



DarkStar® 17 eFinity

*Ceiling Ambient Light Rejecting Fixed Frame Screen
for Standard Throw Projectors*

USER'S GUIDE / M Type – V 1.1

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Product Description:

The **DarkStar® 17 eFinity** is a fixed frame projection screen that uses **EPV Screens'** EDGE FREE® technology. The EDGE FREE® design resembles a flat panel TV display and includes a micro-thin bezel trim to further enhance the frame appearance.

The screen material included is our **DarkStar® 17**, which is an optical lens front projection material precisely formulated for environments with minimal control over room lighting. It was designed to filter and absorb overhead light while reflecting projector light from standard throw projectors. It is best for family rooms, educational facilities, conference rooms or any applications in which incident light is a factor.

Storage and Cleaning Instructions

Storage Conditions

DarkStar® 17 is primarily composed of optical-grade PET (Polyethylene Terephthalate) combined with UV-molded resin, and it exhibits hygroscopic properties. Environmental factors such as humidity and temperature can affect its structural integrity and optical properties. Therefore, please adhere to the following conditions during both installation and storage:

- **Temperature Variations:** Keep temperature fluctuations within a range of no more than 41°F (5°C) per day to avoid undue stress on the material.
- **Avoid Excessive Relative Humidity:** Prevent exposure to high relative humidity levels to preserve the product's quality and performance.
- **Limited Storage Duration:** Do not store the roll material for more than 1 year to maintain its optimal characteristics.
- **Recommended Temperature and Humidity Levels:**

Please refer to the table below for recommended temperature and humidity ranges.

Item	Storage conditions
Temperature	50° - 95°F (10°-35 C)
Relative Humidity	25 - 80%

Surface Cleaning






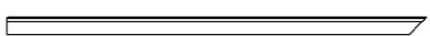
Extended exposure of this product to the atmosphere may lead to localized accumulation of dust or impurities, which can affect the viewing experience. To maintain optimal surface cleanliness, you can employ the following methods:

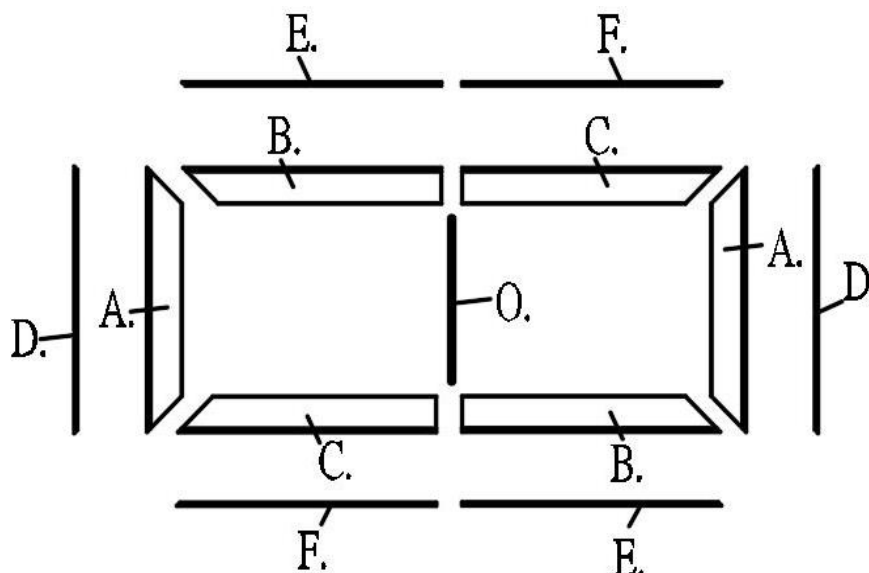
- **Use a Soft Cleaning Brush:** Gently brush the surface with a soft cleaning brush to remove any surface-adhered dust or impurities.
- **Damp Cloth Cleaning:** Dampen a clean, soft cloth with water and wipe the surface. Afterward, use an air gun or dust blower to ensure thorough drying.
- **Adhesive Dust Removers:** Utilize adhesive dust removers or traceless adhesive tape to pick up and remove any dust or impurities adhering to the surface.

By following these cleaning methods, you can ensure that the product remains free from surface contaminants and maintains its optimal viewing quality, even after extended exposure to environmental conditions.

