



UNITEDSIGN GROUP
ARCHITECTURAL | ENGINEERING | DIGITAL

OUTDOOR LED SIGNS DIGITAL BILLBOARDS

Installation Manual



Contents

- 1. Fcc Interference Statement-----3
- 2. Steps-----4
- 3. Unpacking-----5
- 4. Overview-----6
- 5. Structural & Lifting-----7
- 6.Mounting-----8
- 7.Ventilation-----9
- 8.Electrical Installation-----10
- 9.Improvement-----11



FCC INTERFERENCE STATEMENT

Federal Communications Commission Interference Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



STEPS

Test before mounting is suggested:

Power on the screen and make sure it's working properly.

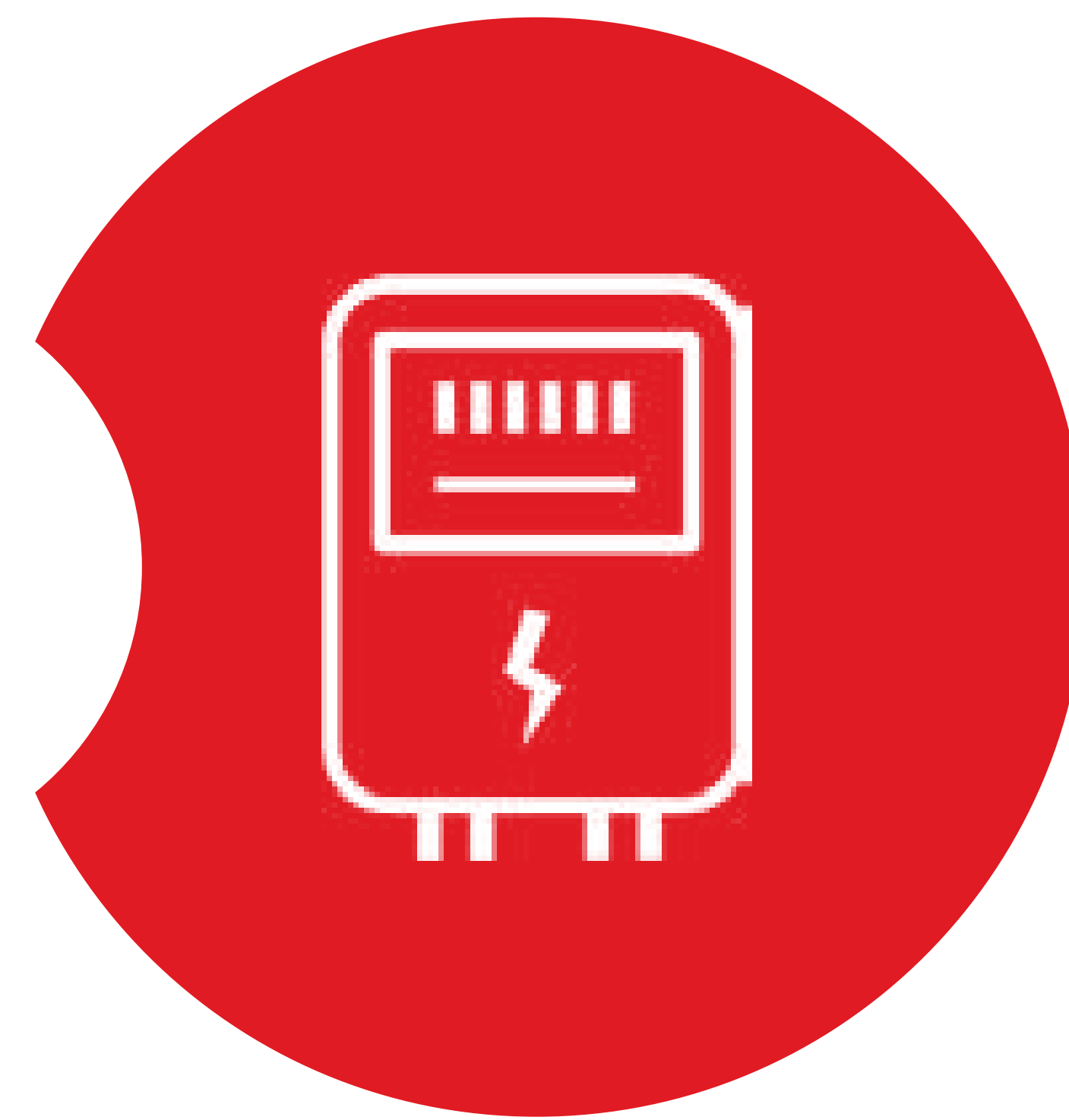
(NOTE: Main power cables are not included; must be provided by Customer)



