ALMA OPERABLE WALLS

FALK BUILT™

falkbuilt.com

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FALKBUILT TECH SHEET

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ALMA OPERABLE WALLS

DESCRIPTION

The Alma is a solid, independent panel operable wall solution with optional, integrated doors, telescopic end panels, and retractable acoustic seals on each panel. The Alma can be specified with semi-automatic or manual acoustic seal operation, actuated once the panels are manually positioned in place.

A wide variety of stacking and suspension configurations are available to cater to the requirements of any layout. Alma and Aqua panels are interchangeable, allowing for solid and double glazed panels in a single wall run. Alma acoustic seals and interior material provide an acoustic rating of 47 STC. Alma operable walls are yet another example of how Falkbuilt is bringing unparalleled flexibility and design excellence to any space imaginable.

CONSTRUCTION

Panel & Frame Construction: 6063-T6 aluminum
Cladding Substrate: 3/4" (19.05mm) 1-sided LPL MDF
Max. Allowable Structure Deflection: 1/4" (6.35mm)
Floor Tolerance: 3/4" (19.05mm) over entire run
Panel Weight: 9.22lb$_m$/ft^2 (45kg/m^2)

All Alma walls require structural backing within the base building, behind the location of each wall dock. This structural backing must be provided by the GC, and must be in place before installation.

Refer to the Cladding Techsheet and falkbuilt.com for more information on cladding material composition and finish options.

Standard Alma STC is 47. 50 STC is possible, for added cost.

Stacking pockets must be at least 6" wider than individual panels.

DIMENSIONAL DETAILS

Maximum Panel Height: 14' (4267.2mm)
Maximum Opening Width // Manual: 100' (30.5m)
Maximum Opening Width // Semi-Automatic: 65' (20m)
Panel Width: 31-1/2" - 48" (800mm - 1219.2mm)
Panel Thickness: 4-15/16" (125mm)

Track suspension hardware requires a minimum of 5-7/8" (150mm) to a maximum of 19-5/8" (500mm) clear space from underside of track to underside of structure. See drawings on following pages.

FINISH OPTIONS

	Anodized	White Powder Coat	Magnetic Markerboard	Falkskin	WriteAway	Textile	DuraFalk
Panel Frame	●						
Ceiling Track	●	●					
Cladding			●	●	●	●	●

Refer to falkbuilt.com for standard finish offerings.

Tackable & backpainted glass cladding are not available for Alma.

SEAL OPERATION TYPES AVAILABLE

Manual

The manual system allows the user to seal and lock the panels in place quickly and safely with the use of a provided hand tool.

Semi-Automatic

The semi-automatic system allows users to engage the top and bottom acoustic seals via a key switch, once the user has manually positioned the wall panels. Low voltage electrical components ensure safe operation and ease of installation.

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DOOR DESIGN OPTIONS & DETAILS

Inset Doors

- Inset within a standard Alma panel and stack away with the rest of the wall panels.

Fixed Full-Height Doors

- Fixed to the base building.

Hinged Full-Height Doors

- Hinged to an adjacent panel, stacks away with the rest of the wall panels.

Double Doors

- Available as inset doors meeting in the middle.

Inset doors can be specified as solid or double-glazed, but must be inset within an Alma (solid) panel.

Refer to the Falkbuilt Design Manual for more information on possible door configurations.

INSET DOOR DIMENSIONAL DETAILS

Panel Width: 47-1/4" *or* 49-3/16" (1200mm *or* 1250mm)
Door Width: 33-7/16" *or* 35-7/16" (850mm *or* 900mm)

FULL HEIGHT DOOR DIMENSIONAL DETAILS

Door Width: 41-5/16" (1050mm)
Max. Door Height (Fixed): 14' (3267.2mm)
Max. Door Height (Hinged): 9'5" (2870.2mm)

Adjacent panels hinged to hinged full-height doors must be the same width as the door, or wider.

DOOR HARDWARE OPTIONS & DETAILS

Recessed Leverset

- ADA compliant.
- The recessed leverset is the default door hardware solution for all Alma doors.
- The recessed leverset is strongly recommended for most Alma door configurations.
- Can be specified as locking or non-locking.

Protruding Leverset

- ADA compliant.
- Can only be specified for fixed full-height doors.
- Can be specified as locking or non-locking.

Concealed Hinges

- Hinges on Alma doors are completely concealed when doors are closed.

All Alma door hardware has been determined to be in compliance with the 404.2.7 ADA regulation on accessible hardware. Branches and architects are responsible for final determination of compliance of all door hardware with local and federal jurisdictional regulations.

Refer to the recessed leverset manufacturer's techsheet for more information on the recessed leverset hardware option.

Refer to the protruding leverset manufacturer's techsheet for more information on the leverset hardware option.

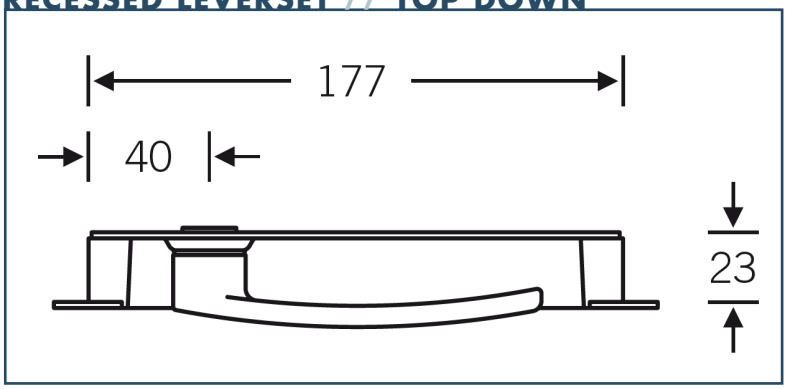
DOOR HARDWARE FINISH OPTIONS

	Anodized	Satin Stainless Steel	Matte White Stainless Steel	Matte Black Stainless Steel
Recessed Leverset		●		●
Leverset		●	●	●

