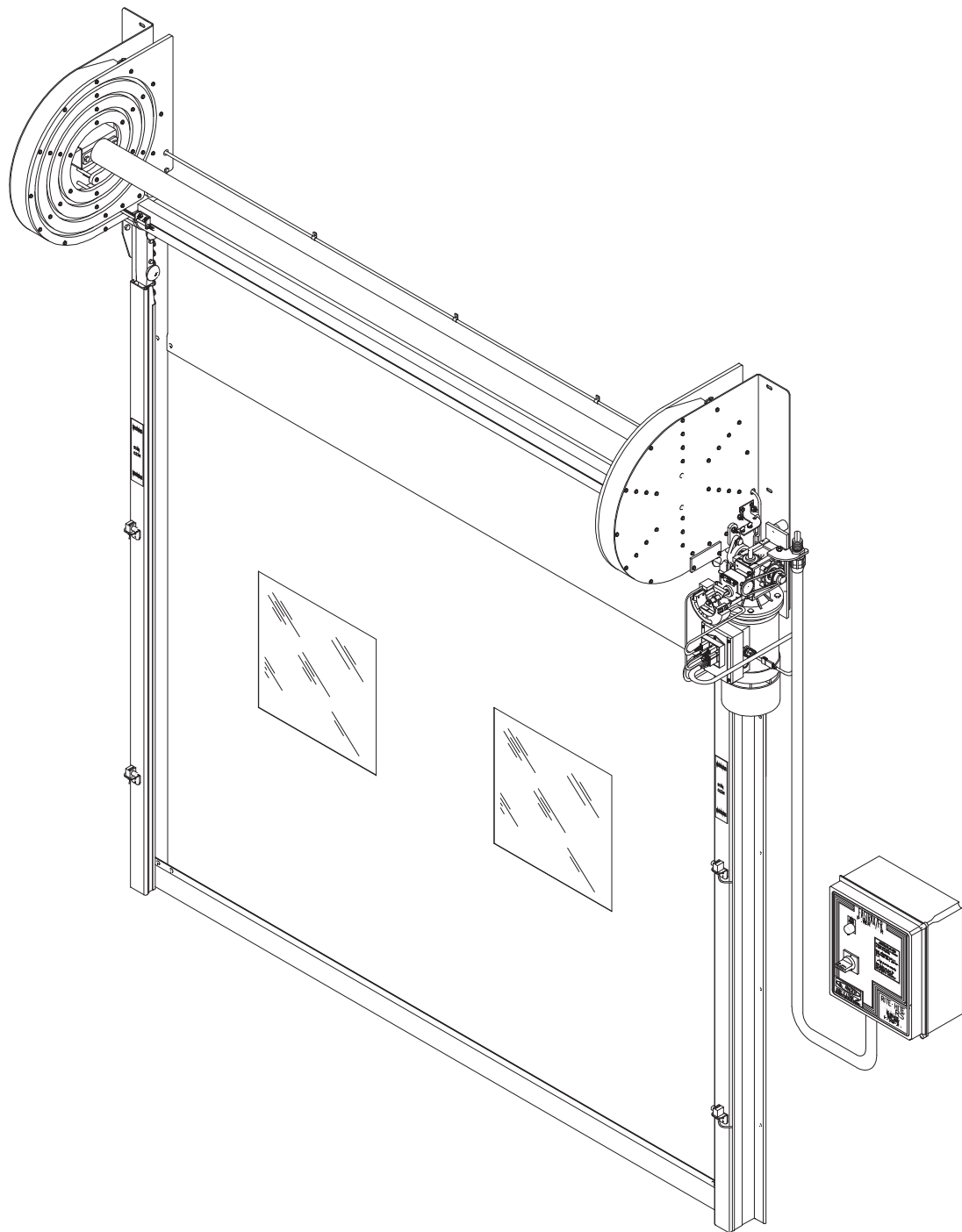


# FASTRAX™

## HIGH PERFORMANCE MODULAR DOOR



**RITE·HITE®**  
**DOORS**  
The Leading Edge In Door Safety.



This Manual Covers All Doors Shipped to Date with exception of drive system changed on (8/10/09).

# PRODUCT INTRODUCTION

## TABLE OF CONTENTS

POLY LUMBER INSTALLATION .....3  
 LOWER TRACK INSTALLATION .....4  
 THERMAL AIR SEAL / DRIVE TUBE INSTALLATION .....8  
 MOTOR / LIMIT SWITCH INSTALLATION .....9  
 UPPER TRACK INSTALLATION .....10  
 ELECTRICAL INSTALLATION .....13  
 i-COMM LOGIC TABLE .....15  
 INVERTER PARAMETERS .....16  
 PHOTOEYE / CURTAIN INSTALLATION .....18  
 THERMAL AIR SYSTEM .....20  
 SHROUD INSTALLATION .....21  
 ELECTRICAL CABLES .....22  
 VIRTUAL VISION INSTALLATION .....24  
 OPTIONAL CHAIN HOIST / WELD PLATE INSTALLATION .....25  
 OPERATING INSTRUCTIONS / FINAL CHECKLIST .....27  
 MAINTENANCE PROCEDURES .....28  
 TROUBLESHOOTING .....29  
 ELECTRICAL DRAWINGS .....31  
 ARCHITECTURAL DRAWING .....40

## NOTICE TO USER

**Our mission is to “Improve Industrial Safety, Security and Productivity Worldwide Through Quality and Innovation.”**

Thank you for purchasing the FasTrax® door from **RITE-HITE DOORS, INC.** The TRAX door is a unique fabric door that can be transformed to fit most opening configurations while helping to keep different atmospheres separate.

This manual should be thoroughly read and understood before beginning the installation, operation or servicing of this door. This owners manual **MUST** be stored near the door. Complete final checklist prior to leaving site. Refer to partslist manual for exploded views and part numbers.

**RITE-HITE DOORS, INC.** reserves the right to modify the electrical and architectural drawings in this manual as well as the actual parts used on this product are subject to manufacturing changes and may be different than shown in this manual. Due to unique circumstances with varying requirements, separate prints may be included with the unit.

The information contained in this manual will allow you to operate and maintain the door in a manner which will insure maximum life and trouble free operation. The serial # for your door is on a label located on the side of the control box and side track, **Figure 28, Page 12.**

Your local **RITE-HITE DOORS, INC.** Representative provides the Planned Maintenance Program (P.M.P.) which can be fitted to your specific operation. If any procedures for the installation, operation or maintenance of the FasTrax have been left out of this manual, are not complete or have suggestions, contact **RITE-HITE DOORS, INC. Technical Support** at 1-563-589-2722.

**RITE-HITE DOORS, INC.** are covered by one or more of the following U.S. patents, including patents applied for, pending, or issued: 5,025,846, 5,143,137, 5,203,175, 5,329,781, 5,353,859, 5,392,836, 5,450,890, 5,542,463, 5,579,820, 5,601,134, 5,638,883, 5,655,591, 5,730,197, 5,743,317, 5,794,678, 5,887,385, 5,915,448, 5,944,086, 5,957,187, 6,042,158, 6,089,305, 6,098,695, 6,145,571, 6,148,897, 6,192,960, 6,321,822, 6,325,195, 6,330,763, 6,352,097, 6,360,487, 6,574,832, 6,598,648, 6,612,357, 6,615,898, 6,659,158

## SPECIAL FEATURES

- i-COMM™ Universal Controller
- Heavy-Duty Industrial Materials
- No Springs, Pulleys or Weights
- Thermal Air™ System
- Soft-Edge™ Technology
- Virtual Vision
- Same Platform, with Flexible “You Build It” Track Design
- Adjustable Speeds
- DuraMax Curtain w/Auto Re-feed™
- InsulMax Curtain w/Auto Re-feed™
- High Pressure Capability
- I-Zone™ Area Detection System
- Powder Coated Materials

## RECOMMENDED SERVICE PARTS

Bumper, Rubber, Motor	15250081 (2)
Fuse, 1 Amp, 250V, Time Delay	51000002 (2)
Fuse, 2 Amp, 250V, Time Delay	51000005 (2)
Kit, Drive Sphere, Qty 10	53700561 (2)
Closed Limit Switch	51950075 (1)
Open Limit Switch	51950076 (1)
Module - Electrical	51950073 (1)
Heater, 1000W, 120V (FR only)	52050018 (1)
Photoeye Receiver	53700703 (1)
Photoeye Source	53700702 (1)
Limit Switch Magnet	55050023 (2)
Sensor, Thermal (FR only)	68900005 (1)

## INSTALLATION TOOLS REQUIRED

- 25' [7620] Tape measure - Hydro level
- 6' [1829] Carpenters level - Ladder (6'-8') [1829 - 2438]
- Scissors Lift
- “C” Clamps
- Drill (cordless or electric) - Drill Bits
- Phillips Bit for Drill
- Wire Strippers
- Straight Edge
- Allen Wrench Set (1/8" [3] & 5/32" [4])
- 7/16" [11], 1/2" [13], 9/16" [14], 3/4" [19] Socket/wrench
- Plumb Bob
- Hammer Drill
- Snap Ring Tool
- 5/16" [10] Nut Driver
- Small Straight/Phillips Screwdrivers

## WARRANTY

**RITE-HITE DOORS, INC.** warrants that its FasTrax door will operate or perform in conformance with the published specifications when subjected to normal, proper and intended usage and be free from defects in material and workmanship for a period of one (1) year from the date of shipment.

**RITE-HITE DOORS, INC.** warrants that the FasTrax 60 and 100 mil curtain fabric only, shall be free from material defects for a period of five (5) years. The curtain fabric warranty covers material failure under normal wear conditions; it does not cover 27oz material, labor, vision wear, edging or damage incurred from abuse, misuse, impact, accidents or disaster. Vision, fuses, bulbs, seals, power failures or electrical power surges are items, that are not considered to be warranty. All claims for breach of this warranty must be made within thirty (30) days after the defect is or can, with reasonable care, be discovered to be entitled to the benefits of this warranty, the products must have been properly installed, maintained, operated within their rated capacities, and not otherwise abused. Periodic lubrication and adjustment is the sole responsibility of the owner.

This warranty is **RITE-HITE DOORS, INC.** exclusive warranty. **RITE-HITE DOORS, INC.** expressly disclaims all implied warranties including the implied warranties of merchantability and fitness. Non-standard **RITE-HITE DOORS, INC.** warranties, if any, must be specified by **RITE-HITE DOORS, INC.** in writing.

In the event of any defects covered by this warranty, **RITE-HITE DOORS, INC.** will remedy such defects by repairing or replacing any defective equipment or parts, bearing all of the costs for parts, labor, and transportation based on the warranty policy. This shall be the exclusive remedy for all claims whether based on contract negligence or strict liability. Neither **RITE-HITE DOORS, INC.** any other manufacturer whose products are the subject of this transaction, nor any **RITE-HITE DOORS, INC.** representative, shall in any event be liable for any loss or use of any equipment or incidental or consequential damages of any kind whether for breach of warranty, negligence, or strict liability. The application of a manufacturer's specifications to a particular job is the responsibility of the purchaser. **RITE-HITE DOORS, INC.** sole obligation with respect to its product shall be to repair or (at our own discretion) replace the product.

### RITE-HITE DOORS INC

8900 N. Arbon Drive  
 P.O. Box 245020  
 Milwaukee, Wisconsin 53224-9520  
 Sales: 414-355-2600  
 Toll Free: 800-456-0600  
 Aftermarket: 563-589-2781  
 Service: 563-589-2722  
 Service Fax: 563-589-2737  
 Representatives in All Major Cities  
[www.ritehite.com](http://www.ritehite.com)

# POLY LUMBER INSTALLATION

**⚠ CAUTION !!!**

Make sure to barricade the door opening on both sides to prevent unauthorized use until the door has been completely installed.

**⚠ DANGER !!!**

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

It is important to verify the following basic information before starting with the installation.

**TO PREVENT DAMAGE TO CONTENTS, STORE DRY BETWEEN 40° AND 80° F [4° and 27° C].**

1. Alternate dimensions in brackets are in [millimeters].
2. Make sure that you are working at the correct location and that you have any required work permits.
3. Inspect the site to make sure that there are no overhead obstructions (sprinkler pipes, HVAC systems, electrical supply lines, etc.) that might interfere with the installation.
4. Detour material handling equipment during the installation.
5. Make sure that the electrician is ready to bring the correct electrical power supply to the door control box.
6. Make sure that the electrical power can be shut off without interfering with other plant operations.
7. Move the door crate as close to the opening as possible.
8. Measure the overall width of the door opening near the floor and the header (Dimensions A and B), and the height of the door opening at the left and right-hand sides (Dimensions C and D), *Figure 1*.

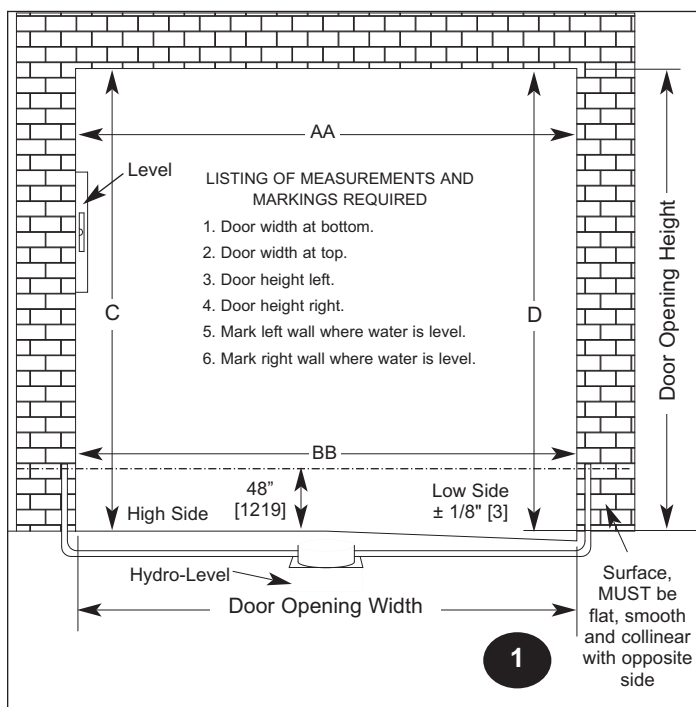
9. Measure the door opening width and place a mark at the center on the floor.
10. Using a 6' [1829] carpenter's level, verify that the door jambs and header are plumb and perpendicular.
11. These dimensions should be within  $\pm 1/2"$  [13] of the dimensions listed on the Serial Number label. If the measurements do not agree, STOP! Contact your RITE-HITE DOORS, INC. representative.
12. Using a hydro level, determine if the floor is level, *Figure 1*. If the floor is not level to within  $1/8"$  [3], mark the wall where the level point is indicated. The measurement between the level mark and the floor is the amount of shimming that needs to be done under the track that will be located on the "Low Side" (greatest measurement) of the door opening.
13. Install optional equipment after verifying door operation.

**NOTE:** *Electrical prints included in the parts or control box, supersede any prints included in this owners manual on Pages 28-35. Always check for electrical prints.*

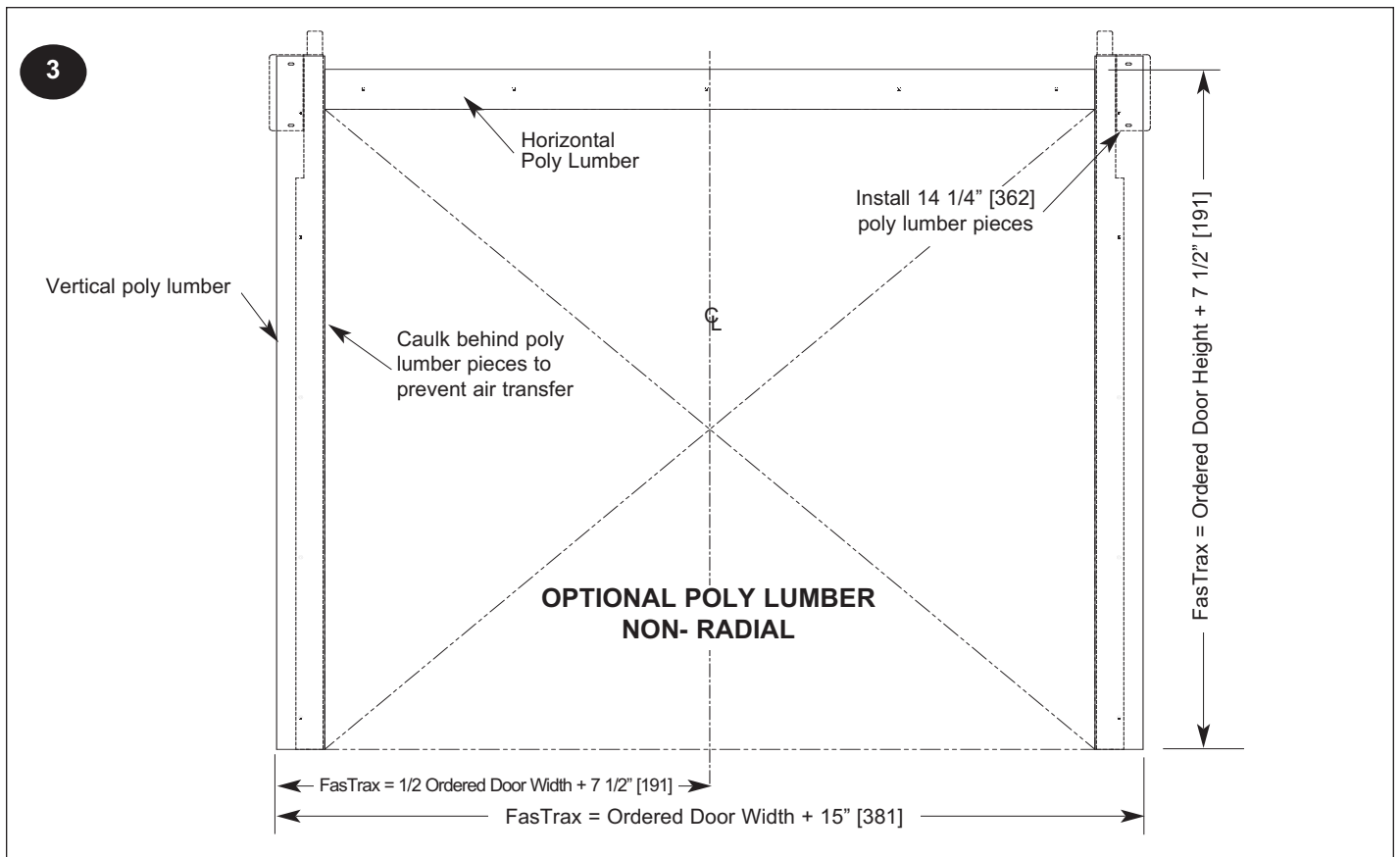
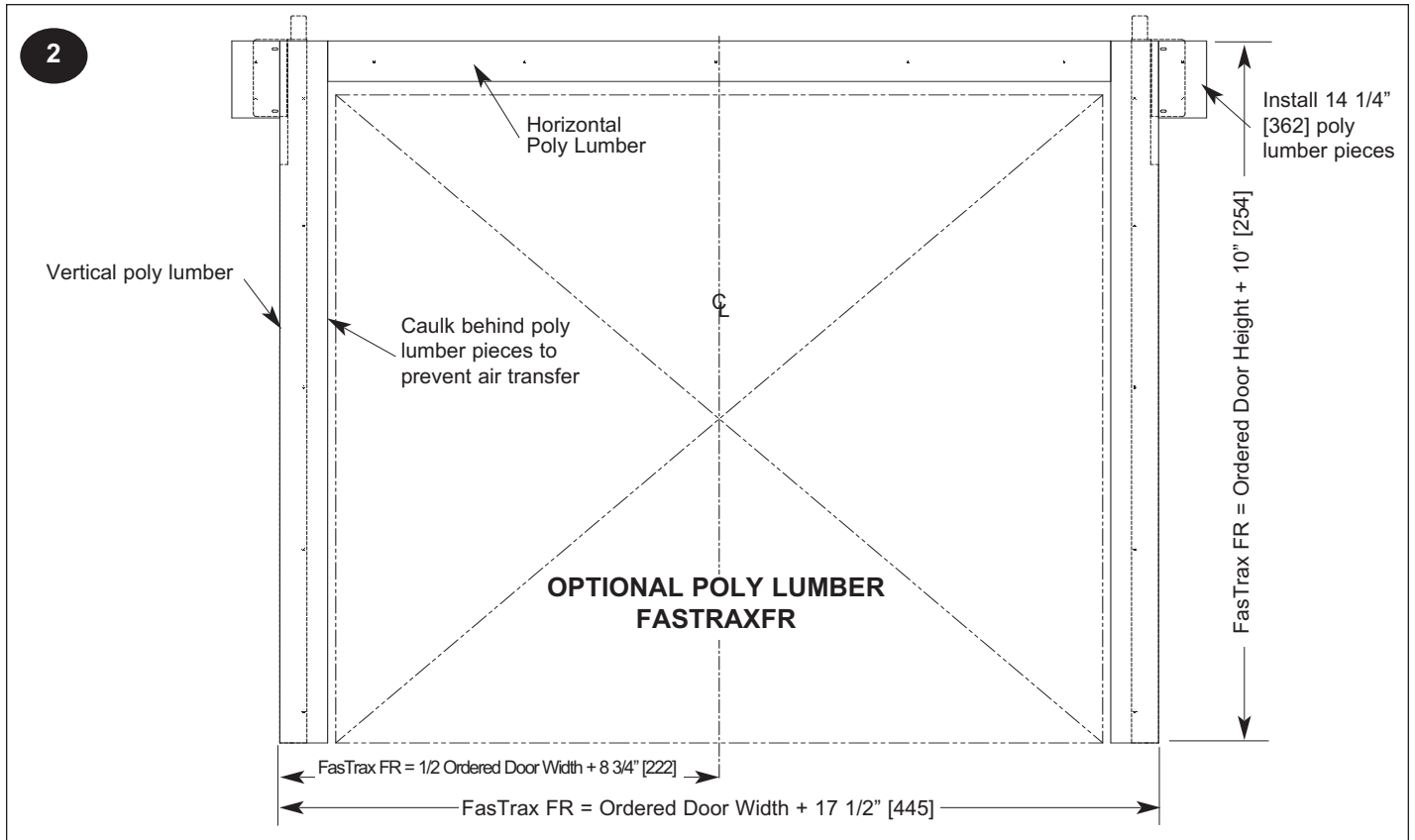
**IMPORTANT!!!**

It is imperative that the tracks be mounted at the proper width. If mounted too wide, excess wear is placed on the drive spheres. If too narrow, the curtain may appear wavy or crease in the center.

