

Installation Guide (Ver. E)

IP rated outdoor display

Jan 07, 2020

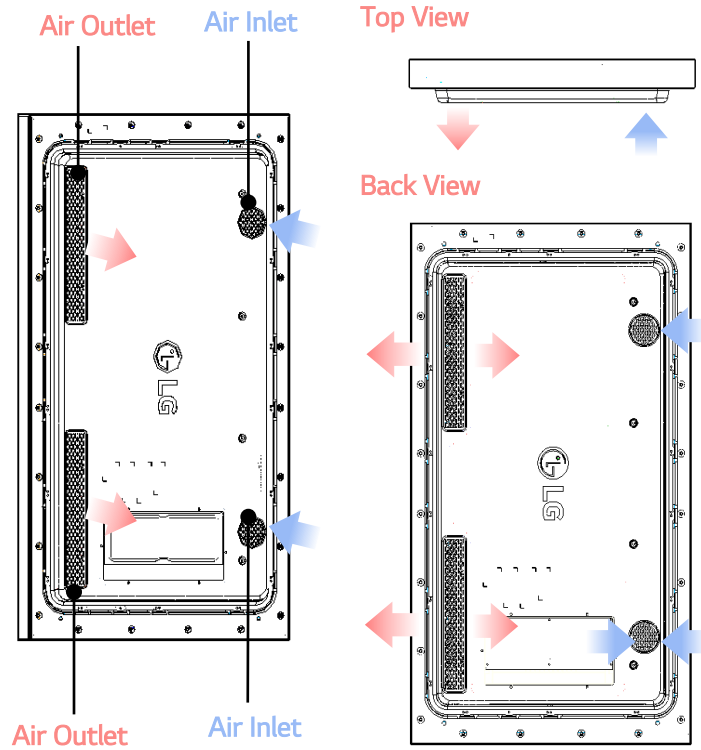
LGE

The data is updated on Jan 07, 2020 and can be changed without prior notice.

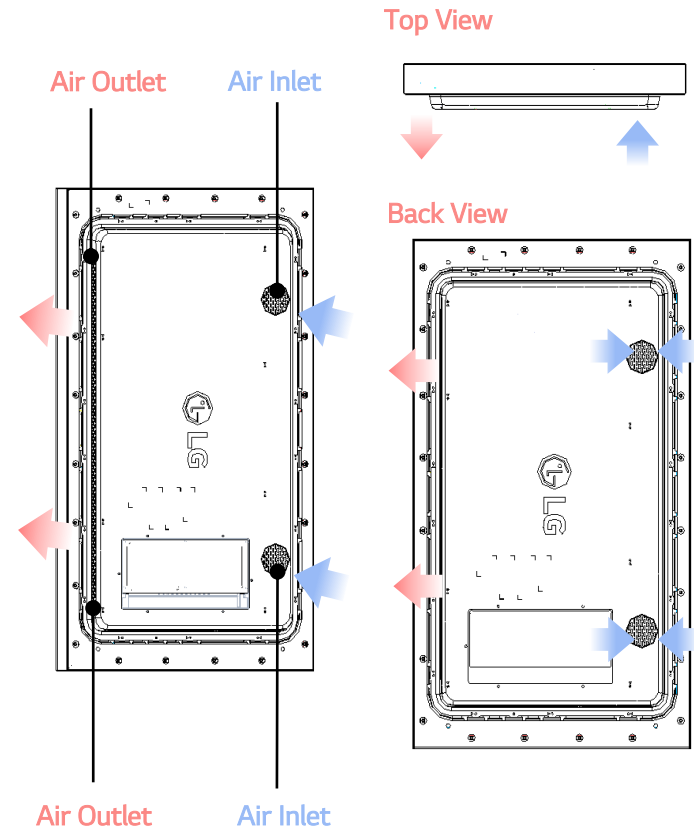
Air flow direction

The outdoor unit uses cooling fans to take in outside air to lower the internal temperature and discharge the hot air. When installing an outdoor unit, remove any obstacle near the air inlet and outlet that may affect air flow.

55XE4F



49XE4F

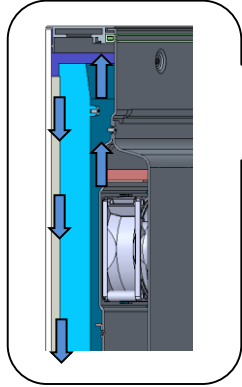


Cooling Concept

There are two-layered air flow for cooling OL and CL.

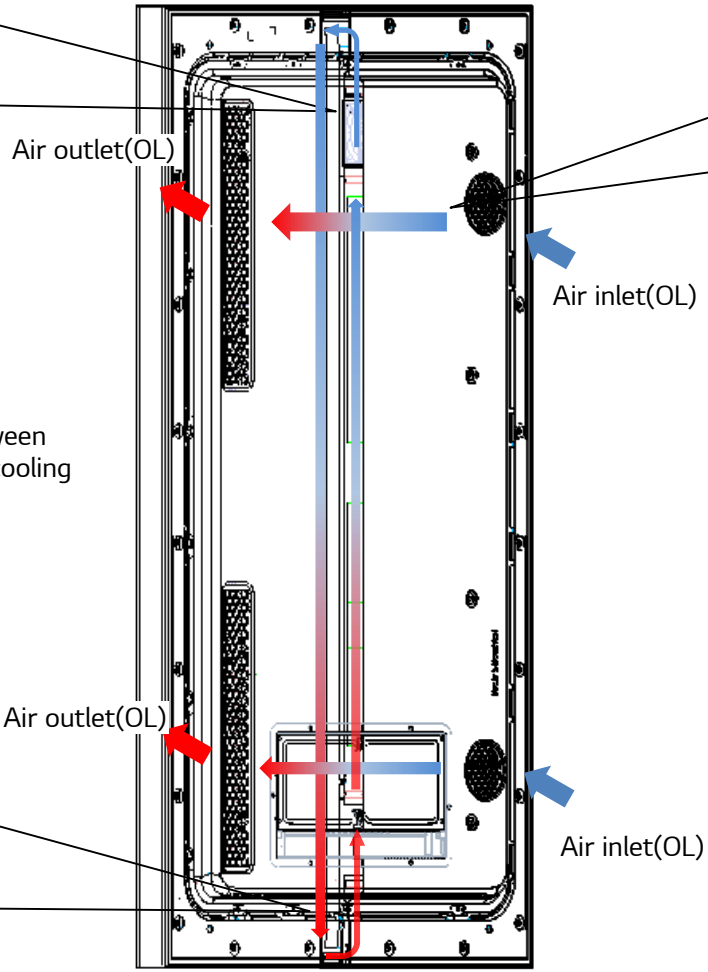
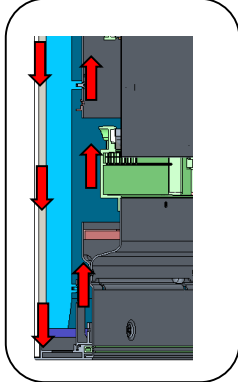
In Closed Loop, air flows only inside. In Open Loop, air flows using outside air.

