Videowall Installation Guide

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Global Tech Sales Group
Enterprise Business Team

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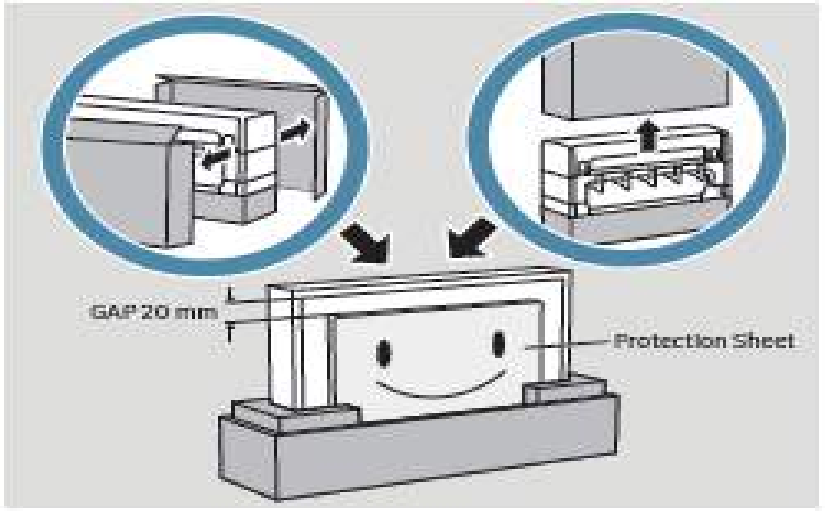
Content

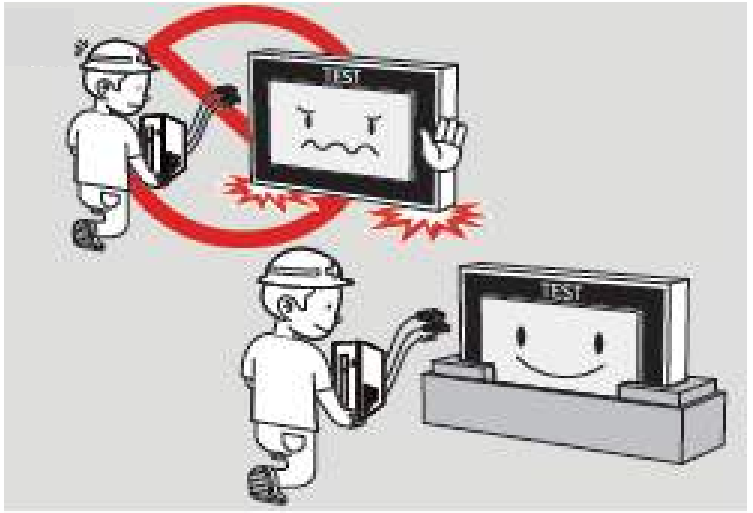
1. Preparation for Installation
2. On Installation
3. Thermal Guide

1. Preparation for Installation

1. Preparation for Installation : 1) Visual inspection

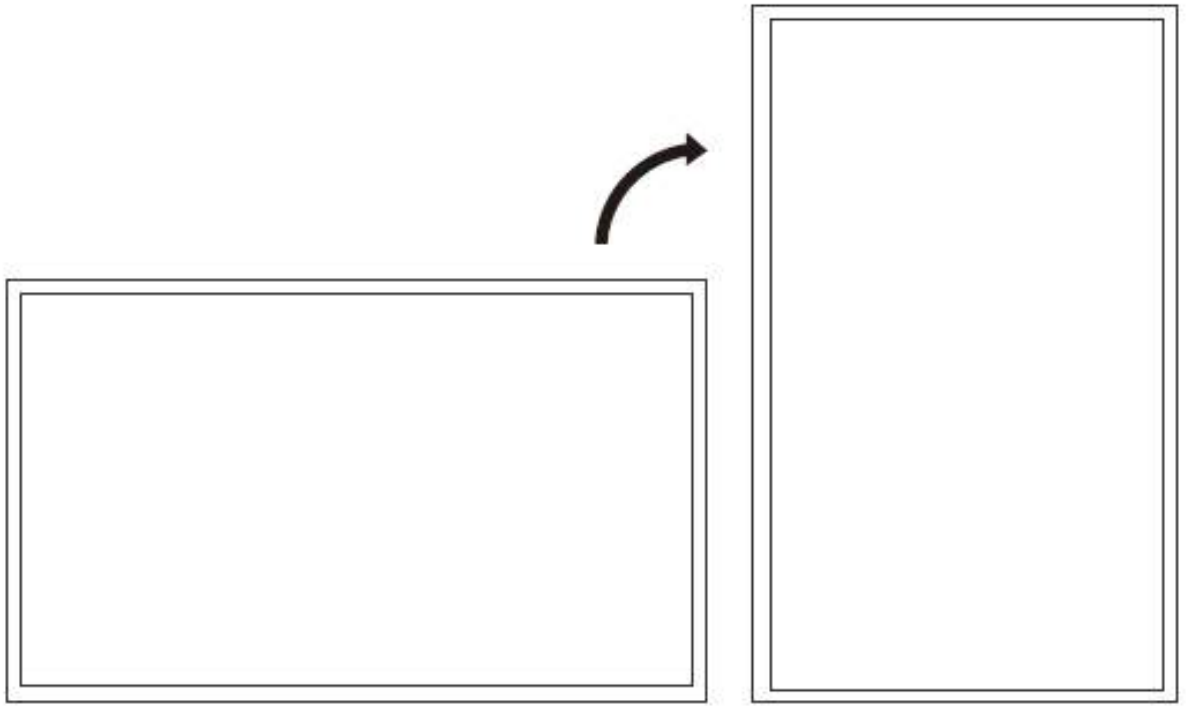
- Please use the bottom box during the check
- Please check the panel condition right after un-boxing and connecting source signal to the screens





