OpenView Luminous Virtual Window Recessed Installation Packet

Installation Packet Includes:

OpenView Luminous Virtual Window Recessed Installation Instructions
- Sample Wiring Drawings EL001580, EL001581, EL001583, EL001622 and EL001623
- Custom OpenView Installation Drawing packet (where applicable)

OpenView Luminous Virtual Window Technical Specifications

Wall Image Layout

OpenView Luminous Virtual Window Maintenance

For technical support at any time during the installation, please call us **toll free at 866-759-3228.**
We want your installation to go as smoothly as possible. Thank you for choosing Sky Factory.

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Provided Components:

OpenView Light Box: extruded aluminum case with back lit LEDs, integrated multi-inlet junction box,and trim mounting hardware with safety cords.

Image Tile: High resolution reproduction mounted on a .25" (6.4mm) polycarbonate panel pre-mounted to light box.

Trim: Wood or anodized aluminum frame which attaches to the light box/image tile with button-fix type 2 fasteners and safety cords.

Electrical: External V AC to V DC power supply

Installation Hardware: single luminaire installations ~ 4 corner alignment brackets
multiple luminaire installations ~ 4 corner alignment brackets plus
at least 2 corner alignment and joining brackets (depending on installation)

Client Supplied Components:

Electrical circuit, V AC switch, conduit (if required) and wiring appropriate to local code provided and run to the appropriate locations.

Power consumption: Approx. 6.6W, 0.275 per square foot

Means to attach the mounting brackets to the rough opening

Miscellaneous hand tools

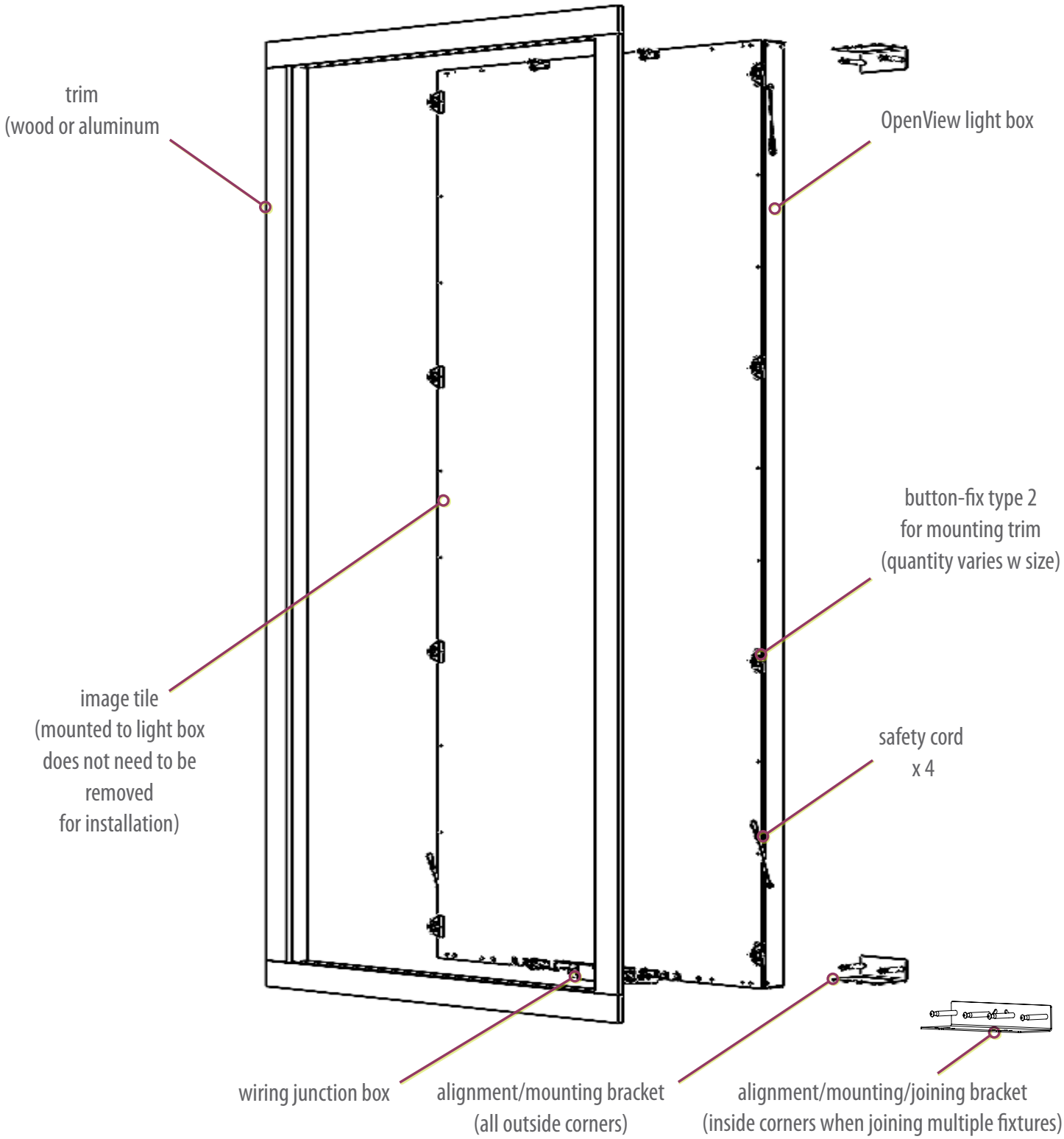
For larger OpenView's, two installers may be needed.

Electrical work must be performed by a qualified electrician and must conform to all local and national codes.

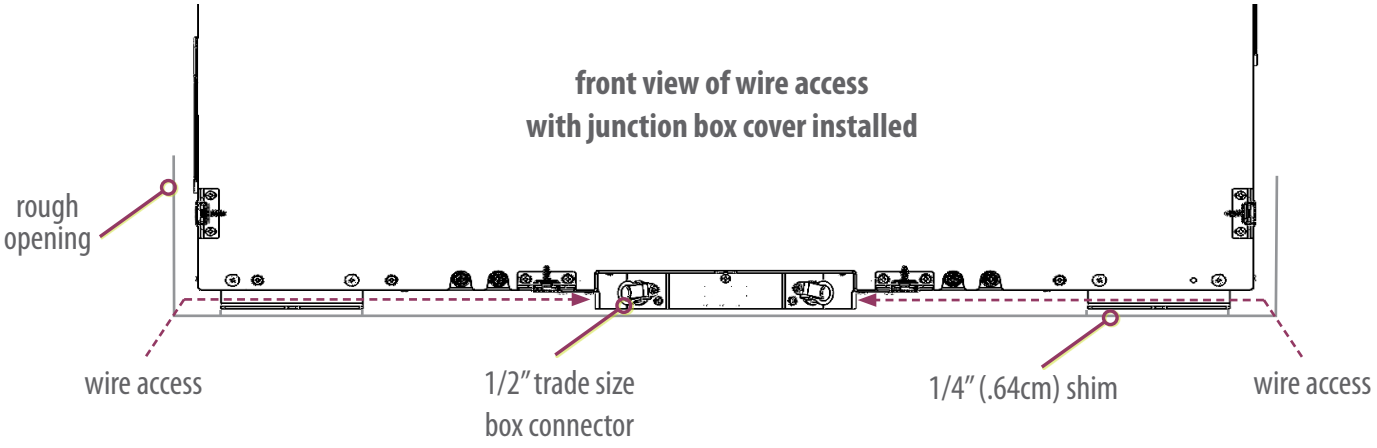
OpenView Recessed Component Details:

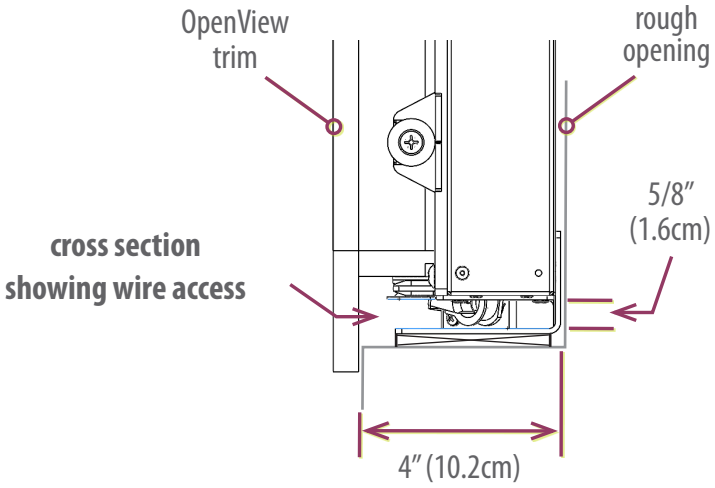
Major components:

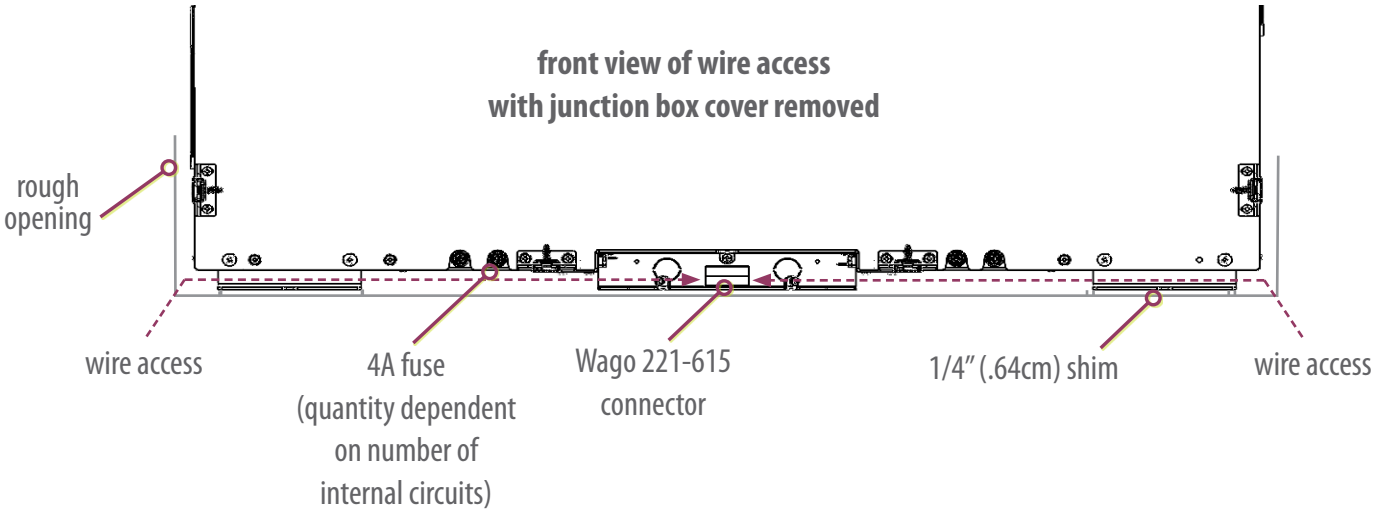
OpenView Recessed Mount fixtures can be mounted singly, in arrays, or joined to other fixtures.



Wiring access:







Step 1: Unpacking the OpenView(s)

IMPORTANT: OpenView comes with trim attached.

Do not try to lift the fixture out of the wrapper by pulling up on the trim.

The trim is held to the light box by button-fix type 2 hardware.

To remove the trim:

1. Remove any shrink wrap holding it to the light box,
2. Using both hands, grasp the trim near the top on both sides and pull it directly away from the light box
   IMPORTANT: DO NOT PULL ON ONE SIDE ONLY!
3. Then continue towards the bottom of the fixture until the trim is fully released.

Installation hardware is shipped above and/or along one side of the OpenView(s).

Step 2: Locating the OpenView(s) on the wall

- For fixture overview and rough opening dimensions, see pages 6-7, Appendices A & B and custom installation drawing packet (where applicable)
- For wiring access see page 4

We recommend the OpenView is placed at standard window height.

OpenView is qualified for dry or damp locations only, and must therefore be placed on an interior wall.

A location for the external power supply and means to run source power to fixture(s) needs to be established.

See "Step 6: Wiring the OpenView and power supply", pages 10-11, and Wiring Diagrams on pages 14-16.

Step 3: Determining the Rough Opening – Fixture Overview

OpenView sizes range from 8 ft^2 to 40 ft^2 in 1 foot increments, from 2′ x 4′/4′ x 2′ to 5′ x 8′/8′ x 5′.

The range of the smaller dimension is 2′ - 5′, the larger 4′ - 8′. That is, a 6′ x 6′ or 3 ′x 9′ are not options. See sample sizes below.

When installing multiple fixtures in a single display, recessed can be joined together whereas surface mount must be mounted separately.

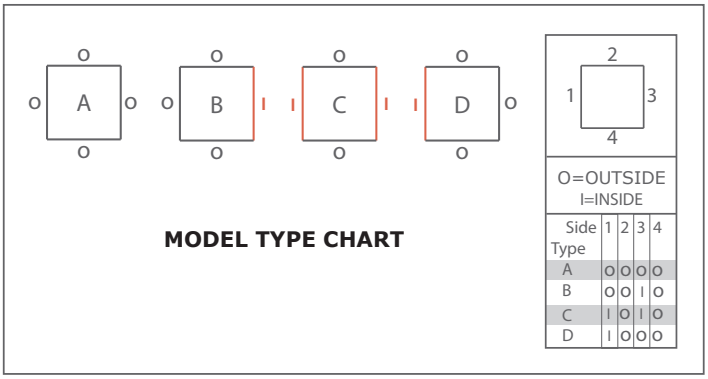
Rough opening can be determined from the model description (Appendix A), from directly measuring the fixture (Appendix B) or from a custom installation drawing packet (where applicable):

Standard model description: OVXxX-X-X

Model Series (OpenView) – Width/Height (Feet) – Mounting Means (R=Recessed S=Surface) – Type (See chart below)

Example: OV4x4-R-A

OV 4′W x 4′H - Recessed - A (40S)



Sample OpenView Recessed Sizes and Combinations						
Model	**Amps [A]**	**Power [W]**	**Average Weight* lbs (kg)**	**Dimensions (WxH)** Light box and SkyTile inches (cm)	Trim inches (cm)	Rough Opening** inches (cm)
OV2x7-R-A	3.85	92.4	43.3 (19.6)	23 3/8 x 83 3/8 (59.4 x 211.8)	26 3/8 x 86 3/8 (67.0 x 219.4)	25 1/8 x 85 3/8 (63.8 x 216.9)
OV4x6-R-A	6.6	158.4	68.0 (30.8)	47 3/8 x 71 3/8 (120.3 x 181.3)	50 3/8 x 74 3/8 (128.0 x 188.9)	49 1/8 x 73 3/8 (124.8 x 186.4)
OV7x5-R-A	9.62	231	96.2 (43.6)	83 3/8 x 59 3/8 (211.8 x 150.8)	86 3/8 x 62 3/8 219.4 x 158.4)	85 1/8 x 61 3/8 (216.2 x 155.9)
OV5x7-R-A	9.62	231	96.2 (43.6)	59 3/8 x 83 3/8 (150.8 x 211.8)	62 3/8 x 86 3/8 (158.4 x 219.4)	61 1/8 x 85 3/8 (155.3 x 216.9)
OV2x7-R-B OV5x7-R-D	13.47	323.3	138.7 (62.9)	23 3/8 x 83 3/8 (59.4 x 211.8) 59 3/8 x 83 3/8 (150.8 x 211.8)	25 1/4 x 86 3/8 (64.1 x 219.4) 61 1/4 x 86 3/8 (155.6 x 219.4)	85 1/8 x 85 3/8 (216.2 x 216.9)
OV2x7-R-B OV5x7-R-C OV2x7-R-D	17.32	415.7	182.2 (82.6)	23 3/8 x 83 3/8 (59.4 x 211.8) 59 3/8 x 83 3/8 (150.8 x 211.8) 23 3/8 x 83 3/8 (59.4 x 211.8)	25 1/4 x 86 3/8 (64.1 x 219.4) 60 x 86 3/8 (152.4 x 219.4) 25 1/4 x 86 3/8 (64.1 x 219.4)	109 1/8 x 85 3/8 (277.2 x 216.9)

*with wood trim ** 4" (10.2cm) deep from back of trim to back of fixture mounting bracket

Step 4: Framing the rough opening

Rough opening should be plumb, square and dimensionally accurate.

Wall surface should be relatively flat. Uneveness in wall surface can cause trim button-fixes to not seat firmly.