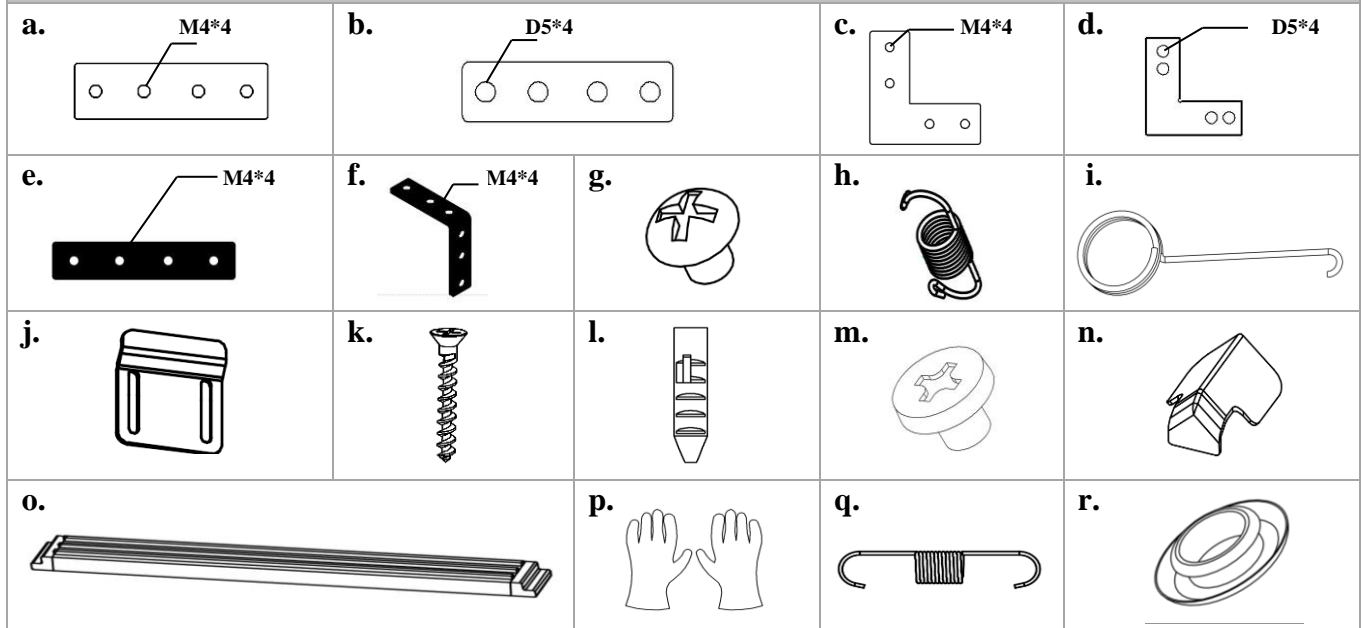
Notes: *The following precautions should always be taken to avoid damaging the material, which is not covered under warranty.*

- Don't **touch** the screen material with your bare hands to avoid leaving oil residue from fingertips.
Use gloves when handling the material.
- Don't **point** to the screen material with a fingertip or other sharp objects to prevent damage to the material.
- Don't **use** acetone, benzene, alcohol and any other organic solvents to clean the screen material.
Using such chemicals will permanently damage the screen.

1. Frame and Edge Trim Parts List			
Qty Item	2 pcs Main Frame Parts	Qty Item	2 pcs Edge Trim Parts
Part A.	vertical frame 	Part D.	
Part B.	½ horizontal frame 	Part E.	
Part C.	½ horizontal frame 	Part F.	



2. Hardware Parts List

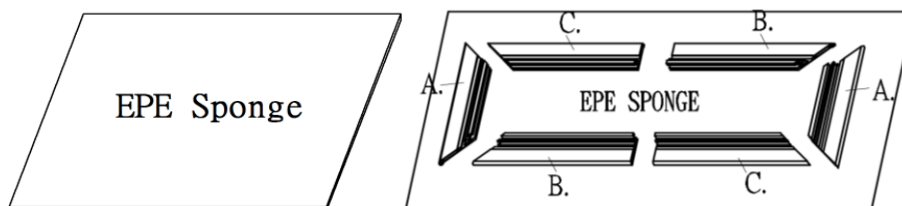


Item	Parts List	103''	123''
a.	Center Joints- M4 (bottom position)	2	2
b.	Center Joints-D5 (top position)	2	2
c.	Elbow Joints M4 (bottom position)	4	4
d.	Elbow Joints D5 (top position)	4	4
e.	Side cover Center Joints- M4	2	2
f.	Side cover Elbow Joints M4	4	4
g.	M4x7 Screws	24	24
h.	Spring	88	104
i.	Spring Hook	2	2
j.	wall brackets	4	4
k.	Φ5x50 Wall Screws	8	8
l.	Hollow Wall anchors	8	8
m.	M4x4 Screws	24	24
n.	Angle cover	4	4
o.	Center Support Bar	1	1
p.	White gloves	2	2
q.	Spring	4	4
r.	Iron eyelet	88	104

Frame Assembly

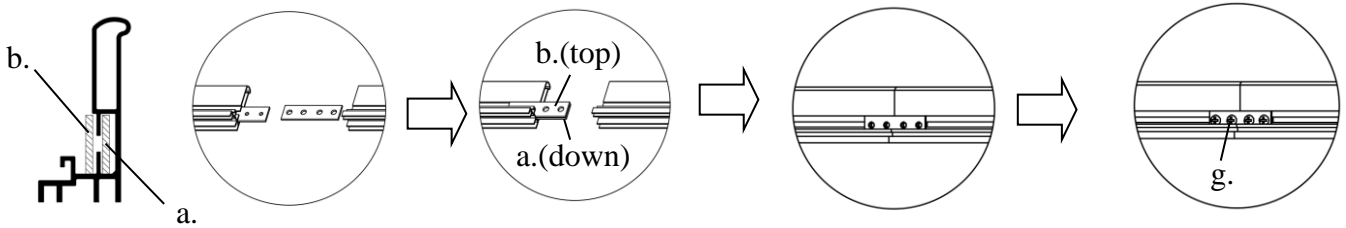
Step 1: Place the included soft padded EPE sponge sheet on a clean area where the screen will be assembled.