RECOMMENDED MOUNTING FASTENERS	
Wall	Fastener
Wood	Lower Track - 3/8" [10] thru-bolt at top, middle, and bottom. 5/16" x 1-1/2" [8x38] lag screws at all other fastener positions. Upper Track - 5/16" x 1-1/2" [8x38] lag screws at all positions.
Wood /Steel	Lower Track - 3/8" [10] thru-bolt at top, middle, and bottom. 5/16" x 1-1/2" [8x38] lag screws at all other fastener positions. Upper Track - 5/16" x 1-1/2" [8x38] lag screws at all positions.
Wood /Masonry	Lower Track - 3/8" [10] thru-bolt or 3/8" [10] masonry anchor positions.at top, middle, and bottom. 5/16" x 1-1/2" [8x38] lag screws at all other fastener positions.
Steel	1. 3/8" [10] thru-bolt. 2. 3/8" [10] drill and tap (material must be 5/16" [8] min.). 3. 3/8" [10] drive self tap/drill screws (1/4" - 14) [6]. 4. Weld, lower track is aluminum, only weld if steel jamb option is included or provided by others.

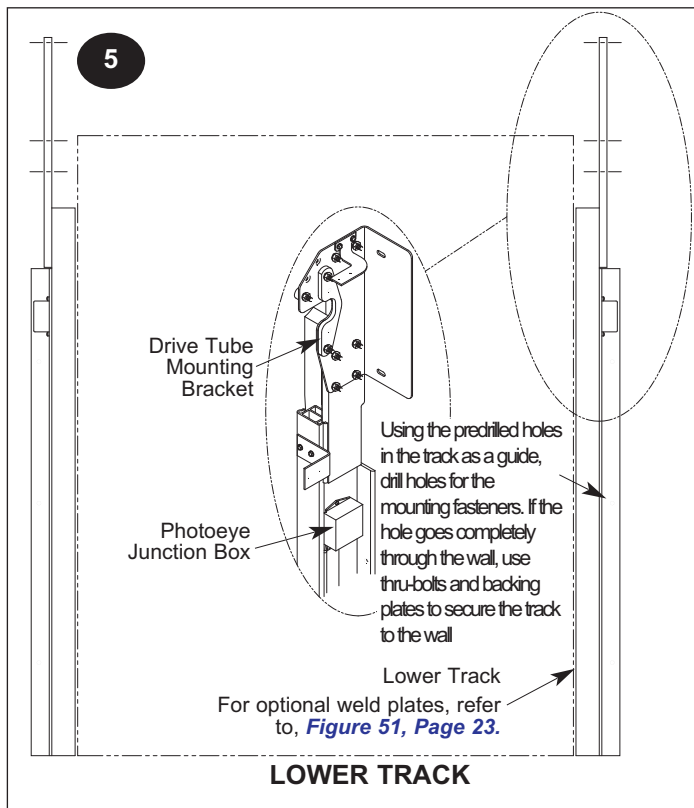
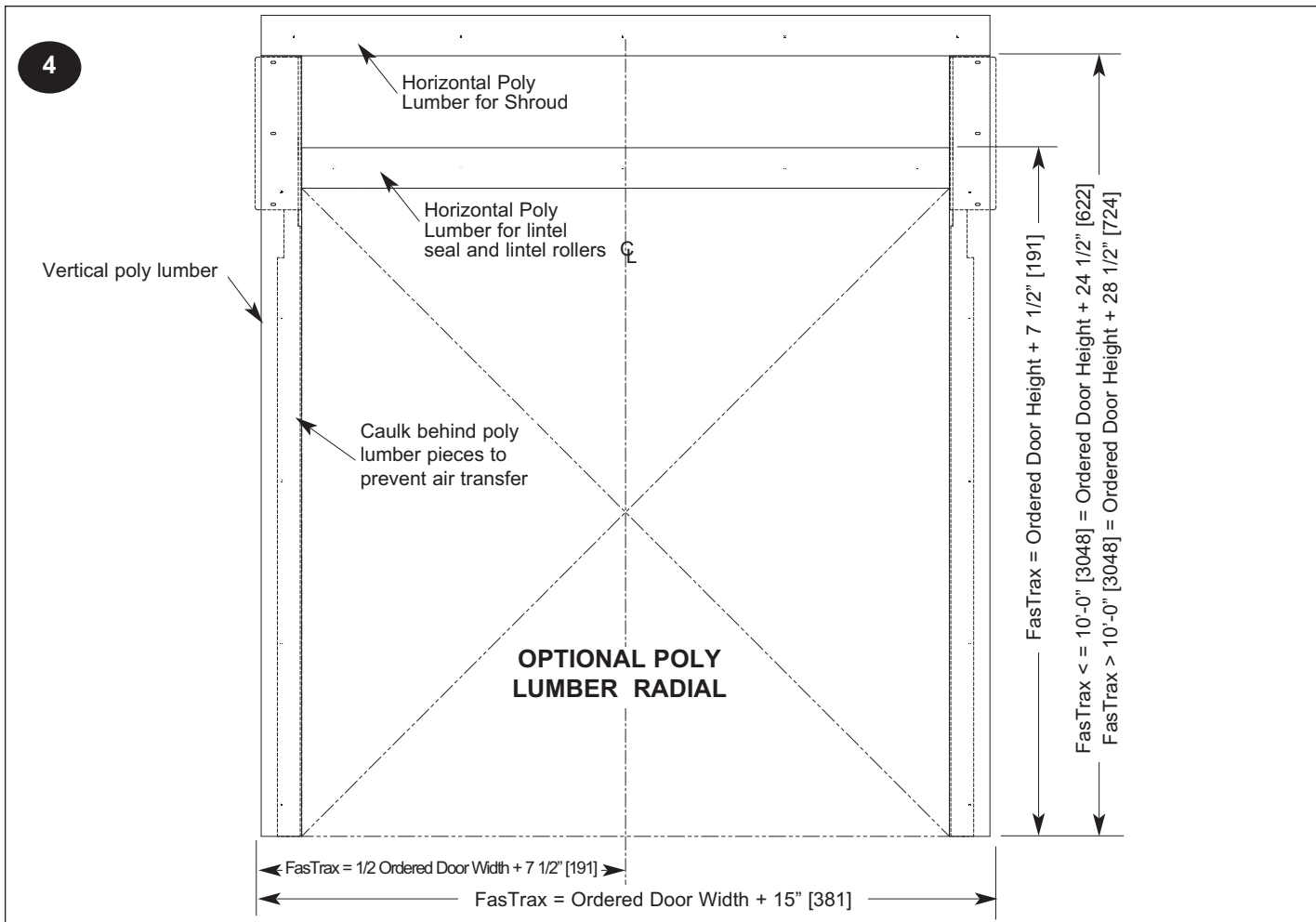


# POLY LUMBER INSTALLATION



# POLY LUMBER INSTALLATION

Lower Track



# LOWER TRACK INSTALLATION

**6**

FasTrax Ordered Door Width + 1/2" [13] (+ 1/8" [3], -0")

4 3/4" [121] Ref.

90°

FasTrax 1/2 Ordered Door Width + 1/4" [6] (+ 1/16" [1.5], -0")

4 1/2" [114] Ref.

Caulk

Door Opening Width

1. Position the front edge of the high side track on the line. Using a 6' [1829] level, make sure that the track is plumb in both directions. Use shims as required to square the track.
2. Repeat process for opposite track.
3. Measure tracks at top and bottom to verify proper width.

**LOWER TRACK W/O POLY LUMBER**

**8**

FasTrax Ordered Door Width + 1/2" [13] (+ 1/8" [3], -0")

6 1/4" [159] Ref.

90°

FasTrax 1/2 Ordered Door Width + 1/4" [6] (+ 1/16" [1.5], -0")

Poly Lumber

7 1/2" [191] Ref.

Caulk

Door Opening Width

1. Position the front edge of the high side track on the line. Using a 6' [1829] level, make sure that the track is plumb in both directions. Use shims as required to square the track.
2. Repeat process for opposite track.
3. Measure tracks at top and bottom to verify proper width.

**LOWER TRACK W/ POLY LUMBER**

**7**

FasTrax FR Ordered Door Width + 9" [229] (+ 1/8" [3], -0")

4 3/4" [121] Ref.

90°

FasTrax FR 1/2 Ordered Door Width + 4 1/2" [114] (+ 1/16" [1.5], -0")

8 3/4" [222] Ref.

Caulk

Door Opening Width

1. Position the front edge of the high side track on the line. Using a 6' [1829] level, make sure that the track is plumb in both directions. Use shims as required to square the track.
2. Repeat process for opposite track.
3. Measure tracks at top and bottom to verify proper width.

**FR LOWER TRACK W/O POLY LUMBER**

**9**

FasTrax FR Ordered Door Width + 9" [229] (+ 1/8" [3], -0")

6 1/4" [159] Ref.

90°

FasTrax FR 1/2 Ordered Door Width + 4 1/2" [114] (+ 1/16" [1.5], -0")

Poly Lumber

8 3/4" [222] Ref.

Caulk

Door Opening Width

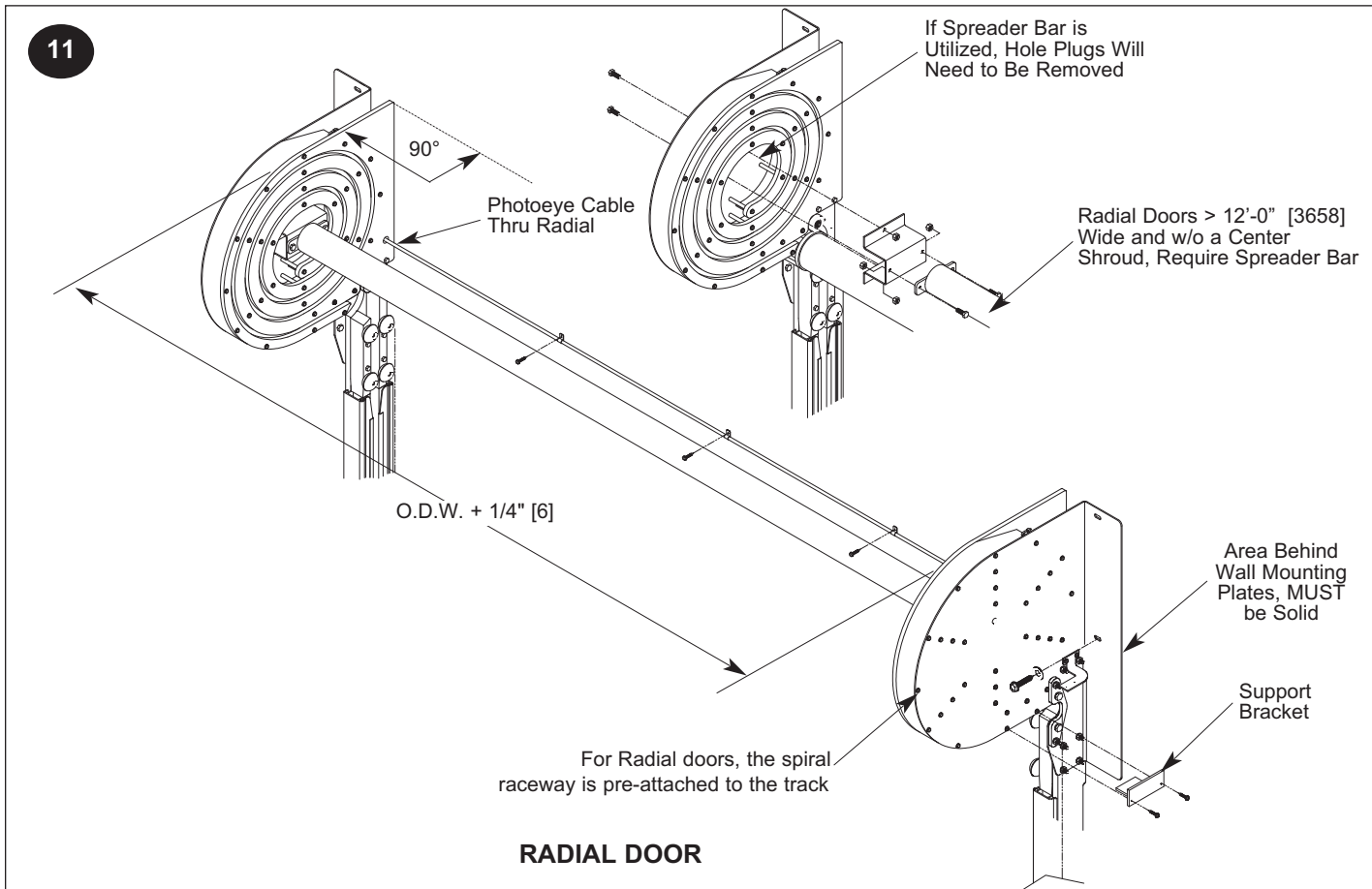
1. Position the front edge of the high side track on the line. Using a 6' [1829] level, make sure that the track is plumb in both directions. Use shims as required to square the track.
2. Repeat process for opposite track.
3. Measure tracks at top and bottom to verify proper width.

**FR LOWER TRACK W/ POLY LUMBER**

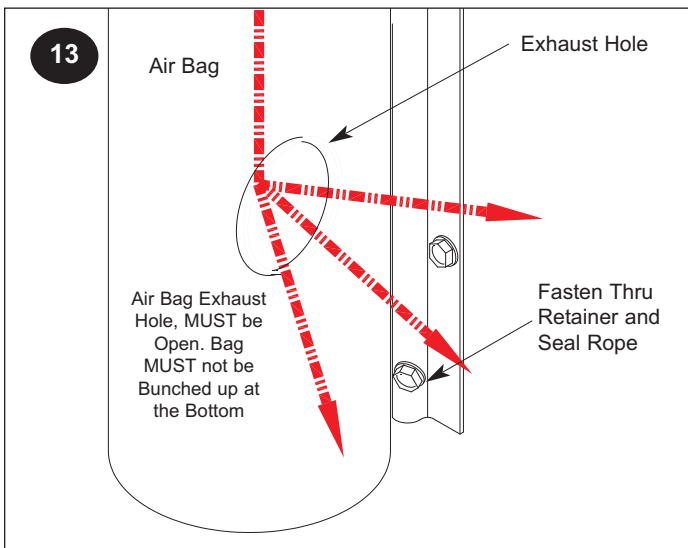
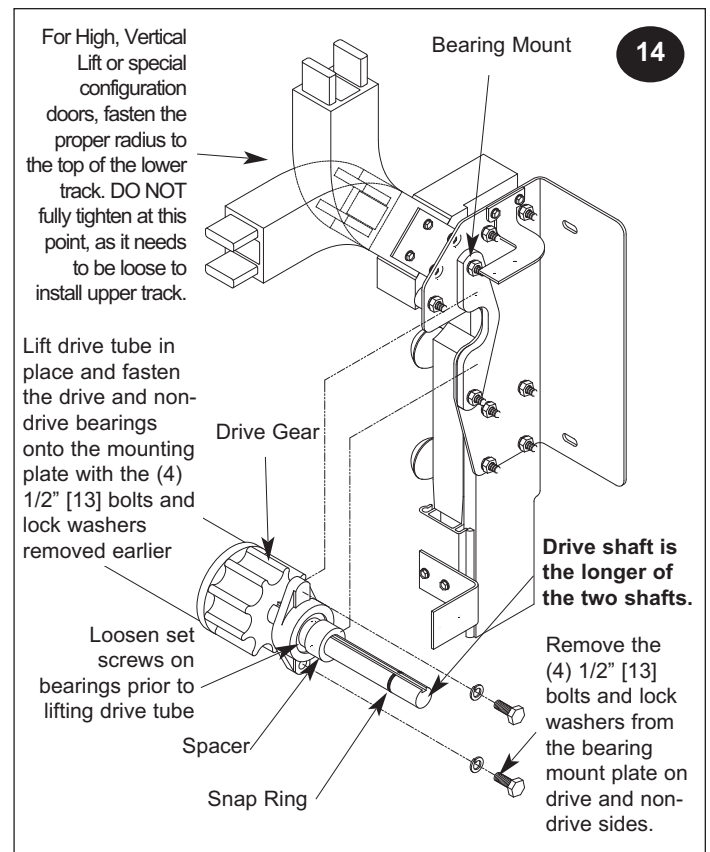
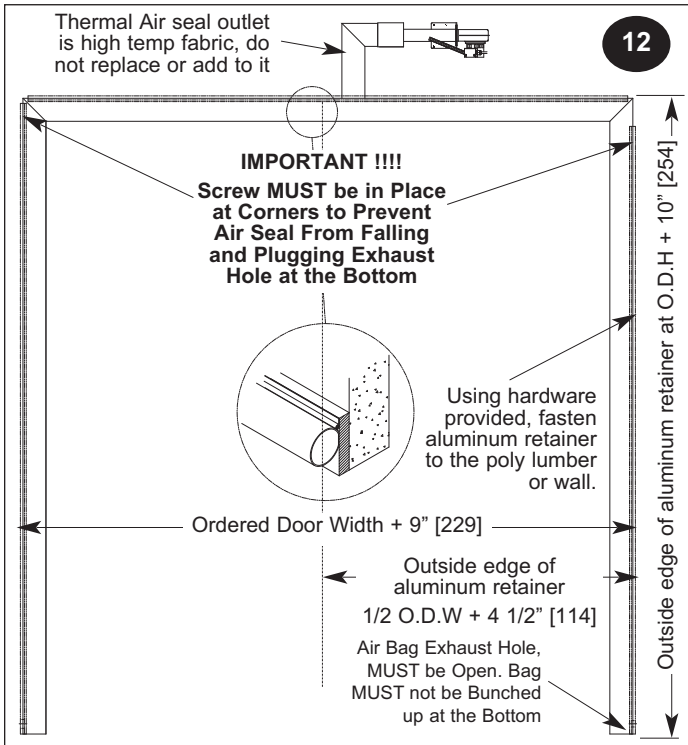
**10**

Backer plates MUST be clean and either be painted, or a non-ferrous material and square to the wall

# SPREADER BAR INSTALLATION

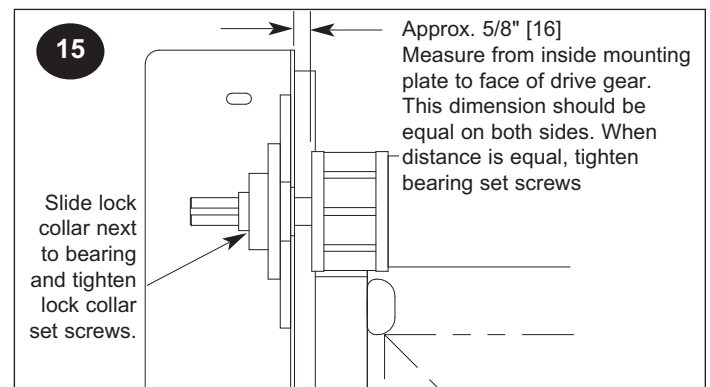


# THERMAL AIR SEAL / DRIVE TUBE INSTALLATION



**IMPORTANT!!!**

By centering the drive tube, the drive gear should be centered directly over lower track drive sphere groove. Failure to do this may result in drive sphere wear or excess noise.





# MOTOR / LIMIT SWITCH INSTALLATION

**16**

**Motor/Brake/Gearbox Assembly**  
To Raise Door w/o Power, Turn Output Shaft

Tighten the rubber motor mounts on the back of the motor mounting plate to reduce any motor rocking. Tighten the rubber mount nuts to lock in place. After motor is wired, run to verify motor does not rock

Grease Fitting  
Spacer

Drive shaft is pre-lubricated at the factory, if more is required, lubricate with an anti-seize lubricant.