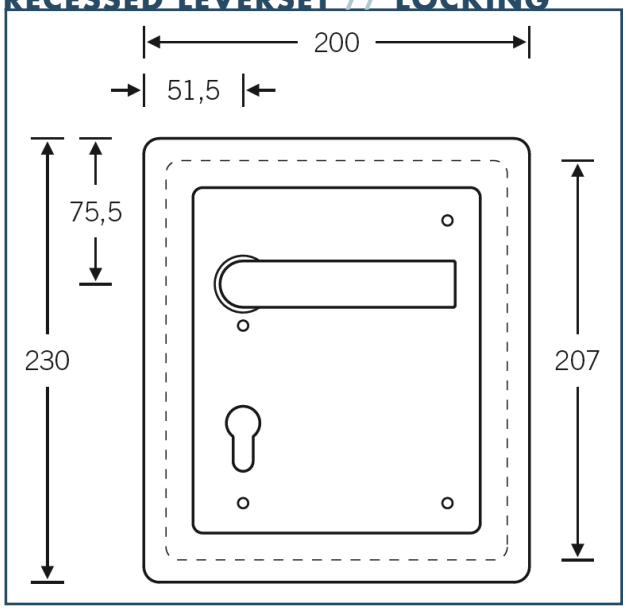
ALMA OPERABLE WALLS

DOOR HARDWARE DETAIL DRAWINGS

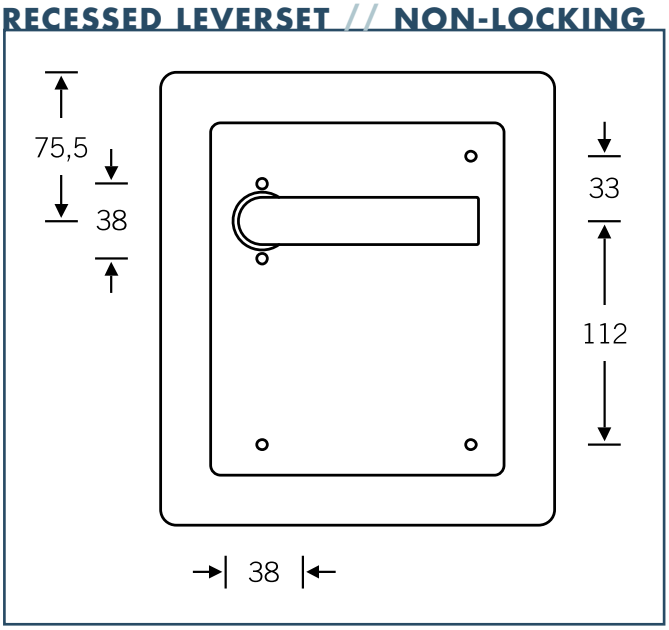
RECESSED LEVERSET // TOP DOWN



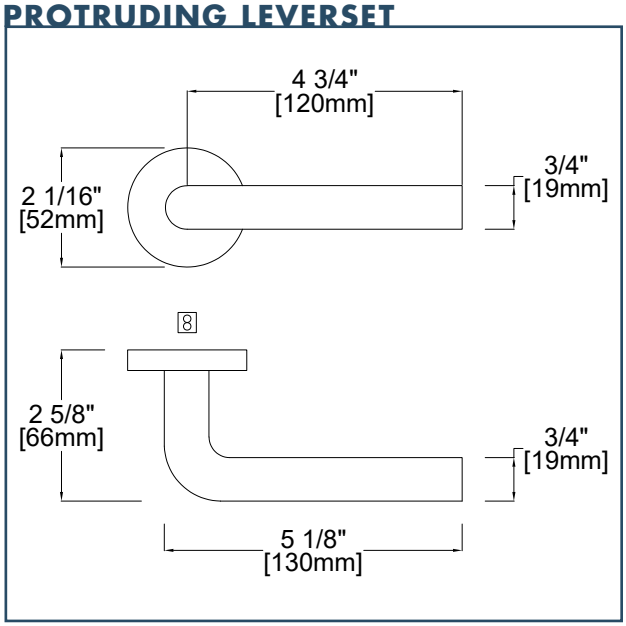
RECESSED LEVERSET // LOCKING



RECESSED LEVERSET // NON-LOCKING



PROTRUDING LEVERSET



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SEMI-AUTOMATIC ELECTRICAL DETAILS

REQUIREMENTS

110v Mains Power Connection

3′ x 3′ (939.8mm x 939.8mm) Accessible Space

Operable wall power supply must be hardwired to building mains power by electrical contractor.

Accessible space requirements per code, for installing junction box and zone box containing operable wall power supply & controller.

Refer to the next two pages for diagrams showing the scope and responsibilities for semi-automatic electrical requirements, as well as a wiring diagram of the semi-auto electrical components overall.

DETAILS

Branch Circuit Breaker Size: 15A

Amp Draw (Falk-Provided Power Supply): 5A @ 25VDC

Max Amp Draw (Mains Power): 1.5A @110 ~ 125VDC

Installation location for the Falk-provided zone box will be found on provided installation drawings. Typically, the zone box is installed within the track cavity, above the location of the key switch.

All labor for low-voltage wiring, specifically from the zone box to the key switch and dock connections, must be coordinated by the Branch.

All Falk-provided wiring is 18ga wire and is color-coded for ease of installation.