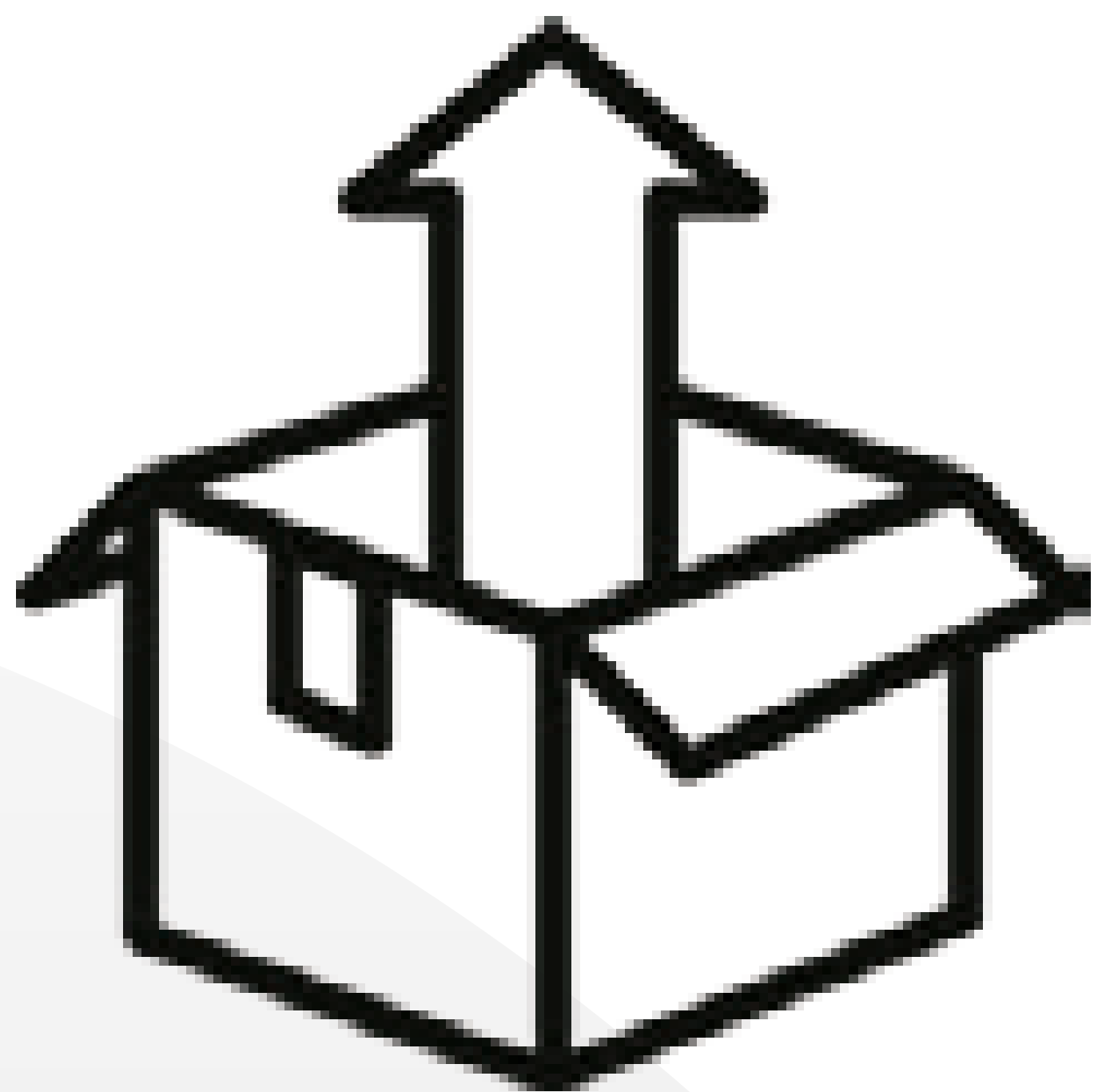
UNPACKING



MOUNTING



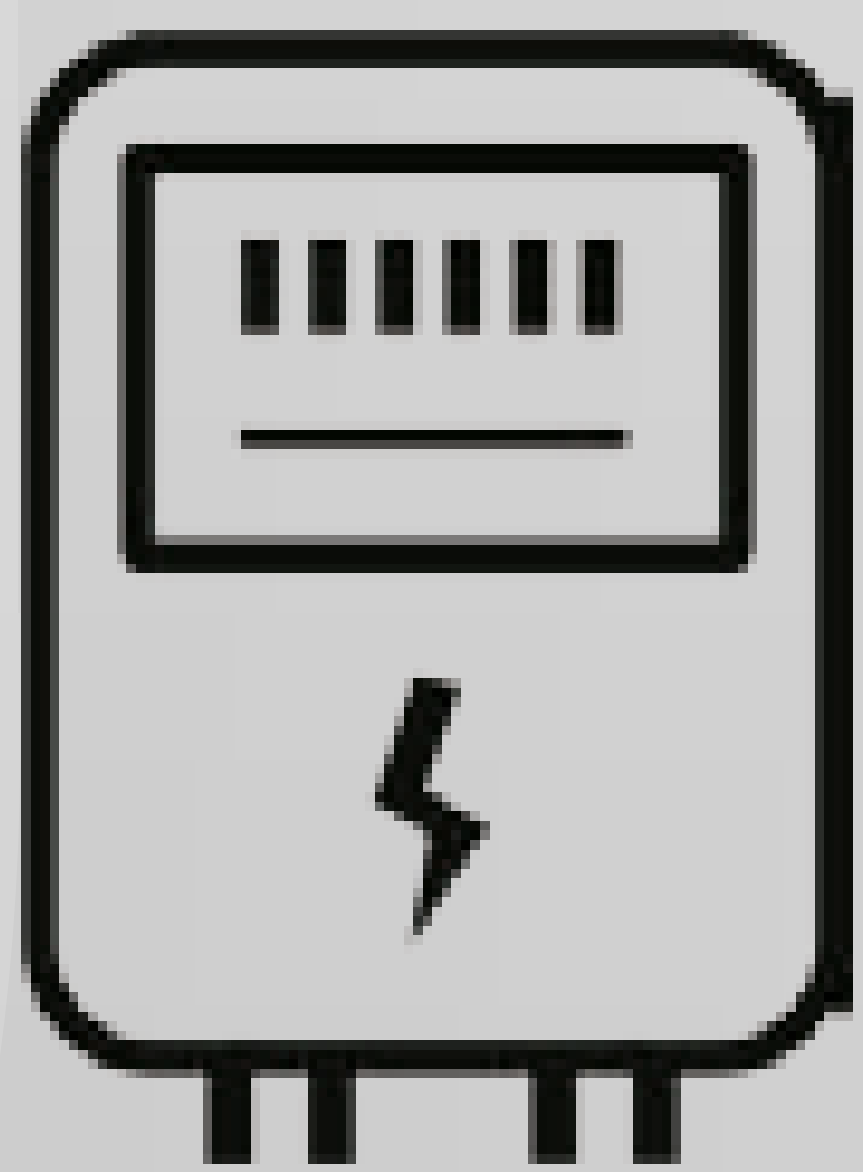
ELECTRICAL INSTALLATION



PAGE 03: Packing types.
PAGE 03: Checklist.



PAGE 05: Follow proper structural & lifting instruction.
PAGE 06: Follow mounting requirements.
PAGE 07: Ensure proper ventilation. (Improper ventilation will dramatically reduce the life of led display, and may VOID the manufacturer's warranty.)
PAGE 08: Install conduit where needed - Must use water tight conduit for all electrical connections.



PAGE 08: Refer to voltage & amperage requirements for the led display as identified on cabinet label.



PACKING & UNPACKING

PACKING TYPES



Crates (Plywood, Non-Timber)



Flight Cases

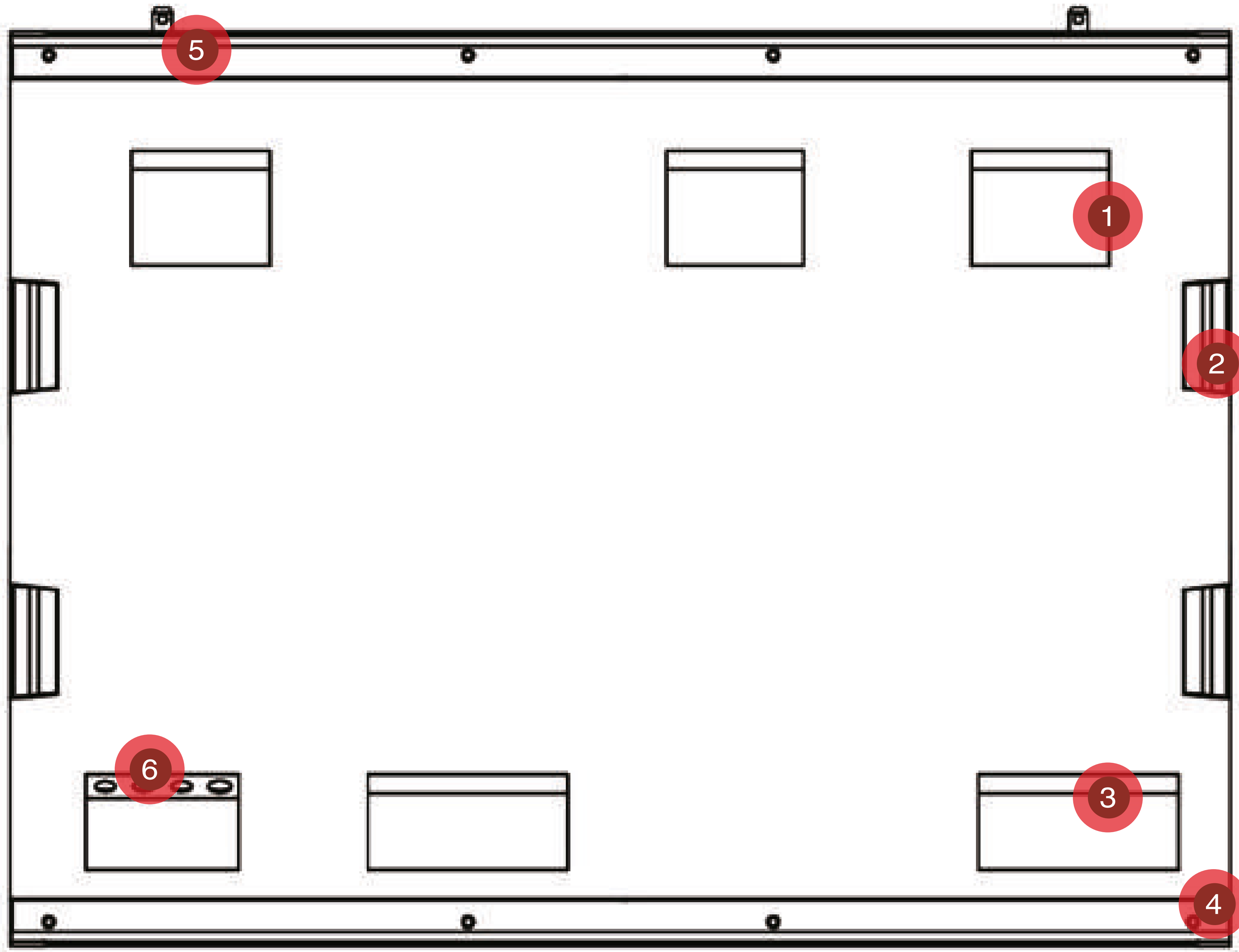
UNPACKING CHECKLIST

- ☐ LED display cabinet(s)
- ☐ Lifting Eyes (Alignment pins)
- ☐ Angle Brackets
- ☐ Liquid Tight Connectors (applicable to inner wiring)
- ☐ Cables
- ☐ Spare parts
- ☐ Antennas & Dimming sensors & temperature sensors (if ordered)