Remove outer snap ring from drive shaft. Slide gearbox housing onto shaft until it is against the spacer.

Limit switch bracket with foam block

Conduit Bracket

Rotate the drive tube until the key way slots are aligned and install key

Install limit switch drive sprocket onto the drive shaft and using a straight edge, align with the driven pulley on the limit switch assembly. Sprocket DOES NOT require a key.

Tilt limit switch assembly and install the chain over the sprockets. The weight of the assembly as well as the foam block will keep tension on the chain

Motor J-Box Cover

Install outer snap ring removed earlier

Limit Switch Chain

Remove the (2) screws from the motor junction box cover, locate the electrical module and install onto the motor junction box cover.

**NOTE:**  
If side clearance is not available (minimum 18" [3]) to install gearbox after drive tube is installed, place gearbox onto shaft prior to installing drive tube. A lifting device will be necessary for this procedure.

Open Limit Switch Magnet (Blue Dot)  
Alternate Open Limit Switch  
Open Limit Switch (Blue Dot)  
Closed Limit Switch (Red Dot)  
Lower Photoeye Cut-Off Switch  
Closed Limit Switch Magnet (Red Dot)  
Alternate Cut-Off Switch  
Upper Photoeye Cut-Off Switch

Remove hinge pin from bracket on the gearbox, slide hinge pin thru limit switch assembly and gearbox bracket.

Plug limit switch cables into the electrical module

Motor / Limit Switch

**! CAUTION !!!**

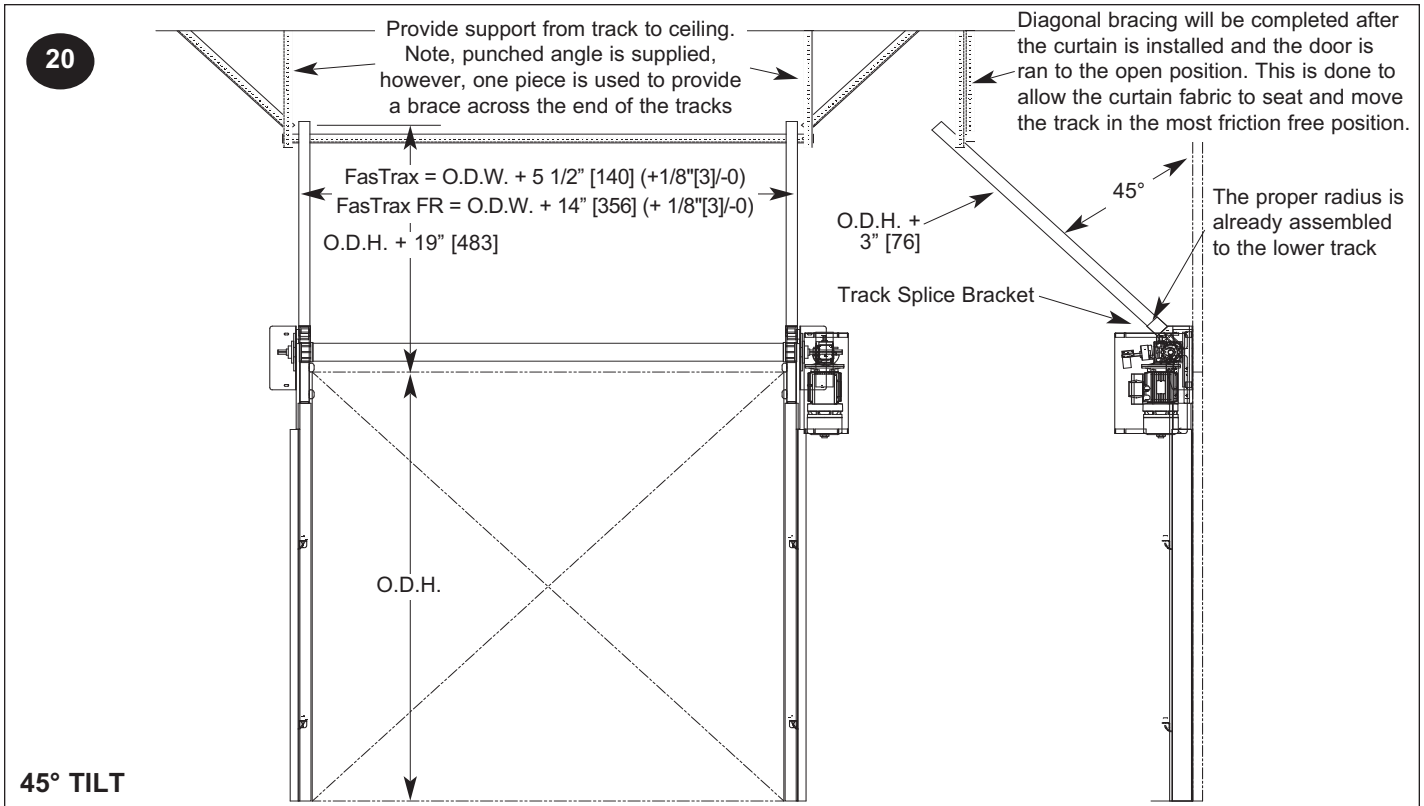
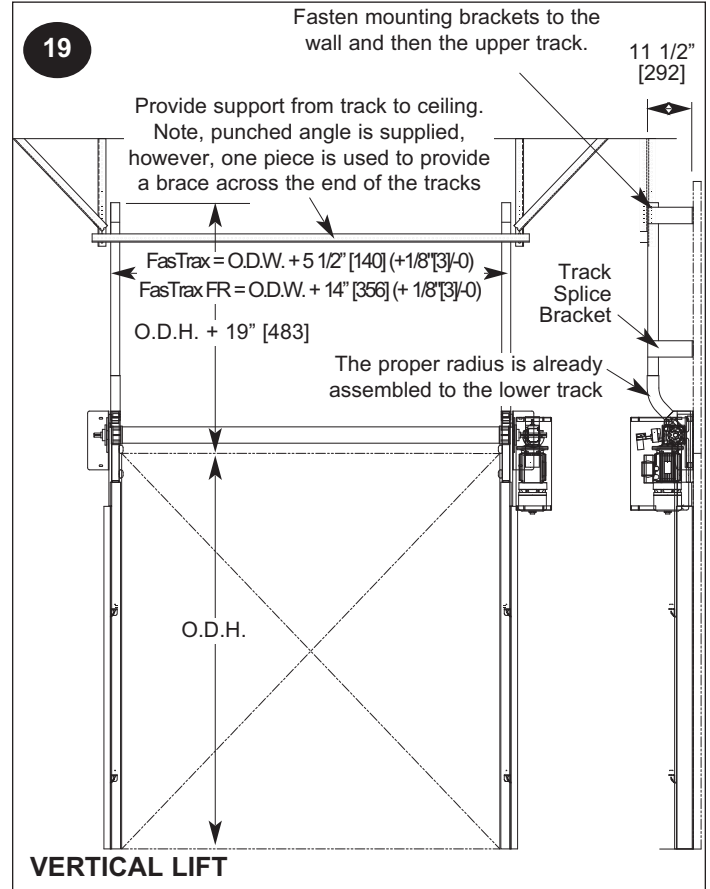
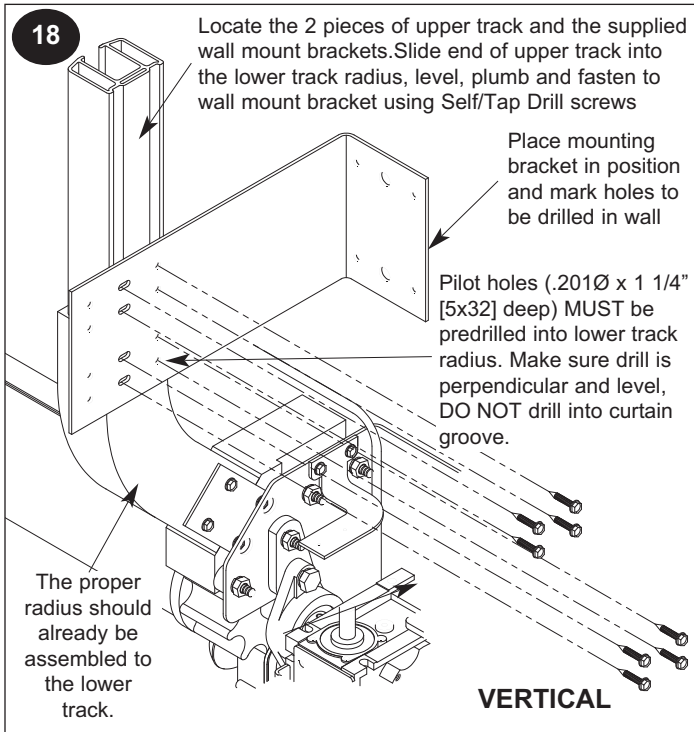
Make sure snap ring is fully seated in groove.

**17**

Chain Connector

Fasten chain from gearbox to bracket

# VERTICAL / 45° TILT - UPPER TRACK INSTALLATION



# STANDARD / HIGH - UPPER TRACK INSTALLATION

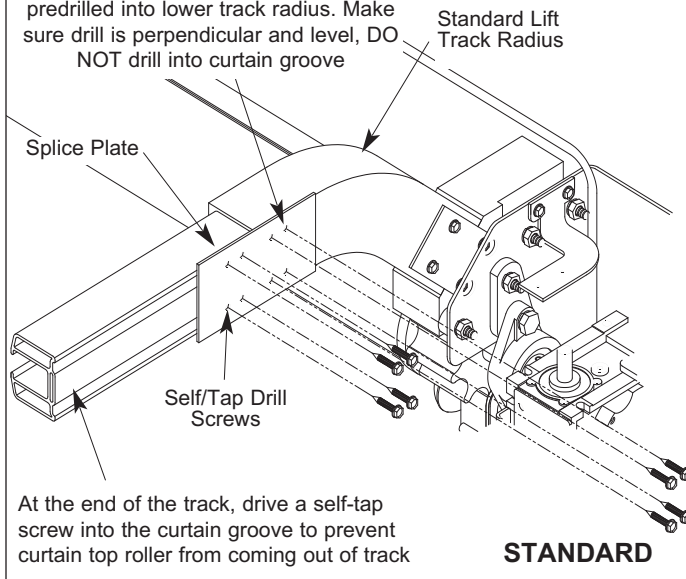
## ! CAUTION !!!

Make sure to place screws so they go into the outer cavities of the upper track and not into the curtain groove. The drill MUST be held perpendicular and level to ensure screw does not go into groove.

### DO NOT Use Self Tap Screws Here

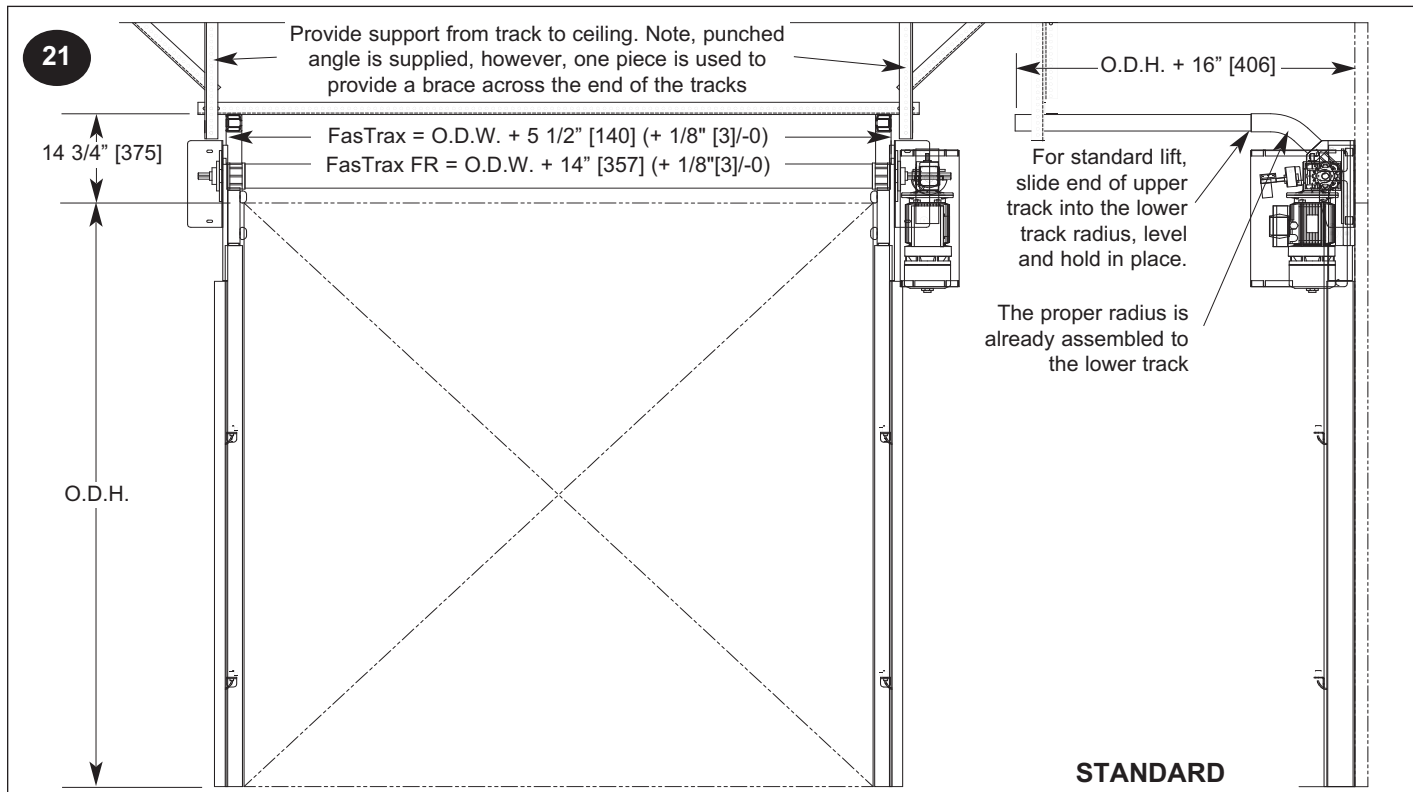
Locate lower to upper track splice wall mount bracket and fasten between the upper and lower track. Pilot holes (.201Ø x 1 1/4" [5x32] deep) MUST be predrilled into lower track radius. Make sure drill is perpendicular and level, DO NOT drill into curtain groove

22

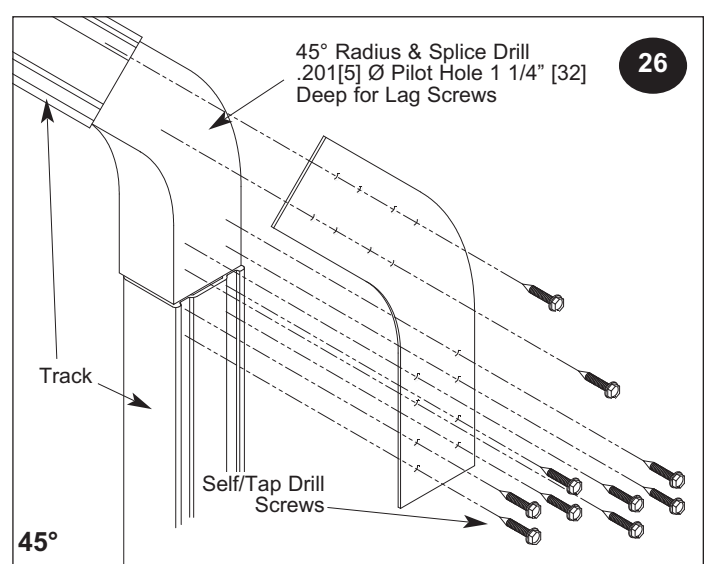
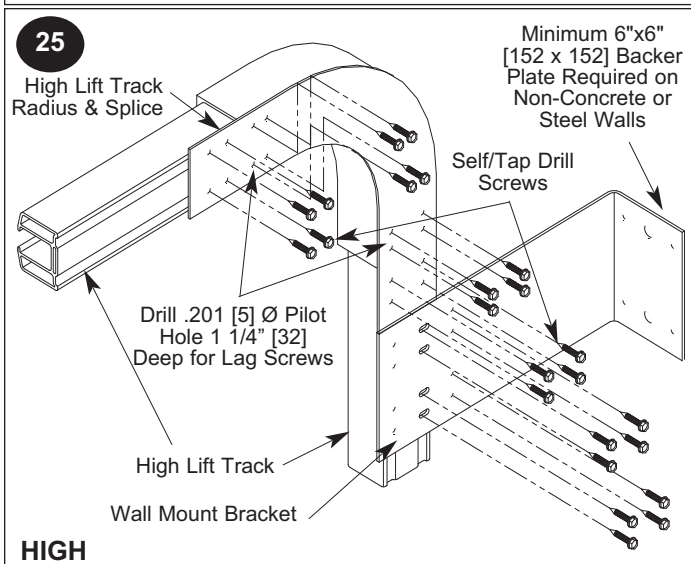
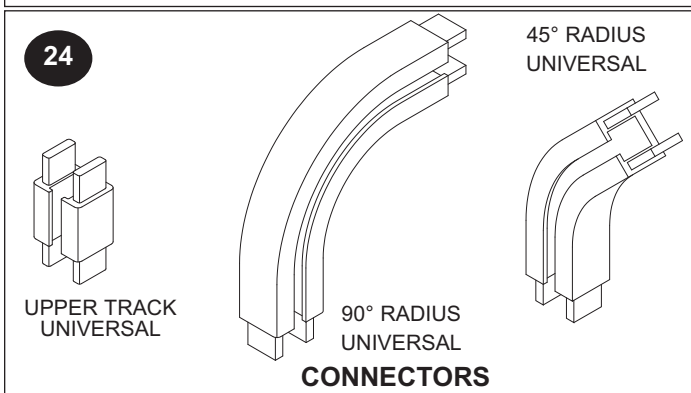
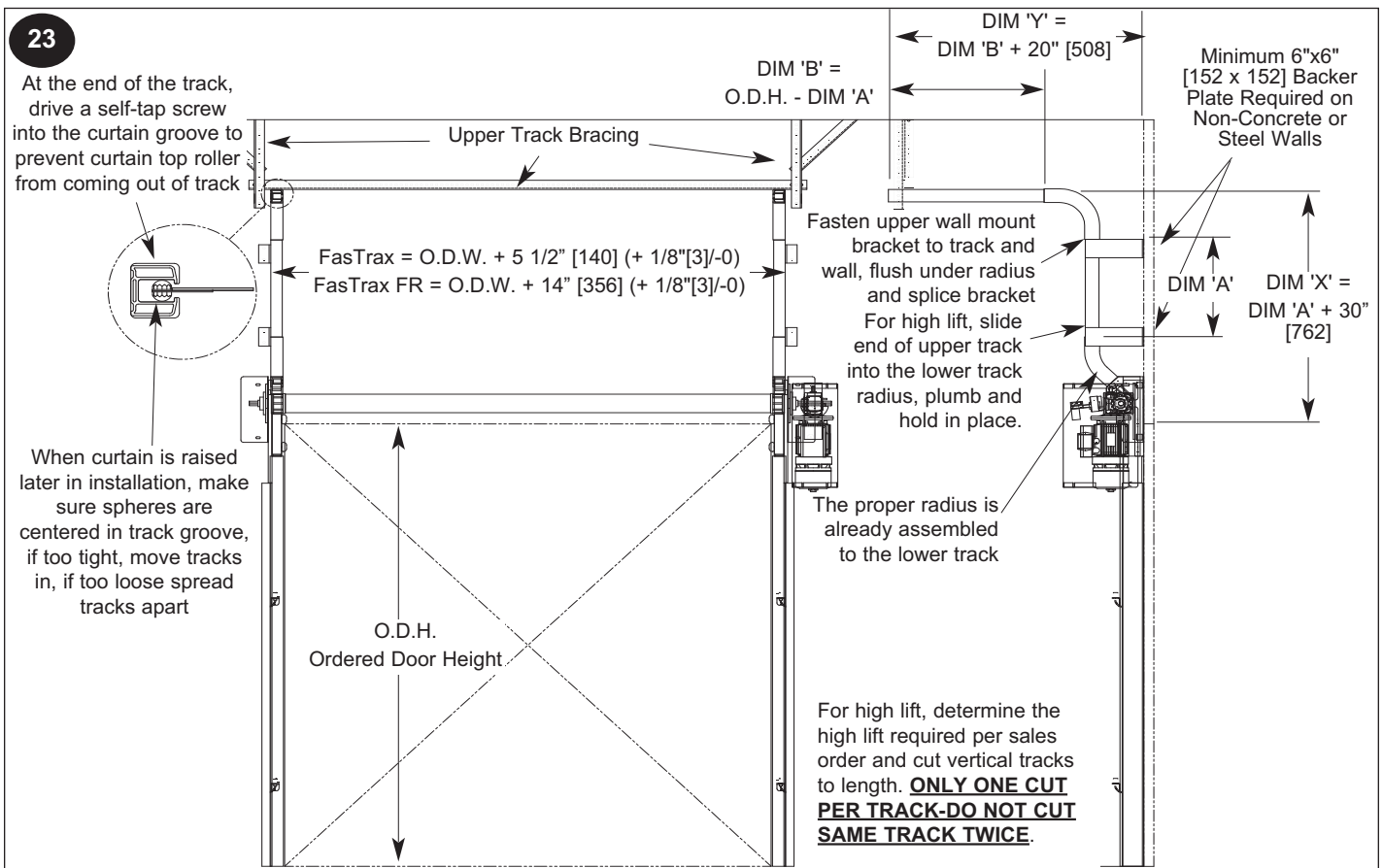


Upper Track

21



# STANDARD / HIGH - UPPER TRACK INSTALLATION



# ELECTRICAL INSTALLATION

## ⚠ WARNING!!!

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

## IMPORTANT!!!

A qualified electrician should install the wiring in accordance with local and national electrical codes. Use lockout and tagout procedures to avoid injury.