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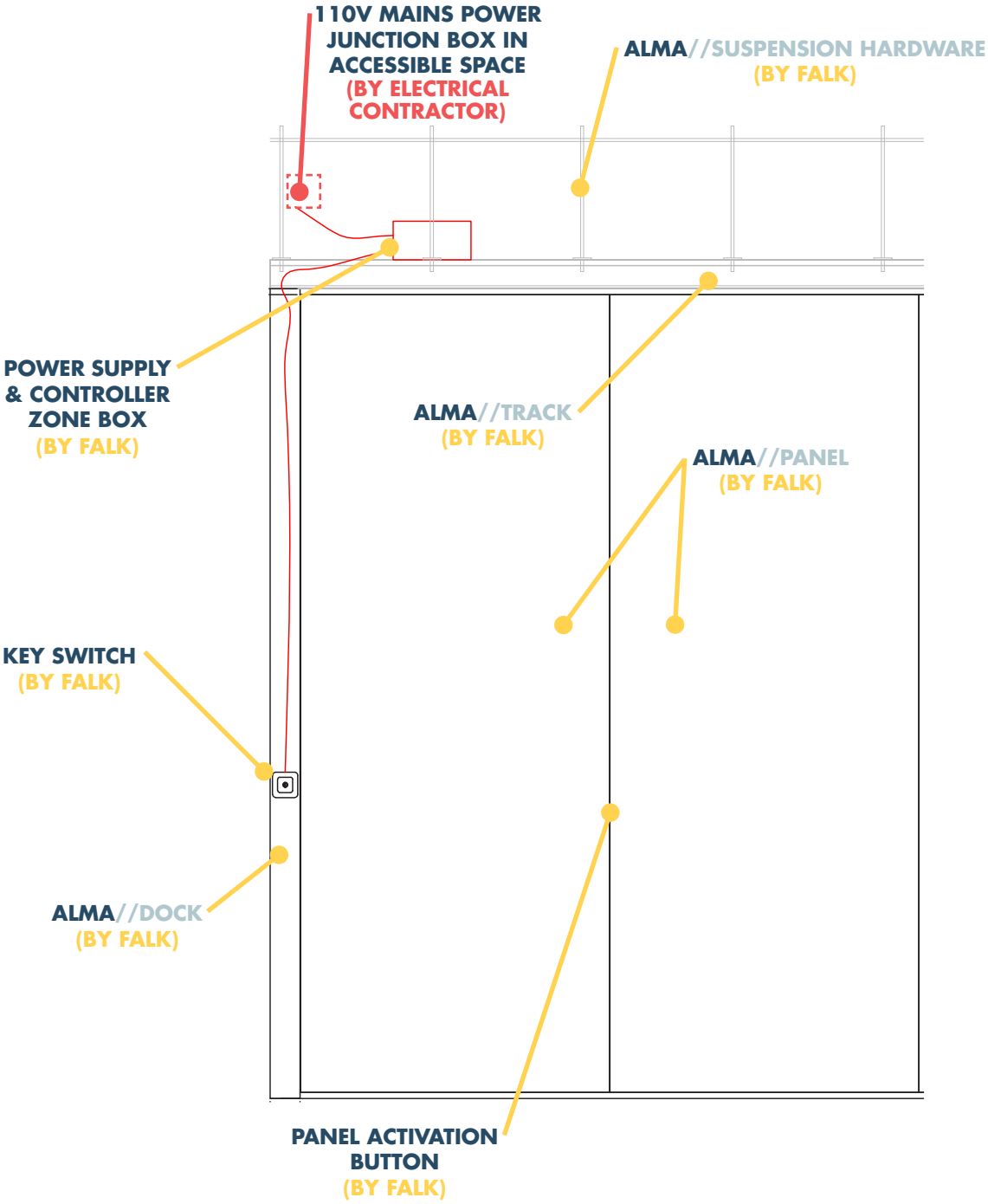
SEMI-AUTOMATIC ELECTRICAL SCOPE DETAILS



