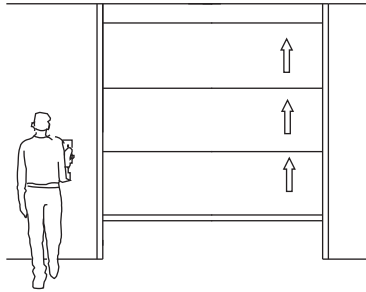


Summit® Vertical Lift Panels, Electrically Operated



Vertical Lift Individual Panels Electrically Operated

Standard Heights to: 17'6" [5.33m] *
Standard Opening Width: 40'0" [[12.1m] *
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 lift partitions, 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 645V series panels extend from, and retract above, the ceiling with the turn of an electric key switch. The 645V 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 645V **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" [102] 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:** 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 645V

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. Prepunching 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 645V electrically operated, vertical lift panels as manufactured by Hufcor Inc.
 1. Intermediate panels shall be nominally 4" [102] thick and to 30" [762] in height. Lead panel to be nominal 27", 30" or 33" [686, 762 or 838] in height to fit opening.
 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 200-240 volt single phase for 2HP motor requirements and 200-240V 3 phase for 5 HP motor requirements on larger openings.
 4. Drive system shall include drive shafts, couplers, torque limiter, key pressure actuation control station 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 arrestor 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. Single key station with continuous pressure actuation.
Option: Additional push button switch located at opposite end of the partition for full view of the opening on both sides during operation.
 7. Option: Non-contact optical beams 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 645V **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 20 oz. per lineal yard [620 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
 - (3) Markerboard full height and width
 - 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.
 - 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 key switch control.
 - E. Extend Partition
 - When the operable wall is being lowered (closed), the panels shall

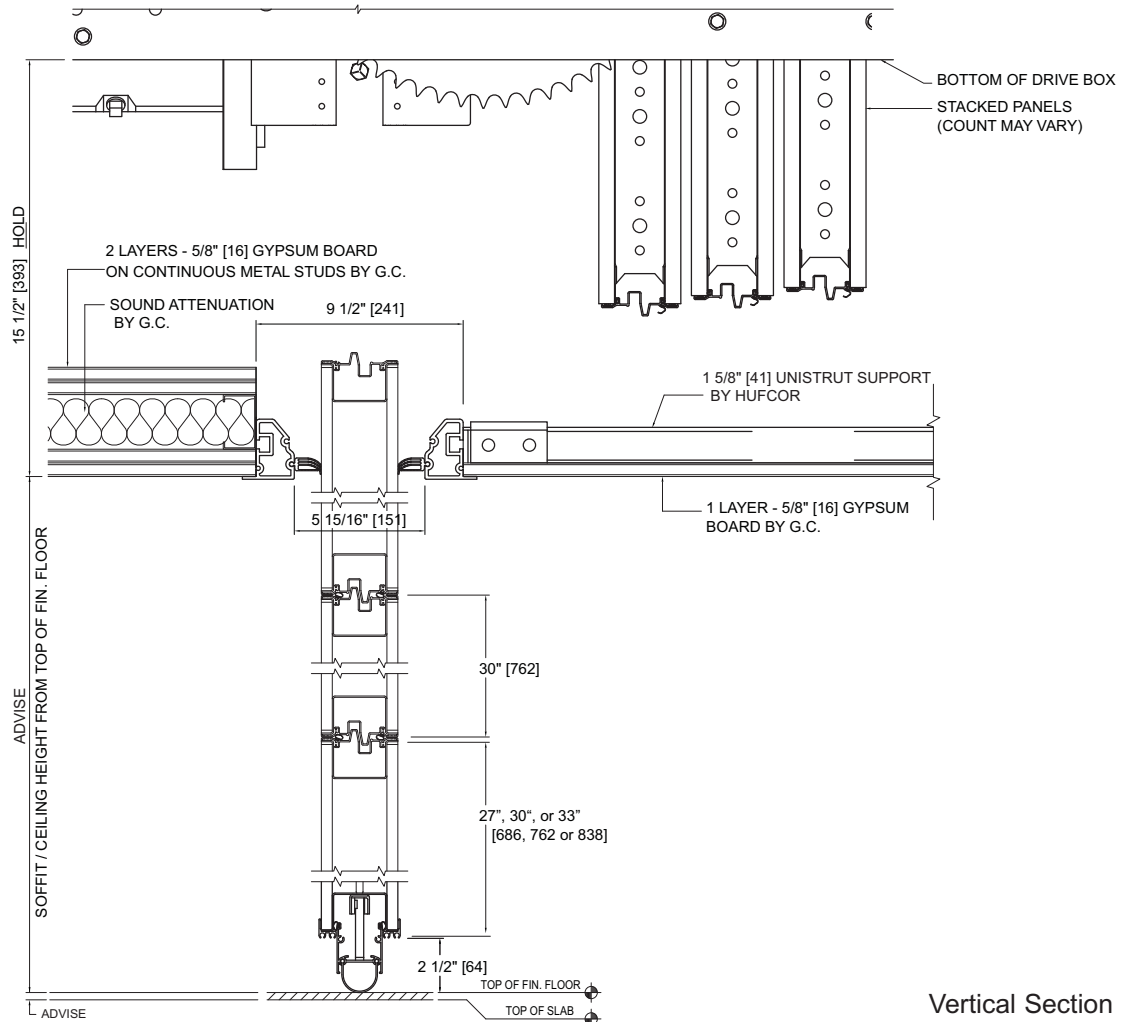
stop if the leading (bottom) edge comes into contact with any object between it and the floor. The operation of the wall may resume once the key switch has been released and the obstruction cleared.