Closed loop air flow

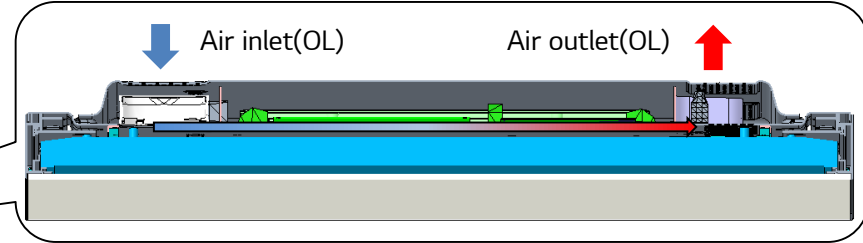


Closed Loop pass through between panel and protective glass for cooling

Closed loop air flow



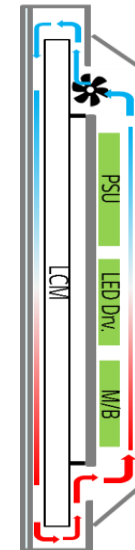
Open Loop Air flow



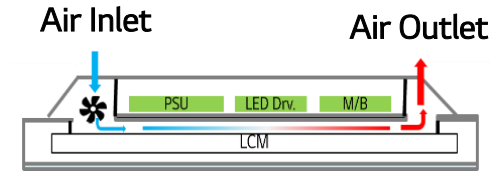
Electric components as PCB are separated in area pass by open loop

* Simple Diagram

Side View (Portrait)
Closed Loop



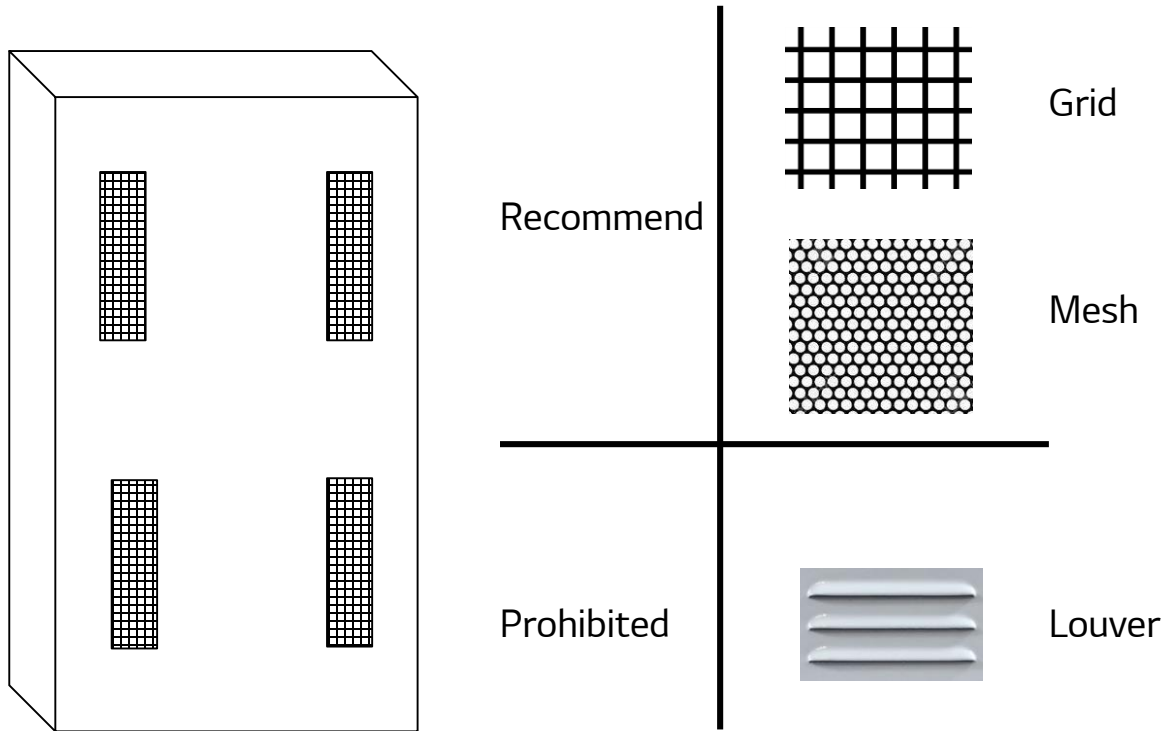
Top View: Open Loop



OL : Open Loop
CL : Closed Loop

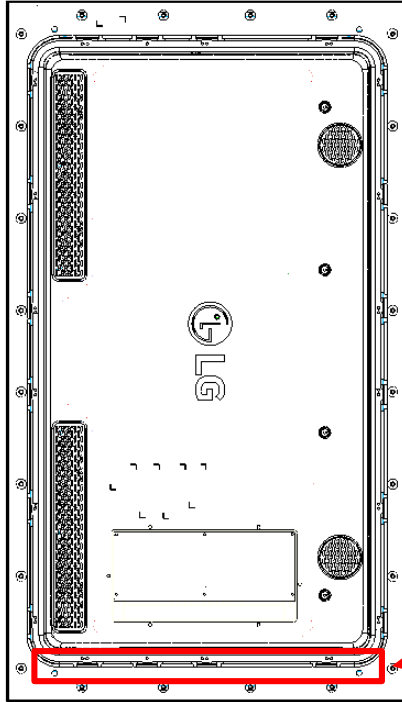
Inlet and outlet types for Casing

The opening size for air inlet and outlet should be minimum 50%.
Air inlet and outlet should be grid or mesh types.
Do not use the louver type as it has limited intake.

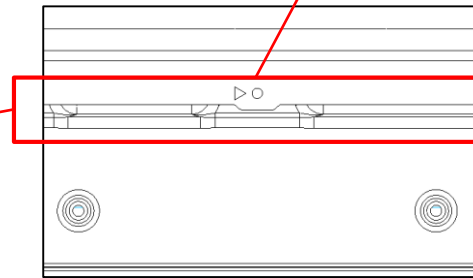
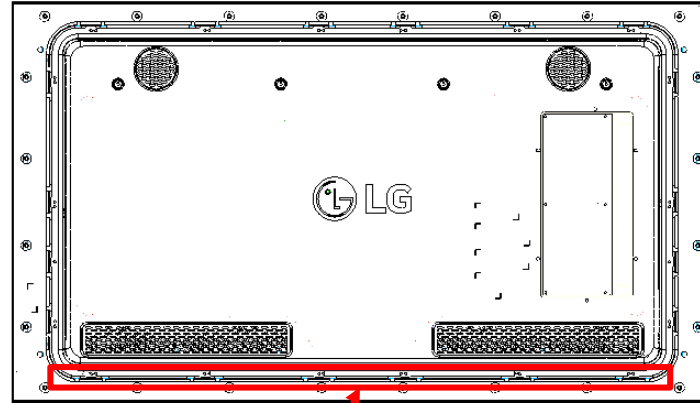


Water drain for display

Portrait



Landscape



Clearance

This clearance is for water drain.

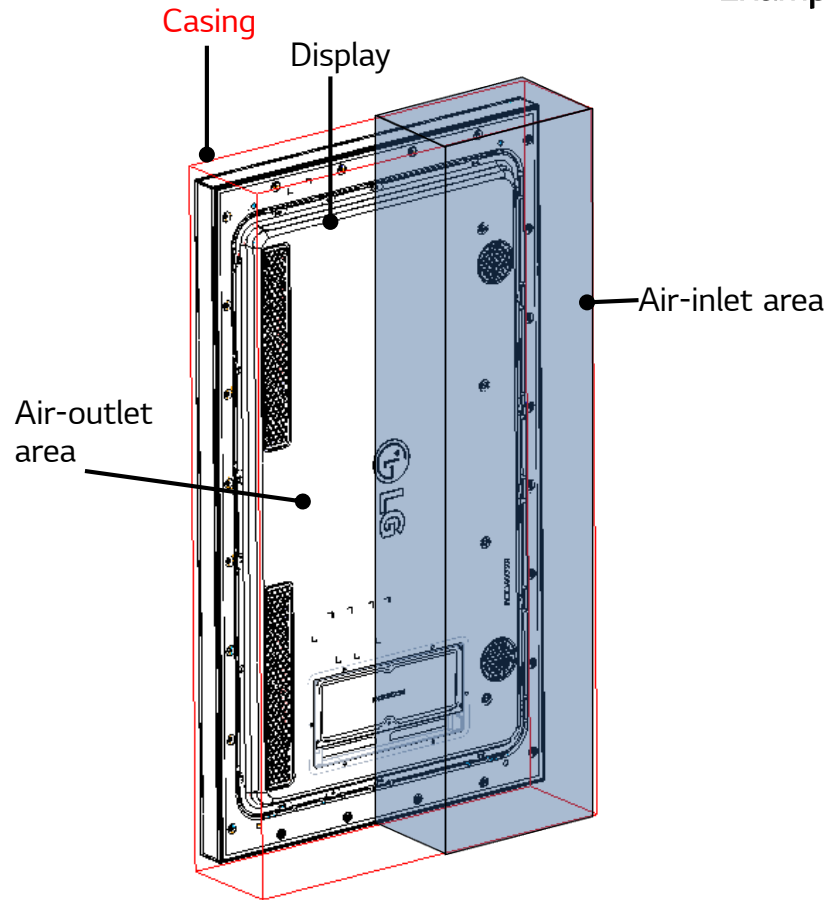
If you make own casing or structure, do not screen clearance by structure.
If block the clearance. It does not warranty water proof under water pour.

