
INSTALLATION INSTRUCTIONS

MSP-WRTIDSKY1 Light Weight Suspended Ceiling Kit for use with Island Display Skybox

The MSP-WRTIDSKY1 Light Weight Suspended Ceiling Kit provides a sturdy support for LCD displays when installing these products in a suspended ceiling.

The Kit includes two spanning plates that will be suspended by four tie wires from the true ceiling above the suspended ceiling tiles. Turnbuckles allow the installation to be fine-tuned.

The reinforcing plate can be installed anywhere above a 2' x 2' (600 X 600mm) or 2' x 4' (600 X 1200mm) ceiling tile.



BEFORE YOU BEGIN

- **CAUTION:** To prevent damage to the Kit, which could affect or void the Factory warranty, and to the equipment that will be attached to it, thoroughly study all instructions and illustrations before you begin the installation. Pay particular attention to the “Important Precautions” on Page 1.
- The maximum weight to be installed on the MSP-WRTIDSKY1 is 40 pounds (18.14 Kg).
- The spanning brackets are designed to fit above a conventional suspended ceiling system.
- If you have any questions about this installation, contact Chief Manufacturing at 1-800-582-6480.



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IMPORTANT WARNINGS AND PRECAUTIONS!

- 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: Improper installation can result in serious personal injury! Make sure that the structural members can support a redundant weight factor *five times* the total weight of the equipment: if not, reinforce the structure before installing the suspended ceiling kit.**
 - **WARNING: Be aware also of the potential for personal injury or damage to the unit if it is not adequately mounted.**
 - **WARNING: The installer is responsible for verifying that the structure to which the MSP-WRTIDSKY1's reinforcing plate is anchored will safely support the combined load of all attached components or other equipment.**
 - **WARNING: The weight of the LCD displays must not exceed 40 lbs (18.14 kg), the maximum load capacity of the reinforcing plate.**
 - **CAUTION:** To avoid personal injury or damage to the suspended ceiling kit, be sure that it is installed square and parallel in all dimensions.
 - **CAUTION:** Check the unit for shipping damage before you begin the installation.

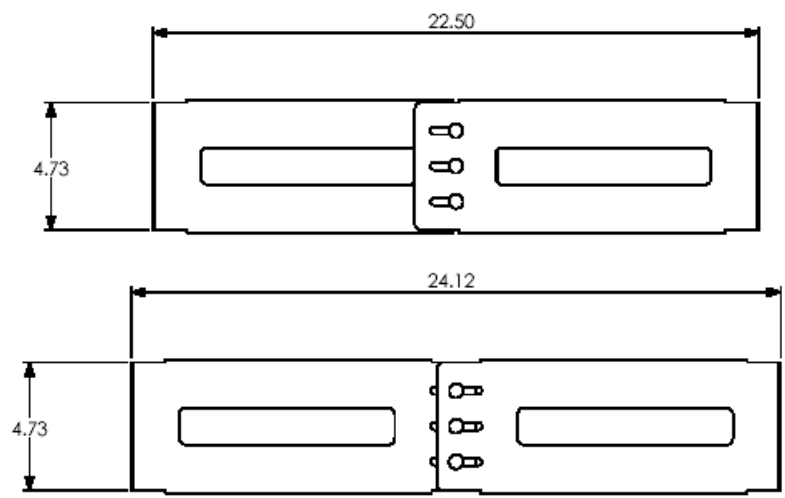
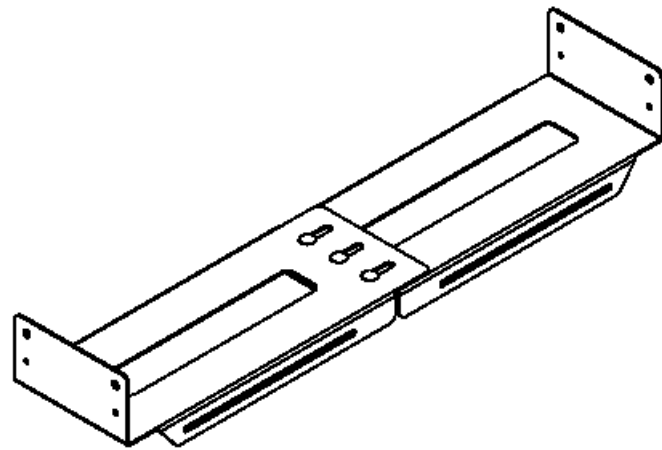
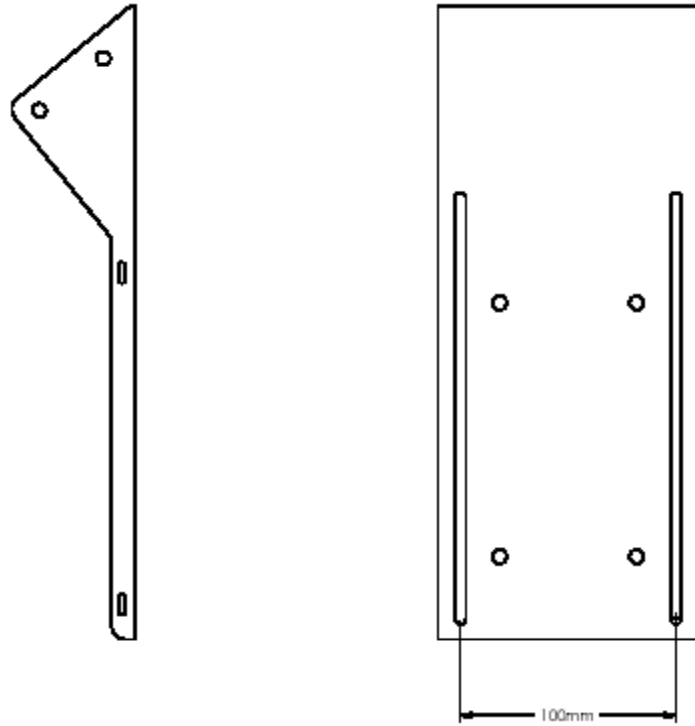
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TOOLS REQUIRED FOR INSTALLATION

