
FUSION MODULAR SYSTEMS

1 Let's Start Here!

LBM Modular Systems

IMPORTANT ! : Each portion of the modular system should be installed following the information here, **AND** the Installation Instructions included with each modular system part.



A brand of  **legrand**

Floor-mounted Video Walls

DISCLAIMER

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DEFINITIONS

MOUNTING SYSTEM: A MOUNTING SYSTEM is the primary Chief product to which an accessory and/or component is attached.

ACCESSORY: AN ACCESSORY is the secondary Chief product which is attached to a primary Chief product, and may have a component attached or setting on it.

COMPONENT: A COMPONENT is an audiovisual item designed to be attached or resting on an accessory or mounting system such as a video camera, CPU, screen, display, projector, etc.



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.



IMPORTANT SAFETY INSTRUCTIONS



WARNING: Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer's responsibility to make sure all mounting systems and accessories are properly assembled and installed using the instructions provided.



WARNING: Failure to provide adequate structural strength for this mounting system and accessories can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this mounting system and accessories are attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the mounting system and accessories.



WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the LBM Modular Floor-mounted Video Wall system and any accessories does not exceed maximum weights noted in Table 1.



WARNING: Use this mounting system and accessories only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.



WARNING: Never operate this mounting system and accessories if they are damaged. Return the mounting system and accessories to a service center for examination and repair.



WARNING: Do not use this mounting system and accessories outdoors.



WARNING: Do NOT stack multiple accessories on the same display wall! Do NOT connect wall add-on accessories to mounting systems that are already three display high. Display mounts may NOT be stacked higher than three displays high on non-portrait models! Portrait versions - may NOT be stacked higher than two displays high!

IMPORTANT ! : Each portion of the modular systems should be installed following the information here, **AND** with the Installation Instructions included with each modular system part.

--SAVE THESE INSTRUCTIONS--

Table 1: LBM Modular Floor-mounted Video Wall Parts Weight Capacity

Modular System Part	Max Weight Capacity for System Part
FCASFP (per pair)	75 lbs (34.0 kg)
FMSIML (per pair)	125 lbs (56.7 kg)
FMSITL (per pair)	125 lbs (56.7 kg)
FMSITL-P (per pair)	125 lbs (56.7 kg)
FMSHXX	Determined by weight capacity of other parts in the modular system
FMSFC	500 lbs (226.7 kg)
FMSFR	175 lbs (79.3 kg)

TABLE OF CONTENTS

DEFINITIONS / IMPORTANT SAFETY INSTRUCTIONS2

LBM MODULAR FLOOR-MOUNTED SYSTEMS WEIGHT CAPACITY3

TABLE OF CONTENTS3

EXTRUSION LENGTH / SCREEN CALCULATIONS4

- Determining Extrusion Length - for a Specific Number of Screens 4
- Determining Maximum Screen Width for Extrusion Length..... 4

MODULAR FLOOR-MOUNTED SYSTEM GUIDELINES5

ORDER OF INSTALLATION5

FLOOR-MOUNTED MENU BOARDS WEIGHT LIMITATIONS (examples) 6

- Maximum Spacing With Two Column to Rail Adapters
- Maximum Spacing With Three Column to Rail Adapters
- Maximum Spacing With Four Column to Rail Adapters

INSTALLATION EXAMPLES.....8

EXTRUSION LENGTH / SCREEN CALCULATIONS

Determining Extrusion Length - for a Specific Number of Screens

Need to Know:

- Number of screens (**N**)
- Mounting pattern of screens, in mm (**P**)
- Desired spacing between screens, in inches (**S**)
- Screen width, in inches (**W**)

Formula: $((N * W) + ((N-1) * S) + 2) - (W - (P/25.4)) = \text{Extrusion length required}$

In the above formula:

- the 2 represents the width of the screen interfaces
- the 25.4 converts millimeters to inches

EXAMPLE

- Number of screens: 4
- Mounting patterns of screens: 400mm
- Desired spacing between screens: 0.0625 inches
- Screen width: 40 inches

$((4 * 40") + ((4 - 1) * 0.0625") + 2) - (40 - (400/25.4)) = 138" \text{ MINIMUM extrusion length required. [NOTE: Final length is rounded to the nearest whole number.]}$

$N * W = \text{MAXIMUM extrusion length required (so that extrusion remains hidden behind screens). [NOTE: Use a Chief extrusion length between the minimum and maximum extrusion lengths.]}$

Determining Maximum Screen Width for Extrusion Length

Need to Know:

- Number of screens (**N**)
- Mounting pattern of screens, in mm (**P**)
- Desired spacing between screens, in inches (**S**)
- Extrusion length, in inches (**L**)

Formula: $\frac{L - ((N - 1) * S) - 2 - (P/25.4)}{(N-1)} = \text{Maximum Screen Width}$

In the above formula:

- the 2 represents the width of the screen interfaces
- the 25.4 converts millimeters to inches

EXAMPLE

- Number of screens: 4
- Mounting patterns of screens: 400mm
- Desired spacing between screens: 0.0625 inches
- Extrusion length: 120 inches

