



Product Manual... Podium DS Series PRA-004-XXX-XXX

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REV	CHANGE	CREATED BY	APPROVAL	DATE
0	INITIAL RELEASE	DG	CB	1/18/2024
A	VARIOUS UPDATES	DG	CB	5/22/2024
B	ADDED FILTER CLEANING INSTRUCTIONS	SP	CB	6/4/2024
C	ADDED CONNECTIONS	SP	CB	08/08/2024
D	ADDED UBR PLUS ROUTER CONNECTIONS	SP	CB	08/12/2024

Product

Podium DS ... Product Description

1. PODIUM DS Series display systems are available in two LCD panel sizes:
 - 65" and 75" diagonal.
 - They may be configured for two LCD panels back-to-back, or for a single LCD panel with an LED illuminated static poster panel reverse.
 - Digital display faces have a left side hinged fascia, with compression latch on the right side:
 - Internally a second latch releases the display cassette to hinge open and give access to the Flexbox electronics housing behind it.
 - Static display faces have a top hinged [lift-off] fascia, with press-closed latch at the bottom.
 - Heavy gauge paper or duratrans material printed inserts attach to the top of the illuminated LED panel using metal clips and hang internally under their own weight.
 - Both types of fascia release by first opening the lower plinth panel to access the main latch, giving a double level of security.
 - Displays are designed for permanent installation, outdoor in a public environment.
2. PODIUM DS Series displays are supplied as *Type A* or *Type B*, for different worldwide regions [either 120VAC or 240VAC]:
 - *Type A* has an incoming power connection DIN rail for 120VAC.
 - *Type B* has an incoming power connection DIN rail for 240VAC.
3. PODIUM DS Series displays use direct air cooling [DACS] to manage the internal temperature of their enclosure:
 - Enclosures employ two levels of incoming air filtration through the base, air is exhausted from the sides at the top:
 - Sacrificial filters, within a removeable tray, which should be regularly changed or cleaned to ensure normal operation.
 - System F7 filters, which require changing annually.
 - Filters may be accessed without opening the main system enclosure.
4. Display systems may be delivered fully assembled, or in kit form for site assembly, depending upon shipping requirements.
5. Display systems have a mains power connection box in the plinth, for connection to an incoming supply by others – the supply must be grounded.
6. PODIUM DS display systems support the integration of a range of playback and network devices:
 - Open-board or boxed SBC's operating Win10IoT or Linux Ubuntu 20.04 LTS – playback devices must be ruggedized to operate within the temperature range of the system and have been tested by Praevar to validate their performance.
 - Cellular modems, LTE gateways, network switches, optical cable converters, etc. a shelf is reserved with supporting power within the Flexbox housing for this purpose.
 - Cellular antenna kit.
 - Cameras and touch-foil fascia to enable interactivity.

Podium DS ... 65" SKU# ref. Listing

Complete Display Systems									
PRA	004	005	001	A	PODIUM	65	DS65DS	PORTRAIT	Floor-standing back-to-back display digital/static - US specification 110VAC On-grade mount [for finished & level surfaces]
				B	PODIUM	65	DS65DS	PORTRAIT	Floor-standing back-to-back display digital/static - EU specification 240VAC On-grade mount [for finished & level surfaces]
PRA	004	005	002	A	PODIUM	65	DS65DD	PORTRAIT	Floor-standing back-to-back display digital/digital - US specification 110VAC On-grade mount [for finished & level surfaces]
				B	PODIUM	65	DS65DD	PORTRAIT	Floor-standing back-to-back display digital/digital - EU specification 240VAC On-grade mount [for finished & level surfaces]
Individual Modules [integrated within system level SKU's listed above]									
PRA	004	005	101		PODIUM	65	Module	PORTRAIT	LCD Display cassette for either LH/RH hinging
PRA	004	XXX	102	A	PODIUM		Module		Flexbox [without playback & network devices] - US specification 110VAC
				B	PODIUM		Module		Flexbox [without playback & network devices] - EU specification 240VAC
PRA	004	005	103	A	PODIUM	65	Module		Fan-tray for DS
				B	PODIUM	65	Module		Fan-tray for DD
PRA	004	005	104		PODIUM	65	Module	PORTRAIT	LED Illuminated Static Poster Panel c/w clips
Consumables & Accessories									
PRA	004	005	201		PODIUM	65	Filter		System F7 Filter
PRA	004	005	202		PODIUM	65	Filter		Sacrificial Filter Medium Kit [includes exhaust]
Options									
PRA	004	005	301		PODIUM		Option	PORTRAIT	PCAP laminated LH/RH hinged fascia upgrade
PRA	004	XXX	302		PODIUM		Option		Forward facing Camera – fascia integrated
PRA	004	005	303		PODIUM		Option	PORTRAIT	Polycarbonate Fascia Vandal Shield

See General Arrangement [GA] and Field Assembly [FA] Drawings for each SKU# for product dimensions, schematics, operation and installation detail. GA and FA drawing numbers follow PRA-004-00X-XXX format. [for example: PRA-004-005-001 GA]

Podium DS ... 75" SKU# ref. Listing

Complete Display Systems									
PRA	004	006	003	B	PODIUM	75	DS75DS	PORTRAIT	Floor-standing back-to-back display digital/static - EU specification 240VAC Sub-grade installation [to accommodate sloping sidewalk]
PRA	004	006	004	B	PODIUM	75	DS75DD	PORTRAIT	Floor-standing back-to-back display digital/digital - EU specification 240VAC Sub-grade installation [to accommodate sloping sidewalk]
PRA	004	006	009	A	PODIUM	75	DS75DS	PORTRAIT	Floor-standing back-to-back display digital/static - US specification 110VAC On-grade mount [for finished & level surfaces]
PRA	004	006	008	A	PODIUM	75	DS75DD	PORTRAIT	Floor-standing back-to-back display digital/digital - US specification 110VAC On-grade mount [for finished & level surfaces]
Individual Modules [integrated within system level SKU's listed above]									
PRA	004	006	101		PODIUM	75	Module	PORTRAIT	LCD Display cassette for either LH/RH hinging
PRA	004	XXX	102	A	PODIUM		Module		Flexbox [without playback & network devices] - US specification 110VAC
				B	PODIUM		Module		Flexbox [without playback & network devices] - EU specification 240VAC
PRA	004	006	103	A	PODIUM	75	Module		Fan-tray for DS
				B	PODIUM	75	Module		Fan-tray for DD
PRA	004	006	104		PODIUM	75	Module	PORTRAIT	LED Illuminated Static Poster Panel c/w clips
Consumables & Accessories									
PRA	004	006	201		PODIUM	75	Filter		System F7 Filter
PRA	004	006	202		PODIUM	75	Filter		Sacrificial Filter Medium Kit [includes exhaust]
Options									
PRA	004	006	301		PODIUM		Option	PORTRAIT	PCAP laminated LH/RH hinged fascia upgrade
PRA	004	XXX	302		PODIUM		Option		Forward facing Camera – fascia integrated
PRA	004	006	303		PODIUM		Option	PORTRAIT	Polycarbonate Fascia Vandal Shield

See General Arrangement [GA] and Field Assembly [FA] Drawings for each SKU# for product dimensions, schematics, operation and installation detail. GA and FA drawing numbers follow PRA-004-00X-XXX format. [for example: PRA-004-006-004 GA]

Podium DS ... Product General Safety Precautions



WARNING:

A local Certified Structural Engineer must specify and stamp a suitable support system for each site, including footings, anchors and embedment details.



WARNING:

Refer to the applicable kit Field Assembly (FA) Drawing instructions to ensure correct and safe installation and interconnection of the equipment.



LIFTING HAZARD:

Podium DS display enclosures are heavy! Do NOT lift or move these heavy objects without proper mechanical lift assistance.



WARNING:

All power connections to be completed by a Certified Electrician, in accordance with the approved wiring schematic.



HAZARDOUS VOLTAGE:

Risk of electric shock! Ensure power is disconnected before opening for service. An all-pole 20A circuit breaker (in accordance with IEC 62368-1 Annex L) shall be incorporated in the electrical installation of the building.



WARNING:

Ensure that all cables are properly located and secured to prevent “pinching” while opening and closing doors and display frames.



WARNING:

OTHER THAN DUST AND COOLING FILTERS, THE SYSTEM CONTAINS NO USER-SERVICEABLE PARTS.

Replacement of all other equipment must only be carried out by a Praevar authorized technician. Failure to comply will void all warranties.



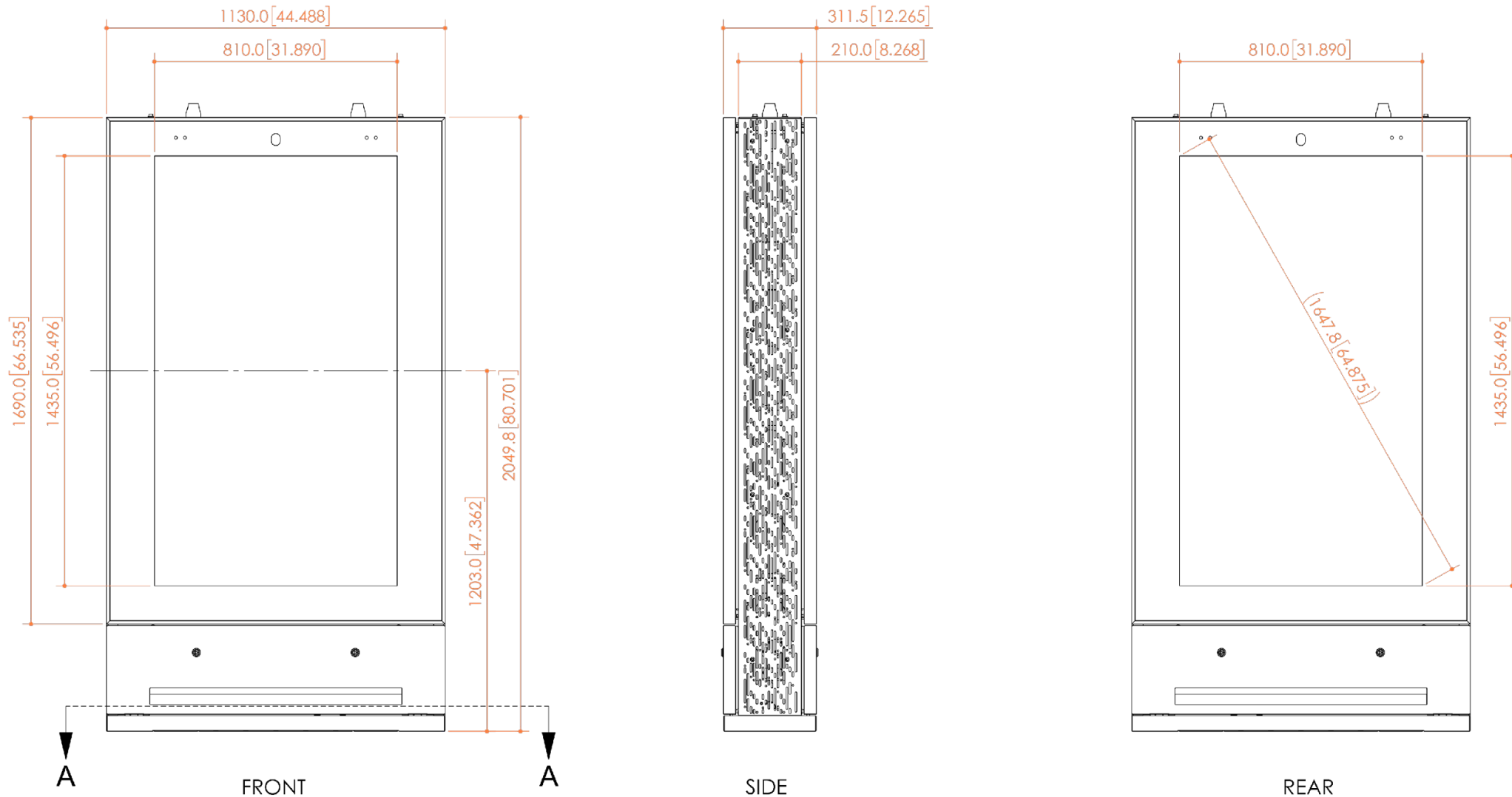
WARNING:

Operating temperature is -4°F to +122°F [-20°C to +50°C]

Podium DS65DD ... Outline Dimensions, PRA-004-005-002

... Refer to Drawing PRA-004-005-002GA for Detailed General Arrangement ...

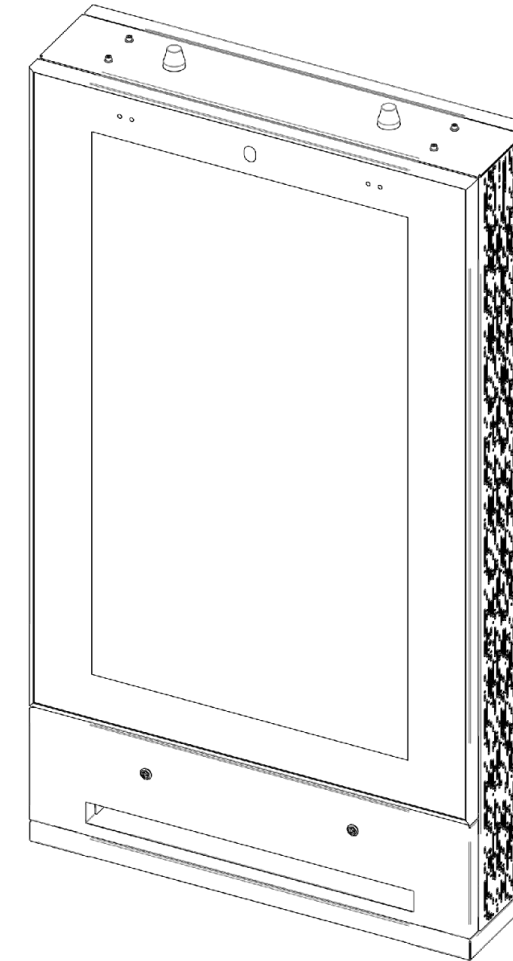
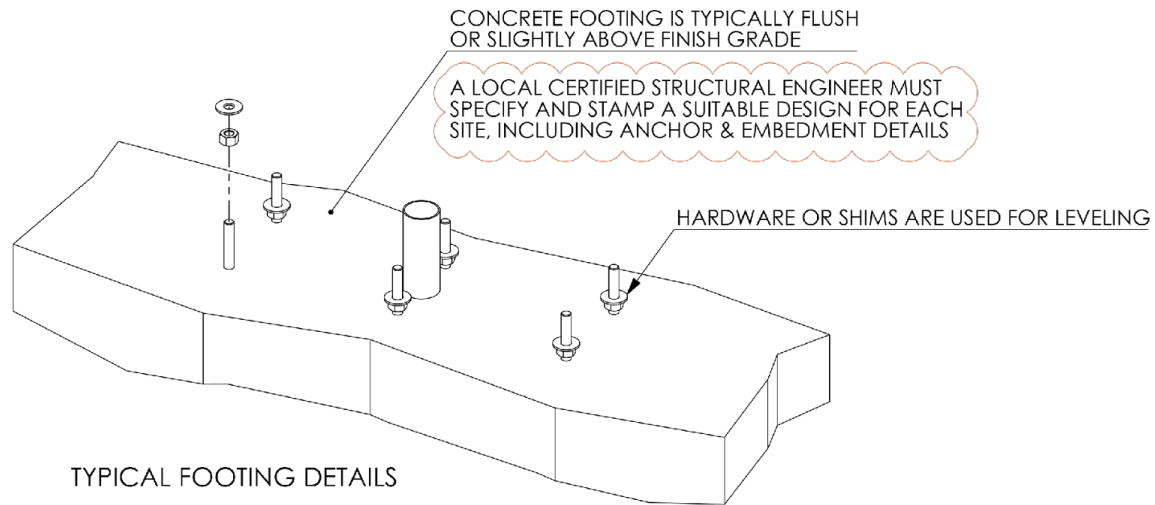
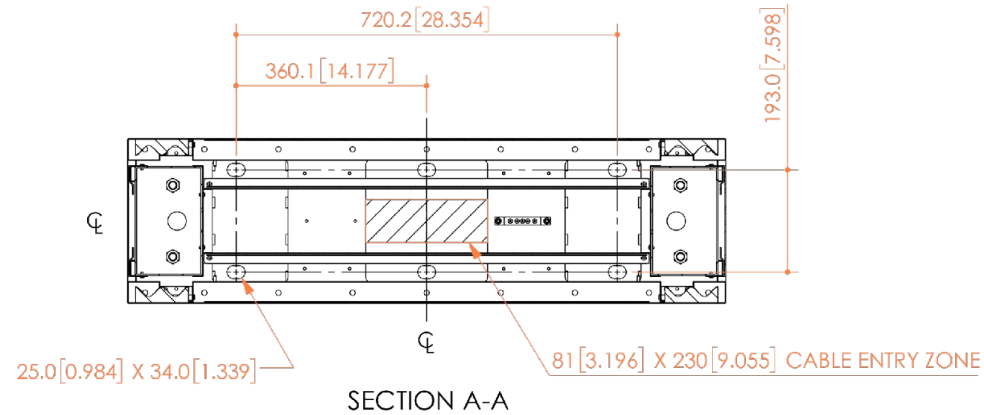
... Refer to Drawing PRA-004-005-002FA for Detailed Field Installation Instructions ...



Podium DS65DD ... Outline Dimensions, PRA-004-005-002

... Refer to Drawing PRA-004-005-002GA for Detailed General Arrangement ...

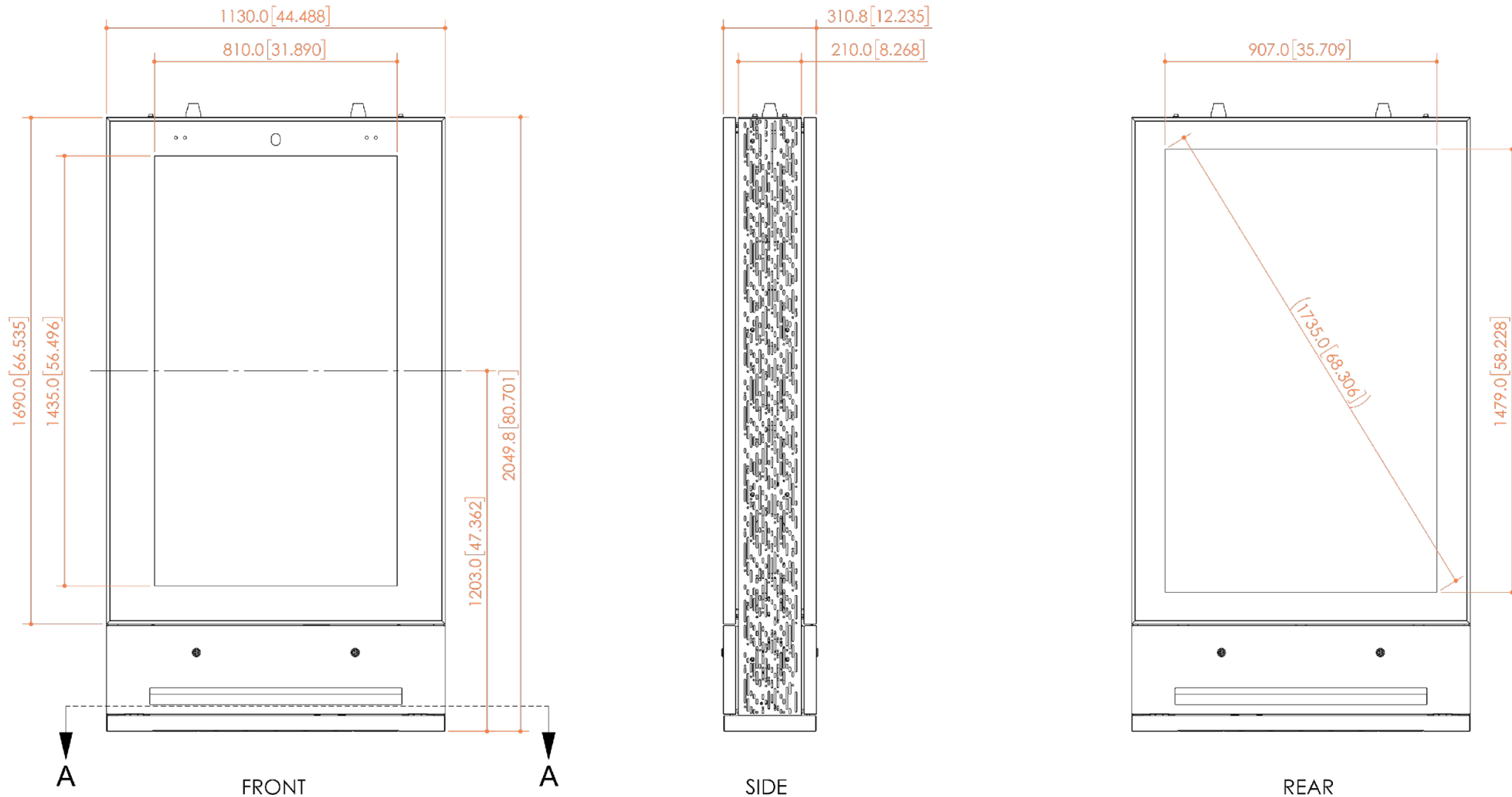
... Refer to Drawing PRA-004-005-002FA for Detailed Field Installation Instructions ...