## ⚠ CAUTION !!!

When drilling holes in the box, DO NOT turn control box upside down or go too deeply into the box. Damage or debris may fall into electrical components causing failure or severe equipment damage.

## IMPORTANT!!!

In freezer and cooler applications where a conduit passes from a warm to cold temperature zone, the conduit must be plugged with epoxy. This will help prevent condensation from forming in the conduit. For more information, see Section 300-7a of the National Electric Code.

## IMPORTANT!!!

To reduce risk of injury or death, an earth ground connection **MUST BE** made to the green/yellow control box ground terminal. If metal conduit is used as the ground connector, an N.E.C. approved ground bushing and green/yellow wire **MUST BE** properly attached to the conduit for connection to the ground terminal.

**NOTE:**

Make sure to route the cable so that it does not interfere with the installation of the motor shroud. If the flexible conduit is too long for the installation, cut the protective outer casing and leave 16" to 20" [406 - 508] of wires. Do not connect the conduit to the fitting on the control box until correct conduit and wire length is achieved.

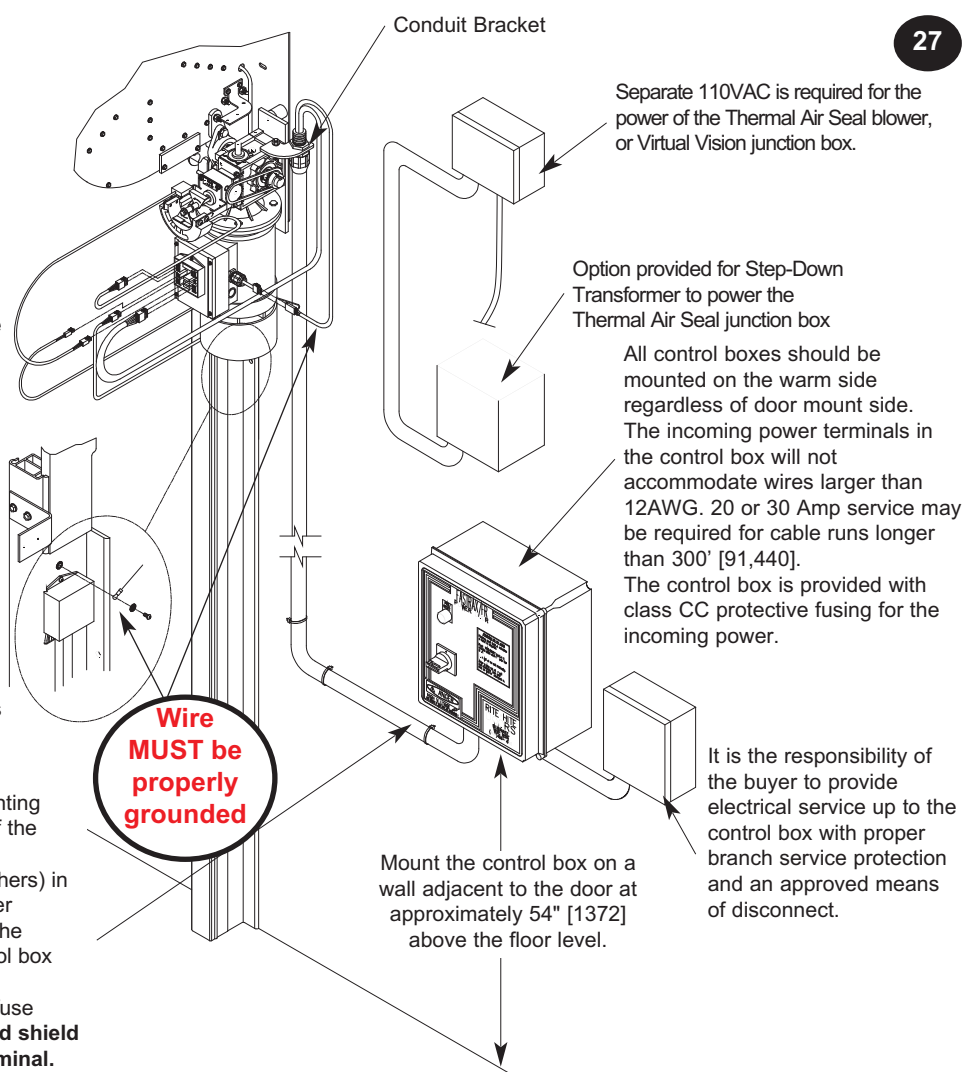
Local electrical codes may require the use of rigid conduit, rather than flexible conduit. If required, remove the control cables from the furnished flexible conduit, install the rigid conduit in its place and rewire. Make sure to remove and replace the conduit connector in the bottom of the control box.

Route all field installed wires so that separation is maintained between line voltage wires and low voltage class II wiring. Electrical prints included in the control box supersede any prints included in this owners manual on [Pages 28-35](#). Always check parts or control box for prints.

Run the control cable from the conduit mounting bracket to the conduit fitting in the bottom of the control box.

Drill a hole for the power supply cable (by others) in the bottom of the control box using the proper connection to maintain the NEMA rating on the enclosure. All holes drilled through the control box must be through the bottom of the box.

Incoming 3-phase power must connect into fuse holder terminals F1, F2, and F3. **Ground and shield wires must attach to the green/yellow terminal.**



# ELECTRICAL INSTALLATION

## ! WARNING!!!

**DO NOT DRILL HOLES ON TOP OF CONTROL BOX TO RUN CONDUIT, AS DUST PARTICLES AND MOISTURE MAY CAUSE DAMAGE TO ELECTRICAL COMPONENTS. THE SAFEST LOCATION IS AT THE BOTTOM. FAILURE TO DO SO, WILL VOID WARRANTY**

**28**

The i-COMM is used to control all functions of the door.

Note label inside control box that is a ready reference to the i-COMM inputs and outputs, [Page 13](#).

Remove labels after installation is complete



Red Bold Solid Line Indicates Un-Safe Area for Drilling Holes

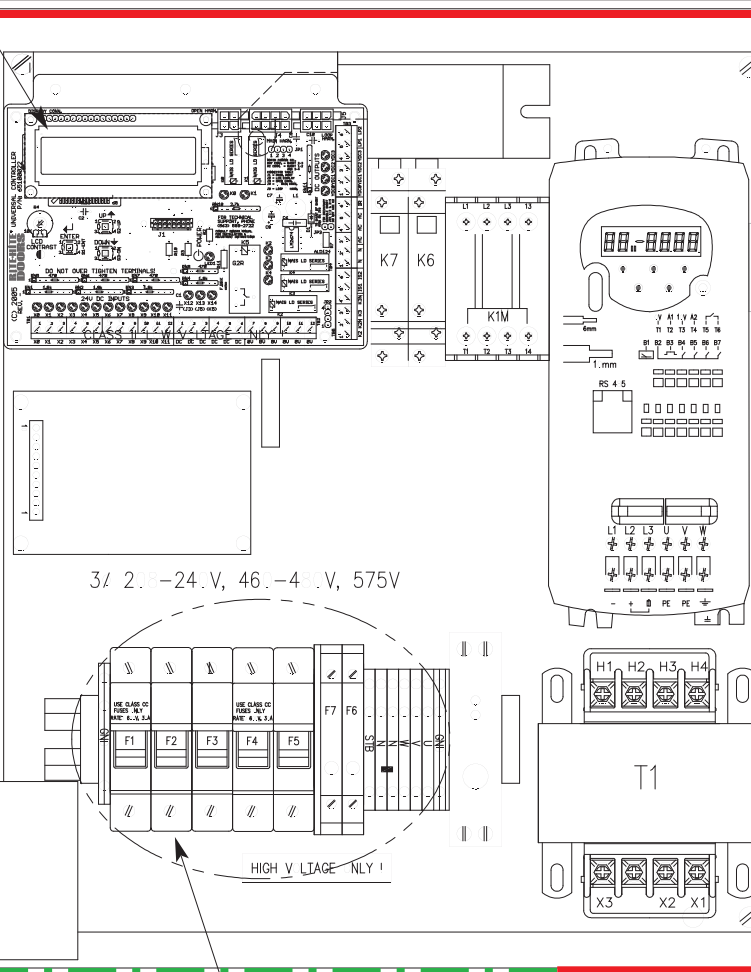
**RITE-NITE®**

Serial # Label

(PEN BUTT. N)

The green button opens and resets the door after a fault. To "OPEN", press and release the button. The i-COMM will automatically close the door after the preset time has expired.

(DISCONNECT SWITCH)



Serial # Label

Incoming Power Terminals F1, F2

22. V 1/ C.NFIGURATI.N

Incoming Power Terminals F1, F2, F3

Green Bold Dashed Line Indicates Safe Area for Drilling Holes

Red Bold Solid Line Indicates Un-Safe Area for Drilling Holes

The red Disconnect Switch stops door operation. The control is rotated to the "ON" position for normal door operation. To stop door operation rotate the control to the "OFF" position. Whenever the door operation is stopped by using the disconnect switch, you must do the following to resume operation.

1. Rotate the red disconnect switch to the "ON" position.
2. Press the "OPEN/RESET" button to reset and open the door.

# i-COMM LOGIC CHART



## FasTrax™ Series i-COMM™ LOGIC TABLE

NAME	INPUT FUNCTION	STATE TABLE *				COMMENTS	
		Func.	O	C	Ro		Rc
X0	Open Limit Switch		1	∅	∅	∅	On when door opened.
X1	Close Limit Switch		∅	1	∅	∅	On when door closed.
X2	Torque Reverse		1	1	1	1	Off to reverse door.
X3	2 ___ Activation Command - Open (4)		X	X	X	X	On to open door (4)
X4	Approach Open		X	X	X	X	On when door passes switch
X5	3 ___ Toggle Command (4)		X	X	X	X	On to toggle open or close (4)
X6	2 ___ Activation Command - Open (4)		X	X	X	X	On to open door (4)
X7	2 ___ Activation Command - Open (4)		X	X	X	X	On to open door (4)
X8	I-Zone™ Sensor #1		X	X	X	X	Off to reverse & hold open (3)
X9	I-Zone™ Sensor #2		X	X	X	X	Off to reverse & hold open (3)
X10	Photoeye - Reverse Door		X	X	X	X	Off when photoeye blocked
X11	Photoeye - Reverse Door		X	X	X	X	Off when photoeye blocked
X12	Open/Reset Switch (1)		X	X	X	X	On to reset from fault (1)
X13	Induction Loop Activation (1)		X	X	X	X	On to open door (1)
X14	Fault Input		1	1	1	1	Must be on for door to run

NAME	OUTPUT FUNCTION	STATE TABLE *				COMMENTS	
		Func.	O	C	Ro		Rc
K0	VFD signal: On to run open		∅	∅	1	∅	On when door is opening
K1	VFD signal: On to close & fast open		∅	∅	1	1	On when door is closing & fast open
K2	20___ Door Closing Output		∅	∅	∅	1	On when door is closing
K3	∅___ User Out (Interlock) (4)		∅	1	∅	∅	User selectable output (4)
K4	Fault Relay Output		1	1	1	1	On when not in fault
K5	Fault Relay Return		1	1	1	1	On when not in fault
YDC0	2 ___ User Out (Preannouncement) (4)		X	∅	∅	1	User selectable output (4)
YDC1	20___ User Out (4)		X	X	X	X	User selectable output (4)
YDC2	Photoeye Emitter Common		X	∅	∅	1	On to turn on photoeye emitters
YDC3	20___ User Out (4)		X	X	X	X	User selectable output (4)
J3-1	Fault (Flashing Push-button)		∅	∅	∅	∅	On when in fault
J3-2	I-Zone Alarm		X	X	X	X	On During I-Zone Alarm (3)

### Timer Adjustment

1. PRESS [ENTER], Controller will stop and fault door.
2. Press [UP] until desired timer is displayed, display will read "Set Close Timer" or "Set Preannouncement".
3. Press [ENTER], Display will show current timer value.
4. Using [UP] & [DOWN] keys select desired time.
5. Press [ENTER] to return to Main Menu.
6. Press [DOWN] until exit is displayed.
7. Press [ENTER] to save values.
8. Reset Door.

Preannouncement Timer is the amount of time the Preannouncement to close output will be on before door closes.

Close Timer is the amount of time the door will remain open before the preannouncement to close timer activates

### \* KEY:

- O = Open State      ∅ = OFF
- C = Closed State    1 = ON
- Ro = Running Open    X = May be ON or OFF
- Rc = Running Close

### NOTES:

- (1) Device operation can be changed through menu. Consult i-COMM manual for additional details.
- (3) Optional, used only for I-Zone sensor system
- (4) Default setting shown in table & comments. Record any changes on space provided. Consult i-COMM manual for additional details.

# INVERTER PROGRAMMING

## FasTrax™ Inverter Program Instructions

When in Status mode, pressing and holding the “M” MODE key for 2 seconds will change the display from displaying a speed indication to displaying load indication and visa versa.

Pressing and releasing the “M” MODE key will change the display from status mode to parameter view mode. In parameter view mode, the left hand display flashes the parameter number and the right hand display shows the value of that parameter.

Pressing and releasing the “M” MODE key again will change the display from parameter view mode to parameter edit mode. In parameter edit mode, the right hand display flashes the value in the parameter being shown in the left hand display.

Pressing the “M” MODE key in parameter edit mode will return the drive to the parameter view mode. If the “M” MODE key is pressed again then the drive will return to status mode, but if either of the “UP” or “DOWN” keys are pressed to change the parameter being viewed before the “M” MODE key is pressed, pressing the “M” MODE key will change the display to the parameter edit mode again. This allows the user to very easily change between parameter view and edit modes whilst commissioning the drive.

**"WARNING: Consult factory before changing any parameters not listed in this table."**

Parameter Number	Name	Default Value	New Value	Units
00.03	Acceleration Rate 1	5.0	0.5	s/100 Hz
00.04	Deceleration Rate 1	10.0	1.0	S/100 Hz
00.10	Security Status	L1	L2	
00.18	Preset Speed 1	0.00	0.00	Hz
00.61	Torque Detection Level	0	50	%

## FasTrax - Status Modes

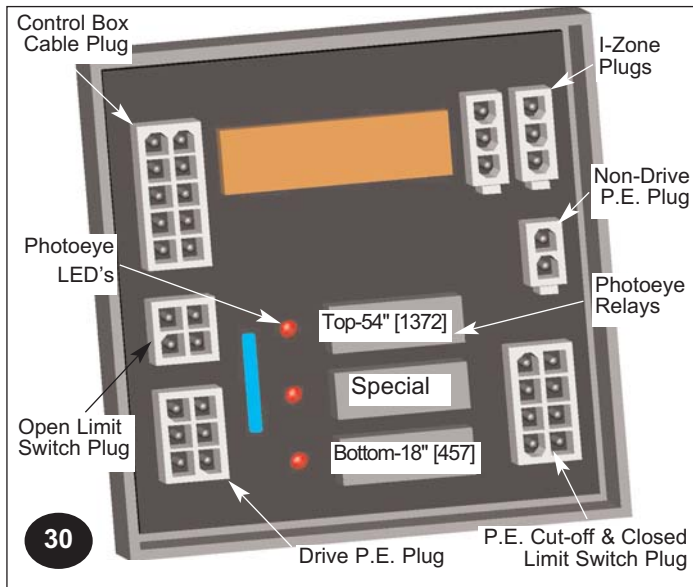
Left Display	Status	Explanation
rd	Drive ready	The drive is enabled and ready for a start command. The output bridge is inactive.
ih	Drive inhibited	The drive is inhibited because there is no enable command, or a coast to stop is in progress or the drive is inhibited during a trip reset.
Er	Drive has tripped	The drive has tripped. The trip code will display in the right hand display.
dC	Injection braking	DC injection braking current is being applied to the motor.
Fr		Drive output frequency in Hz
SP		Motor speed in RPM
Ld		Load current as a % of motor rated load current
A		Drive output current per phase in A



# INVERTER ERROR CODES

FasTrax - Inverter Error Codes		
Trip Code	Condition	Possible Cause
tr UU	DC bus under voltage	Low AC supply voltage, check power source. Low DC voltage when supplied by an external DC power supply.
tr OV	DC bus over voltage	The DC bus (Pr. 84) has exceeded 800V-460V or 400V-230VAC, check the following: If DC bus climbs while door is not running, disconnect CE filter with power off. If fault is intermittent when door is not running try to set Automatic reset of faults. (PR. 73 = 10.34, PR. 74=10.36, PR. 63 = 3, PR 64 = on) If fault is while door is closing add braking resistor, see Control Box Explosion for a list of parts. Deceleration rate set too fast for the inertia of the machine. Mechanical load driving the motor.
tr It.br	I <sup>2</sup> C on braking resistor	Check door closing speed. If fault is while door is closing, add braking resistor, see Control Box Explosion for parts breakdown. See tr OV for more troubleshooting.
tr It. AC	I <sup>2</sup> C on drive output	Check that radial spacing and that they are square, or sideframe spacing. Motor wiring, check for loose connections or shorts. Make sure door cannot move if brake is engaged.
tr OI.AC	Drive output instantaneous over current	Door is mechanical binding or jammed. Check that radial spacing and that they are square, or sideframe spacing. Motor wiring, check for loose connections or shorts. Make sure door cannot move if brake is engaged. Disconnect CE filter with power off. Insufficient ramp times. Phase to phase or phase to ground short circuit on the drives output. Drive requires autotuning to the motor. Motor or motor connections changed, re-auto tune drive to motor MUST wait 10 seconds to reset after trip occurs
OI.br	Braking resistor instantaneous over current	Excessive braking current in braking resistor Braking resistor value too small. MUST wait 10 seconds to reset after trip occurs
O.SPd	Over speed	Excessive motor speed (typically caused by mechanical load driving the motor)
tunE	Auto tune stopped before complete	Run command removed before autotune complete
It.br	I <sup>2</sup> -t on braking resistor	Excessive braking resistor energy
It.AC	I <sup>2</sup> -t on drive output current	Excessive mechanical load. Drive requires re-autotuning to motor. High impedance phase to phase or phase to ground short circuit at drive output.
O.ht1	IGBT over heat based on drives thermal model	Overheat software thermal model
O.ht2	Over heat based on drives heatsink	Heatsink temperature exceeds allowable maximum
th	Motor thermistor trip	Excessive motor temperature
O.Ld1	User +24V or digital output overload	Excessive load or short circuit on +24V output The Enable/Reset terminal will not reset an O.Ld1 trip. Use the Stop/Reset key.
OUL.d	I x t overload	Reduce motor current
hot	Heatsink/IGBT temp is high	Reduce ambient temperature or reduce motor current
br.rS	Braking resistor overload	See Advanced user guide
EEF	Internal drive EEPROM failure	Possible loss of parameter values
PH	Input phase imbalance or input phase loss	One of the input phases has become disconnected from the drive
rS	Failure to measure motors stator resistance	Motor too small for drive Motor cable disconnected during measurement
O.cL	Overload on current loop input	Input current exceeds 25mA
tr HF ##	Hardware Fault	The drive has detected a hardware problem, verify wiring is correct. This cannot be fixed in the field, replace the drive.
HF 05 trip		No signal from DSP at start up
HF 06 trip		Unexpected Interrupt
HF 07 trip		Watchdog failure
HF 08 trip		Interrupt crash (code overrun)
HF 11 trip		Access to the EEPROM failed
HF 20 trip		Power stage - code error
HF 21 trip		Power stage - unrecognized frame size
HF 22 trip		OI failure at power up
HF 25 trip		DSP Communications failure
HF 26 trip		Soft start relay failed to close, or soft start monitor failed or braking IGBT short circuit at power up
HF 27 trip		Power stage thermistor fault
HF 28 trip		DSP software overrun
HF xx trip		HF 1-4, 9-10,12-19,23,24,29,30 Are not used

# CURTAIN INSTALLATION



## IMPORTANT!!!

If motor rocks excessively, tighten bumpers.

