

# **P100 Pedestal and F100 Frame for FHD552-X**

**Installation Manual**

020-101714-01



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## NOTICES

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### WARRANTY

Products are warranted under Christie's standard limited warranty, the complete details of which are available by contacting your Christie dealer or Christie. In addition to the other limitations that may be specified in Christie's standard limited warranty and, to the extent relevant or applicable to your product, the warranty does not cover:

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- e. Problems or damage caused by the use of any lamp, replacement part or component purchased or obtained from an unauthorized distributor of Christie lamps, replacement parts or components including, without limitation, any distributor offering Christie lamps, replacement parts or components through the internet (confirmation of authorized distributors may be obtained from Christie).
- f. Problems or damage caused by misuse, improper power source, accident, fire, flood, lightning, earthquake or other natural disaster.
- g. Problems or damage caused by improper installation/alignment, or by equipment modification, if by other than Christie service personnel or a Christie authorized repair service provider.
- h. Problems or damage caused by use of a product on a motion platform or other movable device where such product has not been designed, modified or approved by Christie for such use.
- i. Problems or damage caused by use of a projector in the presence of an oil-based fog machine or laser-based lighting that is unrelated to the projector.
- j. For LCD projectors, the warranty period specified in the warranty applies only where the LCD projector is in "normal use" which means the LCD projector is not used more than 8 hours a day, 5 days a week.
- k. Except where the product is designed for outdoor use, problems or damage caused by use of the product outdoors unless such product is protected from precipitation or other adverse weather or environmental conditions and the ambient temperature is within the recommended ambient temperature set forth in the specifications for such product.
- l. Image retention on LCD flat panels.
- m. Defects caused by normal wear and tear or otherwise due to normal aging of a product.

The warranty does not apply to any product where the serial number has been removed or obliterated. The warranty also does not apply to any product sold by a reseller to an end user outside of the country where the reseller is located unless (i) Christie has an office in the country where the end user is located or (ii) the required international warranty fee has been paid.

The warranty does not obligate Christie to provide any on site warranty service at the product site location.

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Preventative maintenance is an important part of the continued and proper operation of your product. Please see the Maintenance section for specific maintenance items as they relate to your product. Failure to perform maintenance as required, and in accordance with the maintenance schedule specified by Christie, will void the warranty.


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The product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's own expense.

CAN ICES-3 (A) / NMB-3 (A)

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The product is designed and manufactured with high-quality materials and components that can be recycled and reused. This symbol  means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, there are separate collection systems for used electrical and electronic products. Please help us to conserve the environment we live in!

# Addendum

Translated copies of this document are provided on the CD in the back of this document. The CD may also contain additional product documentation. Read all instructions before using or servicing this product.

本文档的翻译副本在本文档背面的 CD 上提供。该 CD 中还可能包含其他产品文档。使用或维修本产品之前请务必阅读所有说明。

文件背面的光碟提供了本文件的翻譯副本。這張光碟可能另外包含其他產品文件。請先閱讀所有指示再使用或送修本產品。

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Le copie tradotte di questo documento sono fornite sul CD, sul retro di questo documento. Il CD potrebbe anche contenere altra documentazione sul prodotto. Si prega di leggere tutte le istruzioni prima di utilizzare questo prodotto o sottoporlo a manutenzione.

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# Introduction

Every effort has been made to ensure the information in this document is accurate and reliable; however, due to constant research the information in this document is subject to change without notice.

## Using this Manual



**Warning!** Failure to comply with the following could result in death or serious injury.

- To prevent physical injury or equipment damage it is important [Installation and Setup](#) on page 4 is read in its entirety before installing this product.

This manual provides technical information for assisting qualified service technicians in the installation of the P100 Pedestal and F100 Frame.

## Safety Warnings and Guidelines

Please read the following warnings before commencing installation to ensure the safety of those working at the installation site.

### Stacking Limitations

Do not stack more than six F100 Frames when using the approved P100 Pedestals. Stacking the frames higher than the recommended limit increases the possibility of the display wall becoming unstable and unsafe, and also increases the chance that the pedestals may buckle from the extra weight.

### Using Christie P100 Pedestals

It is strongly recommended that the P100 Pedestals are used with both the F100 Frames and the FHD552-X LCD Panels. Installers must ensure that the LCD panels are mounted to or within a secure structure that can adequately support the weight of the stacked panels. If a display wall is built with any other platform, the installer must ensure that the platform is stable and can support the weight of the frames and LCD panels (to their stacking limits).

Ensure that pedestals are level before stacking the F100 Frames and LCD panels. See [External Support](#) on page 3.

## External Support



**Danger!** Failure to comply with the following results in death or serious injury.

- Stacked pedestals, frames, and LCD panels can tip over and cause severe injury or damage when not properly secured. The display wall must be supported during and after installation to a structurally sound surface, such as a permanent wall or an installer-approved free-standing external support structure.

The P100 Pedestals, F100 Frames, and LCD panels must be stacked onto a level surface. If stacked on a non-level or inclined surface, there is an increased risk that the structure could tip over and cause serious injury or damage, even when mounted in secured or free-standing external structures. It is strongly recommended that P100 Pedestals be used to create the platform for a display wall incorporating the F100 Frames and FHD552-X LCD Panels.

## Lifting LCD Panels



**Caution!** Failure to comply with the following could result in minor or moderate injury.

- Lift equipment must be used to lift LCD panels into position on higher rows. A crew of two can lift an LCD panel into position on the first row.

## Airflow Considerations

The room temperature measured all around the display wall must not be greater than the operating temperature, which is between 5°C (41°F) and 40°C (104°F). It is up to the installer to determine, based on their installation, how much open area is required around the display wall for adequate airflow.



# Installation and Setup

Install the display wall for the FHD552-X LCD panel as a single or multi unit system using the P100 pedestal and F100 frame. Additional important information relating to the display wall can be found in the *Installing the FHD552- X on the ML10/MP10 LCD Video Wall Mount Instruction Sheet (P/N: 020-101712-xx)* and the *FHD552-X LCD Panel User Manual (P/N: 020-000741-xx)*. The installer should be familiar with this information before starting the installation.

These instructions are intended to provide qualified installers with step-by-step installation information; however, circumstances and conditions may vary from one installation site to another and the installer has the sole and final responsibility for ensuring that the system is installed with due regard for all relevant safety considerations.



**Caution!** Failure to comply with the following could result in minor or moderate injury.

- Installation of a display wall for the FHD552-X LCD panels should be undertaken only by qualified installers with the requisite training, knowledge and skill to properly install the system.