Podium DS65DS ... Outline Dimensions, PRA-004-005-001

... Refer to Drawing PRA-004-005-001GA for Detailed General Arrangement ...

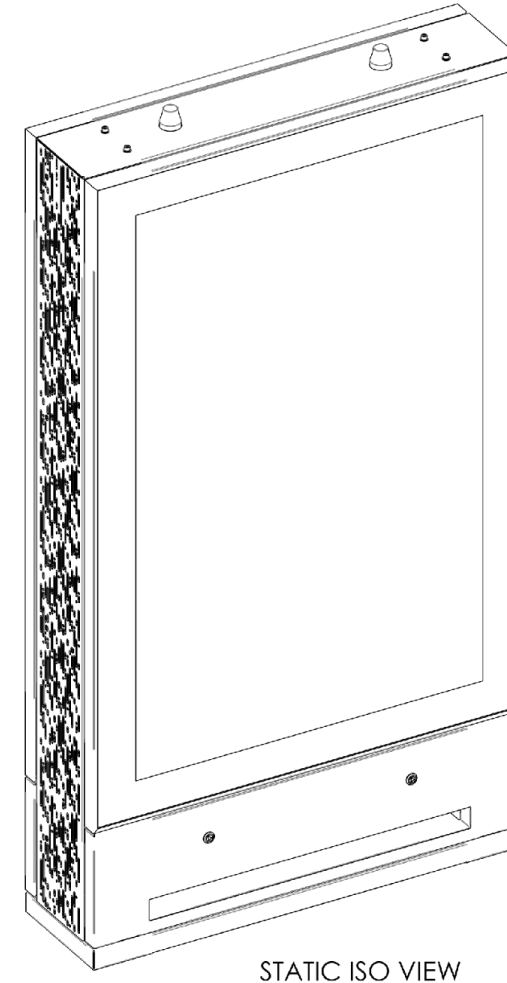
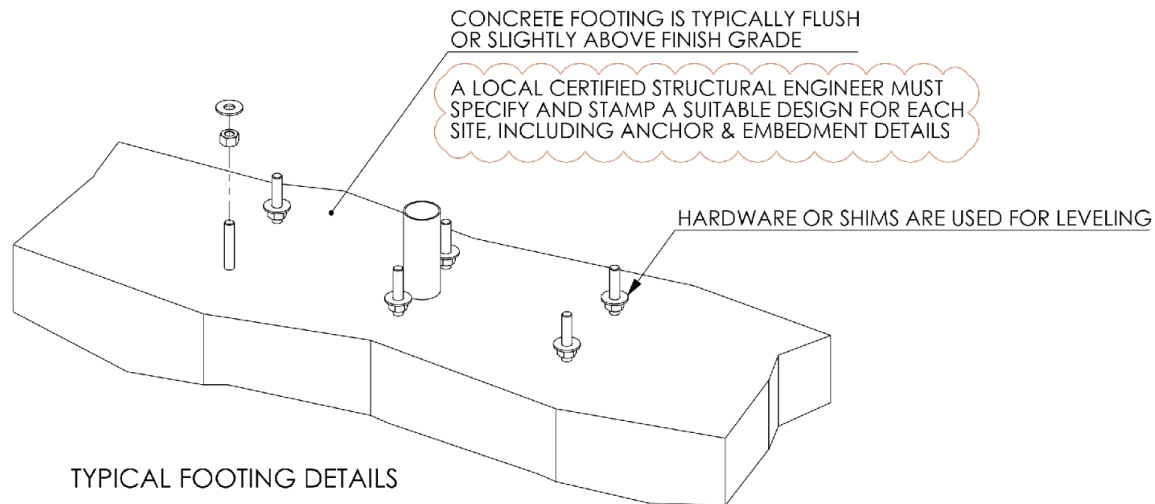
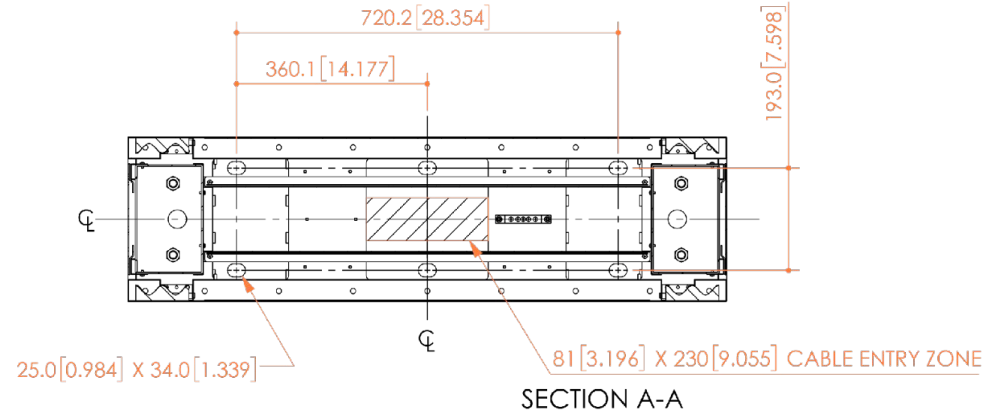
... Refer to Drawing PRA-004-005-001FA for Detailed Field Installation Instructions ...



Podium DS65DS ... Outline Dimensions, PRA-004-005-001

... Refer to Drawing PRA-004-005-001GA for Detailed General Arrangement ...

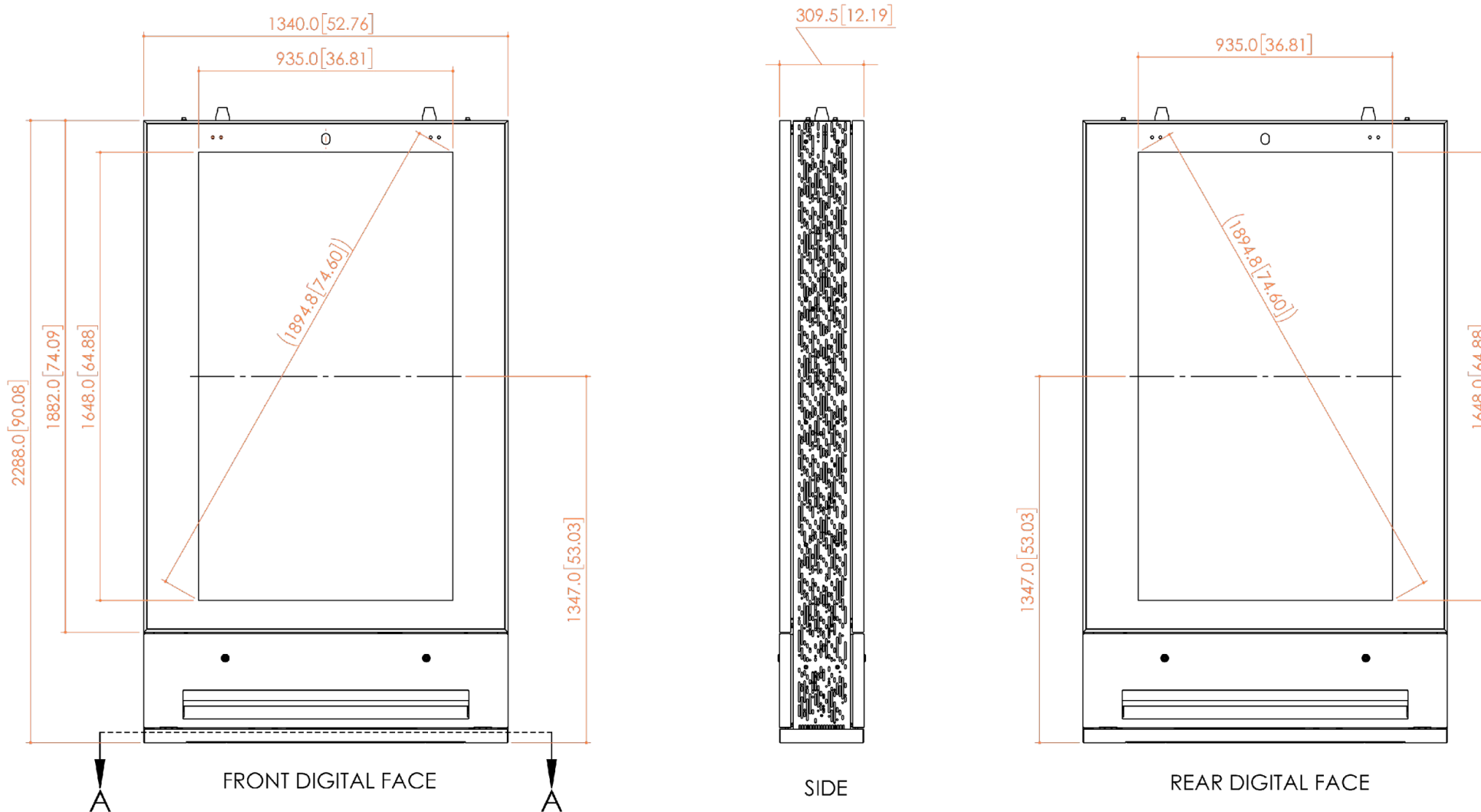
... Refer to Drawing PRA-004-005-001FA for Detailed Field Installation Instructions ...



Podium DS75DD ... Outline Dimensions, PRA-004-006-008

... Refer to Drawing PRA-004-006-008GA for Detailed General Arrangement ...

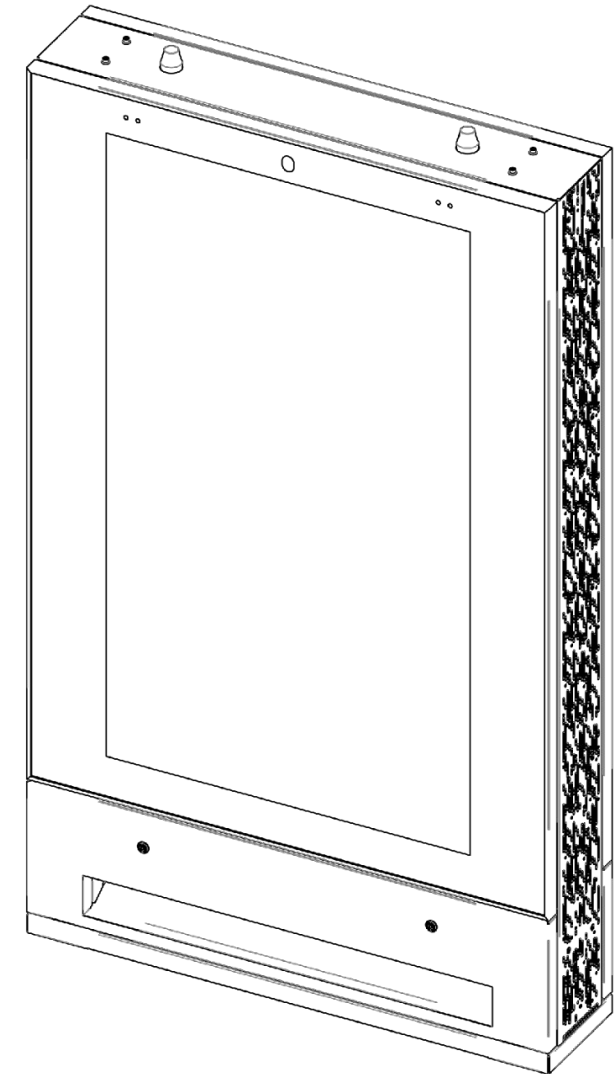
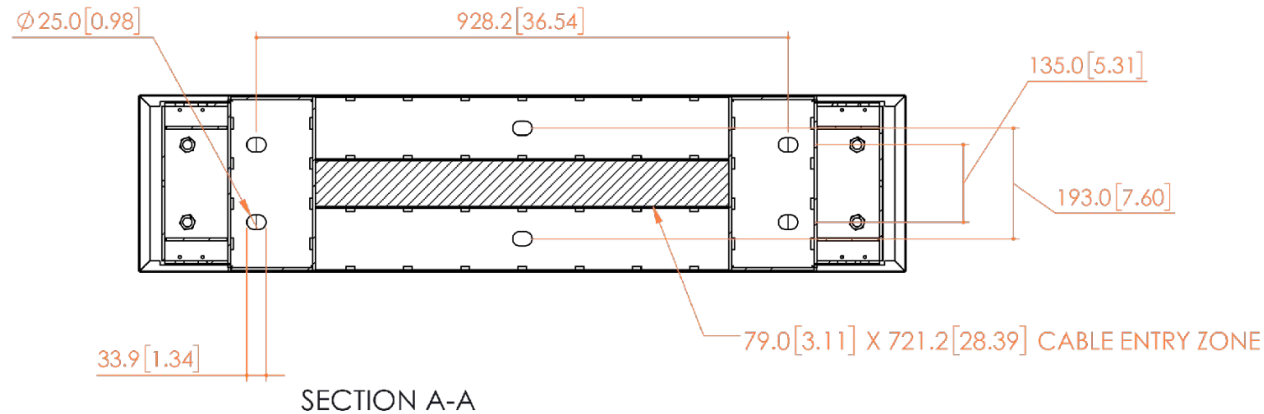
... Refer to Drawing PRA-004-006-008FA for Detailed Field Installation Instructions ...



Podium DS75DD ... Outline Dimensions, PRA-004-006-008

... Refer to Drawing PRA-004-006-008GA for Detailed General Arrangement ...

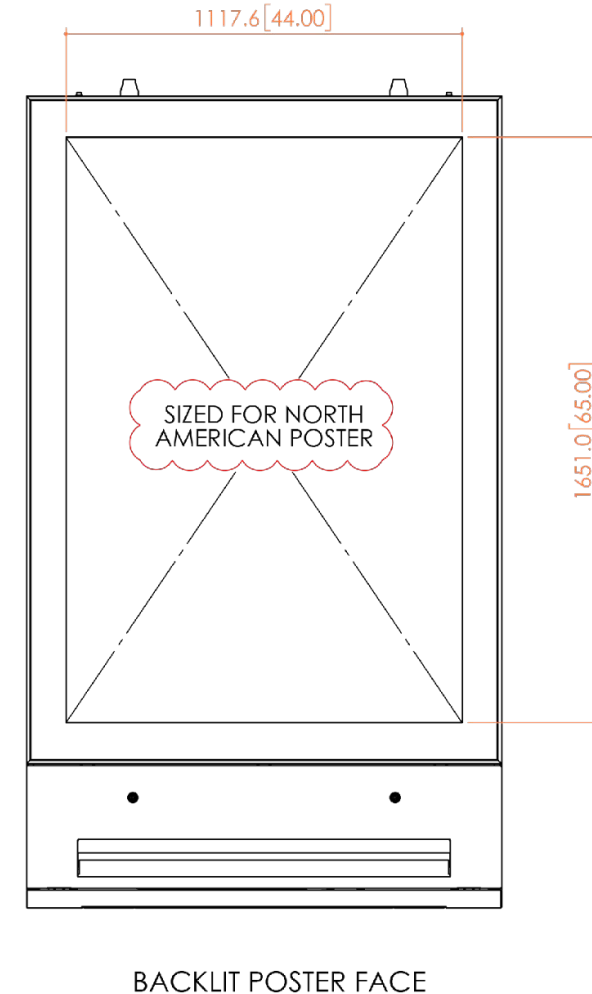
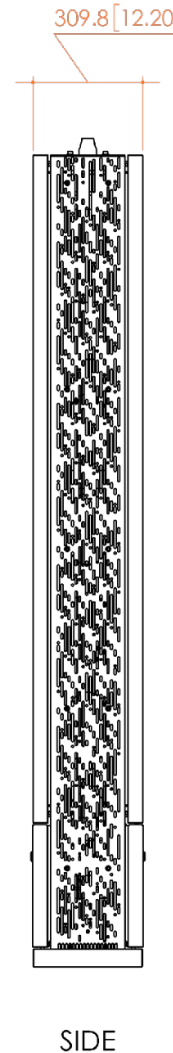
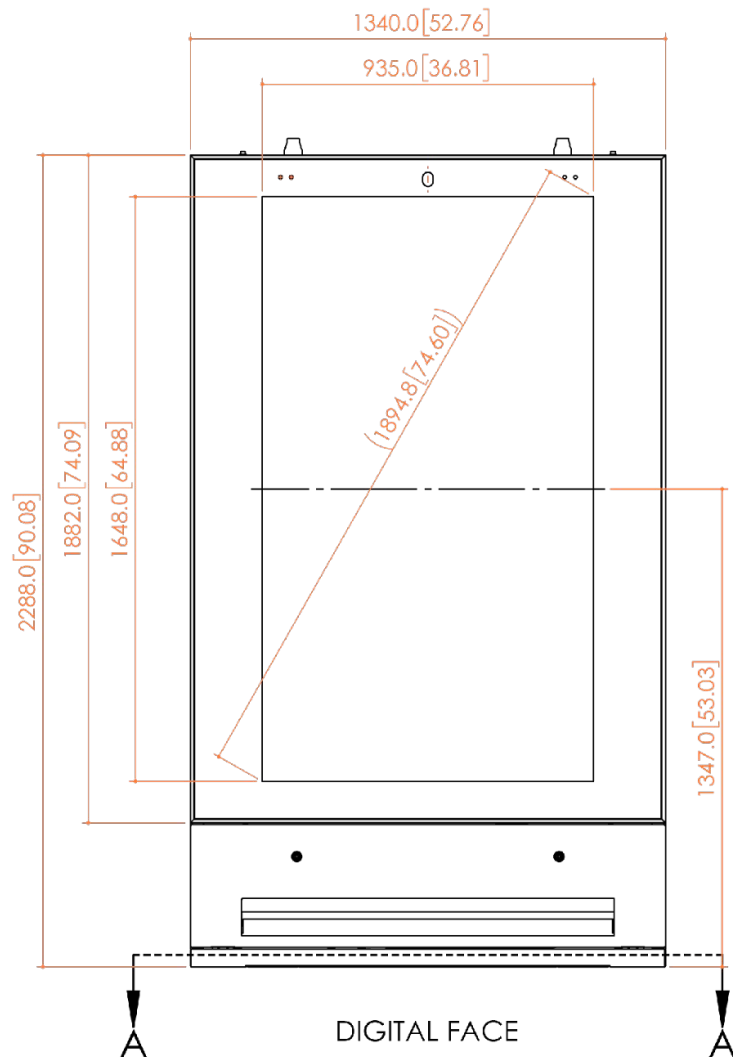
... Refer to Drawing PRA-004-006-008FA for Detailed Field Installation Instructions ...



Podium DS75DS ... Outline Dimensions, PRA-004-006-009

... Refer to Drawing PRA-004-006-009GA for Detailed General Arrangement ...

