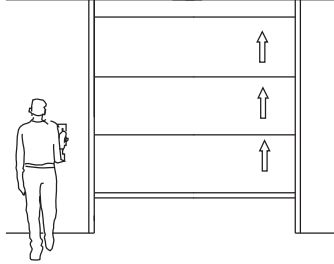


# Series 640V SPECIFICATIONS

## Summit® Vertical Lift Panels, Electrically Operated



### Vertical Lift

#### Individual Panels

#### Electrically Operated

**Standard Heights to:** 17'0" [5181] \*

**Standard Opening Width:** 40'0" [[12192] \*

**Minimum Opening Height::** 7'3" [2209]

**Minimum Opening Width:** 8'0" [2438mm]

**STC Rating:** Min. 51

\*Contact your Hufcor Distributor for heights or widths exceeding those shown.

### PRODUCT OVERVIEW:

**Save Floor Space:** With vertical storage, you do not need to use floor space for storing the partition when it is not in the opening.

**Select for Ease of Operation:** The Summit 640V series panels extend from, and retract into, the ceiling with the turn of electric key switches. The 640V is a popular choice for hotel meeting rooms, convention centers, commercial or educational facilities.

**Design Flexibility:** Panel faces are furnished with Hufcor's standard vinyl patterns and colors but they may also be finished in fabric, carpet, or other pre-approved custom finishes to match or coordinate with the room's interior. (Important Note: Finishes will be applied to the 640V **IN A HORIZONTAL DIRECTION**. The finishes provided on most selectors or samples are shown in a vertical position and may look different when applied horizontally. )

**Standard Features:** The panels are nominally 4" [101] thick, and have a steel frame and steel faces.

**How to Obtain:** Hufcor partitions are sold, installed, and serviced by factory-trained authorized Distributors in the United States and by Licensees and Distributors outside the U.S.A.

**Delivery:** Panels are custom built for your specific project. Lead times vary due to seasonal fluctuations. Check with your Distributor for the current schedule.

**Warranty:** Track and panels are guaranteed for **two years** against defects in material and workmanship.

### "Standard" Product Features and Benefits:

Look for these features when comparing similar products.

- Feature:** Retracts vertically through and above the ceiling  
**Benefit:** Floor space is not needed to store the partition when it is not in the opening.
- Feature:** Electronic, automatic operation  
**Benefit:** Automated operation - reduces setup and operational training time.
- Feature:** Interlocking seals  
**Benefit:** Maintains acoustics over time, ensures panel-to-panel alignment, and adds stability to the partition when extended.
- Feature:** Two key-controlled switches required to operate.  
**Benefit:** Safety. There will be one operator on each side of the partition. Each can see if any person or obstruction is in the path of the partition during operation.
- Feature:** Contact Sensor Seal  
**Benefit:** Safety. Stops and reverses the downward movement of the partition if it should encounter a person or object.
- Feature:** Vertical Guide Rails  
**Benefit:** Reduces moveable parts and the need for separate motors to seal panel into opening. Easy access to operating carriers and safety limit switches for inspection and repair adjustments.
- Feature:** Low voltage wiper connections  
**Benefit:** No need to access interior of panel to service wiring.
- Feature:** Manual override of motor units  
**Benefit:** Panels can be lowered if there is a power failure.
- Feature:** Durable welded steel frames  
**Benefit:** Proven durability in tens of thousands of Hufcor installations globally.
- Feature:** Single panel construction  
**Benefit:** Fewer moveable parts and aesthetically more appealing, creating a "wow" factor.



# GENERAL SPECIFICATIONS/SERIES 640V

## Summit® Vertical Lift Panels, Electrically Operated

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

##### A. General

1. Furnish and install operable partitions and suspension system. Provide all labor, materials, tools, equipment, and services for operable walls in accordance with provisions of contract documents.

#### 1.02 RELATED WORK BY OTHERS

- A. Preparation of opening will be by General Contractor. Any deviation of site conditions contrary to approved shop drawings must be called to the attention of the architect.
- B. All header, blocking, support structures, jambs, enclosures, surrounding insulation, and sound baffles as required in 1.04 Quality Assurance.
- C. Pre-punching of support structure in accordance with approved shop drawings.
- D. Paint or otherwise finishing all trim and other materials adjoining head and jamb of operable partitions.