## Components

All major components required to assemble a complete display wall are packaged and shipped separately to the installation site. This includes the LCD panels, P100 Pedestals, F100 Frames, and the LCD video wall mounts. Each component comes with the hardware required for installation. Check the contents of your shipment against the list below to make sure that you have all the necessary hardware.

Trained service technicians are available to diagnose and correct system-related problems. If you encounter any problems during the setup and installation of your system, contact the authorized dealer or Christie Partner from whom the system was purchased.

### For P100 pedestals (Hardware kit P/N: 000-102657-xx)

- (2) Panel caps
- (16) Flat washers
- (8) M6 hex nuts  $\phi 6.5$
- (8) M6 hex head bolt
- (8) Lock washers
- (8) M8 socket head cap screws for securing the frame to the pedestal
- (16) Flat washers  $\phi 8.4$
- (8) M8 hex nuts for securing the frame to the pedestal

## For F100 frames (Hardware kit P/N: 000-102673-xx)

- (2) Bracket extension hooks
- (4) Flat washers  $\phi 4.3$
- (4) M4 hex nuts
- (4) Flat washers  $\phi 6.4$
- (10) Flat washers  $\phi 8.4$
- (10) M8 socket head cap screws
- (4) M6 socket head cap screws
- (2) Grommets

## Kits required

- P100 LCD Pedestal (P/N: 135-106108-xx)
- F100 LCD Frame (P/N: 135-105107-xx)
- FHD552-X LCD Panel (P/N: 135-004105-xx)
- **Optional:** LCD Frame Trim 8ft (P/N 135-108100-xx)

## Tools and hardware required

- Level
- Phillips screwdriver
- 5 mm allen key for attaching P100 Pedestals
- 6 mm ball driver metric screwdriver for attaching F100 Frames
- 24 mm open ended/adjustable wrench for tightening locknut on pedestal feet
- 7 mm open ended wrench for fastening extension hook
- (2) 10 mm open ended wrenches for fastening pedestal to pedestal
- 13 mm open ended wrench for fastening frame to pedestal

## Service and support

Trained service technicians are available to diagnose and correct system-related problems. If you encounter any problems during the setup and installation of your system, contact the authorized dealer or Christie Partner from whom the system was purchased.

# Installation

## Assemble the pedestals



**Danger!** Failure to comply with the following results in death or serious injury.

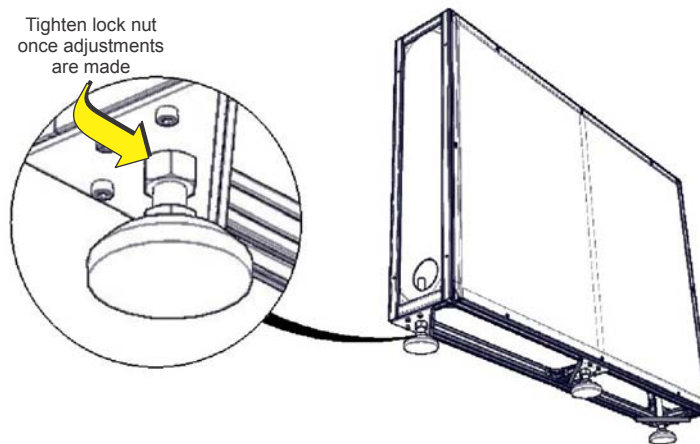
- Once the pedestal platform is constructed it is essential an external support is constructed before adding the frames, video wall mounts and LCD Panels to prevent the display from tipping and causing serious injuries to those at the installation site.



**Caution!** Failure to comply with the following could result in minor or moderate injury.

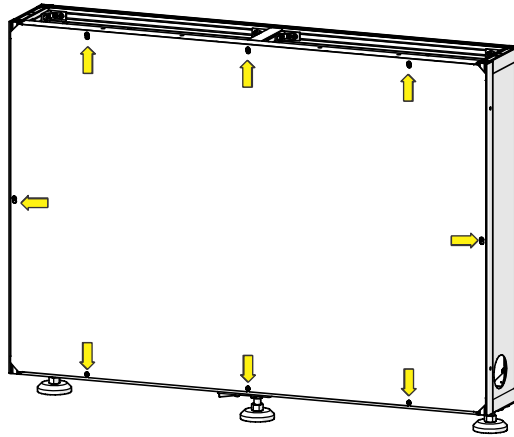
- Depending on the size of the wall, assemble the platform beginning with the center pedestal, working outwards to the end of each row.

1. Slide two pedestals together aligning the front and rear edges.
2. Using a level, adjust the three pedestal feet by rotating them until the two pedestals are level on all sides and with each other.
3. Use a 24 mm open ended/adjustable wrench to tighten the lock nut on the feet once the required adjustment is made.



4. Inspect the inside corners of the pedestal to confirm that the pedestal feet remain fully engaged in the pedestal. If you cannot see any threads at the top of the corner bracket where the foot is installed, then you have over-extended the pedestal foot and must correct this before moving on.

- Using a Phillips screwdriver, loosen the eight screws on the rear pedestal skin. Slide the rear skin up and out to access the mounting points on the pedestal.