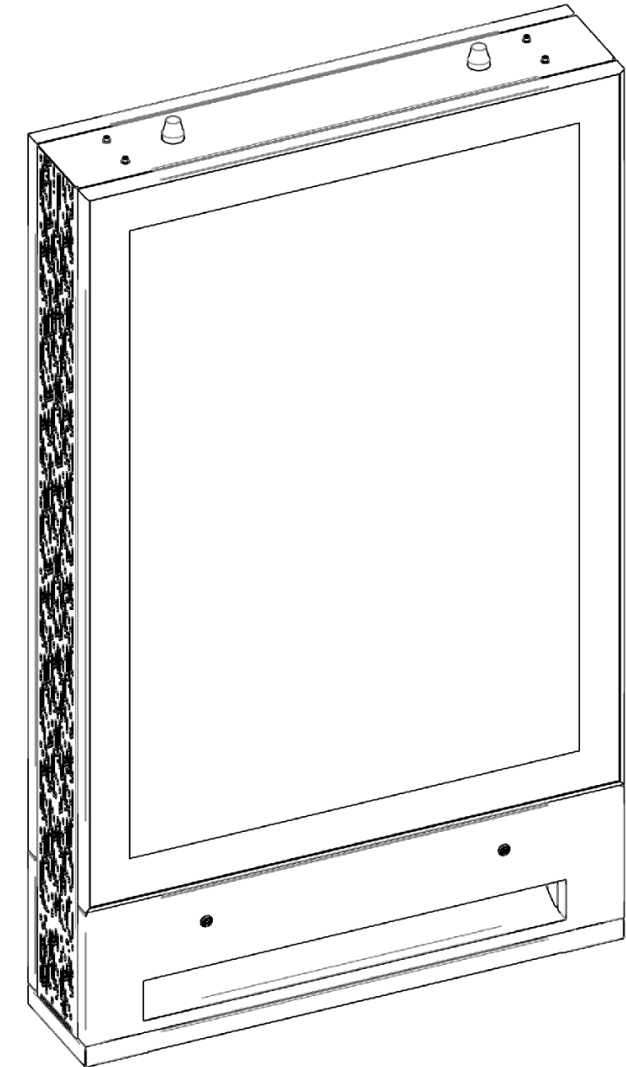
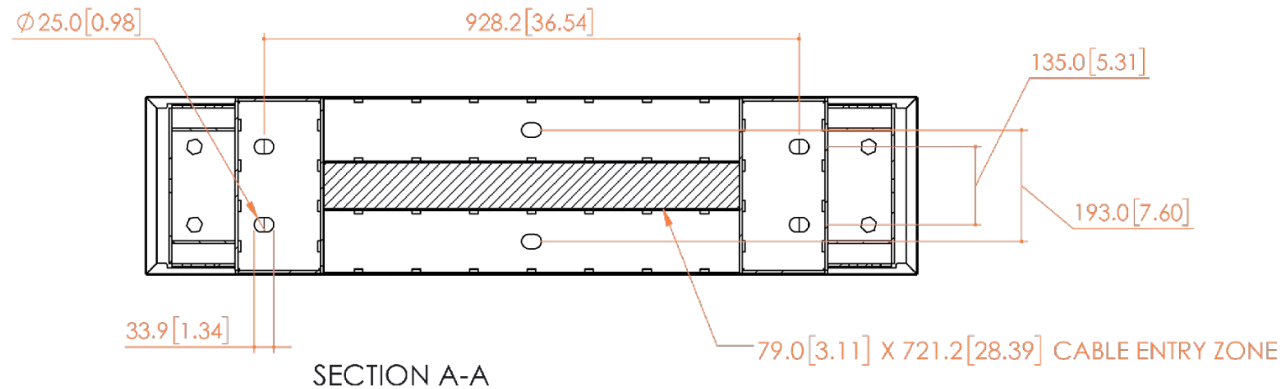
... Refer to Drawing PRA-004-006-009FA for Detailed Field Installation Instructions ...



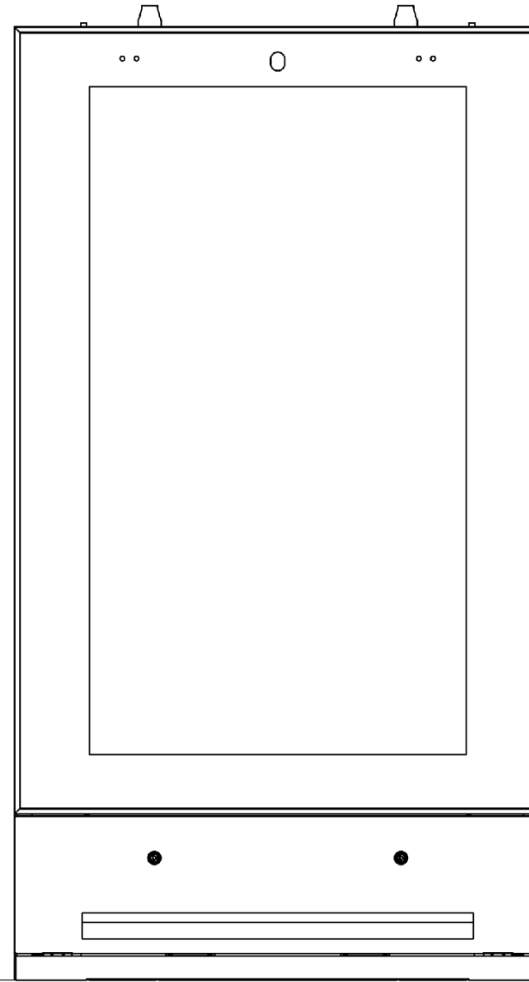
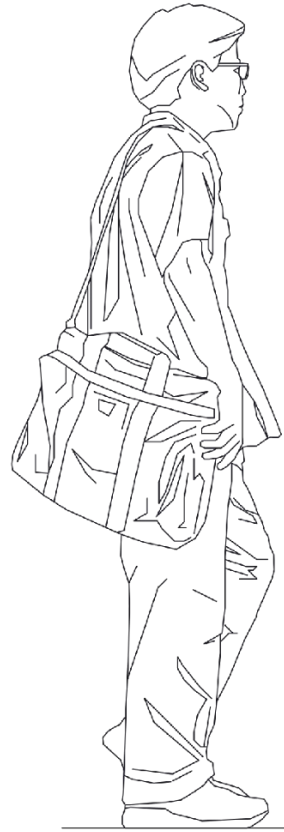
Podium DS75DS ... Outline Dimensions, PRA-004-006-009

... Refer to Drawing PRA-004-006-009GA for Detailed General Arrangement ...

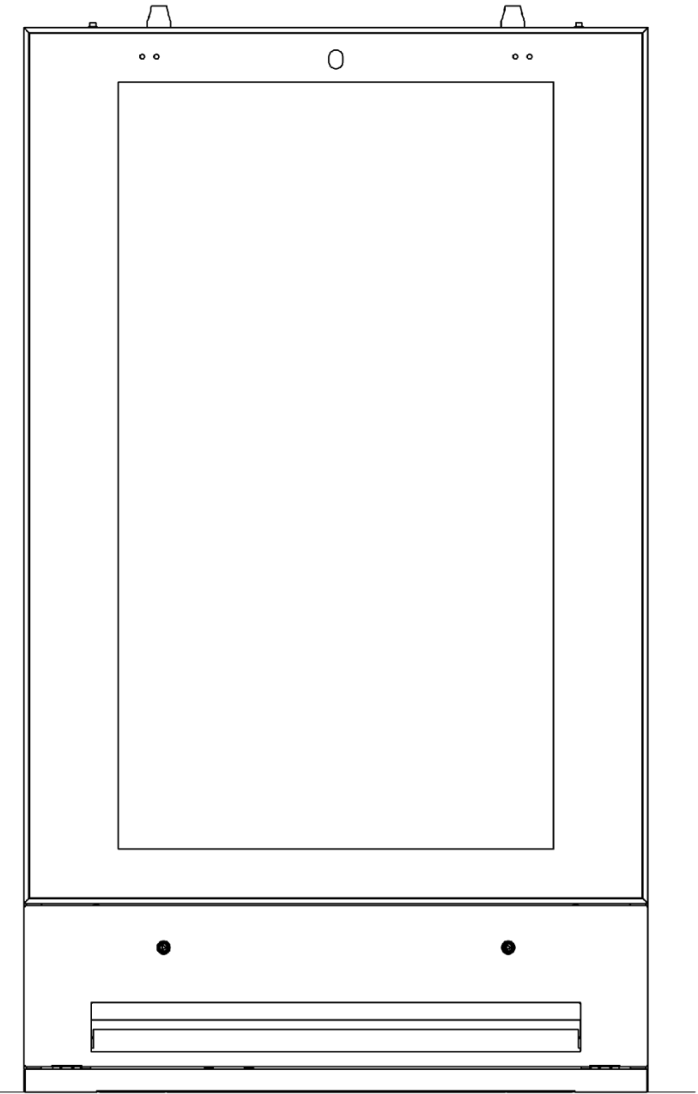
... Refer to Drawing PRA-004-006-009FA for Detailed Field Installation Instructions ...



Podium DS65 / DS75 ... Scale Comparison

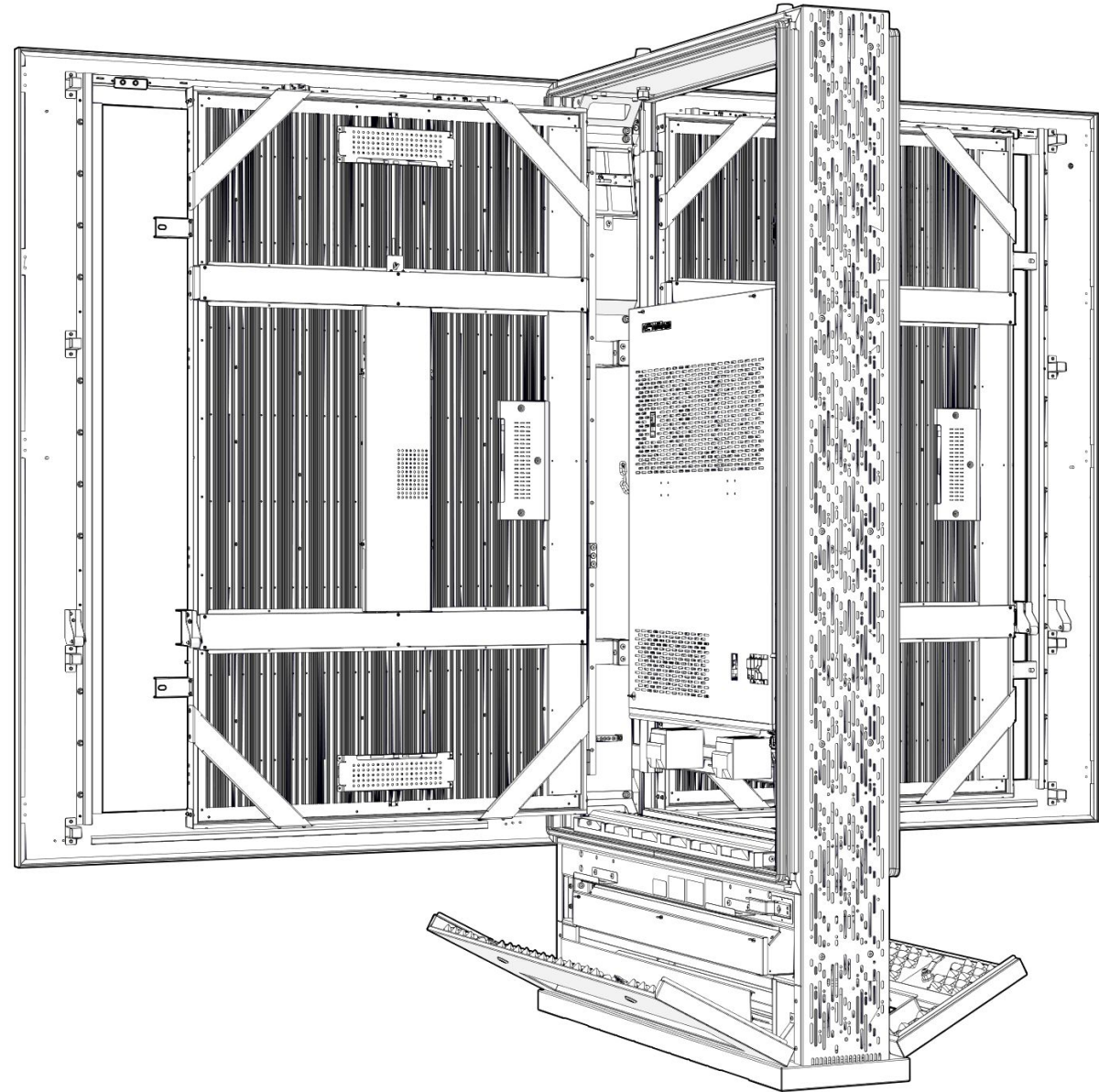
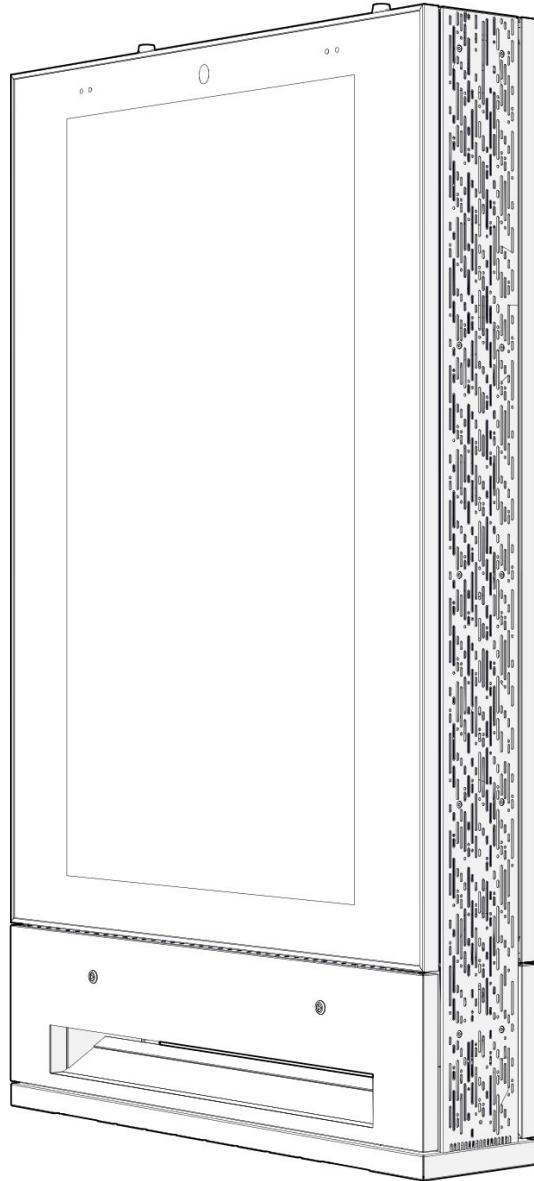