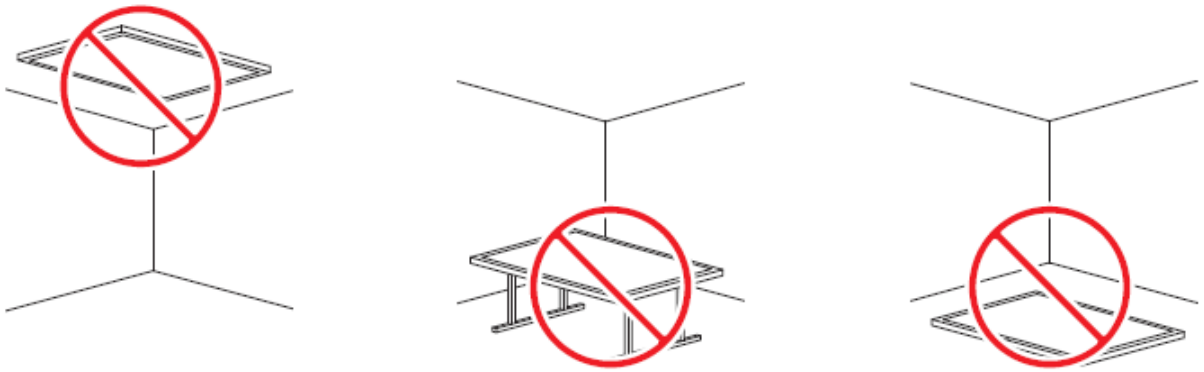
1. Preparation for Installation : 2) Rotation

- To use the product in portrait orientation, rotate it clockwise



1. Preparation for Installation : 3) Non-Installation Condition

- Do not use this model installed on a ceiling, floor, or table



- Do not use this model inclined backward or forward

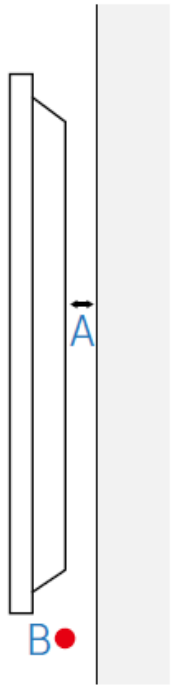
1. Preparation for Installation : 4) Ventilation(1/2)

- Installation on a Perpendicular wall

A Minimum 40 mm

B Ambient temperature: Under 40°C

- When installing the product on a perpendicular wall, allow at least 40 mm of space between the product and wall surface for ventilation and ensure that the ambient temperature is kept below 40°C.



1. Preparation for Installation : 4) Ventilation(2/2)

- Installation on an Indented wall

Plane view

A Minimum 40 mm

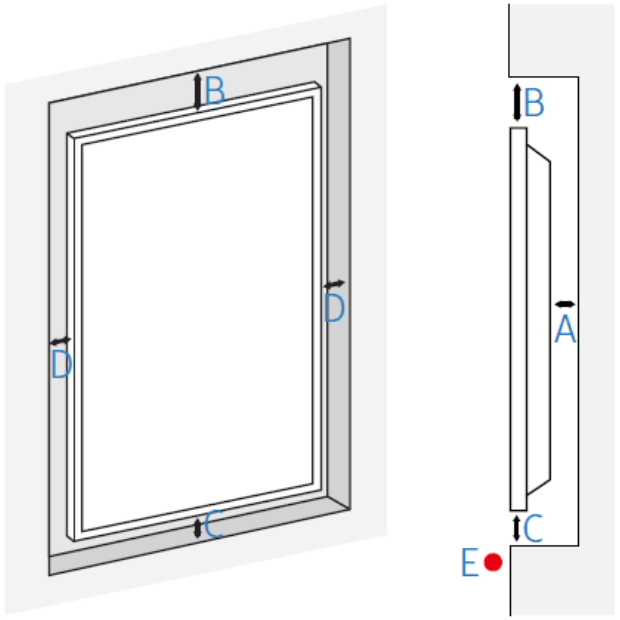
B Minimum 70 mm

C Minimum 50 mm

D Minimum 50 mm

E Ambient temperature: Under 40°C

— When installing the product on an indented wall, allow at least the space specified above between the product and wall for ventilation and ensure that the ambient temperature is kept below 40°C.

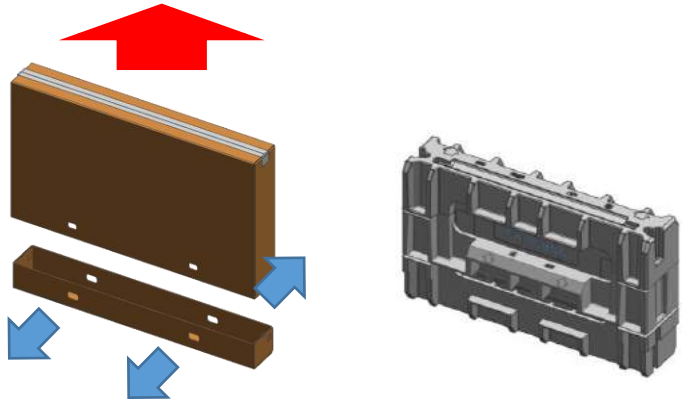


※For further ventilation Information for Video Wall, please refer to the Thermal guide on Appendix.

