



**Note:** Please read this application guide before beginning installation. This application guide is presented in good faith to help in the use of Kirei EchoPanel® products. Kirei accepts no responsibility for installation actions taken or not taken. This document is not intended as an all-encompassing guide, your knowledge as an experienced installer needs to be applied. This application guide contains only recommendations; if you have any questions about installation techniques please contact Kirei at [info@kireiusa.com](mailto:info@kireiusa.com) or 619.236.9924

### WHAT IS ECHOSTAR?

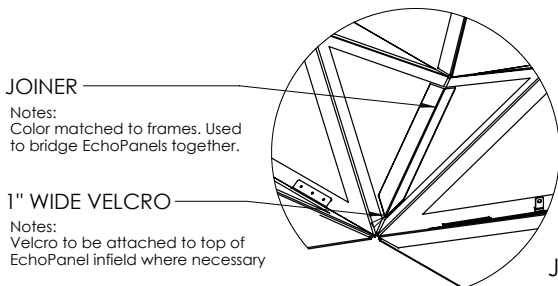
EchoStar is a ceiling-hung decorative acoustic cloud designed to both absorb and diffuse sound. Engineered with EchoPanel® and designed to be individually ceiling-hung in connected clusters via cable suspension systems, each EchoStar arrives ready to hang using your compatible suspension system as specified.

### PARTS INCLUDED:

- EchoStars in amount ordered
- Joiners in amount ordered, based on number of seams between adjacent echostars (one joiner per seam between abutting EchoStars)

### ORDERING NOTE:

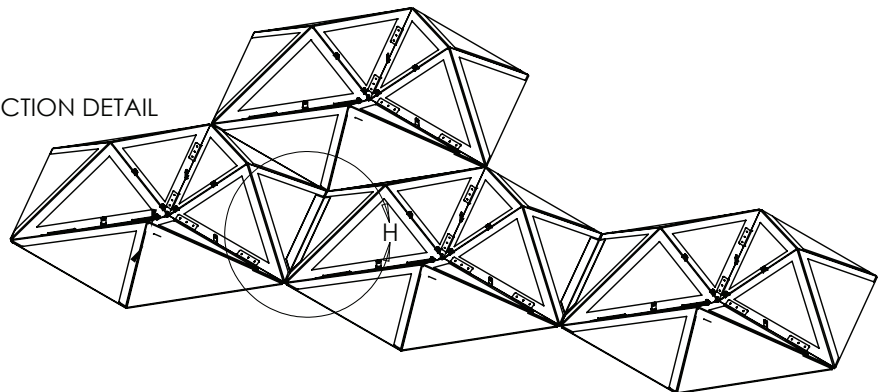
Be sure to order adequate joiners. Prior to ordering count how many joiners will be needed to join each adjacent EchoStar at all adjacent edges.



**JOINER**  
Notes:  
Color matched to frames. Used to bridge EchoPanels together.

**1" WIDE VELCRO**  
Notes:  
Velcro to be attached to top of EchoPanel infield where necessary

JUNCTION DETAIL



ECHOSTAR ASSEMBLY

### JOINER INSTALLATION:

- 1) LINE UP PANEL EDGE AND CORNERS WITH COINCIDING PANEL.
- 2) APPLY 10" OF VELCRO TO EDGE OF ECHOPANELS TO BE JOINED.
- 3) JOINER TO BE INSTALLED ON TOP OF VELCRO BETWEEN THE ECHOPANELS.
- 4) PRESS FIRMLY ON JOINER TO ENSURE FULL VELCRO ENGAGEMENT

## INSTALLATION NOTES:

Each EchoStar comes fully assembled and ready to hang with 3 integrated 1/4" diameter eyelets for connecting your cable system or chain.

The safest and easiest assembly is achieved by evaluating the installation location in advance. Typically, two or more installers are needed for most applications. See Cable Hanging Detail diagram below to better understand how to hang EchoStar with three cables.

When installing EchoStars connected in sequence or in clusters, be sure to plan your layout in advance and begin the install in the center of the cluster, working outward. Be sure to note any conflicts with existing ducting, sprinklers or other ceiling protrusions. Also make sure to check local fire and seismic codes for compatibility.