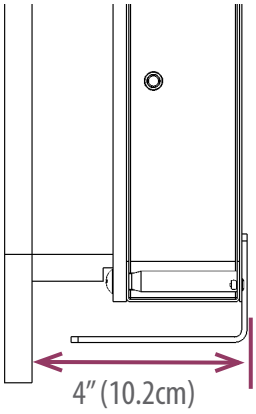
a. When installing a single fixture, set depth of light box so trim is positioned to most forward point(s) of wall.

b. When installing multiple fixtures, trim must be positioned to most forward point(s) of wall and also sit in a single plane, or trims may not line up properly once fully installed.

NOTE: The window(s) does not have to sit perfectly plumb in the opening to function properly, but must sit in a single plane.

Fixture depth:

Total fixture depth is 4" (10.2cm)
from back of trim
to back of alignment/mounting bracket



Step 5: Installing the OpenView

Remove the trim:

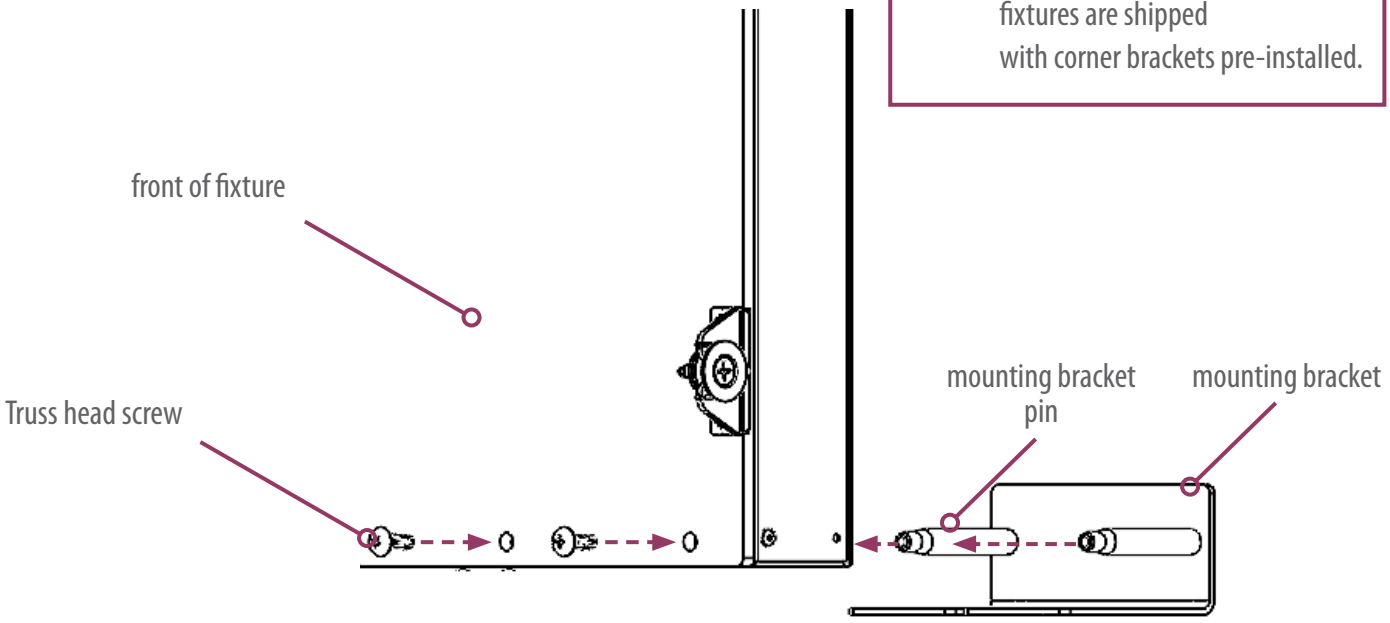
If the trim has not been removed, remove it now:

IMPORTANT: Make sure the safety cords are not connected.

Using both hands, grasp the trim near the top on both sides and pull it directly away from the light box
IMPORTANT: DO NOT PULL ONE SIDE ONLY!
then continue towards the bottom of the fixture until the trim is fully released.

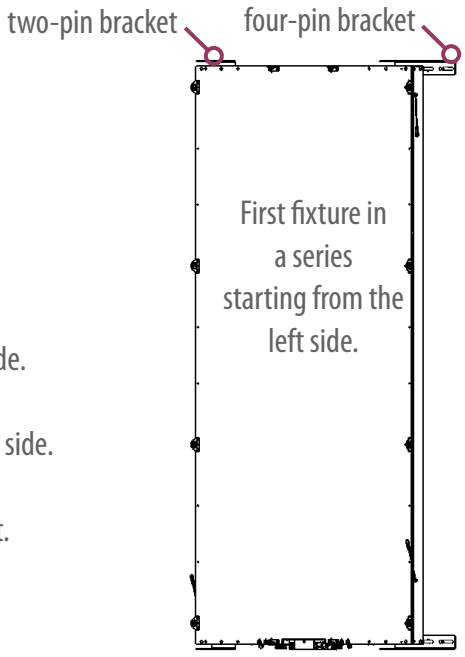
Insert the alignment/mounting brackets onto the light box (single):

NOTE: For single fixture installations, fixtures are shipped with corner brackets pre-installed.



Insert the two pins of each bracket into the two holes at the bottom and top corners of the light box.

Secure with the 10/32 x 5/8" Truss Head SS screws provided.



Insert the alignment/mounting brackets onto the light box (multiples):

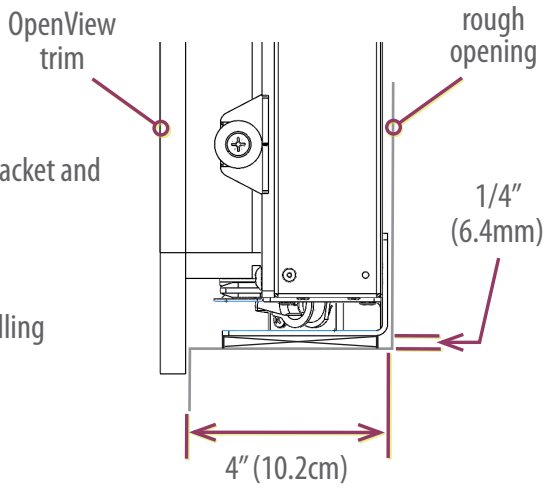
When installing multiples, start from one end and work toward other end.

If working from left to right, install four-pin joining brackets on right or open side.

On next fixture, leave brackets off left side, and install brackets on right or open side.
a. If it is the final fixture in the display, install a two-pin bracket.
b. If it is not the final fixture in the display, install a joining or four-pin bracket.

Repeat as needed.

Install the light box(es) in the rough opening:



NOTE: Trim shown here for illustration purposes.

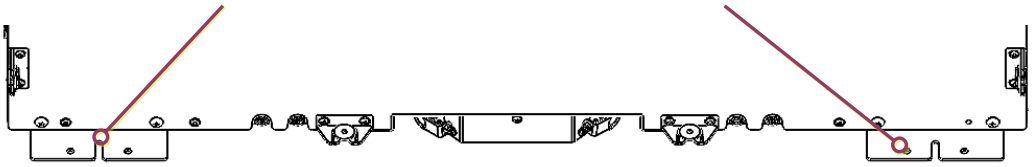
Rough opening allows for 1/4" (6.4mm) of shim space below bottom mounting bracket and above top mounting bracket.

Back of bracket to inside of trim is 4" (10.2cm).

a. Be sure to account for any irregularities in wall flatness, especially when installing multiples.

b. Faces of trim will not line up if fixtures are not installed in a single plane.

Brackets have 1/4" slots for fine adjustment and 1/4" diameter holes for final attachment.



Once fixture(s) are fine tuned, be sure to anchor bracket so it won't shift when installing and/or removing trim.

When installing multiples, 4-pin joining brackets will automatically lock adjoining fixtures in place with appropriate gap.

IMPORTANT:

Before wiring the OpenView, make sure the trim will securely latch, and if multiples, sit in a single plane.

If final adjustments need to be made, wiring may interfere with fastener access.

Step 6: Wiring the OpenView

- See also Wiring Diagrams on pages 14-18

Notice: The LED fixtures are 24DC ONLY.

AC voltage connected directly to the fixtures will destroy the lighting system.