2. On Installation

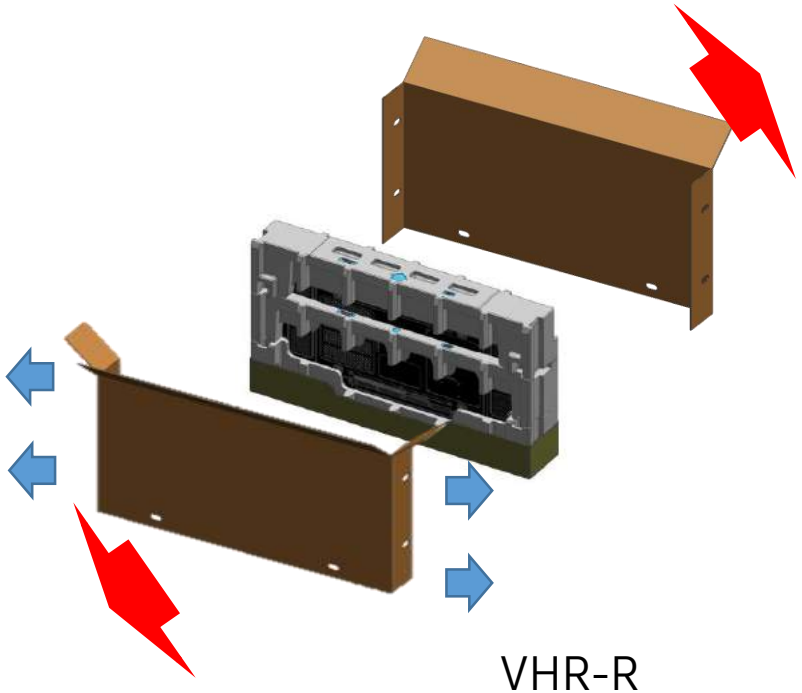
2. On Installation : 1) Un-boxing guide

- After detaching 4 Box Holders at bottom,
  Pull the upper box upward



UDE-A/B,UHF-E,UMH-E,
UHN-E,UMN-E

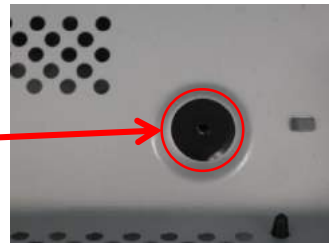
- After detaching 4 Box Holders left & right
  Pull the boxes forward & backward



VHR-R

Unboxing by using the previous way (mentioned left) can be used, but the recommendation is this way as less impact possibility to the product

2. On Installation : 2) Important Notice



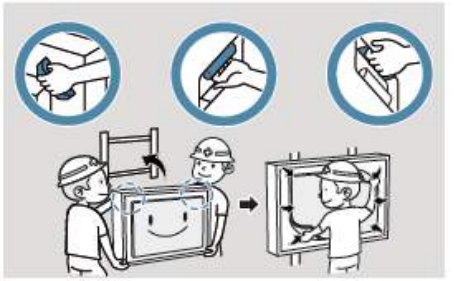
※ It is considered as “On Installation” stage when attaching the Wall Bracket Assy.

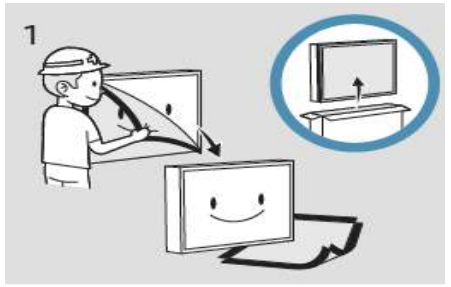
So, if the Seal is broken, all the following issues are under the Installer’s responsibility

2. On Installation : 3) Wall-mounting

- 2 persons should move & install the product
  - Use the handle when moving
  - Do not touch the panel & bezel when moving

