SPS-V-6
SLIDING PANEL MECHANISM - VERTICAL

SPS-V-6
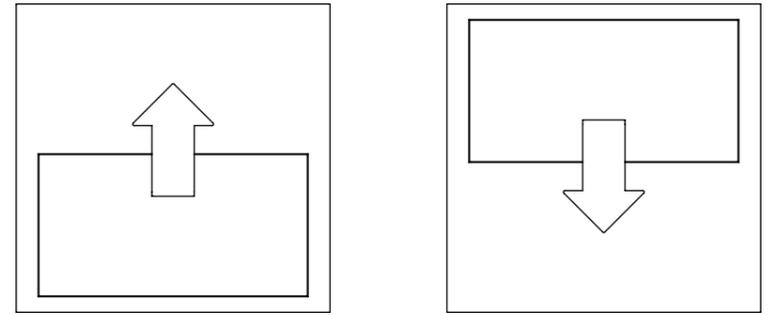# SLIDING PANEL MECHANISM - VERTICAL

**fa** future automation

MODEL	DESCRIPTION	MIN SCREEN HEIGHT	MAX SCREEN HEIGHT
SPS-V-5	Vertical - Single Panel	700 [27 9/16"]	800 [31 1/2"]
SPS-V-6	**Vertical - Single Panel**	**801 [31 9/16"]**	**950 [37 3/8"]**
SPS-V-7	Vertical - Single Panel	951 [37 7/16"]	1100[43 5/16"]
SPS-V-8	Vertical - Single Panel	1101[43 3/8""]	1250[49 3/16"]
SPS-VS-5	Vertical - Double Splitting Panel	700 [27 9/16"]	800 [31 1/2"]
SPS-VS-6	Vertical - Double Splitting Panel	801 [31 9/16"]	950 [37 3/8"]
SPS-VS-7	Vertical - Double Splitting Panel	951 [37 7/16"]	1100[43 5/16"]
SPS-VS-8	Vertical - Double Splitting Panel	1101[43 3/8""]	1250[49 3/16"]

| MODEL	DESCRIPTION	MIN SCREEN WIDTH	MAX SCREEN WIDTH
SPS-HZ-6	Horizontal - Single Panel	1400 [55 1/8"]	1600 [63"]
SPS-HZ-7	Horizontal - Single Panel	1601 [63 1/16""]	1850 [72 13/16"]
SPS-HZ-8	Horizontal - Single Panel	1851 [72 7/8"]	2100 [82 11/16"]
SPS-HZS-6	Horizontal - Double Splitting Panel	1400 [55 1/8"]	1600 [63"]
SPS-HZS-7	Horizontal - Double Splitting Panel	1601 [63 1/16""]	1850 [72 13/16"]
SPS-HZS-8	Horizontal - Double Splitting Panel	1851 [72 7/8"]	2100 [82 11/16"]

SPS-V - VERTICAL - SINGLE PANEL

SPS-VS - VERTICAL SPLIT - DOUBLE PANEL
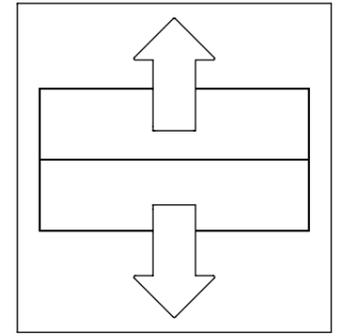
SPS-HZ - HORIZONTAL - SINGLE PANEL
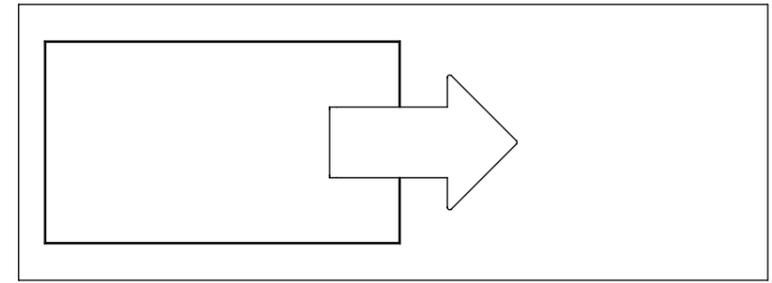

SPS-HZS - HORIZONTAL SPLIT- DOUBLE PANEL
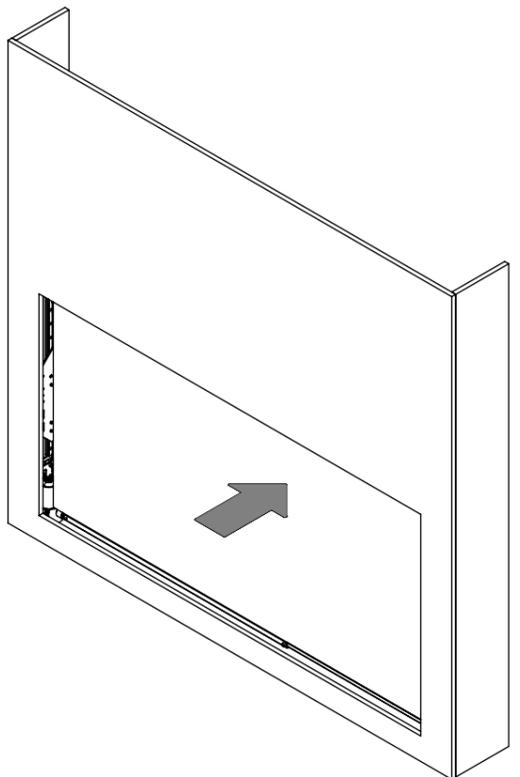
SPS-V-6
SLIDING PANEL MECHANISM - VERTICAL

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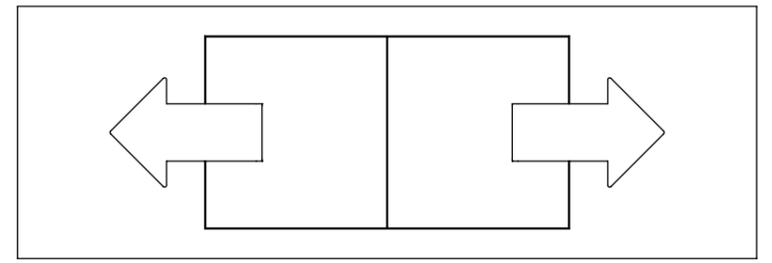
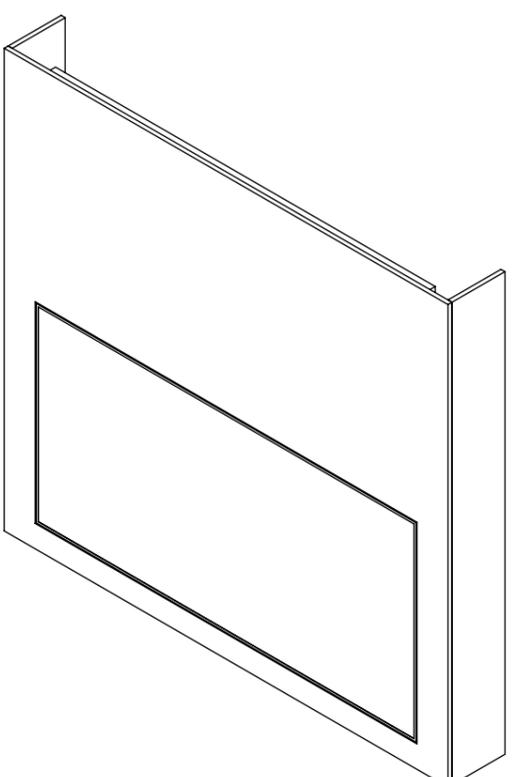| SPECIFICATION	MEASUREMENTS
Minimum Screen Height	801 [31 1/2"]
Maximum Screen Height	950 [37 3/8"]
Minimum Screen Width	1400 [55 1/8"]
Maximum Screen Width	1900 [74 13/16"]
Maximum Moving Panel Weight	40Kg (88lbs)
Maximum Screen Weight	100Kg (220lbs)
Total Mechanism Weight	TBC
Packaging Dimensions (LxWxH)	TBC
Shipping Weight	TBC
Movement Type	Motorised
Power Supply Required	110V - 240V AC
Power Consumption Max.	120W
Power Consumption Standby	3W
Mounting Patterns Supported	VESA 200 - 800 W x 200 - 600 H
Control Options	IR Remote, RS232, Contact Closure
Product Options / Features	QA2 pairing option
Package Contents	Mechanism, IR remote control, Bolt Pack
Marine Suitable	Yes (Indoor)