Step 2: Position the pieces of the frame on the EPE sponge in the arrangement shown above.



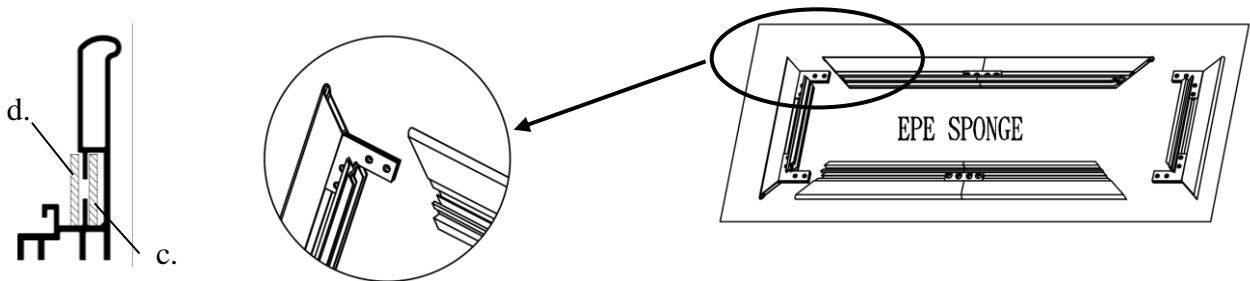
Step 3: Insert *center joint (a/b)* connectors into *one-half of the horizontal frame (B/C)* and secure with the *M4x7 screws (M)* as shown in the illustration below.

Tip: The center joint (b) with the larger diameter holes should be on top.

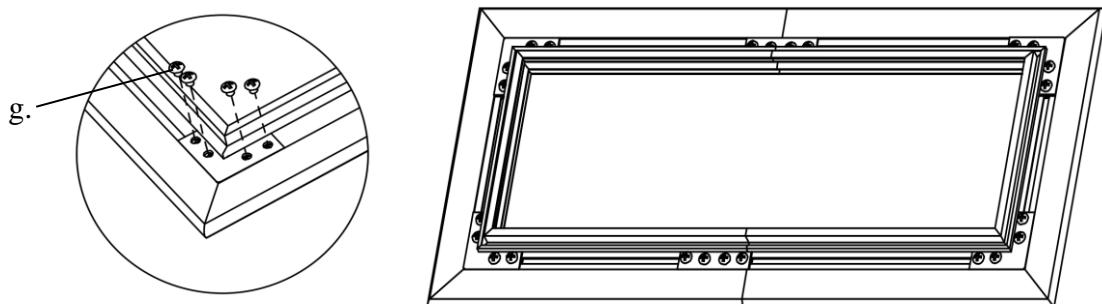


Step 4: Connect the *elbow joints (c/d)* to the top and bottom sections of the vertical frame. Once inserted, connect the vertical sections to the horizontal frame sections. Make sure all holes are in alignment and the frame pieces are flush (no gaps). They should form perfect right angles.

Tip: The elbow joint (d) with the larger diameter holes should be on top.



Step 5: Secure the elbow joints by fastening them with *M4x7 screws (g)*, 4 at each corner.



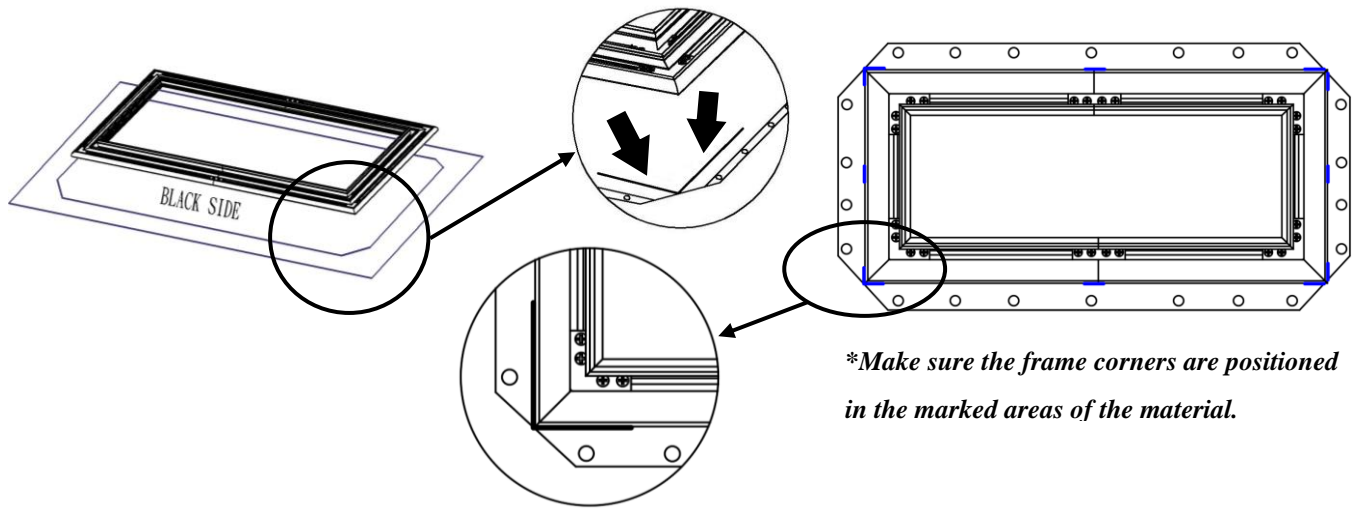
Screen Material

CAUTION!