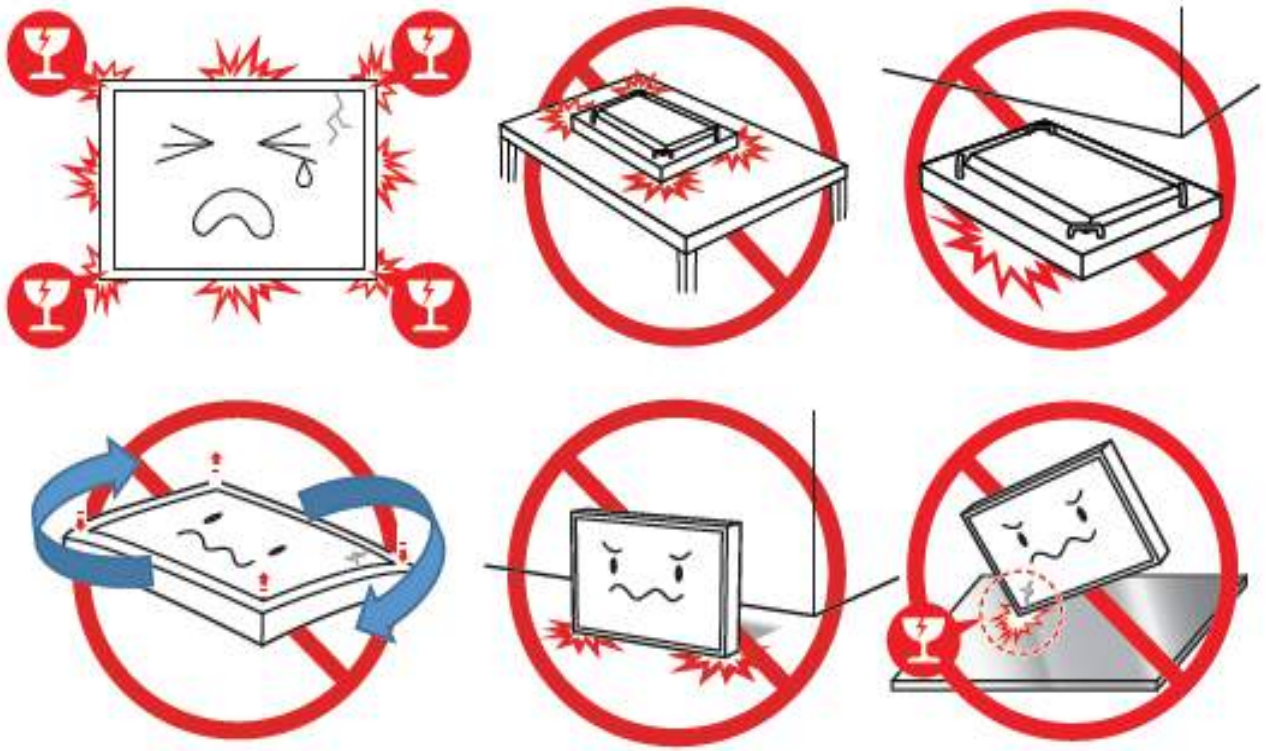
- Panel Protection Sheet should be detached right before the installation
  - Detach it from upward to downward direction
  - The Sheet can be used as mat





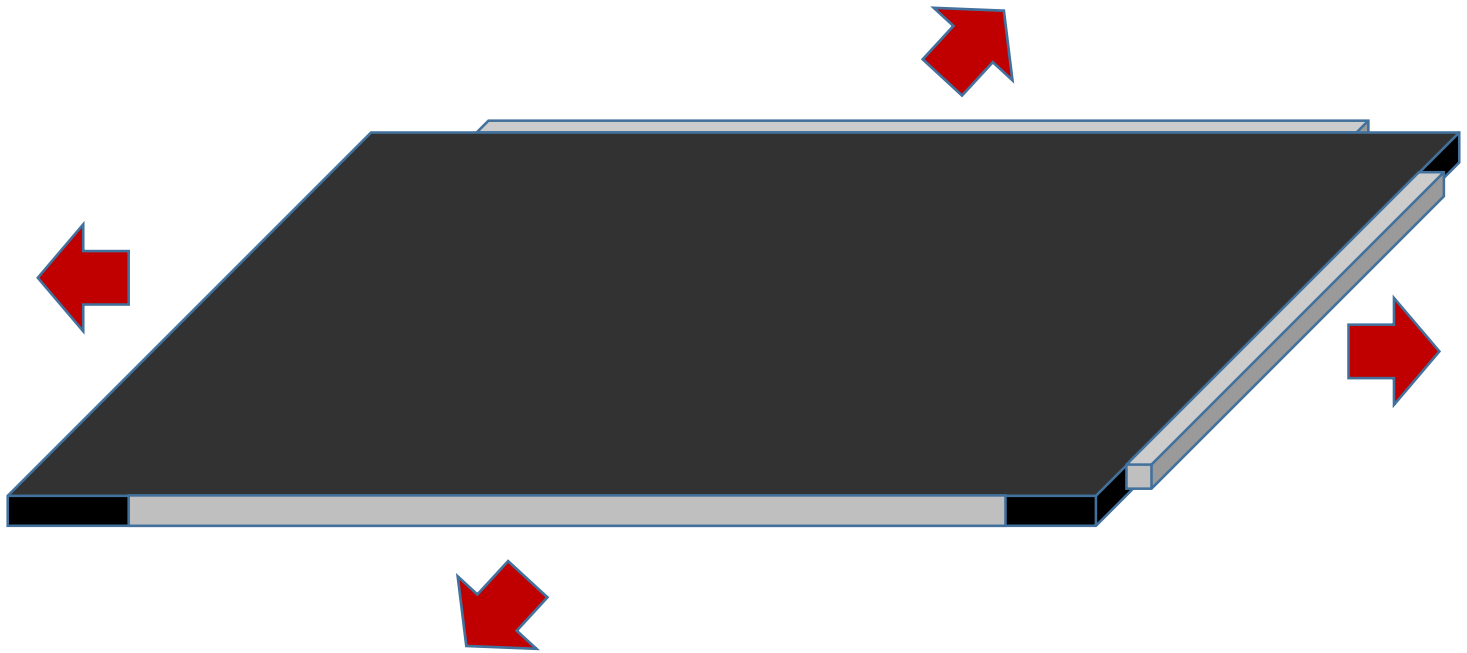
2. On Installation : 4) Cautions during handling