### DRIVE TUBE PHASING

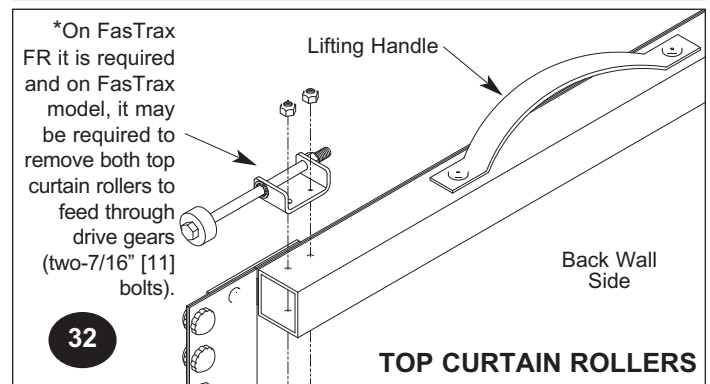
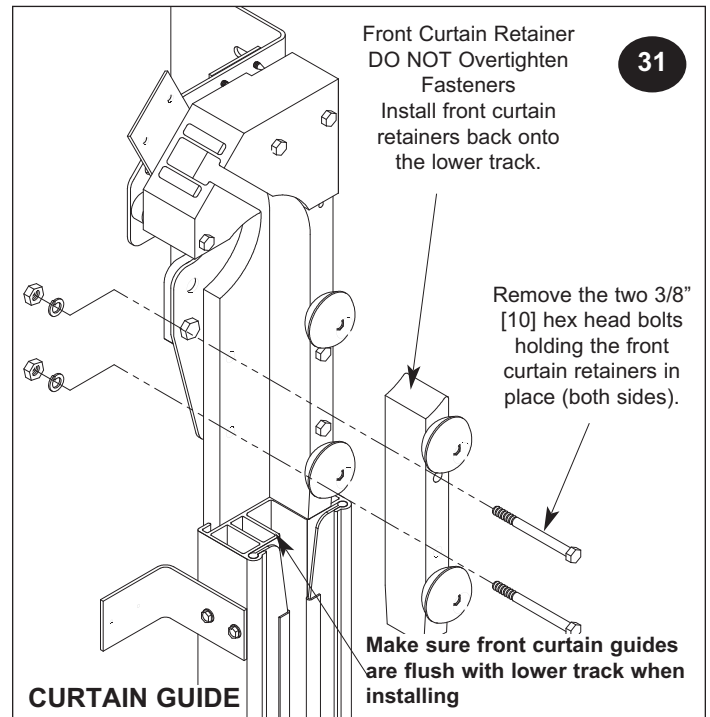
1. With control box installed, turn disconnect to "ON".
2. When pressing the "OPEN" button, the drive tube should rotate counter-clockwise on right hand drive door and clockwise on left hand drive door. (The back of the tube should be turning toward the ceiling.)
3. If the drive tube rotates in the opposite direction, switch wires in motor terminals U & V.

### CURTAIN INSTALLATION (Determine phase first)

1. Place curtain in front of the opening.
2. Disengage brake by tightening the handle on the brake.
4. Using a lift, raise curtain and feed top drive sphere around the back side of the drive gear and into the radius and/or track, *Figure 33*.
5. Rotate drive tube to drive curtain through the drive gears.
6. Loosen brake release handle and secure to clip.

## WARNING!!!

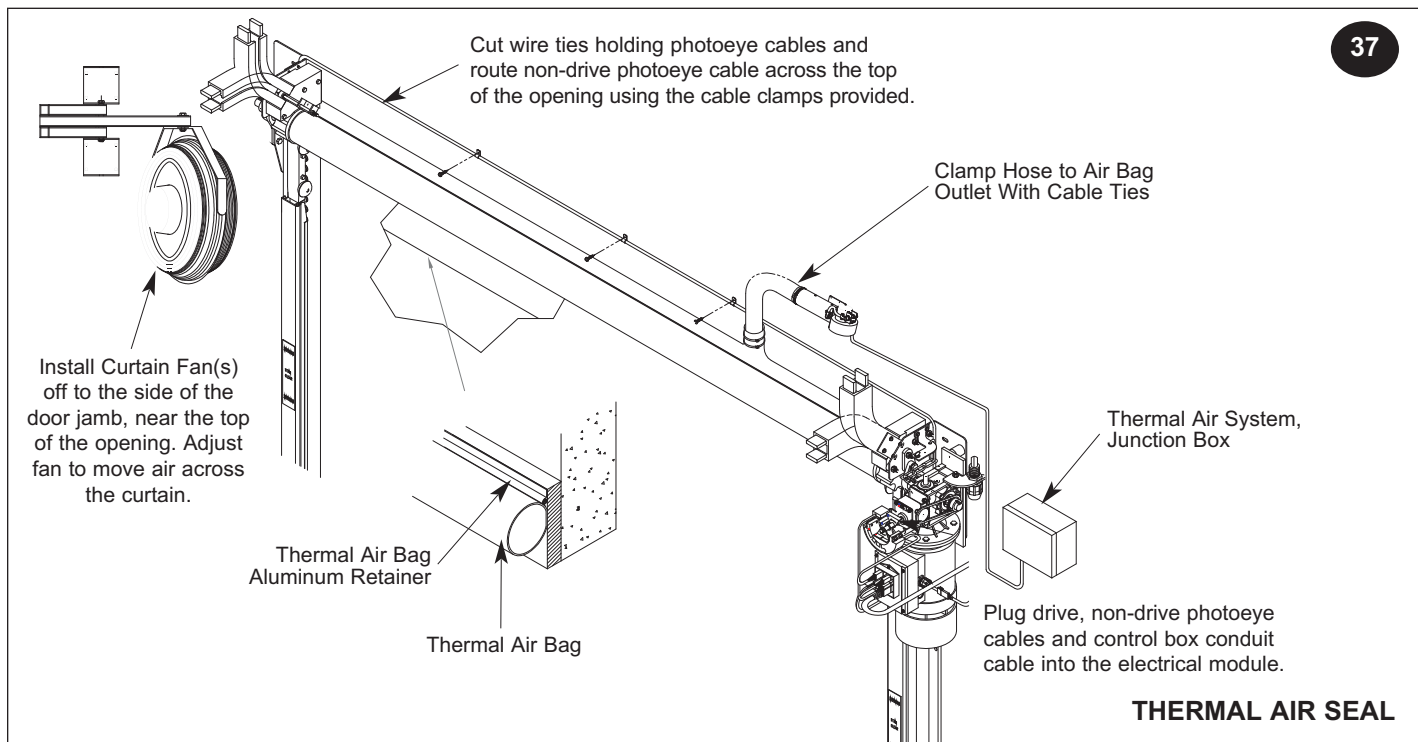
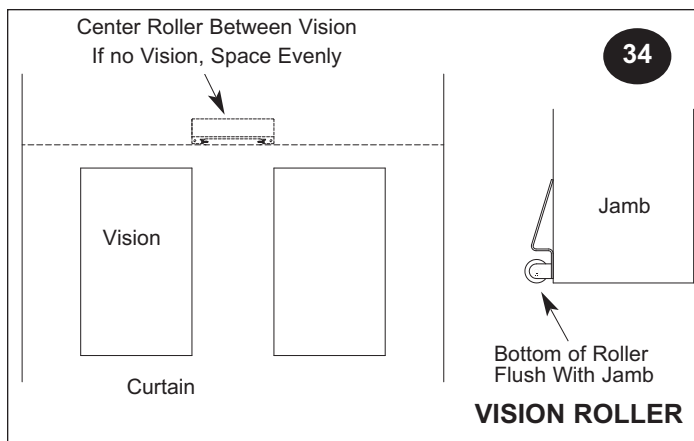
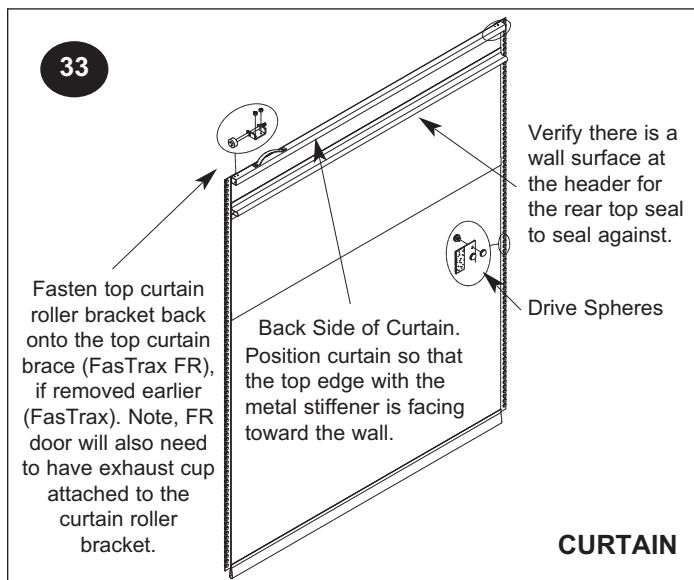
The curtain may close very quickly if the brake is fully released. Releasing the brake partially will allow the door to close smoothly. Failure to restrict the curtain speed, can result in damage to product or injury to personnel.



## IMPORTANT!!!

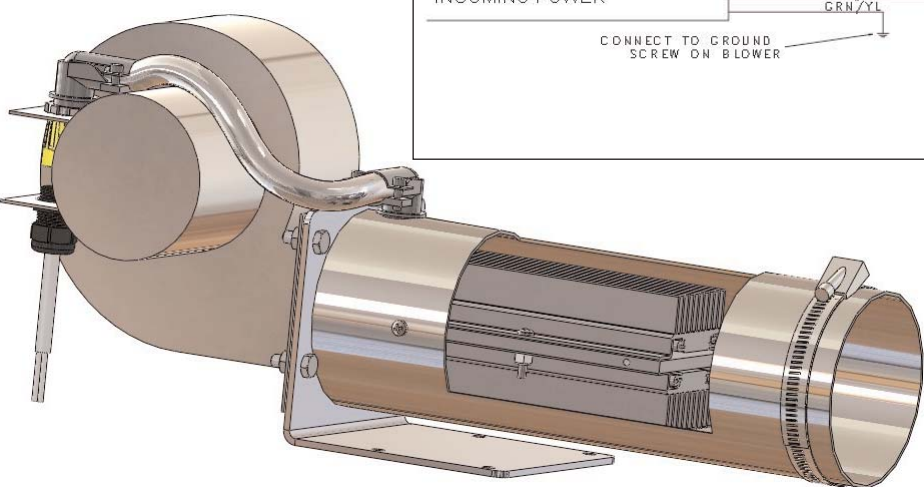
\*Top curtain roller bracket should be positioned such that the roller shaft is toward the curtain and away from the wall.

# CURTAIN INSTALLATION



Curtain Installation

# THERMAL AIR SYSTEM



INCOMING POWER

BLK#1  
BLK#2  
GRN/YL

CONNECT TO GROUND SCREW ON BLOWER

MOTOR WIRE 1  
MOTOR WIRE 2

HEATER WIRE 1  
HEATER WIRE 2

HEATER 1

HEATER WIRE 1  
HEATER WIRE 2

HEATER 2

38

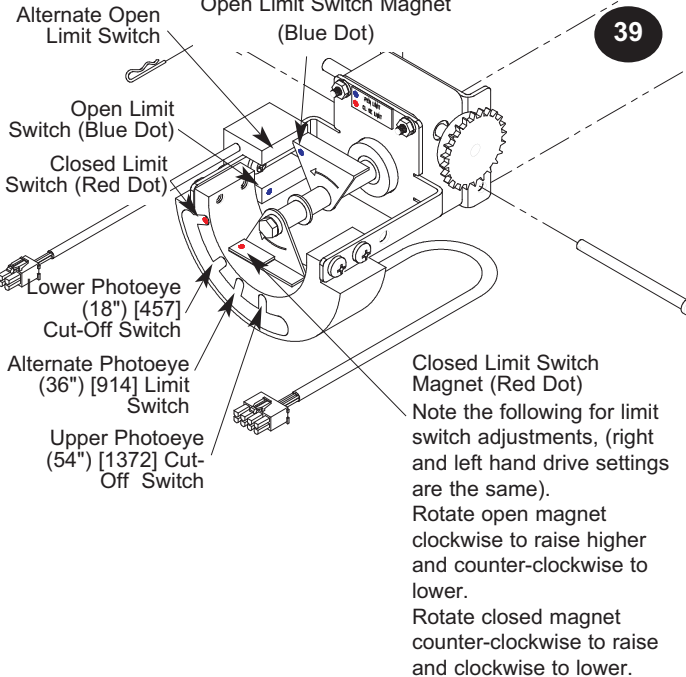
**THERMAL AIR SEAL BLOWER INSTALL**

1. Fasten blower to the air bag and to the wall.
2. Fasten Thermal Air System junction box to the wall and wire blower.
3. The Thermal Air seal outlet is high temp fabric, do not replace or add to it

## OPERATE DOOR

1. With curtain partially fed into the tracks, press the "OPEN" button, when the door is at or near the open position, stop and turn power off to the door and set the open limit switch by rotating the open magnet arm until it lines up with the open proximity switch. (X0 i-COMM input should illuminate)
2. If the curtain travels past the jamb and/or out of the drive gears, the brake handle will need to be tightened to release the brake. Lower the curtain to the desired open position, making sure curtain drive spheres are fed equally level through the gears.
3. Loosen brake handle to engage brake.
4. With power on, turn open magnet arm until it lines up with the open proximity switch (X0 i-COMM input should illuminate).
5. Press the green "OPEN" button, the door should travel close. \*\* Use caution not to close door to far, the black edging should not impact the floor.
6. Stop and turn power off to the door when the curtain is at or near the closed position. Rotate the closed magnet arm until it lines up with the proximity switch. (X1 i-COMM input should illuminate) Turn power on.
7. Press the "OPEN" button and verify open limit is set properly.
8. Allow door to auto-reclose and verify closed limit is properly set.

**NOTE:** Each 1/2" [13] of travel on the limit switch magnets is equal to approximately 12" [305] of curtain travel.



39

Alternate Open Limit Switch

Open Limit Switch Magnet (Blue Dot)

Open Limit Switch (Blue Dot)

Closed Limit Switch (Red Dot)

Lower Photoeye (18" [457] Cut-Off Switch)

Alternate Photoeye (36" [914] Limit Switch)

Upper Photoeye (54" [1372] Cut-Off Switch)

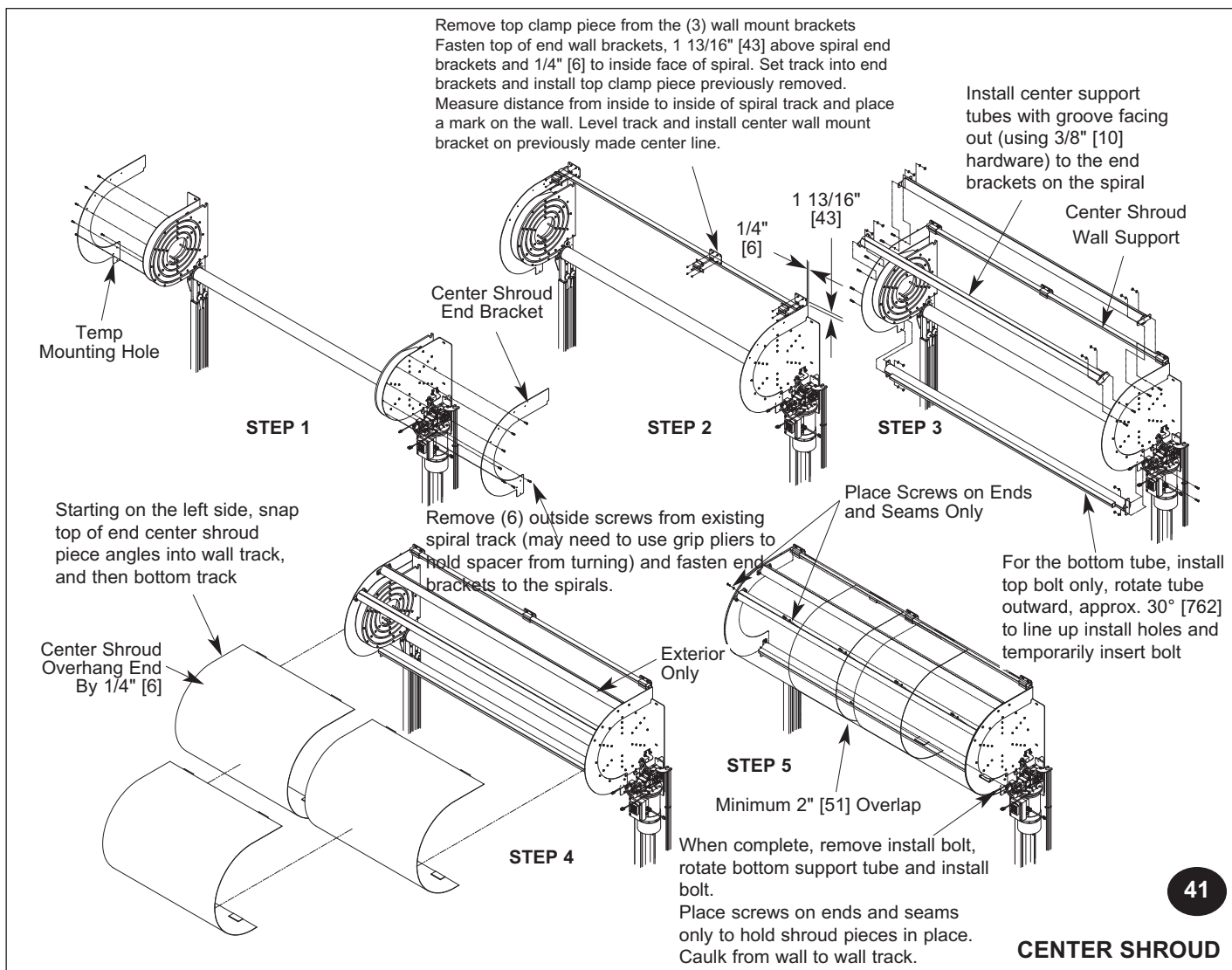
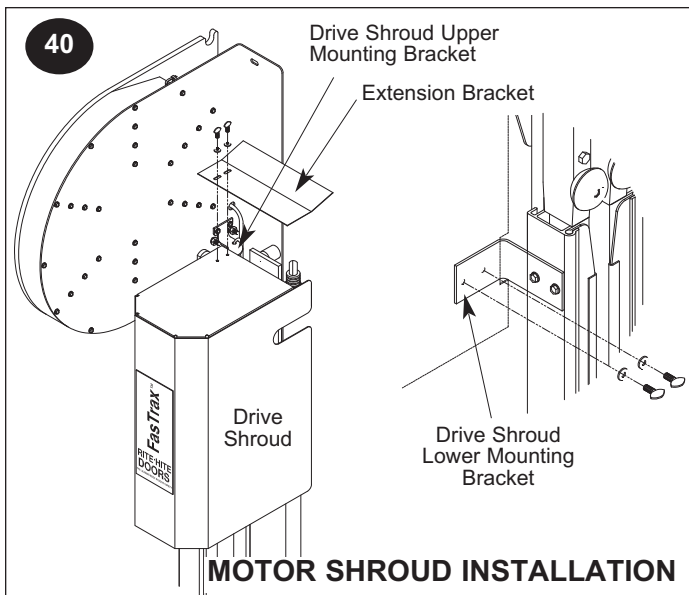
Closed Limit Switch Magnet (Red Dot)

Note the following for limit switch adjustments, (right and left hand drive settings are the same).  
Rotate open magnet clockwise to raise higher and counter-clockwise to lower.  
Rotate closed magnet counter-clockwise to raise and clockwise to lower.

