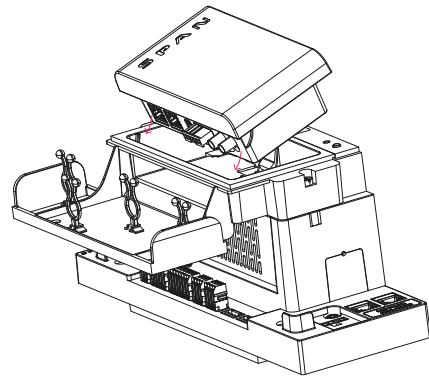
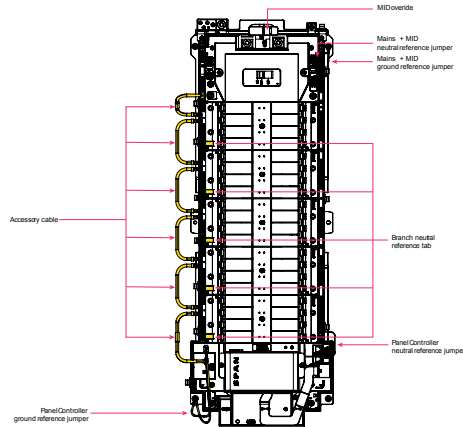


05 SPAN Panel parts

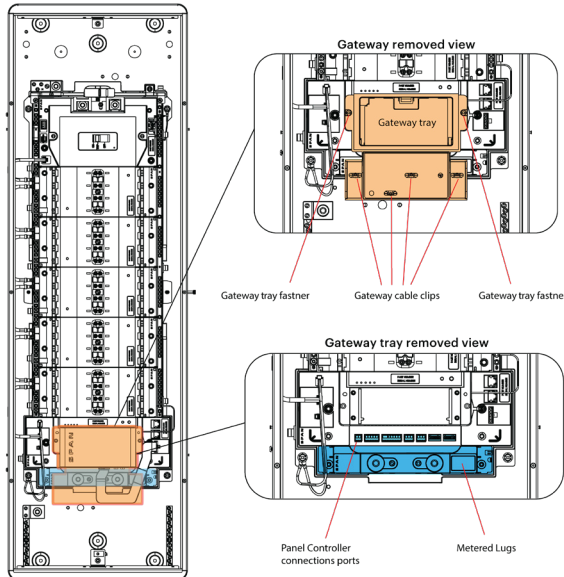
The Gateway is secured into and released from the Gateway tray through a rocking motion. Listen for a click when the Gateway tray clip engages with the Gateway notch.



SPAN Panel comes with factory installed cable jumpers and fasteners that must not be modified or removed. See highlighted areas.

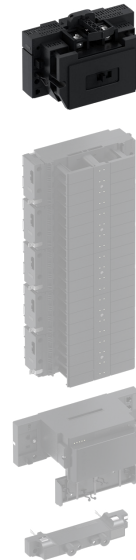


Terminations for Panel Controller low voltage wiring and Metered Lugs are exposed by removing the Gateway and Gateway tray.



SPAN Panels 40 and 48 have the same physical footprint. The Mains/MID module in SPAN 40 is replaced by an extra Branch module and Metered Lugs in SPAN 48. Every SPAN panelboard consists of at least one (1) Panel Controller and Gateway, five (5) to six (6) Branch Modules, one (1) or less Mains Module, and up to two (2) Metered Lugs.

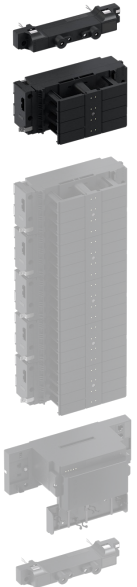
SPAN Panel MAIN 40 + MID



(shared modules)



SPAN Panel MLO 48



- Main + MID with pre-installed 200A Main Circuit Breaker (MCB)
- Up to 40 circuit spaces
- Hardware ready for universal battery integration and generator and appliances control (future)