Enclosure unit partition design

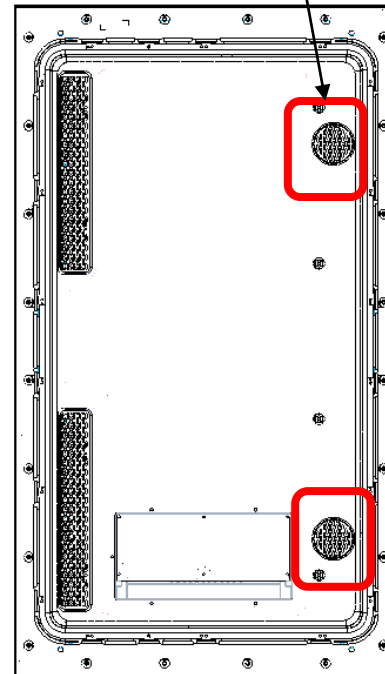
Example of partition

The purpose of partition separate area between air inlet and outlet.
Below image are shown several example about separation.

Example 1)

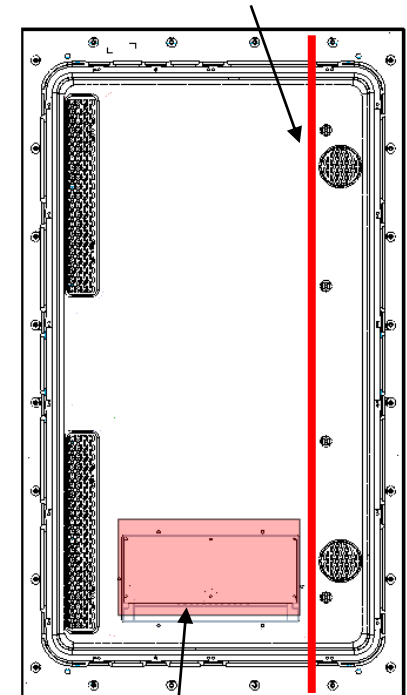


Baffle to separate air-inlet



Example 2)

Partition to separate air-inlet

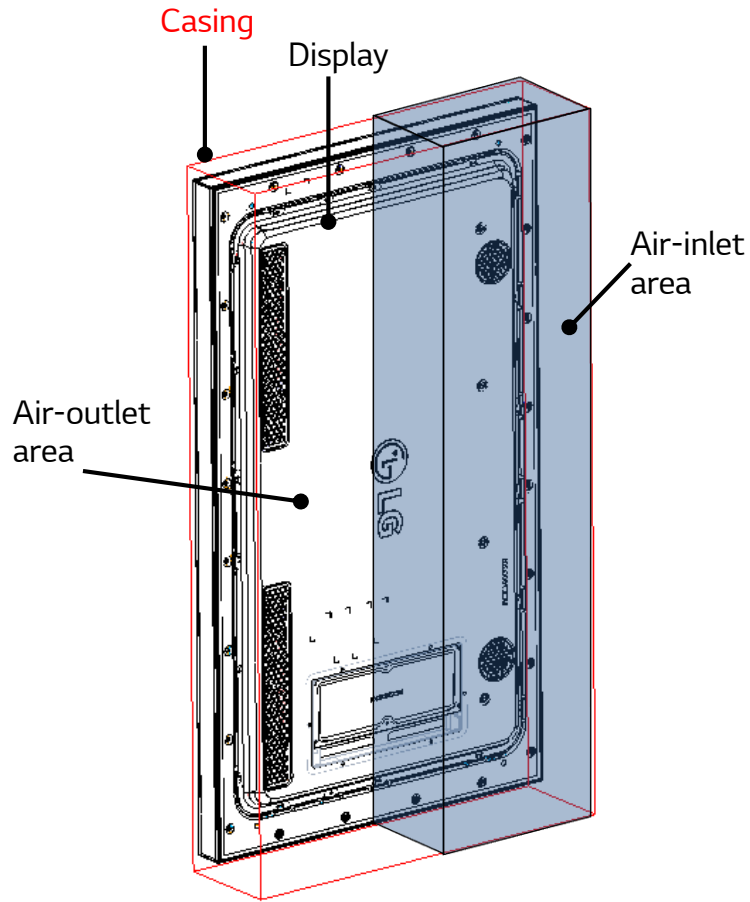


Partition prohibited area for disassembling interface cover

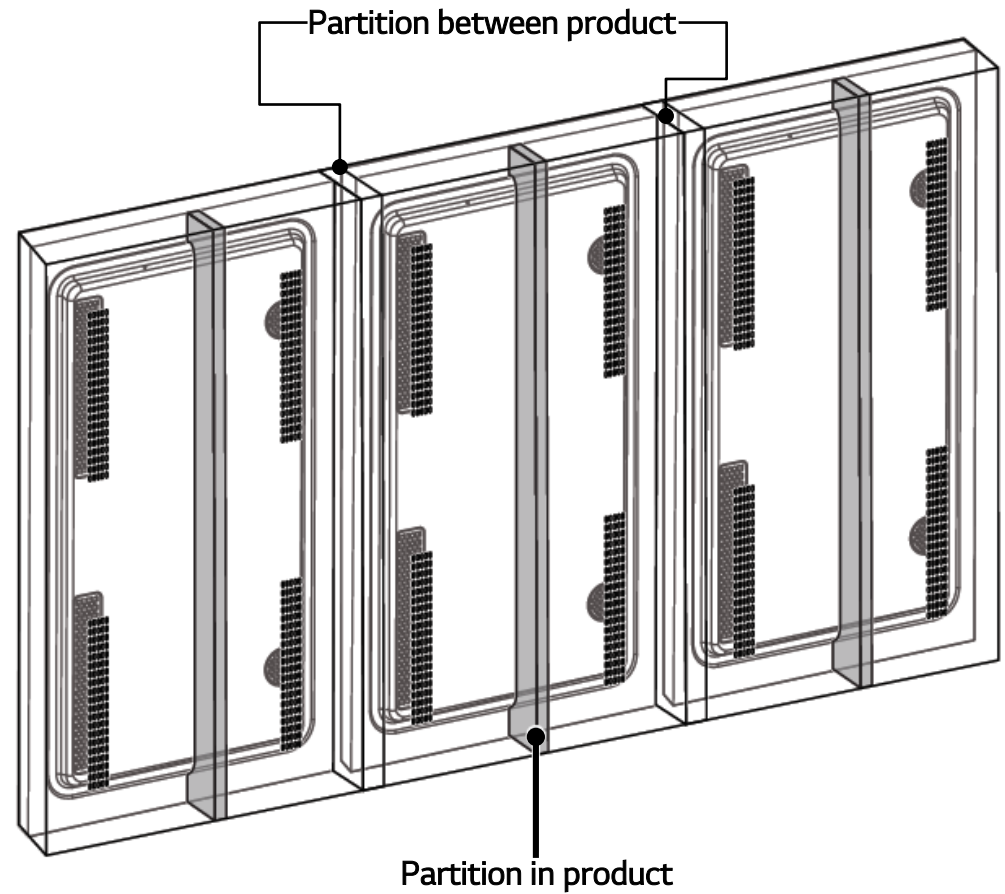
For cooling purposes, a fan is used to intake outside air through the inlet and hot air is discharged through the outlet. So, make sure to separate the inlet and outlet

Enclosure unit partition design

- For outdoor units, add partitions between the inlet and outlet inside the enclosure unit to keep air paths separated.
- The partition shape should perfectly fit to a shape of display unit, with no gap between the display unit and enclosure unit.