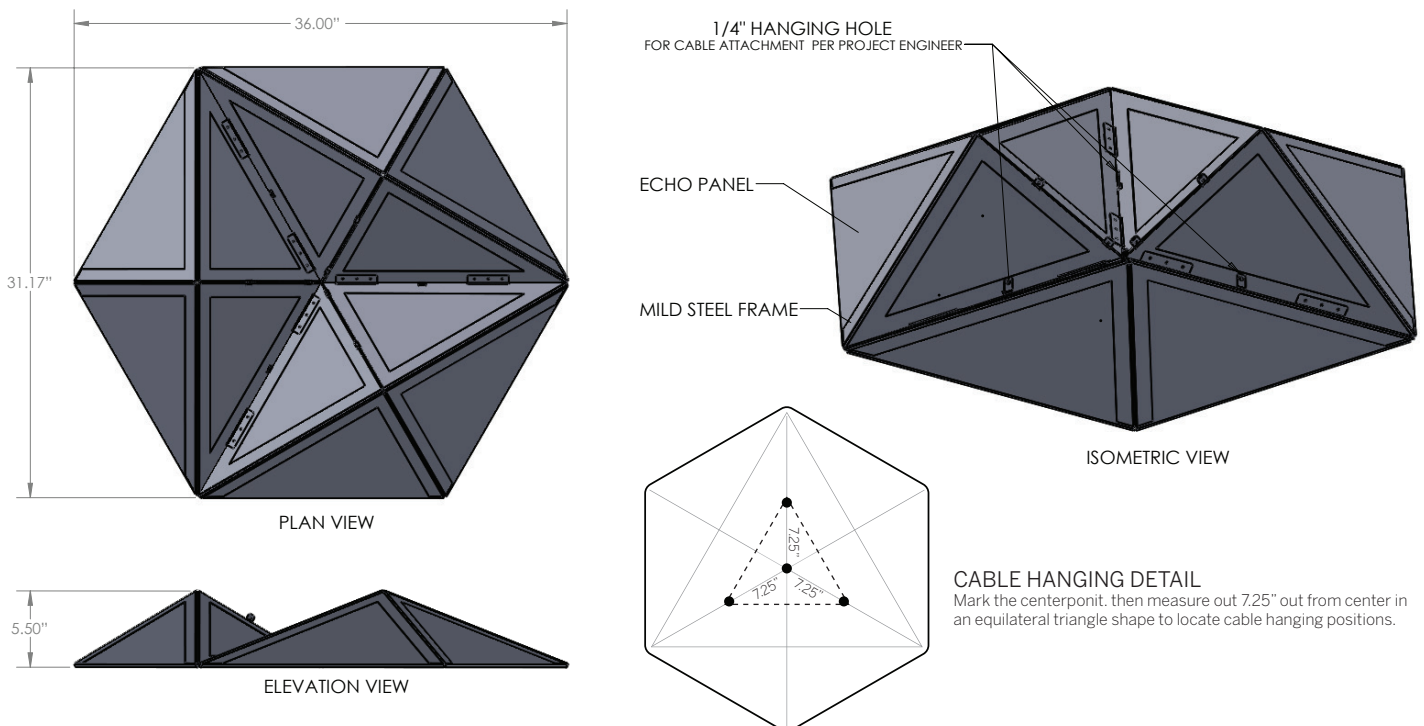
## PREFERRED INSTALLATION:

**Step 1:** Determine the center point of the first EchoStar to be installed. Measure 7.25" from the center in an equilateral triangle to correspond to the 3 mounting eyelets standard on each EchoStar.

**Step 2:** Drop mounting cable to these points, using appropriate ceiling mounting hardware and cable rated for the weight of the end system. (Each EchoStar weighs approximately 8.5 lbs.) Cables should always be vertical. If vertical cables cannot be achieved due to specific site details, hedge cable positions towards the center of the cluster to ensure that the adjoining sides are pulled together.

**Step 3:** When EchoStars are installed in rows or clusters with abutting sides, Joiners are required to connect all abutting sides.

To apply Joiner: Peel Velcro paper off and affix Velcro strips to EchoStar along abutting exposed EchoPanel. Apply Velcro strips to the top of the EchoStar along all abutting edges (not on metal braces). Press Velcro on joiner to Velcro on EchoStar unit. Apply pressure to joiner while supporting underside to be sure that the Joiner Velcro is firmly engaged before continuing. (See diagram below).