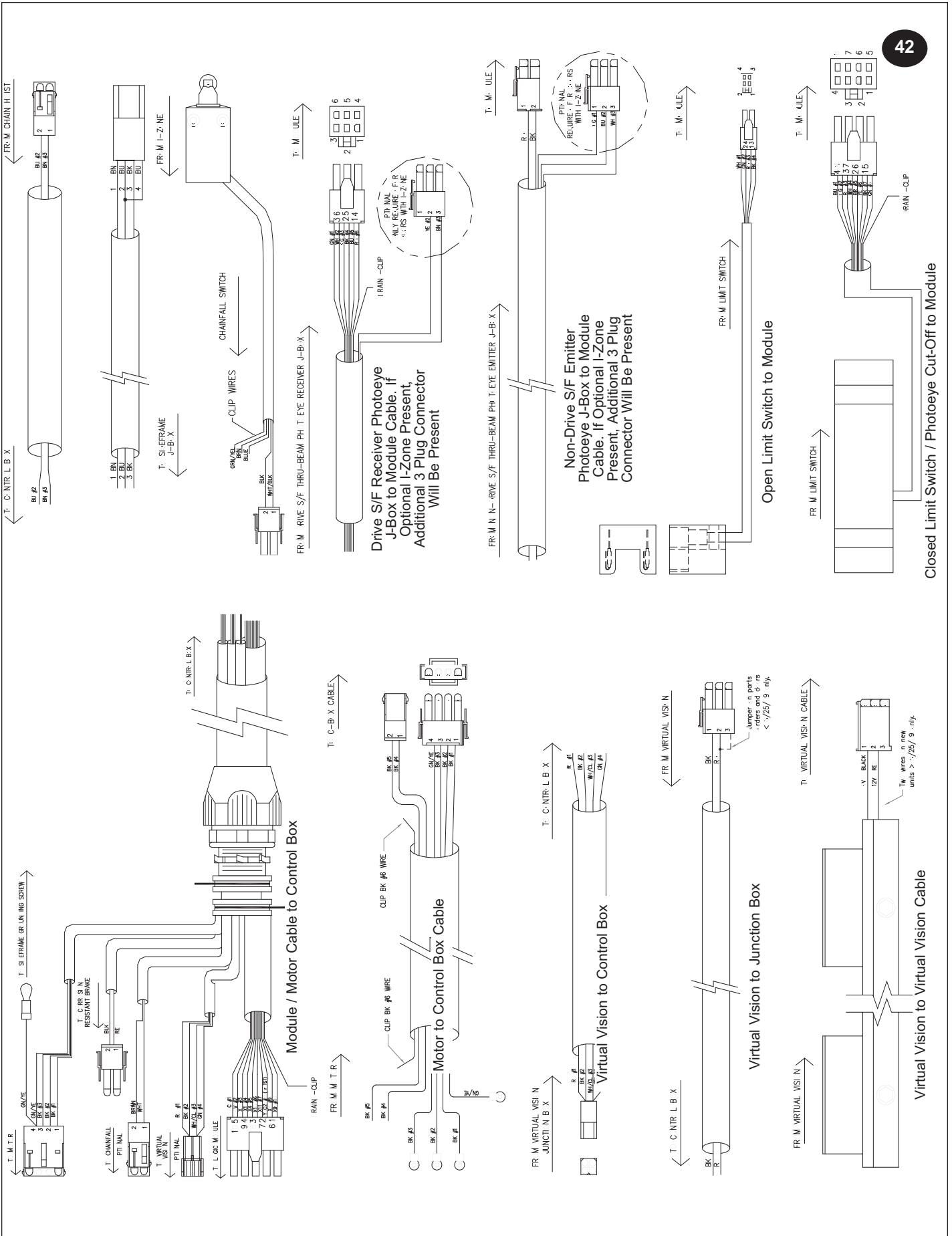
# SHROUD INSTALLATION

## IMPORTANT!!!

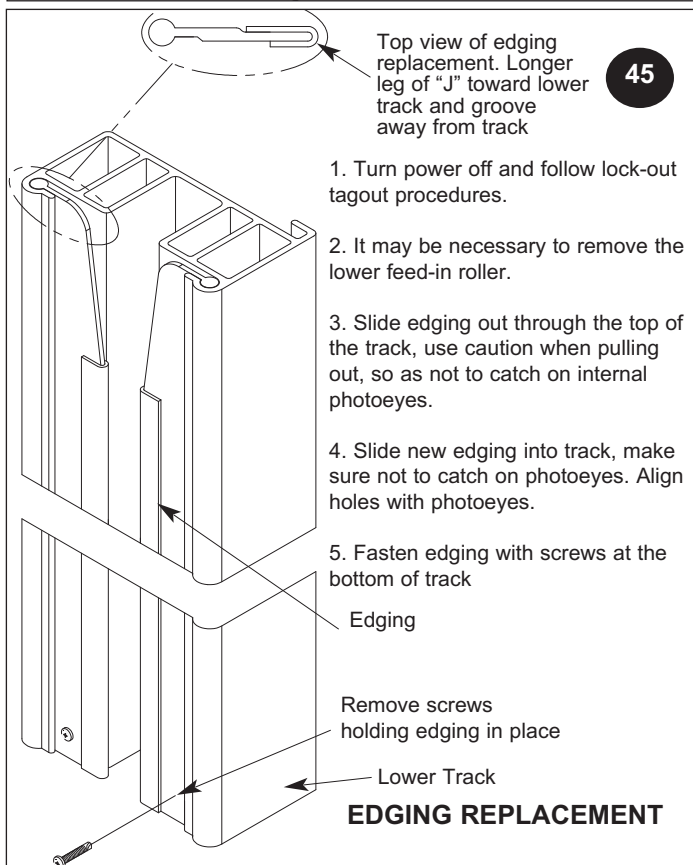
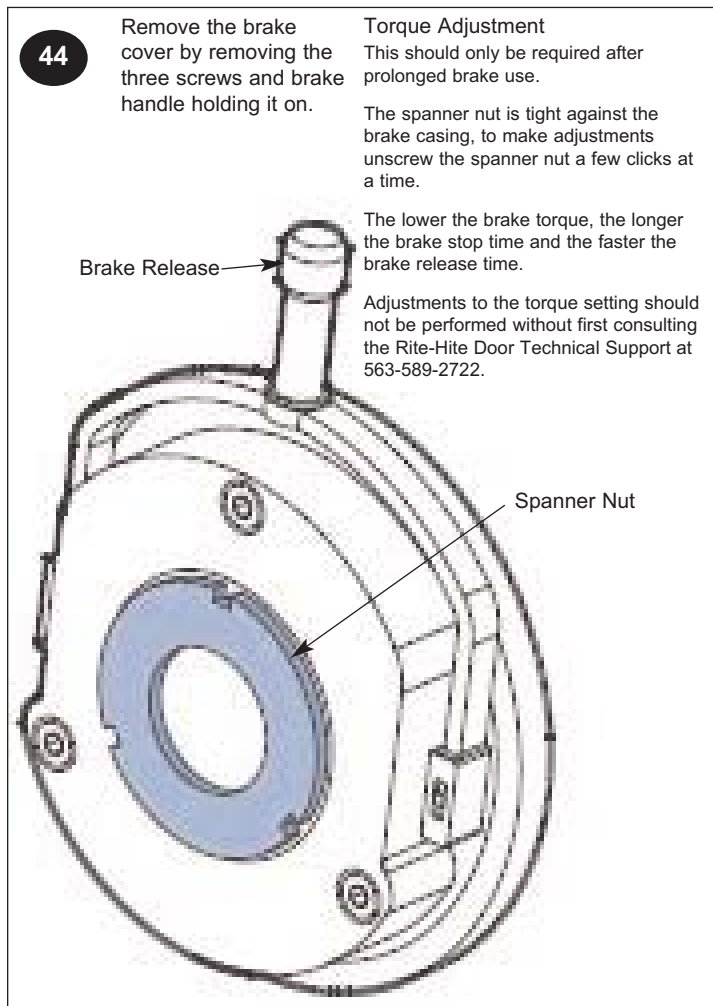
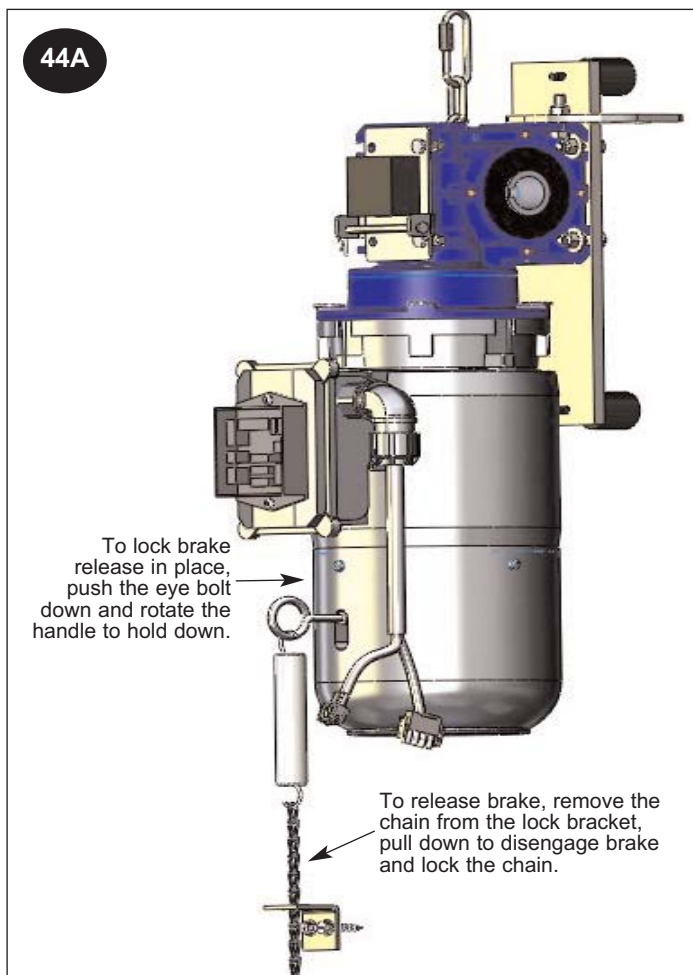
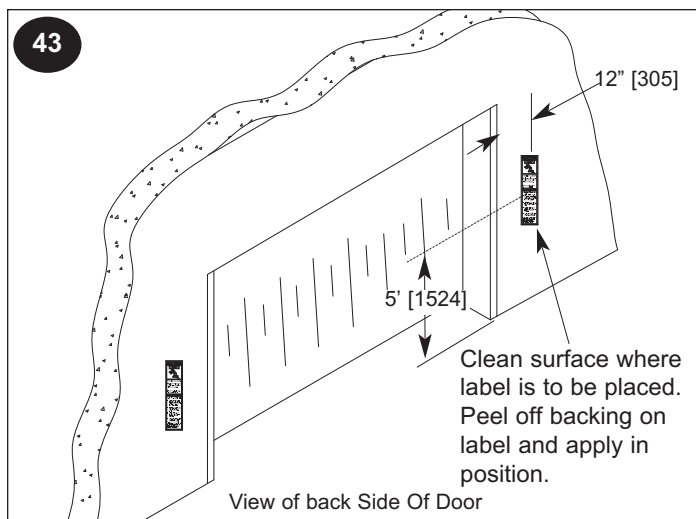
Curtain needs to be stopped at or before it reaches the top of the jamb.



# ELECTRICAL CABLE INSTALLATION



# BRAKE ADJUSTMENT

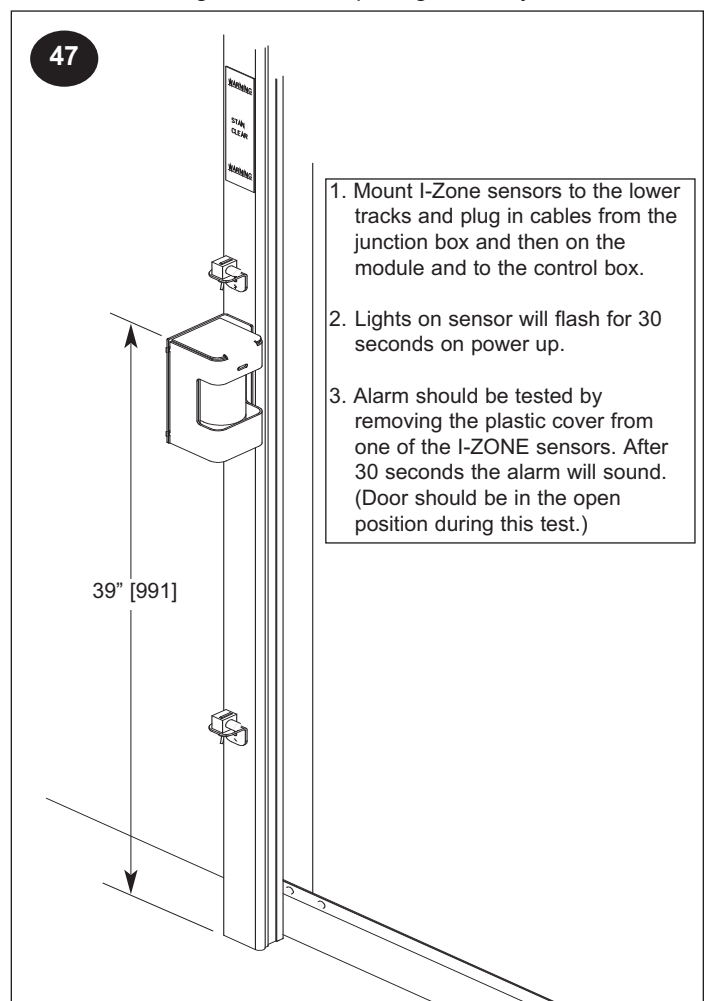
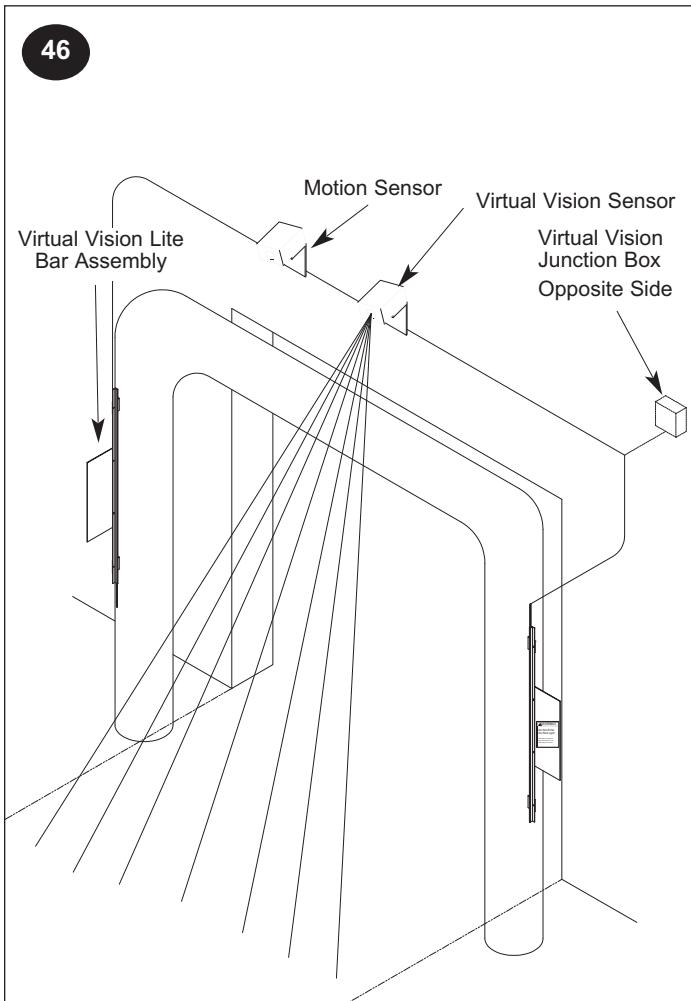


# OPTIONAL VIRTUAL VISION / I-ZONE INSTALLATION

**NOTE:** Virtual Vision is standard on Freezer / Cooler doors provided with the Insulmax curtain. There will be a motion sensor mounted on each side of the door, as well as 2 red LED light bars on each side of the opening on both sides. The motion sensors will detect motion on the opposite side of the curtain to warn oncoming traffic of a possible pedestrian or forklift on the opposite side.

1. If door is equipped with Thermal Air Seal Step Down Transformer junction box, plug in Virtual Vision cable. If not, there will be a separate junction box strictly for the Virtual Vision.
2. Virtual Vision light bar assemblies should be located on each side of the doorway and in clear view of oncoming traffic. They should be installed approximately 3' [914] off the floor, adjacent to the doorway (e.g. goal posts or wall) and in a location that is protected from potential impact damage.
3. Motion sensors can be installed above the opening on Radial doors or off to the side if Vertical, 45° Tilt, High or Standard lift.
4. Sensors should be programmed for a 2 second hold time and bi-directional detection.
5. Direct sensors so they DO NOT extend beyond the width of the door.
6. Plug cables together and wire into control box.

7. To avoid cross talk when changing the settings on the Virtual Vision or activation sensors when using the remote controls, Rite-Hite offers the following three options:
  - a) The BEA remote control allows you to set a unique security code for each sensor. That way, you would enter the code for the sensor you are interested in changing, and it will only change the settings for that sensor. To accomplish this, temporarily disconnect the activation sensor(s) from its power supply (at the i-COMM), use the remote to set a security code (e.g. "1111") for the Virtual Vision sensor(s), then power up all sensors. The activation sensor will have the default security code "0000" for its settings, and the Virtual Vision sensor will have its new security code when changing its settings (use unlock/lock sequence). There should be no cross-talk with the remote's instructions when using this approach. Make sure to record these values for future reference.
  - b) If you do not wish to use security code settings, you can simply power down one unit (at the i-COMM) while setting the other unit, and then do the same thing with the other unit. This is similar to option "a", although if you want to make subsequent changes to the settings, you would need to go through the power down procedure again.
  - c) If you do not wish to power down the units or use security settings, you can physically cover one of the units while programming the other unit. Any opaque material (e.g. cardboard) should work. However, with units typically mounted high above the opening, this may be difficult.





# HOIST - BRAKE RELEASE - WELD PLATE INSTALLATION

**48**

Lubricate drive tube shaft with an anti-seize lubricant

1. With power off, test operation of chain hoist
2. Pull brake chain and lock in place to release
3. Operator Chain Hoist

Place sprocket onto drive shaft and tighten set screws

Route chain around sprockets  
Plumb and level chain hoist, make sure chain is taut

Use a straight edge to align chain sprockets. Failure to do so may result in noise and premature wear.

Wire chain hoist power cable into control box

**Exterior Switch**

Mark and drill hole locations and fasten hoist to the wall. Unit can be rotated 180° to fit.

**Interior Switch**

**BRAKE RELEASE / CHAIN HOIST INSTALLATION**

Attach spring to the bracket and chain to the spring.

Fasten chain lock bracket to wall, so that it will hold chain in place to release the brake. Trim excess chain.

**49**

Interior Chain Fall Shroud

For opposite drive, remove top bracket, rotate 180° and re-fasten

**50**

Fasten (4) photoeye brackets to the track at the pre-drilled holes

Photoeye Hardware

Photoeye cable behind guard

Lower Track

**51**

Measure from bottom of track to each hole location and position weld plates on the steel jamb at these locations and weld in place. If steel is not present at the track hole locations, weld where possible. Note: There MUST be a fastener every other hole minimum, approximately 4' [1219].