1. Panel Closed
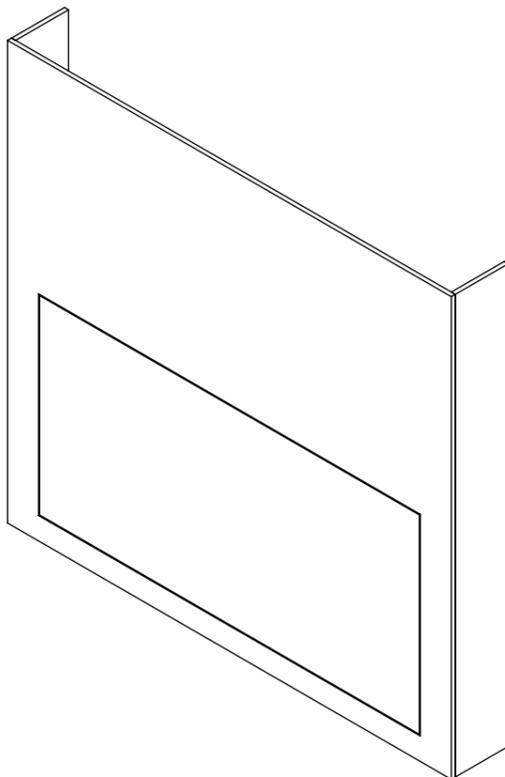
2. Panel Retracts

3. Panel Lifts
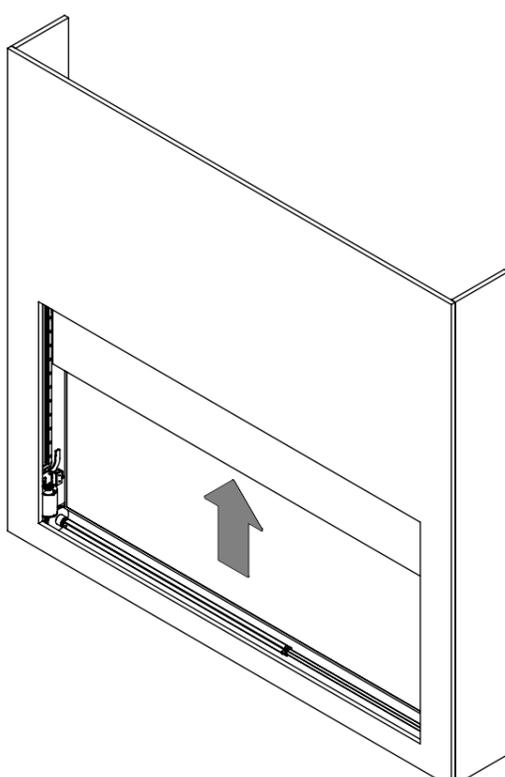
4. Screen Advances

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SLIDING PANEL MECHANISM - VERTICAL

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CABINET DIMENSIONS - WIDTH AND HEIGHT

Screen Height	Install Height
801 [31 1/2"] → 950 [37 3/8"]	(2 x Screen Height) + 190

Screen Width	Install width
1400 [55 1/8"] → 1900 [74 13/16"]	Screen Width + 280

[5 5/16"] 135

[5 5/16"] 135

SECTION A-A

Install Width = Screen Width + 280

A   A

B   B

Opening Height = Screen Height +10

Opening Width = Screen Width +10

SECTION B-B
Minimum Screen Height

[1 15/16"] 50 Clearance

Moving Panel Height = Screen Height

[13/16"] 20

Opening Height

[4 5/16"] 110

[68 1/2"] 1740 Mechanism Height

Install Height = (2 x Screen Height) + 190

SECTION B-B
Maximum Screen Height

[1 15/16"] 50 Clearance

Moving Panel Height = Screen Height

[13/16"] 20

Opening Height

[4 5/16"] 110

[68 1/2"] 1740 Mechanism Height
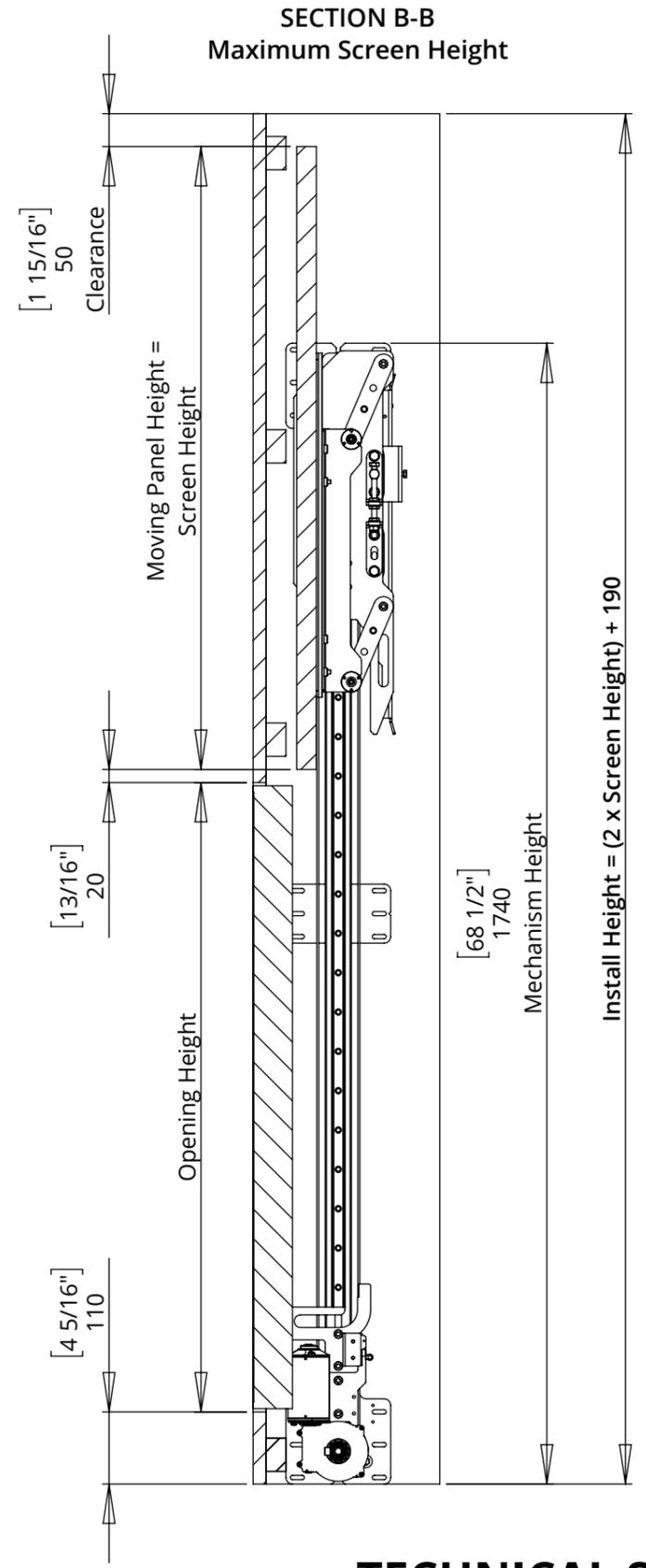
Install Height = (2 x Screen Height) + 190

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SLIDING PANEL MECHANISM - VERTICAL