THE PROJECTION FABRIC IS A DELICATE OPTICAL/LENTICULAR SCREEN MATERIAL AND SHOULD NOT BE FOLDED, BENT, OR CREASED. ALWAYS MAINTAIN SCREEN MATERIAL FLAT AND TAUT DURING SETUP AND DISASSEMBLY. TWO PEOPLE ARE REQUIRED TO SETUP AND INSTALL THE MATERIAL TO AVOID PERMANENT DAMAGE. ANY DAMAGES TO THE SCREEN MATERIAL WILL VOID YOUR WARRANTY.

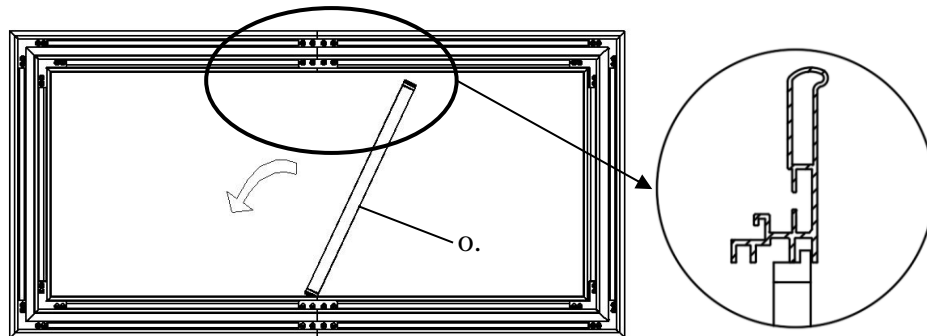
TWO PERSON SETUP

Step 6: Carefully and gently place the assembled frame on top of the screen material in the marked areas as shown below. Make sure to not allow the angle edge of the frame to come in direct contact with the screen material to avoid puncturing it.