1x N Enclosure



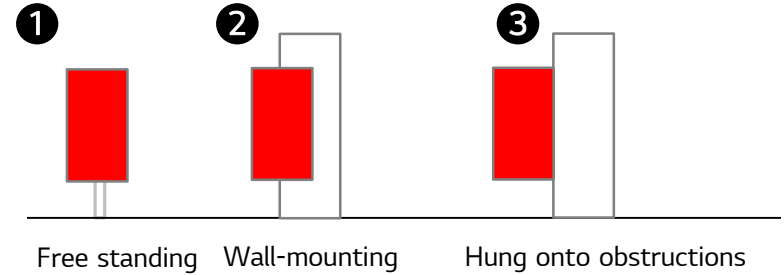
Single enclosure Unit

Opening size :

- Ⓐ Hole: 42,900 mm² or more per each
- Ⓑ Hole: 14,880 mm² or more per each
- Ⓒ Hole: 19,104 mm² or more per each

All hole opening ratio (% of total opening): 50% or more

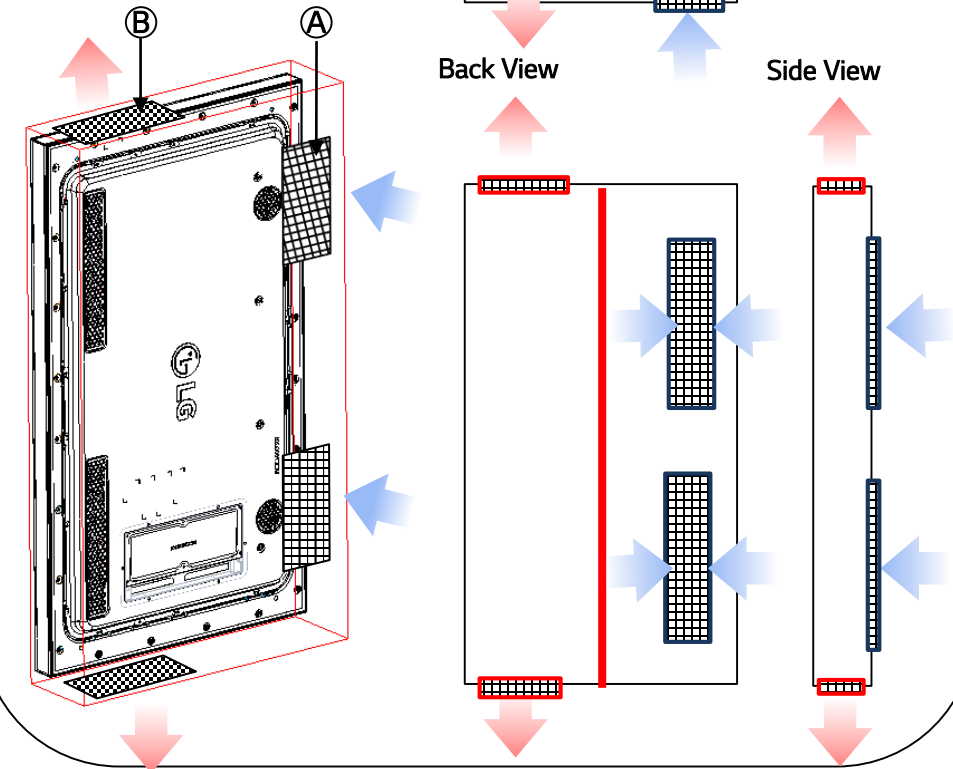
* Outdoor installing scene



Example 1) For free standing

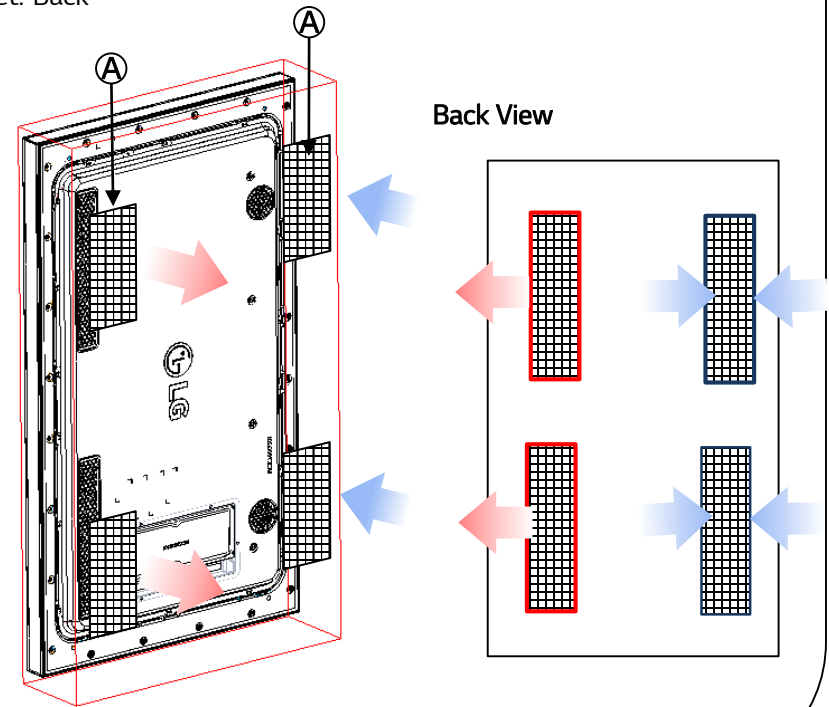
Top View

In-let: Back
Out-let: Top/bottom



Example 2) For Hung onto obstructions

In-let: Back
Out-let: Back



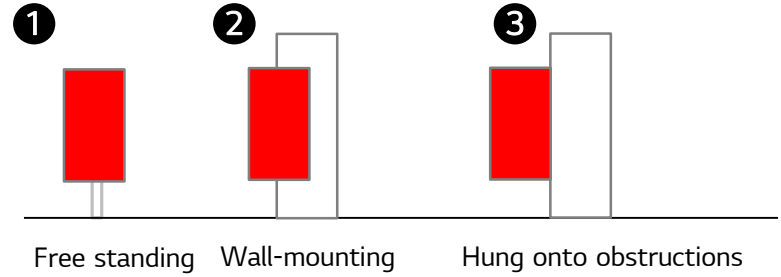
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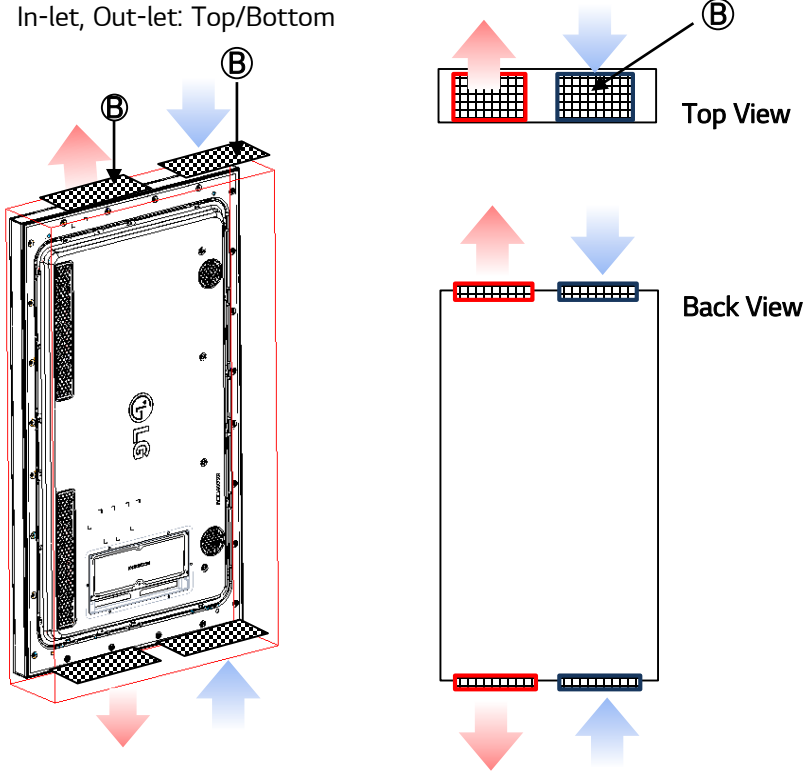
All hole opening ratio (% of total opening): 50% or more