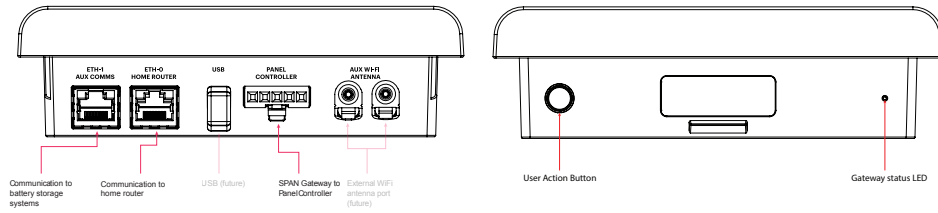
- Metered Lugs only
- Up to 48 circuit spaces

CAUTION: SPAN Panels come with factory installed cable jumpers and fasteners. Do not modify or remove any connections unless directed as per Tech Portal Troubleshooting guides or SPAN Support.

NOTE: Every SPAN Panel 40 and 48 is required to have a Panel Controller and Gateway.

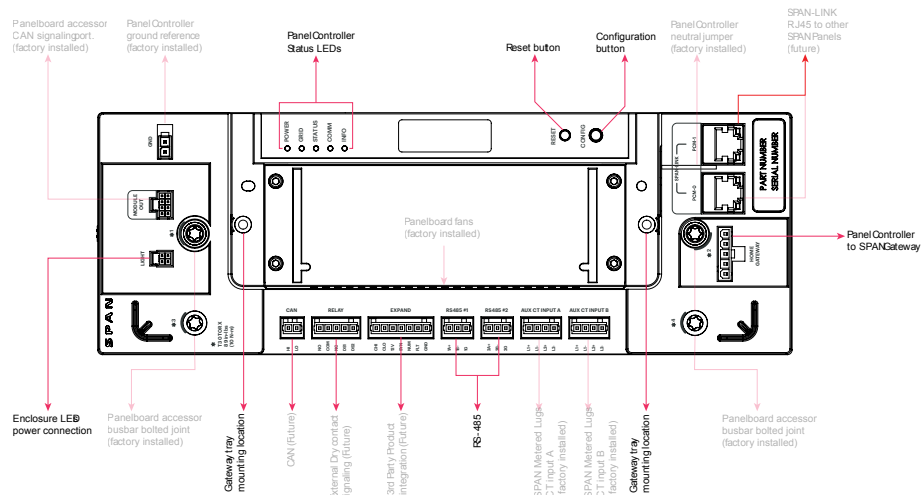
O6 Panelboard accessories

Gateway



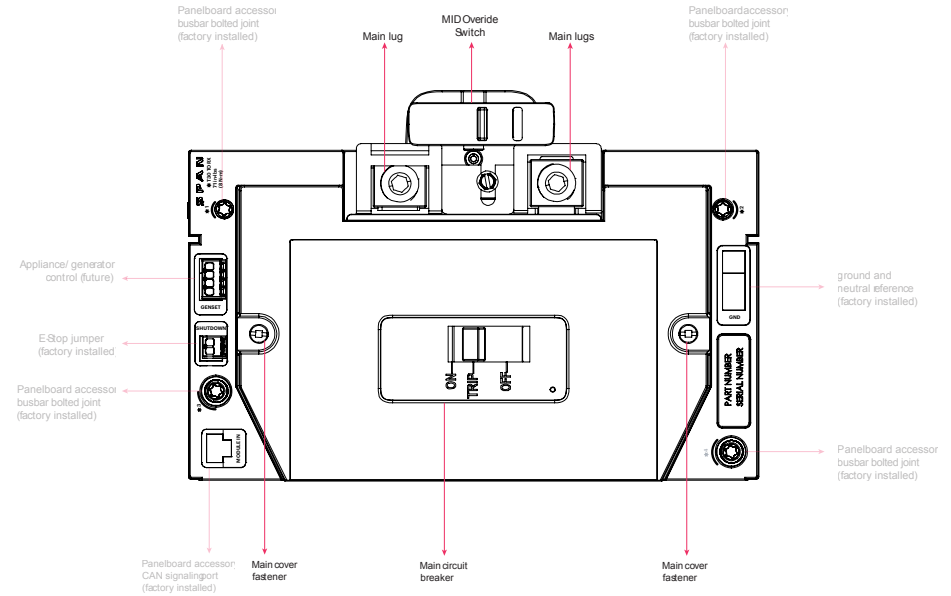
Panel Controller

The Panel Controller exists in every SPAN Panel MAIN 40 +MID and MLO 48. Remove the Gateway tray to expose low voltage connection terminals on the Panel Controller.