OpenViews are powered by an external V AC to V DC 95W-600W with 1 or 2-output channels power supply:

Listed for U.S. and Canada

Overload, Short circuit and Thermal protection

Input Voltage: 100-277V AC, 50-60 Hz

Output Voltage: 24V DC

Suitable for damp locations

Contact Sky Factory for PSU selection

Power supplies and dimmer/switch must be located outside the room in all MRI, shielded applications.

For power consumption: OpenView fixtures are approx. 6.6W, 0.275A per square foot. See also fixture label and/or contact Sky Factory for power consumption information.

In MRI applications, an RF filter is required and will be supplied by others.

- When used with the provided Listed power supply, the system conforms to NFPA 70 Codes 411.4 (B), 411.5 (A), 411.6 (B), and 411.7.
- For Hazardous (Classified) Locations, this product shall conform with Articles 500 through 517 of NFPA 70.
- Secondary circuits shall not be grounded. NEC 411.6 (A)

Electrical work must be performed by a qualified electrician and must conform to all local and national codes.

Wiring Source V AC to power supply:

Run power to V AC side of the power supply:

Line to **L (BLACK)**

Neutral to **N (WHITE)**

Ground to **GND (GREEN)**

Wire gauge must conform to local and national codes.

Install the power switch on the V AC input side of the power supply.

Wiring power supply V DC to OpenView:

Run two continuous wires from the V DC side of the power supply to the OpenView connector, positive (+) to positive (+) and negative (-) to negative (-).

Power supply **V+ (RED)** to OpenView "**+**"

Power supply **V– (BLACK)** to OpenView "**–**"

OpenView connector wire range is 20 - 10 AWG (.05 - 6mm^2) for solid and stranded conductors

0.47 - 0.55" (12 - 14mm) strip length

To minimize voltage drop and maintain desired brightness, use appropriate wire gauge.

Junction box cover must be removed on OpenView to access connector.

Always turn circuit off before removing a wiring cover.

When replacing the cover, make sure all mounting screws are tight.

IMPORTANT: WHEN REPLACING THE JUNCTION BOX COVERS, SNUG SCREWS ONLY!
DO NOT OVERTIGHTEN SCREWS AND STRIP SCREW CHANNEL!

Two 1/2" trade size knock-outs are available on the junction box cover for recessed applications and two on the back for surface mount applications.

When source power is running to a single fixture, only remove the knock-out on the source side of the fixture.

When source power is running through one fixture to another fixture, remove both knock-outs as needed.

Where flexible conduit is permitted, fasten the provided 1/2" (12.7mm) box connector (or comparable) in the wiring access hole and make the electrical connection inside the junction box.

Power entry hole is limited to 1/2" nominal trade size conduit.

Connect DC power in conformance to local and national Electrical Codes.

Wiring dimmer (where provided):

Contact the Sky Factory if you plan on using a dimming system provided by others.

> **Notice:** **Dimming using non-approved systems may permanently damage LED's and will void the warranty!**

Wiring a Sky Factory provided dimmer control:

To wire the dimmer control (and external relay where specified), refer to wiring diagram included with dimmer and relay and EL001621 and EL001622 on pages 17-18, and installation specific wiring diagram (where applicable.)

Replace the junction box cover and test the fixture before installing the trim.

Step 7: Installing the trim

Safety cords:

Safety cords catch the OpenView trim if it is jarred loose of the button-fix catches.

Cords are mounted on the OpenView light box near the top and bottom on each side.
Smaller sizes may have only one set of cords at the top.

Cords attach to clearly marked buttons on trim.

Attaching the safety cords is easiest with two people:
One person holds the trim up while the other person attaches the cords to the clearly marked buttons on the trim.

Attach the trim:

IMPORTANT: Make sure the safety cords are connected.

Using both hands, grasp the trim near the top on both sides, line up the buttons on the trim with the button-fixes on the image panel/light box and push the trim firmly,

then continue towards the bottom of the fixture until the trim is fully secured.

Make sure all the catches latch.

Step 7: Check installation using Final Inspection list.

Is the image evenly lit??

- If there are shadows, dark spots, or bright lines on the image, clean the SkyTile. See OpenView Maintenance.

Is the trim securely latched?

- If trim pops off easily, and rubs against wall when it is installed:

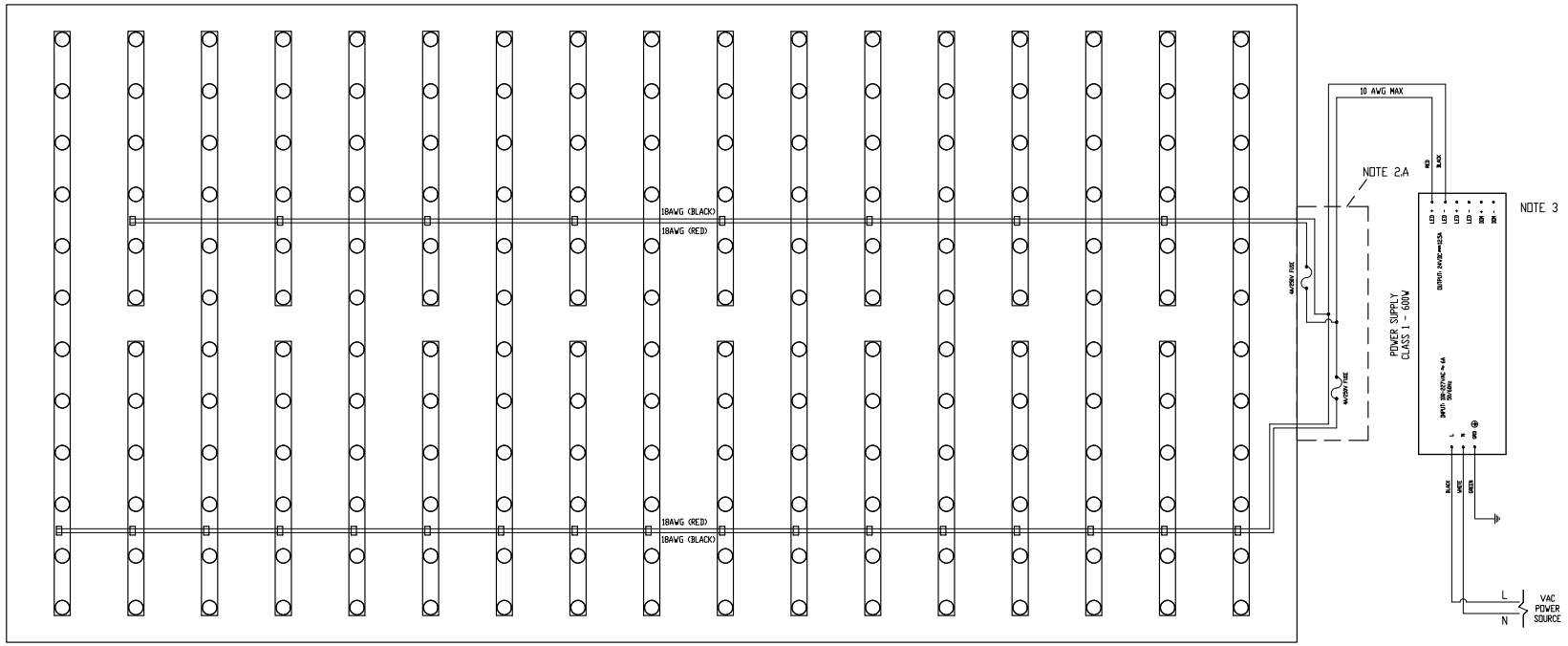
  OpenView light box is most likely recessed too far into the wall. Readjust light box depth.

- If trim pops off easily, and there is a gap between trim and wall all the way around:

  Button catches have not been fully engaged. Re-install trim making sure to firmly press the buttons into the catches.

Are the safety cords attached?

- Install cords.