MECHANISM POSITIONING

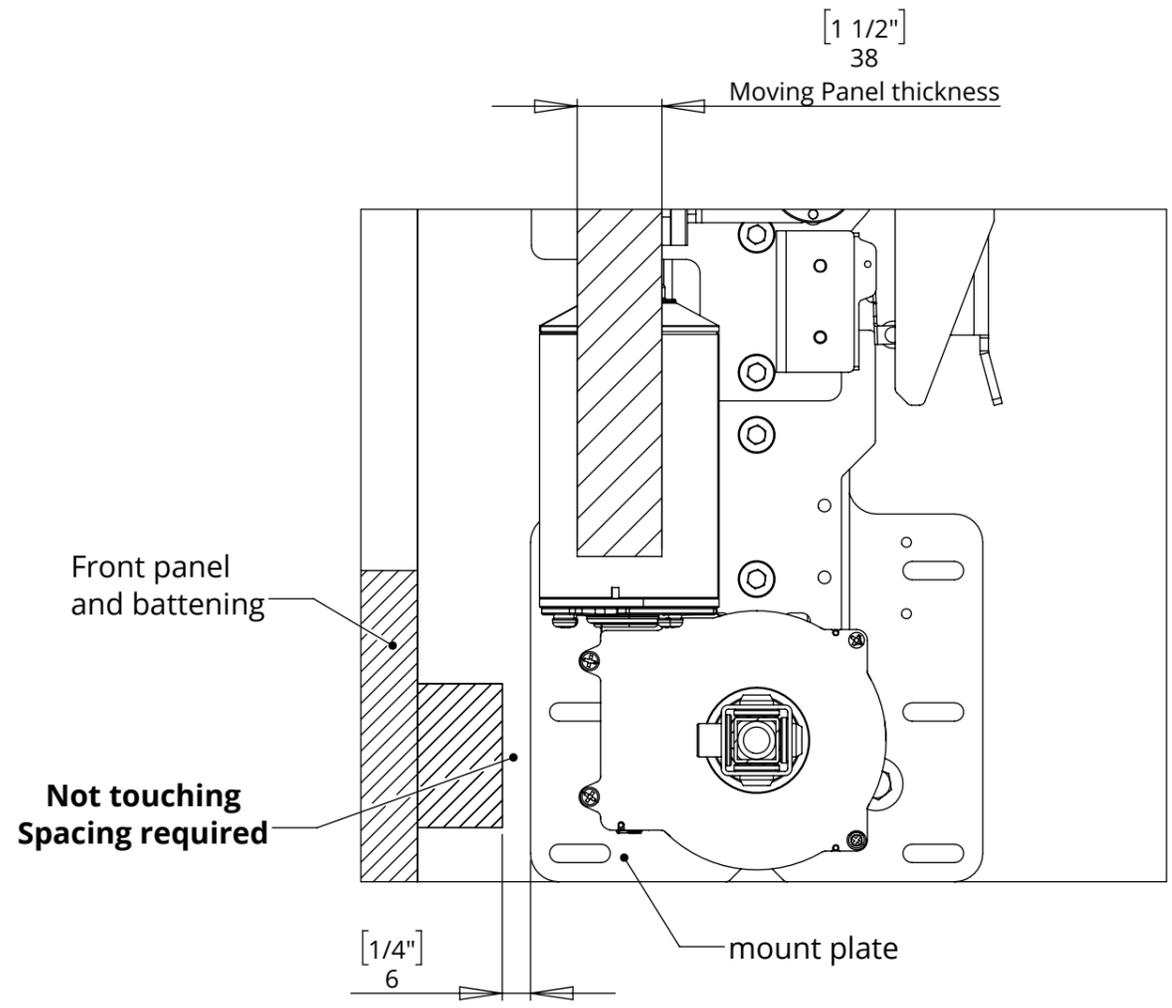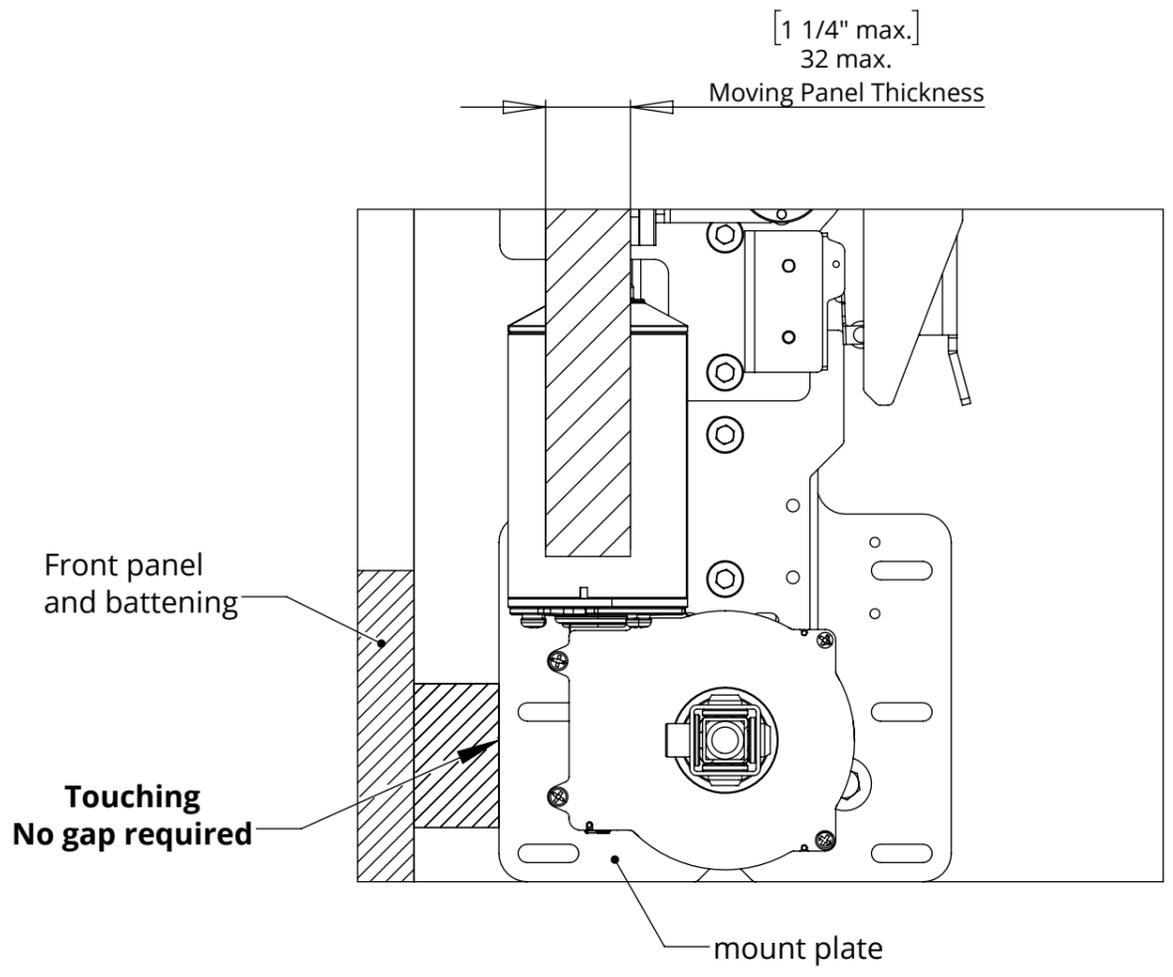**Moving Panels less than 32mm [1 1/4] thick**

If the moving panel is up to 32mm [1 1/4"] thick then mount the mechanism flush to the inside of the front panel as shown.

If the front panel and batten has to be more than 20mm thicker than the moving panel, the moving panel needs to be packed out in order to keep this difference 20mm. This total thickness of the panel and the packer needs to be used as the new moving panel thickness.

Moving Panels greater than 32mm [1 1/4] thick

For panels thicker that 32mm [1 1/4"] move the mechanism back by the increase in thickness.

For example: a 38mm [1 1/2"] thick moving panel needs the mechanism mounted 6mm [1/4"] away from the inside of the front panel (and battens).

