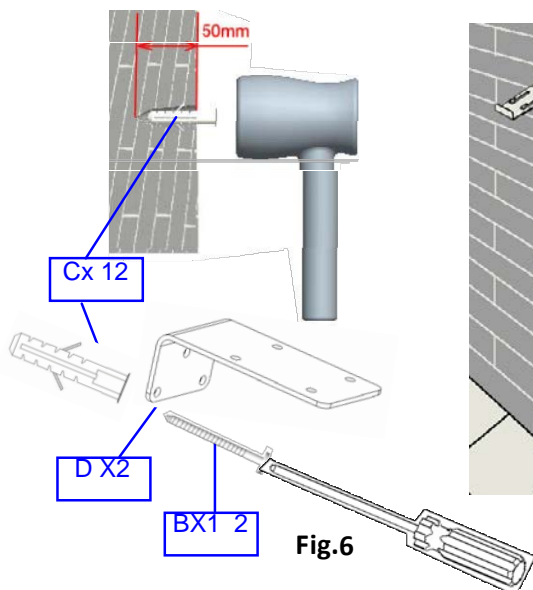


**Fig.5**

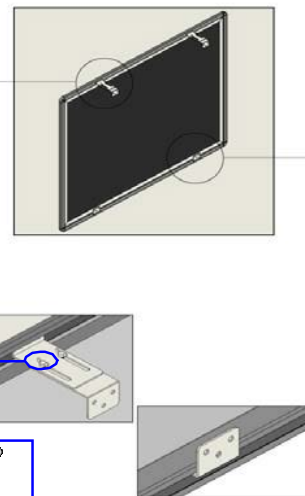
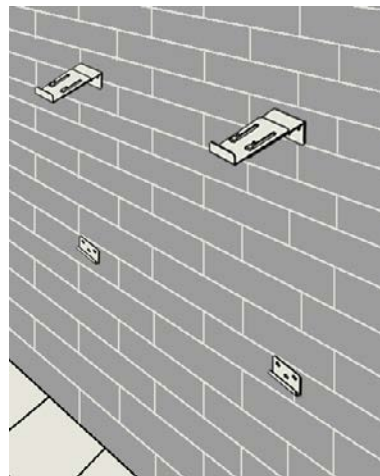
**Note:**

**Fig.4** Bracket configuration for whiteboard 60 inch diagonal (4:3) screens

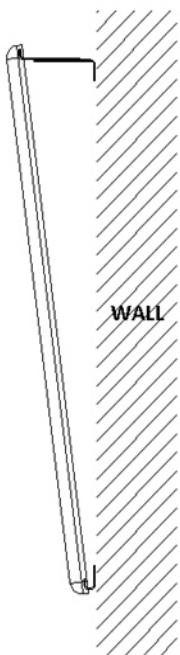
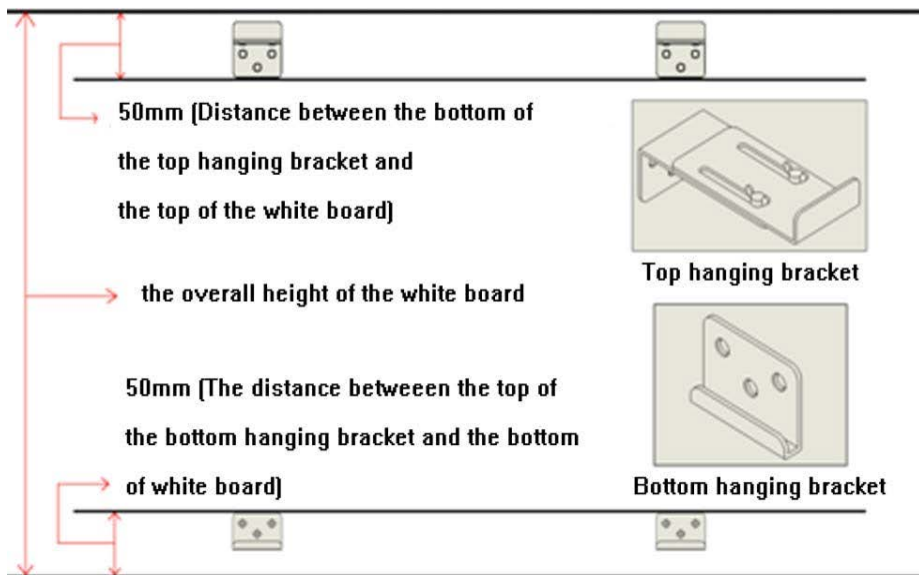
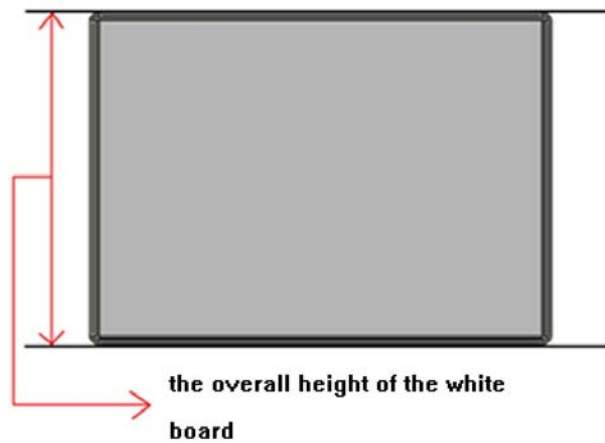
**Fig.5** Recommended Bracket configuration for whiteboard 80 inch (4:3) and 96 inch (16:9)