$\frac{120" - ((4 - 1) * 0.0625") - 2 - (400/25.4)}{(4 - 1)} = 34" \text{ Maximum Screen Width}$

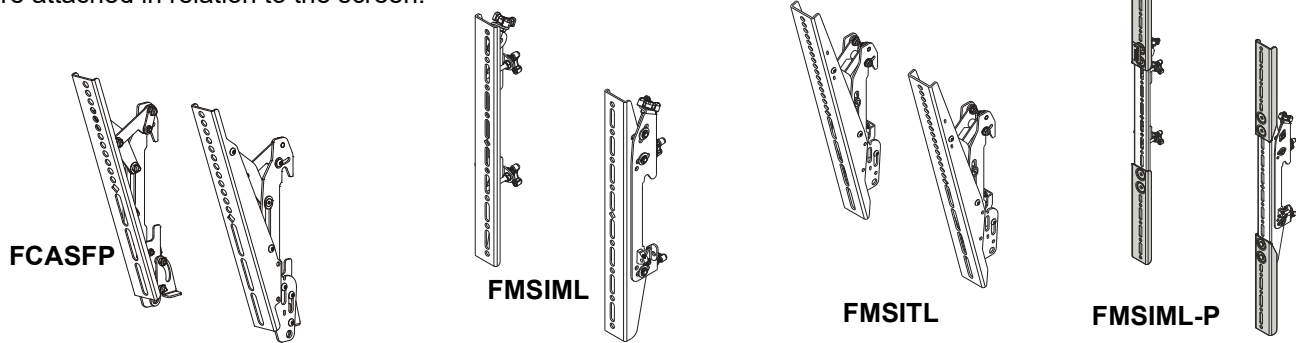
MODULAR BOLT-DOWN SYSTEM GUIDELINES

ORDER OF INSTALLATION

The various parts of your modular, bolt-down menu boards system should be installed in the following order:

IMPORTANT ! : Each portion of the modular system should be installed following the information here, AND the Installation Instructions included with each modular system part.

- 1 Install screen interface brackets first to determine exactly where they are attached in relation to the screen.

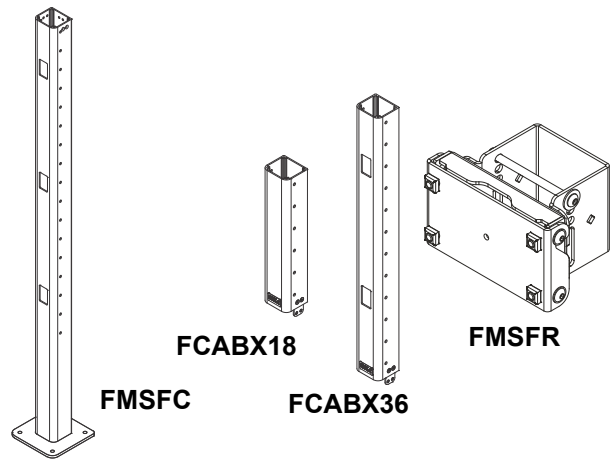


- 2 Decide on the complete layout of the installation, deciding screen placement and column placement.

- 3 Install bolt-down columns.

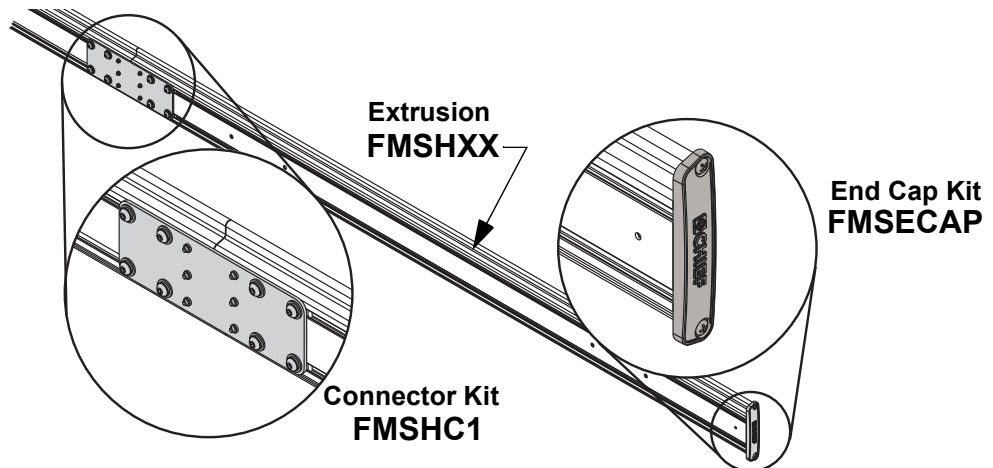
- 4 Install column extenders to columns (optional)

- 5 Install column-to-rail adapters.



- 6 Install extrusions to column-rail-adapters.

- 7 Determine if this would be a good time to install accessories--it usually is.