Mains + MID Panelboard Accessory

All SPAN Panel MAIN 40 +MID models have a Main +MID Panelboard Accessory in the top position of an upright panelboard. The Main cover may be removed to expose a factory installed 200A Main Circuit Breaker (MCB) rated up to 200A.

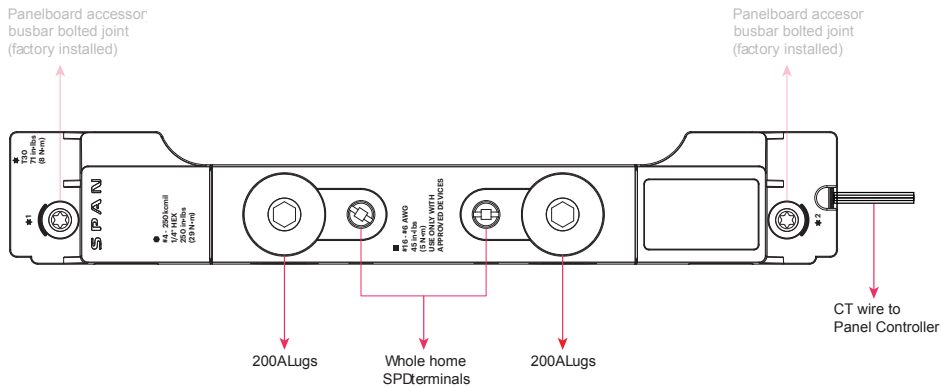


NOTE: Every SPAN Panel MAIN 40 + MID and MLO 48 is required to have a Panel Controller and Gateway.