DS65

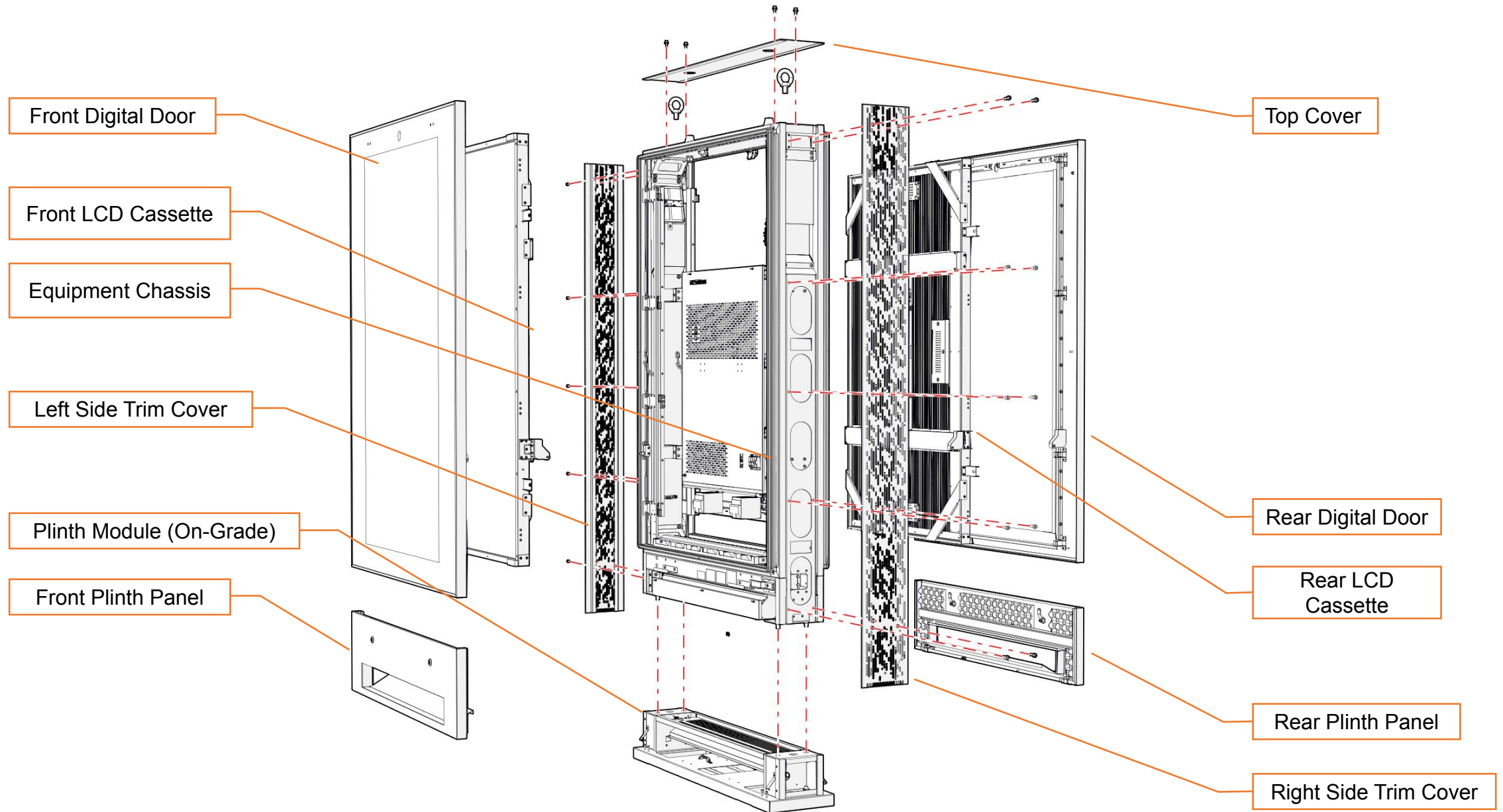


DS75

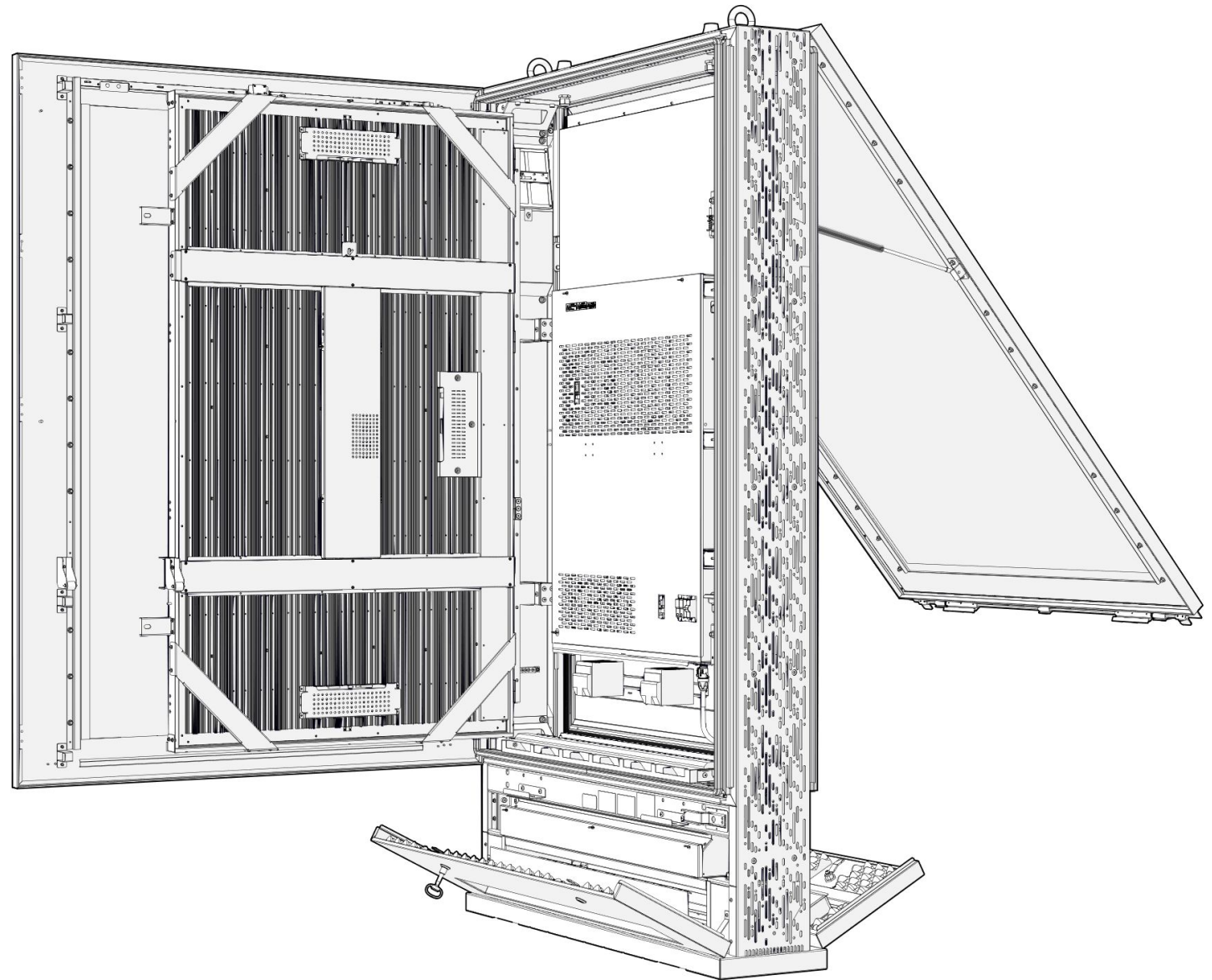
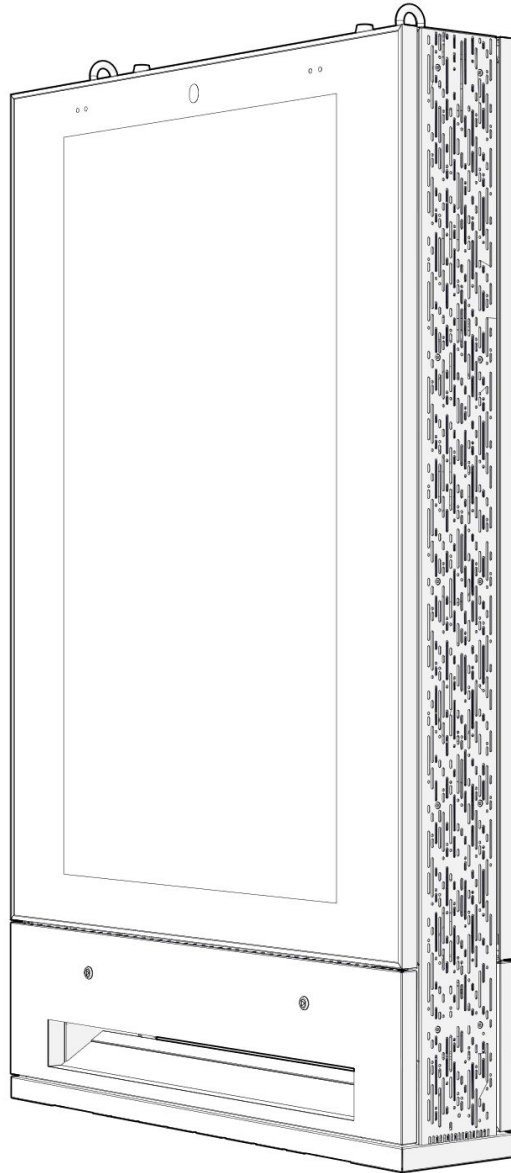
Podium DS75DD ... Closed & Open Views



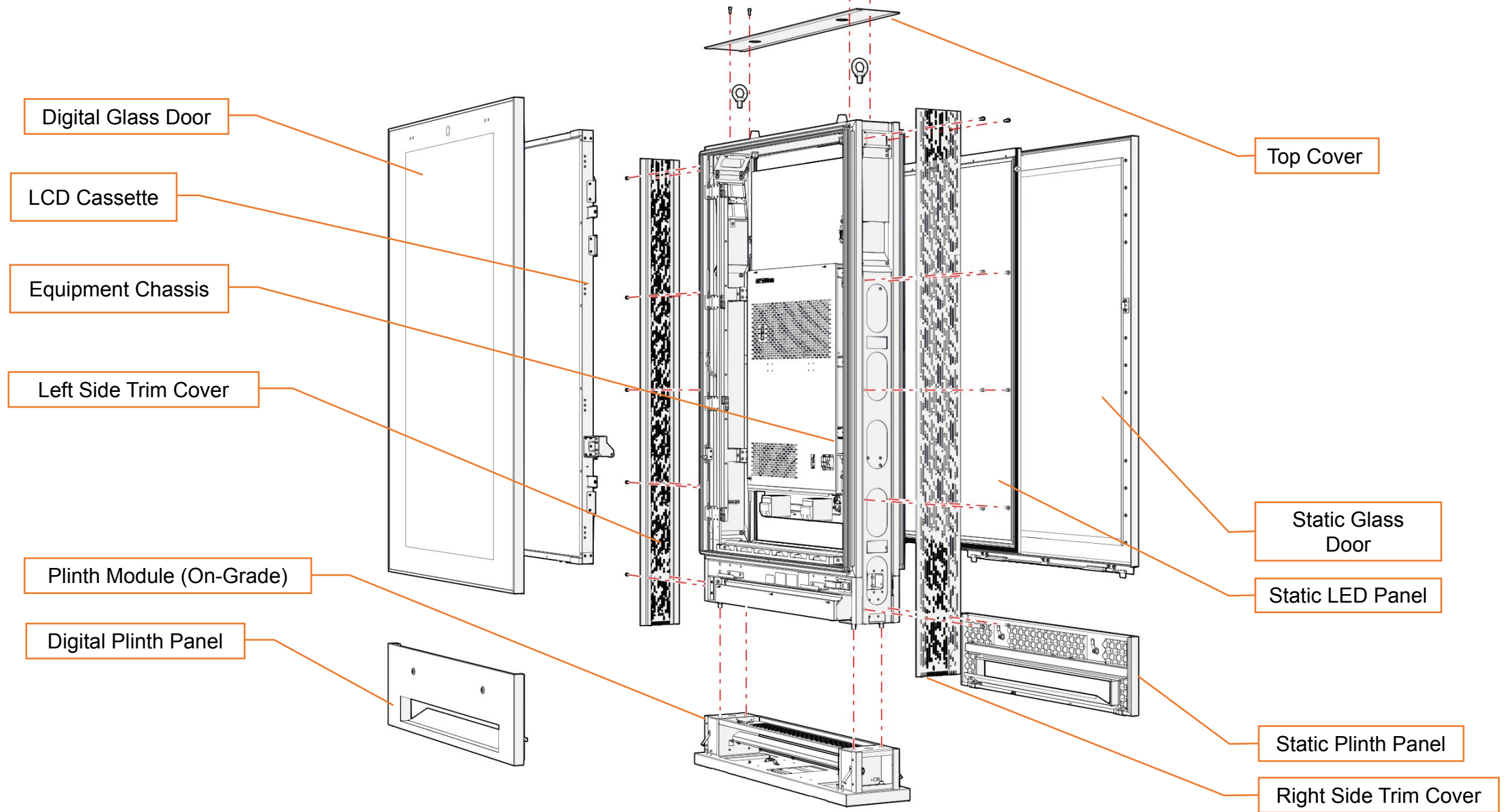
Podium DS75DD ... General Explode View



Podium DS75DS ... Closed & Open Views

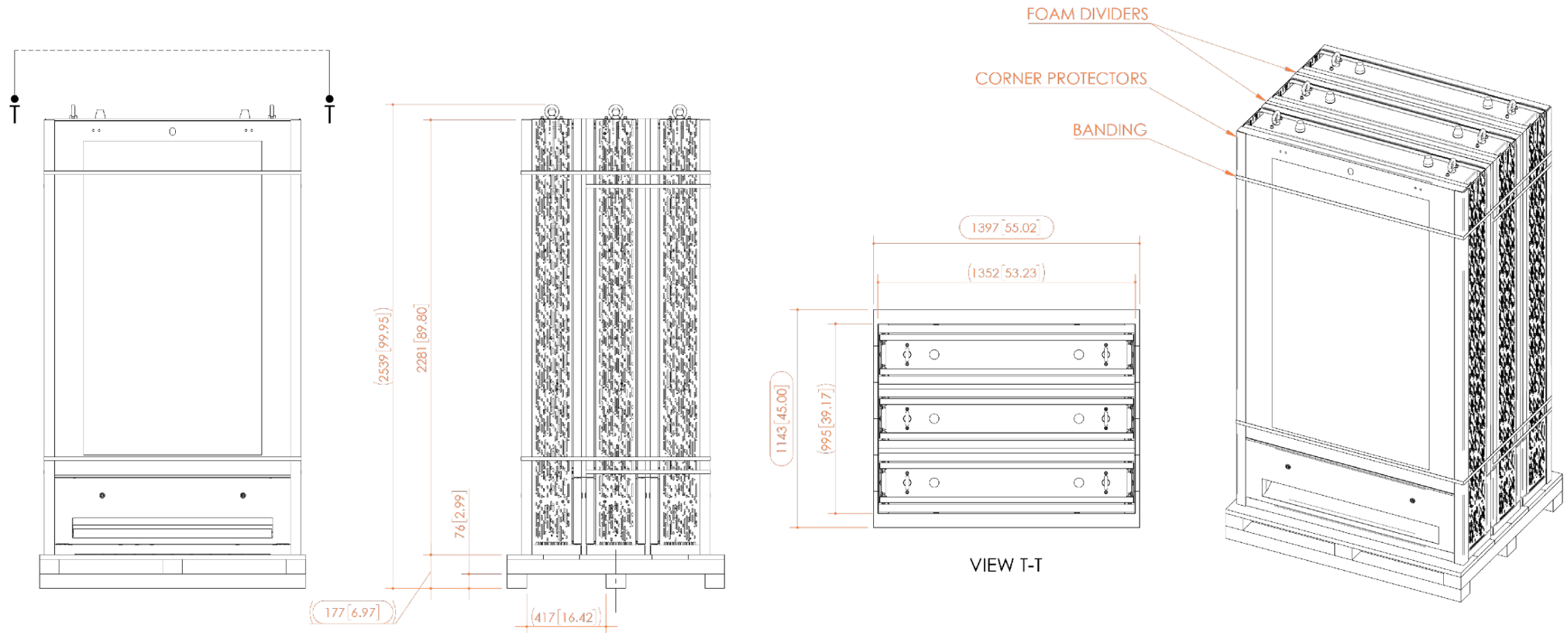


Podium DS75DS ... General Explode View

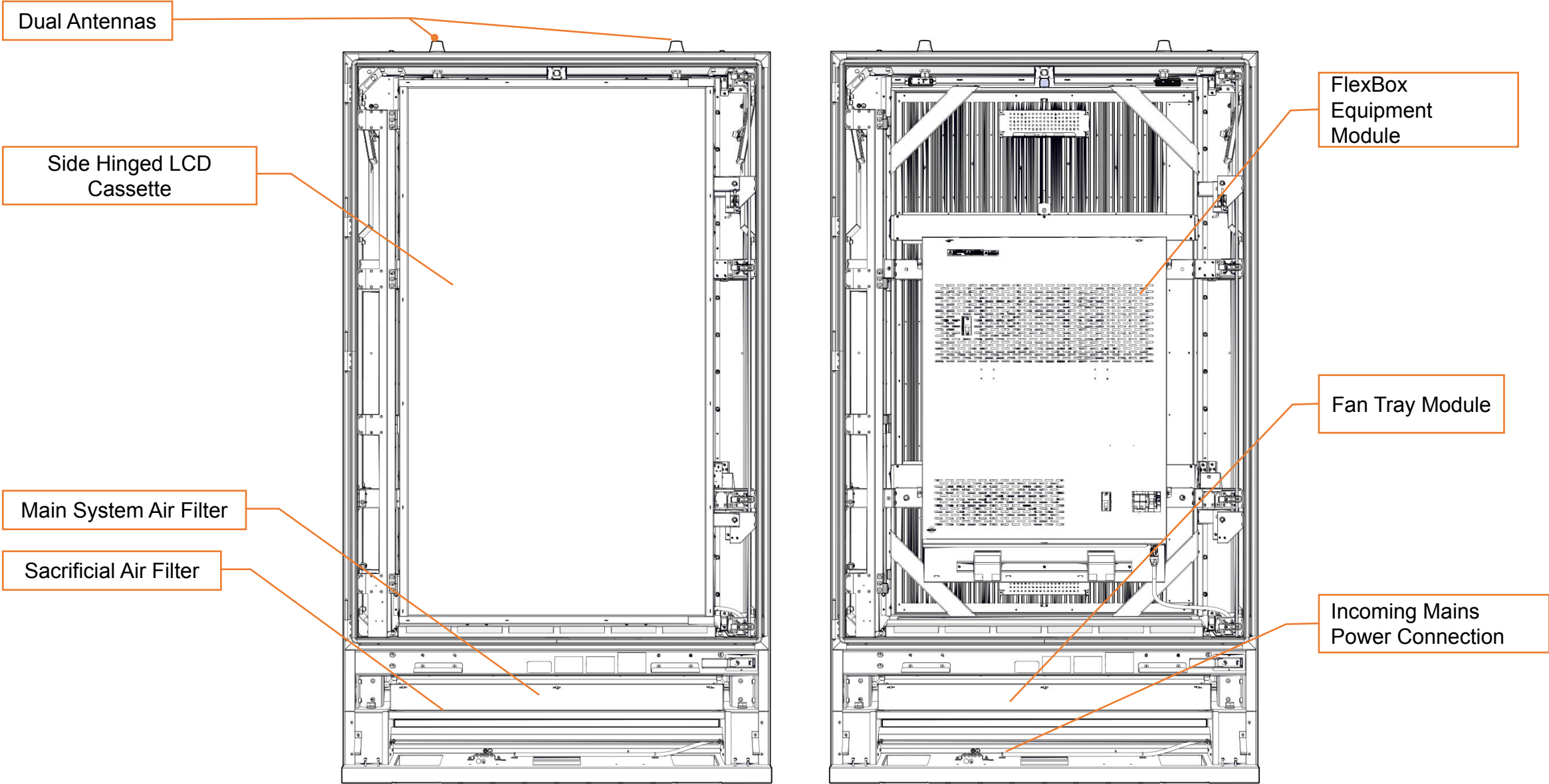


Podium DS75 ... Packaging Detail

... Refer to Drawing PRA-004-006-XXXPKG for Detailed Packaging Information ...



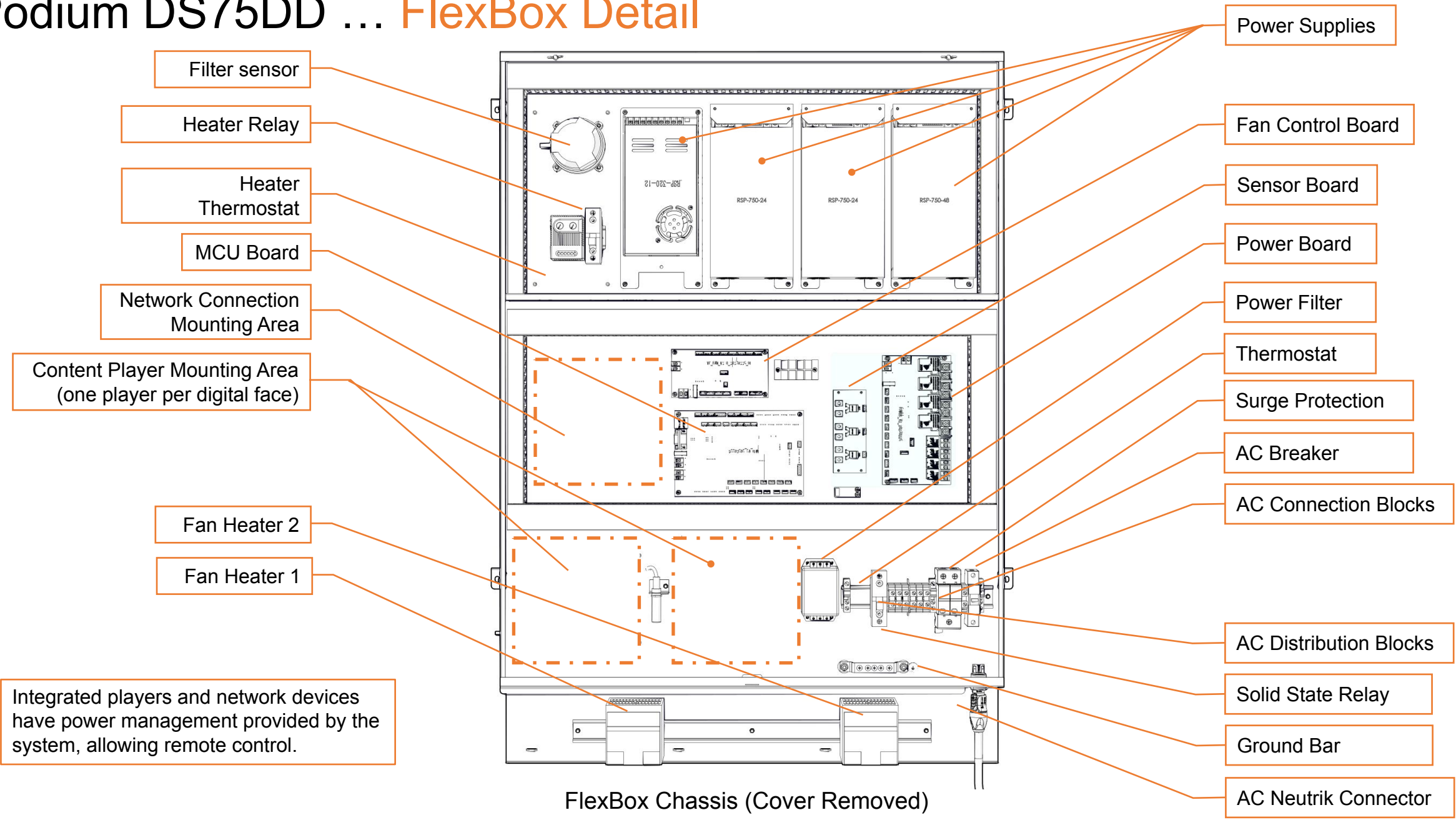
Podium DS75DD ... Equipment Layout



Digital Face (Door Hidden)

Digital Face (Door & LCD Hidden)

Podium DS75DD ... FlexBox Detail



Installation

Podium DS ... Installation Precautions & Notes



WARNING:

A local Certified Structural Engineer must specify and stamp a suitable support system for each site, including footings, anchors and embedment details.



WARNING:

Refer to the applicable kit Field Assembly (FA) Drawing instructions to ensure correct and safe installation and interconnection of the equipment.



LIFTING HAZARD:

Podium DS display enclosures are heavy! Do NOT lift or move these heavy objects without proper mechanical lift assistance.



WARNING:

All power connections to be completed by a Certified Electrician, in accordance with the approved wiring schematic.



WARNING:

Ensure that all cables are properly located and secured to prevent “pinching” while opening and closing doors and display frames.