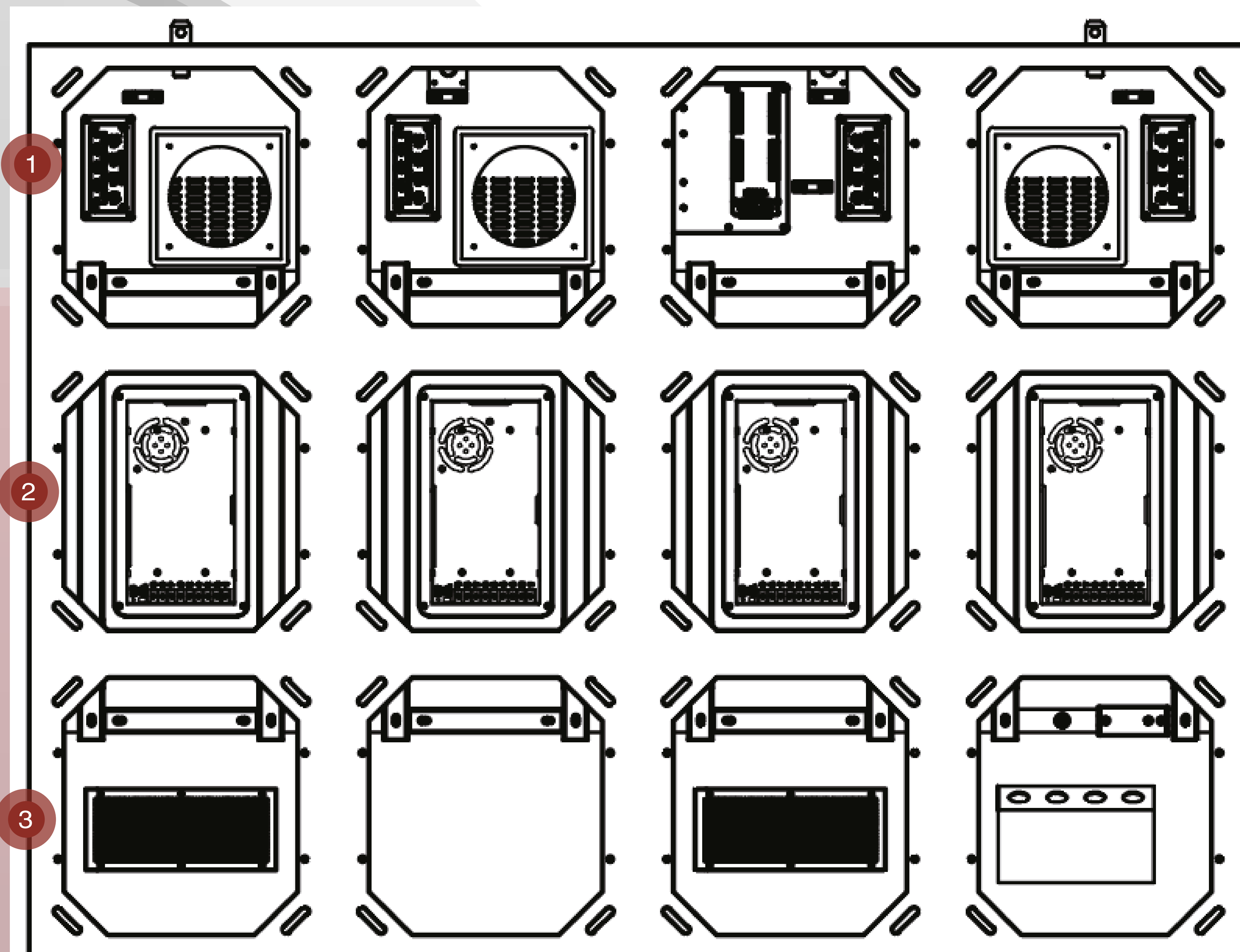
OVERVIEW - GENESIS II

EXTERNAL PARTS POSITION



- 1 Exhaust
- 2 Handle
- 3 Intake
- 4 Angle bracket
- 5 Lifting eyes (Alignment pins)
- 6 Power entry, antenna & sensors exit (if applicable)

INTERNAL COMPONENTS POSITION



- 1 Receiving cards layer
- 2 Power supplies layer
- 3 Wiring layer:
Power entry; Inner wiring
between cabinets, antenna
& sensors exit (if applicable)

STRUCTURAL & LIFTING

It is the installer's responsibility to provide an adequate support structure for the led display. It is very important that you check with local building and planning department for codes and laws regarding led display installation.

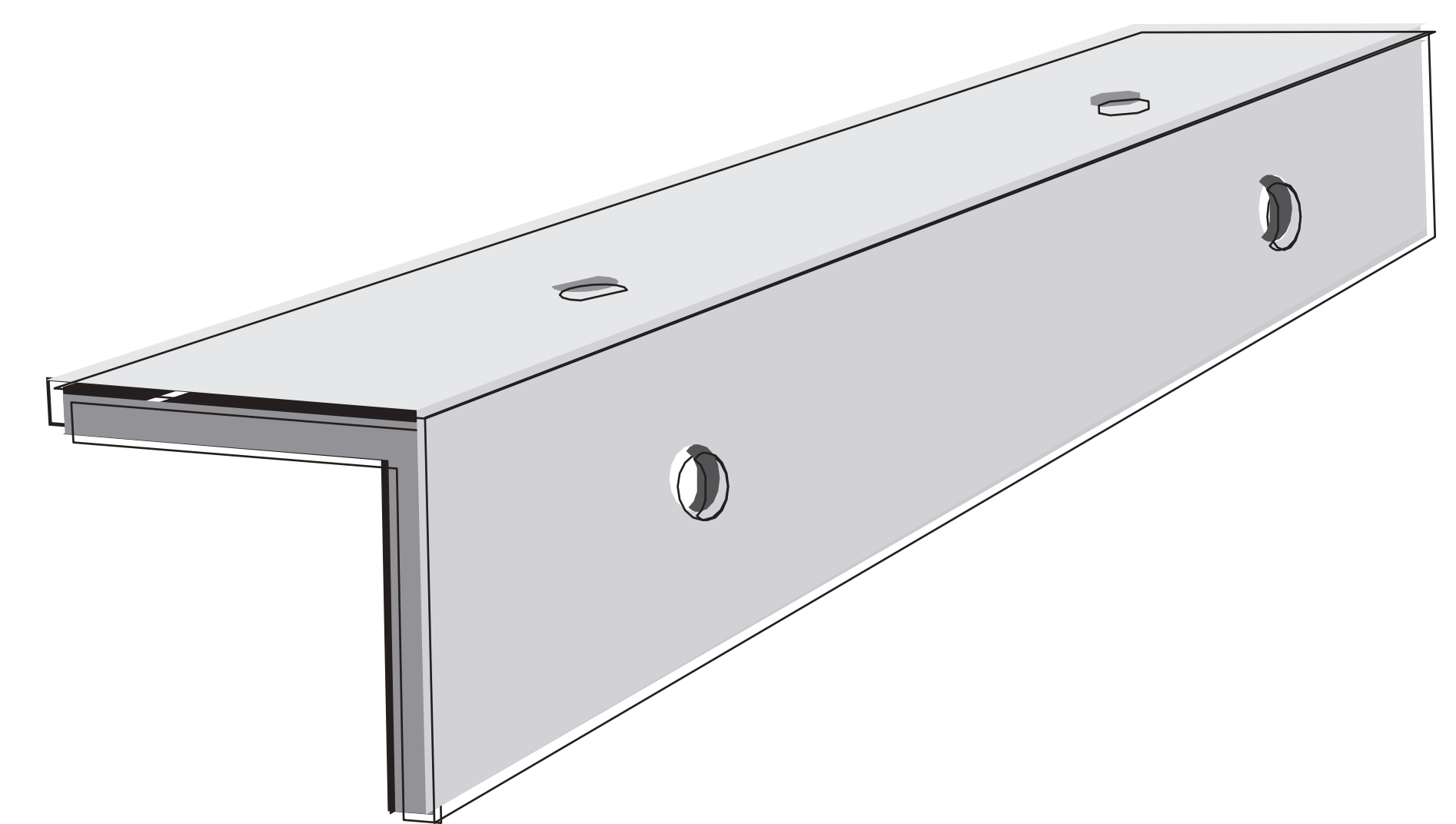
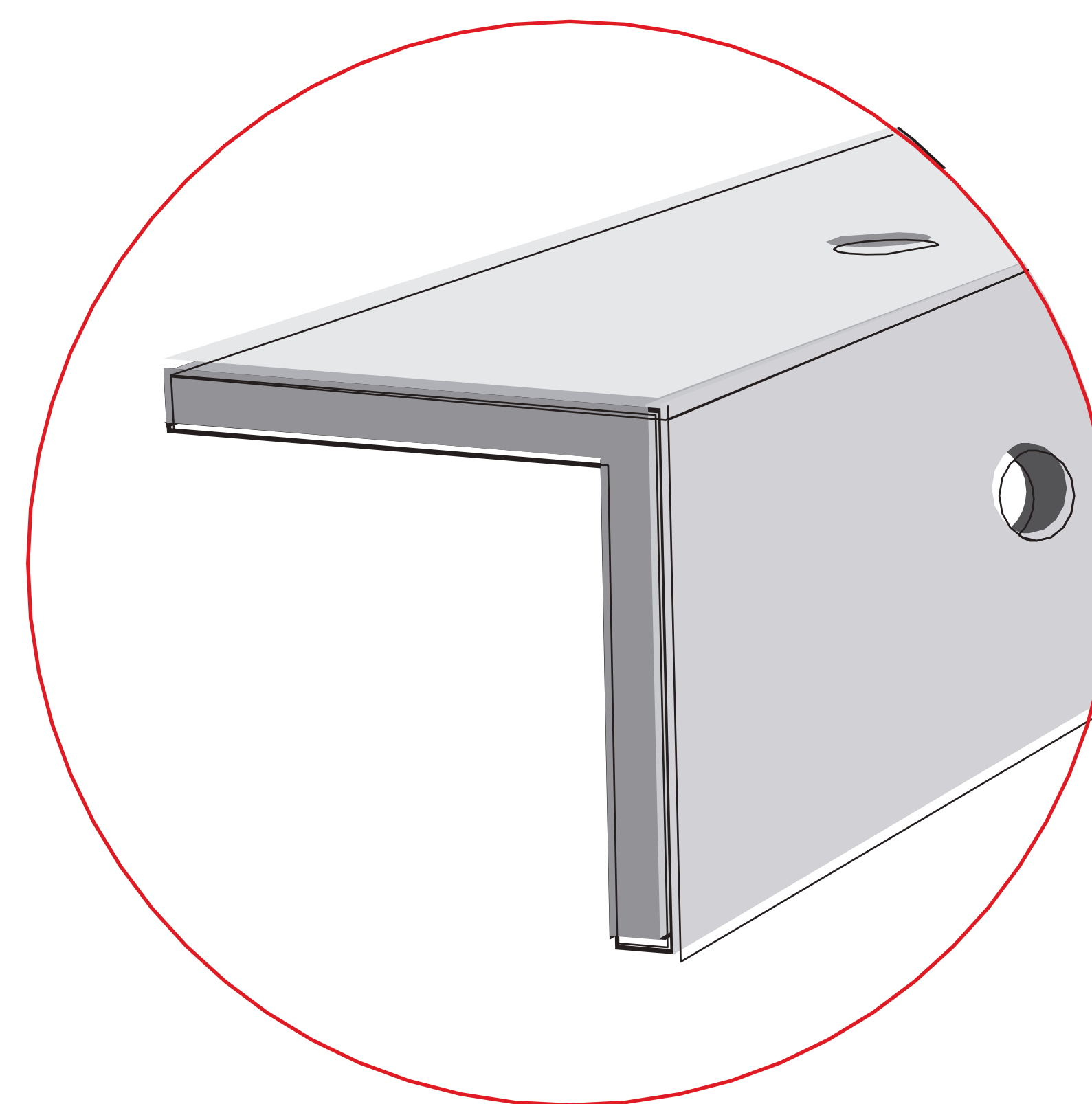