[1 1/4" max.]
32 max.
Moving Panel Thickness

Front panel and battening

**Touching
No gap required**

mount plate

[1 1/2"]
38
Moving Panel thickness

Front panel and battening

**Not touching
Spacing required**

[1/4"]
6

mount plate

SPS-V-6
SLIDING PANEL MECHANISM - VERTICAL

CABINET DIMENSIONS - DEPTH

A cabinet depth of 235mm [9 1/4"] allows for a maximum screen depth of 60mm [2 3/8"].

Cabinet depth needs to be increased if:
• **Moving panel depth is greater than 32mm [1 1/4"].**
• **Screen depth is greater than 60mm [2 3/8"].**

If the Moving panel thickness is greater than 32mm [1 1/4"], the internal cabinet depth will need to be increased by the difference i.e. a 52mm [2 1/16"] thick panel requires the cabinet depth to be increased by 20mm to 255mm [10 1/16"].
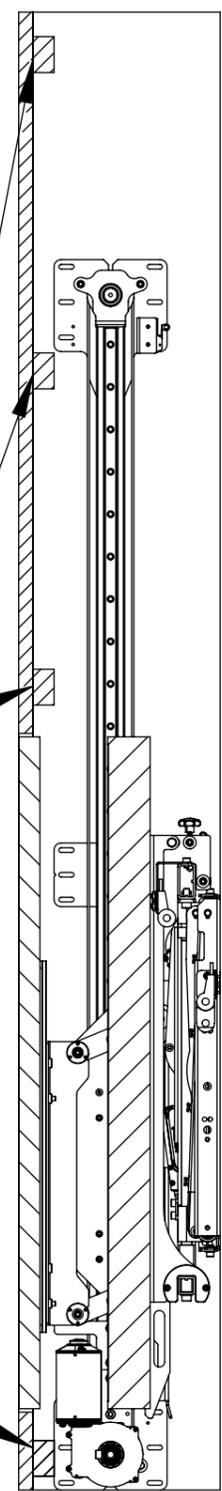
If the screen thickness is greater than 60mm [2 3/8"], the internal cabinet depth will need to be increased i.e. a 100mm [3 15/16"] thick screen requires the cabinet depth to be increased by 40mm to 275mm [10 13/16"].

Cabinet depth can be reduced if the screen thickness is less than 60mm [2 3/8"]. Minimum cabinet depth possible is 205mm [8 1/16"].
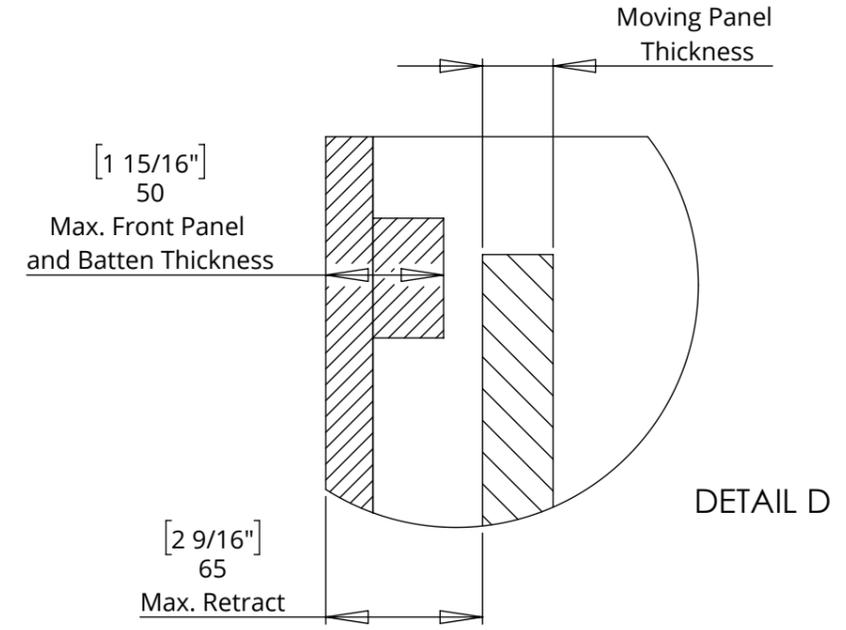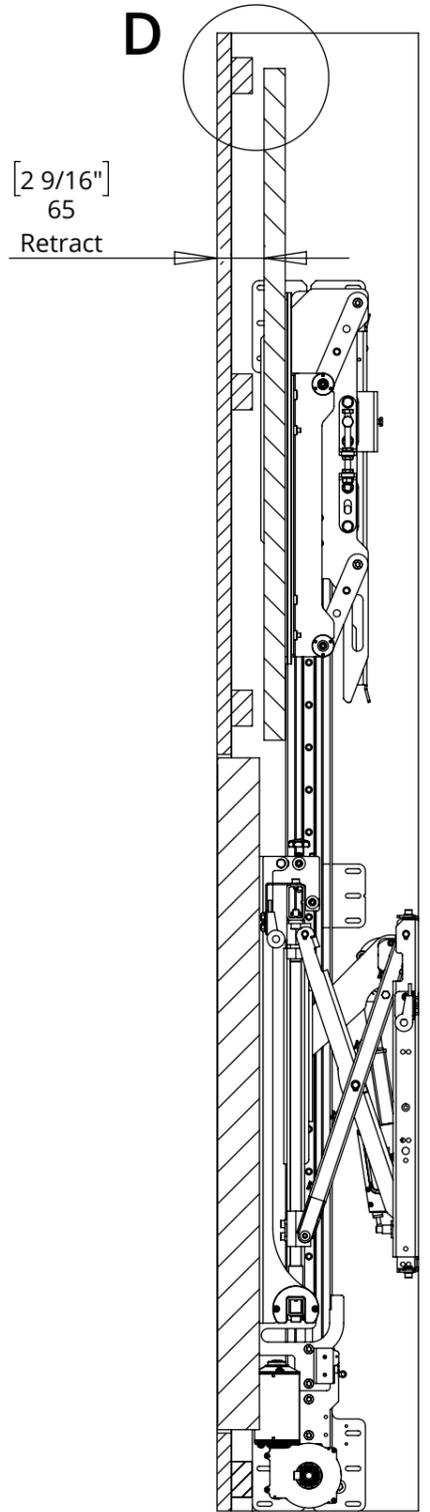
Recommended batten to support front panel above opening

Recommended batten to support front panel below opening

Screen - IN

Screen - OUT

D

[2 9/16"]
65
Retract

Moving Panel Thickness

[1 15/16"]
50
Max. Front Panel and Batten Thickness

[2 9/16"]
65
Max. Retract

DETAIL D

The moving panel can retract up to 65mm [2 9/16"] before rising. For this reason it is advised the front panel work and support battens are no more than 50mm [1 15/16"] thick to give 15mm [9/16"] clearance.