06 Panelboard accessories

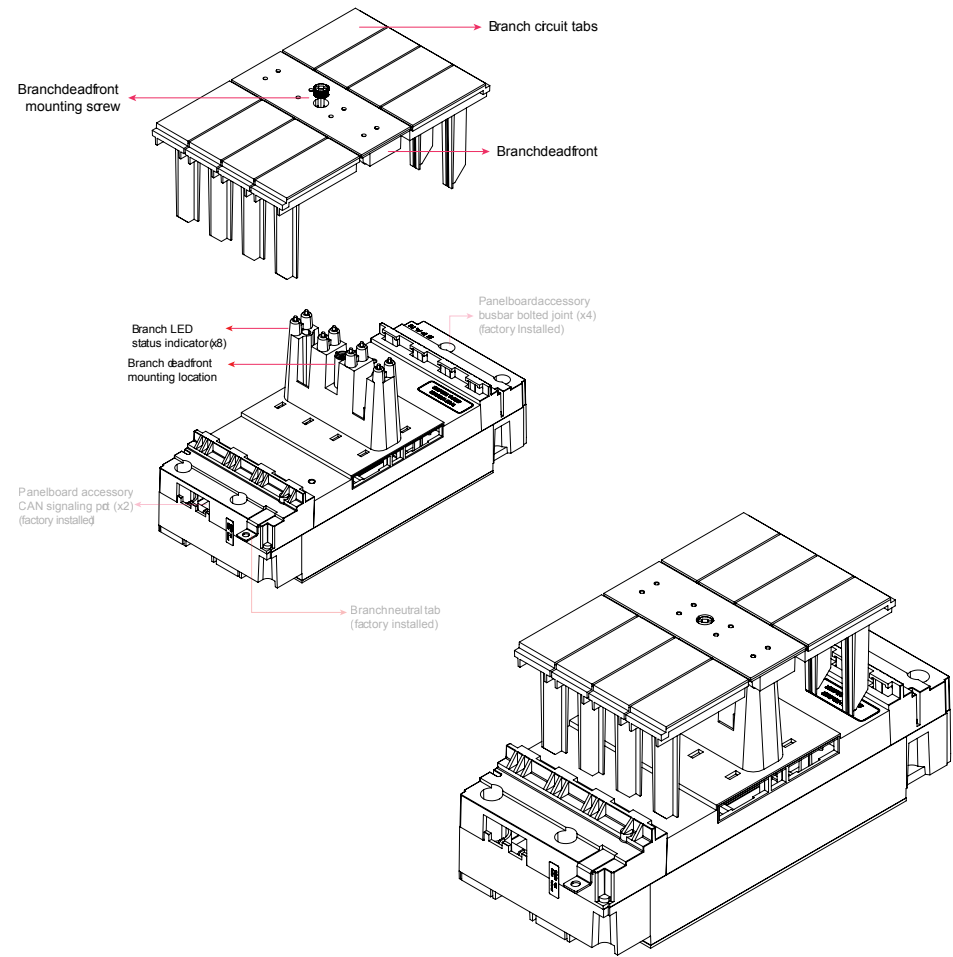
Metered Lugs

Metered Lugs Panelboard Accessories allow up to 200A of feeder connection. SPAN Panel MAIN 40 +MID is factory-installed with one (1) Metered Lugs Panelboard Accessory, whereas SPAN MLO 48 has two (2) Metered Lugs Panelboard Accessories. CT wiring from Metered Lugs are factory-connected to the Panel Controller.



Branch

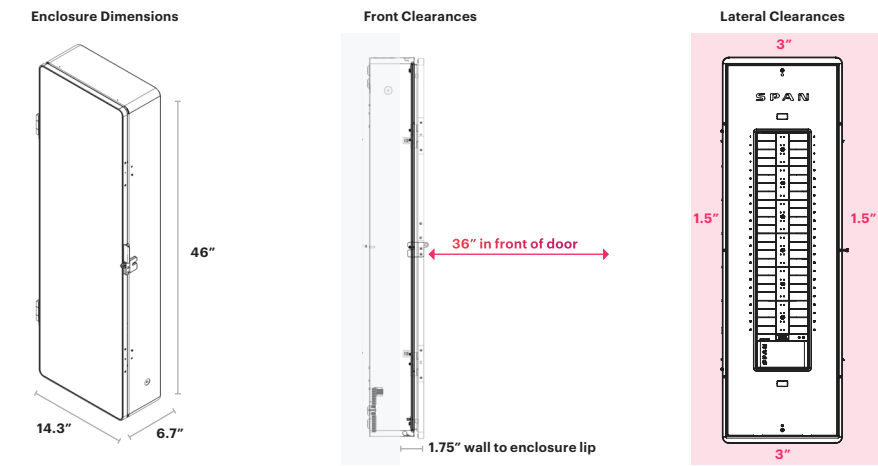
Connect branch circuits rated up to 100A on the Branch Panelboard Accessory. Each Branch Panelboard Accessory comes with its own modular deadfront that must be removed before installing branch breakers. Identify the usable branch circuits and only snap off the deadfront tabs as needed, and reinstall the deadfront.



NOTE: Make provisions for dedicated Ethernet run(s) between the home's network access points and the SPAN Panel in new home construction during rough-in. Multiple ethernet runs may be required for external hardware such as other SPAN Panels or backup storage systems. See Communications Wiring for details.

01 Choosing install location

Dimensions, clearances, and access



Do not install the SPAN Panel near an emergency exit or other building evacuation route. Panel installation must comply with local building codes and standards.

Do not install the SPAN Panel in a location or place any objects near it that would prevent its door from opening to 90°, or that would restrict access to the panel.

Do not mount objects on the wall within the minimum required clearances indicated above, with the exception of items required by the installation, such as electrical conduit or junction boxes.

Do not recess the SPAN Panel beyond the door hinges.