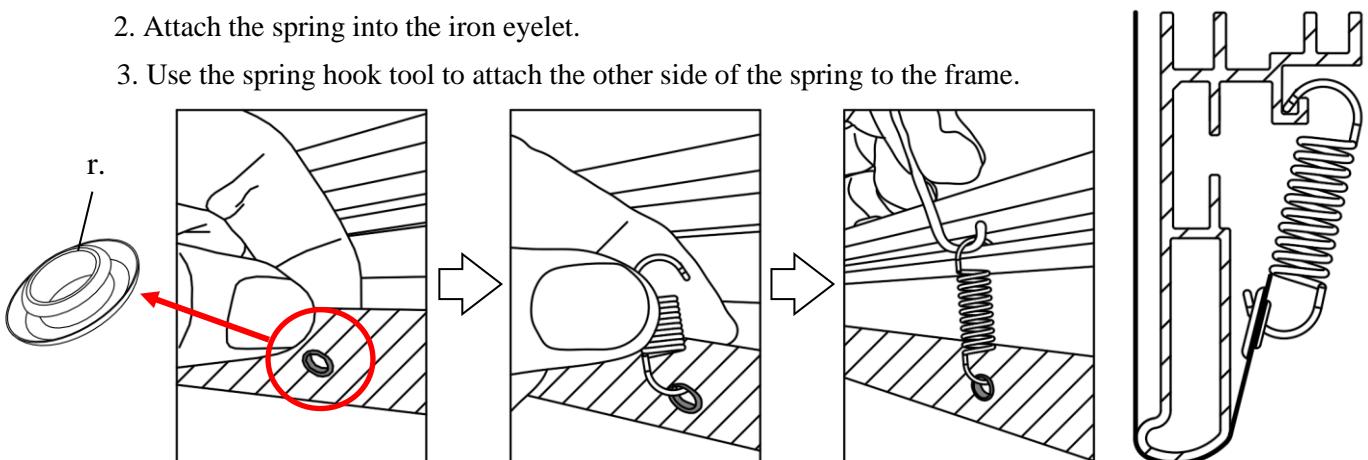


Center Support Bar

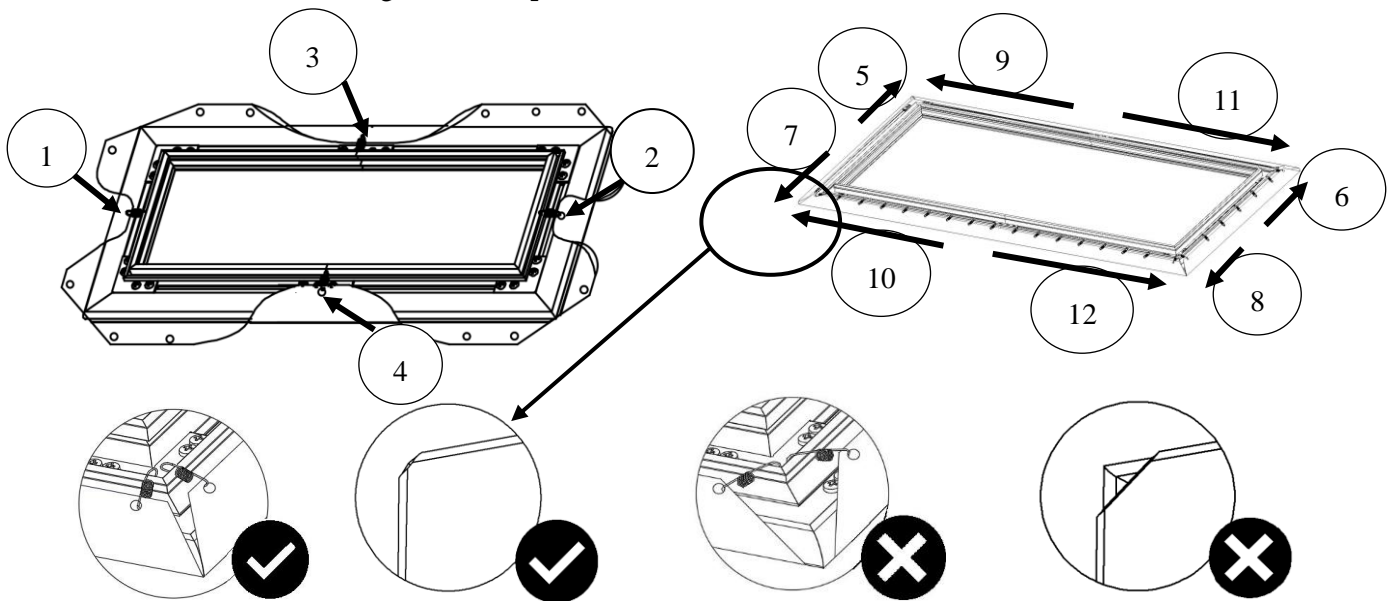
Step 7: Insert the *Center Support Bar* (o) into the upper top groove on the back of the frame with the bottom end near the approximate center point of the frame and rotate it in at an angle so that both ends of the bar are in alignment with the groove.



- Step 8:**
1. Insert iron eyelet through the DarkStar® 17 material hole from behind.
 2. Attach the spring into the iron eyelet.
 3. Use the spring hook tool to attach the other side of the spring to the frame.



Begin by first attaching the center points on both vertical (left/right) sides, *steps 1-2*. Then the center points on both horizontal (top/bottom) sides, *steps 3-4*. Once all center points have been secured, make sure the screen material is still within the marked areas before proceeding to attach the next springs. Continue attaching the rest of the springs to the material in the following order in *steps 5-12*.



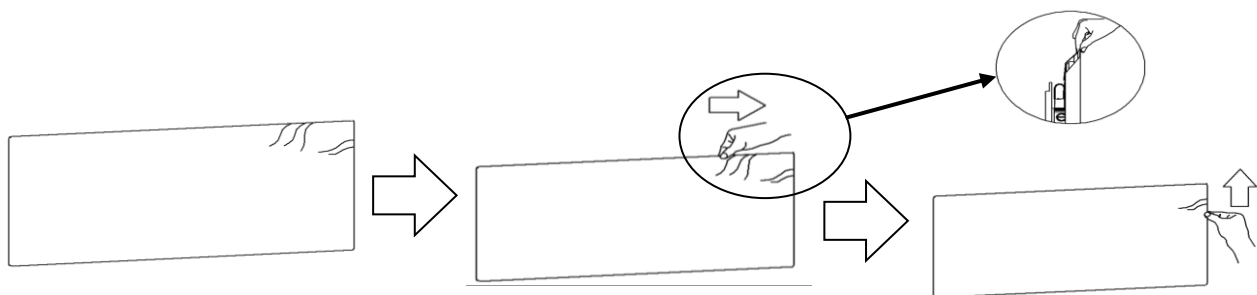
To avoid ripples forming in the material it is imperative that all of the corners are properly wrapped around the edges as illustrated in the check mark diagrams.

Note (after all springs have been attached):

Correct material installation – Corners of the screen material are properly wrapped around the corner edges of the frame and material is evenly tensioned and flat, creating a nicely taut surface.

How to avoid getting ripples on the screen’s material surface

Solution: **With the gloves on and assuring they are clean**, pull and smooth out the material using your hand from the center to the corners, creating a nicely taut surface as shown below.

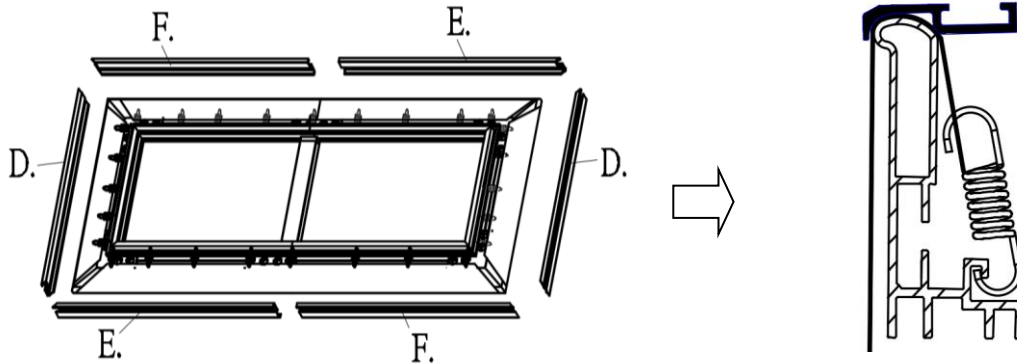


Incorrect material installation –The corners of the screen material are not properly wrapped along the edge of the frame leaving the material with unbalanced tension and an uneven finish. To correct, detach springs from material at the corner(s) where material does not lie flat along the edge of the frame, reposition the material so that it lies flat and wraps along the edge of the frame, and reattach springs to the material.