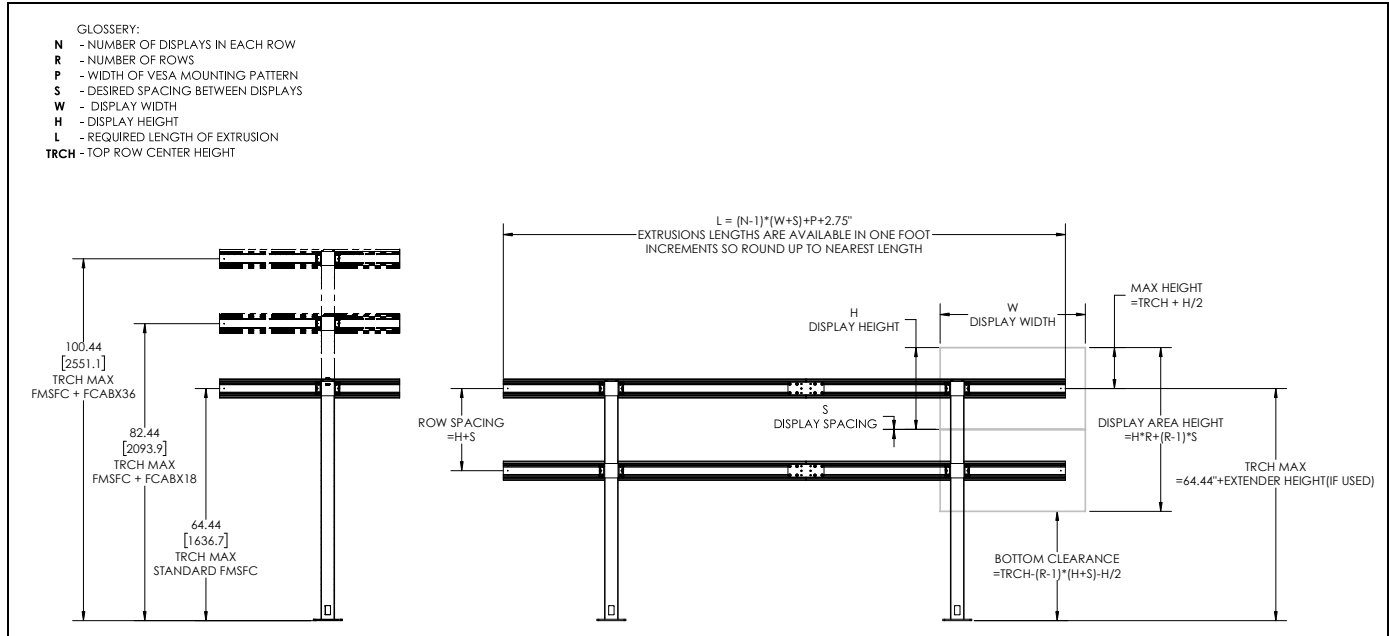


- 8 Place screens on extrusion (see FMSIML for instructions)

- 9 Make final depth and leveling adjustments, as necessary.

IMPORTANT ! : The total wall mounted system weight capacity is determined by the maximum weight allowed for each screen interface (FCASFP, FMSIML, FMSITL , FMSIML-P) multiplied by the number of screens; or the maximum weight allowed for each bolt-down column (FMSFC) multiplied by the number of columns, with the **LESSER OF THE TWO BEING THE MAXIMUM TOTAL SYSTEM CAPACITY**.

Glossary Graphic



1. The **longest span between columns** (center to center) is **96 inches (8 feet)**. (See Figure 1)
2. The **longest overhang** (center to center to end of extrusion) is **32 inches**. (See Figure 1)
3. The **longest single extrusion with only two columns** is **120 inches**. (See Figure 1)
4. The **longest combined extrusion length with only two columns** is **156 inches (13 feet)**. (See Figure 1)
5. The **longest combined extrusion length with only three columns and 1 connector kit using standard extrusion lengths** is **228 inches (19 feet)**. (See Figure 1)
6. When using **three or more columns they must be evenly spaced and centered on the extrusion** as much as possible.