Electrical, mechanical, and environmental requirements

The SPAN Panel is intended to be wall-mounted between studs (2x4" or equivalent) with 16" spacing, using the six (6) available mounting points. It may be semi-flush mounted, where the panel door face must extend at least 3/4", from the surface of the finished wall.

Verify that the wall construction is adequate to support the weight of the Panel. The installation should conform to applicable building codes. Consult a structural engineer and local standards for local mounting requirements.

Best practice is to install the SPAN Panel out of direct sunlight, especially in hot climates, and on south and west facing walls.

NOTE: The door may be configured to open from either direction. Ensure Panel door can swing open to 90° (minimum) per NEC.

Specification	SPAN Panel Main 40 + MID	SPAN Panel MLO 48
Site electrical service	208 or 240/120 VAC, 60 Hz Single or split-phase	
Service feed	200A maximum	
Internal bussing	225A maximum	
Overcurrent Protection (main breaker)	100-200A	
Location	Indoor or outdoor	
Max elevation	9842 ft (3000 m)	
Ambient temperature	-22°F to 122°F (-30°C to 50°C)	
Enclosure dimensions	363.2 x 1168.4 x 170.2 mm (14.3 x 46 x 6.7 inch)	
Weight	109 lb (49.5 kg)	107 lb (48.6 kg)
(Enclosure no door or deadfront)	25 lb (11.3 kg)	25 lb (11.3 kg)
(Panelboard)	41 lbs (18.6 kg)	39 lb (17.7 kg)

- CAUTION:** SPAN Panels installed above 6561 ft (2000 m) must be installed in ambient temperatures less than 104°F (40°C).
- CAUTION:** SPAN Panel is rated NEMA 3R only when installed with enclosure knockouts at the bottom of the Panel.
- CAUTION:** Follow all local codes and standards when planning for and installing the SPAN Panel.
- CAUTION:** Do not exceed SPAN Panel capacity. Ensure that the installation conforms to applicable code, and that appropriate overcurrent protection is in place.
- NOTE:** SPAN Panels connected to 208 VAC distribution systems have limited software capabilities. See support.span.io for details.
- NOTE:** Verify that the site mechanical, electrical, and clearance requirements outlined in this document and the product datasheet are compatible at the planned installation location.

02 Mounting the Panel

A

Retrieve the enclosure and panelboard

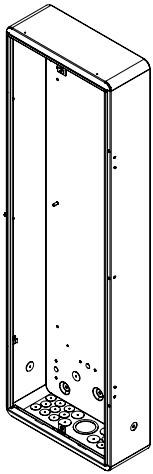
Carefully set aside the panelboard box in an accessible and secure location. Fix the SPAN Panel enclosure with pre-installed ground bars to the wall separately from the panelboard.

B

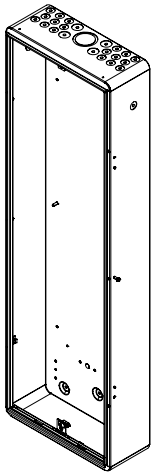
Orient the enclosure

The SPAN Panel enclosure may be installed with knockouts on the top, or rotated upside down to have knockouts at the bottom. Enclosure knockouts must be at the bottom of the Panel in order to maintain its NEMA 3R rating.

Knockouts on bottom
(required for wet environments)



Knockouts on top



CAUTION: When installing outdoors or in a wet/damp environment, the enclosure must be installed with the knockouts at the bottom of the Panel.