- Be cautious on impact, especially the edges of the product



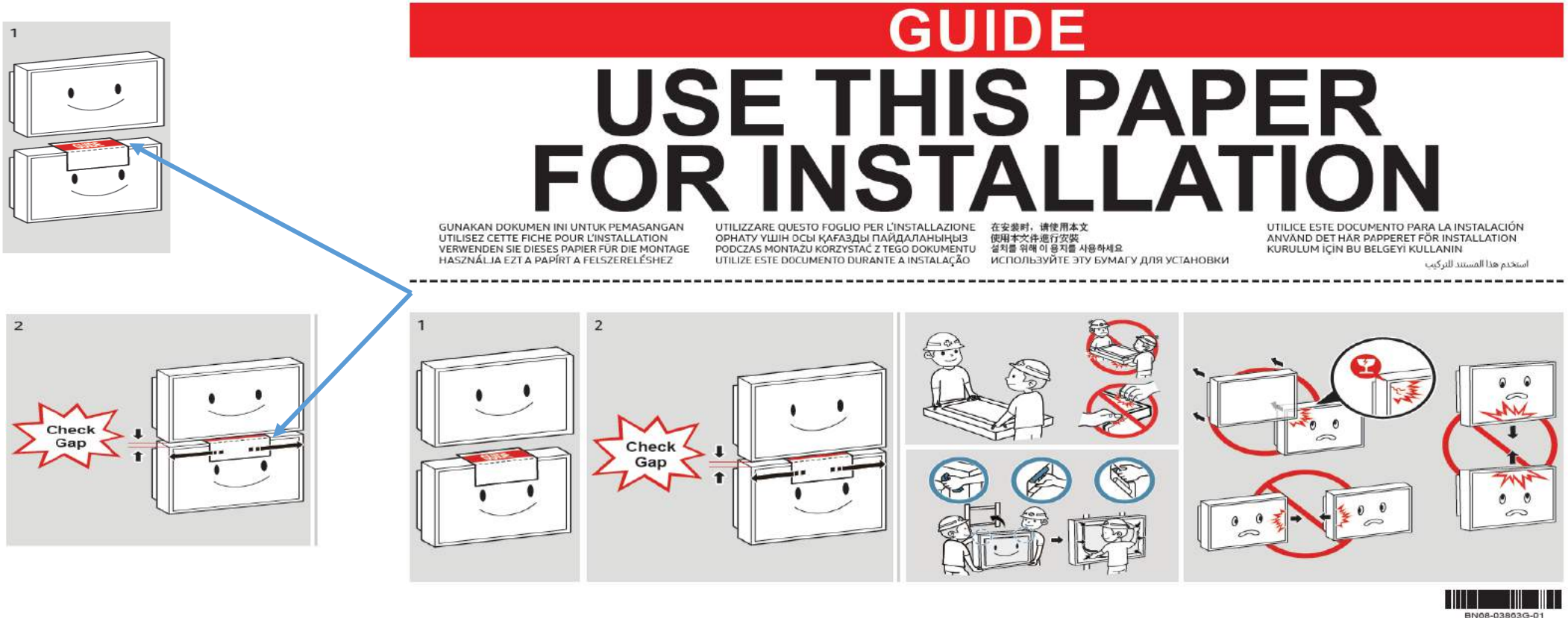
2. On Installation : 5) Detaching the sponges (VHR-R)

- VHR-R has the sponges on four faces in bezel side
- Detach them before installing



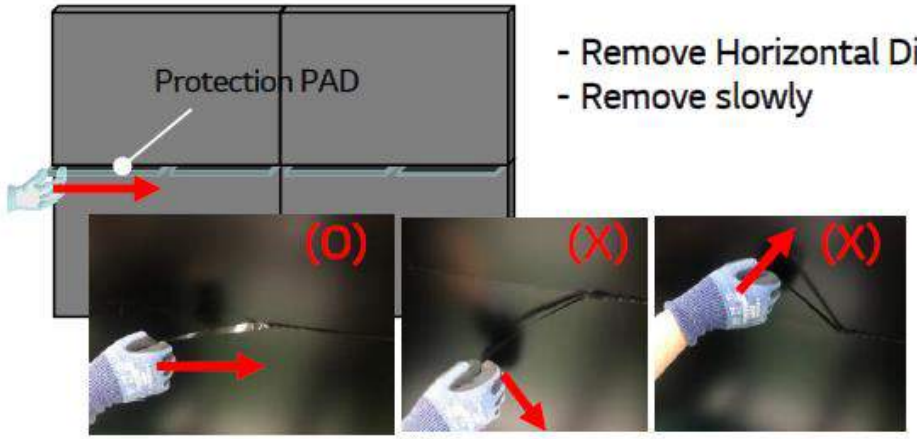
2. On Installation : 6) Reserve the GAP when installing(All products)

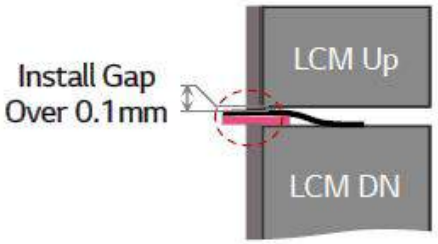
- Use the GUIDE(see below, attached on the panel) to reserve the Gap between products
- VHR-R has the sponges on four faces in bezel side
- Use handles on the rear side of a screen as depicted in the picture below while moving