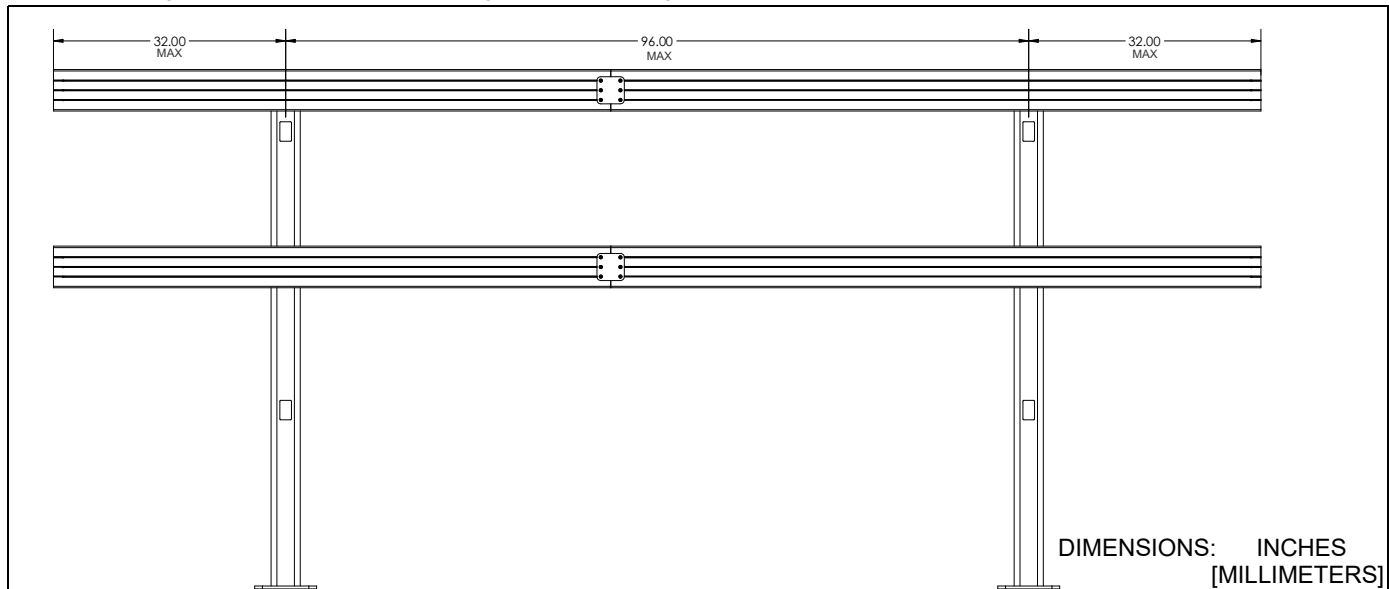


Figure 1

BOLT-DOWN MENU BOARDS WEIGHT LIMITATIONS (examples)

IMPORTANT ! : Weight capacity is dependent upon number of columns and screen interface brackets. Weight capacity is determined by the **LOWEST** weight capacity within the modular configuration. See Table 1, (See Figure 2), (See Figure 3) and (See Figure 4)

IMPORTANT ! : Weight **MUST** be distributed evenly over length of extrusion(s)!