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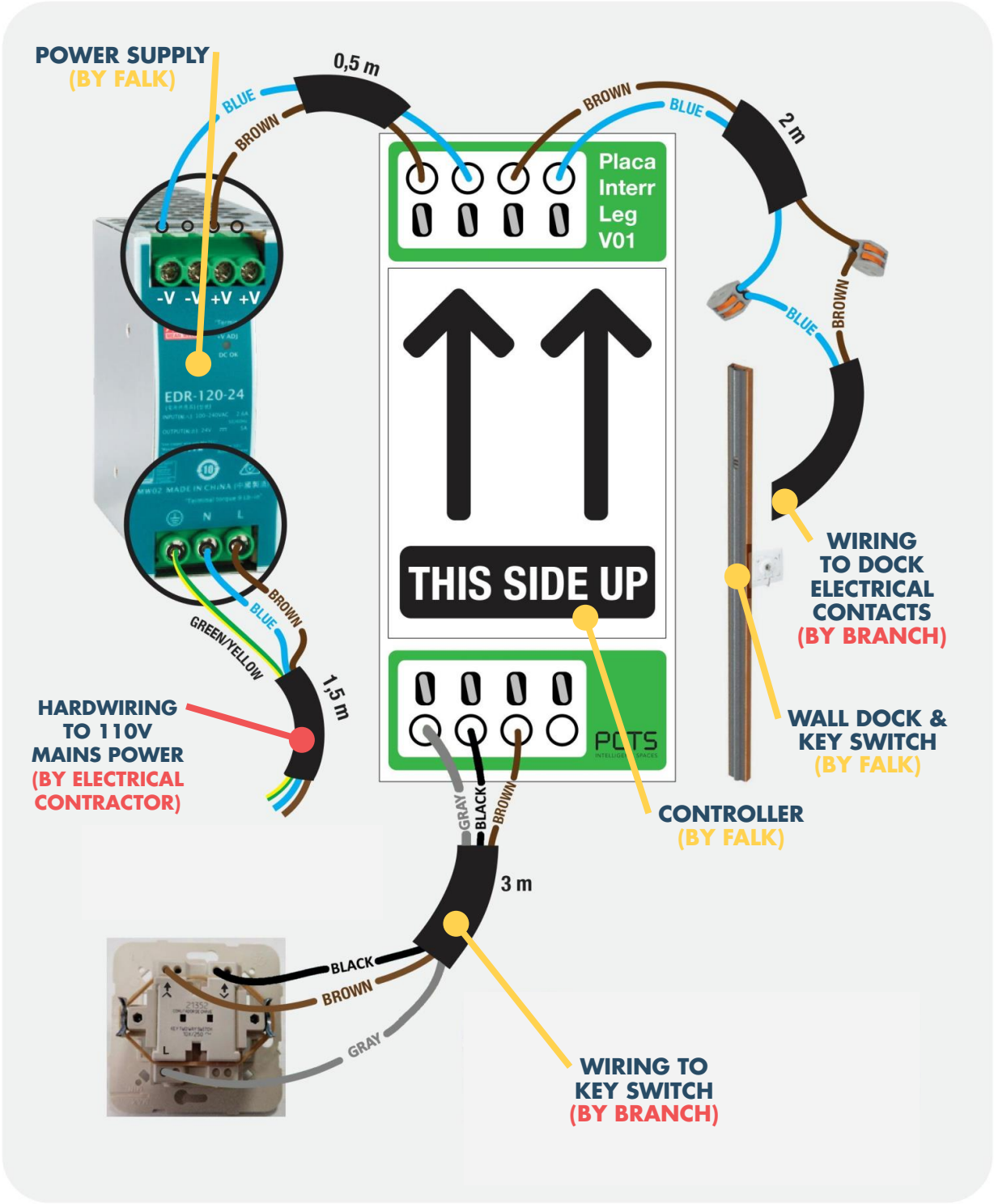
SEMI-AUTOMATIC ELECTRICAL SYSTEM WIRING DETAILS



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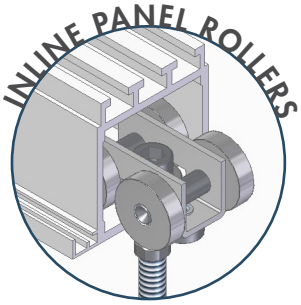
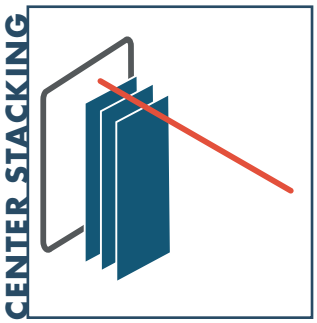
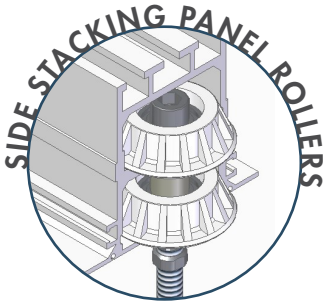
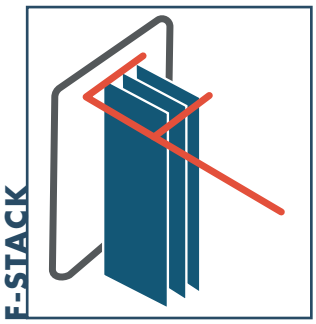
INLINE STACKING OPTIONS