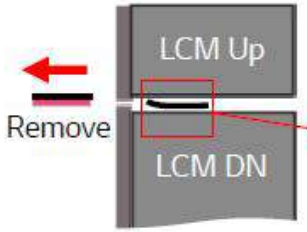


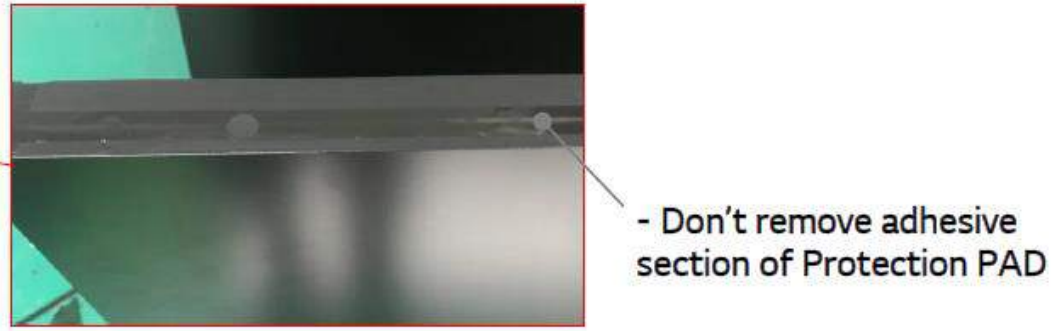
2. On Installation : 6) Reserve the GAP when installing(VHR-R)

- Detach the Black Gap Tape Guide in horizontal direction



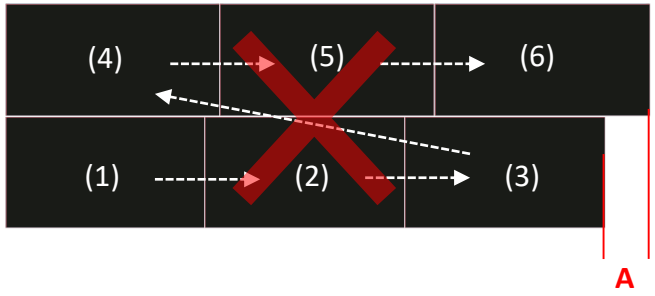


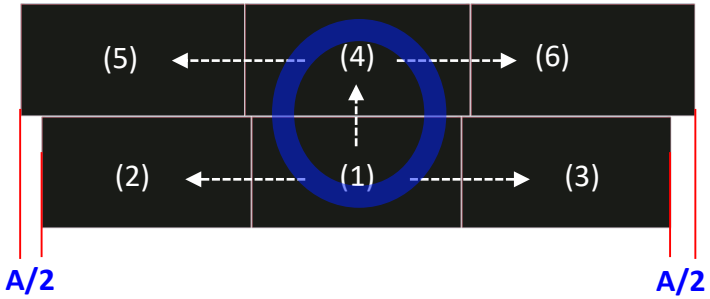




2. On Installation : 7) Cautions During Stacking(1/2)

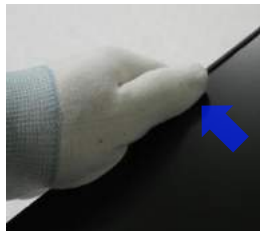
- The products on centers should be always located on center side
- Bottom center → Bottom right or left → Upper center → Upper right or left

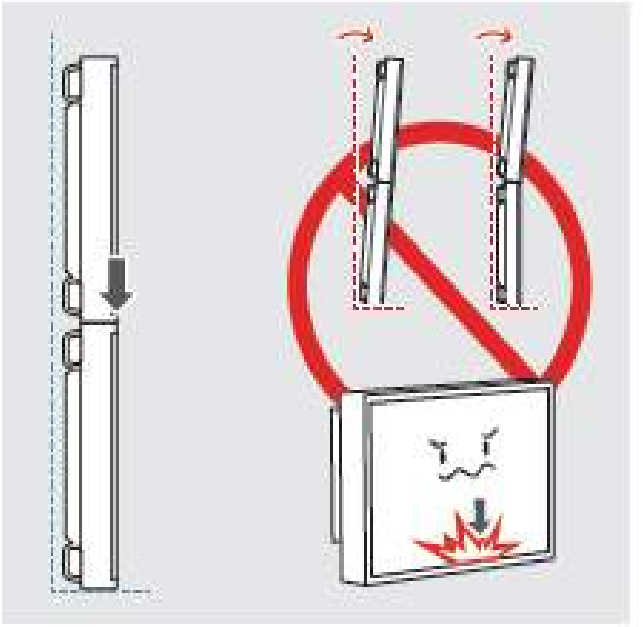




2. On Installation : 7) Cautions During Stacking(2/2)

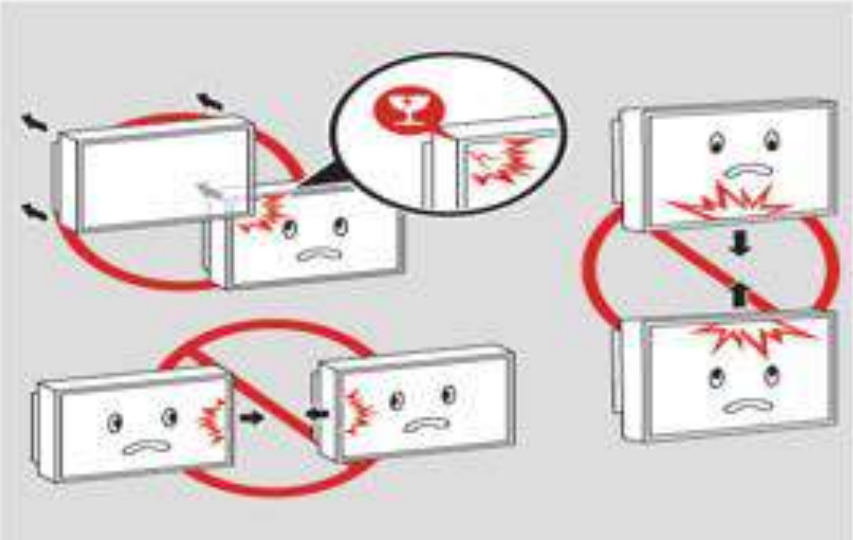
- Do not stack two products simultaneously
- Do not hold the bezel when stacking
- Do not stack the upper product forward direction, all should be upright with 90 degree