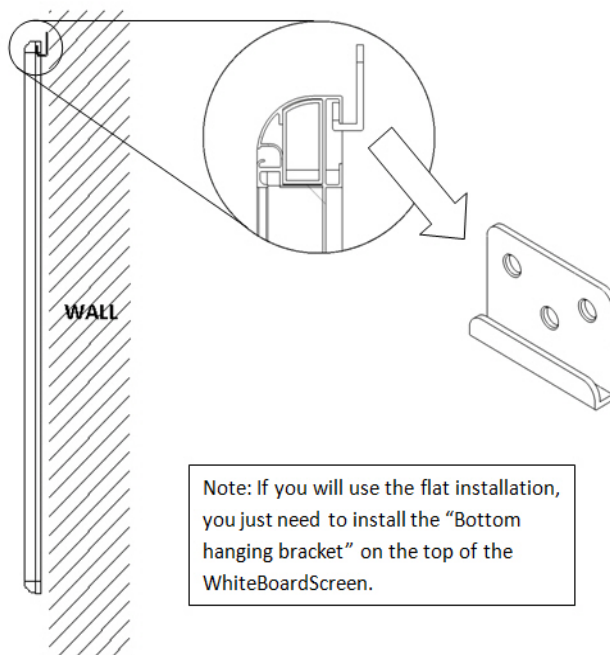
**Fig.6**



**Fig.7**



Desktop Projector Mode



Overhead Projector Mode

## **Notice to Installer:**

Please use the following installation instructions to obtain superior optical performance from the StarBright 4 Angular Reflective ALR (Ambient Light Rejecting) Screen.

Make sure to follow these instructions in order for the StarBright 4 to perform correctly.

- Angular-Reflective material is not compatible with ultra/short-throw projectors
- Minimum lens throw ratio 1.5x image width
- Ambient light must not come from the same direction as the projector

*Since angular-reflective means that the projected image will reflect at the mirror-opposite angle, it is important to position the projector so that the viewer will get the best possible image.*

**Step 1:** Establish the general “eye level” of the viewers

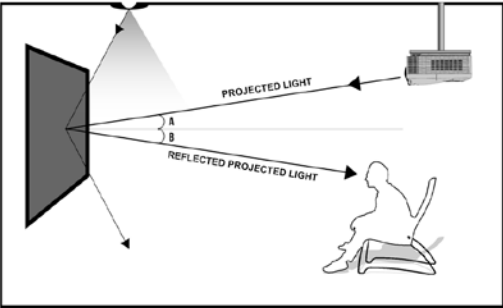
**Step 2:** Set the appropriate projection level

**Step 3:** Adjust the screen height level and projection angle

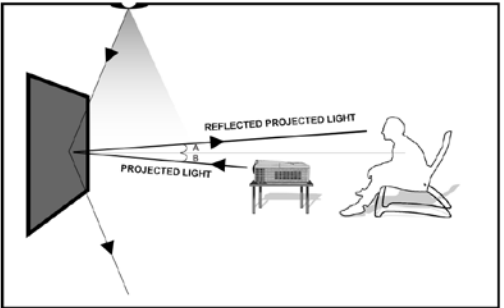
Input Angle (A) = **Output Angle (B)** aligns with the viewer’s angle

### Correct Installation Examples

**Projector Ceiling Installation:** Make sure the projector (*light in*) is angled (A) to reflect (B) at the mirror-opposite angle (*light out*) to align with the viewer’s eye level.