- Phillips screwdrivers, No. 1 and No. 2 tip
- Drill and bit set
- Pliers (heavy-duty)
- Wire cutter
- Hammer (claw type), if suspending from a solid concrete ceiling.
- Other tools may be required depending on the method of installing the unit in the ceiling.

DIMENSIONAL DRAWING



ASSEMBLY PROCEDURES

WARNING: Improper installation can cause serious personal injury! Make sure that the structural members can support a redundant weight factor *five times* the total weight of the equipment you intend to support overhead. The structure must be reinforced before you install the Kit if the structure cannot support a redundant weight factor *five times* the total weight of the equipment.

NOTE: Items in parentheses () refer to parts shown in “PARTS” on page 6.

1. Assemble the span brackets (10) using three 1/4-20 X 5/8” carriage bolts (30) , three 1/4” flat washers (40), three 1/4” split lock washers (60) and three 1/4-20 hex nuts (50). Do not tighten at this time (see Figure 1).
2. Remove the tiles from the area where mounting the kit.
3. Install the span bracket assembly between the suspended ceiling tile rails (grid) and expand the span bracket assembly until the brackets are flush with the rails (see Figure 2).
4. Tighten three 1/4-20 hex nuts (50) to secure span bracket assembly between the suspended ceiling tile rails (grid).
5. Hook turnbuckles (120) into the span bracket assembly (see Figure 3).
6. Install anchoring wire (90) as necessary (see “ANCHORING PROCEDURES” on page 4).
7. Install two LCD mount brackets (20) using eight 10-32 X 3/8” button-head cap screws (70) (see Figure 4).