[9 1/4"]
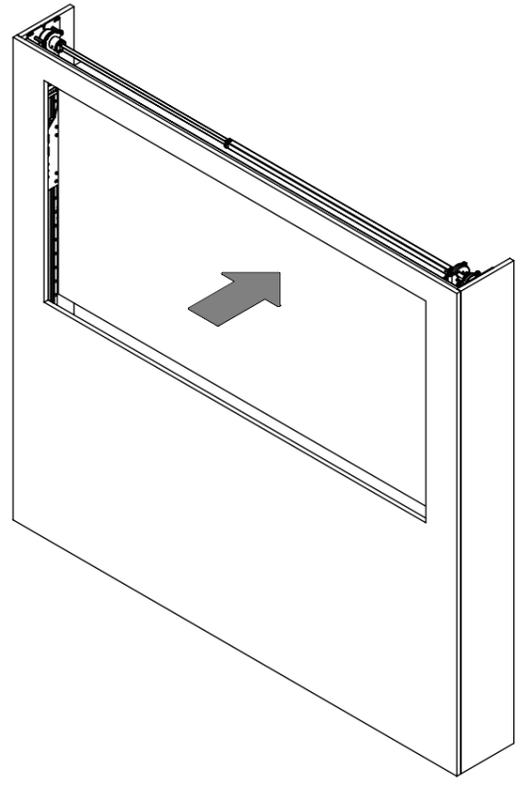**235**
Internal Cabinet Depth

SPS-V-6
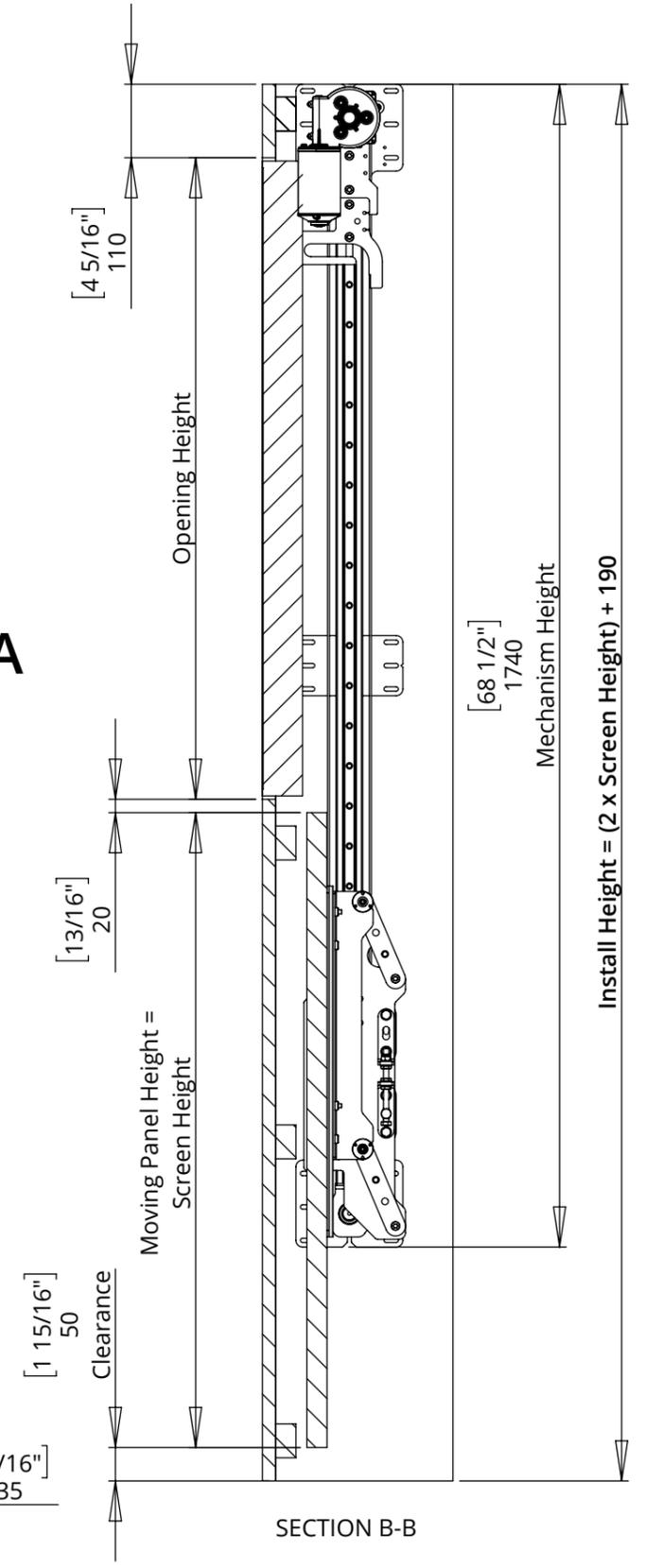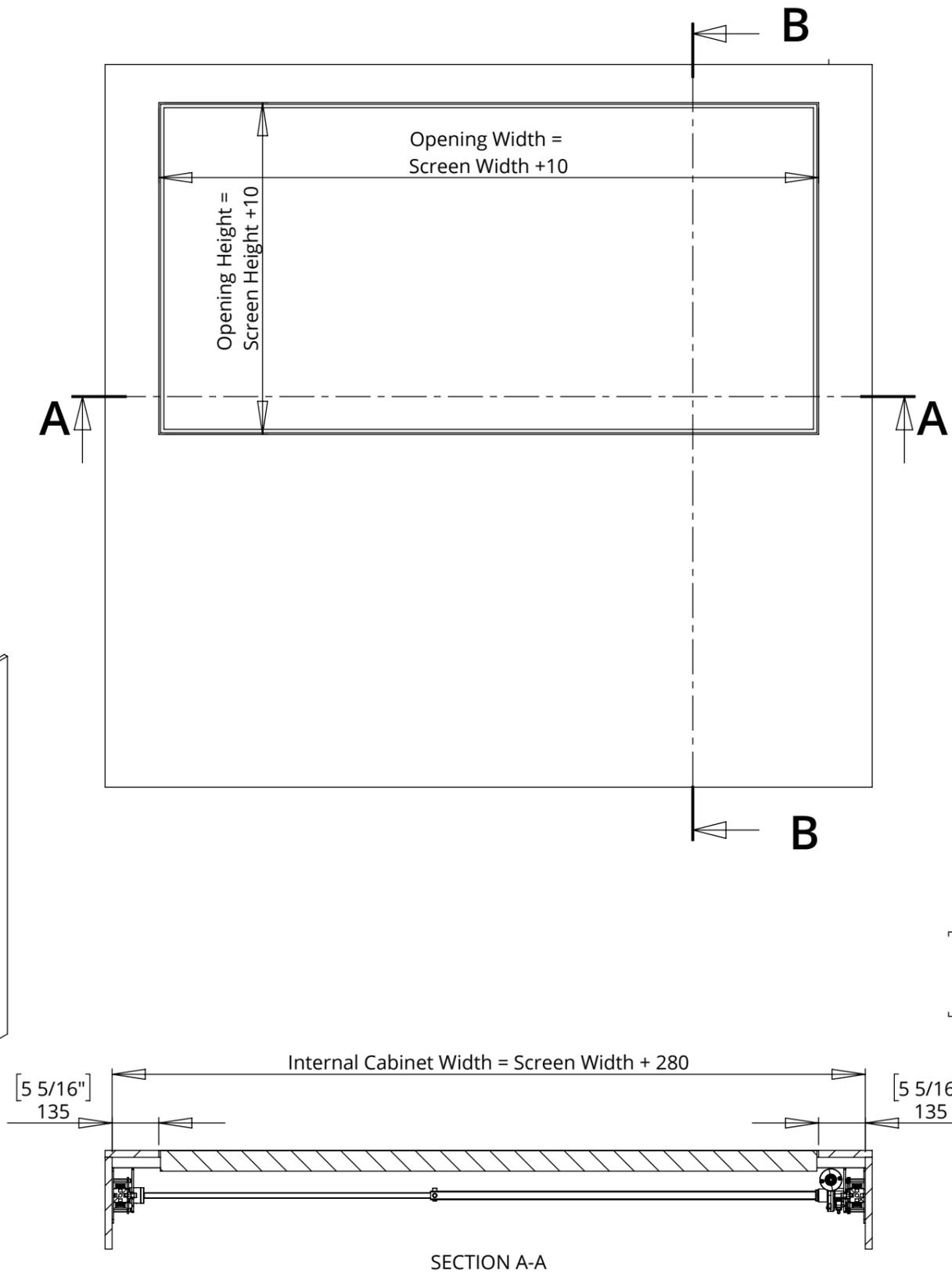## SLIDING PANEL MECHANISM - VERTICAL

CABINET DETAILS INVERTED

Screen Height	Install Height
801 [31 1/2"] → 950 [37 3/8"]	(2 x Screen Height) + 190
Screen Width	**Install width**
1400 [55 1/8"] → 1900 [74 13/16"]	Screen Width + 280

The SPS-V can be inverted so the panel retracts then drops. The mechanism used is the same as in the retract and rise configuration, the mechanism is just rotated through 180˚.