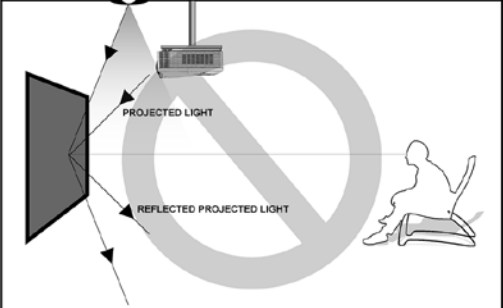


**Projector Table Top:** Make sure the projector (*light in*) is angled (A) to reflect (B) at the mirror-opposite angle (*light out*) to align with the viewer’s eye level.

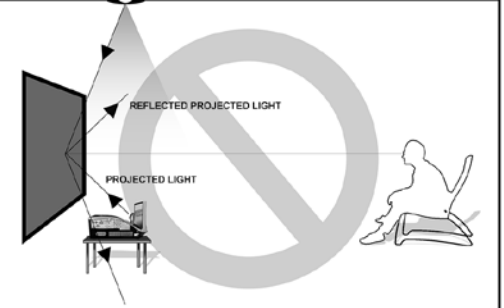


### Incorrect Installation Examples

**Ceiling Mounted Short-throw Projector**



**Tabletop Ultra-Short throw Projector**



**Note:** Improper installation will result in light loss and produce a dark image. This is due to the projector’s light reflecting in the wrong direction.  
*Images are not up to scale and are for illustration purposes only.*

## Recommended Installation Locations for desktop and overhead projector installations

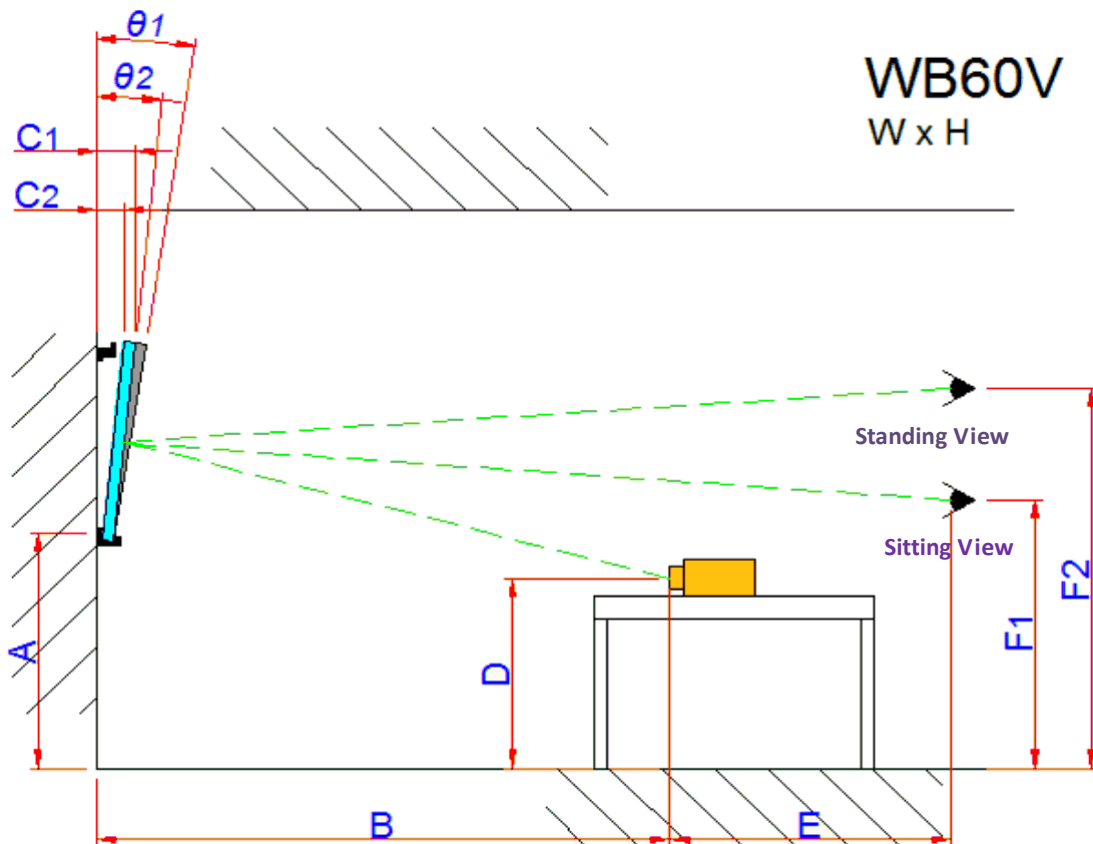
The StarBright4 material used in this WhiteBoardScreen™ has a special high gain that is angular reflective. In order to take full advantage of this special material, it is important that the WhiteBoardScreen™ is installed properly so that the projected image is viewed within the recommended viewing angle.