#### 1.03 SUBMITTALS

- A. Complete shop drawings are to be provided prior to fabrication indicating construction and installation details. Shop drawings must be submitted within 60 days after receipt of signed contract.

#### 1.04 QUALITY ASSURANCE

- A. Preparation of the opening shall conform to the criteria set forth per ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions
- B. The partition STC (Sound Transmission Classification) shall be achieved per the standard test methods ASTM E90.
- C. Noise isolation classifications shall be achieved per the standard test methods ASTM E336 and ASTM E413.
- D. Noise Reduction Coefficient (NRC) ratings shall be per ASTM C423.
- E. Rack testing for 10 years. (tensional strength stress test)
- F. The manufacturer shall have a quality system that is registered to the ISO 9001 standards.
- G. Operable partition shall withstand the effects of earthquake motions determined according to SEI/ASCI. Withstand means, "the panels will remain in place without separation of any parts from the system when subjected to the seismic forces specified".

#### 1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Proper storage of partitions before installation and continued protection during and after installation will be the responsibility of the General Contractor.

#### 1.06 WARRANTY

- A. Partition system shall be guaranteed for a period of two years against defects in material and workmanship, excluding abuse.

### **PART 2 - PRODUCTS**

#### 2.01 ACCEPTABLE MANUFACTURERS

- A. Upon compliance with all of the criteria specified in this section, Manufacturers wishing to bid products equal to the product specified must submit to the architect 10 days prior to bidding complete data in support of compliance and a list of three past installations of products similar to those listed. The submitting manufacturer guarantees the proposed substituted product complies with the performance items specified and as detailed on the drawings.

#### 2.02 MATERIALS

- A. Product to be Summit® Series 640V electrically operated, vertical lift panels as manufactured by Hufcor Inc.
  1. Panels shall be nominally 4" [101] thick and to 30" [762] in height.
  2. Panel faces shall be steel laminated to appropriate substrate to meet the STC requirement in 2.04 Acoustical Performance.
  3. Frames shall be of min. 16 gauge [1.42mm] painted steel.
  4. Sound seals shall be of tongue and groove configuration, ensure panel-to-panel alignment and prevent sound leaks between panels.
  5. Horizontal panel edges shall be of a minimum groove appearance.
  6. The first panel in the opening shall have a bottom retractable safety sensor seal providing a minimum of 2" [51] floor adjustability to accommodate out-of-level floors.
  7. Motor and drive shall automatically extend/retract the panels into the opening.

8. Guide rails shall be nominally 6" [152] wide and 6" [152] deep and shall be architectural grade precision extruded aluminum to provide stability and constant acoustical contact with partition panels during operation.
  - a. Guide rails shall be adjustable up to 1/4" [6] to compensate for out-of-plumb walls.
  - b. Guide rails to provide constant power to safety limit switches
9. Each panel shall have two guide rollers that are sealed hardened ball bearing steel for smooth operation. Each guide roller should provide adjustments to ensure panels can compensate for building movements over time. Each guide roller must contain a minimum 1" dia. [25] carrier bolt to withstand panel load.
- B. Weight of the panels shall be 10.9 lbs. per sq. ft. [53.2 kg/sq m], not including the lifting equipment.
- C. Suspension system
  1. Drive Box
    - a. Panels shall stack on steel drive box and be lowered into opening via gravity feed operation.
    - b. Each panel shall be laterally supported by two hardened ball bearing steel pick up rollers.
    - c. System must contain drive box stack made from hardened steel and capable of supporting the weight of all panels in the stacked position.
  2. Power unit and controls shall be UL listed.
  3. Motor shall be 60 Hz and 115 volt with adequate horsepower to operate partition effectively.
  4. Drive system shall include drive shafts, couplers, torque limiter, two key and pressure actuation control stations wired in series, dual drive emergency operation and all necessary equipment for electric operation.
  5. Operation chain drive shall attach to dual direction lead panel.
- D. Safety Requirements:
  1. System shall have primary and secondary safety systems in the event a single safety system would fail.
  2. System must contain a certified load arrester to stop a free fall occurrence. Motor brakes that simply reduce the downward fall speed are unacceptable.
  3. System must contain an entrapment backup system on the lead edge of the panel that automatically reverses downward movement when lead edge makes contact with an obstruction within the path of the system.
  4. System must contain certified Type B2 safety monitoring relay switches that can sense any failures between each limit switch and the control box as the partition is operated during every cycle. The safety monitor switches must automatically shut off power to the motor drives if a failure occurs.
  5. System must contain a constant contact finger switch as the lead panel operates within the guide rail and immediately shut off the motor drive power in the event of a free-fall detection or an obstruction on the lead edge.
  6. System must contain an audio actuator device to warn when partition is in operation.
  7. Dual key stations with continuous pressure actuation push buttons located on either side of the system must be installed to ensure operators are in full view of the opening on both sides during operation.
  8. Non-contact optical beams must be installed to detect objects that may inadvertently move under the partition during operation.