Maximum Spacing With Two Column to Rail Adapters

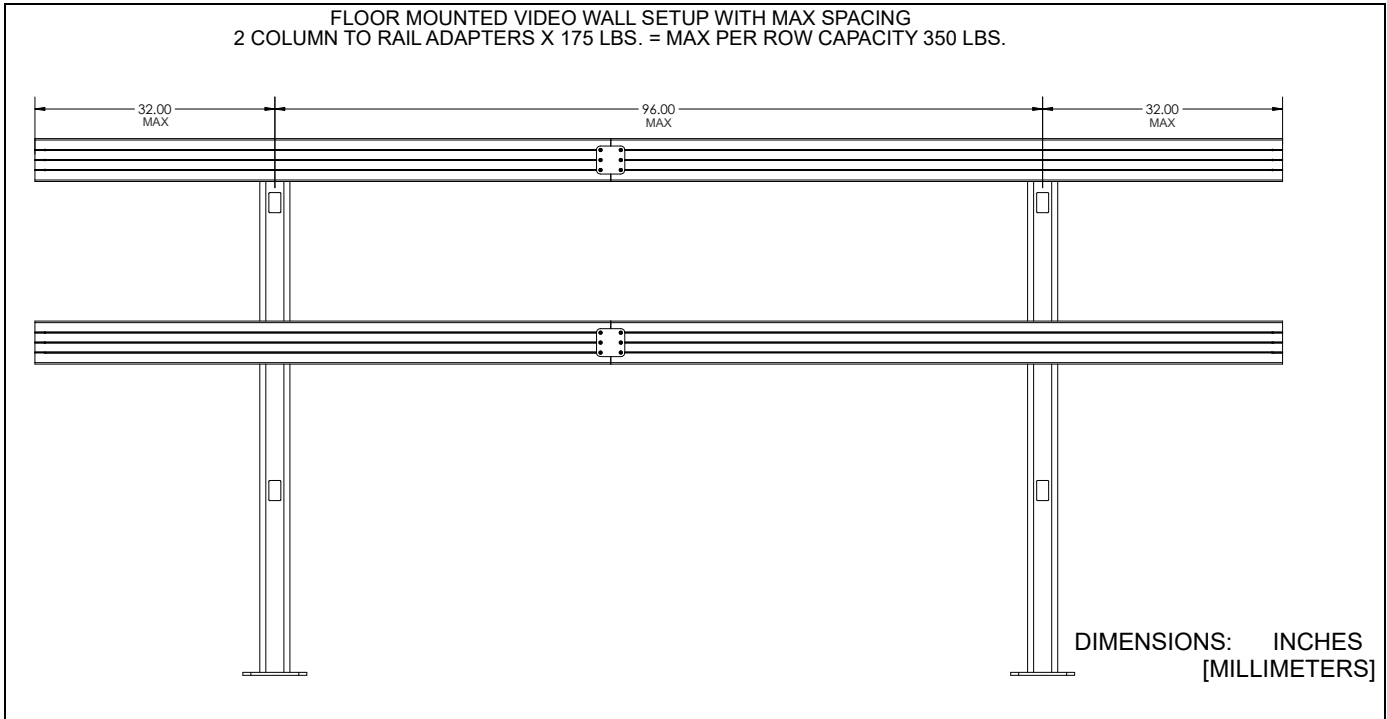


Figure 2

Maximum Spacing With Three Column to Rail Adapters

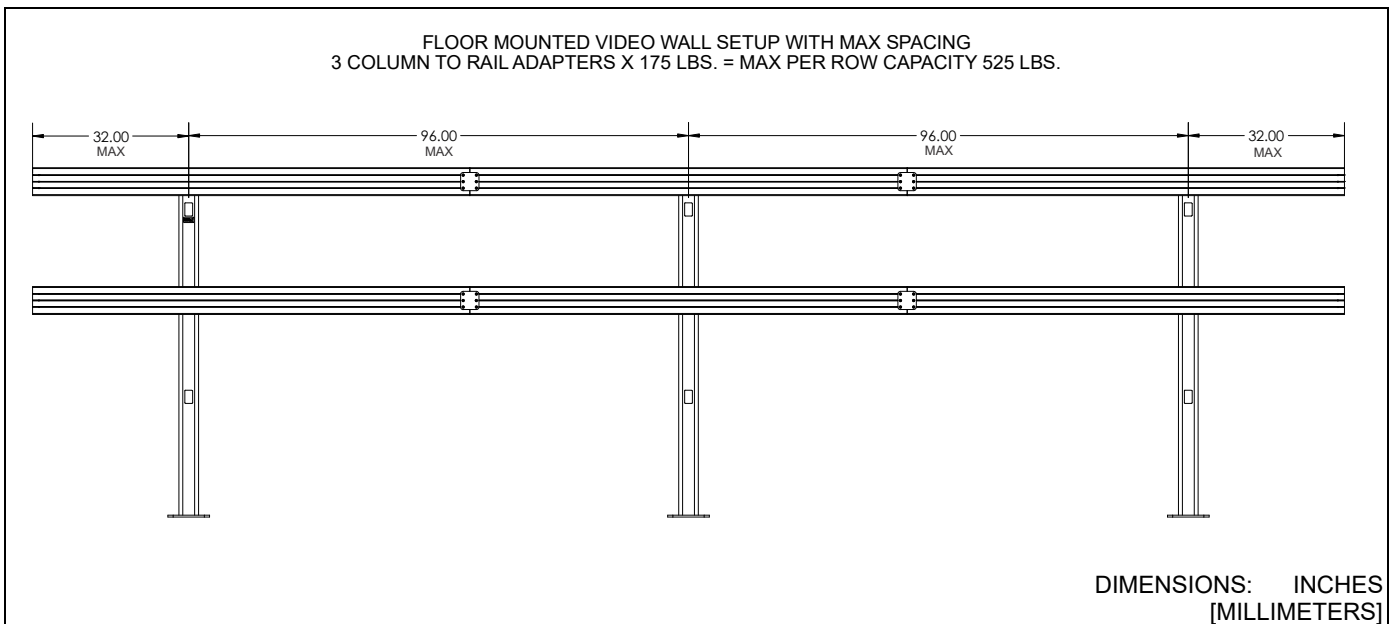


Figure 3

Maximum Spacing With Four Column to Rail Adapters

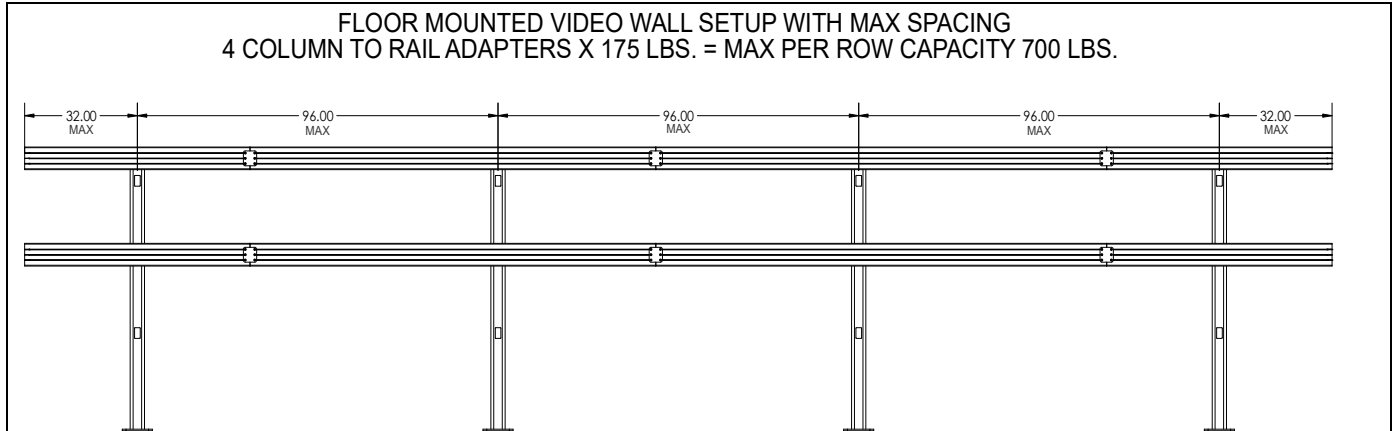


Figure 4

INSTALLATION EXAMPLES

NOTE: The examples are listed for installation with a system using standard 400mm interfaces.