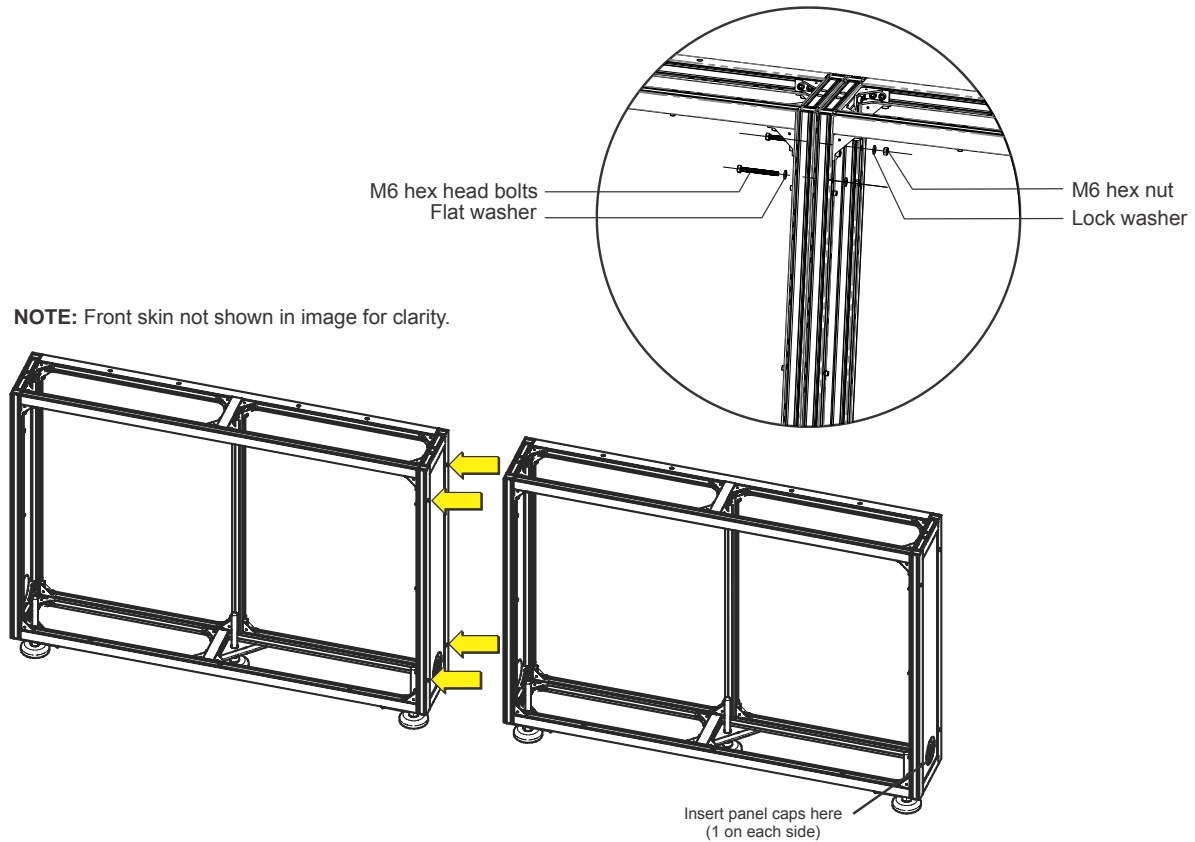
- Loosely fasten the two pedestals together using four M6 hex nuts, four M6 hex head bolts, eight flat washers and four lock washers.

Keep the hardware a little loose at this point to allow you to tweak the alignment between pedestals as more are added to the platform. Do not completely tighten the hardware on the pedestal until the first row of frames are installed. For more information, refer to [Install frames onto pedestals](#) on page 8.

- Slide the next pedestal into position and, using a level, adjust the height until the pedestal becomes level with the pedestals already in the row.
- Repeat steps 1 to 5 for each additional pedestal.
- Verify that the entire platform structure is level and that all rear edges between pedestals are flush.

Apply downward pressure on the pedestal to ensure that the feet are flat to the floor.

- Do not completely tighten the hardware on the pedestal until the first row of frames are installed. For more information, refer to [Install frames onto pedestals](#) on page 8.
- Once the pedestal assembly is constructed snap the panel caps into place (see image below).



## Install frames onto pedestals



**Danger!** Failure to comply with the following results in death or serious injury.

- Stacked pedestals, frames and LCD panels can tip over and cause severe injury or damage when not properly secured. The display wall must be supported during and after installation to a structurally sound surface, such as a permanent wall or an installer-approved free-standing external support structure.



**Caution!** Failure to comply with the following could result in minor or moderate injury.

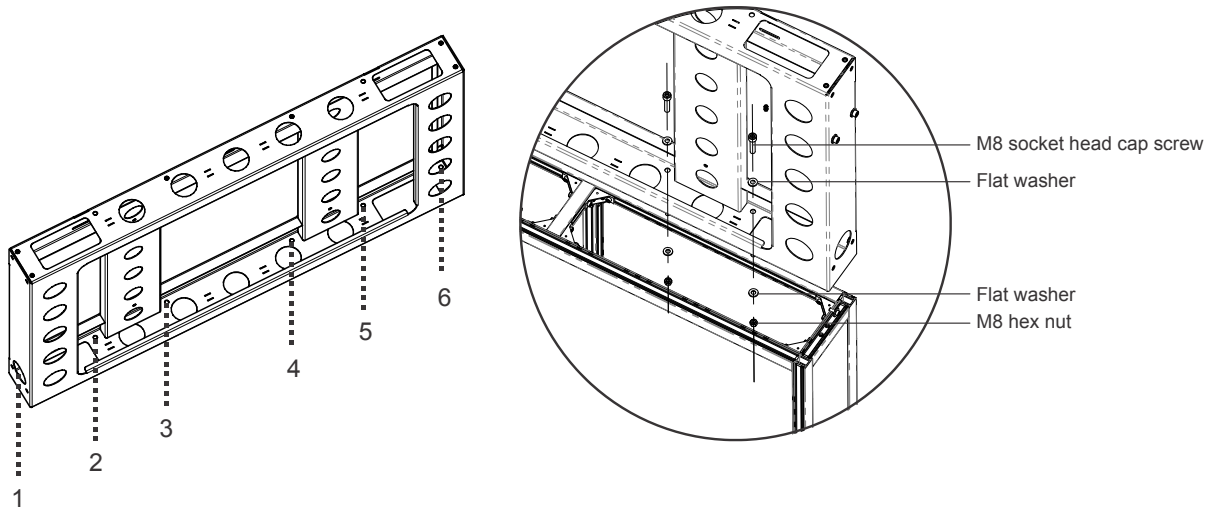
- Lift equipment **MUST** be used to lift LCD panels into position on higher rows. A crew of two can lift an LCD panel into position on the first row.



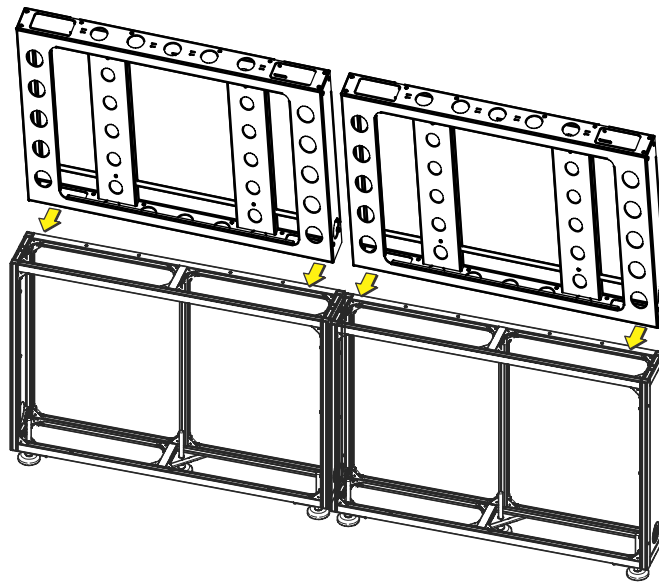
Depending on the size of the wall, assemble the frames starting at the center of the pedestal assemble, working outwards to the end of each row.