Attention: *Do not proceed with the Edge Trim installation until making sure there are no ripples in the material.*

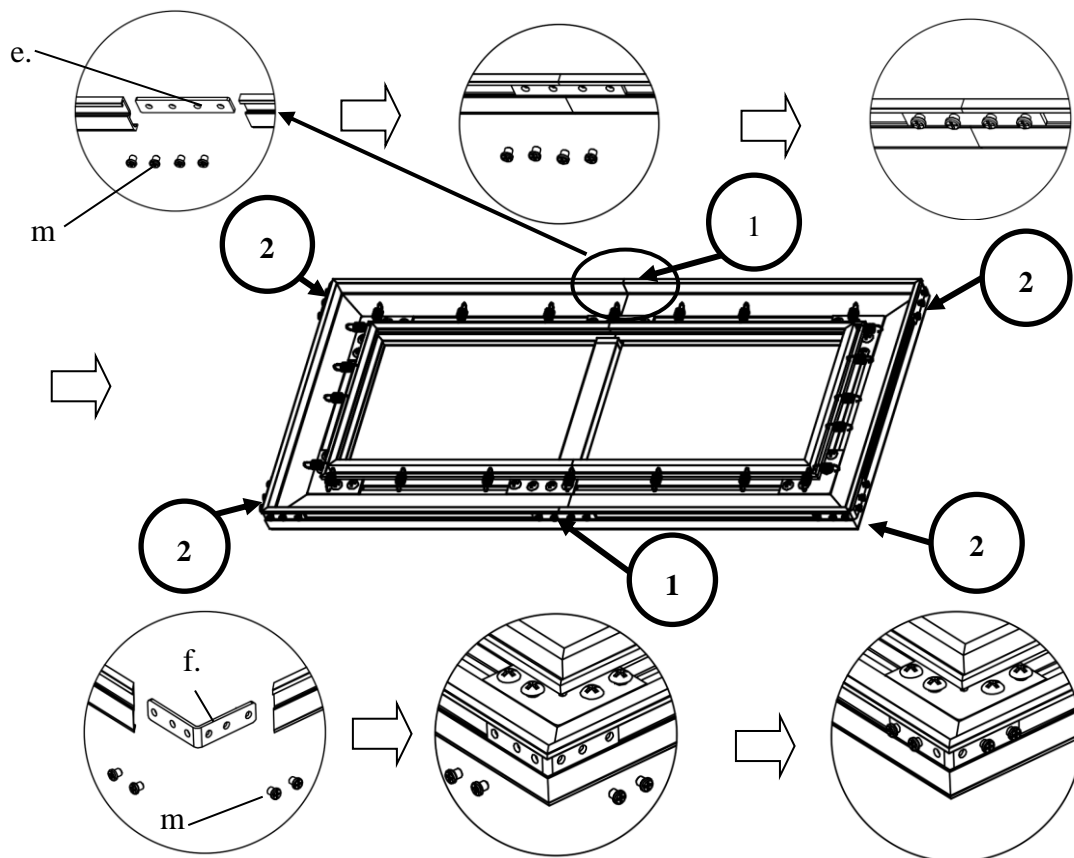
Edge Trim Installation

Step 9: Place the edge trim frame pieces over each end of the frame.



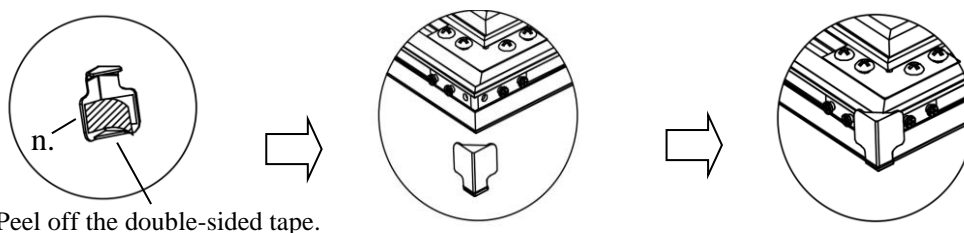
Connect edge trim frames (*e/f*) together using the **M4 center joint** (*e*) and secure with four of the **M4x4 screws** (*m*) as show in **Step 1**. Repeat for other side.

Once both top and bottom edge trim frames have been connected, attach the vertical (left/right) sides edge trim frames (*d*) using the **elbow joints** (*f*) and secure with four **M4x4 screws** (*m*) on all corners, **Step 2**.