It is normal for some viewing areas to be less bright than the center due to the nature of the screen material. It is not a defect and minor “hot spotting” will occur as a result.

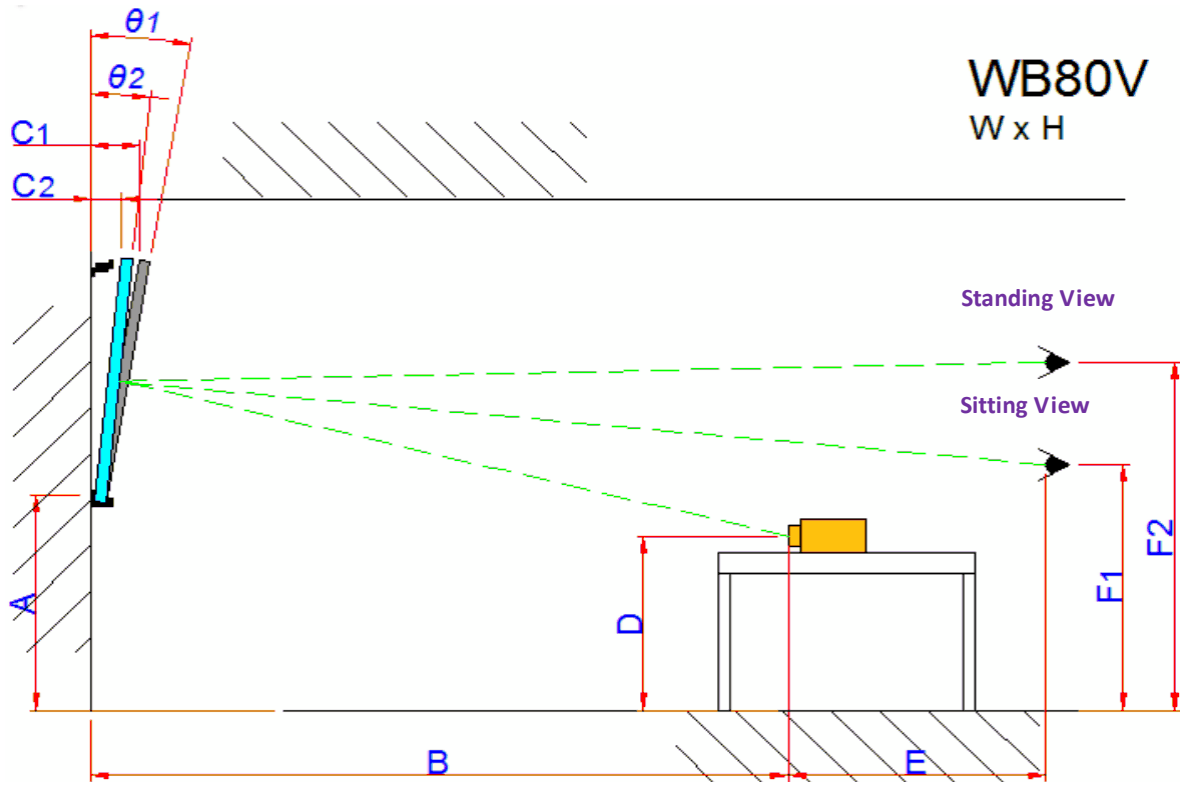
The below charts will assist in determining several factors to consider to help you with your installation. Please note that these are only recommendations.