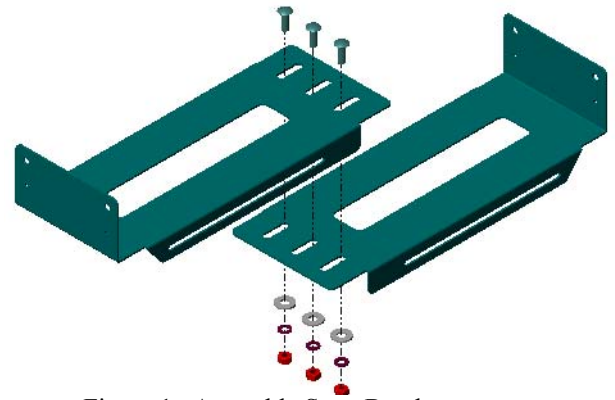


Figure 1. Assemble Span Brackets

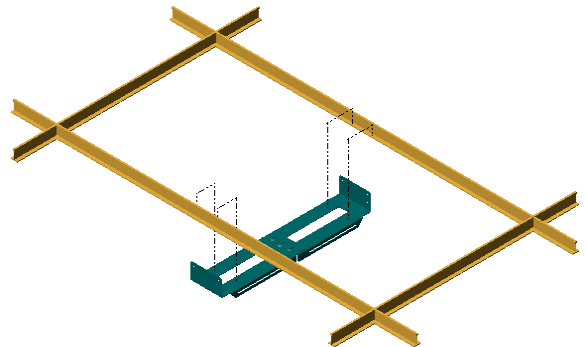


Figure 2. Span Bracket to Grid

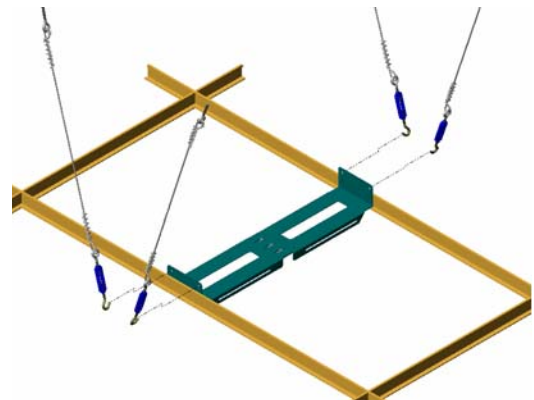


Figure 3. Hook Turnbuckles to Span bracket

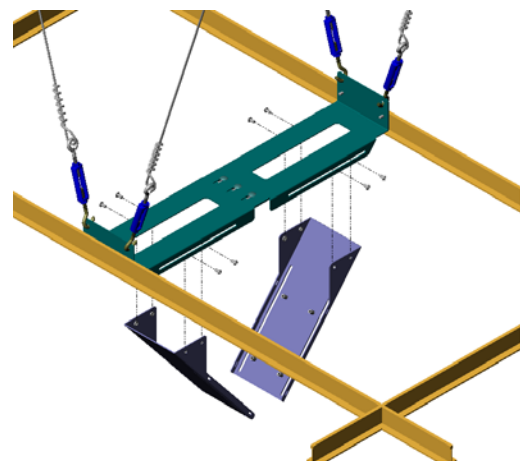


Figure 4. Install LCD Mount Brackets

ANCHORING PROCEDURES

NOTE: If the true ceiling is more than 36 in. (914 mm) above the suspended ceiling, you must obtain additional anchoring wire. Use 14-gauge soft galvanized wire. A longer safety cable may also be required. Contact Chief Manufacturing for assistance in determining your specific requirements.

Anchoring Methods

Select the appropriate anchoring method for your ceiling:

NOTE: Four eye lag screws and four concrete anchors are shipped with the Kit.

- **Wood Joists or Beams.** Drill four 5/32-in. dia. holes, at least 2 in. deep (4-mm dia. holes, 51 mm deep). Fully insert eye lag screws (see Figure 5).
- **Solid Concrete.**
 1. Drill four 1/4-in. dia. holes 1-3/8 in. deep (6-mm dia. holes, 36 mm deep). Use ANSI B94.12-1977 carbide bit (see Figure 6).
 2. Tap anchors into hole to an embedded depth of at least 1" (25.4 mm deep).
 3. Using a hammer with a claw, pull anchor out 1/4" (6.36 mm) to activate anchor.
- **Truss Ceiling.** Attach the tie wire to the turnbuckle and loop its upper end around the ceiling truss. Pull the tie wire tight and twist it around itself at least four times. No additional anchor is required (see Figure 7).

Anchoring Procedure

1. Cut the 20-ft (6.1 m) tie wire into four pieces of equal length.

WARNING: Make sure the tie wire will not become loose. Thread the end of the wire back through the first loop, closest to the eyebolt, and bend the end of the wire up to prevent the wire from untwisting (see Figure 8).