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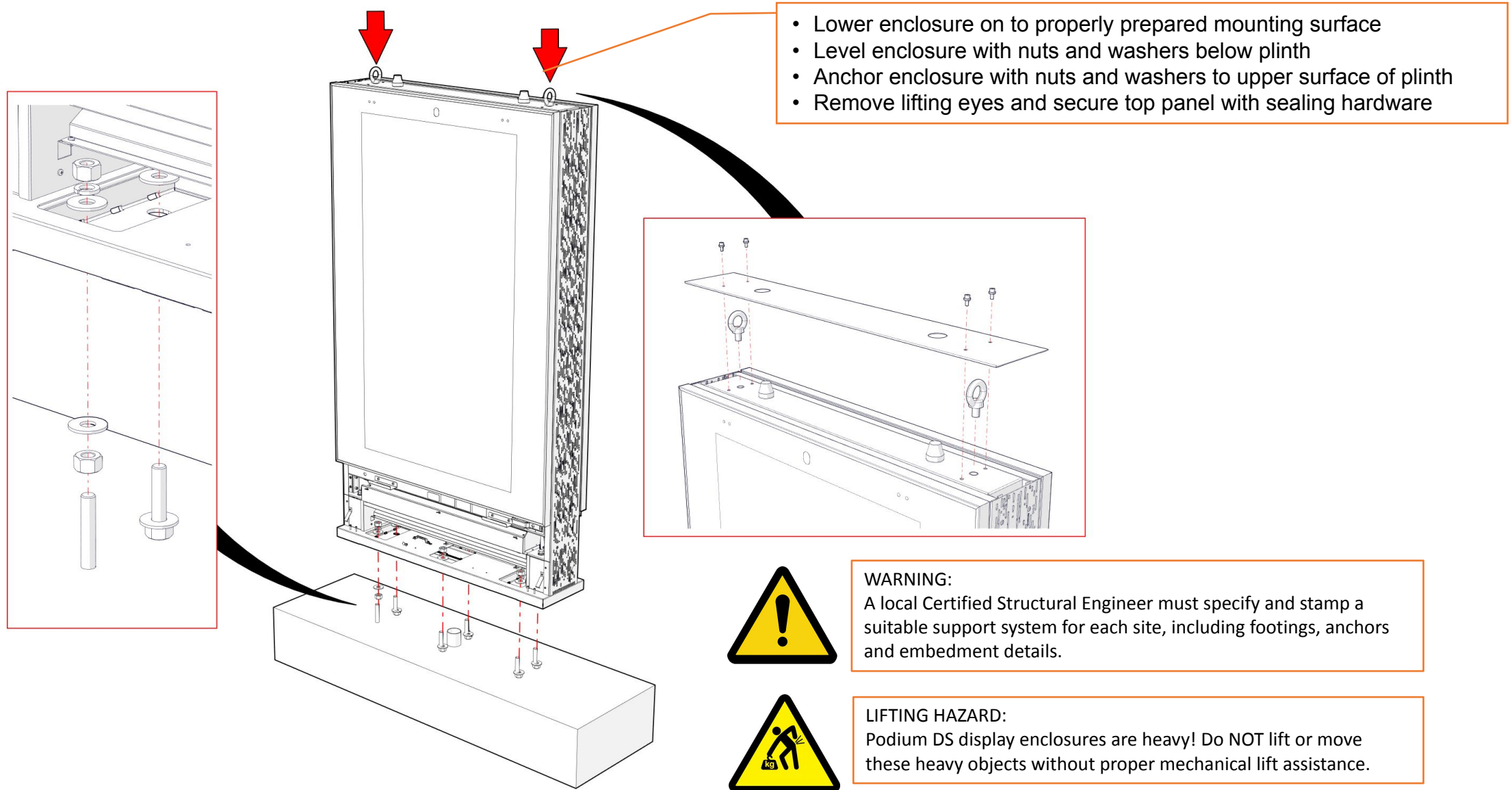


HAZARDOUS VOLTAGE:

Risk of electric shock! Ensure power is disconnected before opening for service. An all-pole 20A circuit (in accordance with IEC 62368-1 Annex L) shall be incorporated in the electrical installation of the building.

Podium DS ... Enclosure Installation

... Refer to Applicable FA for Detailed Field Installation Instructions ...



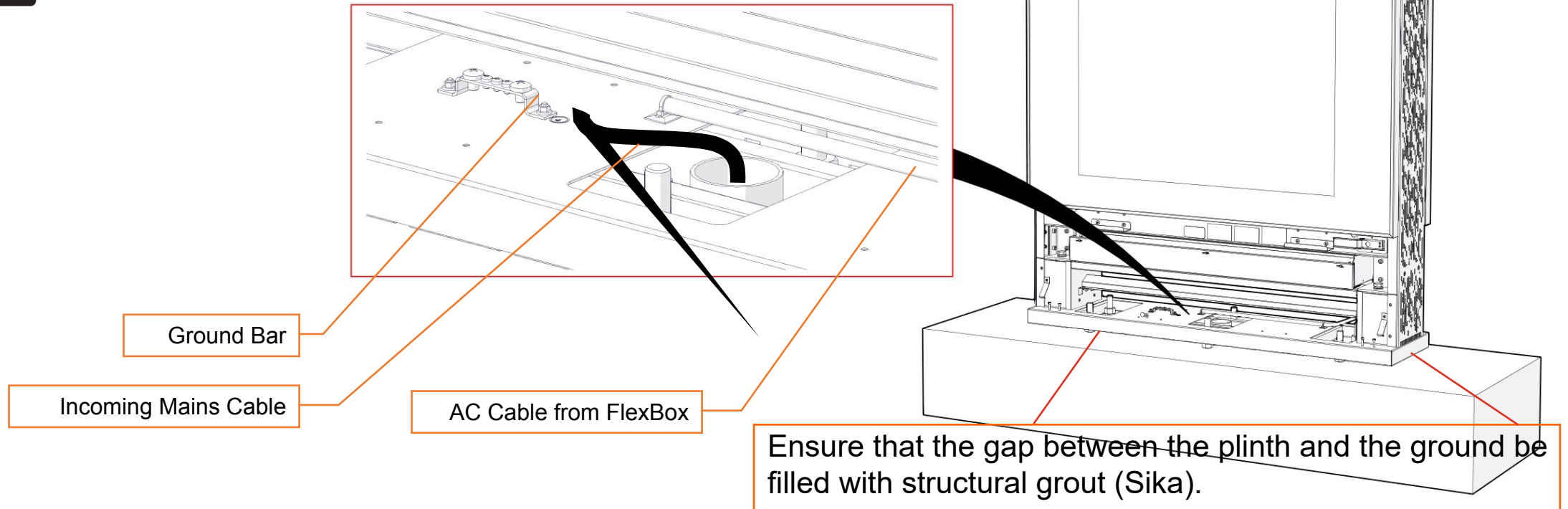
Podium DS ... Enclosure Electrical Connection

- REFERENCE ELECTRICAL SCHEMATIC DRAWING PRA-5003 FOR CONNECTION DETAILS.
- CONNECT 3m LONG AC CABLE WITH INCOMING MAINS POWER AND PLINTH GROUND BAR.
- AN ALL-POLE 20A CIRCUIT BREAKER MUST BE INCLUDED WITH THE SUPPLY CIRCUIT BY THE INSTALLING ELECTRICIAN.



WARNING:

All power connections to be completed by a Certified Electrician, in accordance with the approved wiring schematic.



Operation

Podium DS ... Operating Precautions & Notes



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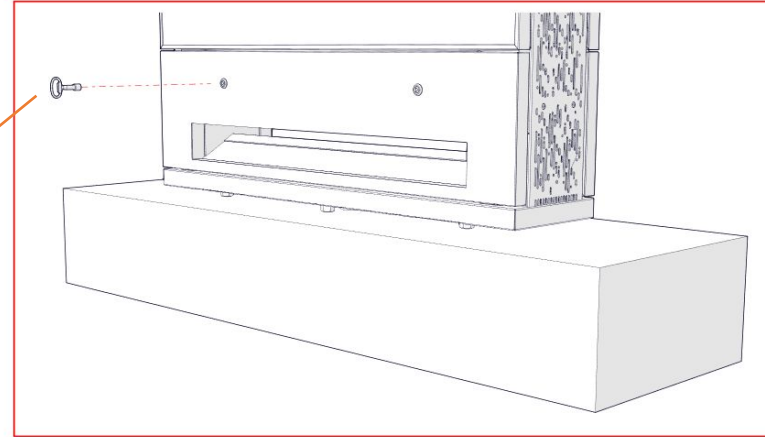


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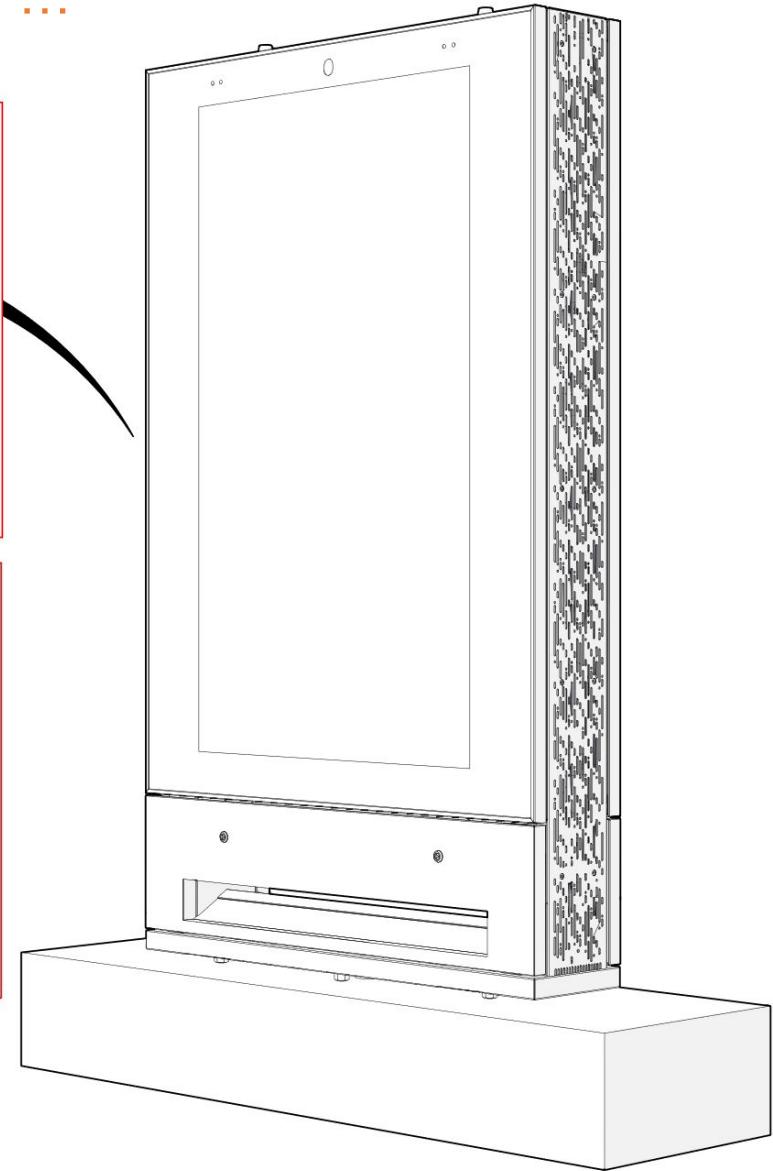
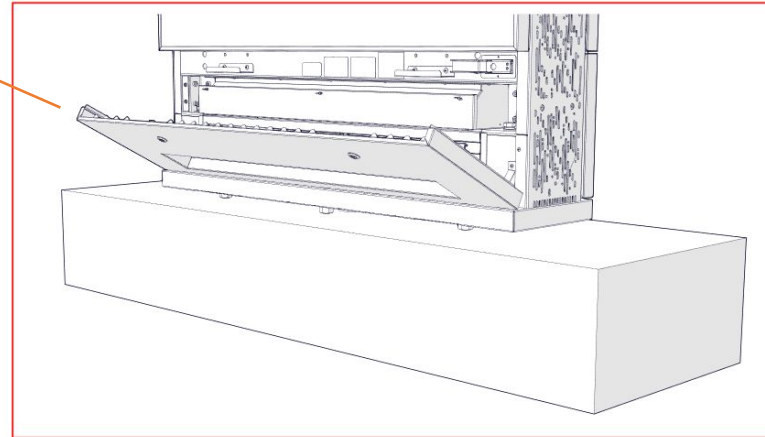
Podium DS System Access ... Digital Side Plinth Panel

... Open Plinth Panel to Access Filters and Digital Door Latch ...

- Use triangular key to un-lock two quarter-turn latches

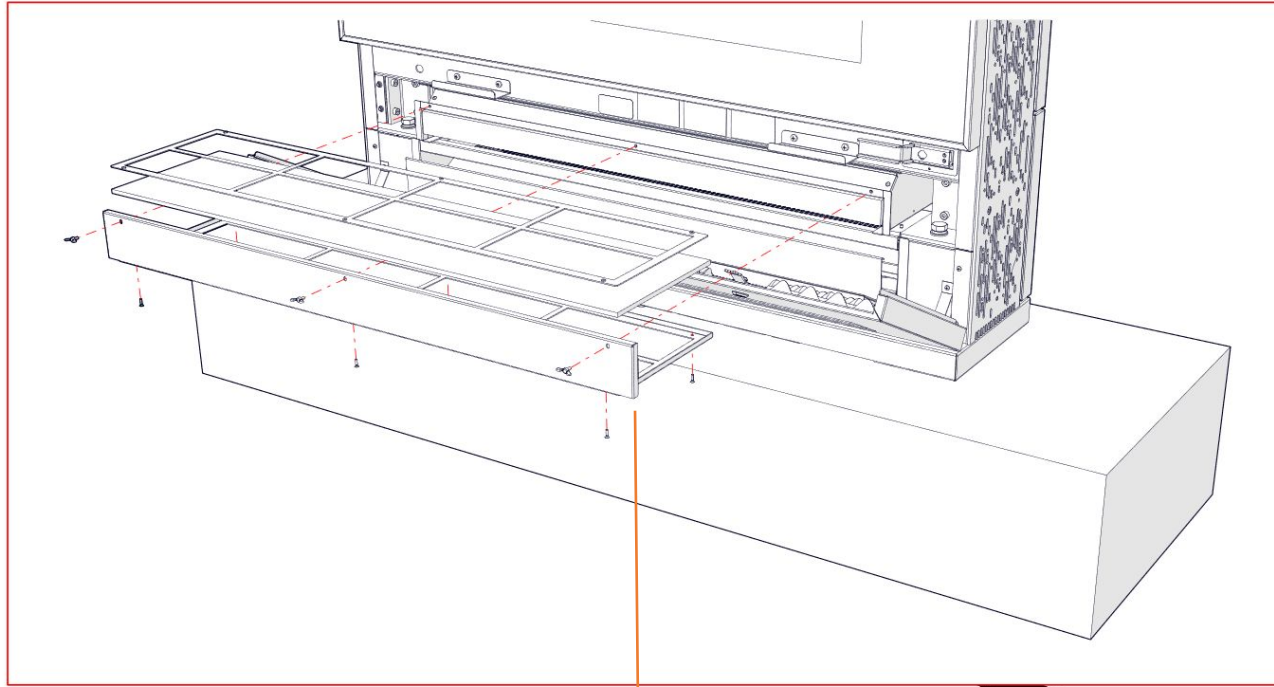


- Lower cover panel opens approximately 62°

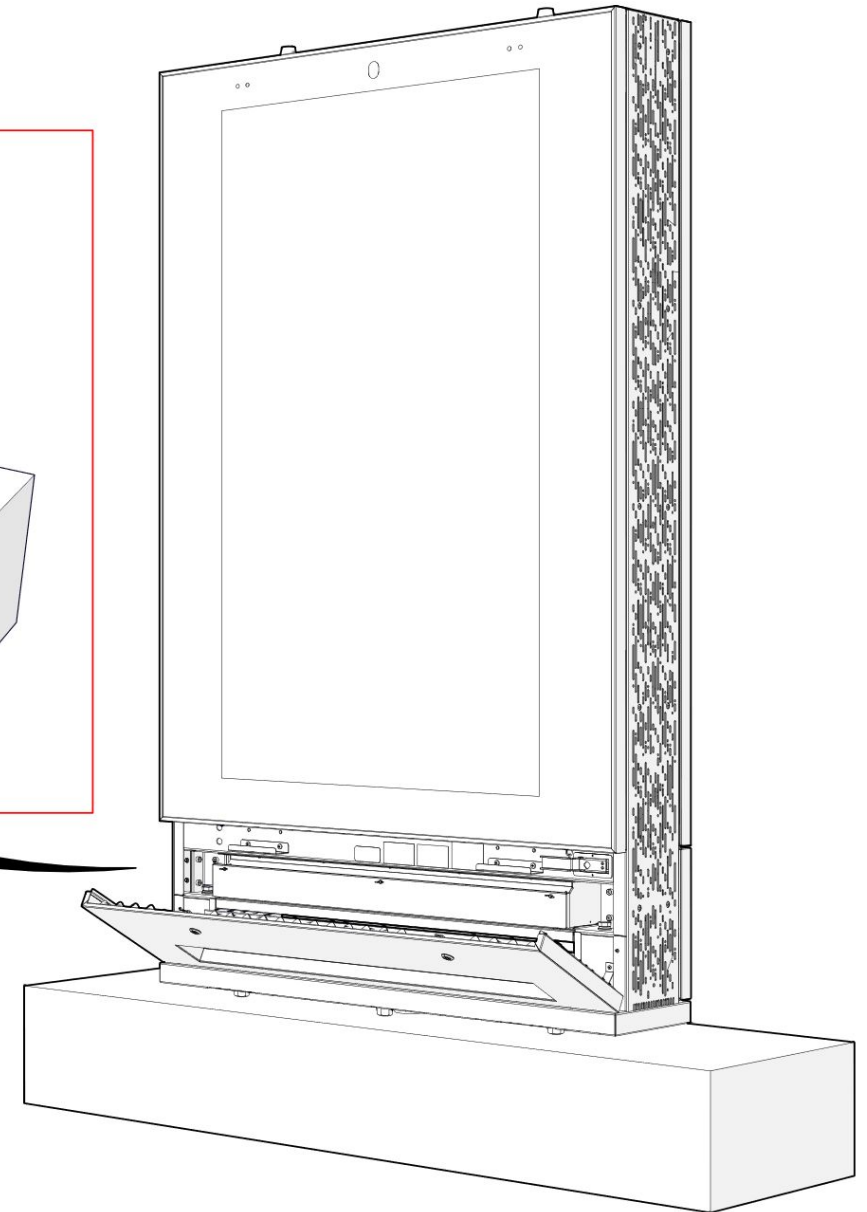


Podium DS System Maintenance ... Sacrificial Filter

... Sacrificial Filter Protects Main Cooling Filter ...