IMPORTANT

- DO NOT weld any part of the led display cabinet.
- DO NOT drill hole into the led display cabinet.
- MUST provide adequate clearance for proper ventilation.

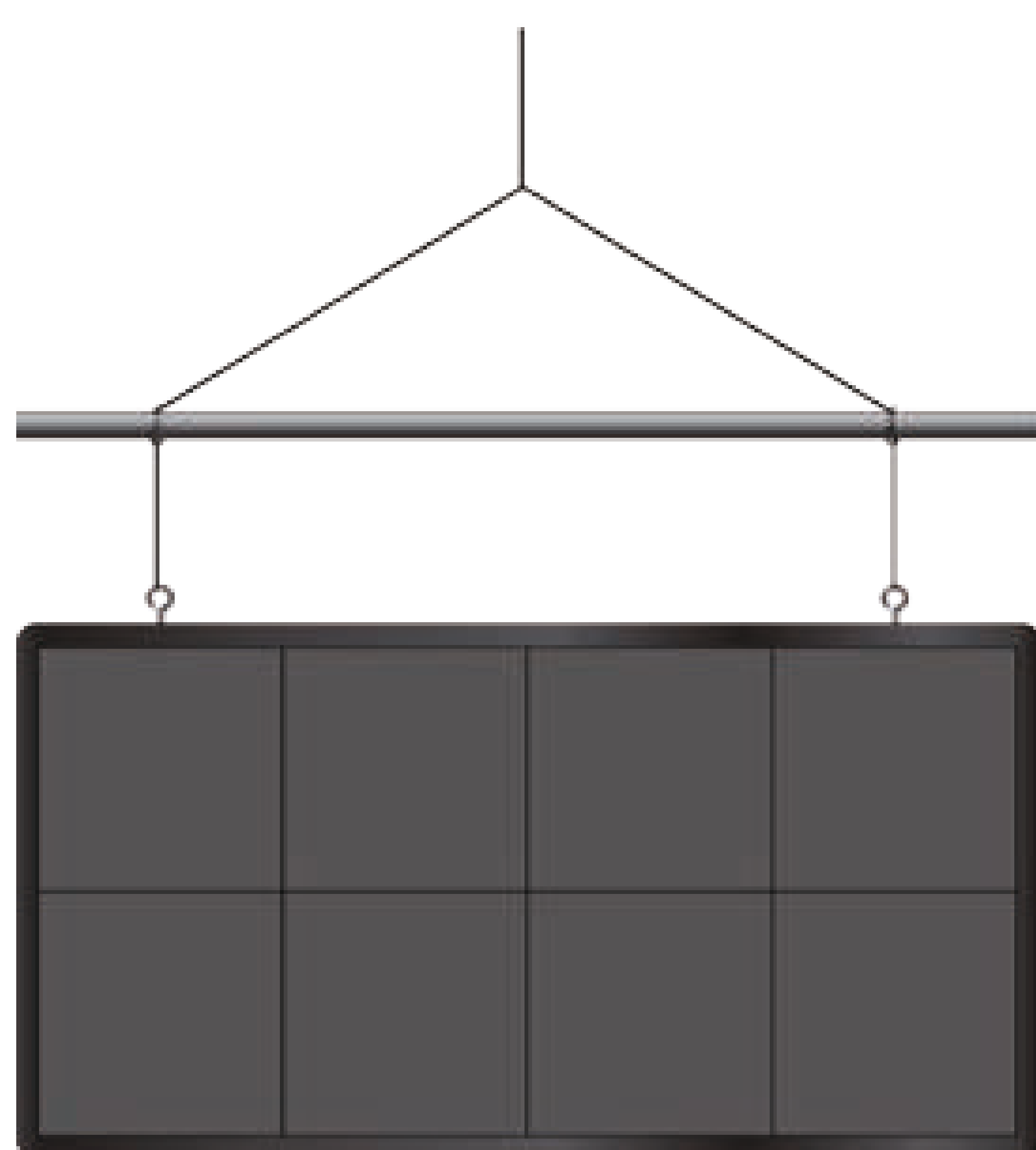
Angle Bracket

This bracket is universally used for pole mount, wall mount, base mount, and other structural installations. Both the top and bottom must be used to ensure structural stability.