Example 1

- 4-screen interfaces x 125 lbs/interface = 500 lbs
- 4-column to rail adapters x 175 lbs = 700 lbs
- 2 columns x 500 lbs = 1000 lbs
- Maximum capacity is limited by the screen interfaces = 125 lbs/screen

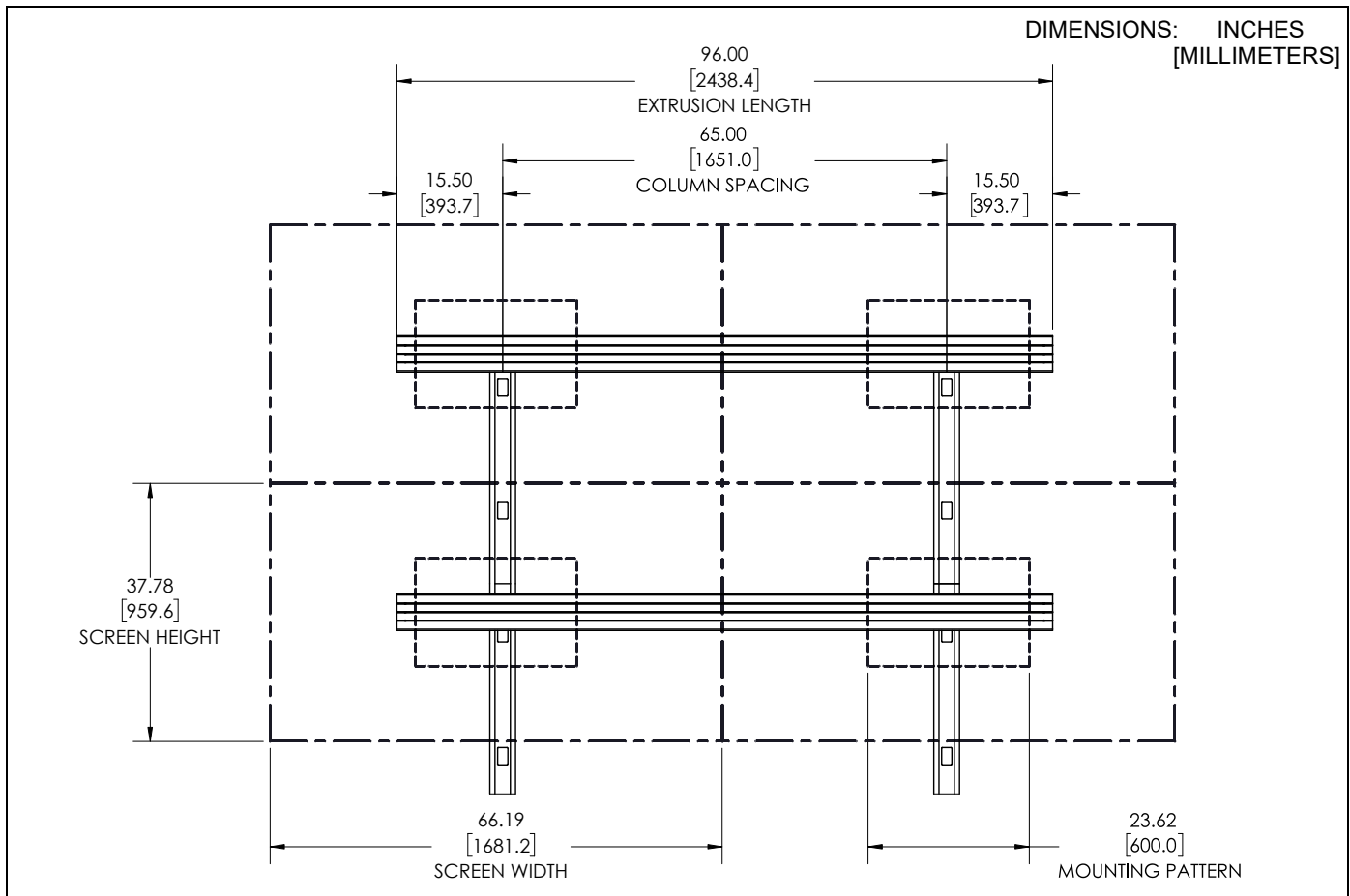


Figure 5

Example 2

- 9-screen interfaces x 125 lbs/interface = 1125 lbs
- 6 column to rail adapters x 175 lbs = 1050 lbs
- 2 columns x 500 lbs = 1000 lbs
- Maximum capacity is limited by the screen interfaces = 125 lbs/screen