Position upper weld plates so they catch the wall mount bracket holes  
If No Steel Above the Opening, It Must Be Provided

4 1/2" [114]

Jamb

Fill gaps between weld plates with tape backed foam

Steel Member

Weld Plate

20" [508]

3" [76]

9" [229]

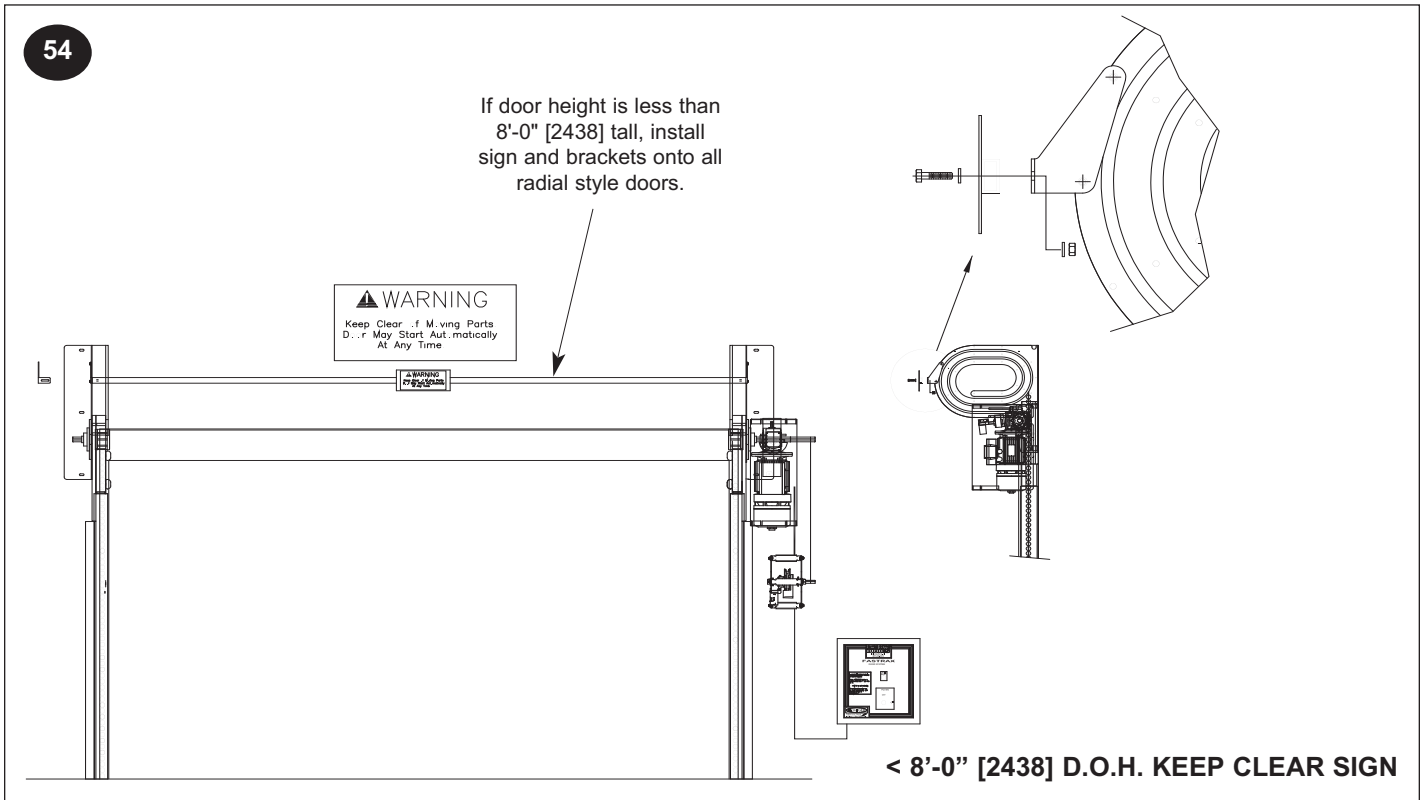
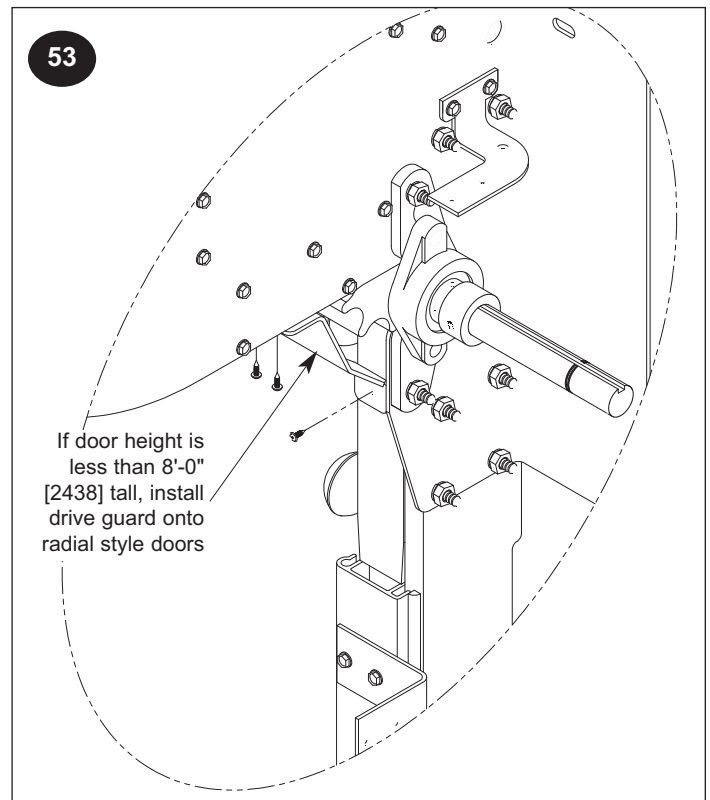
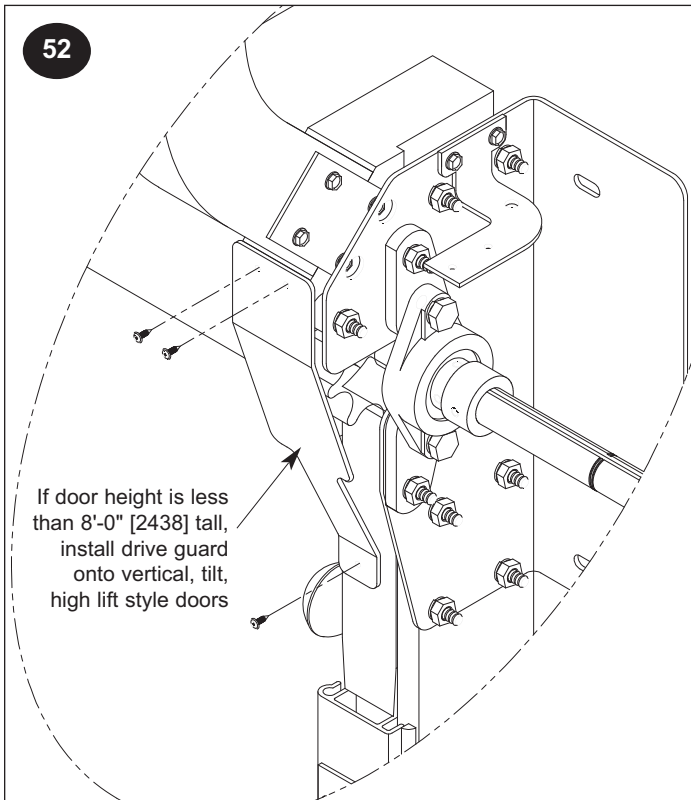
**JAMB DETAIL**

Lower Weld Plate

Fasten lower track to weld plates with self-drill/tap screws and washers provided

**WELD PLATE INSTALLATION**

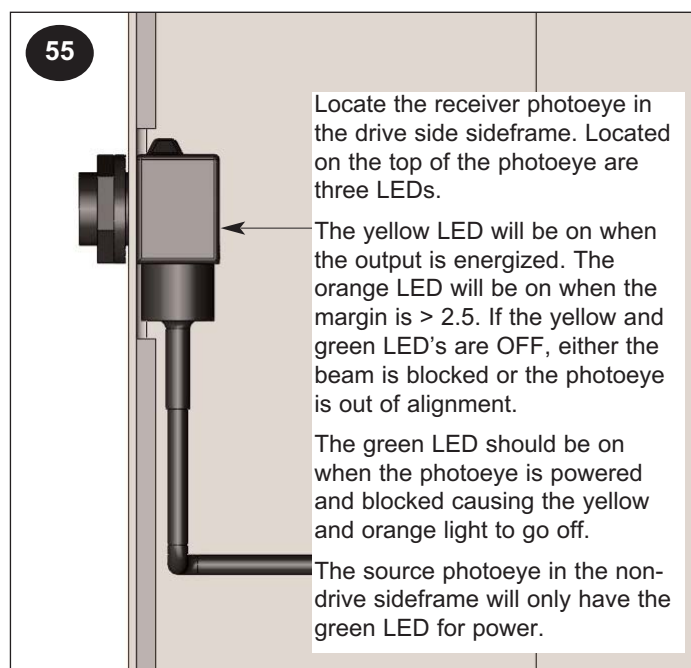
# LESS THAN 8'-0" [2438] DOOR OPENING HEIGHT



# OPERATING PROCEDURE / FINAL CHECKLIST

## VERIFY DOOR OPERATION / CHECKLIST

1. It is recommended that the operation of all controls on the FasTrax/FR be verified monthly.
2. The door operations are controlled by a Universal Controller. The controller is set-up and programmed during testing at the factory. Unless you are a **RITE-HITE DOORS, INC.** authorized service technician, you should not attempt to change the program.
3. A quick way of determining that the door is ready to operate, is to open the control box and look at the row of (X) green Input LED's on the i-COMM and the label to verify proper state.
4. Are door opening dimensions correct ?
5. Tracks shimmed as required?
6. Tracks aligned when installing wall fasteners ?
7. Are the pillow block bearing set screws tightened to 66 to 80 in.-lb. ?
8. Check for proper line voltage ?
9. Are all mounting bolts tight ?
10. All wires connected for the photoeyes ?
11. Are loose wires secured away from moving parts?
12. With the power on, press the "OPEN" button, the door should open and close automatically after a short delay. To adjust the amount of door open time, the setting must be changed in the i-COMM controller, [Figure 28, Page 12](#).
13. Operate and observe the door opening to make sure that it fully opens. Observe the closing action to make sure that the door operates smoothly, and fully closes without excessive curtain ripple, [Figure 39](#).  
If it is necessary to adjust either position, shut the power off and adjust the proper open or closed limit switch.
14. While the door is closing, block the reversing photoeyes. The door should reverse direction and move to the open position, and then continue to operate.
15. Using end user material handling equipment, approach door slowly and verify that all the activation devices that are being used are operating properly. **DO NOT** attempt to drive through a door in which the green button is flashing.
16. Use caution (hock horn) and look in a directions when approaching a door that is closing and ensure that the door will reverse before proceeding.
17. Pedestrians should be advised to use man doors when present and to not lean into the door way.
18. A fault will occur if the optional non-powered chain hoist chain is pulled, simply press the green flashing "OPEN/RESET" button to return to normal operation.
19. Motor shroud installed.
20. **Ground and Shield wires have been properly terminated.**



# MAINTENANCE PROCEDURES

RITE-HITE DOORS, INC. PLANNED MAINTENANCE								
Model FASTRAX®								
CUSTOMER:	JOB#			SERIAL#			DATE:	
Planned Maintenance Task	Recommended P.M. Intervals (Time Shown In Months)							Inspect and Perform the Following
	1	6	12	18	24	30	36	
Activation		x	x	x	x	x	x	Operate all devices to verify proper operation.
Curtain Fans		x	x		x		x	Verify that Curtain Fans are powered and working. Make sure that the fans are positioned properly and are removing condensation from the curtain.
Auto Re-Feed		x	x		x		x	Verify auto re-feed is operational.
Brake	x		x		x		x	Verify that brake stops the door at open and closed positions as well as when stopped in the middle of travel. To move the curtain manually, turn the brake release handle to the disengaged position. The curtain should be able to be moved manually. If brake is making noise, adjust.
Controls / Wiring			x		x		x	Clean, check all connections with disconnect off. Make sure all wires are free from moving parts.
Curtain		x		x	x		x	Inspect for wear or damage, patch immediately to prevent condensation or frost buildup. Clean with warm soapy water. Check drive spheres, if missing or damaged, replaced. Check top roller.
Door Assembly			x		x		x	Perform visual inspection for damage. Tighten all hardware. Replace any worn labels. Use air hose to remove dust and debris.
Door Operation			x	x	x	x	x	Operate door and make sure all operations are functioning properly.
Drive Tube			x		x		x	Verify drive tube gear is centered over track groove. Make sure bearing set screws and mounting bolts are tight.
Gearbox			x		x		x	Check gearbox fluid level, fill with 90 weight if low. Check snap rings and/or lock collar set screws.
Limit Switch Assembly			x		x		x	Check open and close positions, adjust as required. Check photoeye cutoff switches. Lubricate chain, sprockets and check alignment.
Lintel Seal			x		x		x	Verify lintel seal is sealing wall properly.
Motor			x		x		x	Check junction box and plug connections.
Non-Powered Opening Option			x		x		x	With power off, verify chain hoist opens door. Lubricate chain, sprockets and check alignment.
Photoeyes		x	x	x	x	x	x	Verify both photoeyes reverse the curtain. LED's on module or I-COMM should go on/off. Clean emitter and receiver lens.
Thermal Air Seal		x	x		x		x	Verify air bag is inflated, free of tears and providing an adequate seal against curtain and the wall. If torn, patch immediately to prevent condensation buildup. Verify warm air existing exhaust holes.
Tracks / Radial (upper and lower)	x	x	x	x	x	x	x	Perform visual inspection. Lubricate radials and tracks with food grade synthetic grease (Super Lube). It may be required to remove the existing grease prior to adding new. Verify proper width and tighten all hardware. Check foam seal if present. Inspect track retention edging, replace if cracked.
Track Retention Edging			x		x		x	Verify virtual vision is functioning properly. Red LED's should be lit if movement on opposite side.
Virtual Vision			x	x	x	x	x	Inspect vision for tears or separation.
Vision (not on FR doors)		x	x		x	x		Clean with warm soapy water.
Radial and Track Lubrication								Lubrication of the radials and tracks is the sole responsibility of the end user. If door is mounted in a dirty environment, it may be required to remove the existing grease prior to adding new.

## MAINTENANCE INFO

High-Temperature Synthetic Grease with PTFE (Polytetrafluoroethylene)

The synthetic oil base in this food-grade silica-thickened grease, increases the time before the next application. It also contains a PTFE additive that reduces friction and waterproofs metal surfaces, preventing rust and corrosion. NSF rated H1 for applications with incidental food contact. Temperature range is -45° to +450° F [-45° to +232° C]. Color is white.

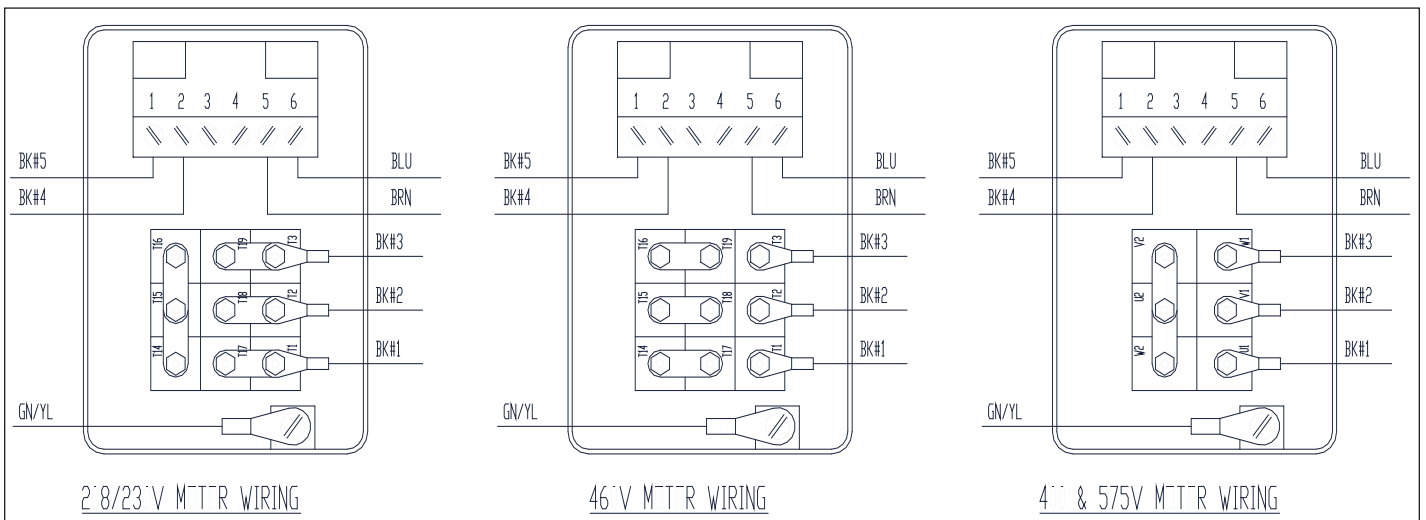
McMaster Carr # 1378K33 - 14.1oz Cartridge

# TROUBLESHOOTING

DEFINITION	FUNCTION
Activation	For activation questions, refer to the Activation Manual and inputs X5 & X6.
Brake	The brake is powered by 110VAC, if brake does not stop door when open or closing or if there is excessive noise, see brake adjustments on <a href="#">Page 21, Step 44</a> .
Breakaway	If the curtain is separated from the lower tracks, simply press the open button and the door will auto-refeed back into the tracks without tools or intervention. If a major separation occurs the door may need to be turned manually to prevent damage to the curtain.
Conduit Cable	If supplied conduit cable is too short, DO NOT splice wires, as the cable is shielded to prevent electrical noise from entering the control box i-COMM universal controller. Issues regarding noise of this nature will not be covered under warranty. Contact Aftermarket for replacement. Make sure the motor is grounded and the braided (drain) wire is properly grounded to prevent electrical noise.
Curtain	The curtain is driven by the drive spheres and the drive tube. a) If drive spheres are missing from curtain, repair or replace. b) If curtain struggles to raise or lower or is baggy across the opening, verify tracks are proper distance: FasTrax = O.D.W. + 1/2" [13] or FasTrax FR = O.D.W. + 9" [229]. c) Check to make sure tracks are lubricated with food grade synthetic grease (Super Lube). d) If curtain is making contact with the wall when closing, verify lower tracks are not too close together and that lintel roller is present and properly installed.
Disconnect Switch	The disconnect switch is in line with fuse holder terminals F1, F2, F3, and removes power from the entire control box, except for terminals F1, F2, F3.
Drain Wire	<b>Verify that drain wire is terminated properly, failure to properly terminate the drain wire, may result in sporadic reversals, photoeye and other issues due to either static electricity or electrical noise and void warranty.</b>
Drive Side Switch	The drive can be switched from right hand to left hand by performing the following: a) Remove and switch conduit mounting bracket to opposite side. b) Remove and switch motor mount bumper bracket. c) Remove gearbox limit switch bracket and move to outside holes. d) Remove and switch limit switch driven sprocket. e) Remove and switch drive and non-drive photoeye cables. f) New drive shroud is required.
Drive Tube	If drive spheres make excessive clicking noise, make sure tube drive gears are centered over track grooves.
FasTrax or FasTrax FR i-COMM Controller™	FasTrax is the standard door and FasTrax FR is the freezer / cooler door with Thermal Air System. The i-COMM controller is a circuit board that controls the actions of the door. There is a digital display that shows the cycles, status and position of the door at any time during its travel. For input and output function signals, refer to chart on <a href="#">Page 13</a> . Settings can be changed for re-close or pre-announce timers, interlocks, special activation commands, among many others, refer to instructional manual included. a) Verify i-Comm is receiving 24VDC from power supply. b) Verify 8 pin connector is fully engaged onto i-comm board and pins/wires are not loose. c) Input X0 - Open Limit will be on when the switch and magnet are lined up (Blue dots). d) Input X1 - Closed Limit will be on when the switch and magnet are lined up (Red dots). e) Input X2 - Torque Reverse needs to be on for the door to operate. f) Input X10 - Lower Photoeye will be on unless photoeye is blocked or not aligned. g) Input X11 - Upper Photoeye will be on unless photoeye is blocked or not aligned. h) Input X14 - Fault needs to be on for the door to operate.
Inverter	See <a href="#">Pages 14-15</a> for proper parameter settings.
Limit Switches	The Open, Closed, and Photoeye limit switches are a normally open device and should only be closed when the magnet is in-line with the switch. If the switch is closed when it is not in-line with the magnet, check all plug and pin connections to make sure they are not bent and/or replace the switch. a) If the curtain travels past the open limit switch, dis-engage brake and turn drive tube to place bottom of curtain at the top of the jamb and set open limit by placing magnet at the open switch and verify X0 i-COMM input is on. Engage brake. b) If the curtain travels past the close limit switch, dis-engage brake and turn drive tube to place bottom of curtain such that it seals the floor and set closed limit by placing magnet at the closed switch and verify X1 i-COMM input is on. Engage brake. c) To adjust open limit switch, place door in the open position, and align magnet with the open limit switch, by rotating the open magnet plate. d) To adjust the closed limit switch, lower door so the curtain bottom loop is sealing on the floor and align magnet with the close limit switch, by rotating the open magnet plate. e) Photoeyes are shut off as the door closes and the close magnet passes the photoeye cut-off switches. f) Operate door and test operation. g) If limit switch chain jumps teeth, make sure it is lubricated. h) If open and closed limit input LED's are both on at the same time, the door will go into a fault. j) If door closes too far and does not see the closed limit switch, it will torque reverse, open and go into fault.
Module	The module is located on the cover of the motor junction box where the limit switches, photoeyes, optional I-Zone and cable from control box harness is wired. a) X11 and upper red LED will go off when the upper (54") [1372] photoeye is tripped or as the limit magnet passed by. b) X10 and lower red LED will go off when the lower (18") [457] photoeye is tripped or as the limit magnet passed by. c) The center red LED is not used. d) When installing door and it is not operating normally, verify all pins are in the proper position in the plug. e) Verify pins are seated properly in the plugs.
Motor	If "OPEN" button is pressed and the door closes, phasing is reversed, switch wires in terminals, V and W. Make sure the motor is properly grounded to prevent electrical noise.
Non-Powered Opening	If issues arise with the non-powered opening chain hoist, check the following: a) If power outage, release brake and pull chain on hoist to open door. b) If chain hoist chain is pulled while door is powered, the door will go into fault mode (green light flashing). c) If chain hoist chain is pulled, reset door by pressing the green flashing button.
O.D.H. or O.D.W.	O.D.H. = Ordered Door Height or O.D.W. = Ordered Door Width
Open/Reset Push Button Pressure	The open/reset push button function is when the button is pressed, a command to open the door is given. If the curtain is blowing out because of high wind or negative pressures, check the following: a) The tracks MUST be mounted at O.D.W. + 1/2" [13] for FasTrax and O.D.W. + 9 1/2" [241] for FR door. If mounted wider, excessive curtain wear may occur, if too narrow, curtain buckling or billowing will be greater. b) Check to make sure the curtain has all the drive spheres in place. c) Exterior doors are equipped with a garnet bag in the bottom loop to protect from the elements. d) Stiffer track edging is standard on exterior doors.
Re-Close Timer	The door can be set to close from 2 to 255 seconds, follow i-COMM adjustment instructions.