1. Panel Retracts

2. Panel Drops

Opening Width = Screen Width +10

Opening Height = Screen Height +10

B

A   A

B

[4 5/16"] 110

Opening Height

[68 1/2"] 1740 Mechanism Height

Install Height = (2 x Screen Height) + 190

[13/16"] 20

Moving Panel Height = Screen Height

[1 15/16"] 50 Clearance

SECTION B-B

Internal Cabinet Width = Screen Width + 280

[5 5/16"] 135

[5 5/16"] 135

SECTION A-A
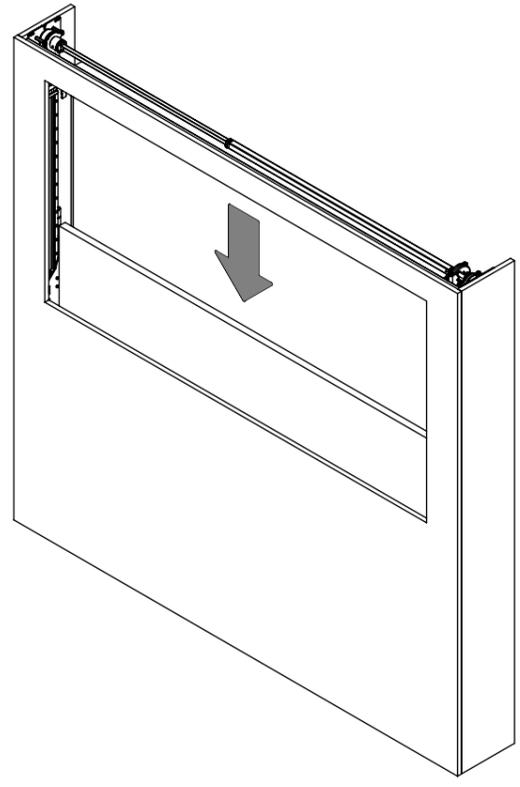
SPS-V-6
SLIDING PANEL MECHANISM - VERTICAL

AB - ADVANCE BRACKET

The Advance Bracket has a service mode that can be used during installation and servicing of the mechanism and the screen.

This allows the screen to be pulled out from the wall to provide access to rear of the screen and inside the mechanism during fitting.

ADVANCE - IN

ADVANCE - OUT

ADVANCE - SERVICE

[3 15/16"]
100

[43 5/16"]
1100

[24 7/16"]
622
Max Mount Height

[31 1/2"]
800
Max Mount Width

[3 15/16"]
100

[20 1/16"]
510
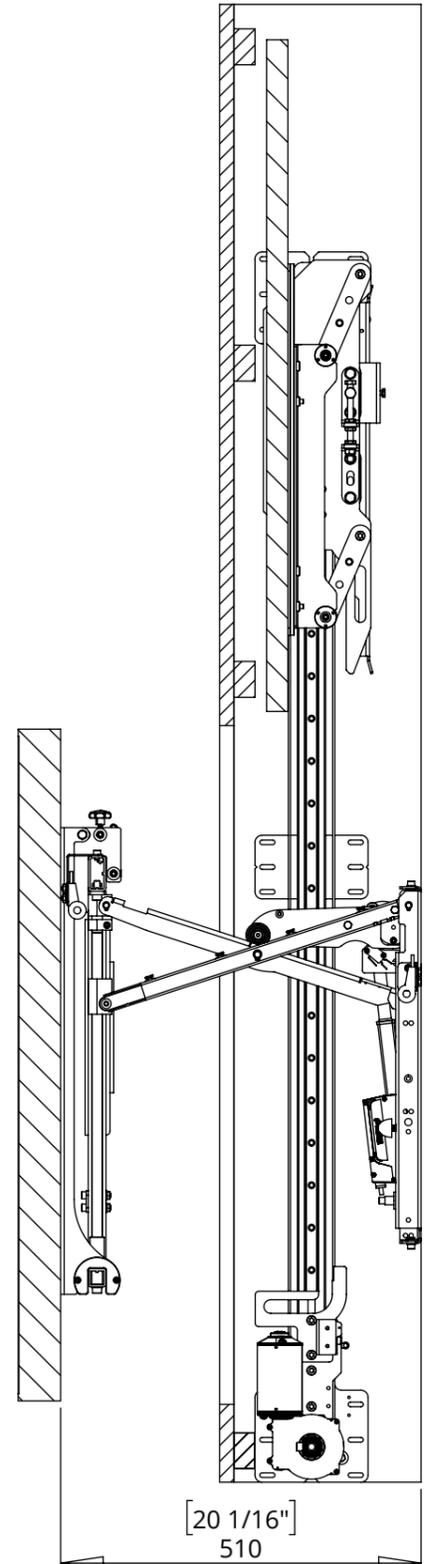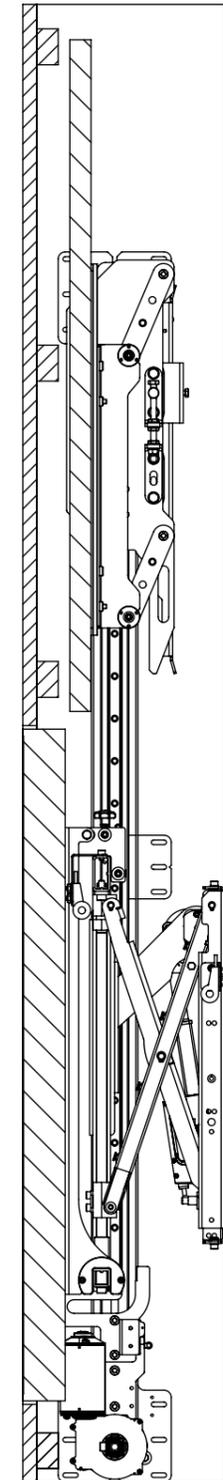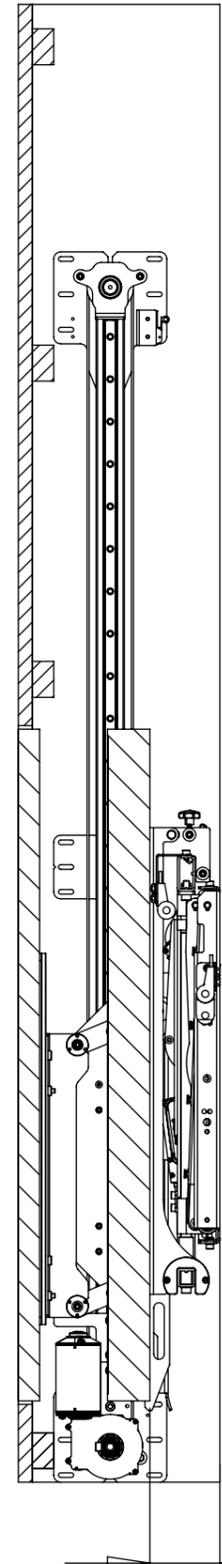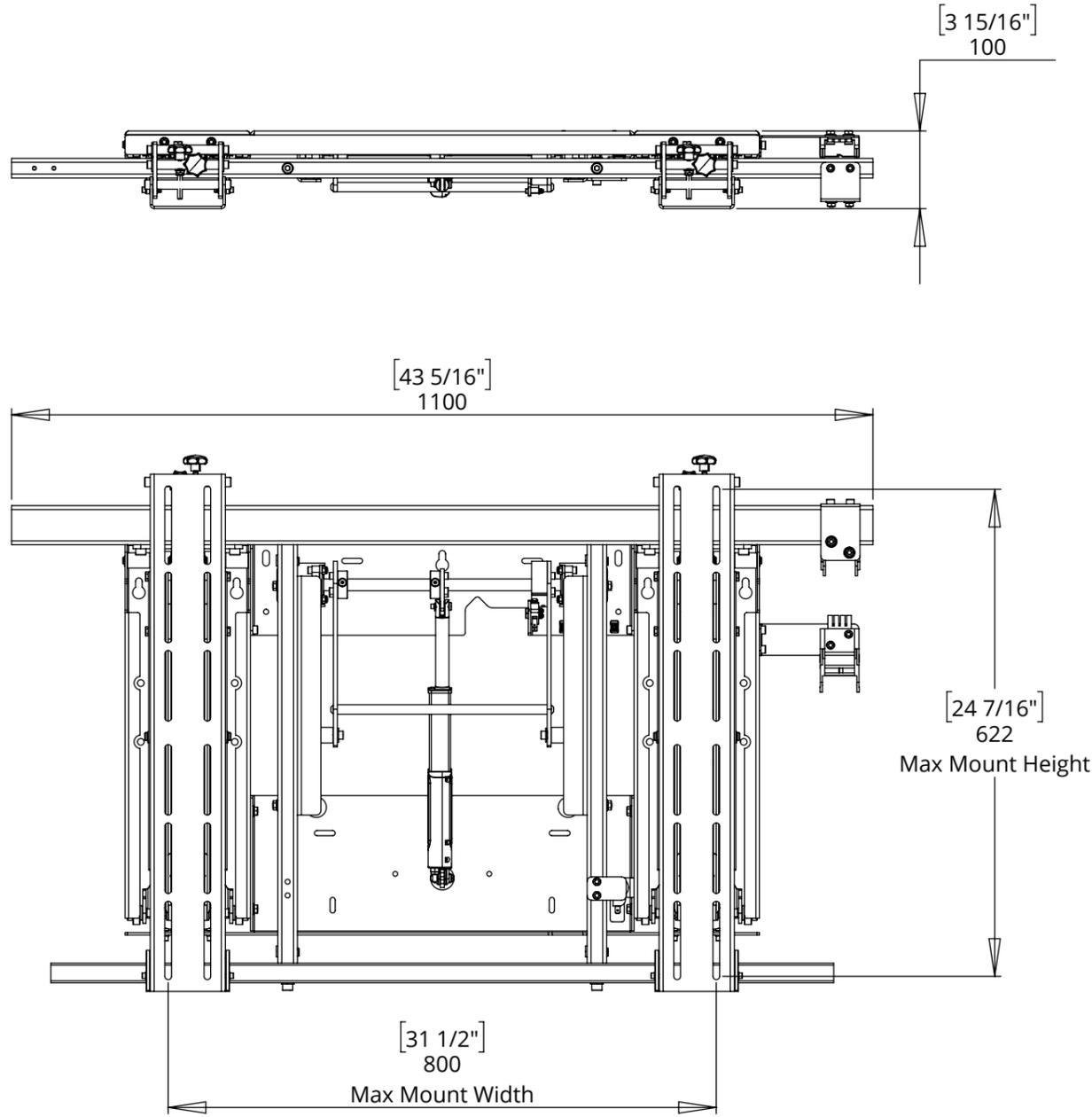
SPS-V-6
SLIDING PANEL MECHANISM - VERTICAL