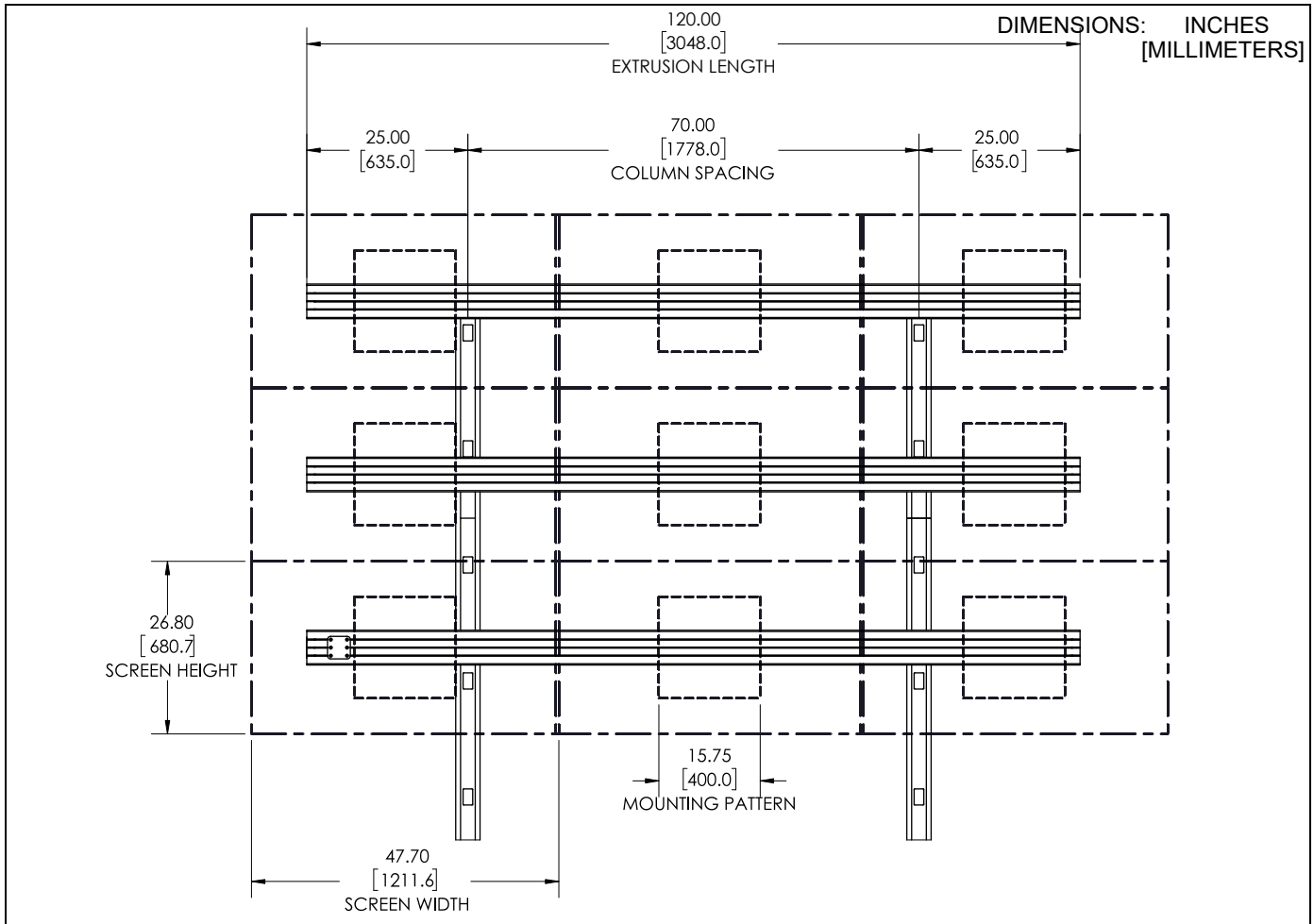


Figure 6

Example 3

- 10-screen interfaces x 125 lbs/interface = 1250 lbs
- 6 column to rail adapters x 175 lbs = 1050 lbs
- 3 columns x 500 lbs = 1500 lbs
- Maximum capacity is limited by the screen interfaces = 125 lbs/screen