Apply the Velcro Strips to the top surface of the adjoining EchoStar sides and firmly connect each before moving on to next adjoining EchoStars.

Joiners are required to attach adjacent EchoStar units at adjoining edges. All adjoining edges should have a joiner applied to both EchoStar units.

### **FIRE RATING:**

EchoPanel® 12mm and 24mm panels are Class C fire rated by the ASTM E84 test. EchoPanel 7mm and 12mm panels can be treated to satisfy Class A requirements. ASTM E84 test results can be obtained by contacting Kirei at [info@kireiusa.com](mailto:info@kireiusa.com) or 619.236.9924.

### **LOW VOC MATERIAL:**

EchoPanel® is considered a low-VOC emitting material making it a healthy building option for interior finishes. EchoPanel® total VOC emission rate is <0.02 mg/m<sup>2</sup>/hr. (over 7 days).

### **HANDLING AND STORING:**

EchoPanel® panels and tiles should be stored flat. Storage areas should be clean, dry, cool, and well ventilated. EchoPanel® is a soft material which may be damaged by impression or impact, and may be soiled by contact with dirty surfaces or hands. Maintain clean work surfaces and wear clean gloves while handling EchoPanel®. All EchoPanel® products are inspected prior to shipment. Kirei is not responsible for damage in shipment or in storage; customers should carefully inspect all items at time of delivery and note any obvious damage on the delivery receipt. For the customer's protection subsequently discovered concealed damage must be reported immediately to the carrier. Claims to Kirei will not be considered if the sheet has been worked by the customer or others. No claims for labor charges will be allowed in any circumstances.

### **HANDLING AND STORAGE GUIDELINES:**

- Carefully inspect all material at time of delivery and note any obvious damage on the delivery receipt.
- Store EchoPanel® sheets horizontally, with support under full sheets.
- Keep EchoPanel® sheets as clean as possible during storage. Both sides of EchoPanel® should be kept free from grease, wax, dust, and chips that could leave impression.
- Store EchoPanel® sheets indoors, in a dry, cool, well-ventilated area.
- Avoid exposure to heat 150°F (65°C) or greater.
- Keep table tops clean to avoid scratching the sheets.
- Before cutting the sheets, inspect the whole sheet for defects, then recover for protection during fabrication.
- Wear clean gloves when handling the sheets.
- Do NOT store EchoPanel® sheets near radiators, steam pipes, or in direct sunlight.

### **CLEANING AND CARE:**

Remove dust and dirt by dusting, vacuuming, or with a soft cloth or sponge and a solution of carpet or upholstery shampoo. Always use a soft, damp cloth and blot dry. Spot cleaner such as ZEP Commercial Instant Spot Remover has been used with success for light soil. No guarantee is given for cleaning results with this product.

### **WORK SAFETY:**

In the interest of work safety, it is recommended that people working with Kirei EchoPanel® wear the appropriate safety equipment. Although the product emits zero off-gases, masks and gloves should be worn to ensure the maximum possible safety precautions. For an MSDS form, please contact Kirei at [info@kireiusa.com](mailto:info@kireiusa.com) or 619-236-9924.



# EchoStar Installation Guide Addenda

## Cable Drops & Joiners

EchoStars are sold as individual cloud elements and can be suspended individually or in arranged clusters with abutting edges. Proper hanging alignment and joiner installation is essential to ensure proper installation results.

Joiners are required for each abutting edge between EchoStars. (see diagram)

### Cable Drops and Alignment - IMPORTANT

Each EchoStar has (3) attachment points for individual mounting cable drops. Installers typically supply gated hook grippers and 1/16" stainless cable for easy leveling at each attachment point. When installing in clusters, cable accuracy & symmetry is extremely important to avoid tension on abutting edges.

#### Installation Instructions:

Begin installation at the center of each EchoStar cluster and work your way outwards.

Ensure symmetrical and vertically aligned cable drops.