* Outdoor installing scene



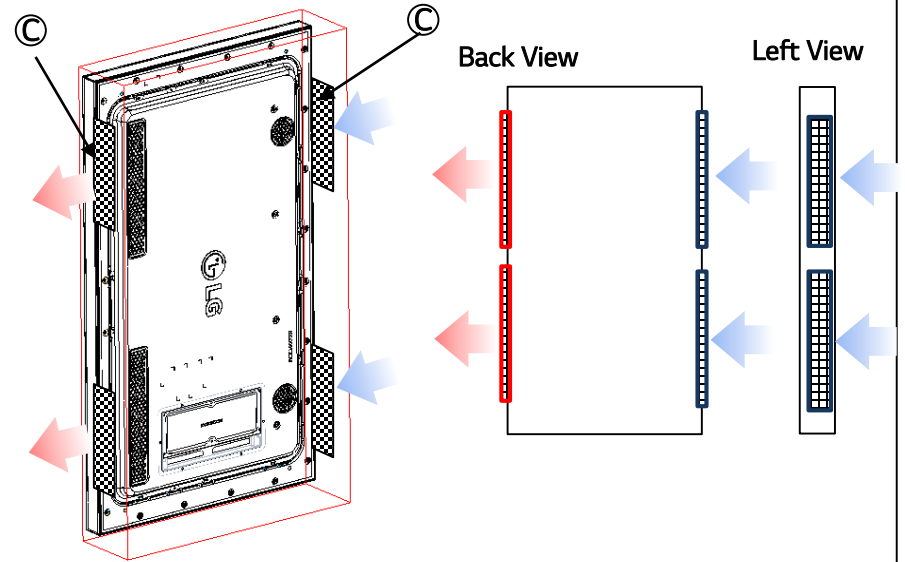
Example 3) For 2) Wall-Mounting and 3) Hung onto obstructions

In-let, Out-let: Top/Bottom



Example 4) For Wall-Mounting and Hung onto obstructions

In-let, Out-let: Right/Left



Double side enclosure Unit

Opening size :

Ⓐ Hole: 12,640 mm² or more per each

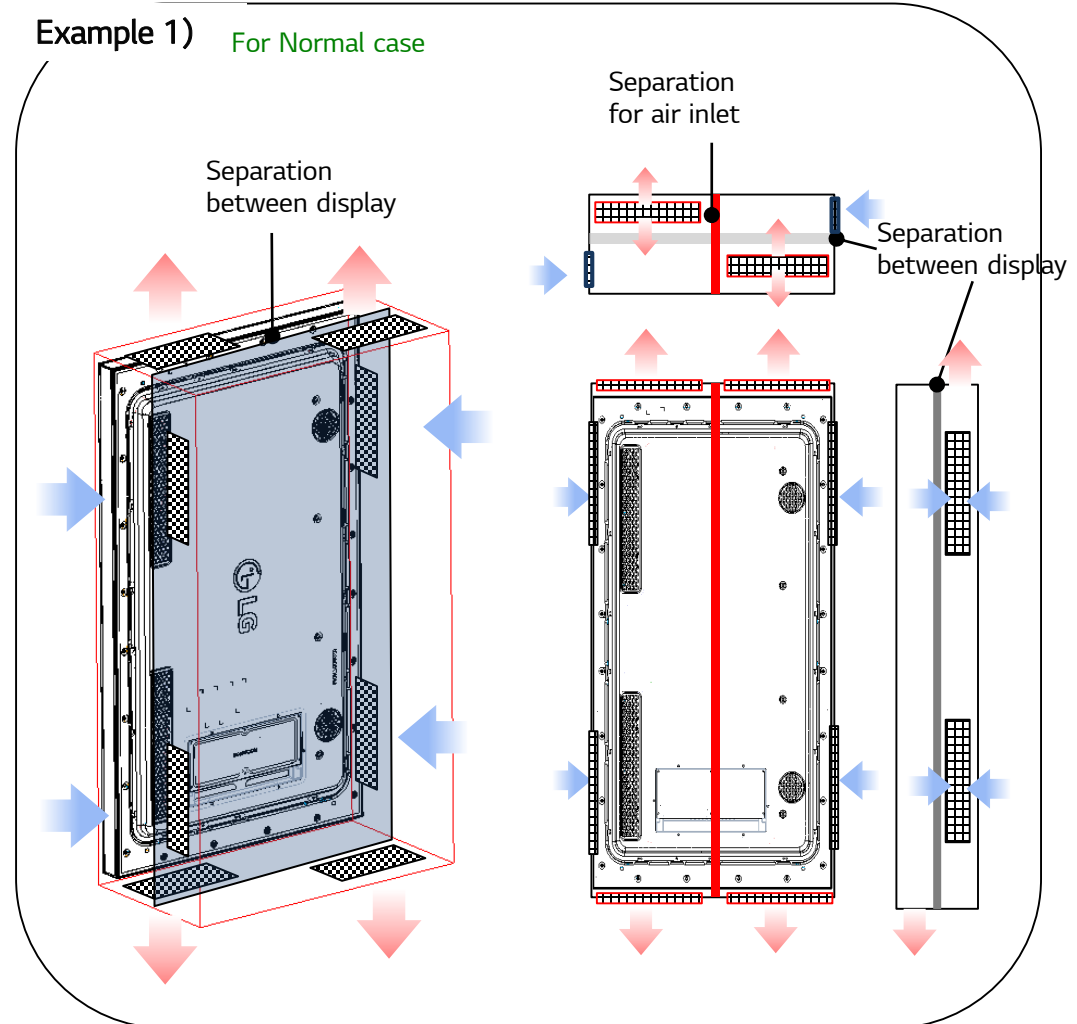
Ⓑ Hole: 25,260 mm² or more per each

All hole opening ratio (% of total opening): 50% or more

Ⓐ Hole: on the Top surface

Ⓑ Hole: on the Side surface

Example 1) For Normal case



Double side enclosure Unit

Opening size:

Ⓐ Hole: 12,640 mm² or more per each

Ⓑ Hole: 25,260 mm² or more per each

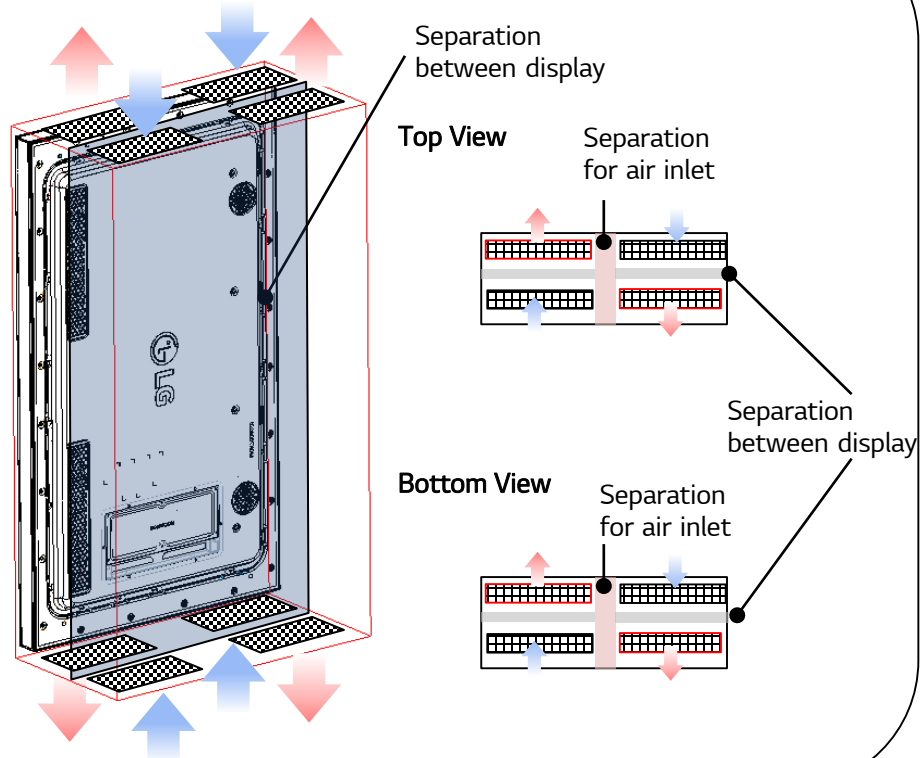
All hole opening ratio (% of total opening): 50% or more