CABINET DETAILS & ACCESS

The SPS mechanism requires certain access for installation and servicing.

For installation, the top panel must be removable to provide access to all the fixing points.

For servicing, the best option is to have the panels to the left and right of the opening on hinges. This will provide enough access to everything that will need to be serviced and maintained. Alternatively, the side panels could be made to be easily removable on suitable catches / fixings.

The Moving Panel Mechanism mounts to the side walls of the cabinet, and the Advance Bracket mounts to the back of the cabinet. It is essential that these surfaces can take the weight of the mechanism, moving panel and screen.

The mechanism is supplied with a control box on a 3m [10'] flying lead. This must be fitted in an easily accessible location. This will be the first item to be checked if there is an issue with the mechanism. Mains power and control connections (IR sensor / receiver, contact closure, RS232) are all made at the control box.
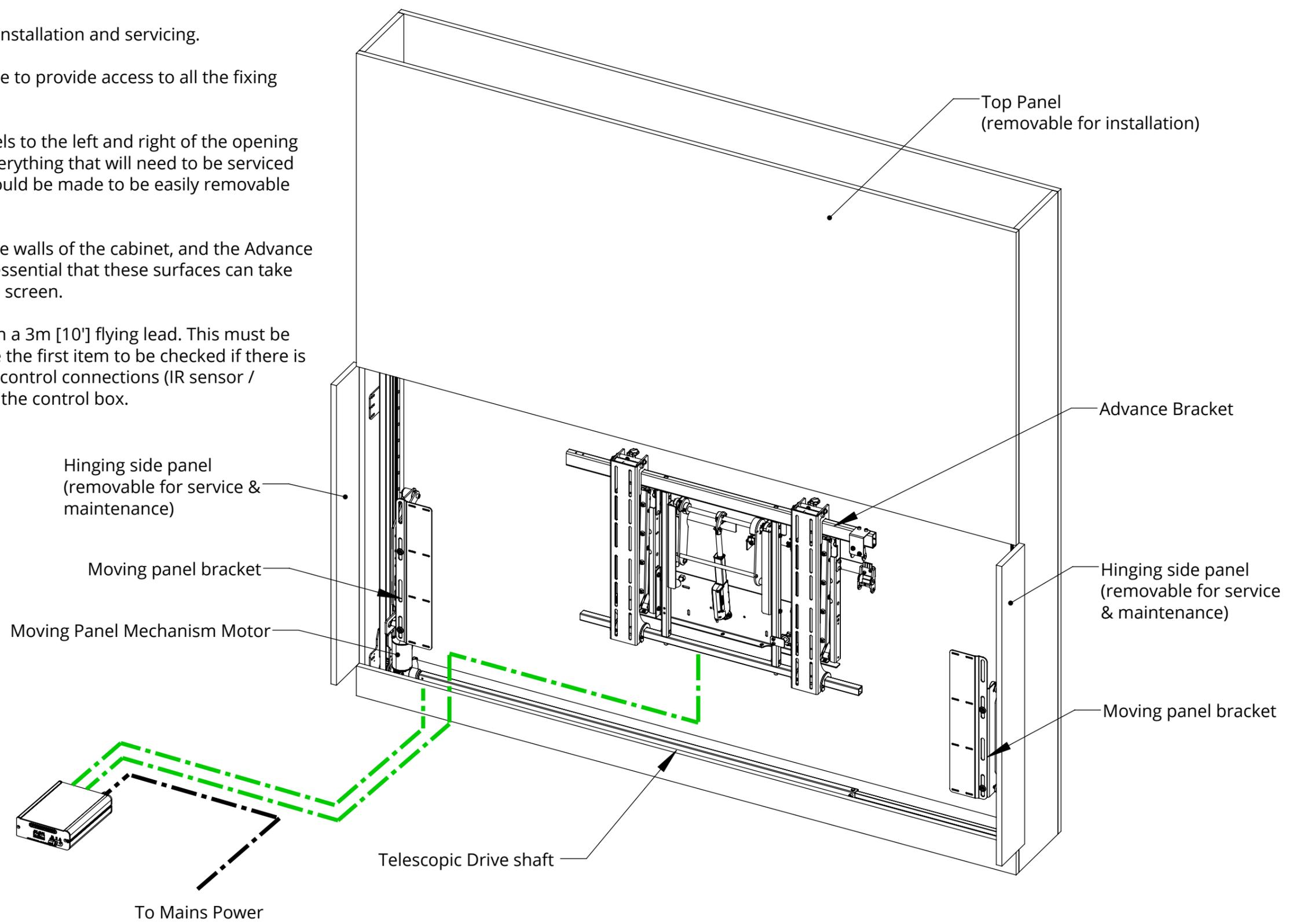
Top Panel
(removable for installation)

Advance Bracket

Hinging side panel
(removable for service & maintenance)

Moving panel bracket

Moving Panel Mechanism Motor

Hinging side panel
(removable for service & maintenance)

Moving panel bracket

— ⋅ — Mechanism Cables

— ⋅ — Power Cables

Control box wiring loom must be routed to the bottom left corner of the cabinet

Telescopic Drive shaft

To Mains Power

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SLIDING PANEL MECHANISM - VERTICAL