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 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.



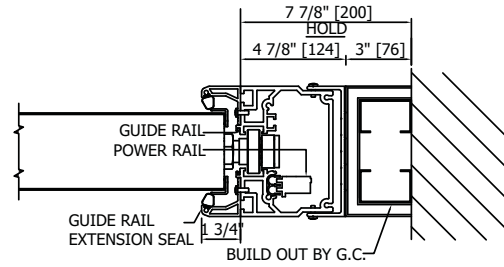
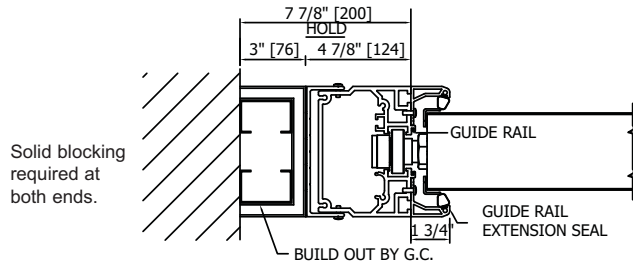
Vertical Section



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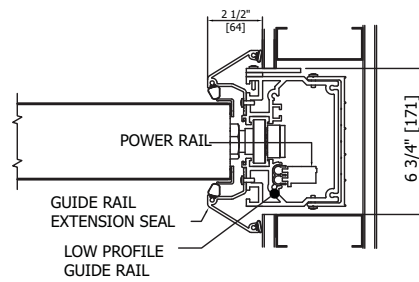
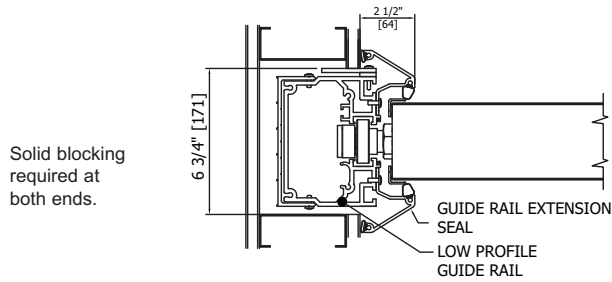
HORIZONTAL SECTION - Surface Mount