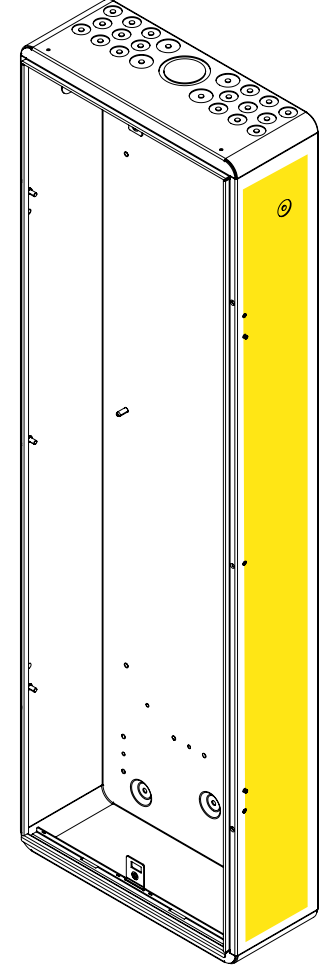
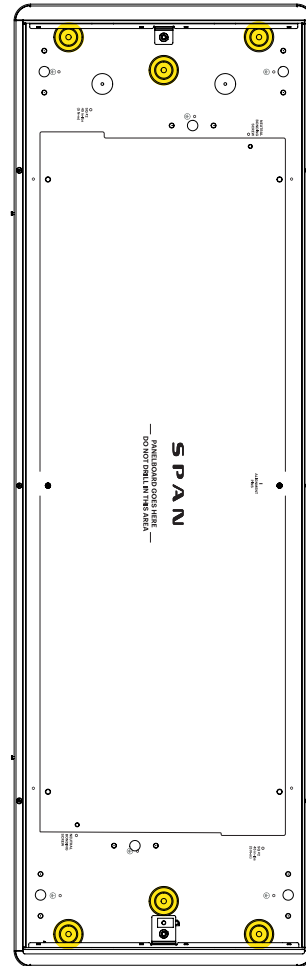
C

Mount the enclosure

The provided cardboard drill template can be used for surface wall mount leveling and alignment. Using a drill and level, mount the SPAN Panel enclosure on the wall, observing site and mechanical requirements, and applicable building and installation codes. There are six (6) mounting points available for use.

When semi-flush mounting, drill 1/4" pilot holes marked by interior markings of the Panel enclosure. Install fasteners through the sidewalls to secure the Panel to the studs (as shown). Ensure the wall space can accommodate the flush section without interference from pipes or conductors inside the wall space.

To protect the Panel enclosure from dust and debris in new construction installations, insert the cardboard drill template on the face of the enclosure and tape around the edges.



- WARNING:** Risk of electric shock. If you are replacing an existing electrical panel, make sure power source(s) to the panel are turned off before removing the old panel, and when installing the SPAN Panel. Always make sure all electrical equipment is safely de-energized before beginning work.
- CAUTION:** The SPAN Panel must be installed upright, within 10 degrees of perpendicular from grade, and level from side-to-side.
- CAUTION:** Do not orient enclosure knockouts at the top of the Panel when installing outdoors or in a wet/damp environment. Installing the SPAN Panel enclosure with knockouts at the top violates the NEMA 3R rating.
- NOTE:** Verify the wall's fire rating prior to mounting. Surface mount the SPAN Panel to comply with local building and fire codes where applicable.

02 Mounting the Panel

D

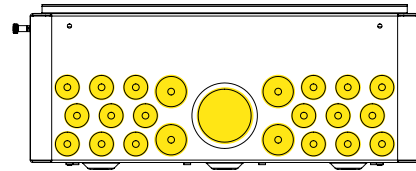
Install conduit

The SPAN Panel allows conduit entry through the top, bottom, lower sides, and rear section at specific locations of the enclosure. See highlighted areas to the right.

Limit side entry hole punches below 1/4" and conductor wires to a maximum of 10 AWG along the length of the panelboard, as per outline inside the enclosure.

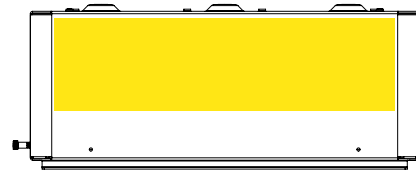
Before making any conduit or cable penetrations, plan conduit routes, and corresponding knockout locations and sizes on the enclosure.

Be sure to allow adequate clearance for conduit routing and anchoring. Conduit installation must comply with applicable fill limits and electrical codes.