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CONTROL BOX

[8 1/8"] 207

[13/16"] 20 max

CABLE LOOM LENGTH APPROX [118 1/8"] 3000

[1/4"] 7

[5/16"] 8

[3/16"] 5

[2 1/16"] 52

[5 7/8"] 150

RS232 PORT

CONTACT CLOSURE PORT

EMERGENCY STOP CONNECTOR

IR LEAD INPUT 3.5mm [0.14"] JACK

IR OUTPUT INDICATOR LED

8 CORE CABLE
SPS SWITCHES
10mm [3/8"] dia.
EU SPEC: 0.5mm²
US SPEC: 20AWG

2 CORE CABLE
SPS MOTOR
10mm [3/8"] dia.
EU SPEC: 4mm²
US SPEC: 12AWG

8 CORE CABLE
ADVANCE BRACKET
10mm [3/8"] dia.
EU SPEC: 0.5mm²
US SPEC: 20AWG

MAINS INPUT
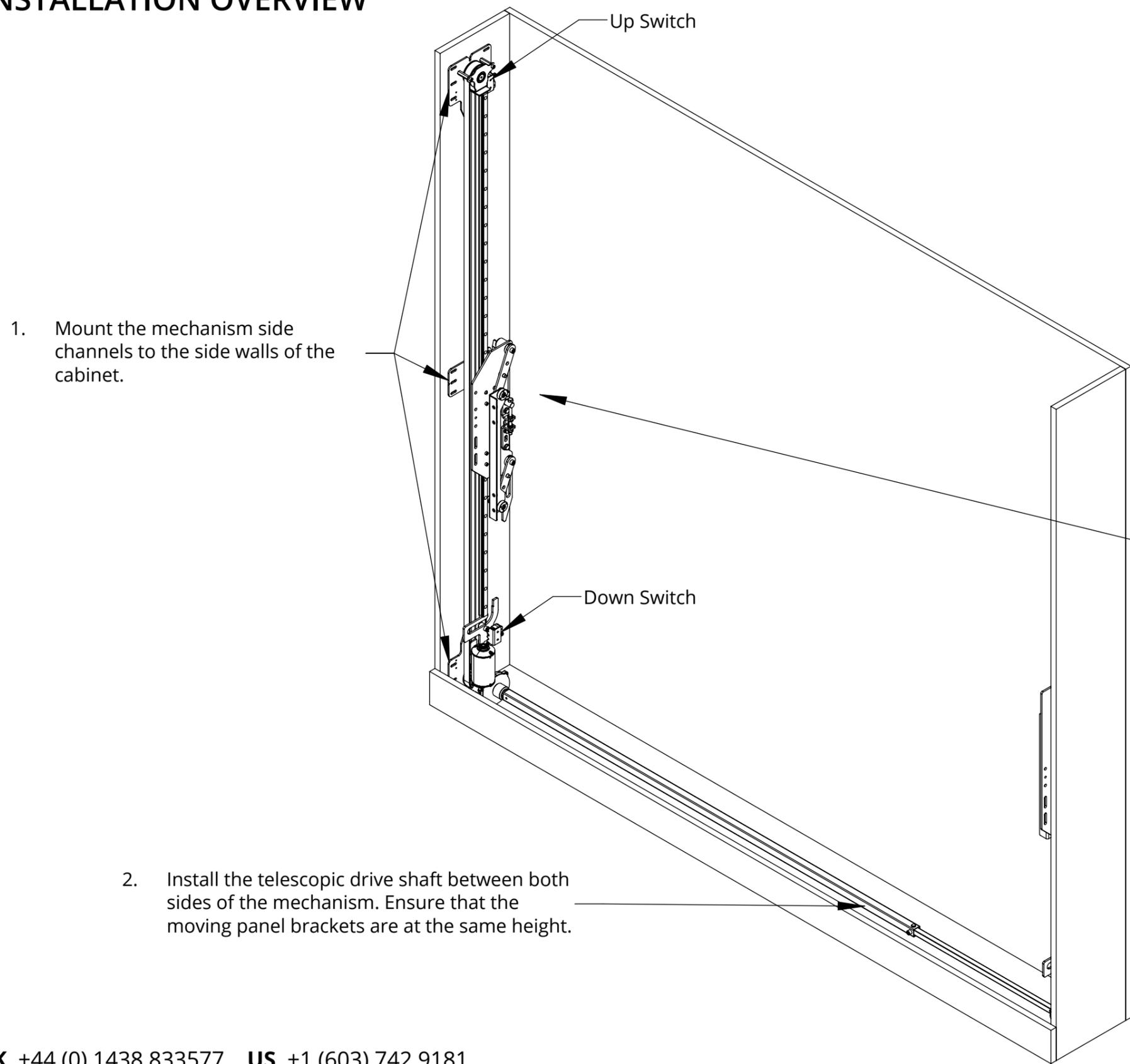
NOTES

- POWER SUPPLY UNIT (PSU) WILL ALLOW 110V OR 240V AC INPUT. THE SAME PSU IS USED FOR EU OR US MAINS SUPPLIES.
- OTHER THAN CONTROL CABLES, ALL CABLES TERMINATE AT CONTROL BOARD VIA STANDARD PHOENIX CONNECTORS.
- CABLE LOOM LENGTH SUPPLIED AT APPROX. 3m [118"]. LOOM CAN BE EXTENDED UP TO MAXIMUM OF APPROX. 10m [400"].
- MINIMUM CABLE BEND RADIUS 25mm [1"].

SPS-V-6
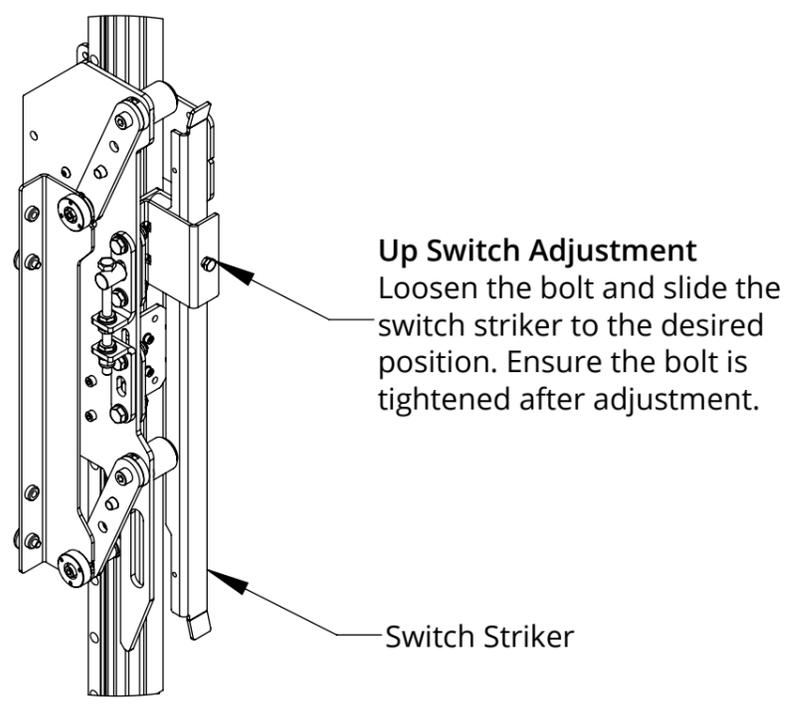## SLIDING PANEL MECHANISM - VERTICAL

INSTALLATION OVERVIEW

Up Switch

3. Run the mechanism, adjust the up switch so that the carriages travels the height of the moving panel + 25mm [1"].

Rear View

1. Mount the mechanism side channels to the side walls of the cabinet.

Up Switch Adjustment
Loosen the bolt and slide the switch striker to the desired position. Ensure the bolt is tightened after adjustment.

Down Switch

Switch Striker

2. Install the telescopic drive shaft between both sides of the mechanism. Ensure that the moving panel brackets are at the same height.

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SLIDING PANEL MECHANISM - VERTICAL

INSTALLATION OVERVIEW

4. Mount the Panel Brackets to the rear of the moving panel as dimensioned below.

[3 11/16"]
94

Rear View of moving panel

[3 11/16"]
94

[4 5/16"]
110

[4 5/16"]
110

5. Mount the moving panel back onto the mechanism, use the slots in the mount brackets to align the panel and get it into the desired position.

Moving panel bracket

Recommended to use 5mm shims to align the moving panel with the base of the aperture.