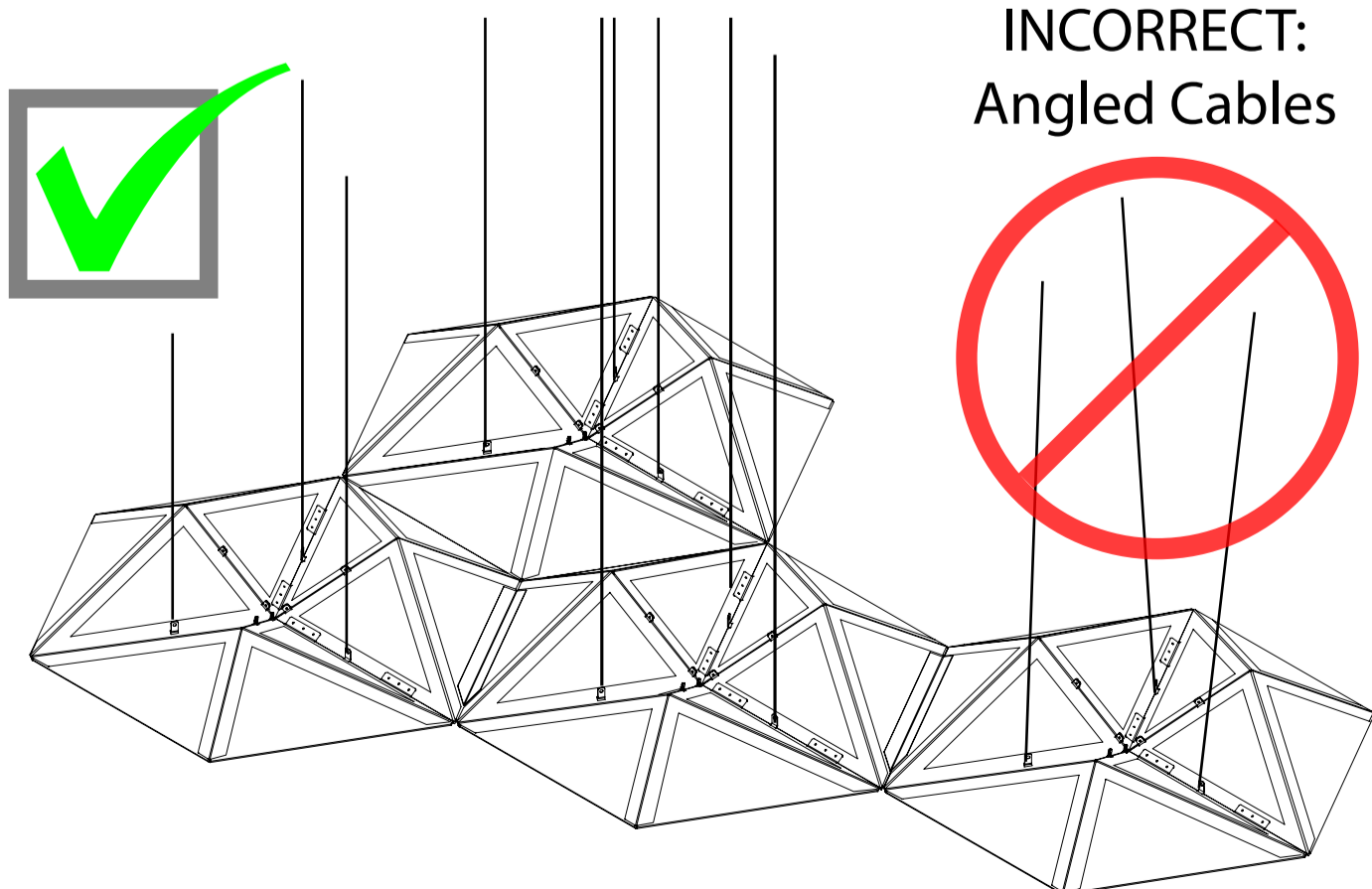
Cable drops should be both symmetrical to the abutting EchoStar and precisely vertical. If any overhead intrusions prevent this, always hedge the cables towards the center of the cluster to ensure that all elements are gently drawn together. (see diagram)

Any cables pulling outwards from the cluster will cause gaps to occur.

Apply Joiners after all EchoStars are suspended & leveled

Joiners are not intended to level or pull together improperly positioned cables.

#### CORRECT: Vertical Cables



#### INCORRECT: Angled Cables