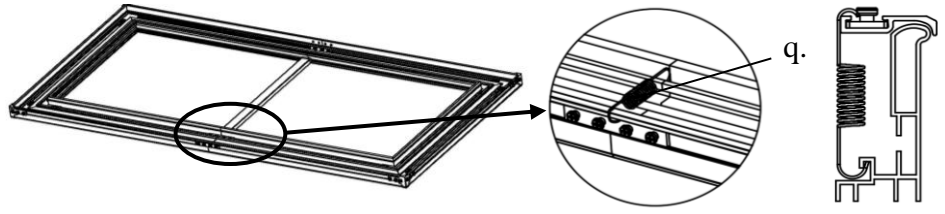
Step 10: Install the **angle cover** (*n*) on each corner of the frame using the **M4x4 screws** (*m*).

Note: The angle cover screws holes align with the screw holes on the elbow joint.



Peel off the double-sided tape.

Step 11: Install the **springs (q)** in each middle area to further support the bezel trim edge frame.



Notice to Installer:

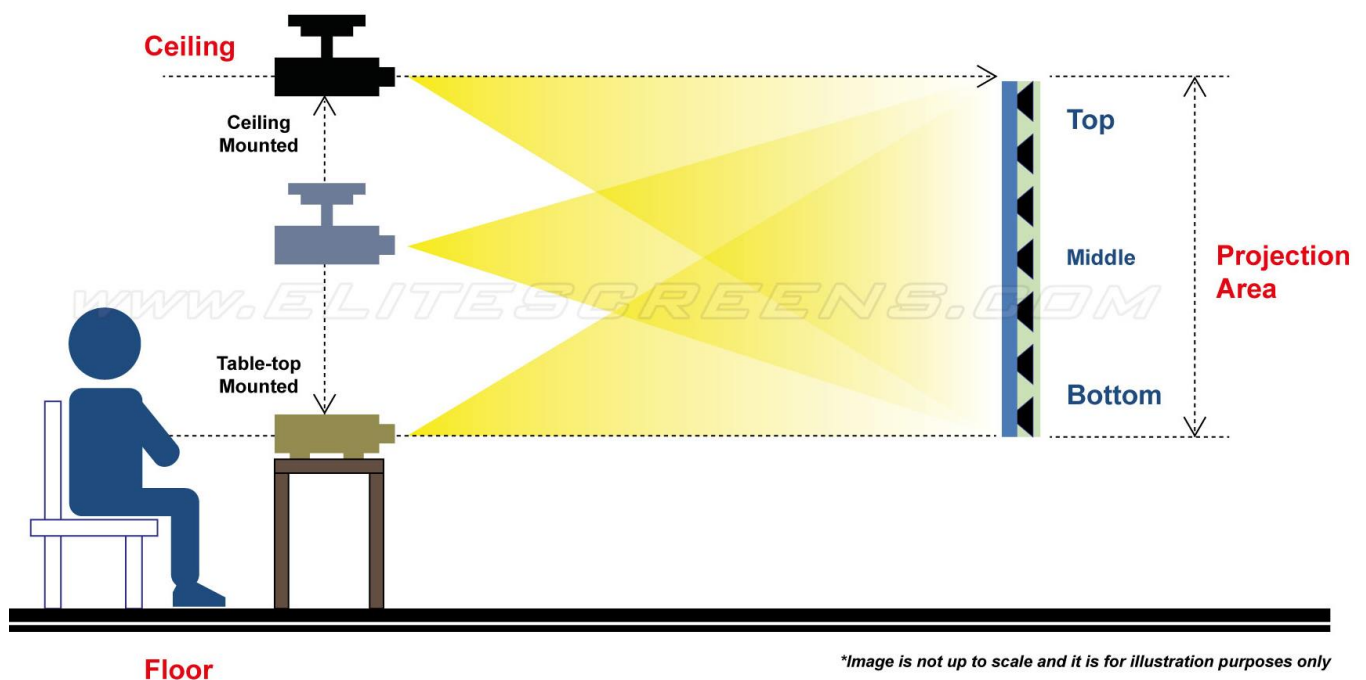
Please use the following installation instructions to obtain superior optical performance from the **DarkStar® 17** (Ceiling/Ambient Light Rejecting) Screen.

Make sure to follow these instructions for the **DarkStar® 17** to perform correctly.

1. Ambient Light must not come from the same direction as the projector's light
2. For best results, standard throw projector must have a lens throw of ratio 1.35 or greater.
3. **Not compatible with Ultra-short and Short-Throw Projectors**
4. *DO NOT install the projector higher or lower than the screen.*