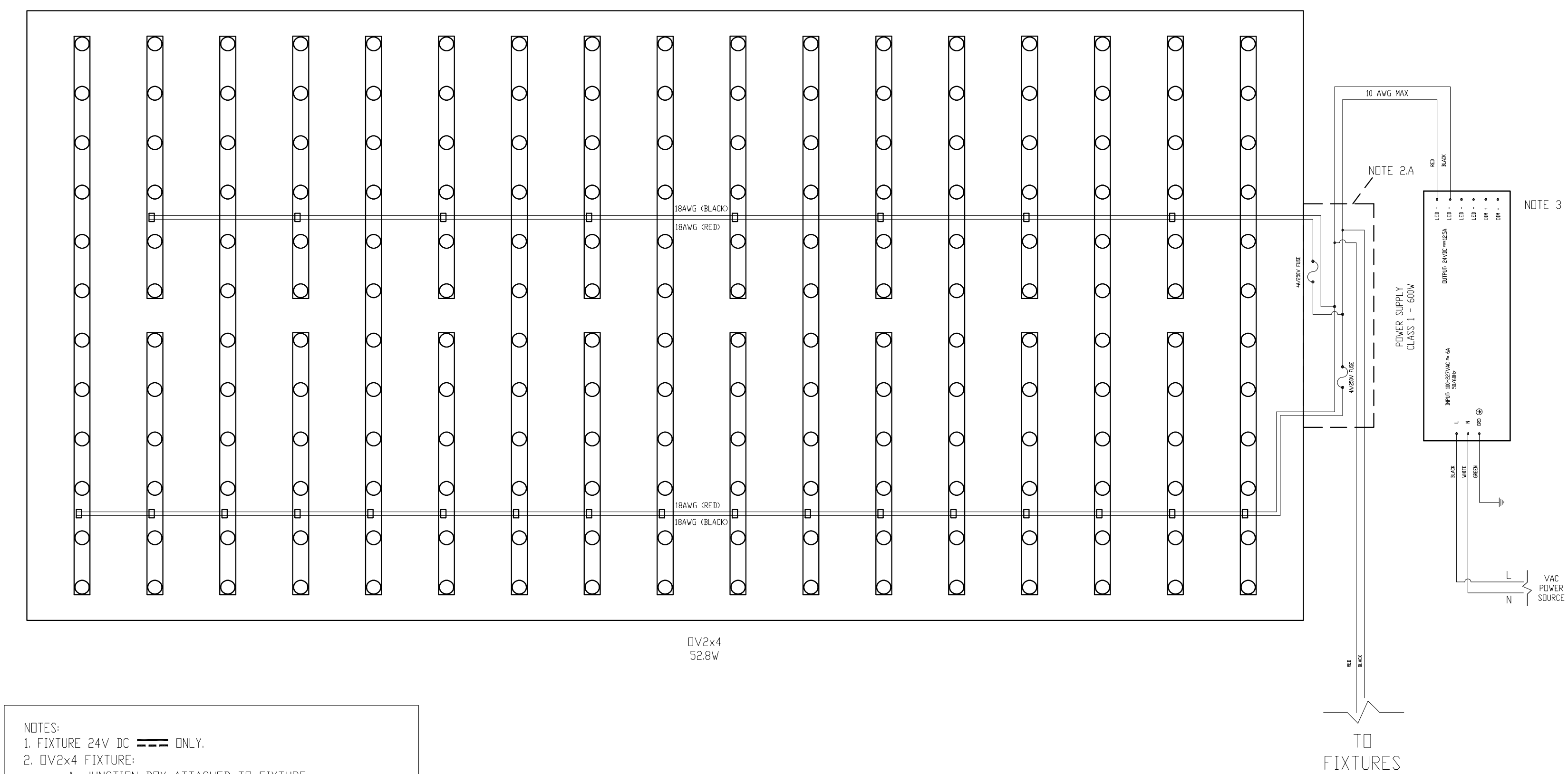


DV2x4
52.8W

NOTES:
1. FIXTURE 24V DC ⎓ ONLY.
2. DV2x4 FIXTURE:
   A. JUNCTION BOX ATTACHED TO FIXTURE:
      WIRE COLORS:
      RED (+) (POSITIVE)
      BLACK (-) (NEGATIVE)
   B. REPLACEABLE 4 AMP FUSE.
   C. JUNCTION BOX VOLUME: 15.7 CUBIC INCHES
3. POWER SUPPLY
   CLASS 1 OR CLASS 2 POWER SUPPLY.

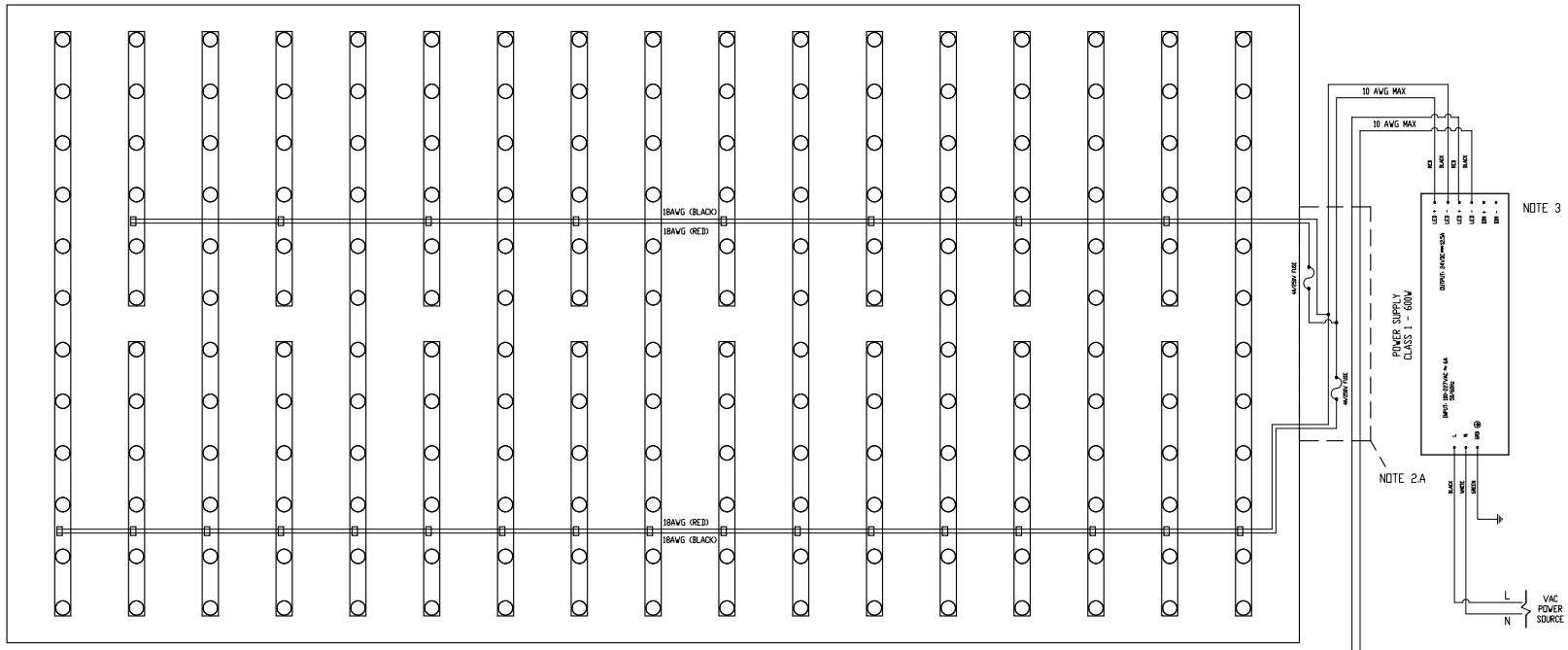
Sky Factory		DWG NO. EL001580	REV C
PROPRIETARY AND CONFIDENTIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN TOLERANCES FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	TITLE: DV2x4 WIRING DIAGRAM EXTERNAL POWER SUPPLY	
DO NOT SCALE DRAWING	NEXT ASSY USED ON APPLICATION	DRAWN BY: RIA	DATE: 09/08/2025
		SCALE: NTS	FORMAT: B
			SHEET 1 OF 1

D | EL001580 | REV C



NOTES:
1. FIXTURE 24V DC ⎓ ONLY.
2. DV2x4 FIXTURE:
   A. JUNCTION BOX ATTACHED TO FIXTURE:
      WIRE COLORS:
         RED (+) (POSITIVE)
         BLACK (-) (NEGATIVE)
   B. REPLACEABLE 4 AMP FUSE.
   C. JUNCTION BOX VOLUME: 15.7 CUBIC INCHES
3. POWER SUPPLY
   CLASS 1 OR CLASS 2 POWER SUPPLY.