1. Position the first frame so that the six mounting points of the frame line up with the points on the pedestal.
2. Loosely fasten the frame to the pedestal using six M8 socket head cap screws, 12 washers and six M8 hex nuts.

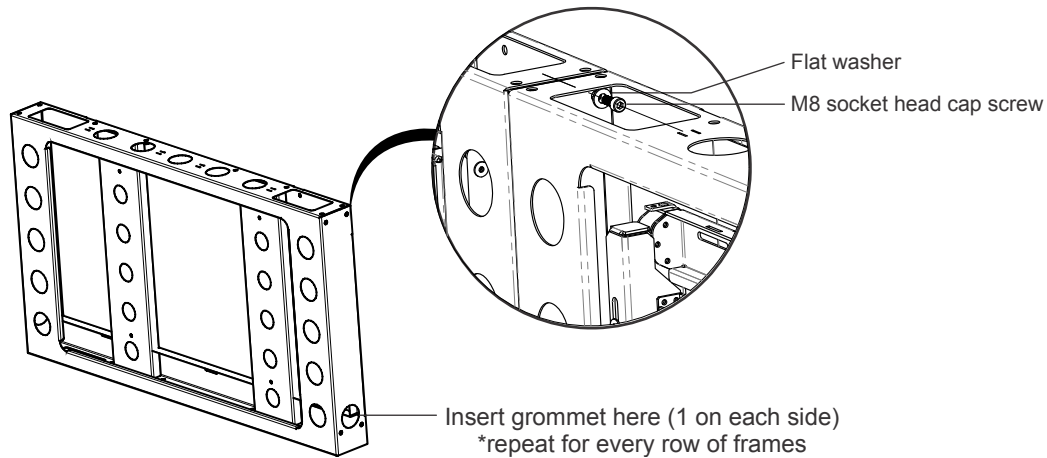
Keeping the hardware a little loose at this point will allow you to tweak the alignment between frames as more are added to the platform.



3. Place the next frame onto the next pedestal and repeat step 1.



4. Using four M8 socket head cap screws and four flat washers (φ8.4), secure the two frames to one another using the four mounting points, as shown below. Hand tighten the hardware to allow small adjustments while the other frames are added to the row.



5. Check the alignment between each frame and make adjustments, as required.
6. Completely tighten the hardware between the frames and pedestals before adding the next row of frames. Some adjustment of the pedestal feet may be required to achieve a level row.
  - a. Use a 5 mm allen key and two 10 mm open ended wrenches to tighten the hardware on the pedestals.
  - b. Use a 13 mm open ended wrench to tighten the hardware securing the frames to the pedestals.
  - c. Use a 6 mm ball driver to tighten the hardware securing the frames together.
7. Snap grommets into the cutouts of the frames on each end of the row. These grommets ensure the cables do not rub against the metal cutout (see image above).

## Adding additional rows of F100 frames

1. Add the second row, beginning with the center and working outward. Complete these steps for each frame in the next row.
  - a. Using safe and approved lifting methods, install the next frame over the lower frame, approaching it from the back.
  - b. Once the top frame is resting on the lower frame, slide it forward until it is in position.
  - c. Align the top and bottom frames until all edges are flush and the mounting holes are aligned.
  - d. Using six M8 socket head cap screws and six flat washers ( $\phi 8.4$ ) secure the upper frame to the one below. Hand tighten the hardware at this point to allow for small adjustments as the other frames are added to the row.
  - e. Position the next frame in the row. Using four M8 socket head cap screws and four flat washers ( $\phi 8.4$ ), secure the frame to the one adjacent to it.
  - f. Check alignment between each frame and adjust, as required.

- g. Tighten all hardware between the top and bottom frames before adding the next row of frames.
- h. Snap grommets into the cutouts of the frames on each end of the row. These grommets ensure the cables do not rub against the metal cutout (see image above).
- i. Repeat the above steps to add additional rows of frames until the desired installation is complete.

## Install video wall mount onto frame

For a detailed overview, refer to the *Installing the FHD552- X on the ML10/MP10 LCD Video Wall Mount Instruction Sheet (P/N: 020-101712-xx)* and the *FHD552-X LCD Panel User Manual (P/N: 020-000741-xx)*.

## Install FHD552-X LCD panel

For a detailed overview, refer to the *Installing the FHD552- X on the ML10/MP10 LCD Video Wall Mount Instruction Sheet (P/N: 020-101712-xx)* and the *FHD552-X LCD Panel User Manual (P/N: 020-000741-xx)*.

## Apply permanent external support



**Caution!** Failure to comply with the following could result in minor or moderate injury.

- External support for a display wall must be designed and implemented by a qualified installer and must comply to local area safety standards. All display walls must have permanent external supports.

The FHD552-X LCD panel display wall requires external support regardless of its overall height. Reinforcing the structure prevents the wall from tipping due to unforeseen circumstances.

When designing external support for a display wall consider:

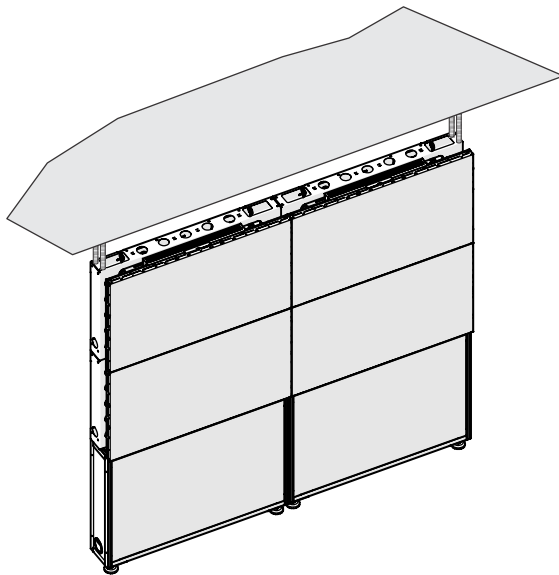
- Local building codes for specific requirements.
- Size of the installation (number of LCD panels being stacked).
- Physical characteristics of the installation (including weight, center of gravity, mounting hole location).

For technical information on the display wall components, see *Mechanical Drawings* on page 14.