#### E. Finishes

##### **IMPORTANT NOTE ABOUT FACE FINISH DIRECTION:**

Finishes will be applied to the 640V **IN A HORIZONTAL DIRECTION**. The finishes provided on most selectors or samples are shown in a vertical position and may look different when applied horizontally.

1. Face finish shall be: (**select as required**):
  - a. Factory applied reinforced vinyl fabric with woven backing, weighing not less than 15 oz. per lineal yard [465 g/m]. Color shall be selected from manufacturer's standard color selectors.
  - b. Standard upgrade fabrics (color shall be selected from manufacturer's standard color selector):



- (1) Factory applied vertical ribbed carpet (N.R.C. .20)
- (2) Factory applied stain resistant fabric
- c. Optional:
  - (1) Customer selected (requires factory approval for manufacturing compatibility)
  - (2) Unfinished for field decoration
- 2. Exposed metal trim and seal color shall be **(select from Hufcor's Standard Trim selector)**:
  - a. Lamb's Wool (standard)
  - b. Brown (standard)
  - c. Gray (standard)
  - d. Clear Anodized (if selected, any exposed vinyl seals will be gray)
  - e. Custom powder coated (optional upgrade for exposed metal trim)

**2.03 OPERATION**

- A. Partitions shall be key switch controlled, requiring constant contact to activate the motor. As a safety precaution, two key switches are required to activate the partition. Switches to be mounted on both sides of partition to provide operators a clear view of the partition path to prevent injury.
- B. Motor drive shall automatically seal the partition in the opening.
- C. The panels shall open and close at a constant nominal speed of approximately 5 to 10 vertical feet per minute [1.5-3 meters per minute].
- D. Stack/Store Panels
  - 1. Panels are retracted above the ceiling and stored by activating the two key-switch controls.
- E. Extend Partition
  - When the operable wall is being lowered (closed), the panels shall stop if the leading (bottom) edge comes into contact with any object

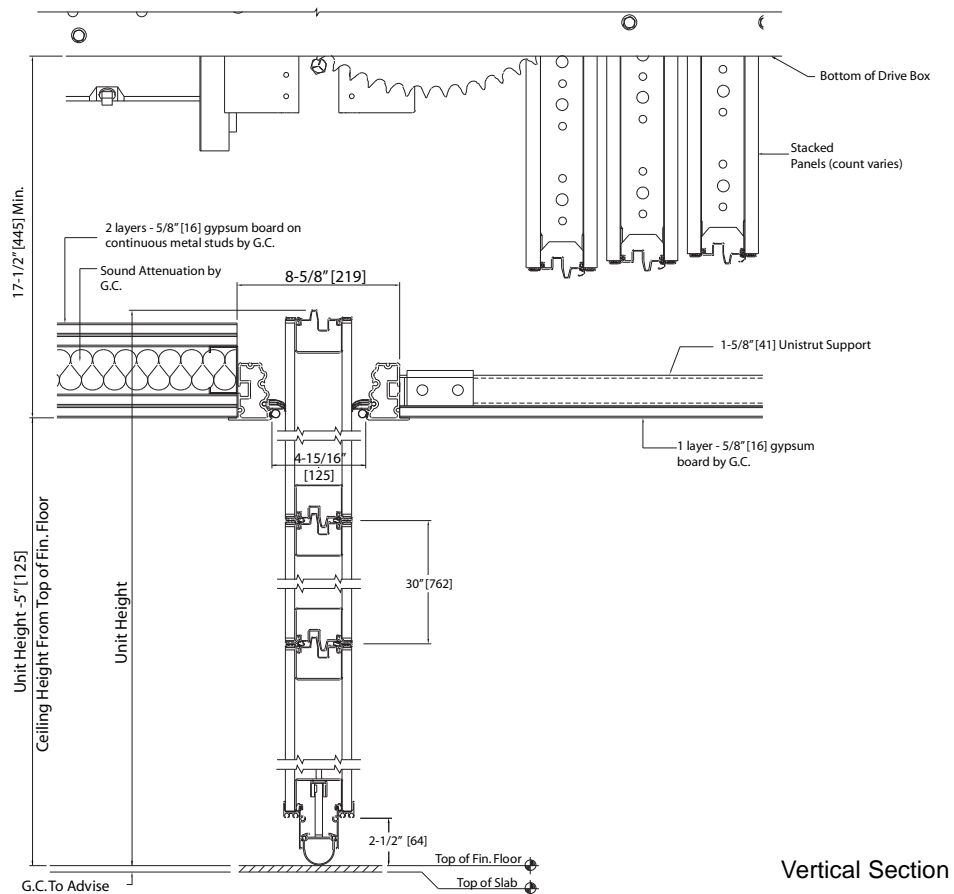
between it and the floor. The operation of the wall may resume once the key switch has been released and the obstruction cleared.