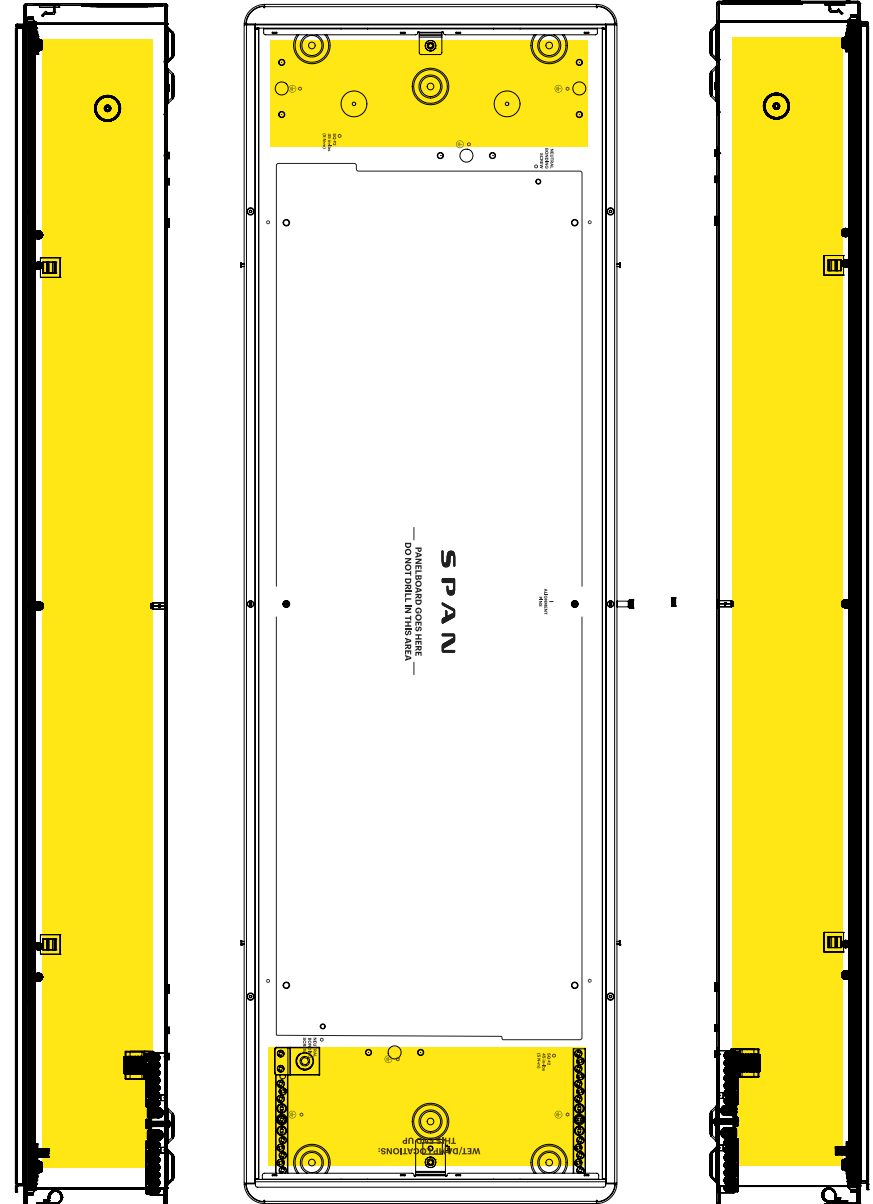


Enclosure Knockouts

- (4) 3/4" knockouts
- (18) 1/2" knockouts
- (1) Concentric 1.5", 2" knockout



Conduit Entry Points



CAUTION: Do not punch holes in any location on the enclosure that would allow moisture to enter the unit.

CAUTION: Note the locations of ground bars and wires inside the Panel before cutting. Do not damage panelboard parts and wiring.

CAUTION: Follow guidance in NEC Chapter 3 and any local AHJ requirements for cable type selection. Consider exterior surface- and flush-mounted installations as wet/damp conditions, and use proper wiring methods. When installed in wet/damp locations, conductors routed through the bottom face must be wet- or damp-rated.

NOTE: Ensure that any metal shards do not come into contact with panelboard parts that could be energized. Ensure panelboard is removed or shielded before drilling into the enclosure.