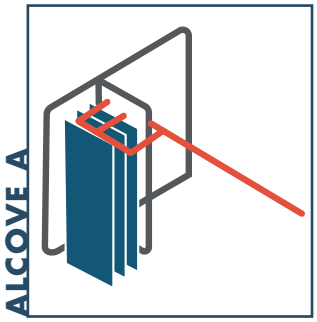


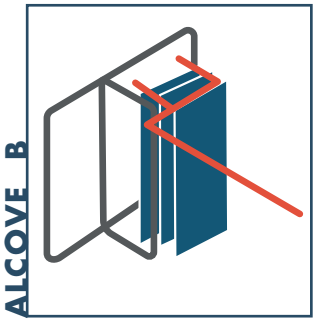


SIDE STACKING OPTIONS



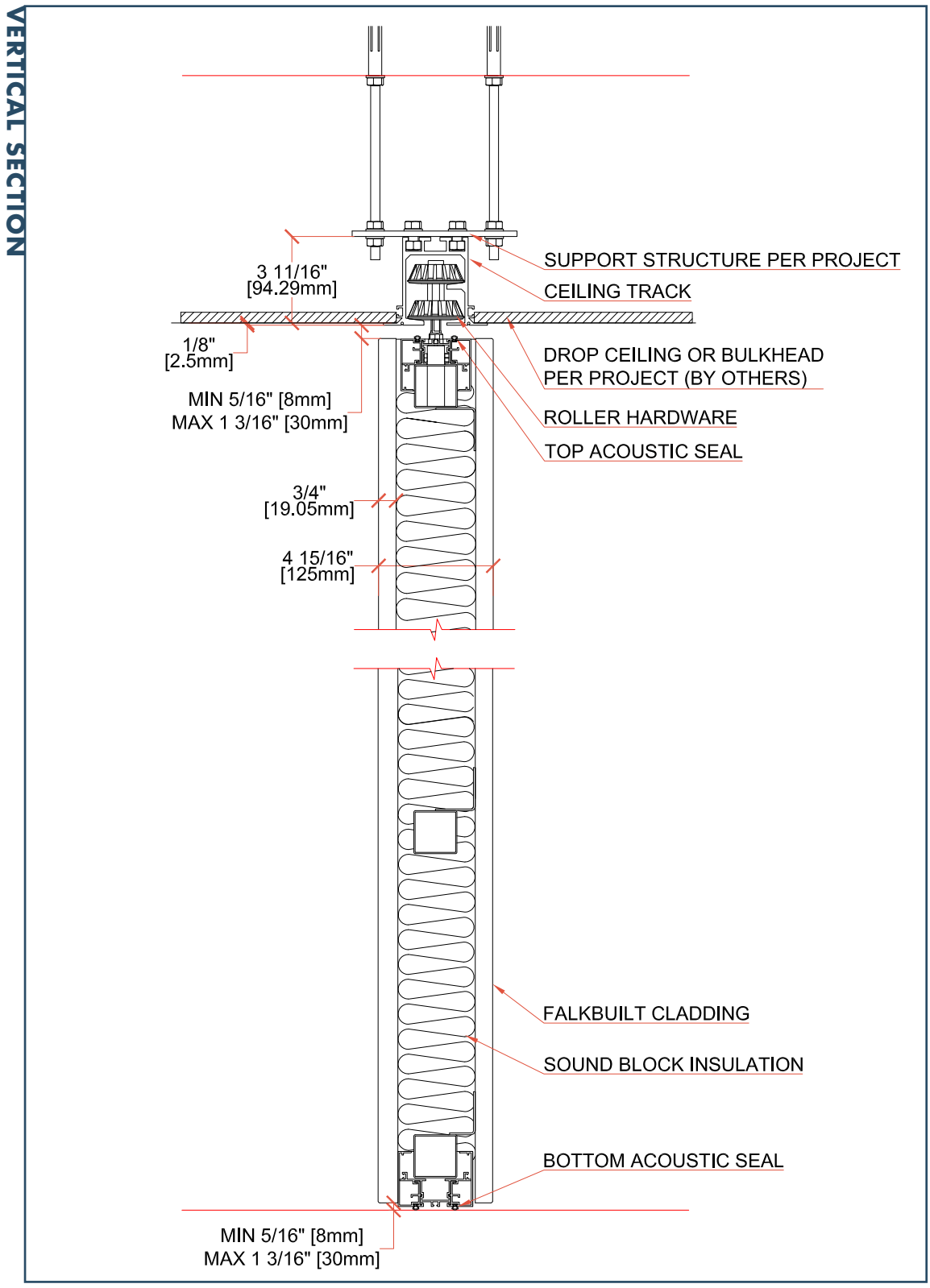






AQUA OPERABLE WALLS

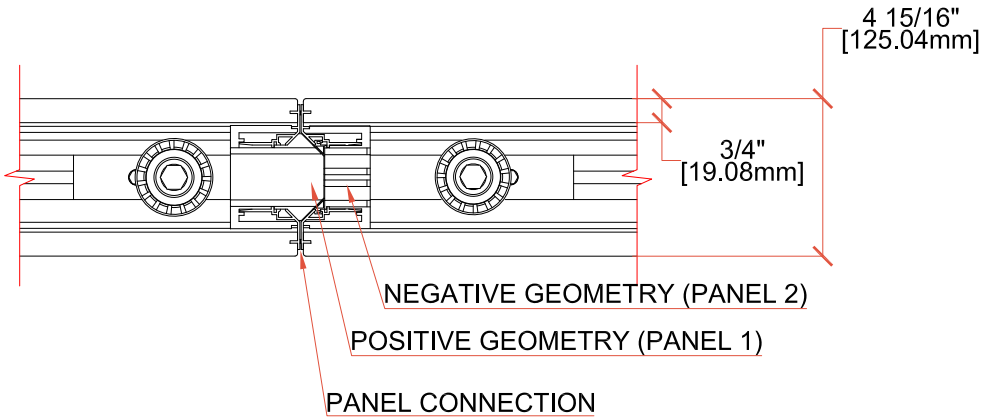
ELEVATION VERTICAL SECTION DETAIL DRAWING