Sky Factory	DWG. NO. EL001581	REV C
PROPRIETARY AND CONFIDENTIAL	TITLE: DV2x4 WIRING DIAGRAM EXTERNAL POWER SUPPLY	
DO NOT SCALE DRAWING	DRAWN BY: RIA	DATE: 09/08/2025
	SCALE: NTS FORMAT: D	SHEET 1 OF 1



DV2x4
52.8W

NOTES:
1. FIXTURE 24V DC ⎓ ONLY.
2. DV2x4 FIXTURE:
   A. JUNCTION BOX ATTACHED TO FIXTURE:
      WIRE COLORS:
      RED (+) (POSITIVE)
      BLACK (-) (NEGATIVE)
   B. REPLACEABLE 4 AMP FUSE.
   C. JUNCTION BOX VOLUME: 15.7 CUBIC INCHES
3. POWER SUPPLY
   CLASS 1 OR CLASS 2 POWER SUPPLY.

Sky Factory	DWG. NO. EL001583		REV C
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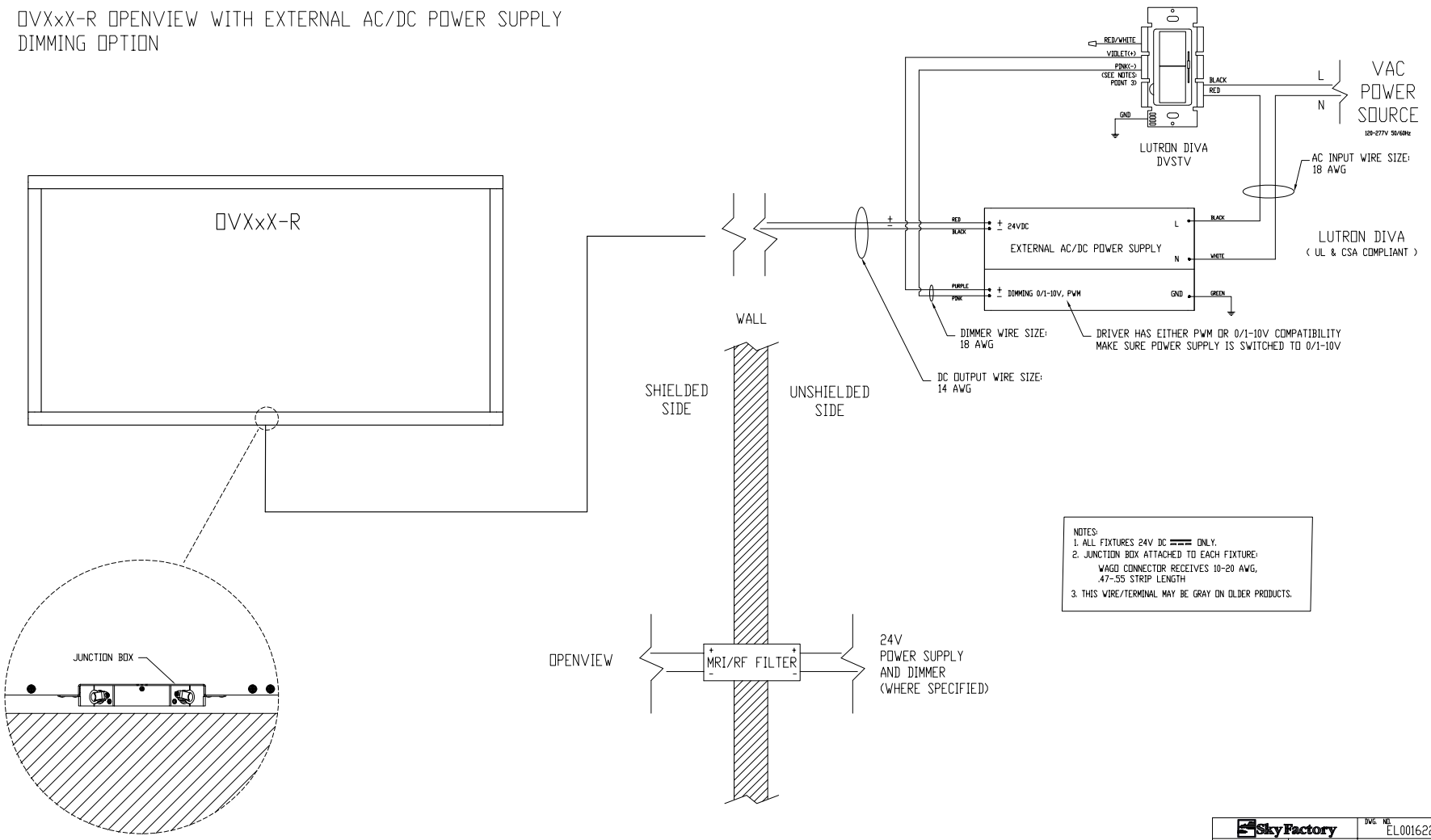
	SCALE: NTS	FORMAT: D	SHEET 1 OF 1

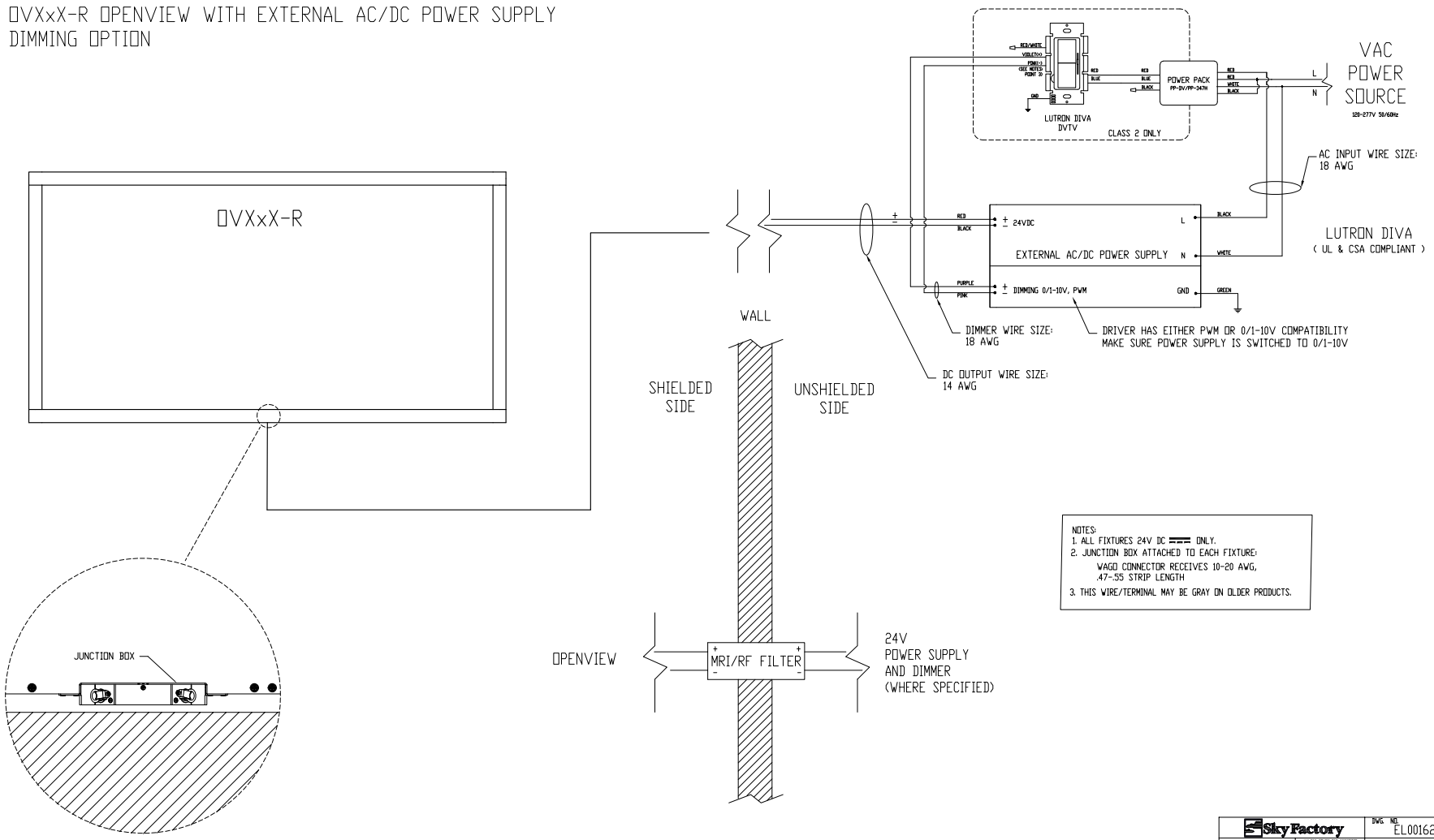
□VXxX-R □PENVIEW WITH EXTERNAL AC/DC POWER SUPPLY DIMMING □PTION



NOTES:
1. ALL FIXTURES 24V DC ⎓ ONLY.
2. JUNCTION BOX ATTACHED TO EACH FIXTURE:
   WAGO CONNECTOR RECEIVES 10-20 AWG, .47-.55 STRIP LENGTH
3. THIS WIRE/TERMINAL MAY BE GRAY ON OLDER PRODUCTS.