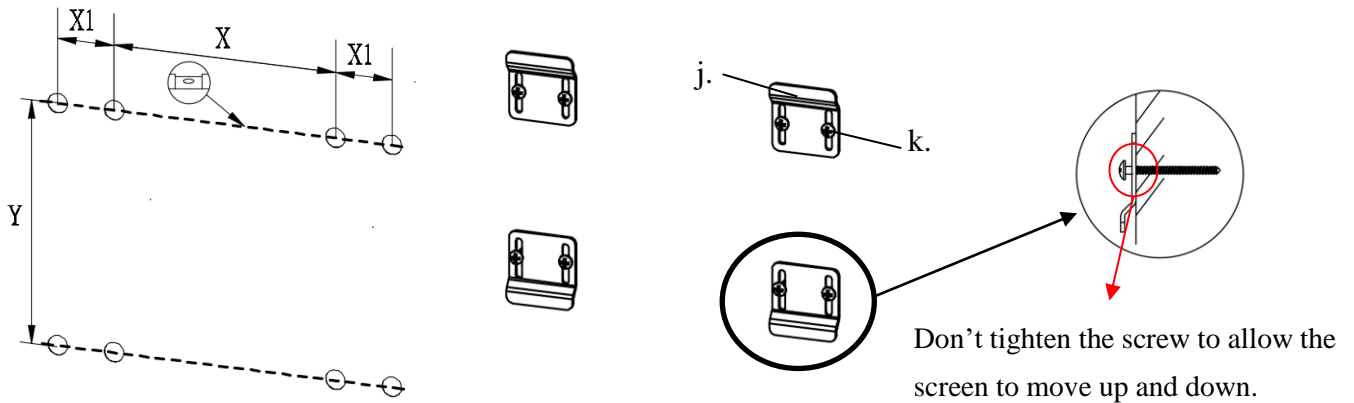
Tip: Installing the projector in a 90-degree angle in the middle projection area will provide the best light dispersion for brightness uniformity.

Optimal Projector Placement for DarkStar® 17



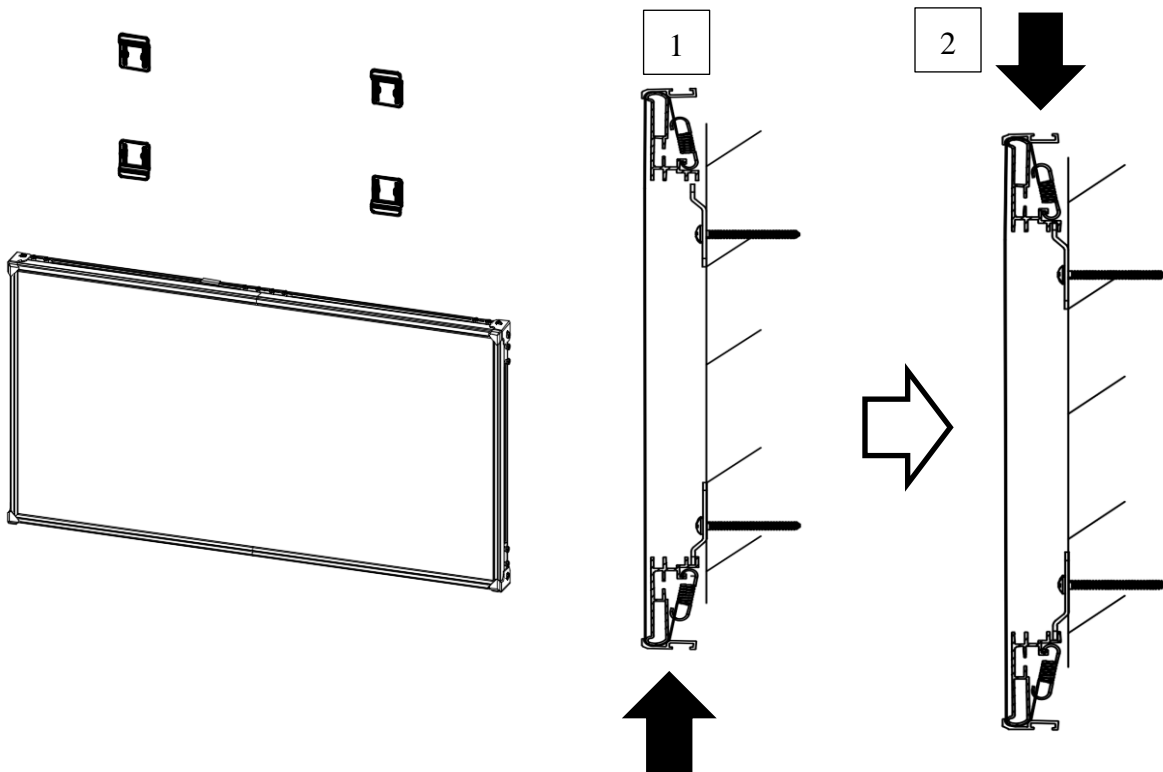
Wall Installation

Step 12: Measure the overall length and height of the frame and drill holes for the top brackets. Line up the wall brackets with the drilled holes on the installation location and screw them in using a Phillips screwdriver. If not installing into a structural wood stud, use a hollow wall anchor then screw in the M5x50 wood screws with a screwdriver. Make sure the brackets are leveled.



Model/Size	X = Wall bracket distance	X1 = Bracket hole distance	Y = Top/Bottom Wall Bracket Height
103"	1200mm (47.24")	30mm (1.18")	1110mm (43.7")
123"	1400mm (55.12")	30mm (1.18")	1360mm (53.54")

Step 13: Position the fixed frame screen onto the bottom wall brackets (fig. 1), lift and secure on the top wall bracket and push down at the center of the top of the (fig. 2) frame to secure.



For Technical Support or an EPV Screens contact in your area, visit www.epvscreens.com.