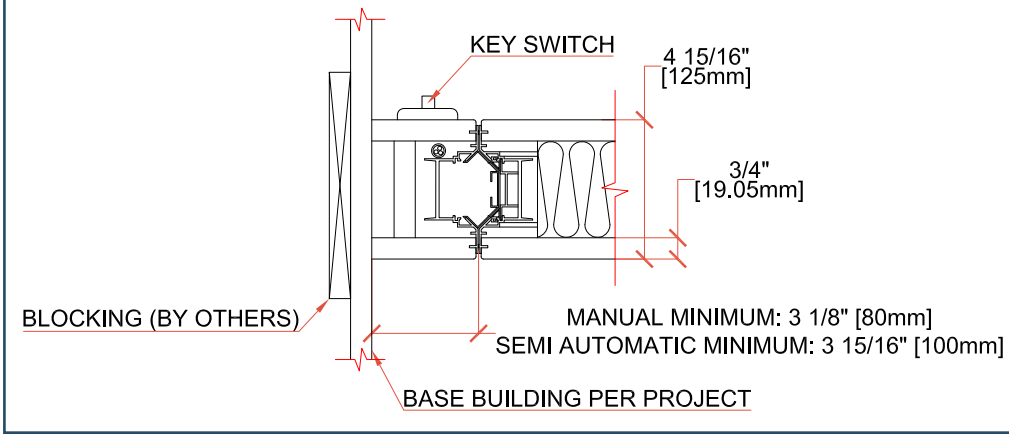
AQUA OPERABLE WALLS

PANEL CONNECTION & DOCKING CONDITION DETAIL DRAWINGS

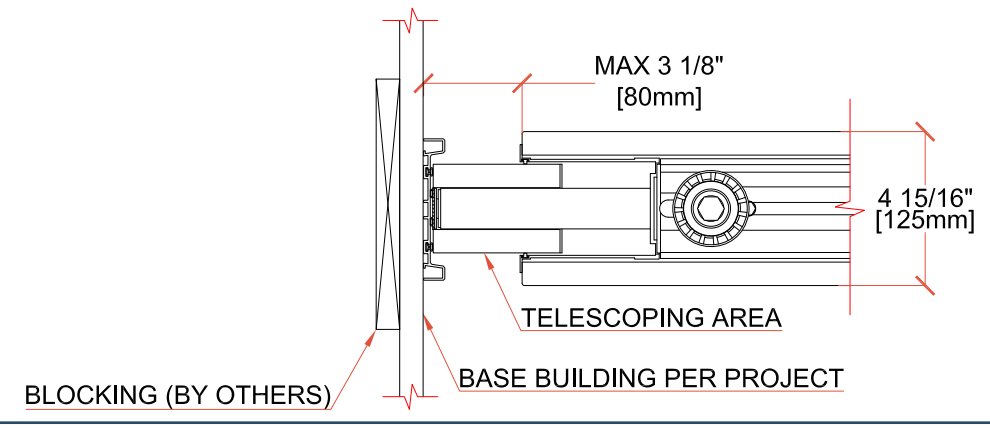
PANEL-TO-PANEL CONNECTIONS



STANDARD DOCKING CONDITION



TELESCOPIC PANEL DOCKING CONDITION



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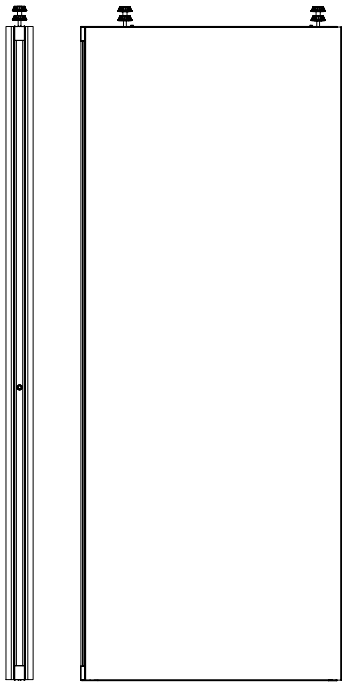
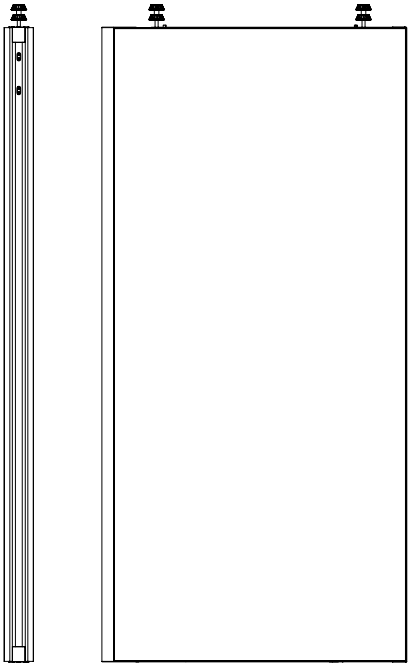
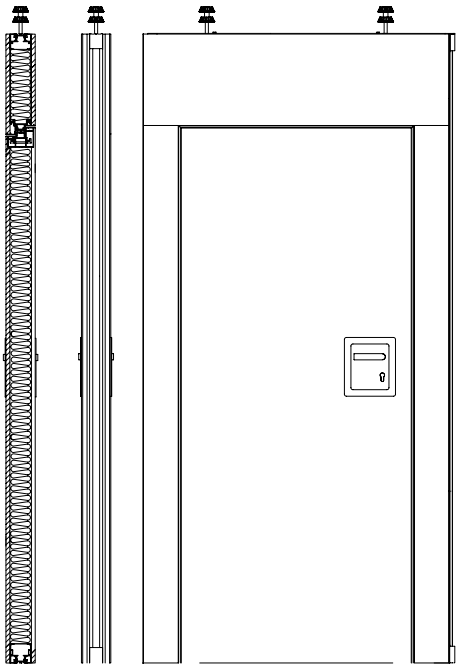
PANEL & DOOR ELEVATION DRAWINGS