2. Insert the wires through the ends of the turnbuckles. Twist each wire around itself at least four times, then thread the wire back through the loop closest to the eyebolt (see Figure 8).
3. If required (see "Anchoring Methods" above), drill holes for the four ceiling anchors. Position the holes so that the tie wires, when attached and taut, will angle outward at 15° as shown.
4. Pull the tie wires tight and attach them to the ends of the ceiling anchors (or to the truss) and secure as in Step 2. The weight of the ceiling tray should now be supported by the tie wires.

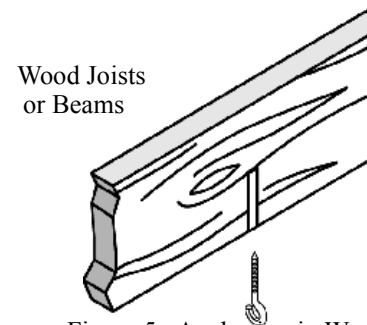


Figure 5. Anchoring in Wood

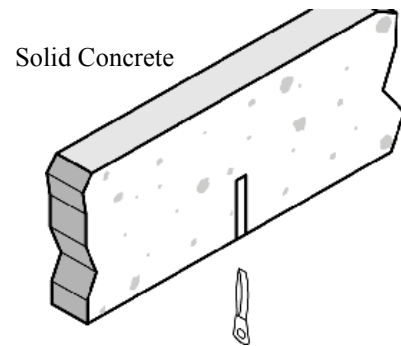


Figure 6. Anchoring in Concrete

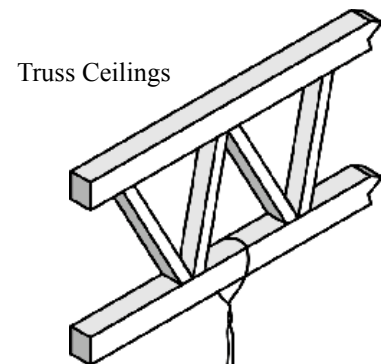


Figure 7. Truss Anchoring

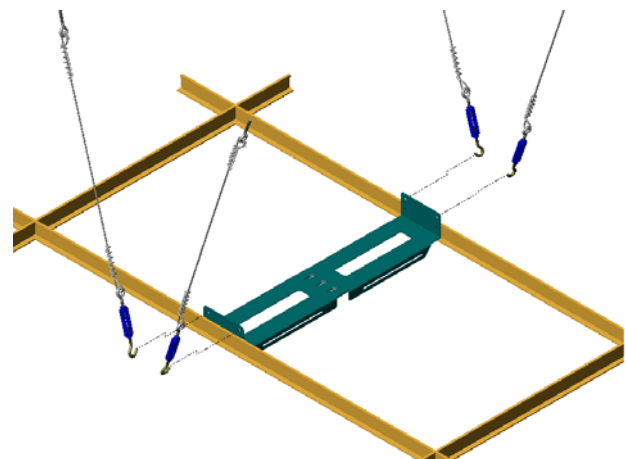


Figure 8. Anchoring

FLAT PANEL DISPLAY AND H BOX INSTALLATION PROCEDURES

Flat Panel Display

WARNING: Improper installation can cause serious personal injury! Make sure that the structural members can support a redundant weight factor *five times* the total weight of the equipment you intend to support overhead. The structure must be reinforced before you install the Kit if the structure cannot support a redundant weight factor *five times* the total weight of the equipment.

NOTE: Items in parentheses () refer to parts shown in “PARTS” on page 6.

1. Install flat panel display on LCD mount brackets (20) and secure using four M4 X 10mm Phillips pan head screws (80) (see Figure 9).
2. With four screws securing LCD mount bracket and four screws securing display to LCD mount bracket loose, position display to desired location and height.
3. Tighten four screws securing LCD mount bracket and four screws securing display to LCD mount bracket.

H Box (Not Included)

1. Install H box bracket (not included) on LCD mount brackets (20) and secure using four 10-32 X 3/8” button-head cap screws (70) (see Figure 10).
2. Install H box (not included) on H box bracket (not included) secure using four screws (not included) (see Figure 11).