### Desktop projector installation

Model Number	Overall Width (W)	Overall Height (H)	Installation Height (A)	Suggested Projection Distance (B)	Sitting View Distance (C1)	Standing View Distance (C2)	Suggested Projection Height (D)	Viewer Distance (E)	Sitting View Height (F1)	Standing View Height (F2)	Sitting View Angle (O1)	Standing View Angle (O2)
Unit: mm												
WB60V	1190.0	930.0	1000-1200	1950-2950	160	114	800-1000	1200	1200	1700	9°	6°
Unit: Inches												
WB60V	46.9	36.6	39.4-47.2	76.8-116.1	6.3	4.5	31.5-39.4	47.2	47.2	66.9	9°	6°



Model Number	Overall Width (W)	Overall Height (H)	Installation Height (A)	Suggested Projection Distance (B)	Sitting View Distance (C1)	Standing View Distance (C2)	Suggested Projection Height (D)	Viewer Distance (E)	Sitting View Height (F1)	Standing View Height (F2)	Sitting View Angle (01)	Standing View Angle (02)
Unit: mm												
WB80V	1630.0	1230.0	1000-1200	2750-3750	228	145	800-1000	1200	1200	1700	10°	6°
Unit: inches												
WB80V	64.2	48.4	39.4-47.2	108.3-147.6	9.0	5.7	31.5-39.4	47.2	47.2	66.9	10°	6°



**Desktop Installation explanation:**

- A= Installation Height (Floor to bracket drilling hole)
- B= Suggested Projection Distance (Projector to screen)
- C1= Sit View Distance (The brightest view when people are sitting down in relation to the angle setting in F1)
- C2= Stand View Distance (The brightest view when people are standing in relation to the angle setting in F2)

\*\*\*\*User selectable average recommendations\*\*\*\*

- D= Suggested Projection Height (Floor to project center)
- E= Viewer Distance (User to projector)
- F1= Sit View Height
- F2= Stand View Height

\*\*\*\*The basis of height is from an average height\*\*\*\*

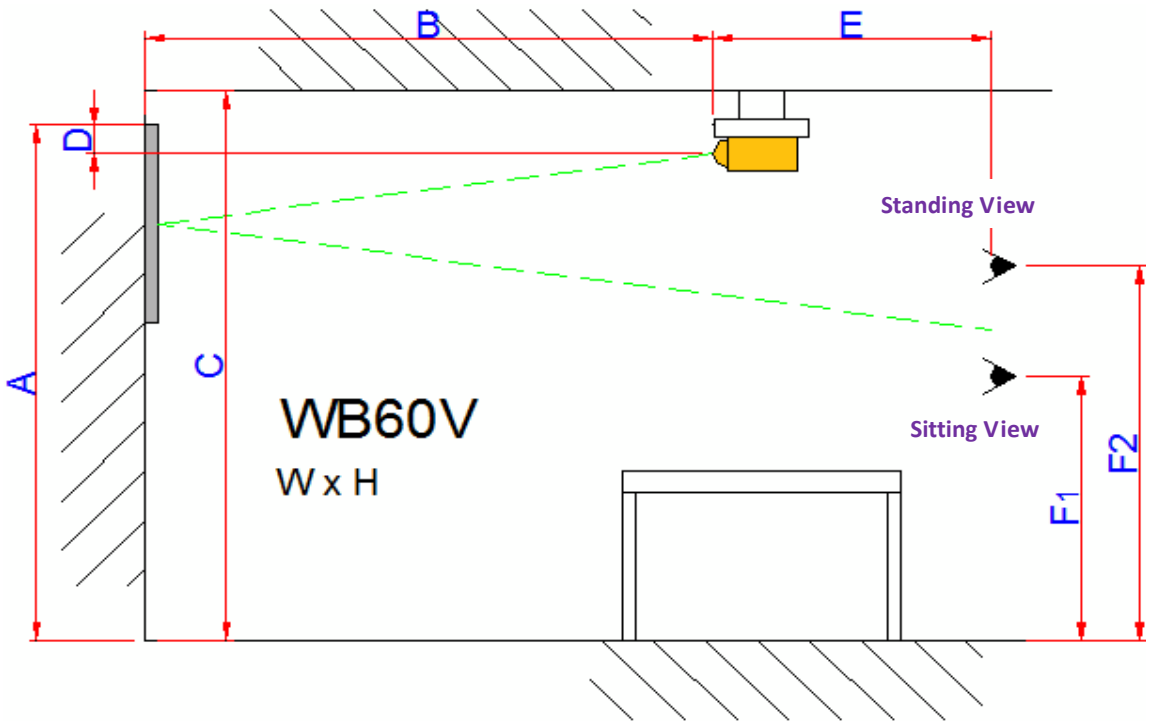
- theta 1= Sit View Angle (Screen slope angle between screen and wall to achieve brightest view)
- theta 2= Stand View Angle (Screen slope angle between screen and wall to achieve brightest view)