- Type of material being considered for external support.
- Strength and stability of the vertical or horizontal surface.
- Required number of external supports.

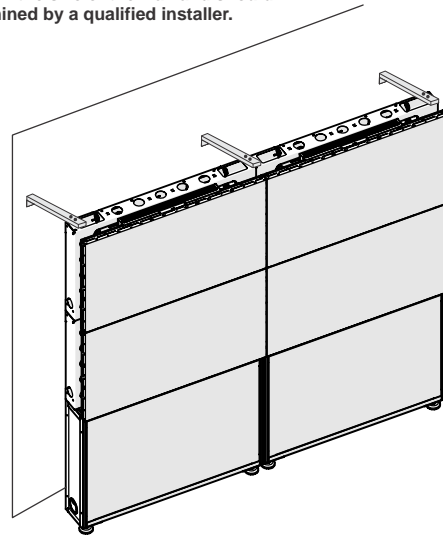
The illustration below depicts two possible external support methods for a display wall. Consider your options and choose the method that best supports your specific installation.





Example of Ceiling Mount Support  
(Shown, threaded rods installed into ceiling to support 2x2 wall)

**CAUTION!** The natural frequency of support is dependant on the size of the wall and should be determined by a qualified installer.



Example of Wall Mount Support  
(Shown, bars installed into back wall to support 2x2 wall)

## Connect sources

A variety of external sources can be connected to the connection panel on the LCD panel. Properly routing the cables from one LCD panel to another in the display wall will keep them from becoming tangled. For a detailed overview, refer to the [Installing the FHD552-X on the ML10/MP10 LCD Video Wall Mount Instruction Sheet \(P/N: 020-101712-xx\)](#) and the [FHD552-X LCD Panel User Manual \(P/N: 020-000741-xx\)](#).

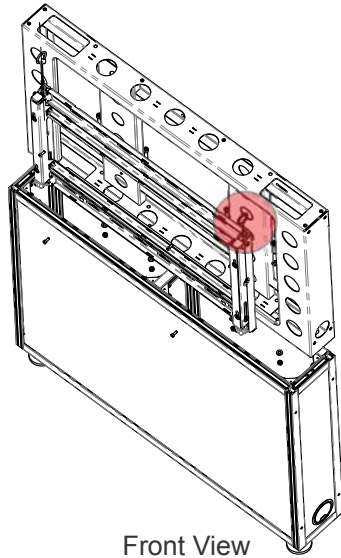
## Optional: Install trim

As an optional feature, trim in the form of 8 ft (2.4 m) magnetic strips can be applied to the sides of the display. Each strip covers up to three frames in height.

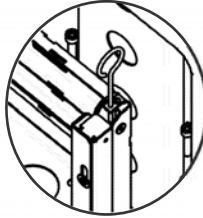
## Optional: Install bracket extension hook

To easily release individual panels installed into a display wall it is recommended the bracket extension hooks, provided with the frame assembly, are installed. To install, thread an M4 nut and flat washer onto the hook, insert it into the video wall mount, as shown in the illustration below.

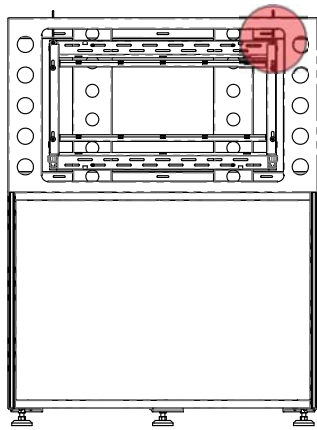
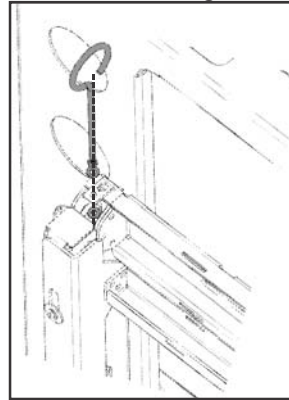
Thread another flat washer and M4 nut onto the hook to secure it. Use a 7 mm open ended wrench to completely tighten the hardware.