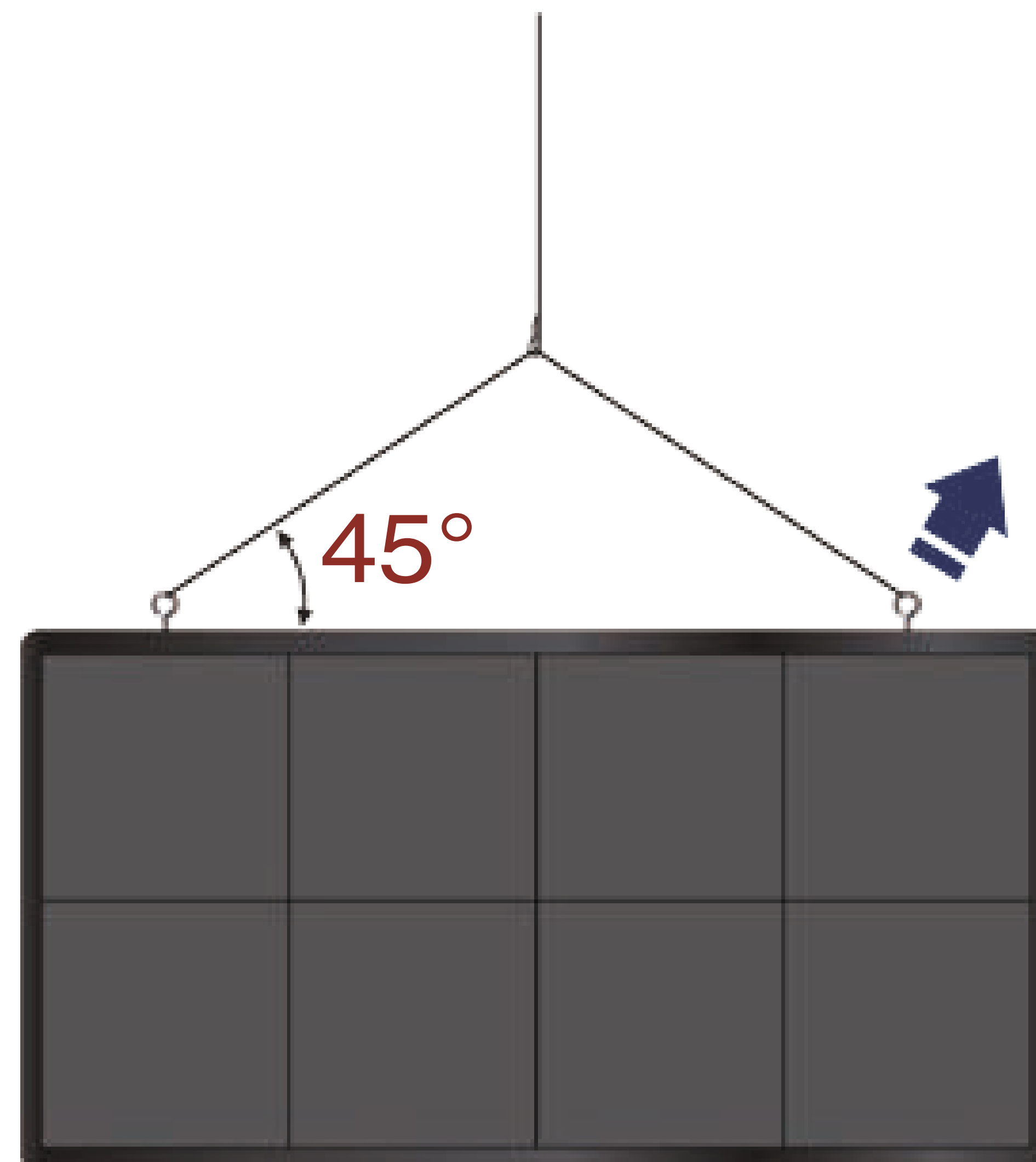


Lifting Only From The Lifting Eyes

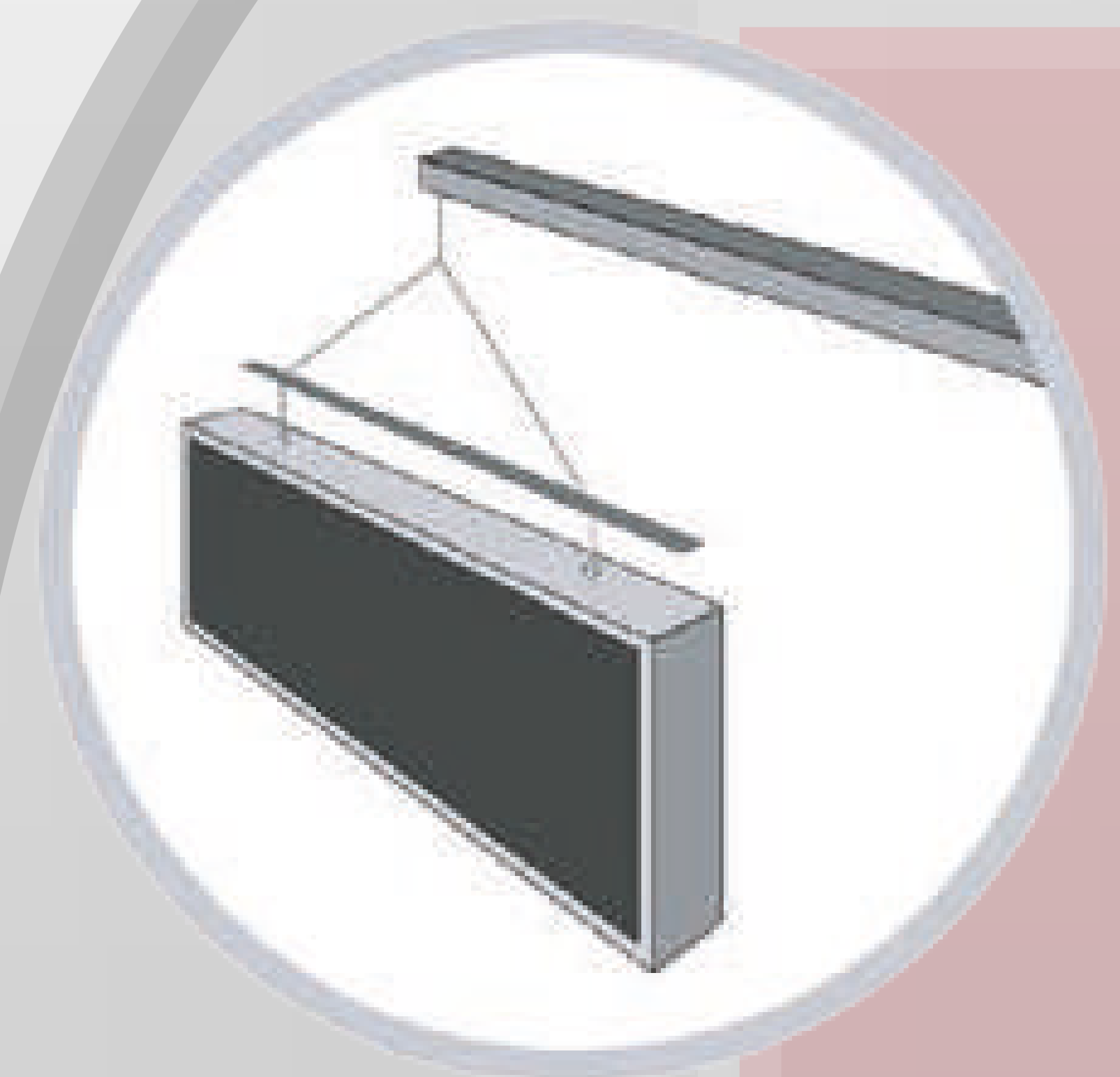
Use care when lifting the display using all the provided lifting points. Use only approved lifting straps which meet the appropriate load requirements. (Not included)



With a Spreader Bar
(RECOMMENDED)