NOTE: Use care when drilling, and confirm that fittings are the correct size and rated for the correct installation environment for the installation location before proceeding.

02 Mounting the Panel

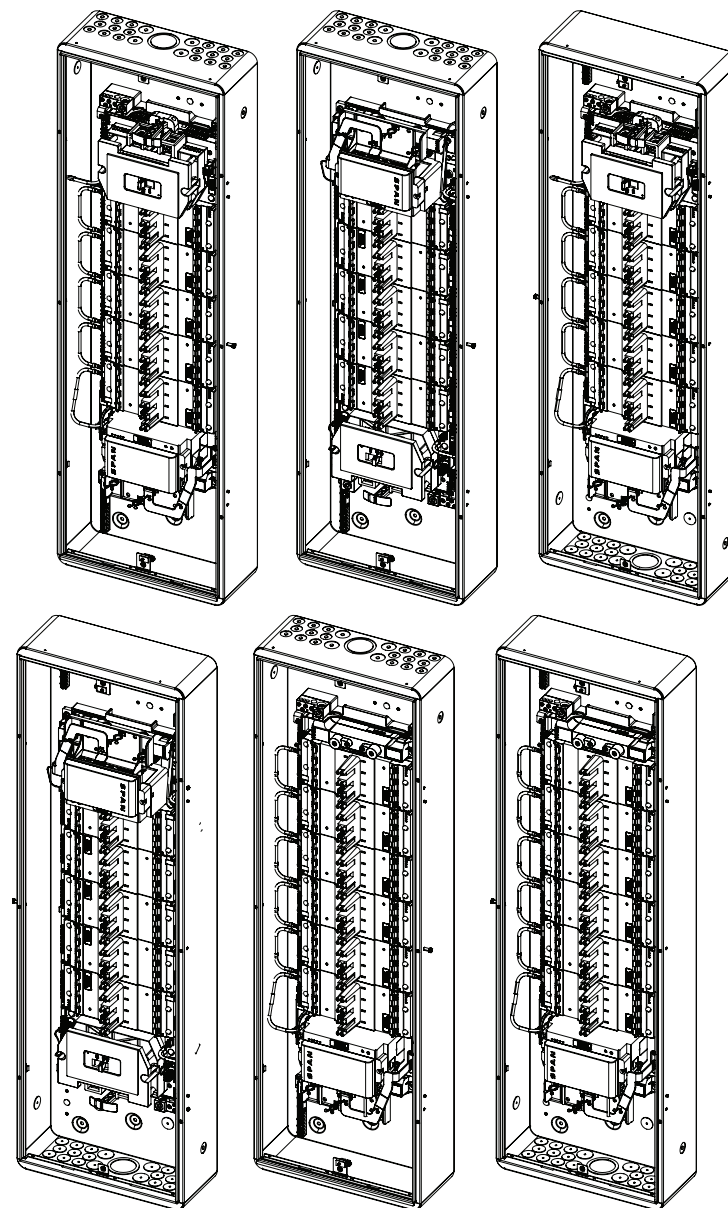
E

Orient the panelboard

The SPAN Panel MAIN 40 +MID panelboard may also be rotated and installed in two positions depending on entry location of feeders per site. In the default upright position, the main breaker is installed at the top of the Panel and the Panel Controller is in the lower half. When the panelboard is rotated upside down, the main breaker is installed at the bottom of the Panel and the Panel Controller is at the top.

SPAN Panel MLO 48 is factory installed with Metered Lugs at both the top and bottom of the panel for convenient feeder termination. The panelboard in SPAN Panel MLO 48 cannot be rotated.

The SPAN Panel MAIN 40 +MID and SPAN Panel MLO 48 can be installed as per any of the following orientation combinations.



NOTE: Locations and positions of individual panelboard accessories on the panelboard rotate together on SPAN Panel MAIN 40 +MID.

NOTE: Do not rotate the panelboard in SPAN Panel MLO 48. The Panel Controller in SPAN Panel MLO 48 must be installed in the lower half of the panel.