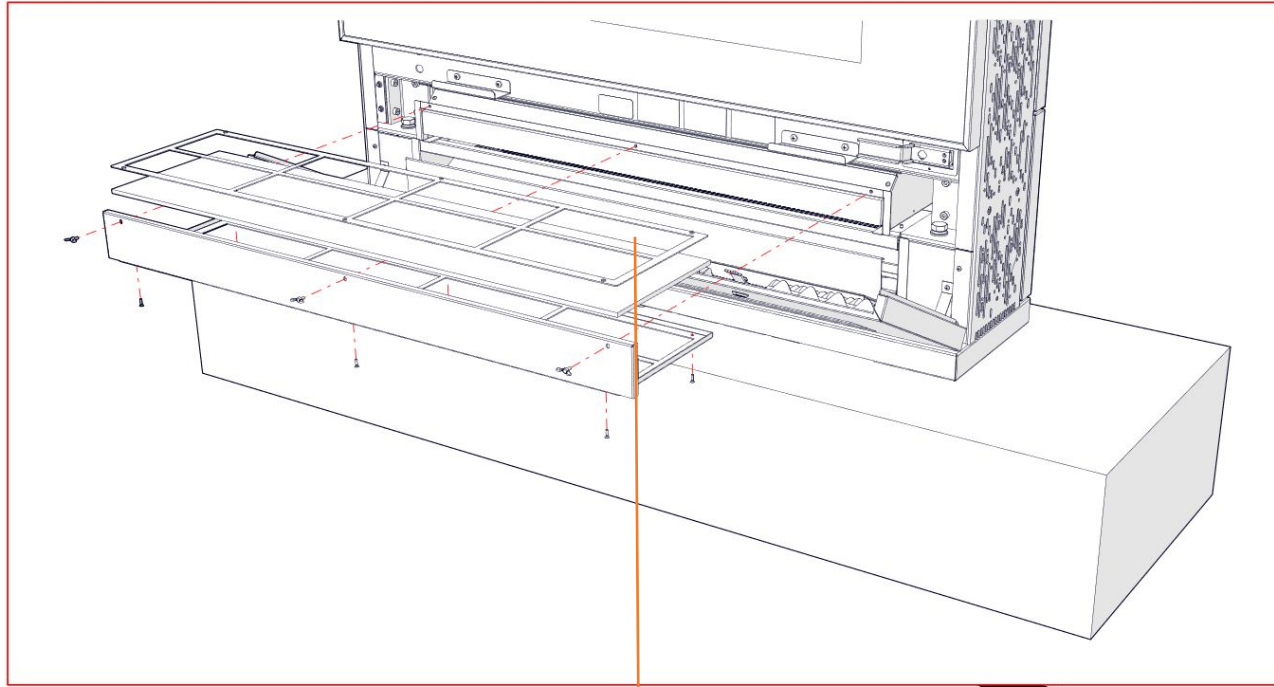


- Remove [3] wing head screws to slide out filter tray
- Remove [6] lower screws that hold retaining frame
- Clean or replace sacrificial filter
- This filter should be cleaned or replaced as conditions demand, or at least every three months

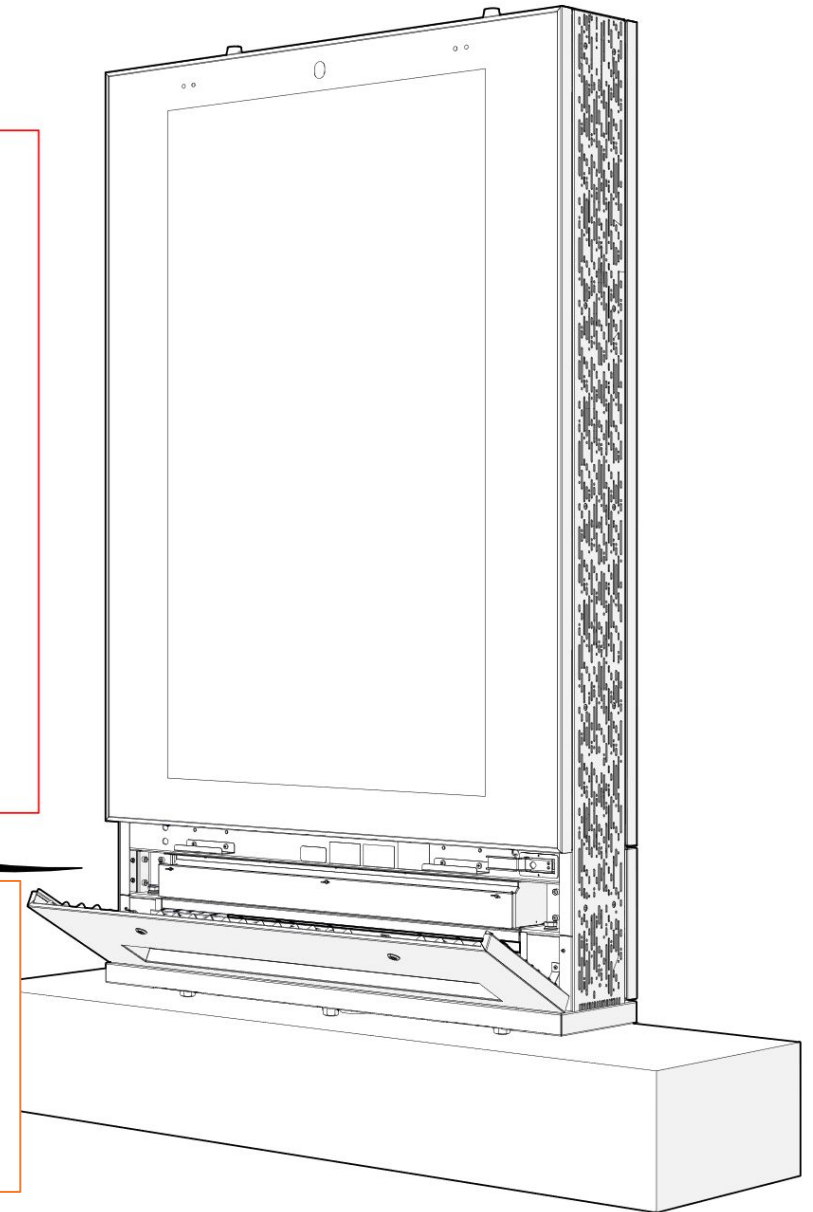
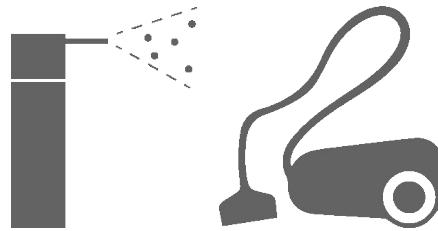


Podium DS System Maintenance ... Sacrificial Filter

... Cleaning The Sacrificial Filter ...

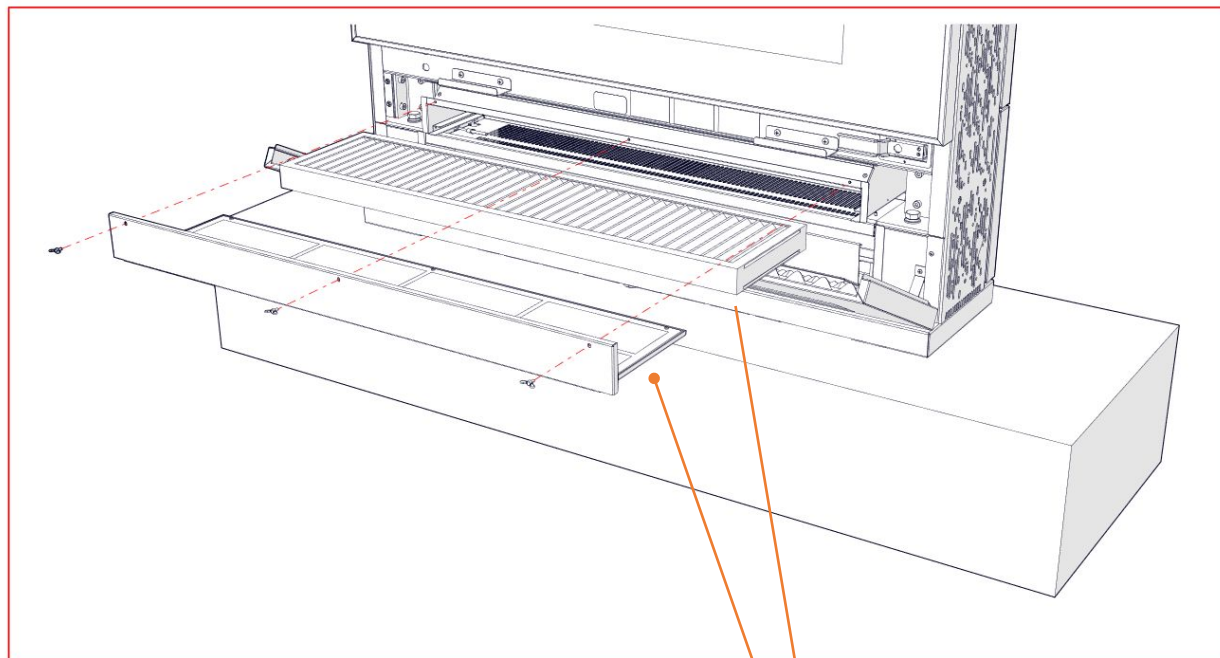


- Air Duster to clear the filter.
- Vacuum to remove any debris.
- Rinse the filter with water and ensure it is fully dry before installing.
- Replace the filter if material is too degraded.

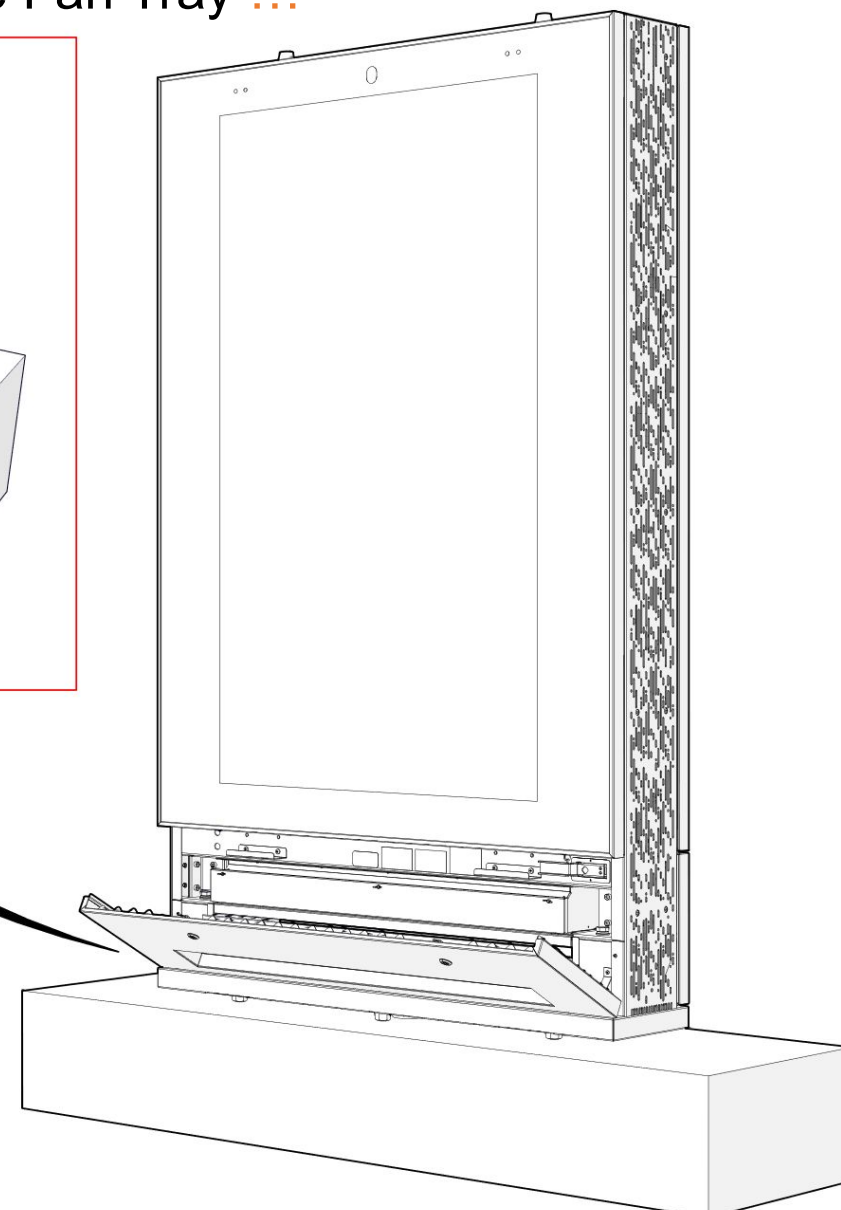


Podium DS System Maintenance ... Main System Filter

... The Main System Filter is Located Directly Beneath the Fan Tray ...

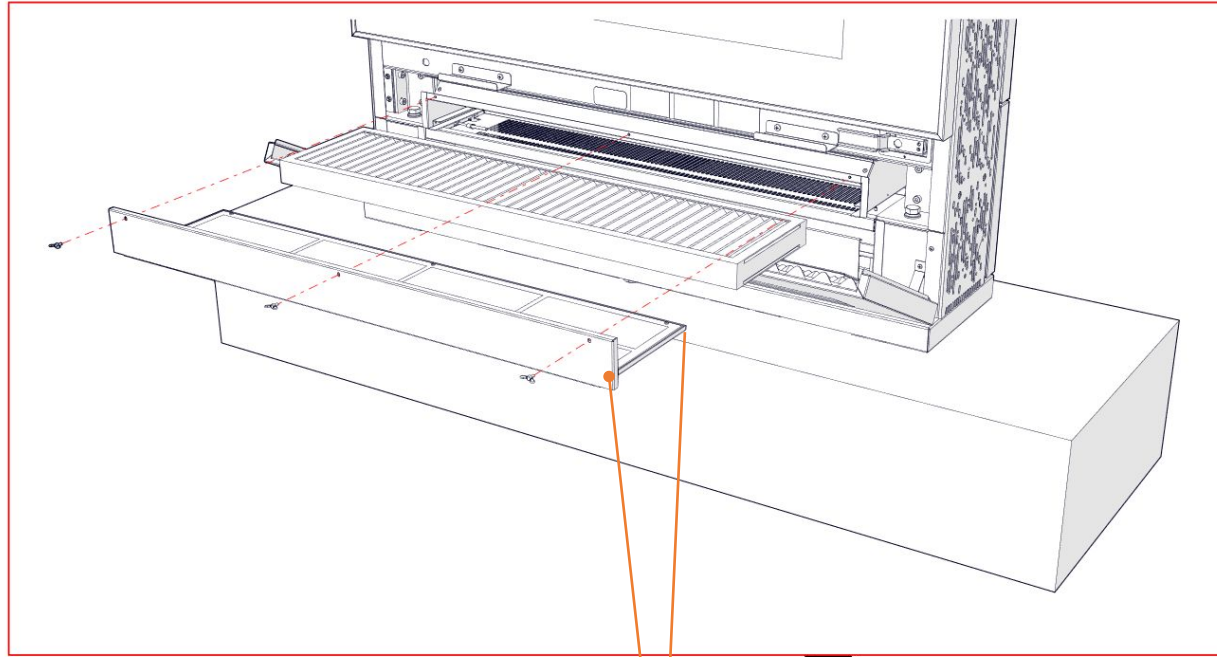


- Loosen and remove wing head screws to pull out sacrificial filter tray
- Remove and replace main cooling filter
- The main filter should be checked annually for signs of blockage or extreme dirt build-up, but generally should not require replacement in the first three years of operation
- This filter is not cleanable, and must be replaced if soiled to the point of impacting cooling system efficiency

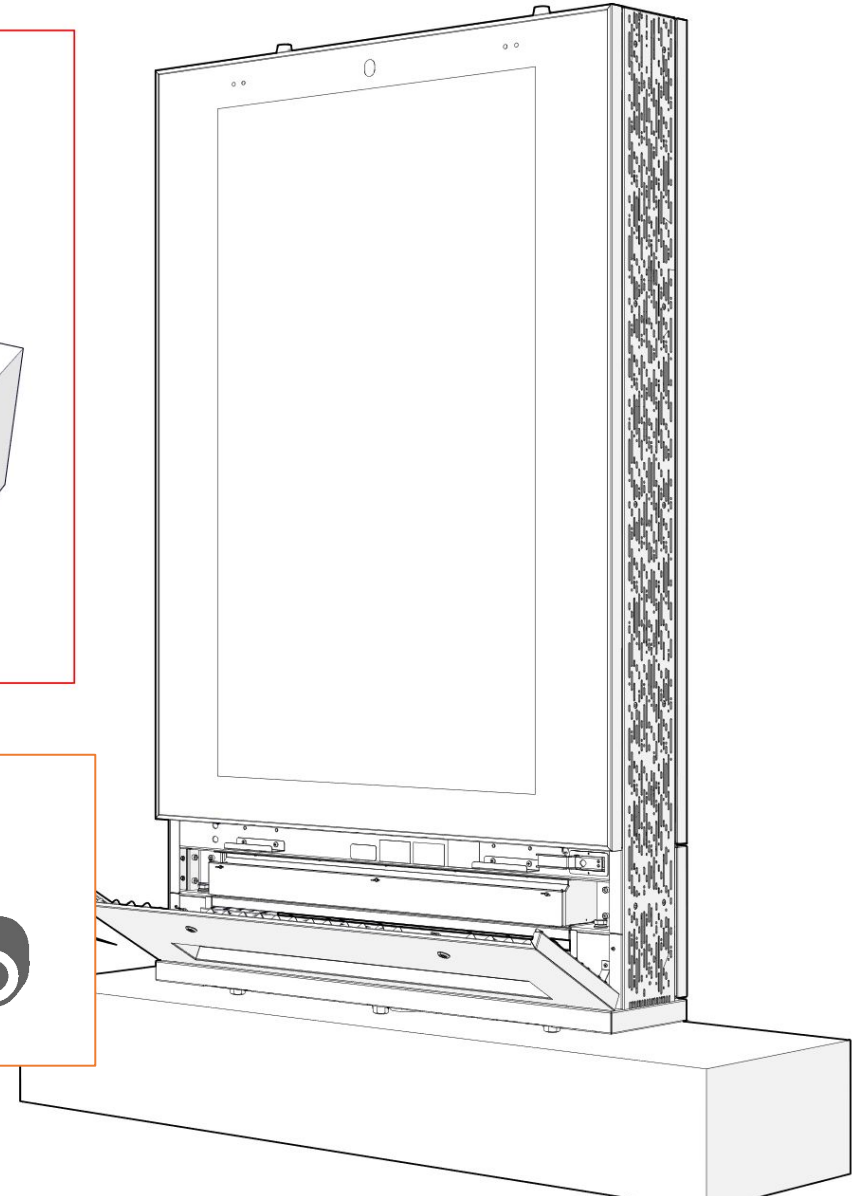
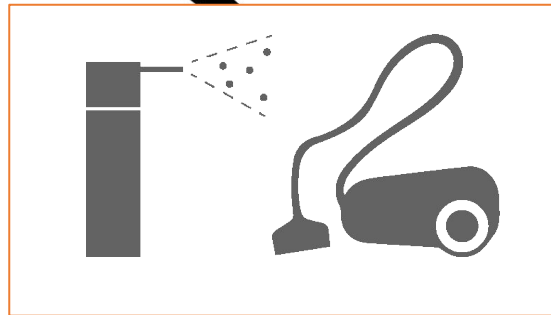


Podium DS System Maintenance ... Main System Filter

... Cleaning The Main System Filter ...

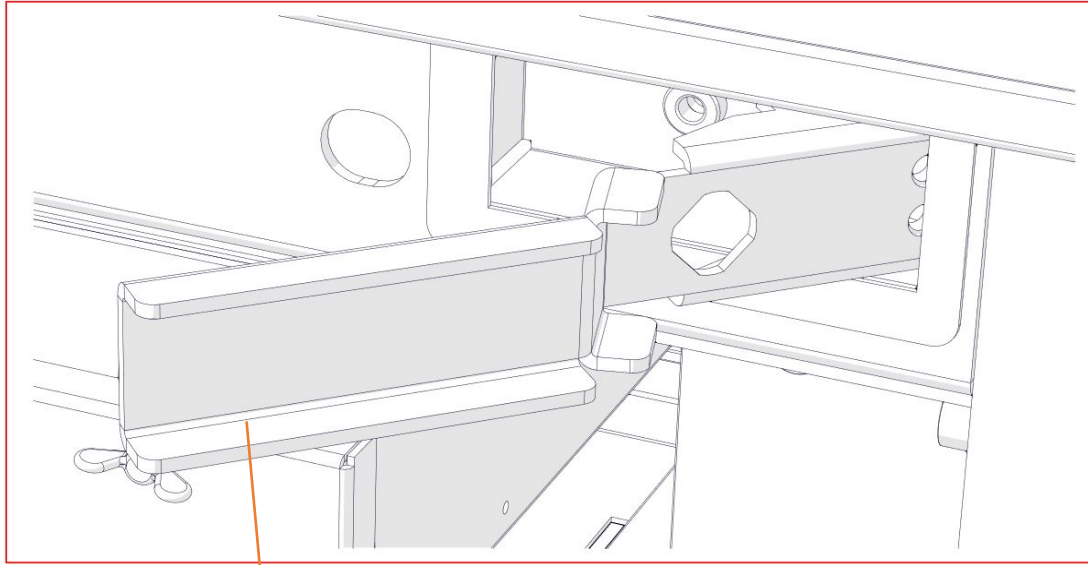


- Air Duster to clear the filter.
- Vacuum to remove any debris.
- **RINSING THIS FILTER WITH WATER IS NOT RECOMMENDED.**
- Replace the filter if material is too degraded.