Without a Spreader Bar

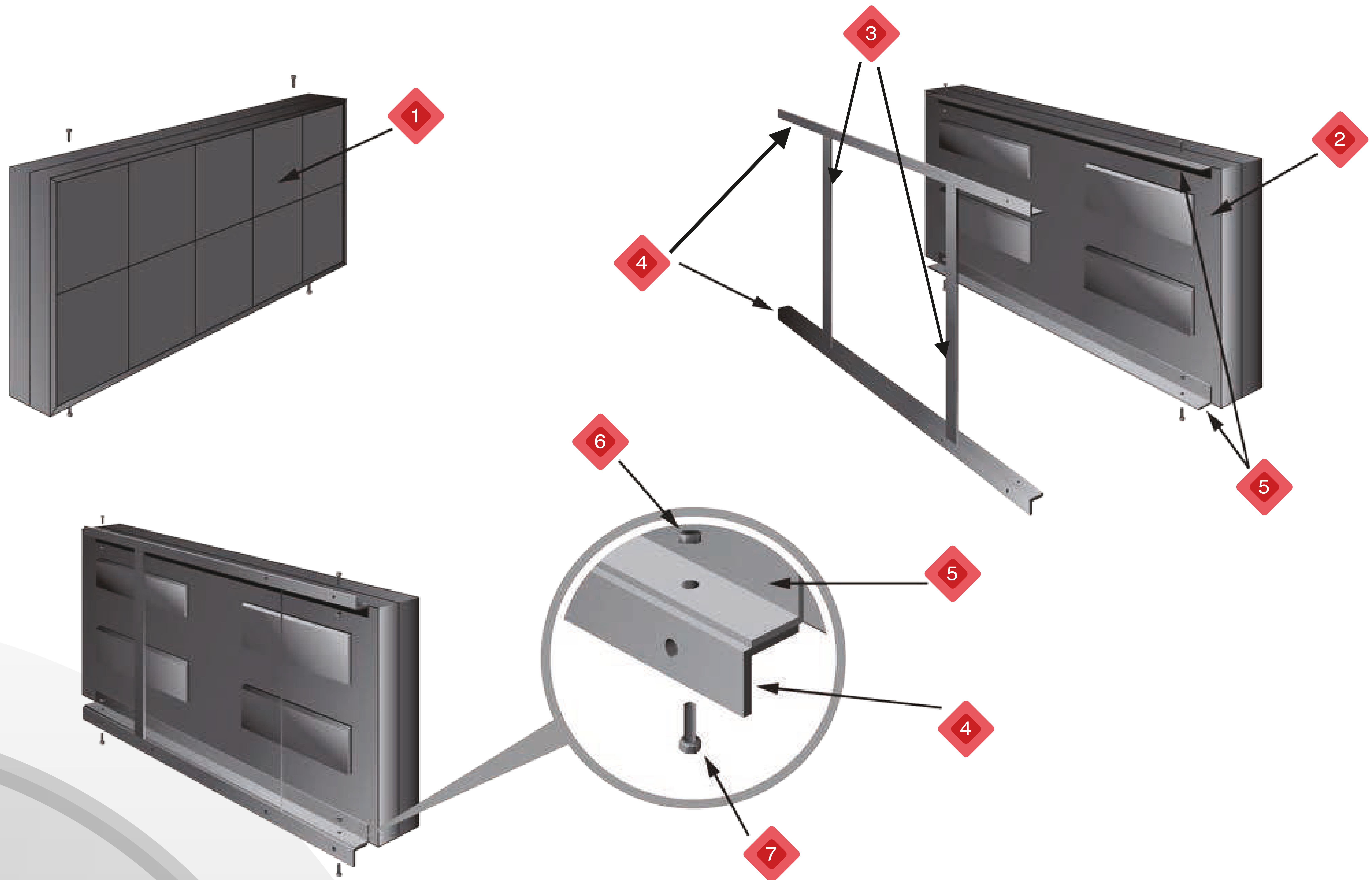


IMPORTANT ⚠
Do not use this method if this angle is less than 45°

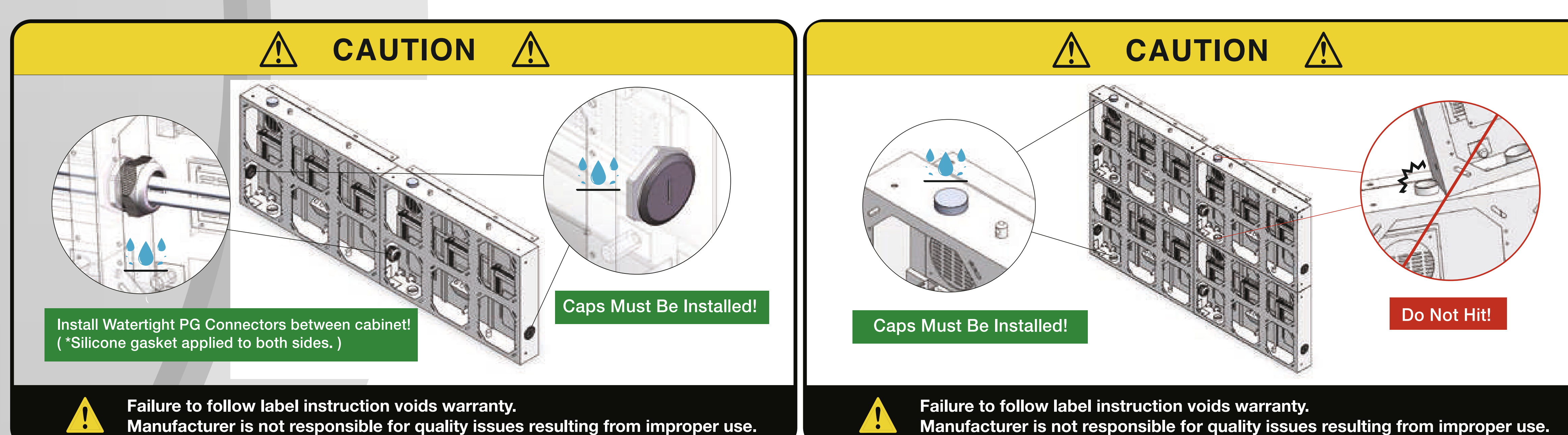


MOUNTING

The information below is for general reference only. It does not replace professionally engineered drawings. Please consult your specific shop drawing for details. We provide angle brackets for free. There are 4 pieces angle brackets for each led display cabinet (2 brackets are assembled on top and bottom of cabinet's rear side; other 2 brackets are packed separately in crates.)

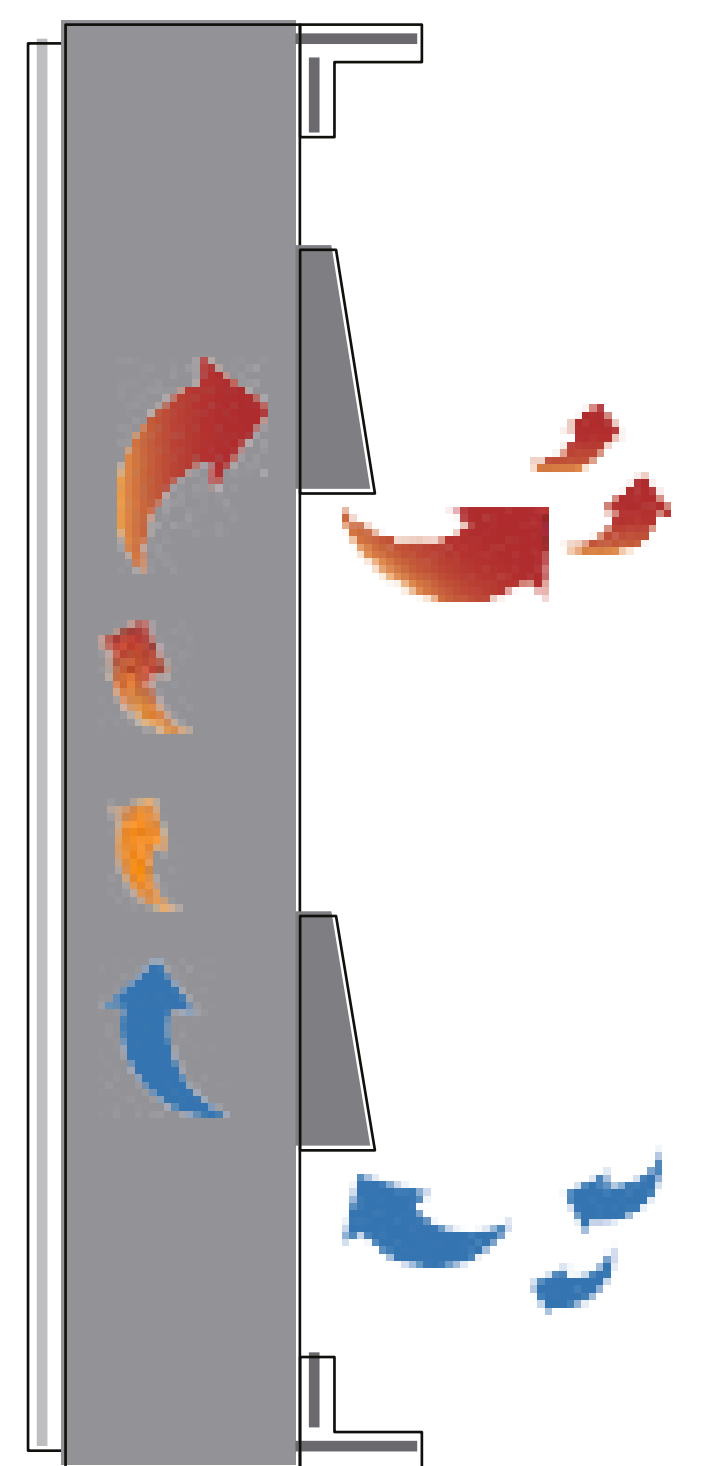
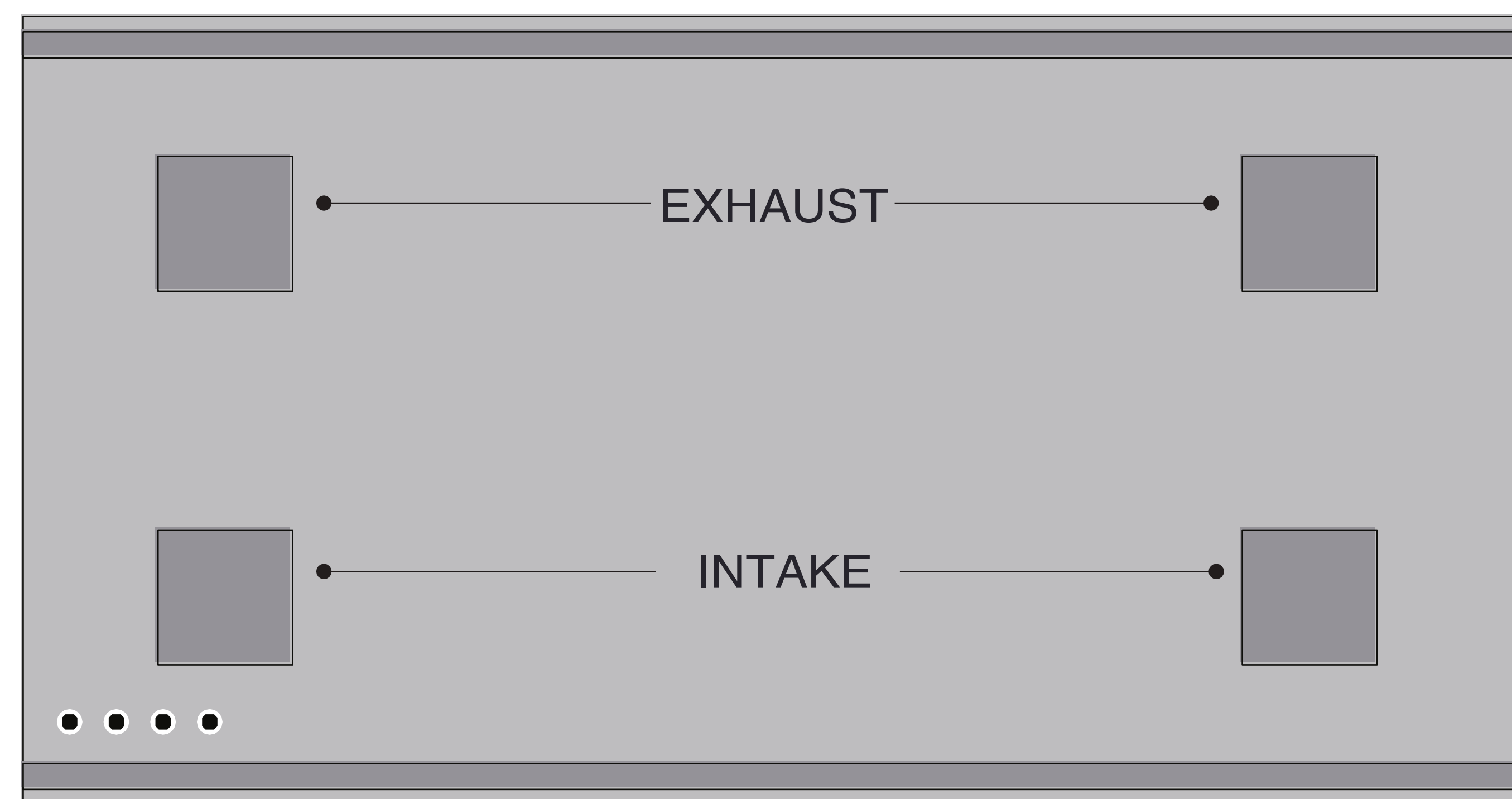