**2.04 ACOUSTICAL PERFORMANCE**

- A. Acoustical performance shall be tested at a laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and in accordance with ASTM E90 Test Standards. Standard panel construction shall have obtained an STC rating of minimum of 51.
  - 1. Complete, unaltered written test report is to be made available upon request.

**PART 3 - EXECUTION**

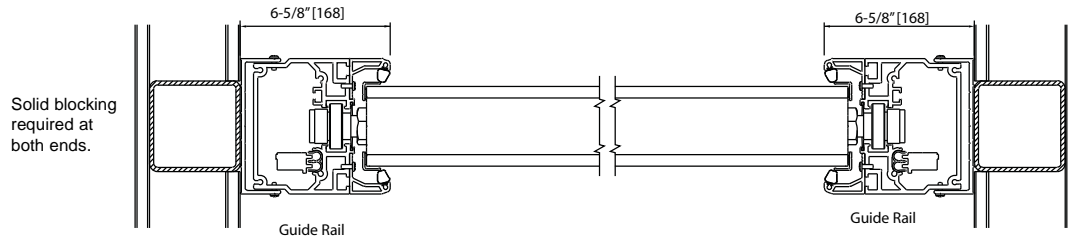
- A. Installation. The complete installation of the operable wall system shall be by a certified factory-trained installer and be in strict accordance with the approved shop drawings and manufacturer's standard printed specifications, instructions, and recommendations.
- B. Cleaning
  - 1. All panel surfaces and system components shall be wiped clean and be free of handprints, grease, and soil.
  - 2. Cartoning and other installation debris shall be removed to onsite waste collection area, provided by others.
- C. Training
  - 1. Installer shall demonstrate proper operation and maintenance procedures to owner's representative.
  - 2. Operating keys and owners manuals shall be provided to owner's representative.



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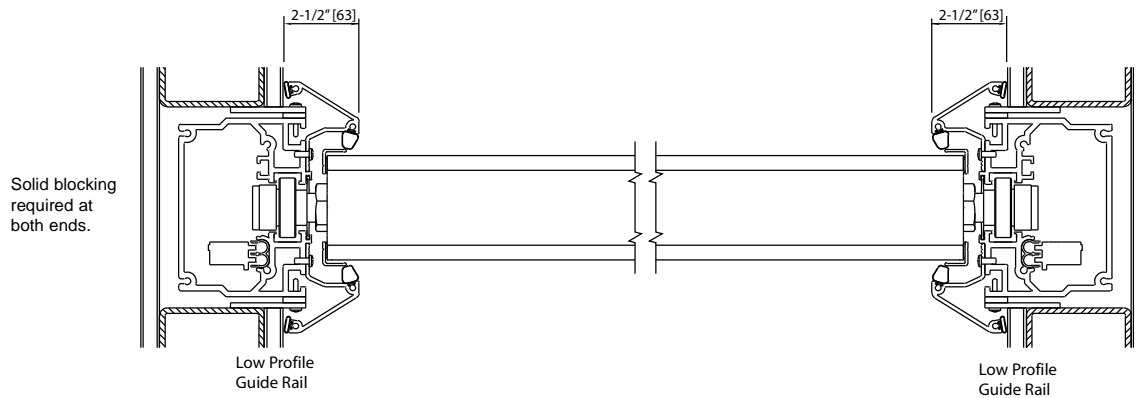
HORIZONTAL SECTION - Surface Mount