(\*\*\*\*Relation between C1, F1 and theta 1; Relation between C2, F2 and theta 2\*\*\*\*)

- W= Overall Width
- H= Overall Height

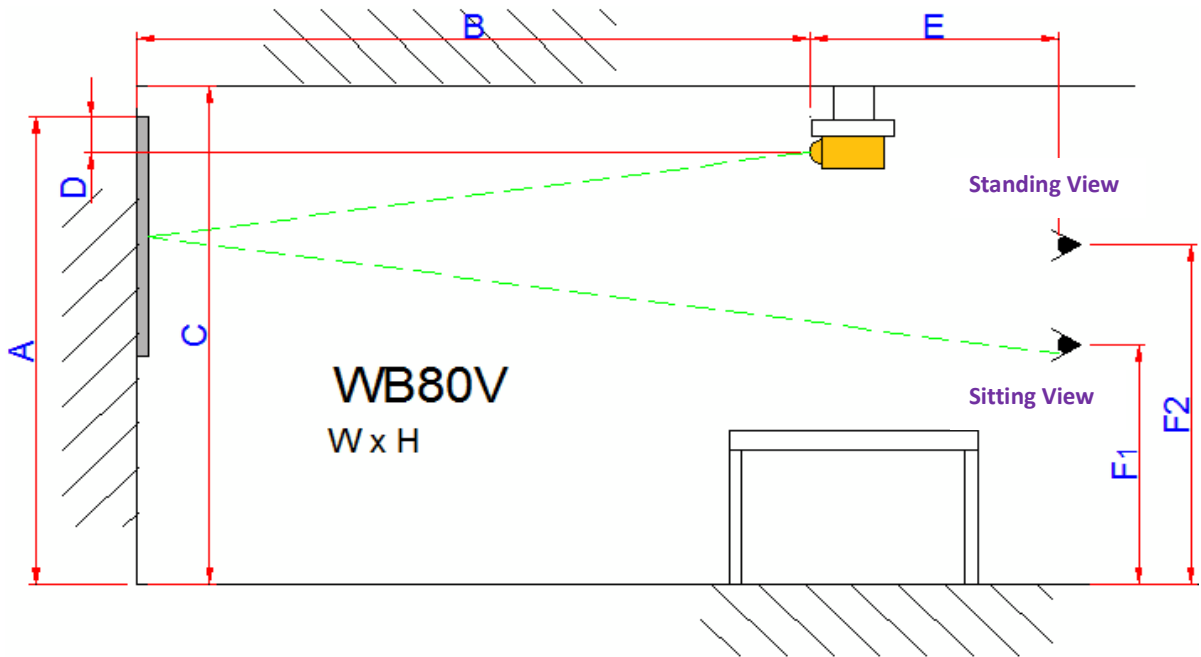
# Overhead Projector installation

Models	Overall Width (W)	Overall Height (H)	Installation Height (A)	Suggested Projection Distance (B)	Ceiling Height (C)	Suggested Offset (D)	Viewer Distance (E)	Sitting View Height (F1)	Standing View Height (F2)
Unit: mm									
WB60V	1190.0	930.0	2340	1950-2950	2500	130	1200	1200	1700
Unit: inches									
WB60V	46.9	36.6	92.1	76.8-116.1	98.4	5.1	47.2	47.2	66.9





Models	Overall Width (W)	Overall Height (H)	Installation Height (A)	Suggested Projection Distance (B)	Ceiling Height (C)	Suggested Offset (D)	Viewer Distance (E)	Sitting View Height (F1)	Standing View Height (F2)
Unit: mm									
WB80V	1630.0	1230.0	2340	2750-3750	2500	17	1200	1200	1700
Unit: inches									
WB80V	64.2	48.4	92.1	108.3-147.6	98.4	6.	47.2	47.2	66.9



**Over head installation explanation:**

- A= Installation Height (Suggested from floor to top of screen)
- B= Suggested Projection Distance (Projector to screen)
- C= Ceiling Height
- D= Suggested Off set (Distance between projection center and top of screen)
- E= Viewer Distance (User to projector)
- F1= Sit View Height
- F2= Stand View Height
- \*\*\*\*The basis of height is from an average height\*\*\*\*

W= Overall Width  
H= Overall Height

Note: The data is for reference only. The installer should base the installation according to the customer and the space provided.

For more information, technical support or your local Elite Screens contact, please visit [www.elitescreens.com](http://www.elitescreens.com)