- 1.Front
- 2.Back
- 3.Reinforced frame (build as needed)
- 4.Brackets for fixing to structure
- 5.Brackets on cabinet (*DO NOT WELD THIS BRACKET)
- 6.Nuts (not provided)
- 7.Bolts (not provided)



VENTILATION

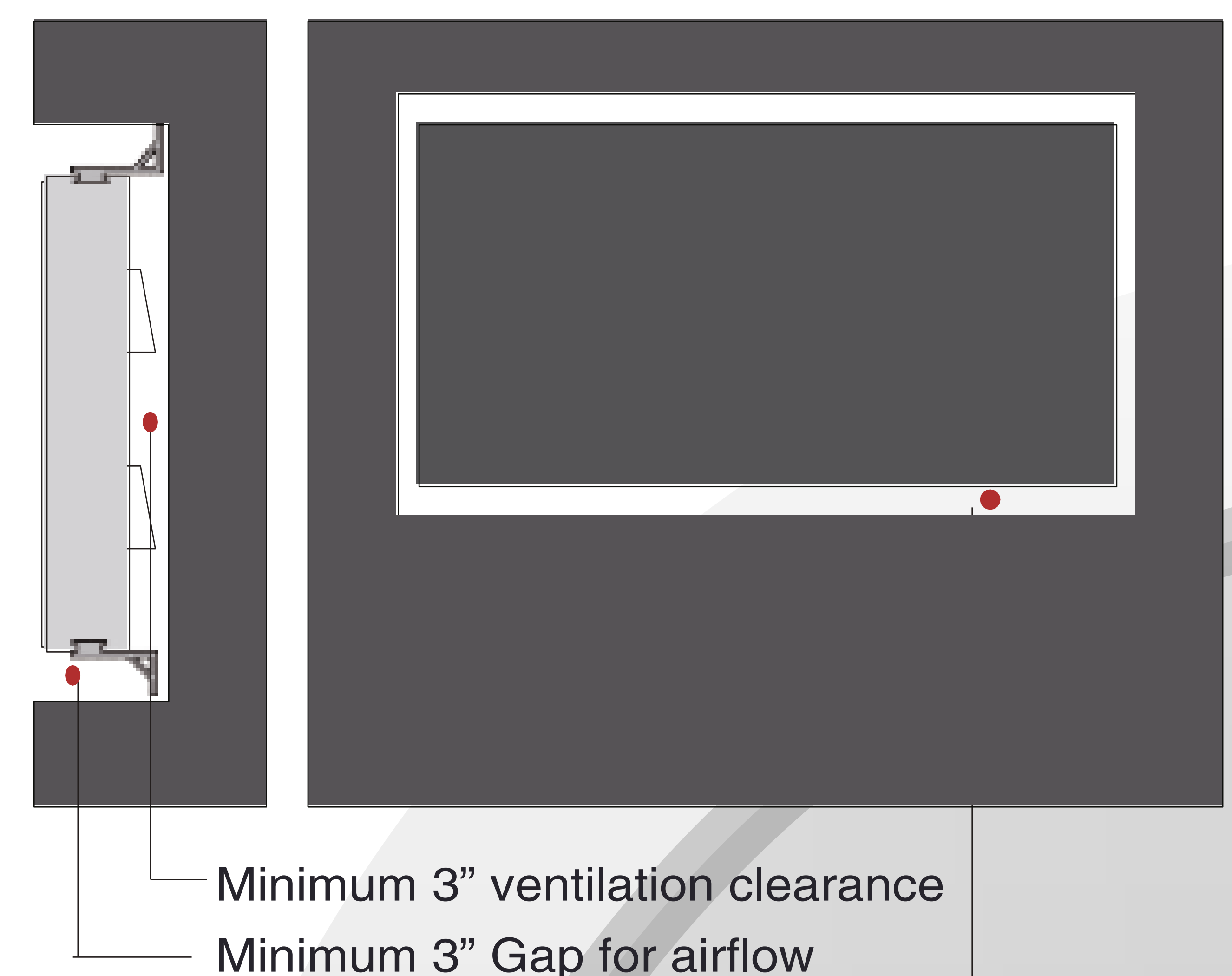
Our led displays are designed to operate between -40°F and 140°F. There are multiple intake vents and exhaust vents on back of each cabinet. The cabinets include internal thermostats to turn the fans ON once it reaches 100°F. In order to keep the led display at nominal temperature, adequate ventilation is required.



1. Improper ventilation will dramatically reduce the life of led display, and may VOID the manufacturer's warranty.
2. DO NOT restrict air flow around the back of the cabinets.
3. Anti-vandalism cover is NOT suggested. Make sure of adequate ventilation when apply anti-vandalism cover to display side.