Ⓐ Hole: on the Top surface

Ⓑ Hole: on the Side surface

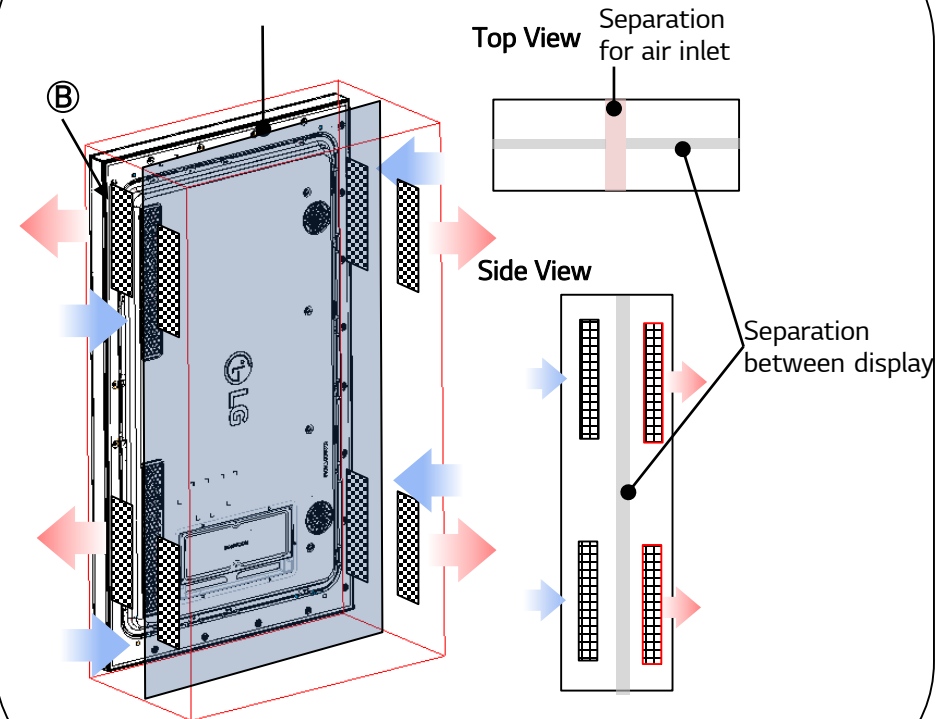
Example 2)

For obstructions both side



Example 3)

For obstructions above and below



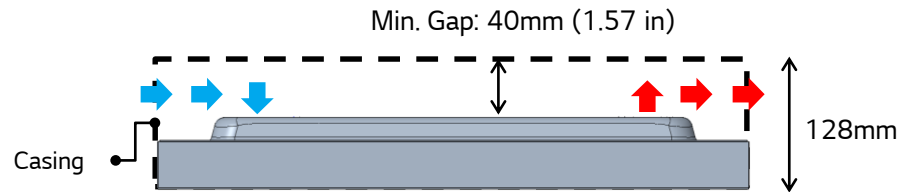
Clearance for enclosure

Installing the outdoor unit in the enclosure

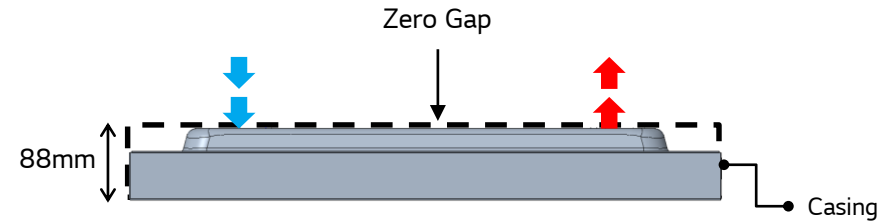
- When installing the built-in to the wall, keep the distance from the back in order to secure air flow.
- If the direction of casing ventilation is back same as XE4F, It is better to do it with zero gap.

Single Side Enclosure

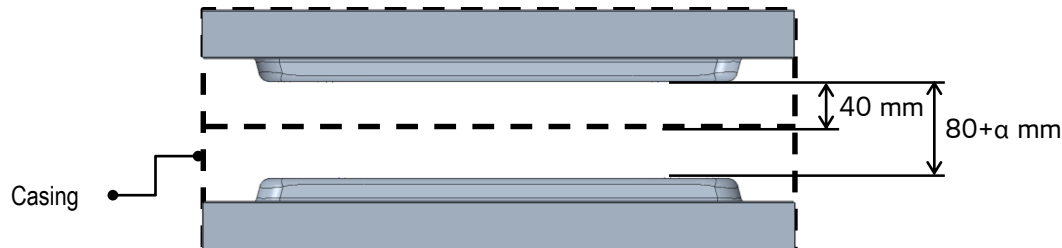
* Side(or Top) Ventilation



* Back Ventilation



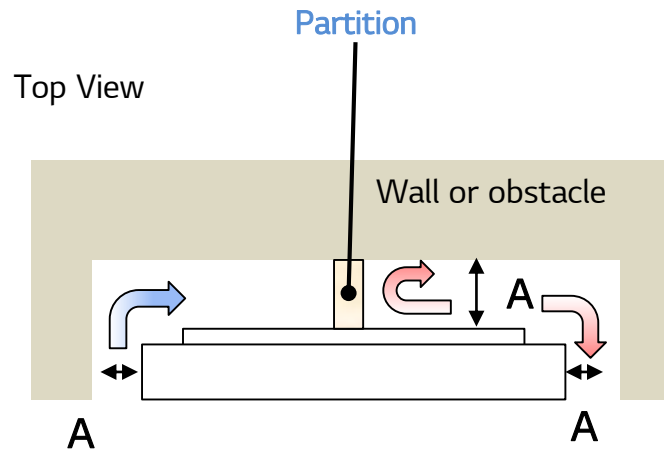
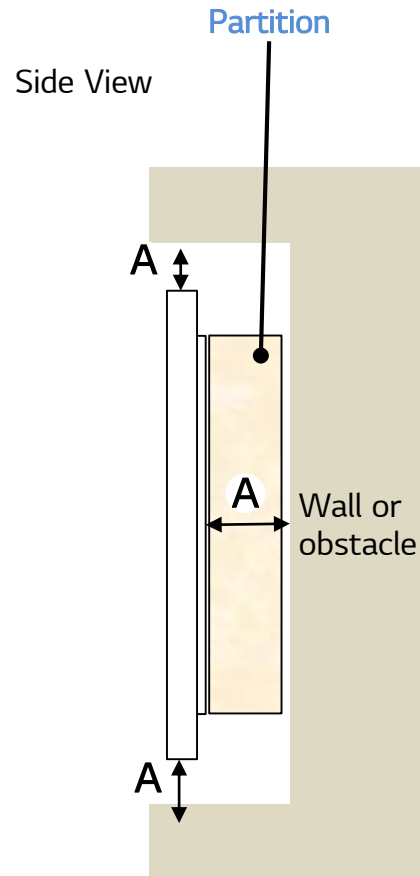
Double Side Enclosure