Sky Factory		DWG. NO. EL001622	REV A
PROPRIETARY AND CONFIDENTIAL	UNLESS OTHERWISE SPECIFIED	TITLE: □PENVIEW LUMINOUS VIRTUAL WINDOW AC/DC POWER SUPPLY WITH DIMMER	
DO NOT SCALE DRAWING		DRAWN BY: RIA	DATE: 10/14/2025
		SCALE: NTS	FORMAT: D
			SHEET 1 OF 1

OVXxX-R OPENVIEW WITH EXTERNAL AC/DC POWER SUPPLY DIMMING OPTION



NOTES:
1. ALL FIXTURES 24V DC ⎓ ONLY.
2. JUNCTION BOX ATTACHED TO EACH FIXTURE:
   WAGO CONNECTOR RECEIVES 10-20 AWG, .47-.55 STRIP LENGTH
3. THIS WIRE/TERMINAL MAY BE GRAY ON OLDER PRODUCTS.

Sky Factory		DWG. NO. EL001623	REV A
PROPRIETARY AND CONFIDENTIAL	UNLESS OTHERWISE SPECIFIED	TITLE: OPENVIEW LUMINOUS VIRTUAL WINDOW AC/DC POWER SUPPLY WITH DIMMER	
DO NOT SCALE DRAWING		DRAWN BY: RJA	DATE: 10/14/2025
		SCALE: NTS	FORMAT: D
			SHEET 1 OF 1

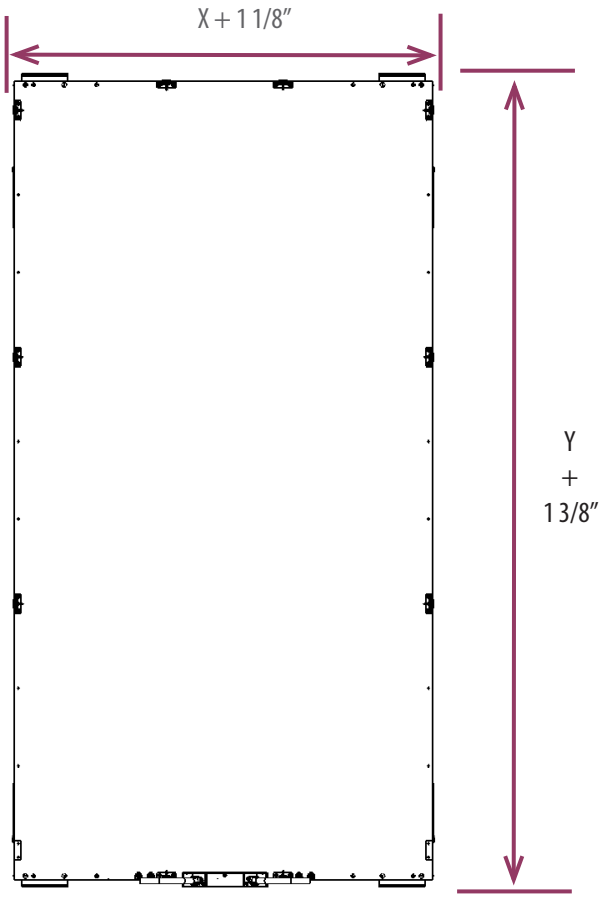
Rough Opening of Singles (Type A):

Singles:

Where "X" = width of single OpenView
"Y" = height of single OpenView

Rough opening width and height:

width = X + 1 1/8"
height = Y + 1 3/8"



Example:

OV3x7-R-A:

width = X + 1 1/8"
=36" + 1 1/8"
= 37 1/8" (94.3cm)

height = Y + 1 3/8"
= 84" + 1 3/8"
= 85 3/8" (216.9cm)

OV4x6-R-A:

width = X + 1 1/8"
= 48" + 1 1/8"
= 49 1/8" (124.8cm)

height = Y + 1 3/8"
= 72" + 1 3/8"
= 73 3/8" (186.4cm)

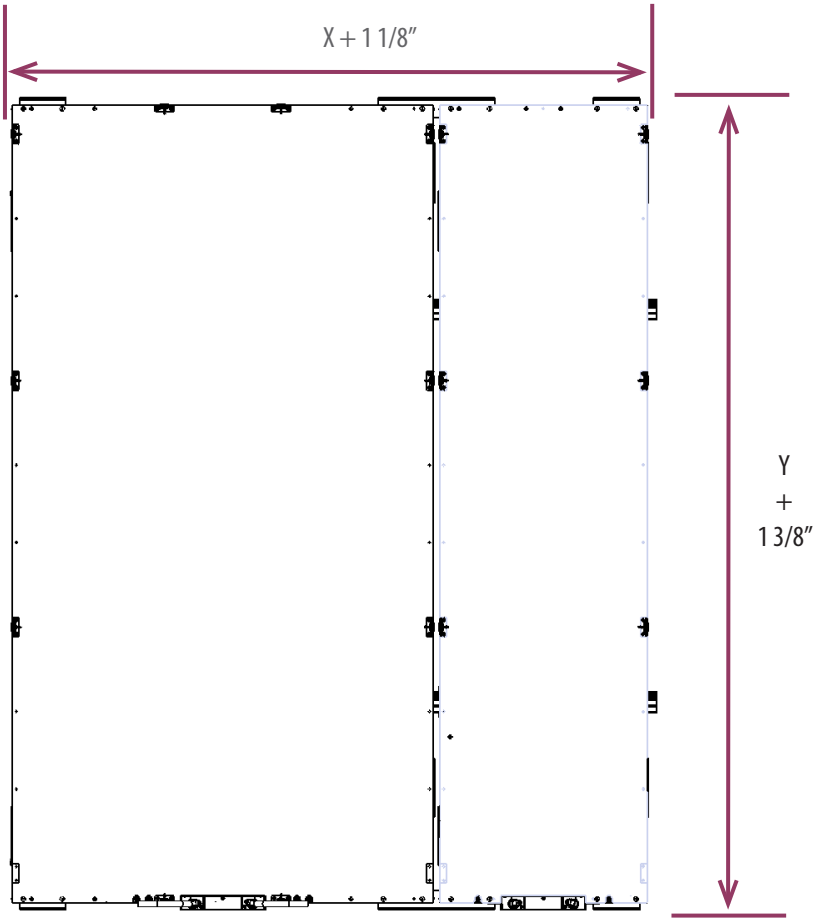
Rough Opening of Multiples (Any combination of Types B, C & D):

Multiples:

Where "X" = width of OpenView combination
"Y" = height of OpenView combination

Rough opening width and height:

rough opening width = X + 1 1/8"
rough opening height = Y + 1 3/8"



Examples:

OV3x7-R-B–OV2x7-R-D:

width = $X^1 + X^2 + 1\ 1/8"$
= 36" + 24" + 1 1/8"
= 61 1/8" (155.3cm)

height = Y + 1 3/8"
=84" + 1 3/8"
= 85 3/8" (216.9cm)

OV2x6-R-B–OV5x6-R-C–OV2x6-R-D:

width = $X^1 + X^2 + X^3 + 1\ 1/8"$
= 24" + 60" + 24" + 1 1/8"
= 109 1/8" (277.2cm)

height = Y + 1 3/8"
= 72" + 1 3/8"
= 73 3/8" (186.4cm)