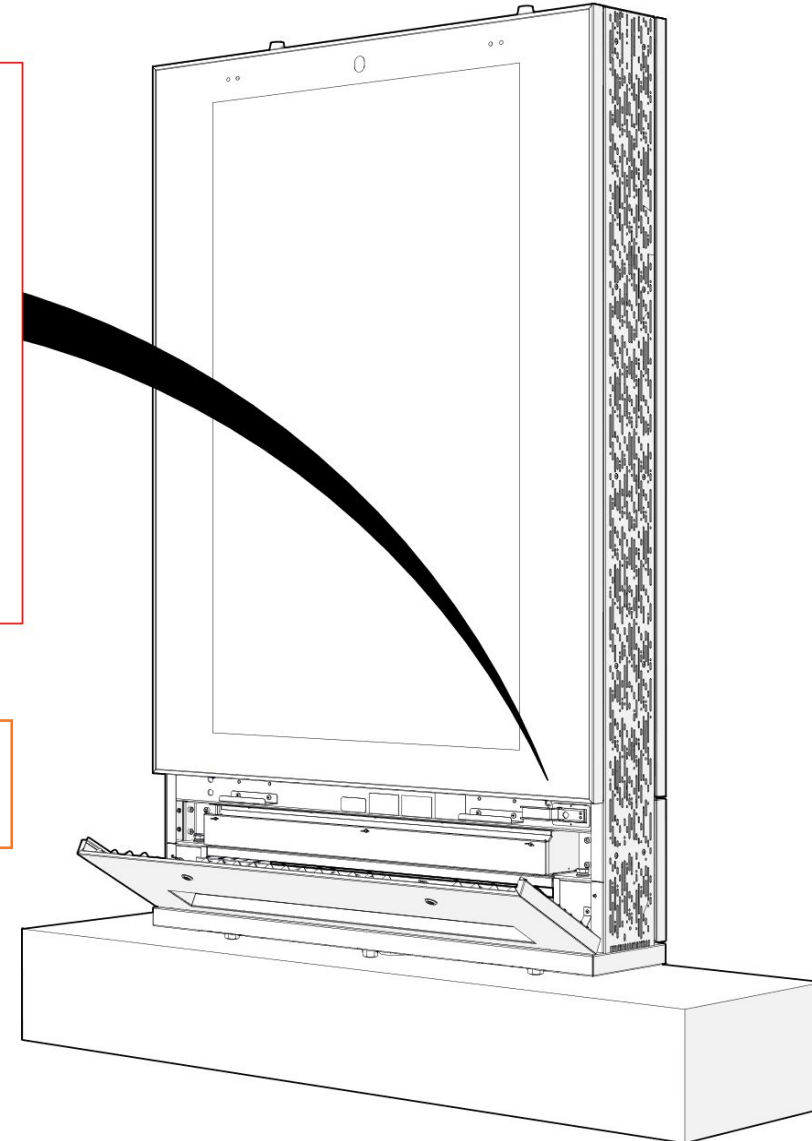


Podium DS System Access ... Digital Face Glass Door

... Digital Display Enclosure Vault Access via Latch Within Plinth Compartment ...

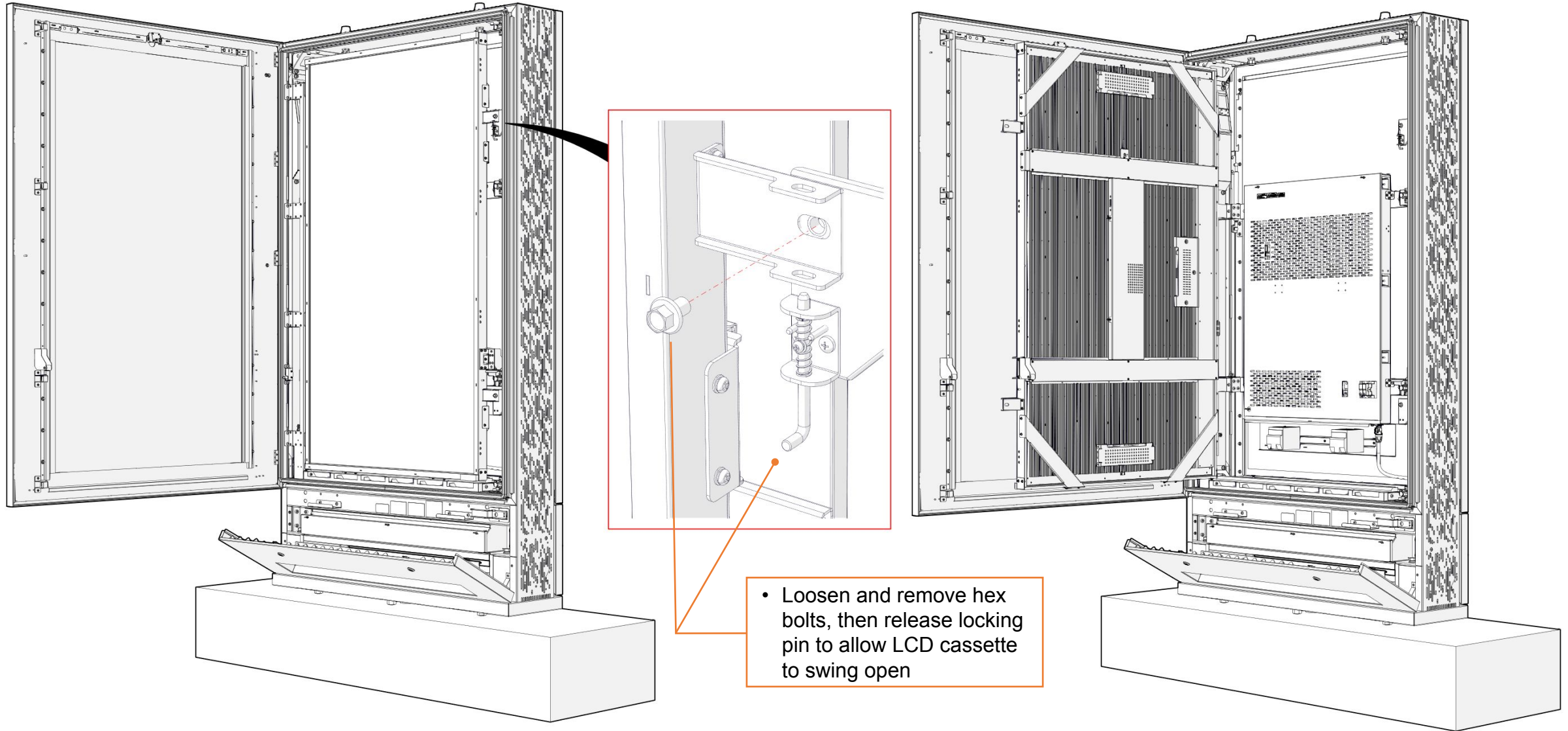


- With plinth cover open, crank the swing handle to disconnect the internal multi-point latch system



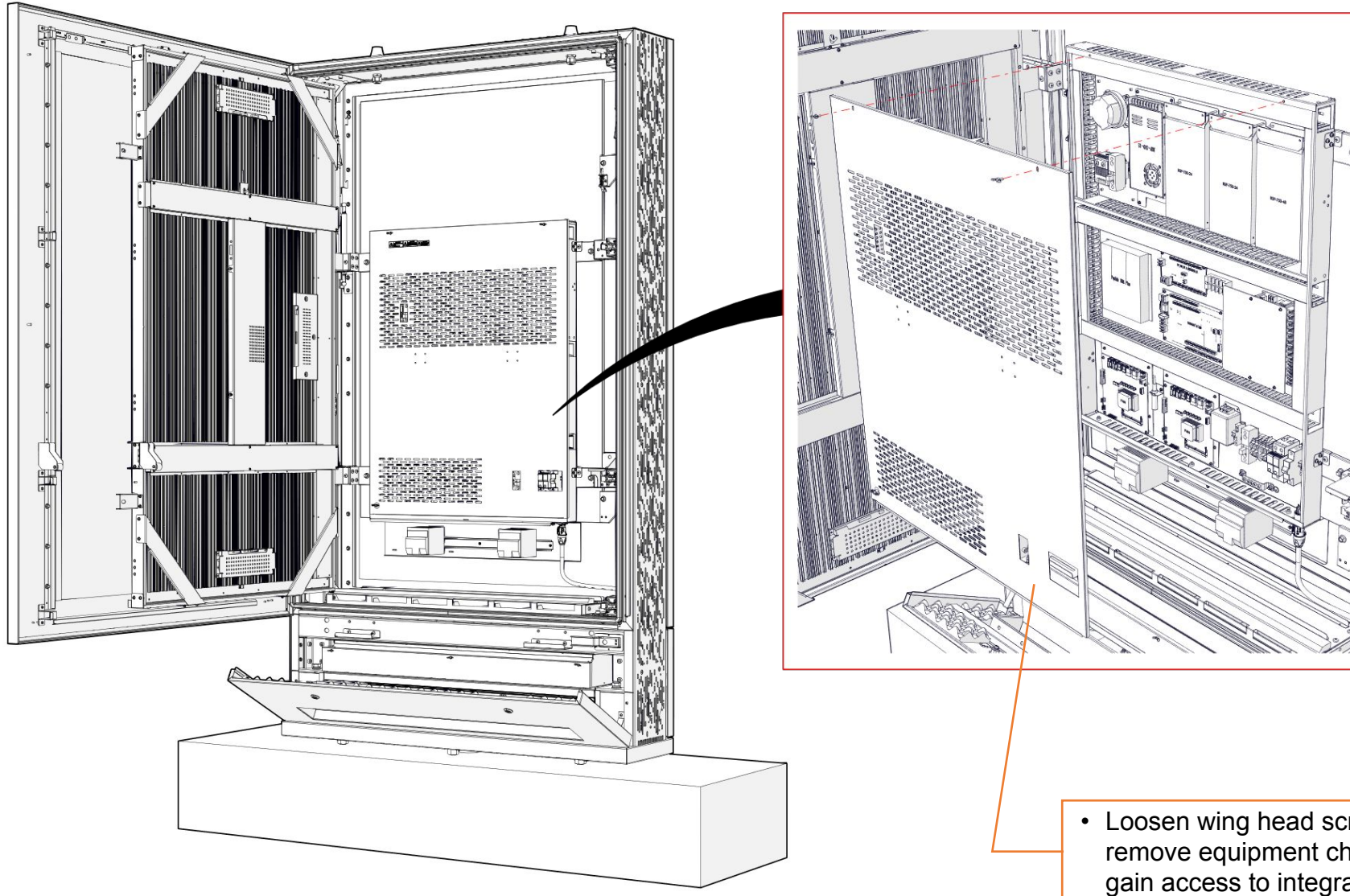
Podium DS System Access ... Integrated Equipment

... LCD Cassette Must be Open for Access to Integrated Equipment ...



Podium DS System Access ... Integrated Equipment

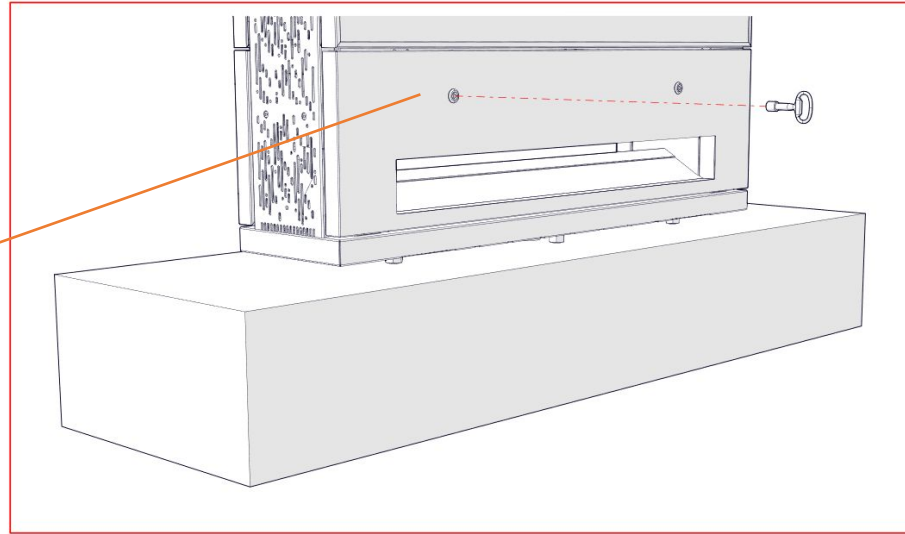
... Equipment Chassis Cover Must be Removed for Access to Integrated Equipment ...



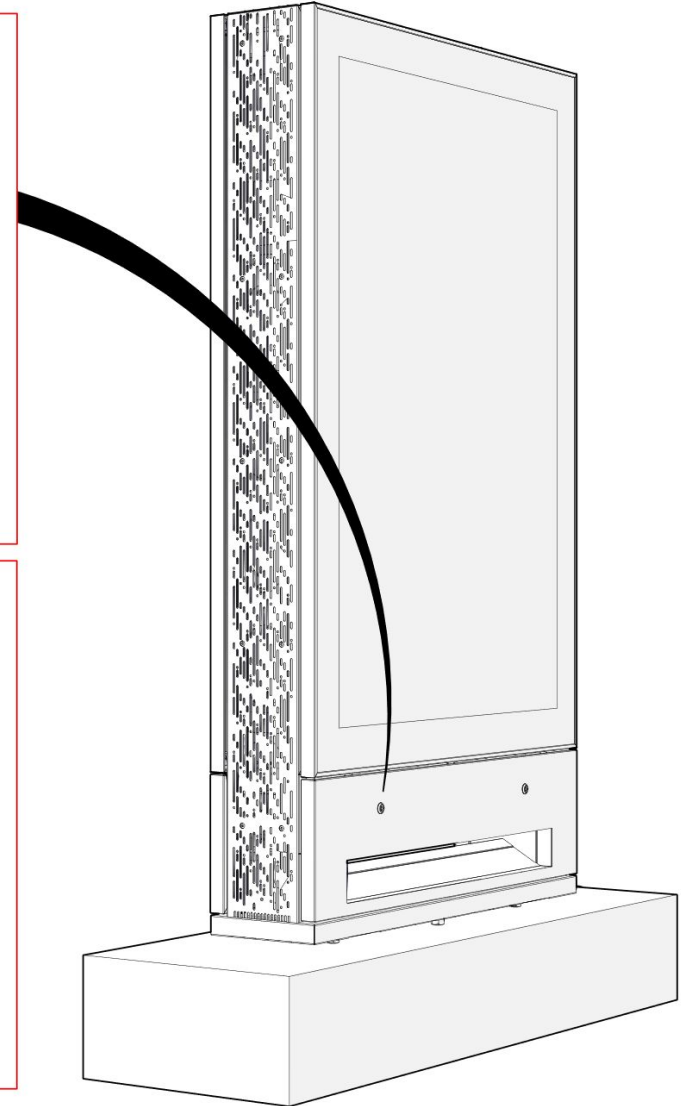
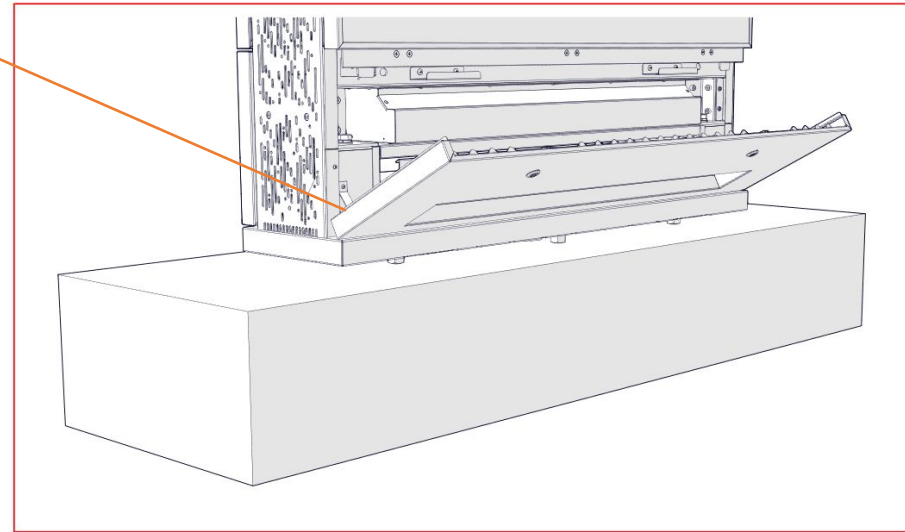
Podium DS System Access ... Static Side Plinth Panel

... Open Plinth Panel to Access Digital Door Latch ...

- Use triangular key to un-lock two quarter-turn latches

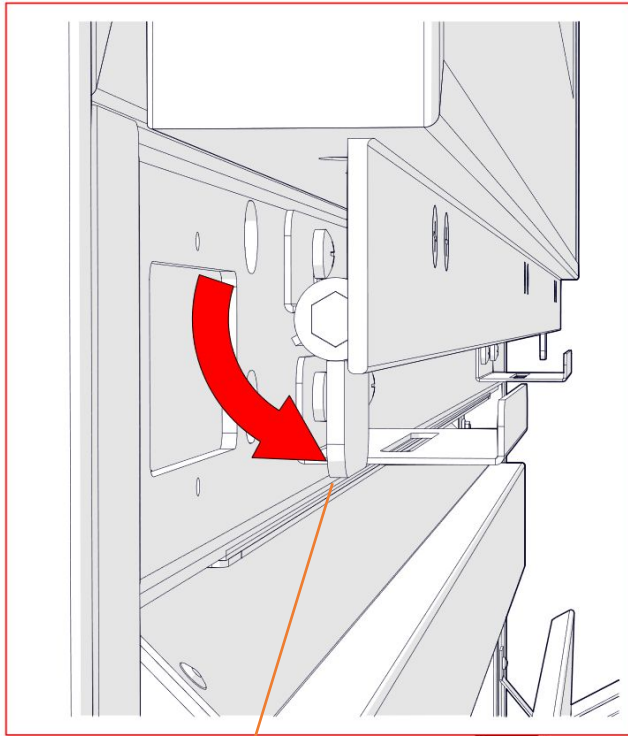


- Lower cover panel hinges open approximately 62°

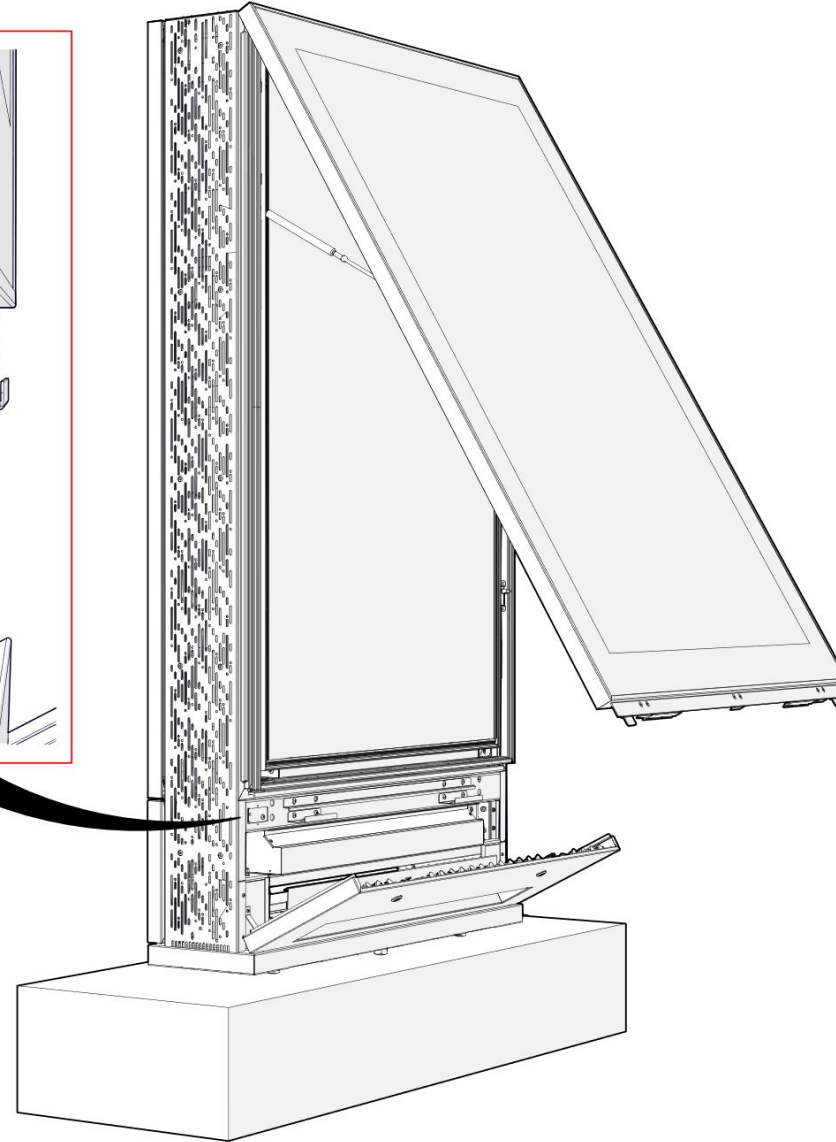


Podium DS System Access ... Static LED Panel

... Open Static Door for Access to Poster and LED Panel ...