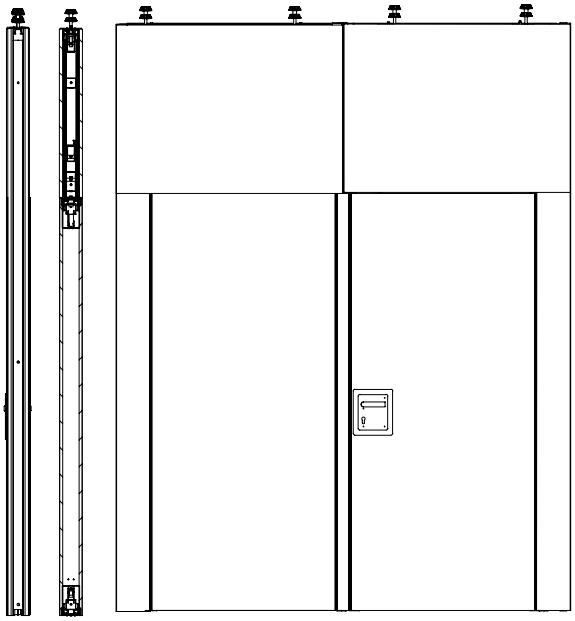
STANDARD PANEL



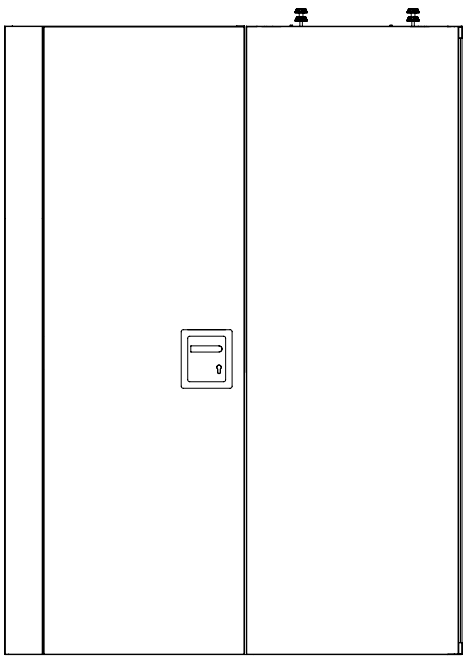
TELESCOPIC PANEL



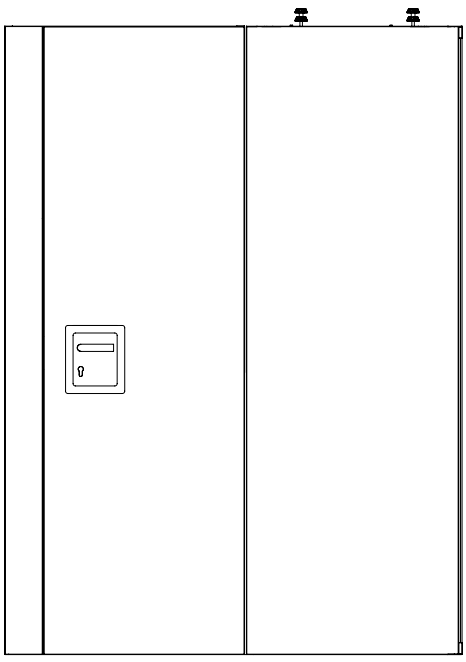
INSET DOOR



DOUBLE INSET DOOR



FIXED FULL HEIGHT DOOR



HINGED FULL HEIGHT DOOR

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TRACK-TO-STRUCTURE CONNECTION DETAILS & STRUCTURAL FAQ

See below for a list of frequenlty asked questions related to connecting Falkbuilt operable walls to overhead structure. Refer to the following pages for detail drawings showing the most common forms of structural support conditions and hardware for Falkbuilt operable walls.

Q: Who provides the mounting hardware for the operable wall?

A: All mounting hardware, specified in the track-to-structure connection details on the following pages, is provided by Falk. The details on the following pages are the recommended and most common forms of overhead structural support for Falk operable walls. The only components in the details on the following pages not provided by Falk are those for the concrete, grid, or drywall ceiling condition, and the steel I-beam.

Q: Who determines what structure is required to mount the operable wall?

A: The engineer of record for the project should be the one to confirm the required structure for the operable wall.

Q: What information do I need to provide in order for the engineer of record to make their assessment?

A: Ultimately, all required structural information must be provided to the engineer of record on the project. However, the transfer of this information is usually coordinated by the GC or architect. The engineer will require the weight of the operable wall, which can be found on page 2. Further engineering information may be required. Best practice is to provide this tech sheet to the engineer of record for review, along with any other project materials.

Q: In the Track-to-Structure detail drawings on the following pages, what do the vertical and horizontal Min Max dimensions refer to?

A: The vertical Min-Max dimension specifies how far the track drops down from the main structural support, also known as Track Drop-down Height. The minimum distance ensures proper installation of the track and wiring, and the maximum ensures that the operable wall maintains its rigidity and strength. The horizontal Min-Max dimension refers to the maximum distance apart at which the vertical components can be installed.

Q: When installing the track, at what interval must mounting hardware be installed?

A: Once shop drawings are created, the exact location of all mounting hardware will be called out in the shop drawings. Mounting hardware will be more frequent (approx. 10″) on the side where the wall stacks, and less frequent (approx. 20″) further down the run of wall. The engineer of record can also modify these placements.

Q: What is the maximum allowable deflection for the structure the operable wall is suspended from?

A: 1/4″ (6.35mm). This information should be provided, along with the rest of the techincal information, to the engineer of record for the project.