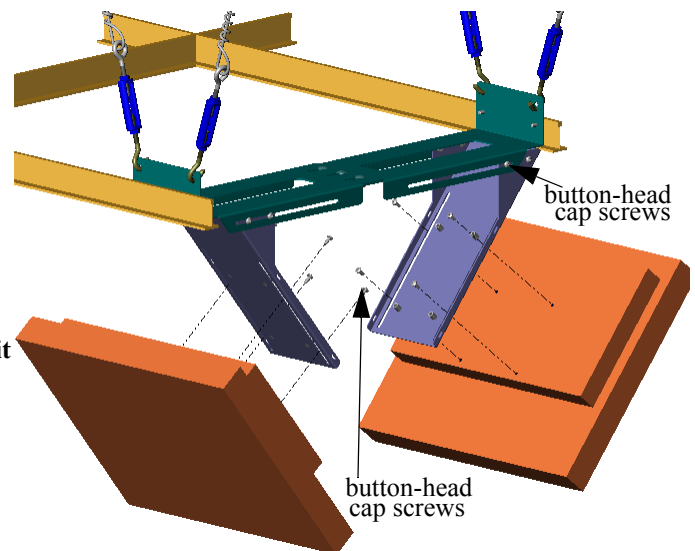


Figure 9. Flat Panel Display Installation

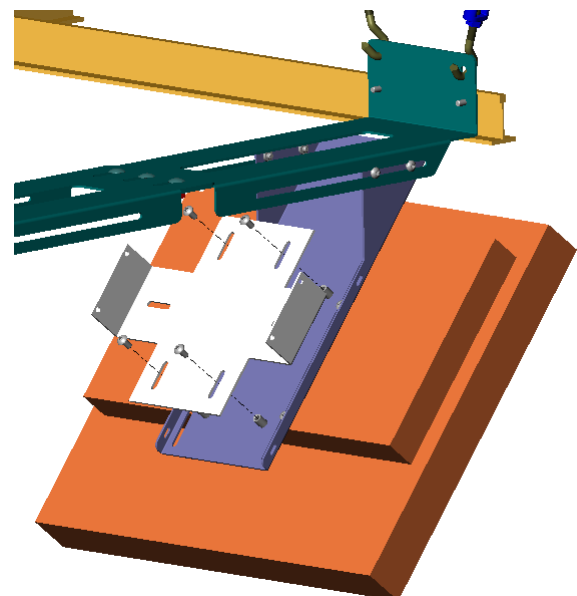


Figure 10. H Box Bracket Installation

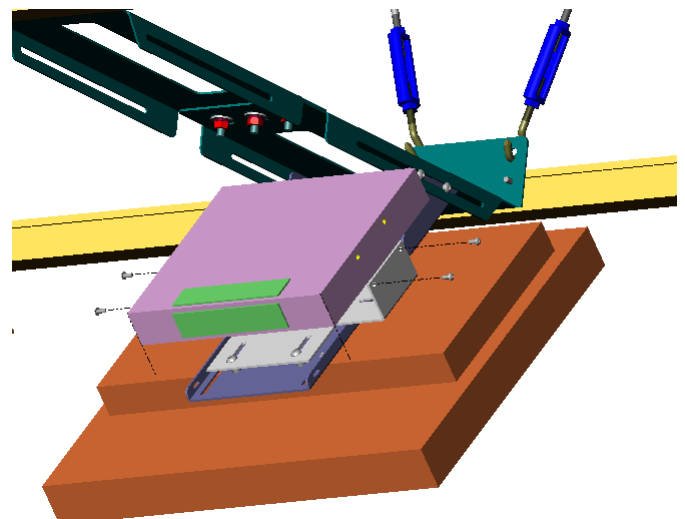


Figure 11. H Box Installation

PARTS

Ref	Description	Qty
10	BRACKET, Span, Skybox	2
20	BRACKET, LCD Mount	2
30	BOLT, Carriage, 1/4-20 X 5/8"	3
40	WASHER, Flat, 1/4"	3
50	NUT, hex, 1/4-20	3
60	WASHER, lock, split, 1/4"	3
70	SCREW, button head, 10-32 X 3/8"	16
80	SCREW, Panhead, M4-7 X 10mm	8
90	WIRE, 14 gage, 20 ft (6.1 m)	1
100	ANCHOR, concrete	4
110	SCREW, lag, eye	4
120	TURNBUCKLE, 1/4-20 with hook and loop	4
130	KEY, hex, 1/8"	1