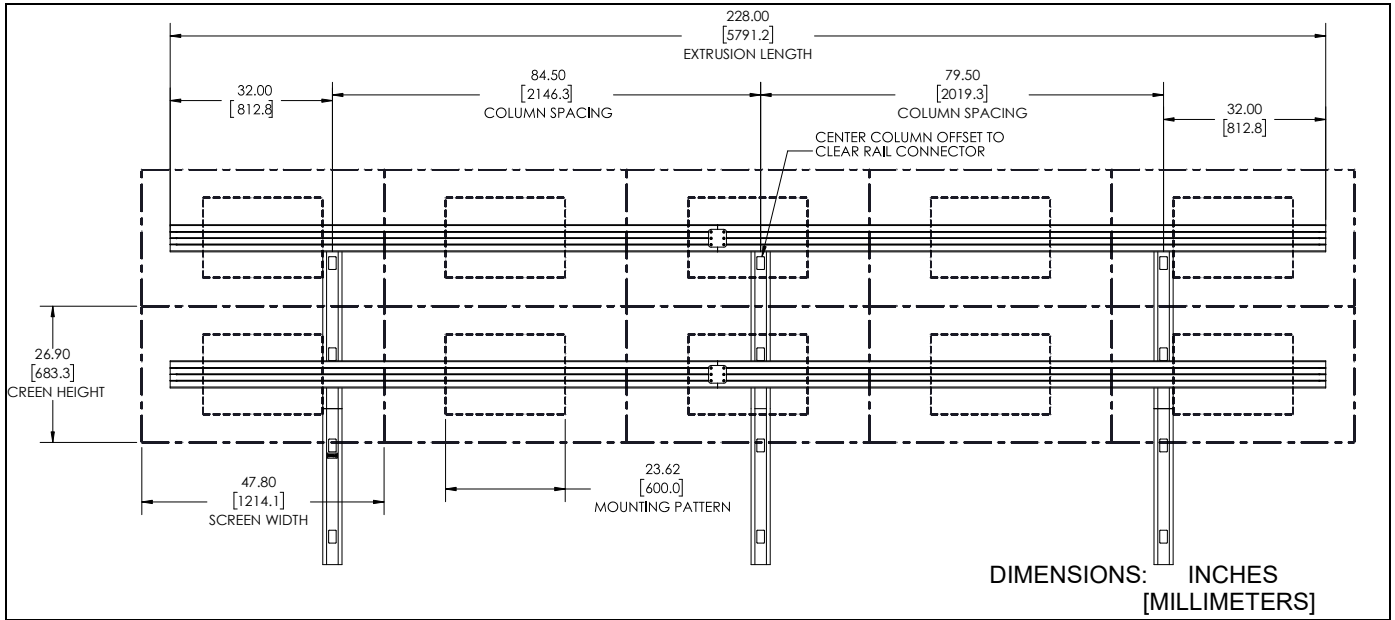


Figure 7

Example 4

- 32-screen interfaces x 125 lbs/interface = 4000 lbs
- 16 column to rail adapters x 175 lbs = 2800 lbs
- 4 columns x 500 lbs = 2000 lbs
- Maximum capacity is limited by columns

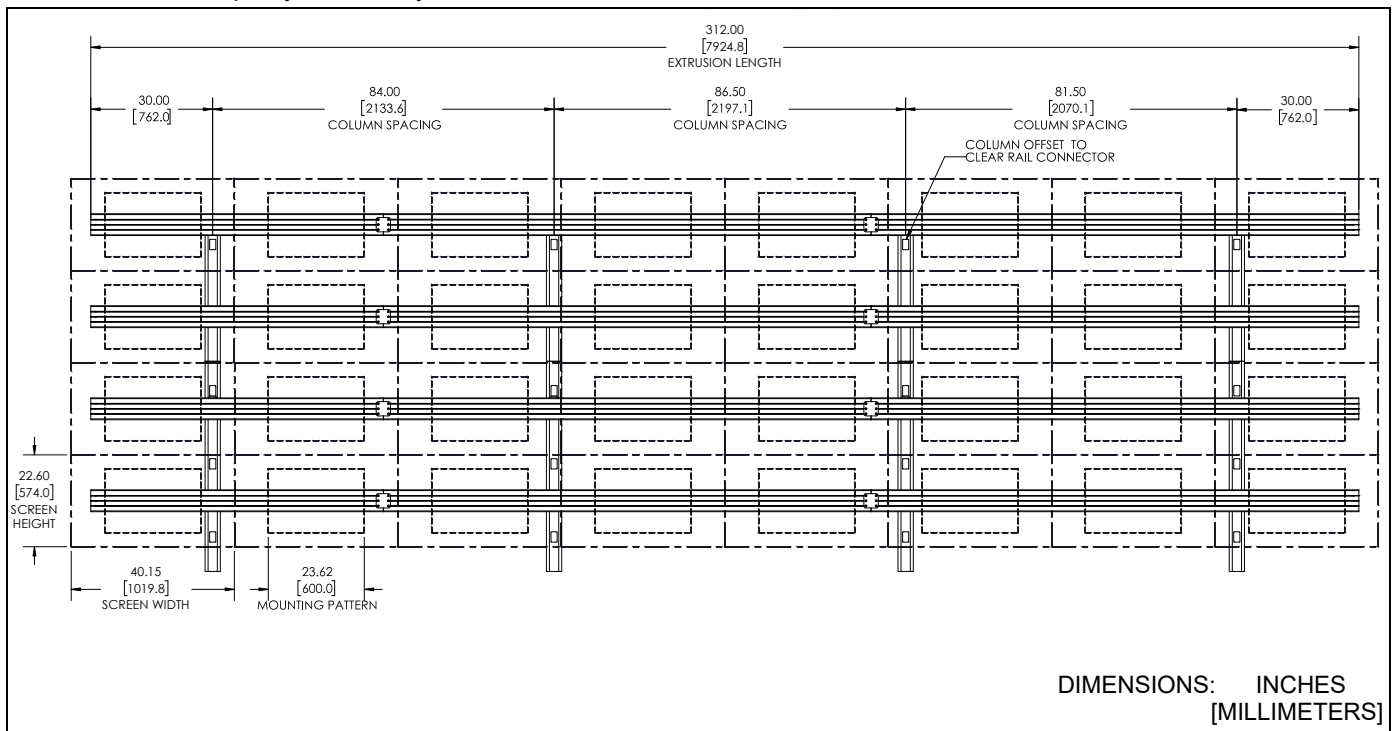


Figure 8



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8800-003247 Rev00
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10/2021

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