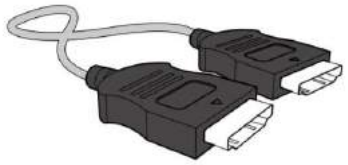
2. On Installation : 8) Wall-mount Alignment

- Be cautious to prevent panels from colliding each other and being damaged when adjusting panel positions in X,Y,Z-directions
- Be cautious to not push too strong when using Push-Pull Wall-Mount

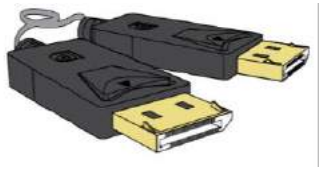


2. On Installation : 9) Video signal cables

- Use the cables packed along with the products
- Use the cables officially certified and with below length recommendation
  - 55inch product: ~2 meters
  - 46inch product: ~1.5 meters



HDMI cable



DP cable

- Condition for UHD Color On & DP/HDMI Cable length
  - UHD contents can be played at max 25 units (5x5)
  - Use the DP Cable(DP1.2, packed with product) for Loop-out
  - UHD Color Menu

    To play UHD source, UHD Color should be “On” at Menu setting of all products

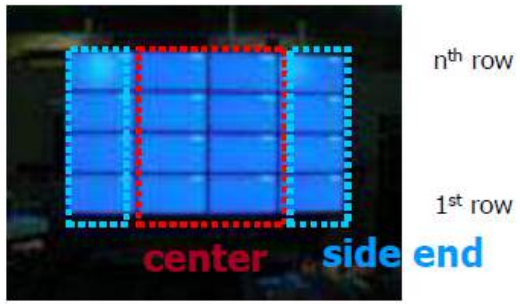
3. Thermal Guide

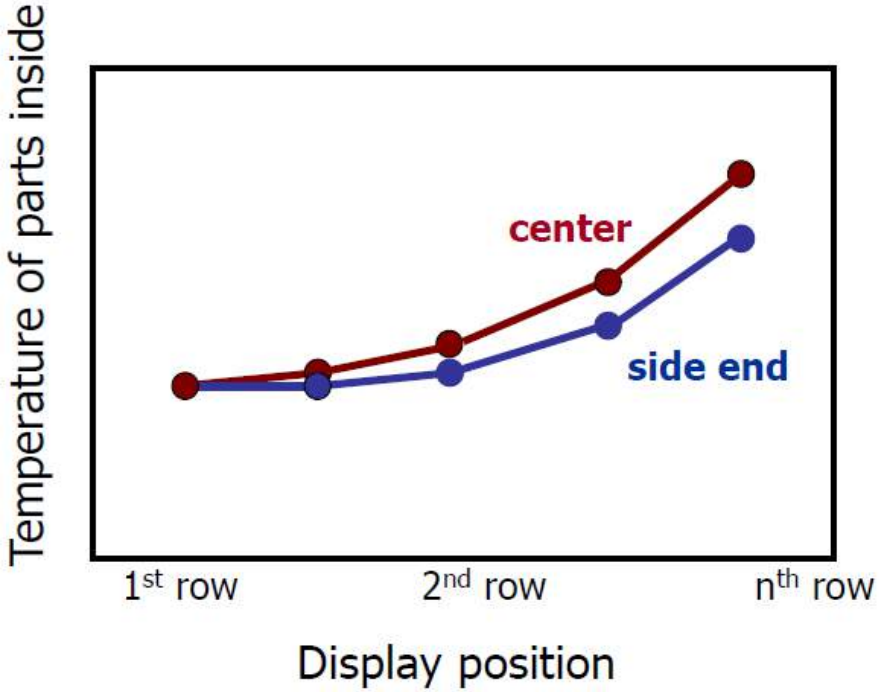
3. Thermal Guide

It should be cautious for multi connection because of the following reason.

The temperature in the center (upper) of connection is mostly increased in horizontal (vertical) connections because natural convection affects air temperature in the region.

It is also considered the position of multi connected devices; in case of installation near the upper wall, the air flow is restricted by the wall and temperature is increased more. Therefore, additional consideration like fan or keeping proper distance from wall is necessary.