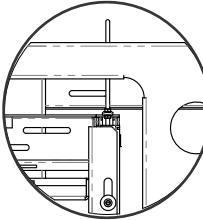
Front View



Hardware Configuration

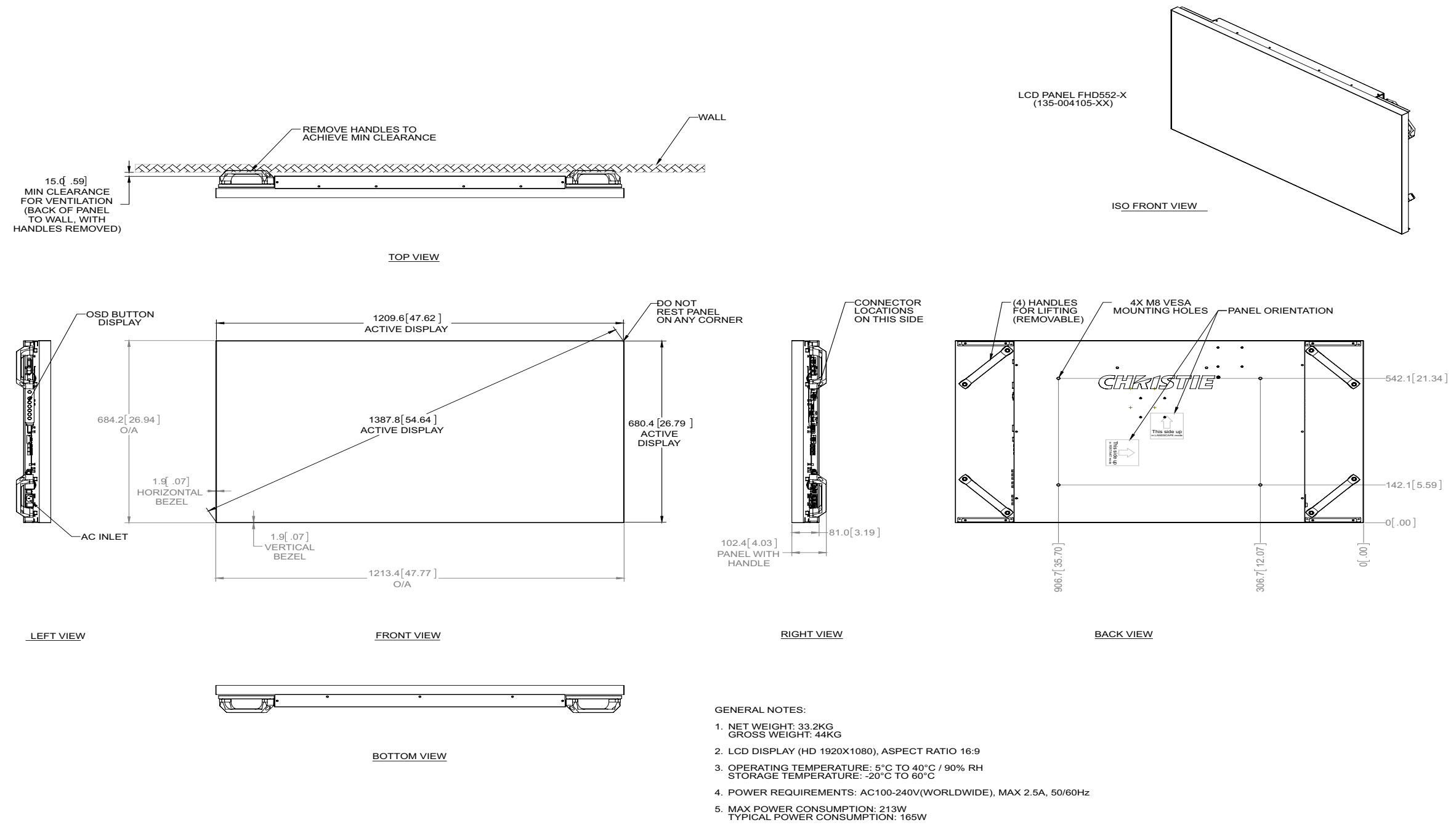


Back View



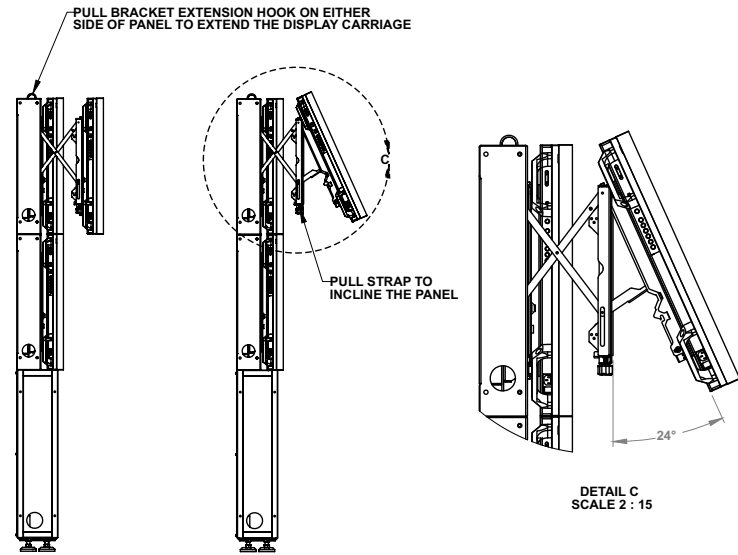
# Mechanical Drawings

## LCD Panel



# 2x2 Configuration of Pedestal, Frame and LCD Panel

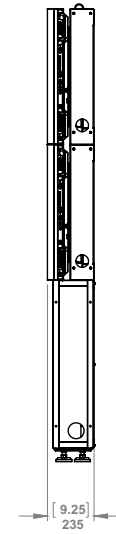
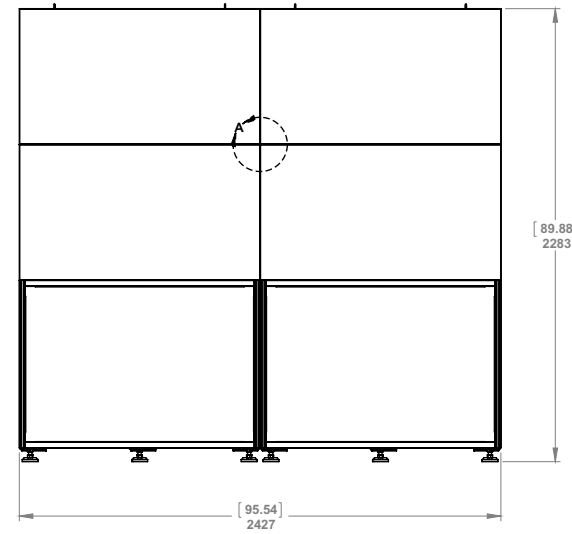
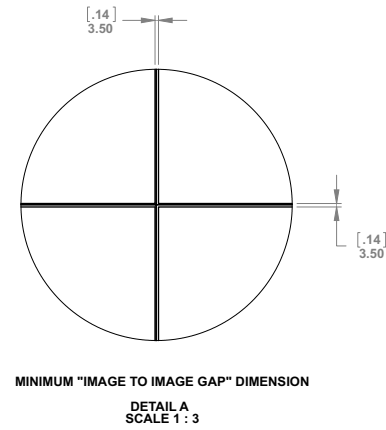
2X2 CONFIGURATION OF PEDESTAL, FRAME & LCD PANEL WITH EXTENDED MOUNT FOR SERVICE



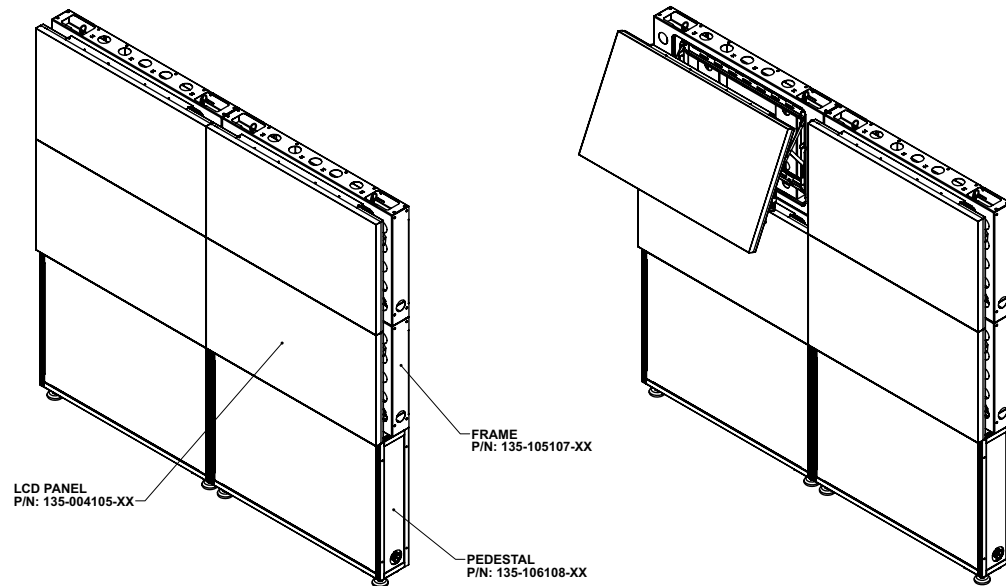
GENERAL NOTES:

- 1) ALWAYS POWER DOWN AND DISCONNECT ALL POWER SOURCES TO THE PANEL BEFORE SERVICING

2X2 CONFIGURATION OF PEDESTAL, FRAME, & LCD PANEL FHD552-X



PANEL EXTENDED OUT FOR SERVICE

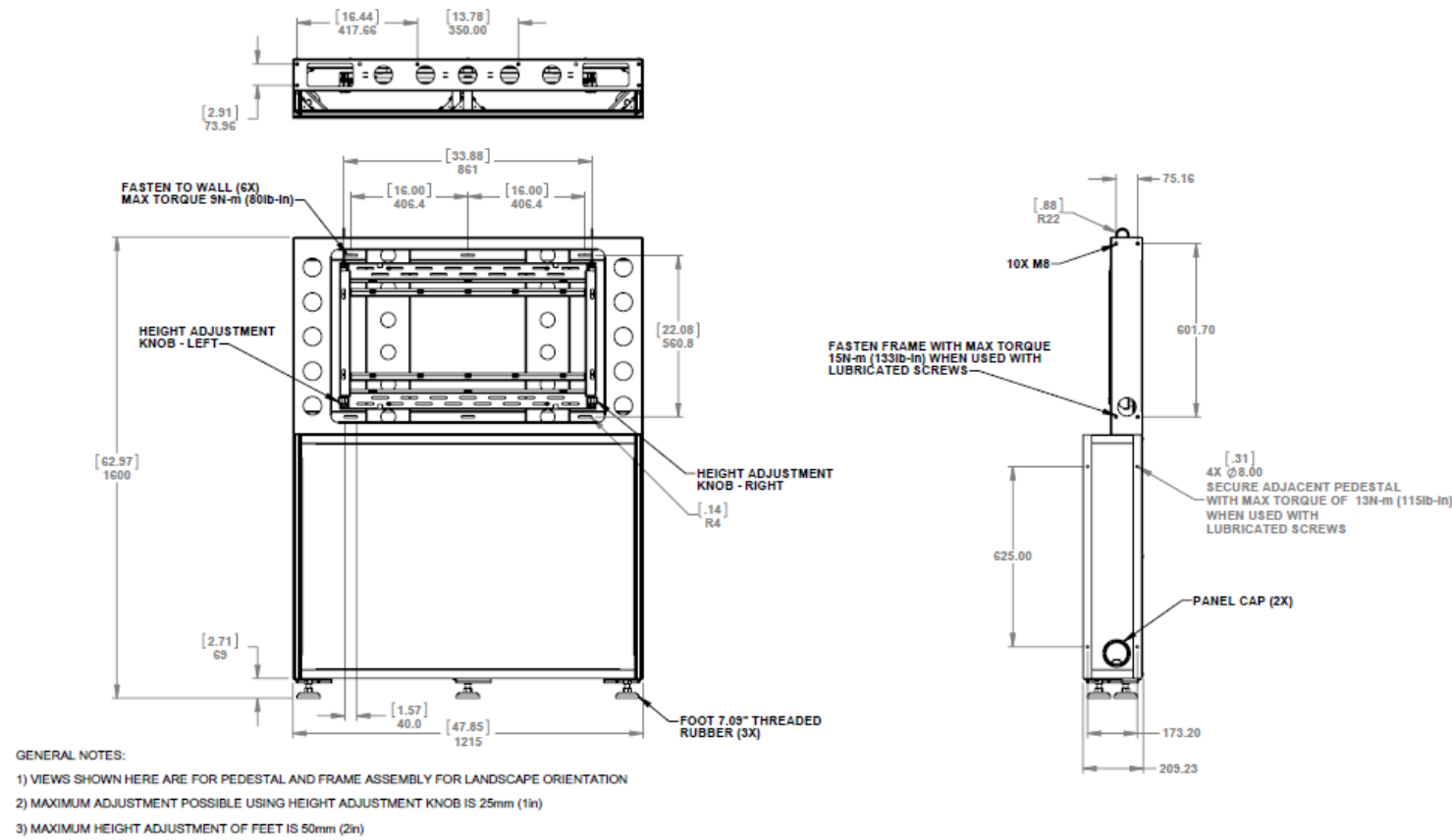


**NOTE: PEDESTAL, FRAME AND MOUNT COMPATIBLE WITH LCD PANEL FHD552-X  
FOR INSTALLATION OF FHD551-XG REFER TO 020-100627-02  
FOR INSTALLATION OF FHD552-X WITH FRAME 135-105107-01,  
AND PEDESTAL 135-106108-01 SEE DWG 020-100627-03**