No Scale

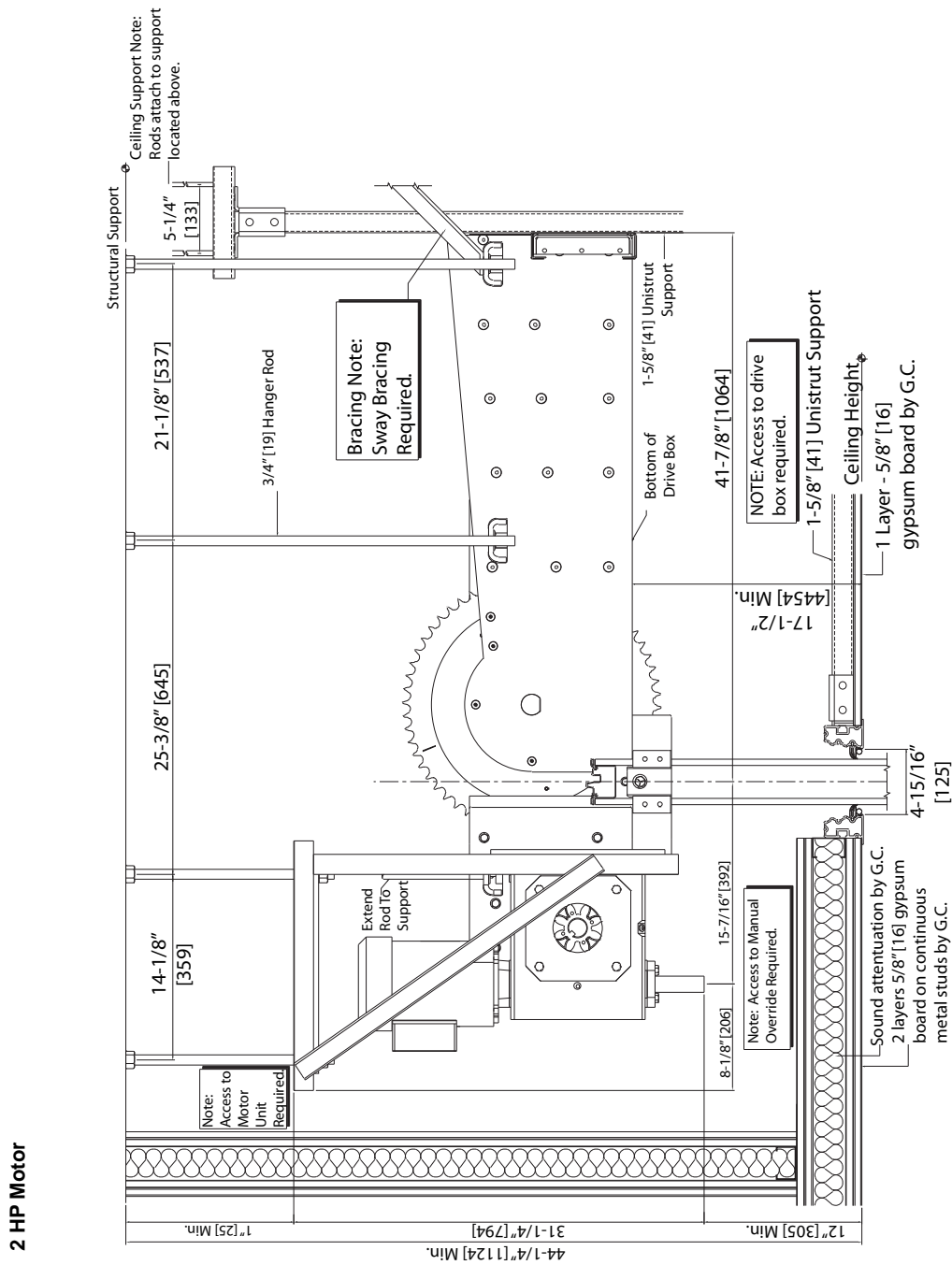


HORIZONTAL SECTION - Low Profile Mount

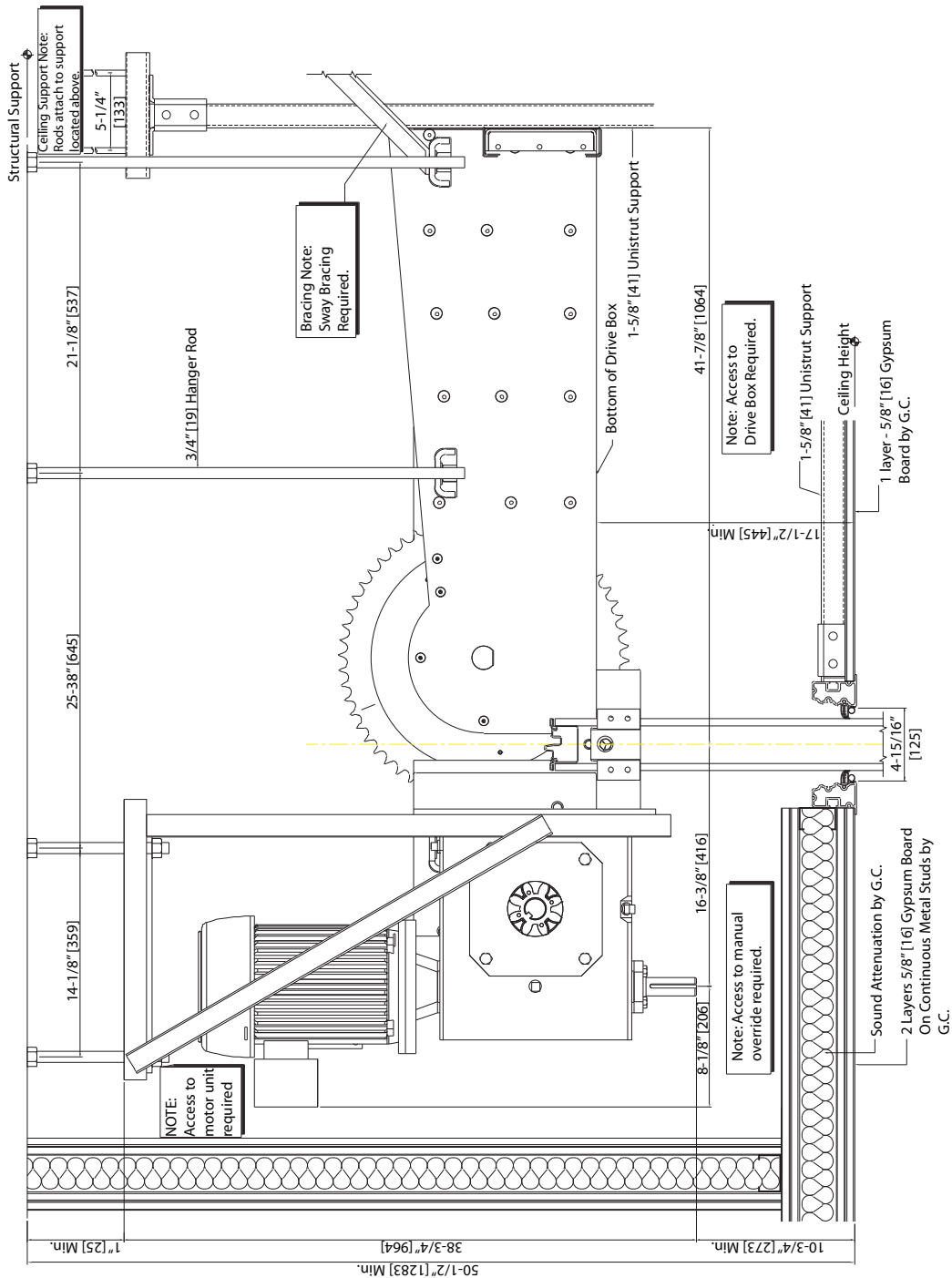
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# Summit® Vertical Lift Panels, Electrically Operated



**5 HP Motor - Used when Partition Weight Exceeds 3300 lbs. [1497]**



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