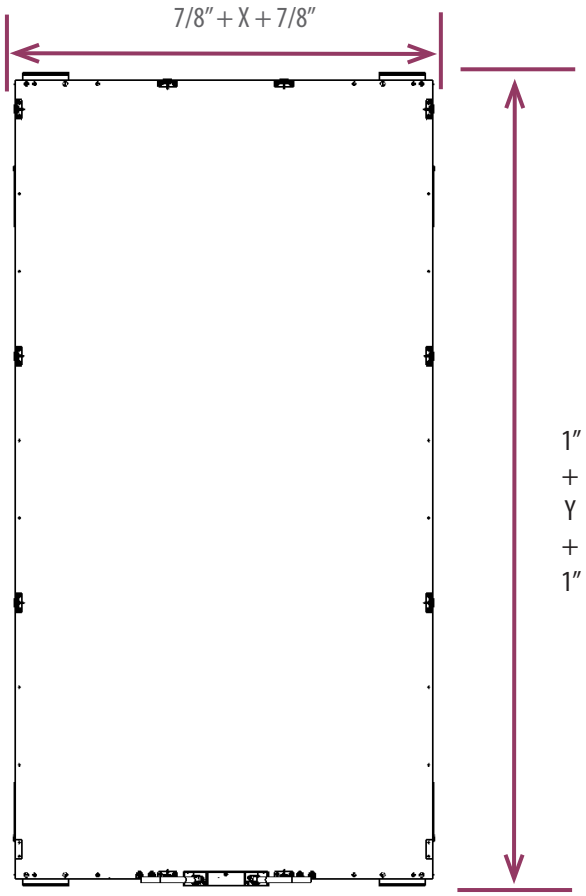
Rough Opening of Singles (Type A):

Singles:

Where "X" = width of single OpenView light box
"Y" = height of single OpenView light box

Rough opening width and height:

width = 7/8" + X +7/8"
height = 1" + Y +1"



Example:

OV3x7-R-A:

width = 7/8" + X + 7/8"
= 7/8" + 35 3/8" + 7/8"
= 37 1/8" (94.3cm)

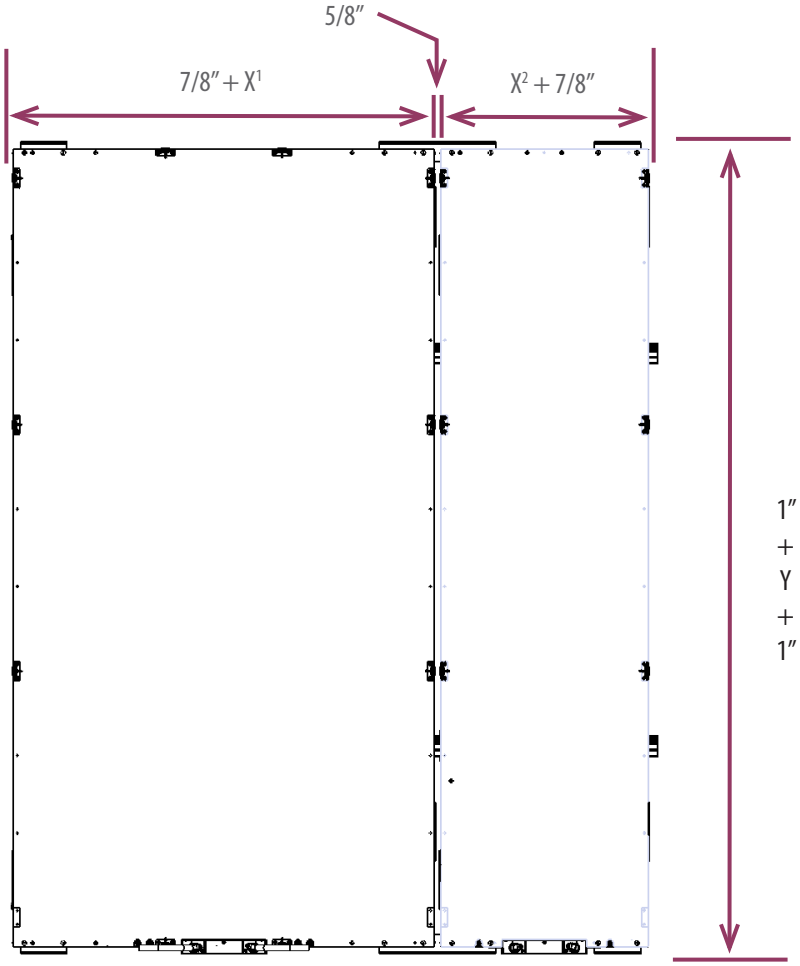
height = 1" + Y + 1"
= 1" + 83 3/8" + 1"
= 85 3/8" (216.9cm)

OV4x6-R-A:

width = 7/8" + X + 7/8"
=7/8" + 47 3/8" + 7/8"
= 49 1/8" (124.8cm)

height = 1" + Y + 1"
=1" + 71 3/8" + 1"
= 73 3/8" (186.4cm)

Rough Opening of Singles (Types B, C & D):



Multiples:

Where "X1" = width of first OpenView light box
"X2" = width of second OpenView light box
"Y" = height of OpenView combination

Rough opening width and height:

width = 7/8″ + X1 + 5/8″ + X2 + 7/8″
height = 1″ + Y + 1″

Examples:

OV3x7-R-B–OV2x7-R-D:

width = 7/8″ + X1 + 5/8″ + X2 + 7/8″
= 7/8″ + 35 3/8″ + 5/8″ + 23 3/8″ + 7/8″
= 61 1/8″ (155.3cm)

height = 1″ + Y + 1″
= 1″ + 83 3/8″ + 1″
= 85 3/8″ (216.9cm)

OV2x6-R-B–OV5x6-R-C–OV2x6-R-D:

width = 7/8″ + X1 + 5/8″ + X2 + 5/8″ + X3 + 7/8″
= 7/8″ + 23 3/8″ + 5/8″ + 59 3/8″ + 5/8″ + 23 3/8″ + 7/8″
= 109 1/8″ (277.2cm)

height = 1″ + Y + 1″
= 1″ + 71 3/8″ + 1″
= 73 3/8″ (186.4cm)

Appendix C: Wire Sizing Chart

Wire Sizing Chart is calculated for a recommended voltage drop of no more than 3%.

For amps per luminaire at 24V DC, see below. For custom sizes, see custom wiring diagram included (where applicable).

NOTE: Some larger installations have multiple branches. See installation specific wiring diagrams included and/or custom wiring diagram (where applicable).

NOTE: Largest power system has two sets of leads. See installation specific wiring diagrams included and/or custom wiring diagram (where applicable).

We recommend dividing the load as evenly as possible to minimize voltage drop and maximize placement options.

Length (ft)	5	10	15	20	25	30	35	40	45	50
Amperage (24V DC)										
1	18	18	18	18	18	18	18	18	18	18
2	18	18	18	18	18	16	16	16	16	14
3	18	18	18	16	16	16	14	14	14	12
4	18	18	18	16	14	14	14	12	12	12
5	18	18	16	14	14	12	12	12	12	10
6	18	16	16	14	12	12	12	10	10	10
7	18	16	14	14	12	12	10	10	10	10
8	18	16	14	12	12	10	10	10	10	-
9	18	16	14	12	12	10	10	10	-	-
10	16	14	12	12	10	10	10	-	-	-
11	16	14	12	12	10	10	-	-	-	-
12	16	14	12	10	10	-	-	-	-	-
13	16	14	12	10	10	-	-	-	-	-
14	16	14	12	10	10	-	-	-	-	-
15	16	14	12	10	-	-	-	-	-	-
16	16	12	10	10	-	-	-	-	-	-
17	16	12	10	10	-	-	-	-	-	-
18	16	12	10	10	-	-	-	-	-	-
19	16	12	10	-	-	-	-	-	-	-
20	14	12	10	-	-	-	-	-	-	-

Amps per Luminaire at 24V DC

OpenView sizes range from 8 ft^2 to 40 ft^2 in 1 foot increments, from 2′ x 4′ to 5′ x 8′ (vertical or horizontal).

OpenView fixtures are approx. 6.6W, 0.275A per square foot.

To determine approx. amperage per fixture from model description:

OV3x7-R-A
Amperage = (3′ x 7′) x .275
= 21 x .275
= 5.78A @ 24V DC

OV4x6-S-A
Amperage = (4′ x 6′) x .275
= 24 x .275
= 6.6A @ 24V DC