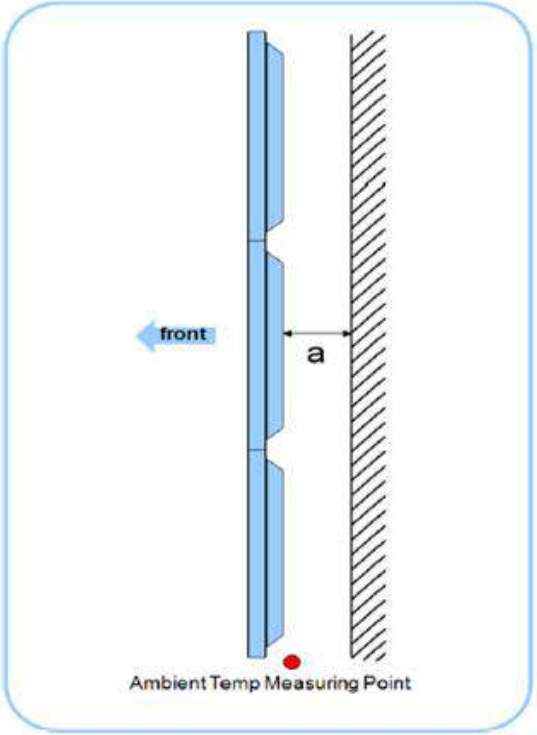


3. Thermal Guide

Wall Mount Condition (46”/55”)

- It is strongly recommended that ambient temperature is under 30 ℃ for video-wall installation.
- Considerable amount of heat is added to the upper units.
  → internal T of uppermost unit is 5 ~ 10 ℃ higher than the lowest unit.
  (Even there is adequate distance from the wall)

- Min. distance from the wall should be greater than a mm
- Min. distance between ceiling and top of screens should be greater than b mm
- Min. distance between ground and bottom of screens should be greater than b mm



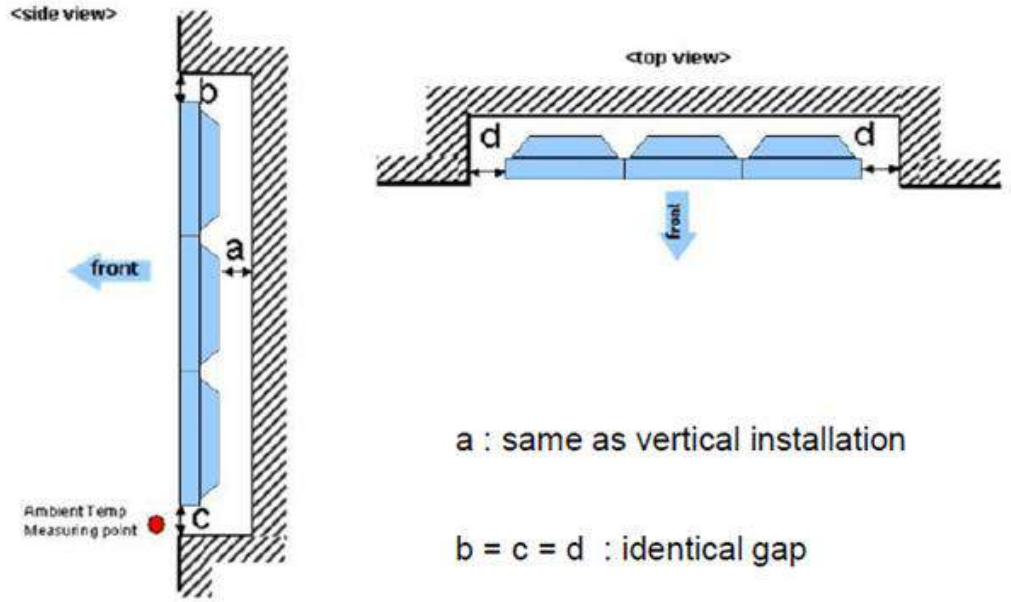
Recommended distances

Configuration	2 x 2	3 x 3	4 x 4	5 x 5
a [mm]	80	120	160	200
b [mm]	100	150	200	250

※ For more than 6 rows, auxiliary air conditioning system will be required.
※ In case of bigger matrix than 5x5, contact local Samsung representative

3. Thermal Guide

Embedded Wall Mount Condition (46”/55”)



a : same as vertical installation

b = c = d : identical gap

- Ambient temperature under 30 ℃ is also recommended for embedded video-wall.
- Distance from the rear wall is same as vertical wall mount case.

Recommended distances

Configuration	2 x 2	3 x 3	4 x 4	5 x 5
a [mm]	80	120	160	200
b (= c = d) [mm]	100	150	200	250

※ Additional fans are required in order to decrease side gaps(b, c, d) For aesthetic purpose

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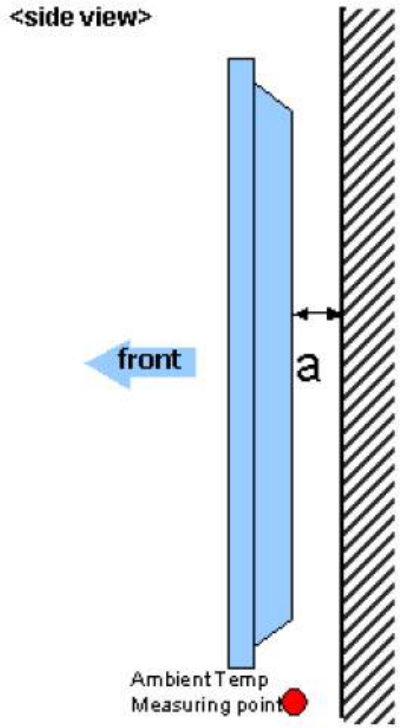
Appendix: Thermal Guide for Single screen

1. Vertical wall mount condition



a: ≥ 15mm (LED BLU less than 65”)
40mm (other LFD models)

Ambient temperature ≤ 35℃

- *Proper thermal management is applied in commercial model.*
- *No additional consideration is not necessary with ambient temperature under 35C.*