No Scale



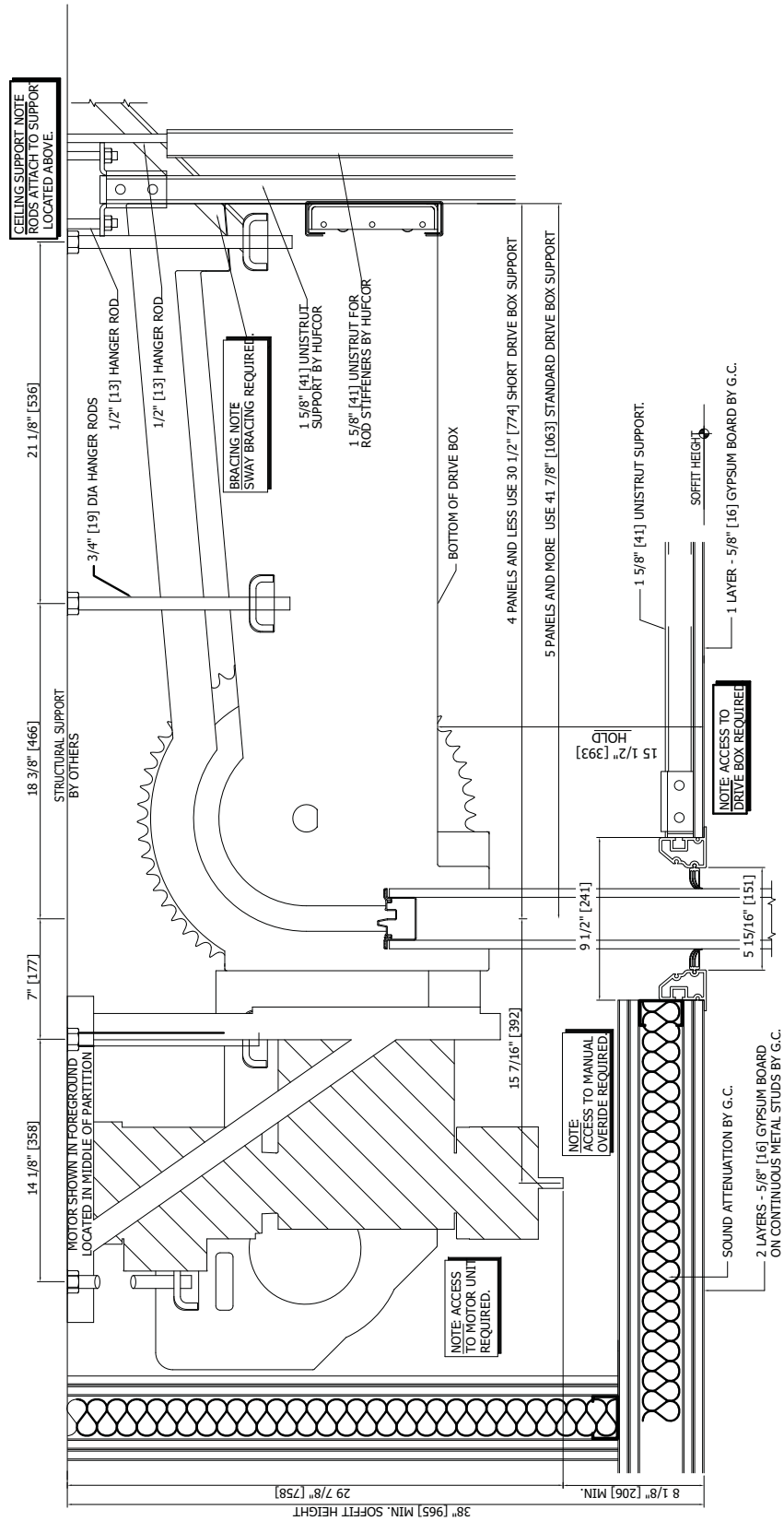
HORIZONTAL SECTION - Low Profile Mount

No Scale



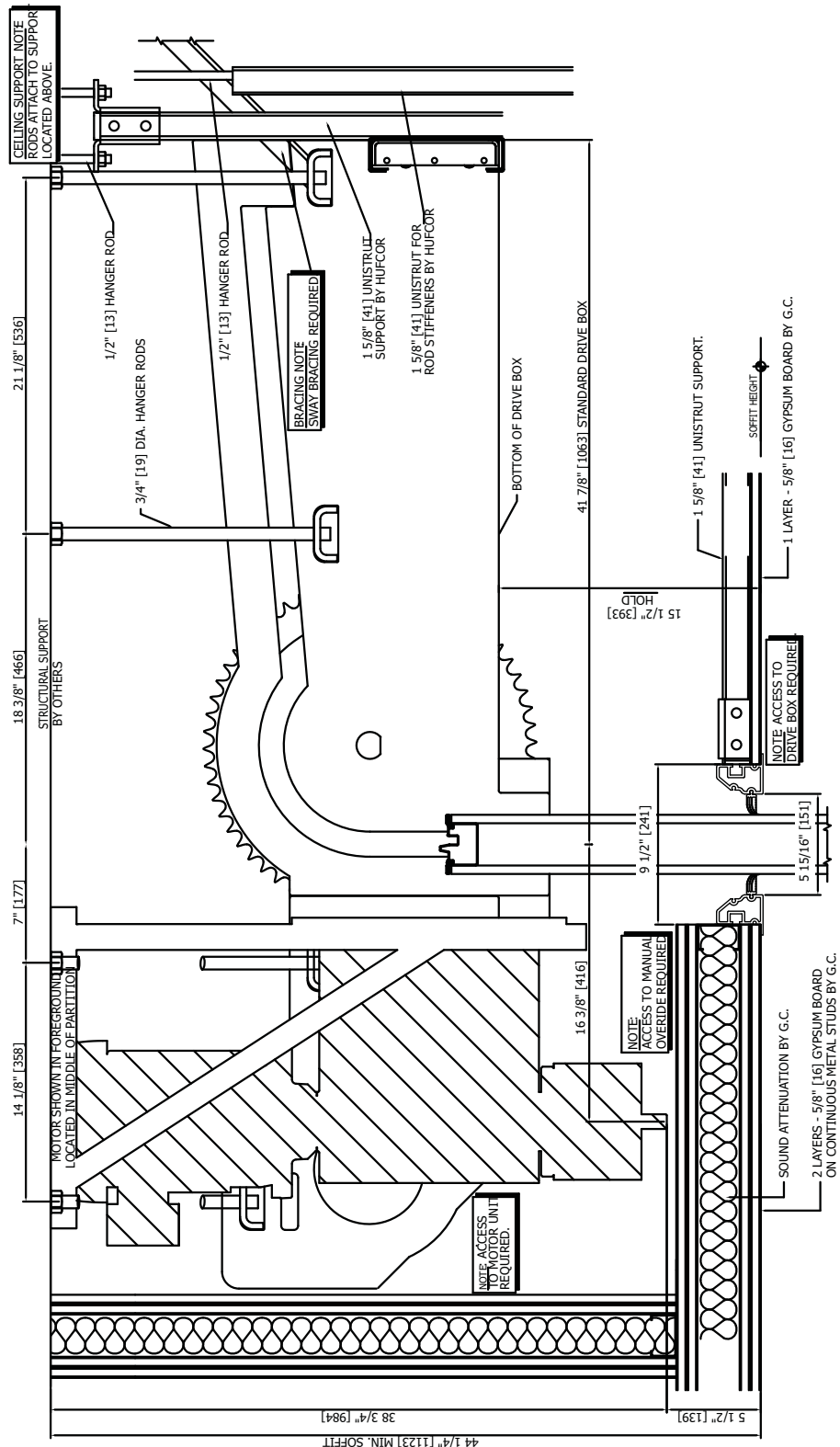
MOTOR DRIVE UNIT - NOT TO SCALE

2 HP Motor - Side View/Drive Box



MOTOR DRIVE UNIT - NOT TO SCALE

5 HP Motor /Drive Box - Used for larger openings.



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The manufacturer reserves the right to improve and change product without notice.