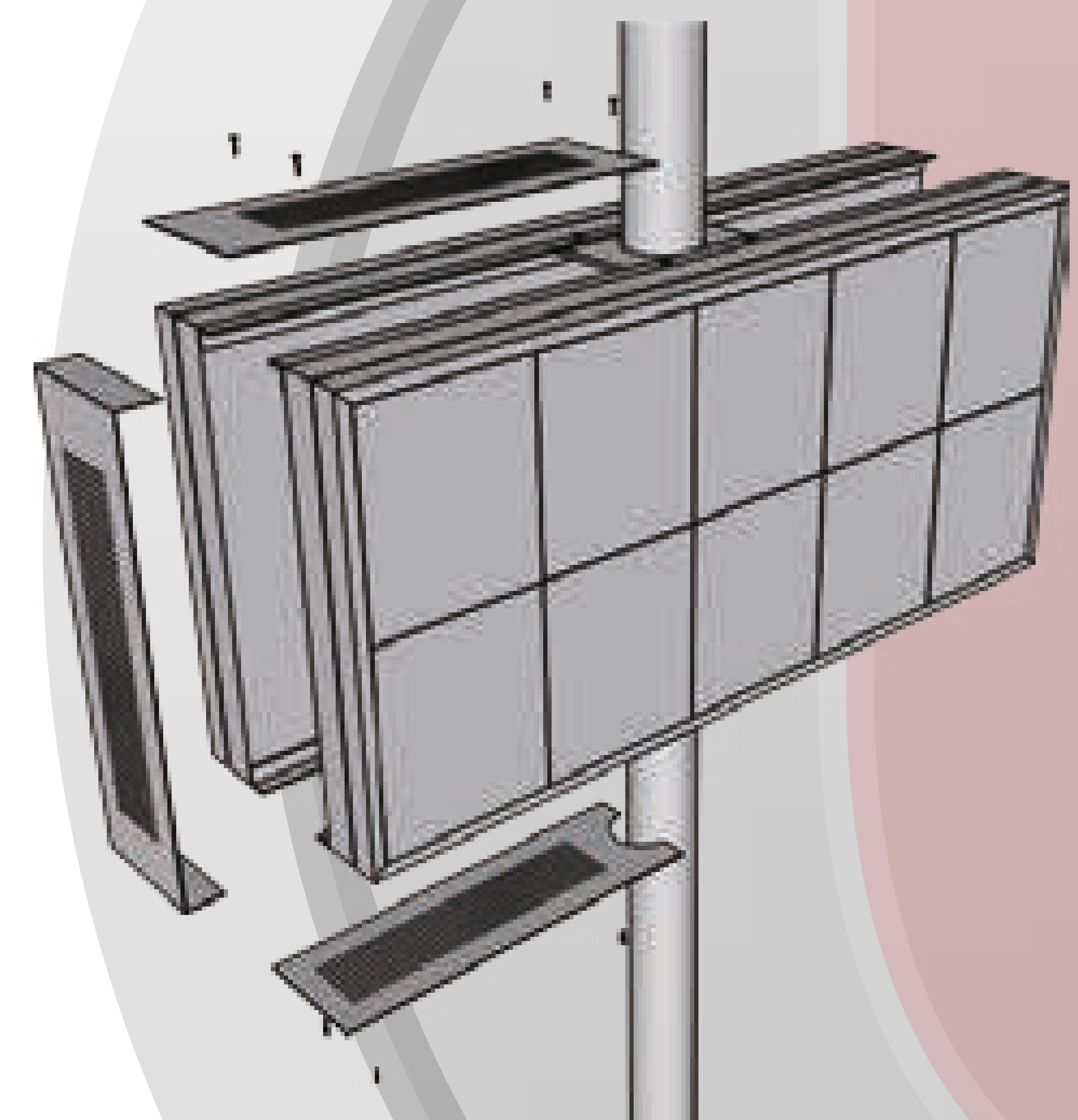
Recessed installation

When installing into a recessed structure, you must provide minimum of 3" ventilation clear-ances to allow cool air to be circulated.



Shroud installation

1. When installing shrouds, we recommend using perforated aluminum. Multiple vents may be used.
2. **DO NOT** use non-perforated sheets to cover the sides of the led display. This will obstruct the air flow, which can damage the electronic components.



ELECTRICAL INSTALLATION

- Main electrical connections should be done by a licensed electrician following all N.E.C. and Local codes.
- A proper Earth Ground must be run from the led display, to a grounding rod using N.E.C. standards.

Liquid tight conduit

(supplied) MUST be used for power entry and antenna & sensors exit.

Liquid tight connector

(supplied) MUST be used for inner wiring.

IMPORTANT

Each cabinet has a power entry point.

One power entry may be used for multi cabinets by inner wiring (with aviation plugs).

- Check the wiring diagram supplied.
- Check the cabinet label for specific power requirements.

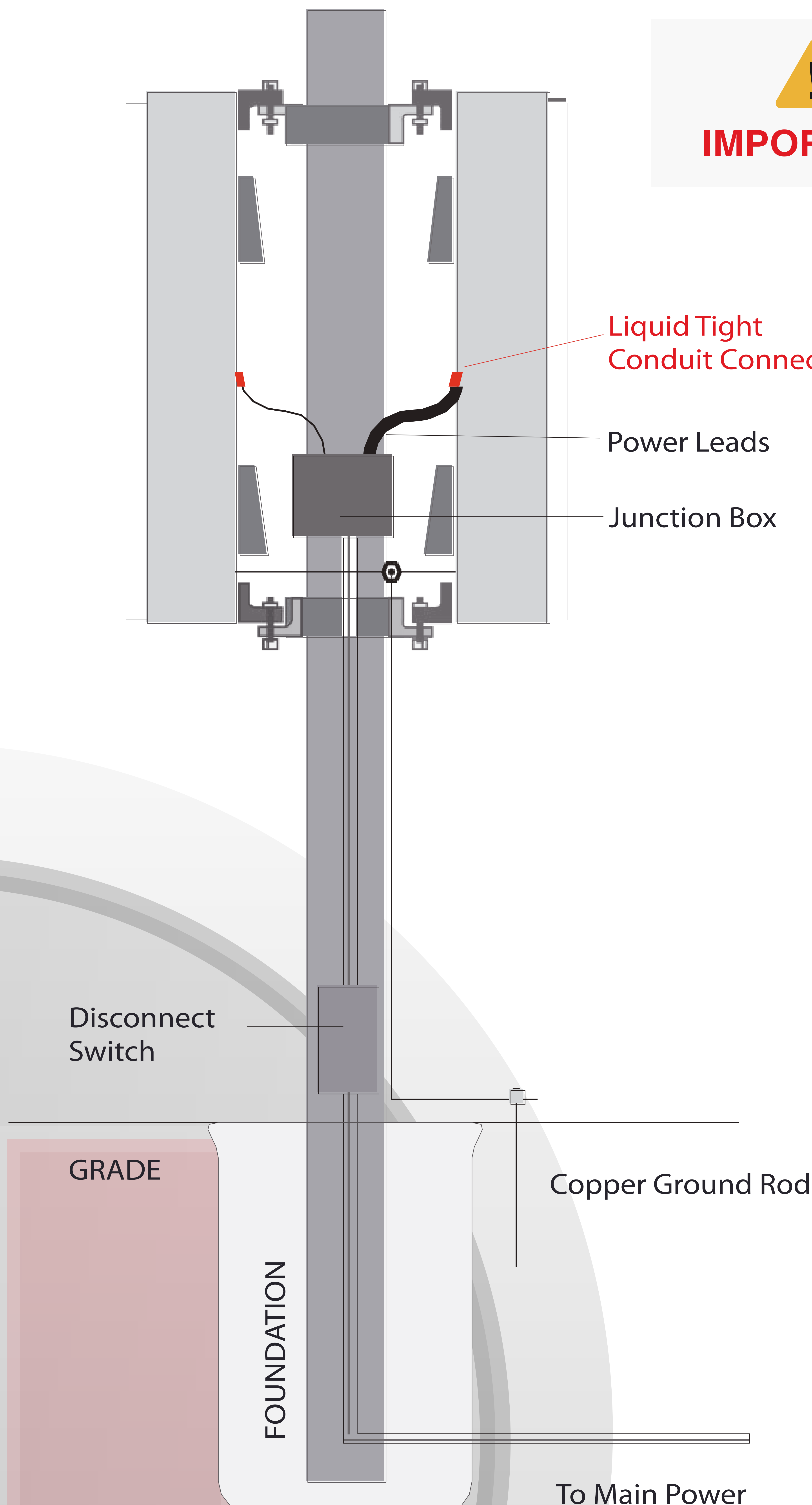
Earth Ground:

All LED display must be earth grounded to minimize static currents and lightning damage. The structure or foundation will not provide a sufficient earth ground for the led display. A properly installed copper ground rod must be used.

*WARNING: SYSTEM POWER LIMITS

For 960×960 mm LED display cabinets:

- Max. series-connected units: 4 cabinets
- Max. Total input current: 16 A
- For the operation of product, the minimum ambient temperature is -40°C and the maximum ambient temperature is 60°C.
- The power tap within the product is not for supply of other equipment, it is the spare power supplying the tools when required during the subsequent maintenance.
- The maximum total output current for female wire connector and for power tap is 10A, the maximum total input current of product with output shall not exceed 16A.
- An approved external circuit breaker of 30A shall be provided for protection of power supply.
- Building wire of 12AWG and minimum 90°C shall be used for permanently mains and grounding connection.





IMPROVEMENT

Please visit our support page to submit your feedback.

Your feedback is highly appreciated and is extremely helpful for us to make the improvements. Thank you!

Thank You