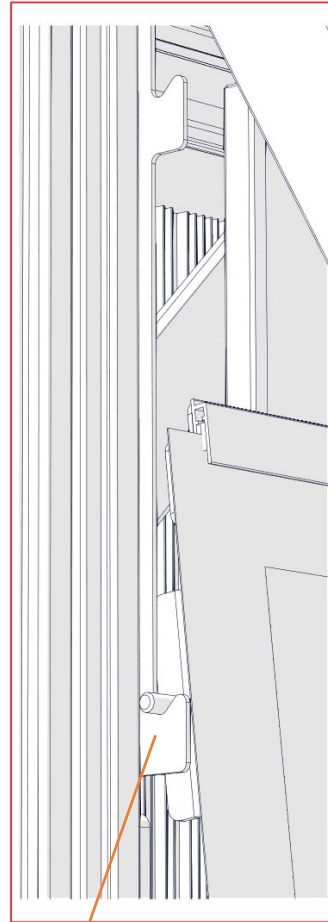


- Rotate lower tabs to un-latch static door

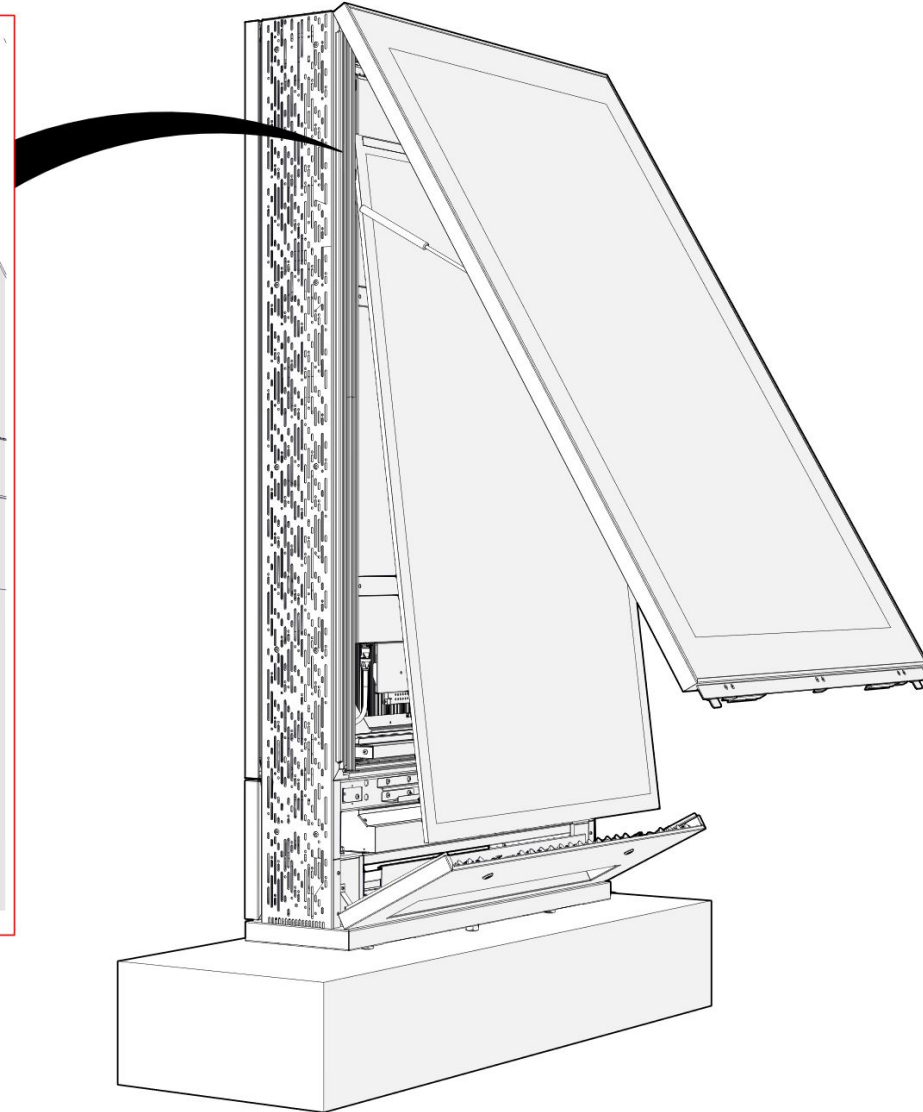


Podium DS System Access ... Static LED Panel

... Reposition LED panel to fit poster ...

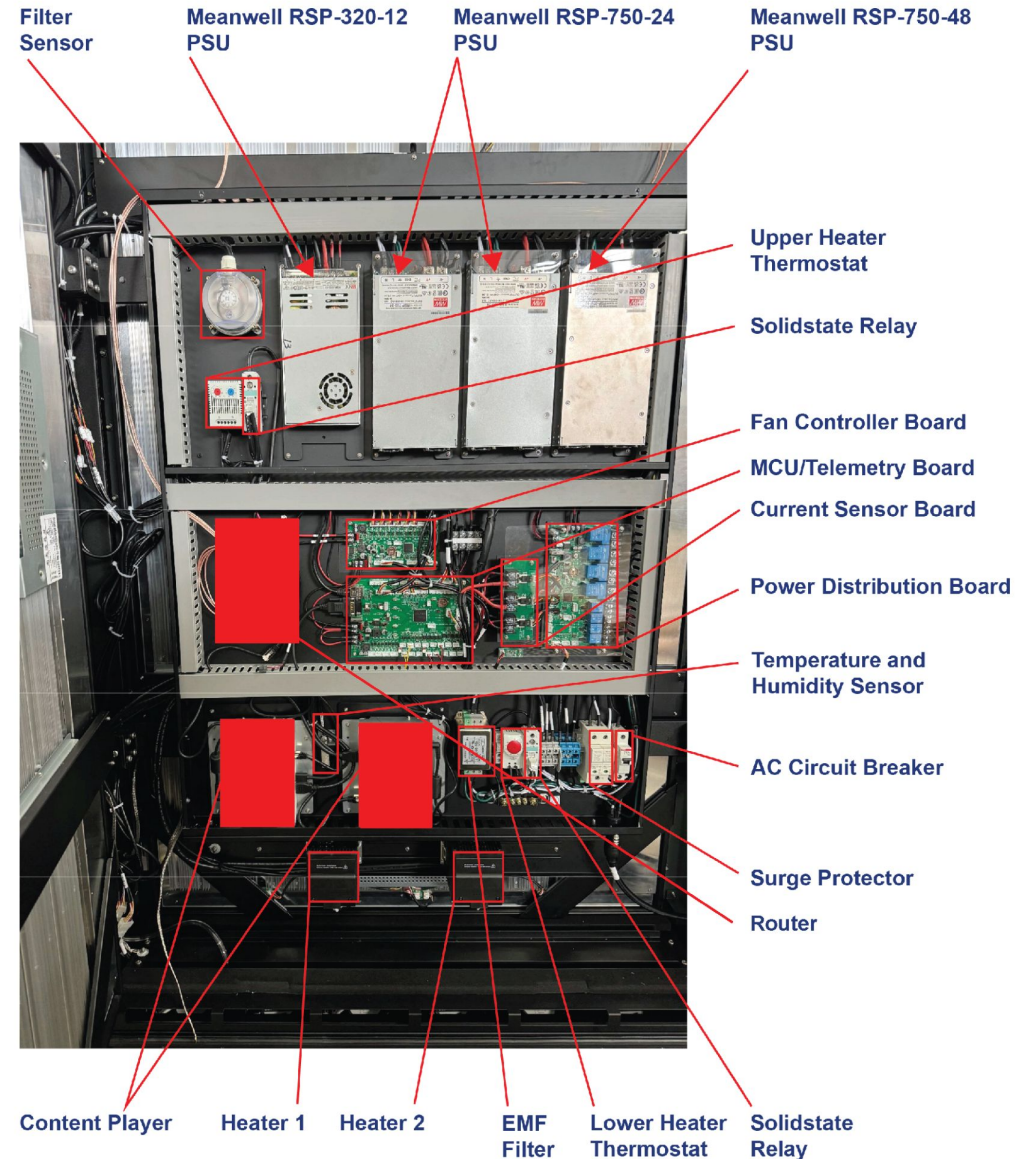


Position LED panel in lower support bracket hook to post printed media



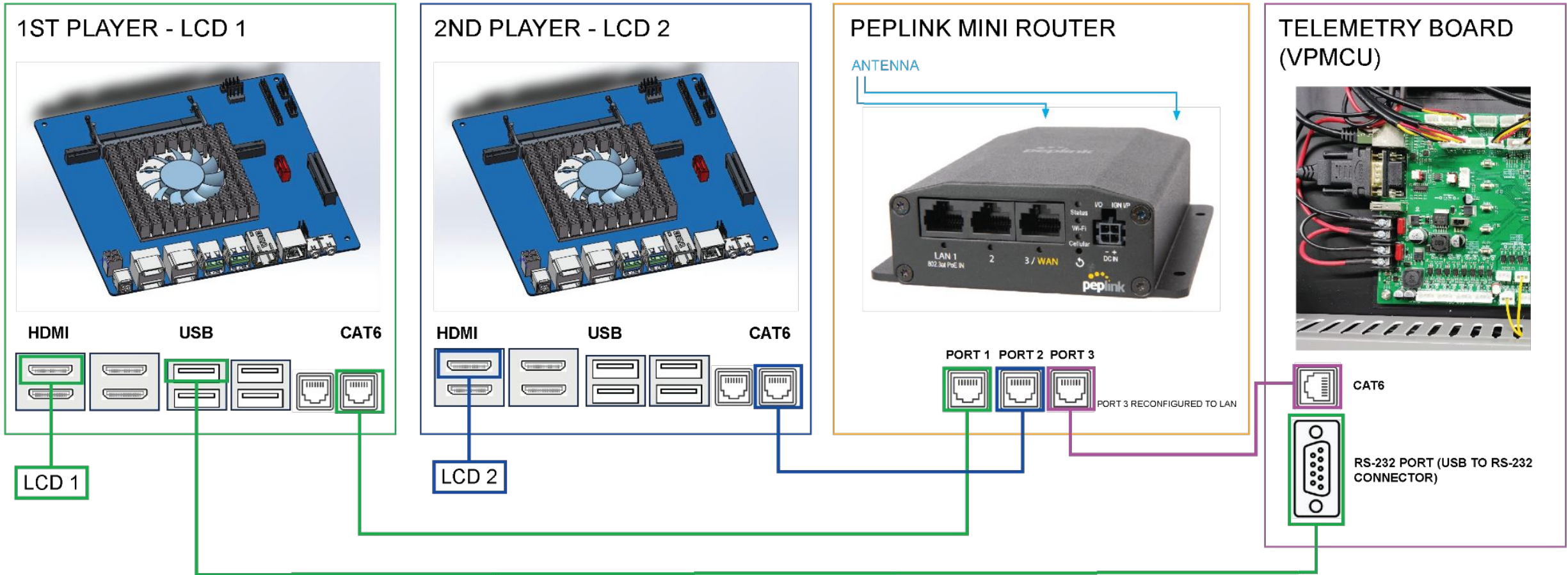
Podium DS System Access ... Connection

... Flexbox overview ...



Podium DS System Access ... Connection

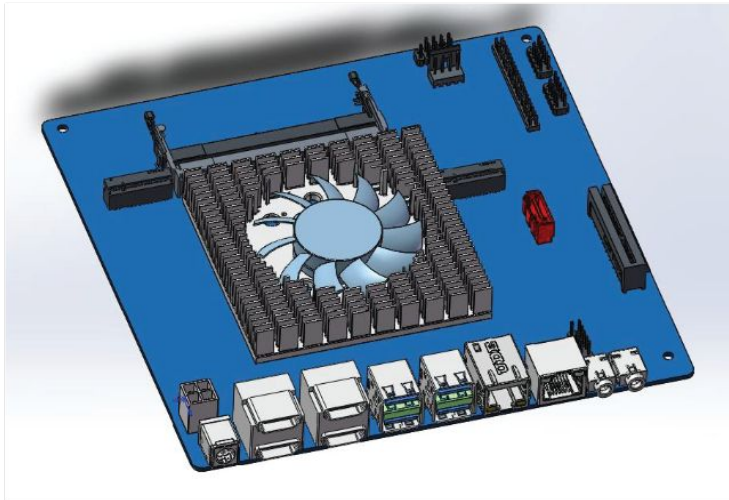
... Digital/Digital Connection PEPLINK MINI ROUTER ...



Podium DS System Access ... Connection

... Digital/Static Connection PEPLINK MINI ROUTER ...

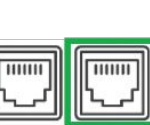
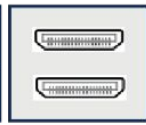
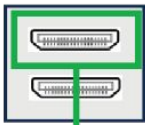
1ST PLAYER - LCD 1



HDMI

USB

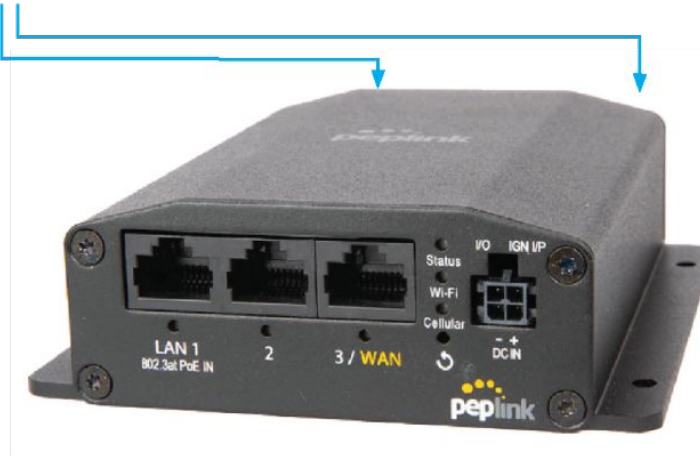
CAT6



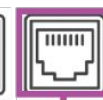
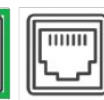
LCD 1

PEPLINK MINI ROUTER

ANTENNA

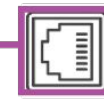
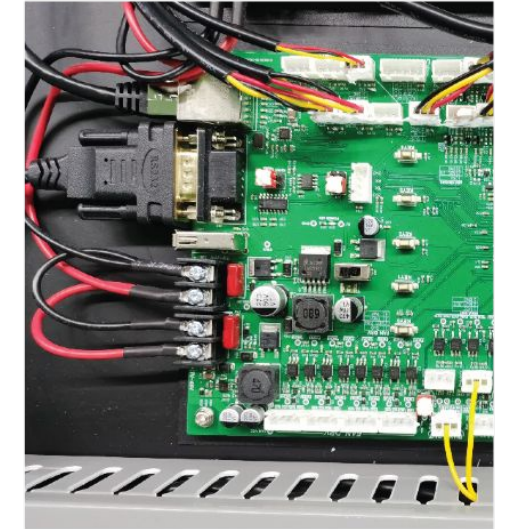


PORT 1 PORT 2 PORT 3

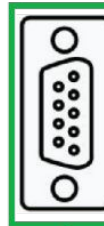


PORT 3 RECONFIGURED TO LAN

TELEMETRY BOARD (VPMCU)



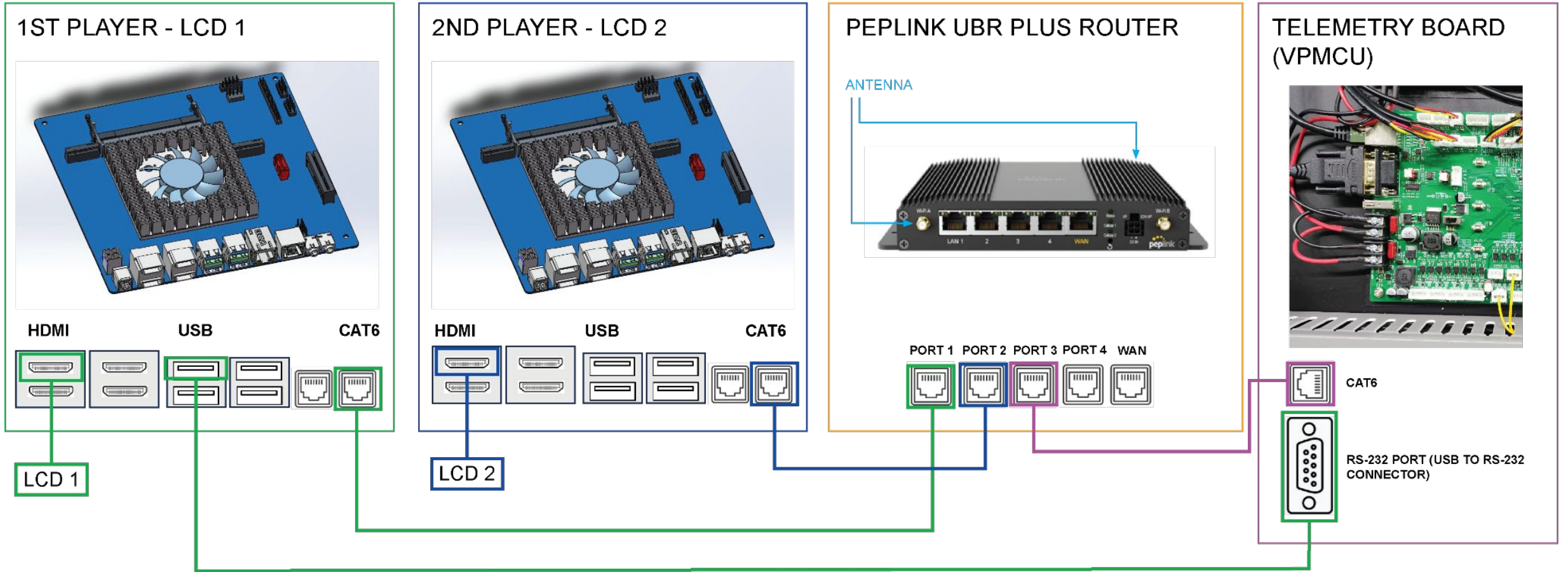
CAT6



RS-232 PORT (USB TO RS-232 CONNECTOR)

Podium DS System Access ... Connection

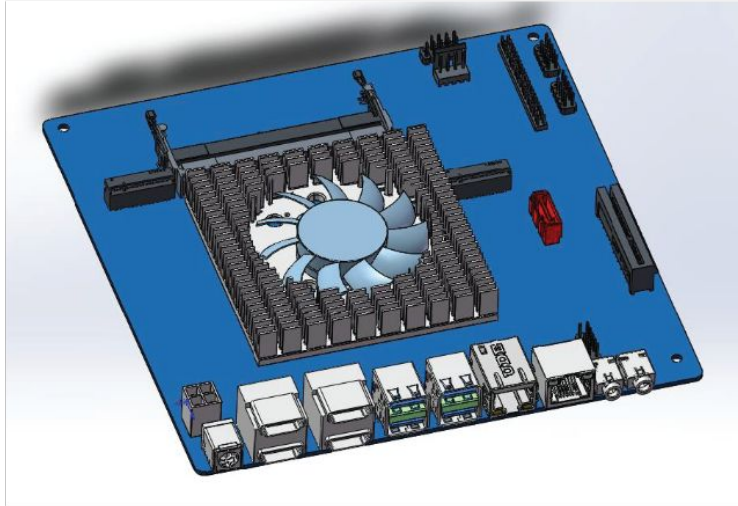
... Digital/Static Connection with UBR PLUS ROUTER ...



Podium DS System Access ... Connection

... Digital/Digital Connection UBR PLUS ROUTER ...

1ST PLAYER - LCD 1



HDMI

USB

CAT6



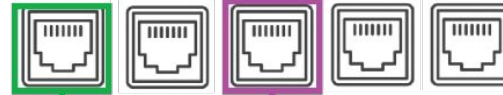
LCD 1

PEPLINK UBR PLUS ROUTER

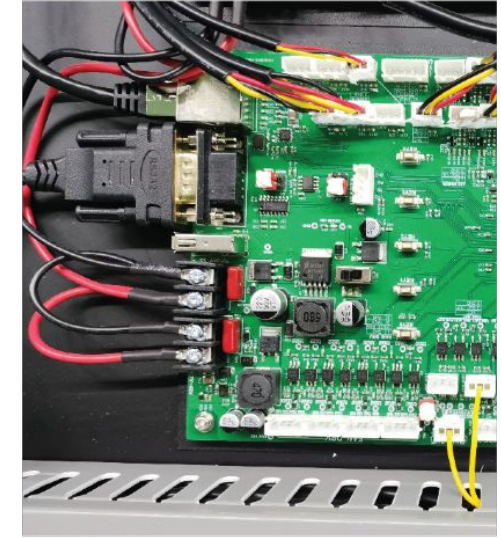
ANTENNA



PORT 1 PORT 2 PORT 3 PORT 4 WAN



TELEMETRY BOARD (VPMCU)



CAT6

RS-232 PORT (USB TO RS-232 CONNECTOR)