Clearance for built-in installation

Installing the outdoor unit only

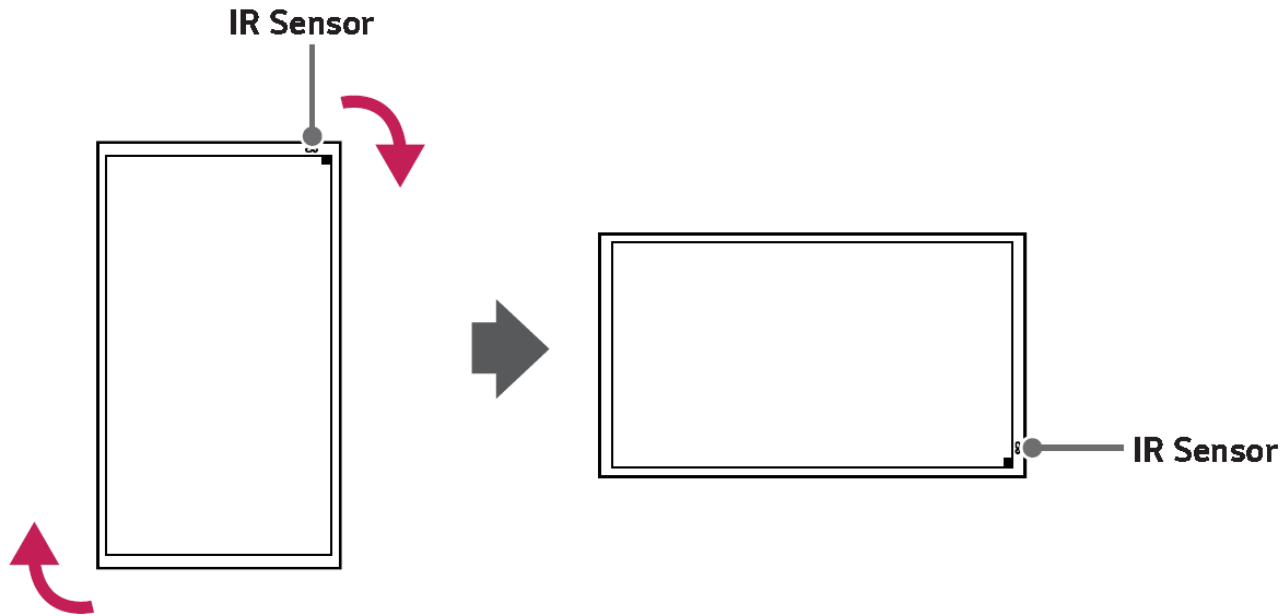
- When installing the built-in to the wall, keep the distance from the back, top, bottom, and sides of the product in order to secure air flow.
- If the unit is subject to excessive heat due to an insufficient gap, this may cause a malfunction, which will not be covered by the warranty.



A : 40mm (1.57 inch) or more

Rotation

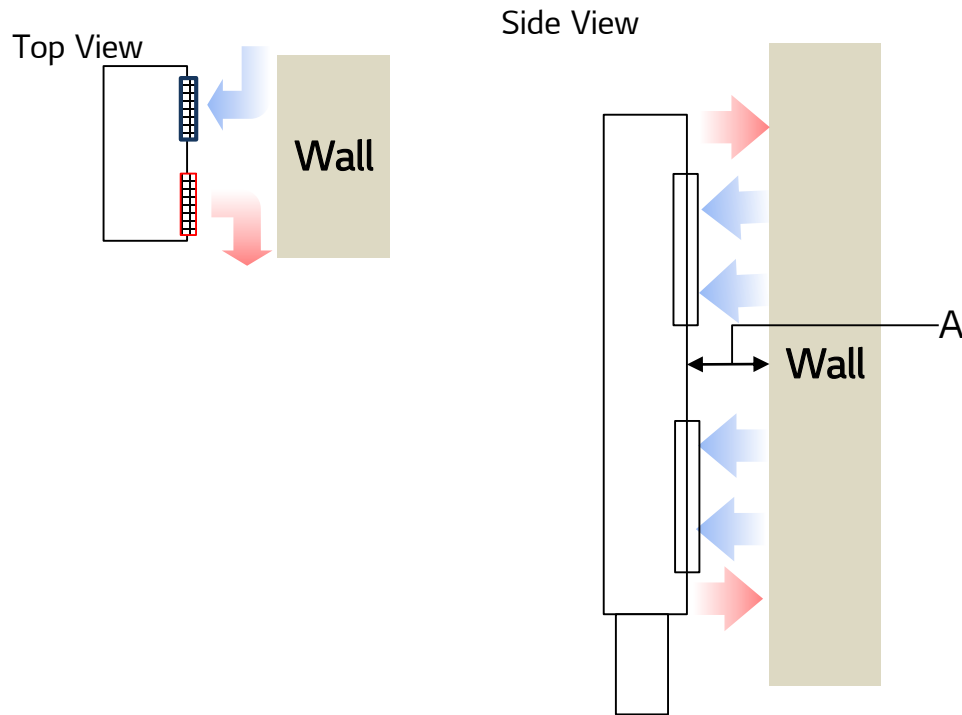
- To install in landscape orientation, rotate the screen clockwise 90 degrees while facing it from the front.



Installing Enclosure unit

Installing an enclosure unit

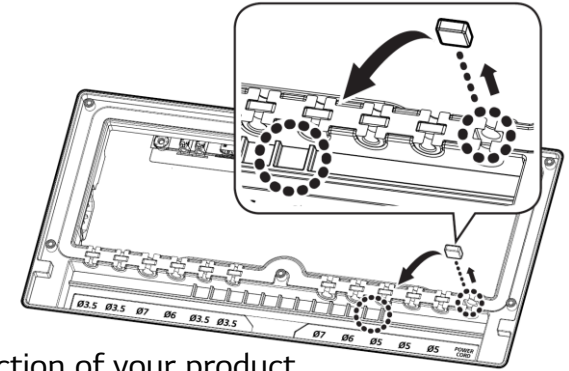
- When installing an enclosure unit close to the wall, keep the distance in order to secure air flow. Consult your provider for detailed requirements before installing the product. Excessive heat due to the use of the enclosure unit with an obstacle or a wall may cause a malfunction or a problem to the product.
- Distance for 49/55XE4F (A): 100 mm or more
- Remove any obstacle near the inlet and outlet that may affect air flow