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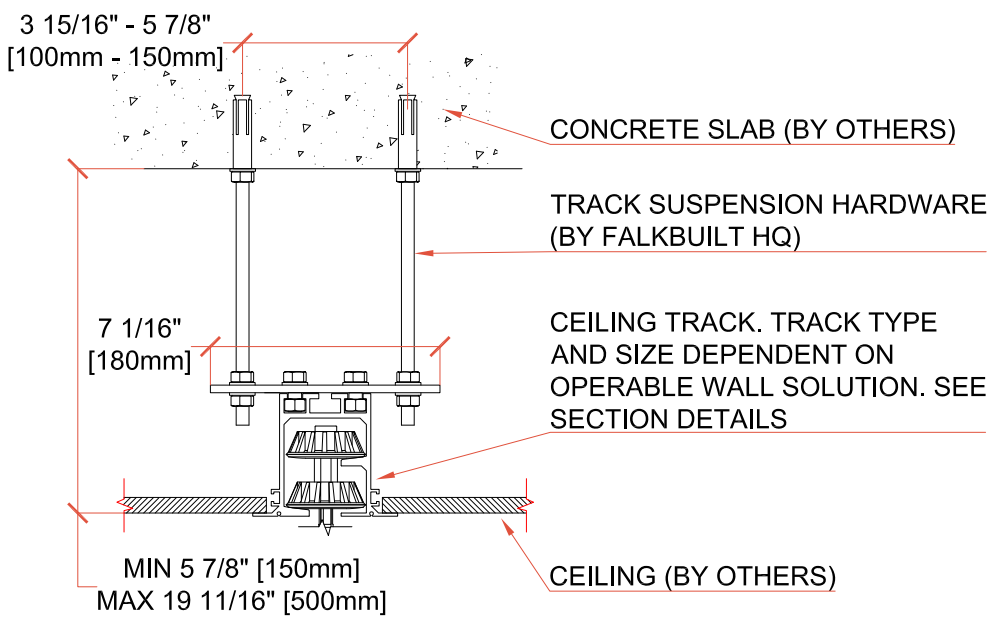
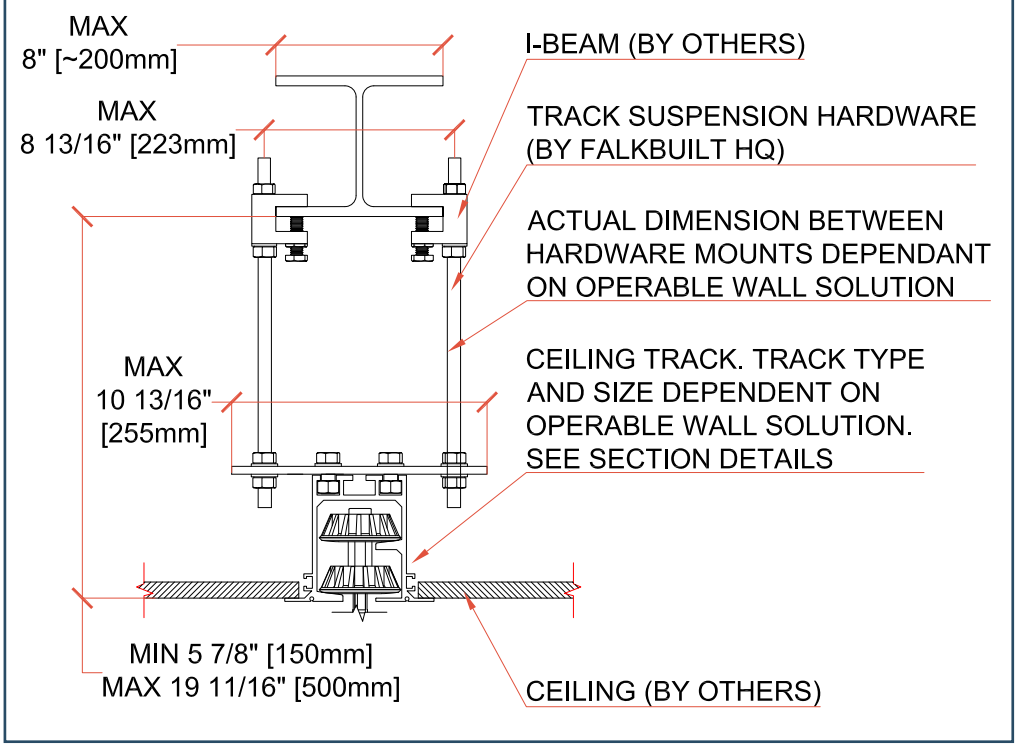
TRACK-TO-STRUCTURE CONNECTION DETAIL DRAWINGS

CONCRETE SLAB CONNECTION DETAIL



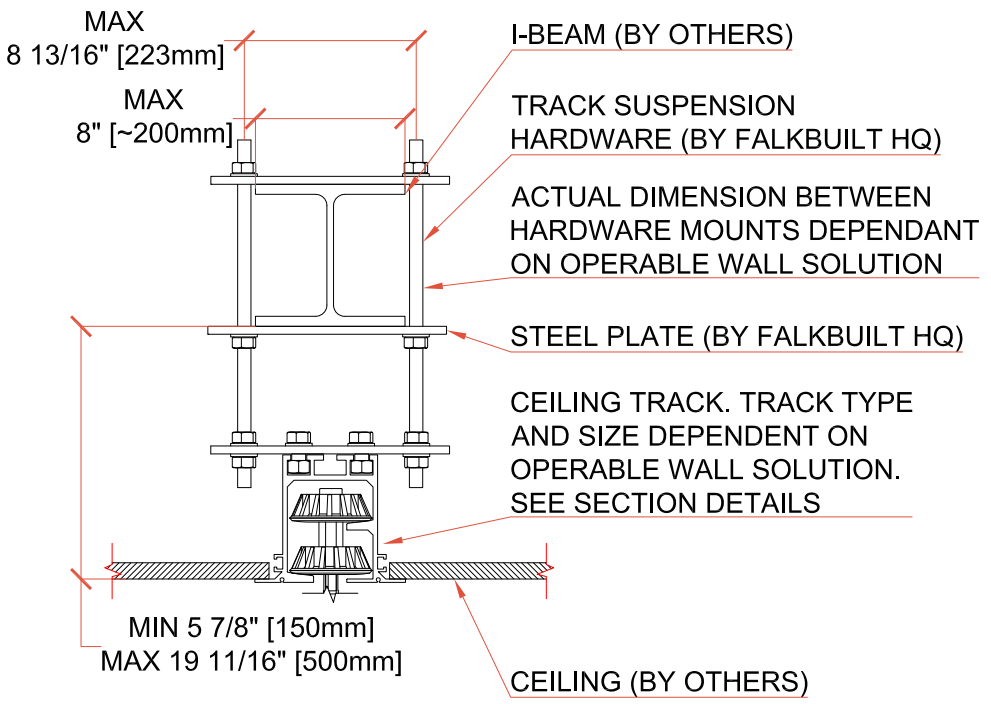
STEEL I-BEAM // CLAMPING // CONNECTION DETAIL



ALMA OPERABLE WALLS

TRACK-TO-STRUCTURE CONNECTION DETAIL DRAWINGS

STEEL I-BEAM // DOUBLE PLATE // CONNECTION DETAIL



STEEL I-BEAM // BOLT THROUGH // CONNECTION DETAIL