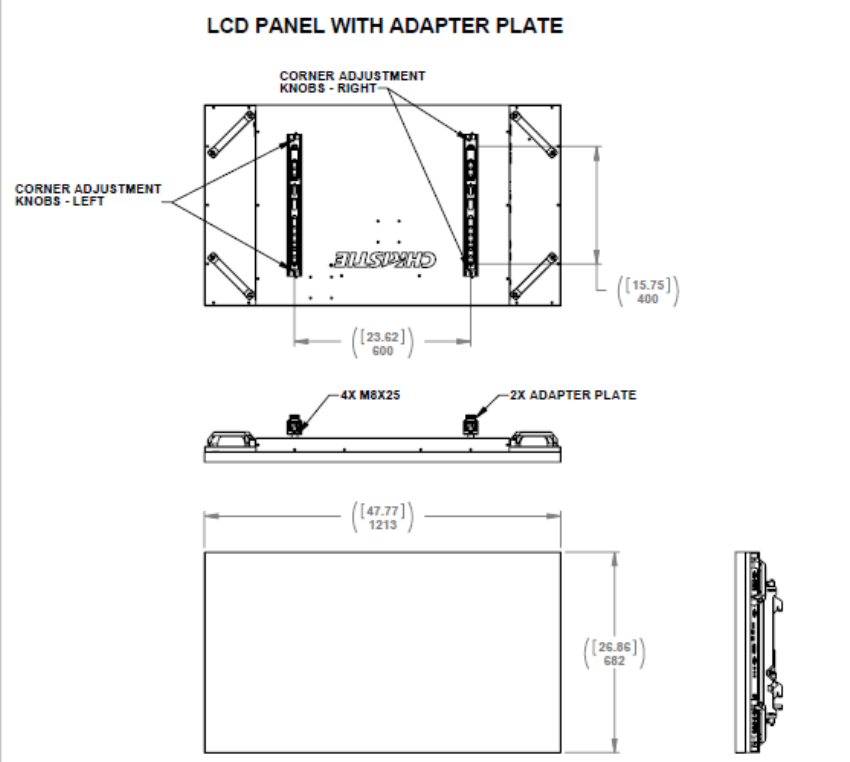
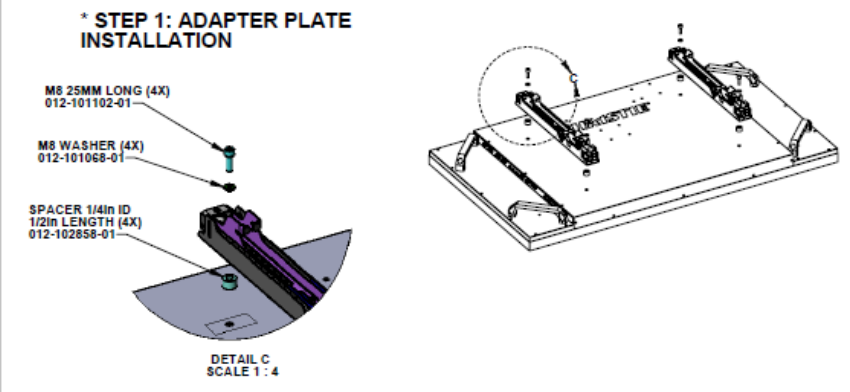
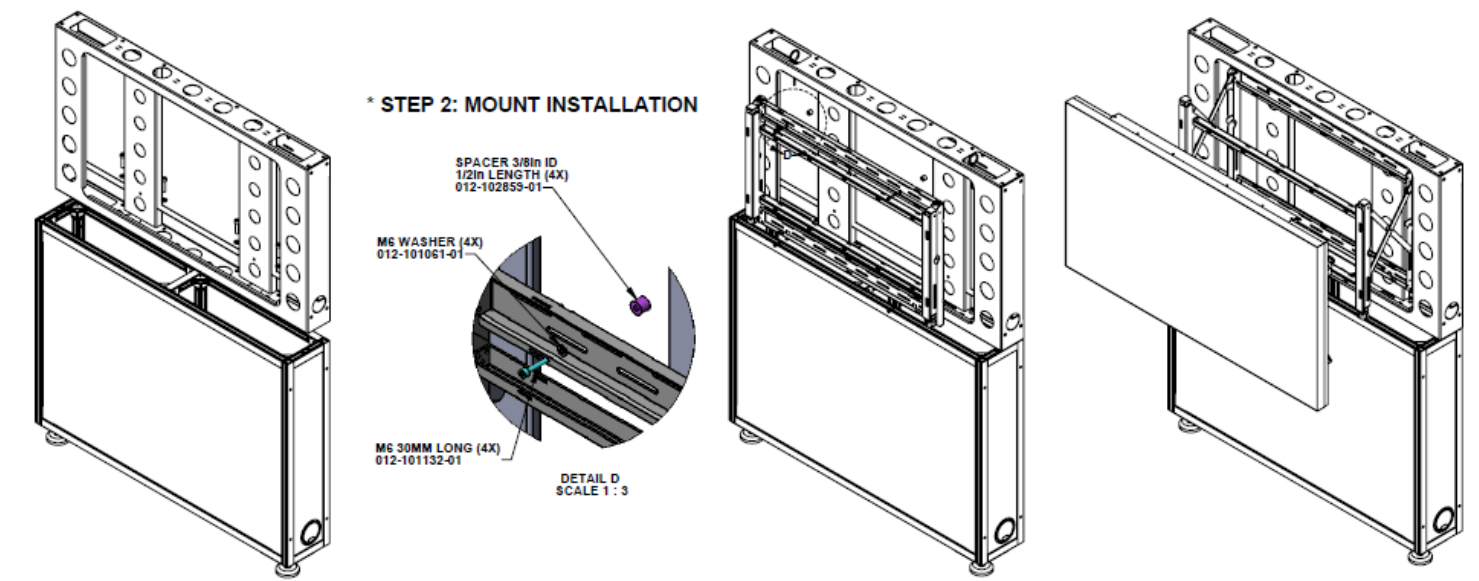
GENERAL NOTES:

- 1) REFER TO 'SPACER KIT INSTRUCTION SHEET' P/N: 020-100728 FOR WALL MOUNT APPLICATIONS
- 2) MOUNTS, FRAME, PEDESTAL SHOWN HERE ARE FOR LANDSCAPE ORIENTATION
- 3) MAXIMUM STACK HEIGHT IS SIX PANELS. ADDITIONAL COOLING REQUIRED FOR STACK OVER FIVE HIGH
- 4) APPROXIMATE WEIGHT OF 135-001102-XX (FHD552-X) PANEL WITH ADAPTER PLATE & DISPLAY CARRIAGE - 90kg (198lb)
- 6) APPROXIMATE WEIGHT OF FRAME - 16.7kg (36.8lb)
- 7) APPROXIMATE WEIGHT OF PEDESTAL - 24.8kg (54.7lb)

# Attaching Pedestal and Frame



ATTACHING PEDESTAL AND FRAME WITH M8 SCREWS, WASHERS AND NUTS (6 EACH PER PEDESTAL AND FRAME ASSEMBLY)      ATTACHING DISPLAY CARRIAGE TO THE FRAME      ATTACHING PANEL WITH ADAPTER PLATE TO DISPLAY CARRIAGE



**\* NOTE: IF USING PEDESTAL (000-102656-01), FRAME (000-102659-01), AND MOUNT (135-101103-01) WITH FHD552-X PANEL, FOLLOW STEPS 1 AND 2 FOR INSTALLATION (SPACER KIT 000-105302-01 REQUIRED)**

**GENERAL NOTES:**  
 1) MAXIMUM DEPTH ADJUSTMENT POSSIBLE USING CORNER ADJUSTMENT KNOB IS 19mm (0.75in)  
 2) FASTEN M8 SCREW WITH A MAXIMUM TORQUE OF 1.27N-m (11.284lb-in)





LIT MAN INST FHDS52 PED Frame

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