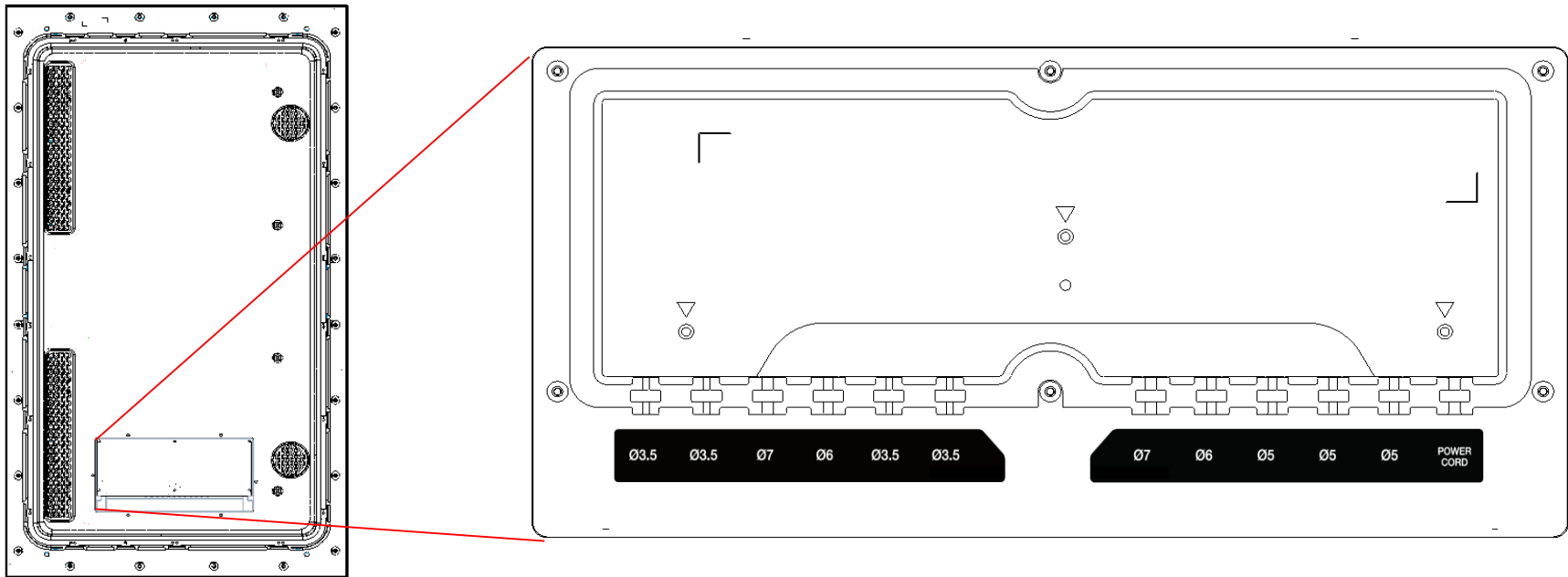
Cautions when connecting cables

Remove the appropriate hole gasket before connecting cables.

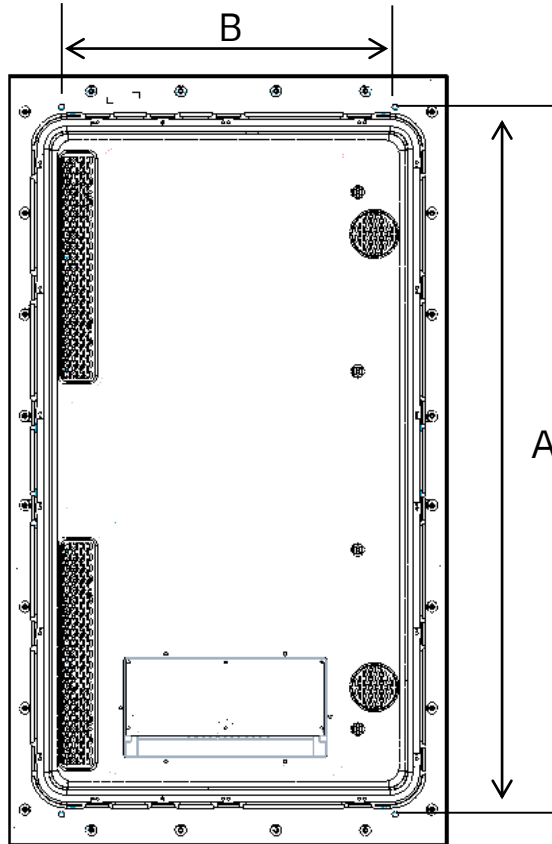
- 7 Ø hole : For inserting 7~7.5 Ø cables
- 6.5 Ø hole : For inserting 6.5~7 Ø cables
- 6 Ø hole : For inserting 6~6.5 Ø cables
- 5 Ø hole : For inserting 5~5.5 Ø cables
- 3.5 Ø hole : For inserting 3.5~4 Ø cables



When there is no cable connection, Do not remove hole gaskets. This will lessen the protection of your product against water and may result in a malfunction due to water damage, which will not be covered by the warranty.

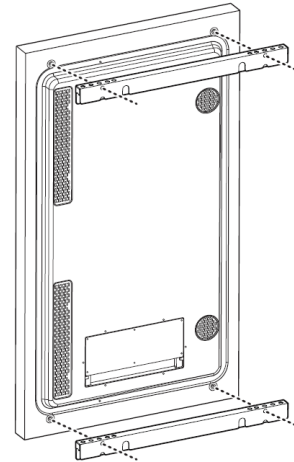


Mounting Hole



	Display mounting		Screw
	A	B	
49XE4F	1048	490	M8 /15mm
55XE4F	1186	560	

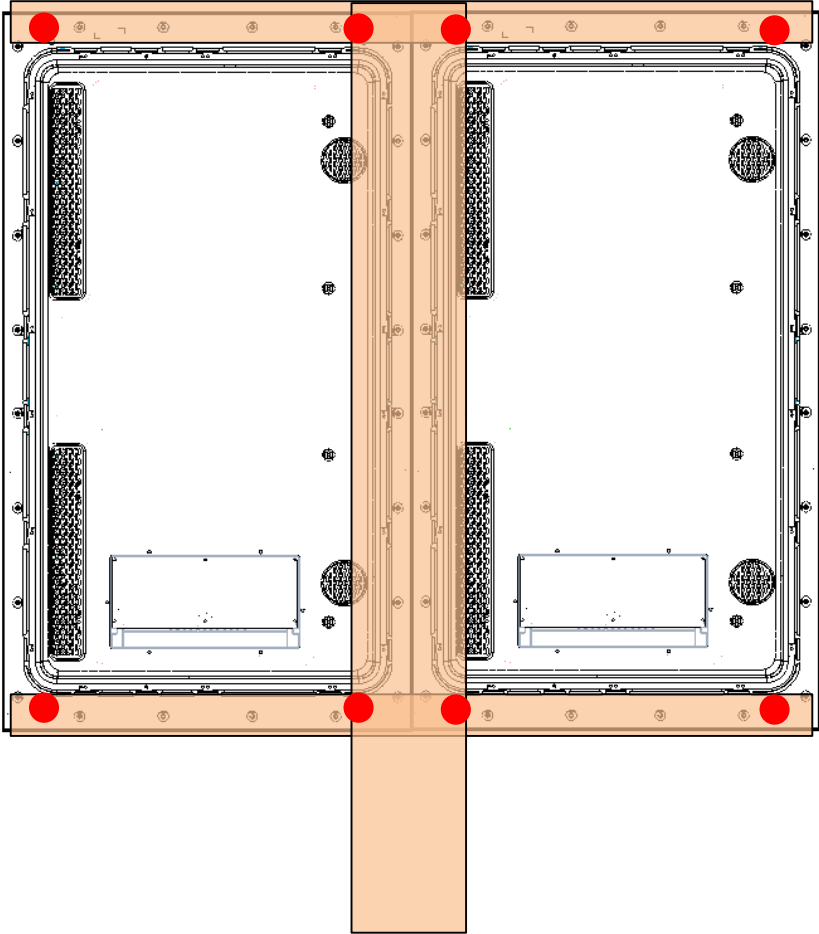
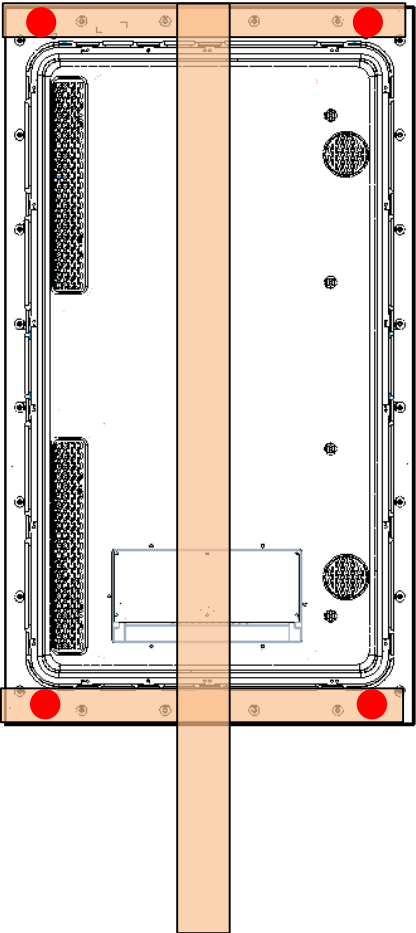
To use the VESA Wall Mount, a separate bracket is also required.



T-Bar Stand Install guide

Single pole mounting

● Fixing point of display



T-Bar Stand Install guide

Double pole mounting

● Fixing point of display