# TROUBLESHOOTING

DEFINITION	FUNCTION
Photoeyes	<p>The photoeyes are wired to the 24VDC circuit and are wired as normally closed when there is power to the unit and the emitter photoeye is aligned with the receiver photoeye. There are 3 lights on the receiver and one on the emitter. Green is for power, yellow and orange are for proper alignment. The photoeyes will reverse or hold the door open when the photoeye beam is blocked. When the beam is not broken, the door will auto-reclose.</p> <p>If photoeyes require adjustment, check that sideframes are square to the wall.</p> <p>a) Power to Brown (DC) and Blue (OV) wires.                      b) Relay wires Black to Blue should be closed when photoeye is aligned and open when not aligned.                      c) When open, i-COMM verifies photoeye inputs are off. If on, door will fault. If off, test is ok, emitter's turn on.                      d) Verify module LED's correspond with photoeye activation, LED on module should light up when close limit switch magnet is lined up with the photoeye cut-off switch at all 3 locations.                      e) Orange and yellow light on the Receiver should be on when aligned.                      f) Green light on the Emitter indicates the unit is powered up.                      g) Input X11 and Module upper red LED will go off when the upper (54") [1372] photoeye is tripped or as the limit magnet passed by.                      h) Input X10 and Module lower red LED will go off when the lower (18") [457] photoeye is tripped or as the limit magnet passed by.</p>
Power Supply	Power Supply is powered by 120VAC from the F1 fuse and delivers 24VDC to the i-comm.
Virtual Vision	<p>FasTrax FR door comes standard with Virtual Vision, when motion is sensed via Falcon motion sensors on the opposite side of the curtain, the Virtual Vision red LED's will illuminate to notify driver of movement on the opposite side of the curtain.</p> <p>a) It is normal for the YDC3 output to flash on i-COMM during door operation.</p>
Voltage Change	<p>To change the voltage, see step below:</p> <p>a) Change transformer taps, fuses per electrical diagram.                      b) Change motor wiring per junction box diagram.                      c) Replace Inverter with proper voltage.</p>
Door does not close	<p>a) Verify inputs X2 and X4 are on.                      b) Verify inputs X5, X6 or X7 are not on, if on, remove wire from terminal to determine what is keeping light on.                      c) Verify outputs K1, K2, K4, K5 and YDC2 are on or coming on to signal inverter to close door.                      d) Check status on i-comm display to see why door is staying open ("<i>Photoeye Blocked</i>" or "<i>Photoeye Failure</i>", etc.), should read "<i>Door Closing in 'x' seconds</i>".                      e) Verify inverter display is changing frequency.                      f) Verify chain hoist chain is not pulled and switch is not tripped.                      g) Verify brake handle is not released.                      h) Verify X10 and X11 are on and that the photoeyes are lined up and not blocked.                      j) Verify proper incoming power is reaching inverter at L1, L2 and L3.                      k) Verify as the curtain gets close to the photoeyes that they are being shut off. Make sure the magnet is 1/8" [3] to 3/16" [5] from the switch and that the switch is working.                      m) If run timer occurs, check for binding or obstructions. Tracks may need to be lubricated to reduce friction.</p>
Door does not open	<p>a) Verify inputs X2 and X4 are on.                      b) Verify input X3, X5, X6 or X6 are coming on when activation device is being used.                      c) Verify outputs K3, K4, K5 and YDC2 are on or coming on to signal inverter to open door.                      d) Check status on i-comm display to see why door is staying closed, should read "<i>Door Opening</i>".                      e) Verify inverter display is changing frequency.                      f) Verify brake handle is not released.                      g) Verify proper incoming power is reaching inverter at L1, L2 and L3.</p>
Door slams open/close	<p>a) Verify the limits properly set.                      b) Verify X0 input coming on when door reaches open position.                      c) Verify X1 input coming on when door reaches closed position                      d) Verify sprocket set screws are tight and the chain moves when the drive tube is turned.                      e) Verify the open and close magnet paddles move when the drive tube is turned.                      f) Verify the magnet is within 1/8" [3] - 3/16" [5] from the switches when it passes by.                      g) Verify the outputs are turning off when the X0 &amp; X1 inputs light up.                      h) Verify the inverter is changing speeds on the display.                      j) Verify the phasing is correct. The door should open when the green open button is pressed.                      k) Verify the brake is engaged and not released ?                      m) Verify the key been installed on the gearbox / shaft.                      n) Verify the proper ratio gearbox is being used.</p>





# ACTIVATION WIRING

REVISION HISTORY			
REV	DESCRIPTION	ECN	DATE
A	UPDATE FALCON	5705	7/25/2008

### INTERLOCK

**Door1**

K3	X?
K3N	DC
X?	K3
DC	K3N

2 Door Standard Interlock

Note: Consult i-COMM manual to see which inputs can be assigned interlock in function. Connect K3 to whichever input is selected to become interlock in. No other devices should be connected to this input.

\*Terminal must be assigned to Interlock through i-COMM menu on both doors. (i.e. If X3 is to be assigned a function of Interlock input, the menu ("Input Func X3") should be set to a value of "0")

Output YK3 (K3 relay) should remain at the default setting of "0" on both doors.

**Door2**

X?	DC
DC	K3
K3	K3N

### HEATED PULL CORDS

DC	Photoeye SW.
X6**	SW.
AC	HTR.
N	HTR.

Heated Pull-Cord Station

### INDUCTION LOOP

LP1	Wire(a)
LP2	Wire(b)
Wire	Wire(a)
Wire	Wire(b)

Loop Wiring

### PHOTOEYES

DC	BK
N	BU
AC	BN
X6*	OG

Retroreflective or Thru Beam Receiver

### BEA - Falcon, IS-87, EagleHM

AC	1	EU or US
N	2	RD
DC	3	BK
X6**	4	WH
	5	GN
		YE
		GY

BEA Motion Sensors

### MS Sedco - D38

AC	1*
N	2*
X6**	3
DC	4

D38 Motion Sensor

\*If switched, green lite will be on, and F2 fuse blown.

### STROBES & ALARMS

STB	Beacon/Strobe Wire
N	Wire

Warning Device Beacon/Strobe Additional Relay Required 120VAC U.L. Listed .30 Amp Max

STB	120VAC Alarm Wire
N	Wire

Audible Alarm

### PUSHBUTTONS & PULL-CORDS

DC	Switch SW
X6**	SW

Wire Each device as shown.

### RADIO CONTROLS

N	BK	Receiver
DC	WH	
AC	RD	
X6**	YE	

300MHz Radio Control

N	BK	Receiver
DC	WH	
AC	RD	
X6**	OG	

40MHz Radio Control (1, 2 or 4 Button)

### NOTES:

THIS DRAWING ASSUMES INPUT FUNCTIONS ARE SET TO FACTORY DEFAULTS. CONSULT I-COMM MANUAL FOR DETAILS

WARNING: NEVER CONNECT MOTION SENSORS TO A TOGGLE INPUT

Terminals "X6", "X7" are automatic reclose.  
 Terminals "DC" are DC common for inputs.  
 Terminals "AC" and "N" are 24VAC terminals.

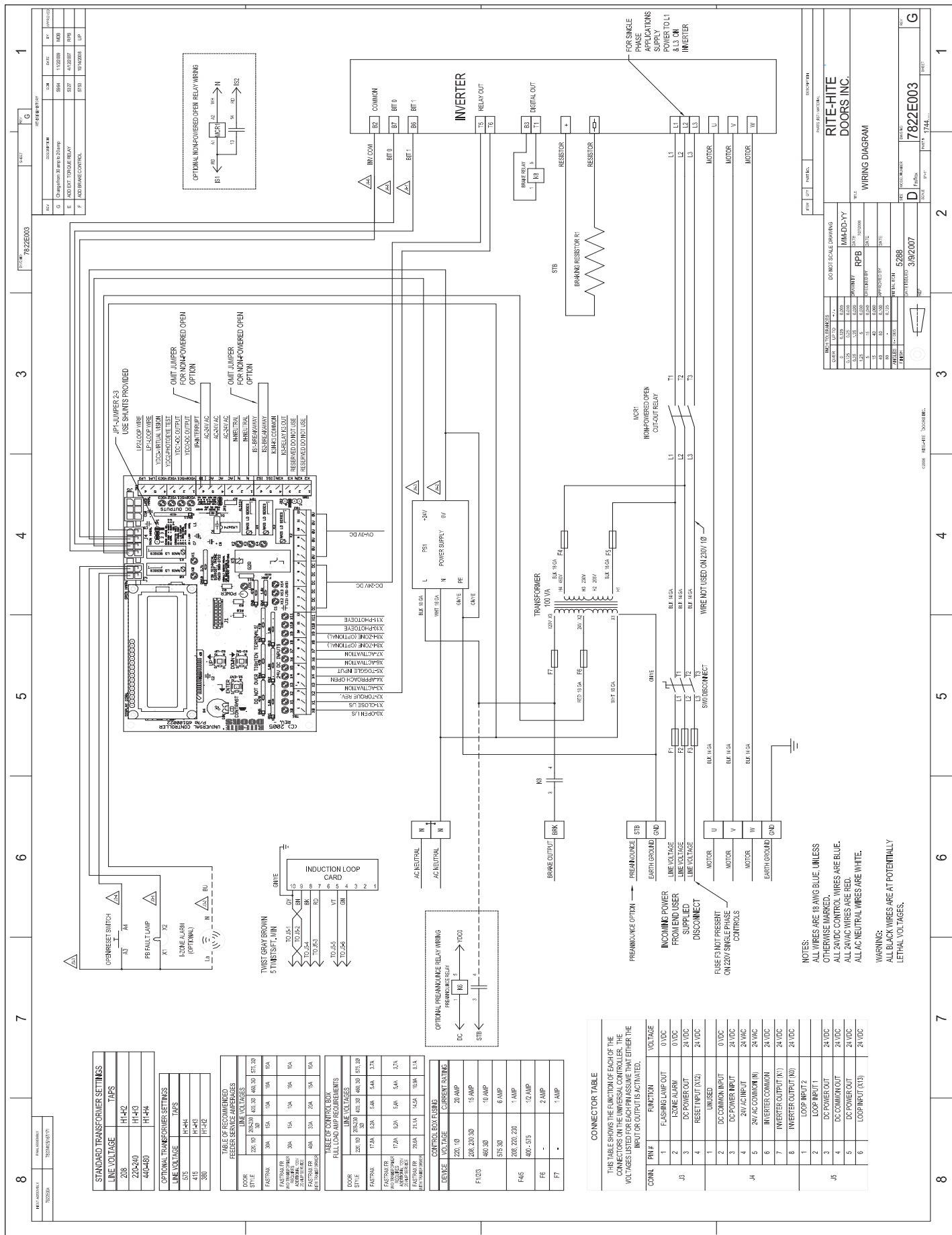
\*Terminal X7 is a default  
 \*\*For true toggle operation use terminal "X5".  
 (Pull cords, push button or radio controls only.)  
 \*\*\*For Reverse hold open connect sensors to UNUSED input.  
 (i.e. X3, X6, or X7 and assign that input a function of "6" in the i-COMM menu. Multiple sensors can be connected in parallel.

Consult i-COMM manual for additional instructions.

ITEM	QTY	PART NO.	DESCRIPTION
PARTS LIST / MATERIAL			
<b>RITE-HITE DOORS INC</b>			
TITLE: <b>FasTrax SERIES ACTIVATION WIRING i-COMM</b>			
DO NOT SCALE DRAWING		MM-DD-YY	DATE
DRAWN BY		RPB	7/24/2008
CHECKED BY			DATE
APPROVED BY			DATE
INITIAL ECN		5288	
DATE ISSUED		3/9/2007	
SCALE	8"=1"	PART #	1744.XXXX
REV	A	DWG NO	7822E011
SHEET		SHEET	



# 230/460V - ELECTRICAL WIRING DIAGRAM



REV	DESCRIPTION	DATE	BY
G	Original 20 amp & 20 amp	11/02/09	MB
E	Added Torque Relay	4/20/07	RFB
F	Added Brake Control	10/19/09	LP

STANDARD TRANSFORMER SETTINGS	
LINE VOLTAGE	TAPS
208	H1-H2
230-240	H1-H3
440-480	H1-H4

OPTIONAL TRANSFORMER SETTINGS	
LINE VOLTAGE	TAPS
475	H4-H5
575	H4-H5
730	H4-H5

TABLE OF RECOMMENDED FEEDER SERVICE AMPERAGES	
DOOR STYLE	LINE VOLTAGES
FASTWAX	208, 230, 240, 440, 480, 575, 730
FASTWAX (R)	208, 230, 240, 440, 480, 575, 730
FASTWAX (R) WITH TRANSFORMER	208, 230, 240, 440, 480, 575, 730
FASTWAX (R) WITH TRANSFORMER	208, 230, 240, 440, 480, 575, 730

TABLE OF CONTROL BOX FULL LOAD AMP REQUIREMENTS	
DOOR STYLE	LINE VOLTAGES
FASTWAX	17.2A, 3.5A, 5.4A, 3.7A
FASTWAX (R)	17.2A, 3.5A, 5.4A, 3.7A
FASTWAX (R) WITH TRANSFORMER	20.2A, 21.4A, 14.5A, 10.6A, 8.1A

CONTROL BOX FUSING		
DEVICE	VOLTAGE	CURRENT RATING
F1/2/3	220, 10	20 AMP
F4/5	208, 230, 240	15 AMP
F6	440-500	10 AMP
F7	575, 300	6 AMP
F8	208, 230, 240	1 AMP
F9	400-575	1/2 AMP
F10	-	2 AMP
F11	-	1 AMP

CONN.	PRNF	FUNCTION	VOLTAGE
1	J1	FLASHING LAMP OUT	0VDC
2	J2	LOZBE ALARM	0VDC
3	J3	DC POWER OUT	24VDC
4	J4	RESERVE (NCS)	24VDC
5	J5	UNUSED	0VDC
6	J6	DC COMMON INPUT	24VDC
7	J7	24V AC INPUT	24VAC
8	J8	24V AC COMMON (N)	24VAC
9	J9	INVERTER COMMON	24VDC
10	J10	INVERTER OUTPUT (K)	24VDC
11	J11	INVERTER OUTPUT (N)	24VDC
12	J12	LOOP INPUT 2	24VDC
13	J13	LOOP INPUT 1	24VDC
14	J14	DC POWER OUT	24VDC
15	J15	DC COMMON OUT	24VDC
16	J16	DC POWER OUT (NCS)	24VDC
17	J17	LOOP INPUT (NCS)	24VDC

**NOTES:**  
 ALL WIRES ARE 18 AWG BLUE UNLESS OTHERWISE MARKED.  
 ALL 24VDC CONTROL WIRES ARE BLUE.  
 ALL 24VAC WIRES ARE RED.  
 ALL AC NEUTRAL WIRES ARE WHITE.  
 WARNING: ALL BLACK WIRES ARE POTENTIALLY LETHAL VOLTAGES.

DO NOT SCALE DRAWING

DATE: 3/9/2007

5288

782E003

DO NOT SCALE DRAWING

DATE: 3/9/2007

5288

782E003

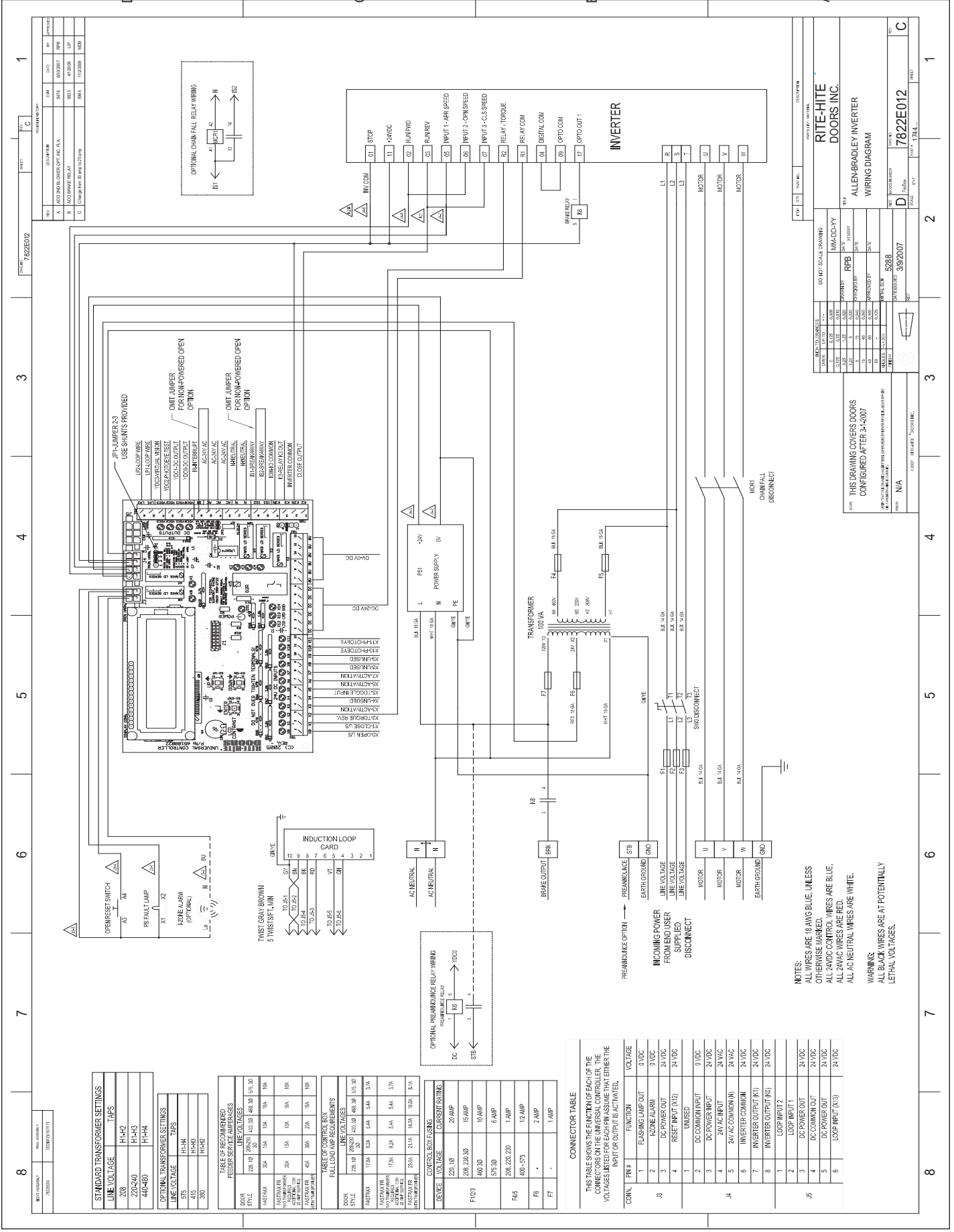
DO NOT SCALE DRAWING

DATE: 3/9/2007

5288

782E003

# 575V - ELECTRICAL WIRING DIAGRAM



REV	DESCRIPTION	DATE	BY	APPROVED
A	ADD FIELD-LOADED OPT. INC. I.A.	03/20/07	SPB	
B	ADD BRAKE RELAY	03/20/07	LJP	
C	Change from 3 phase to 3-wire	03/20/07	MOB	

STANDARD TRANSFORMER SETTINGS	
LINE VOLTAGE	180V
TAPS	H1-H2
200V	H1-H3
220V-240V	H1-H4
440V-480V	H1-H4

OPTIONAL TRANSFORMER SETTINGS	
LINE VOLTAGE	180V
TAPS	H1-H4
200V	H1-H4
220V-240V	H1-H4
440V-480V	H1-H4

TABLE OF RECOMMENDED FEESER SERVICE AMPERAGES							
DOOR STYLE	LINE VOLTAGES	200V	220V	240V	480V	575V	600V
FASTRAK	15A	15A	15A	15A	15A	15A	15A
FASTRAK PRO	20A	20A	20A	20A	20A	20A	20A
FASTRAK PRO	30A	30A	30A	30A	30A	30A	30A
FASTRAK PRO	40A	40A	40A	40A	40A	40A	40A

CONTROL BOX SIZES		
DEVICE	VOLTAGE	CURRENT RATING
F103	220V-180V	20 AMP
F103	220V-220V	15 AMP
F103	480V-300V	10 AMP
F103	575V-300V	6 AMP
F46	220V-220V-220V	1 AMP
F6	400V-575V	12 AMP
F7	220V	2 AMP

CONNECTOR TABLE		
CONN. / PIN #	FUNCTION	VOLTAGE
1	FLASHING LAMP OUT	0VDC
2	ZONE ALARM	0VDC
3	DC POWER OUT	24VDC
4	RESET INPUT (N.C.)	24VDC
5	UNUSED	
6	DC COMMON INPUT	0VDC
7	DC POWER INPUT	24VDC
8	24V AC INPUT	24VAC
9	24V AC COMMON (N)	24VAC
10	INVERTER COMMON	24VDC
11	INVERTER OUTPUT (K1)	24VDC
12	INVERTER OUTPUT (K2)	24VDC
13	LOOP INPUT 1	24VDC
14	DC POWER OUT	24VDC
15	DC COMMON OUT	24VDC
16	DC POWER OUT	24VDC
17	LOOP INPUT (N.C.)	24VDC

THIS TABLE SHOWS THE FUNCTION OF EACH OF THE CONNECTORS ON THE UNIVERSAL CONTROLLER. THE VOLTAGES LISTED FOR EACH PIN ASSUME THAT EITHER THE INPUT OR OUTPUT IS ACTIVATED.

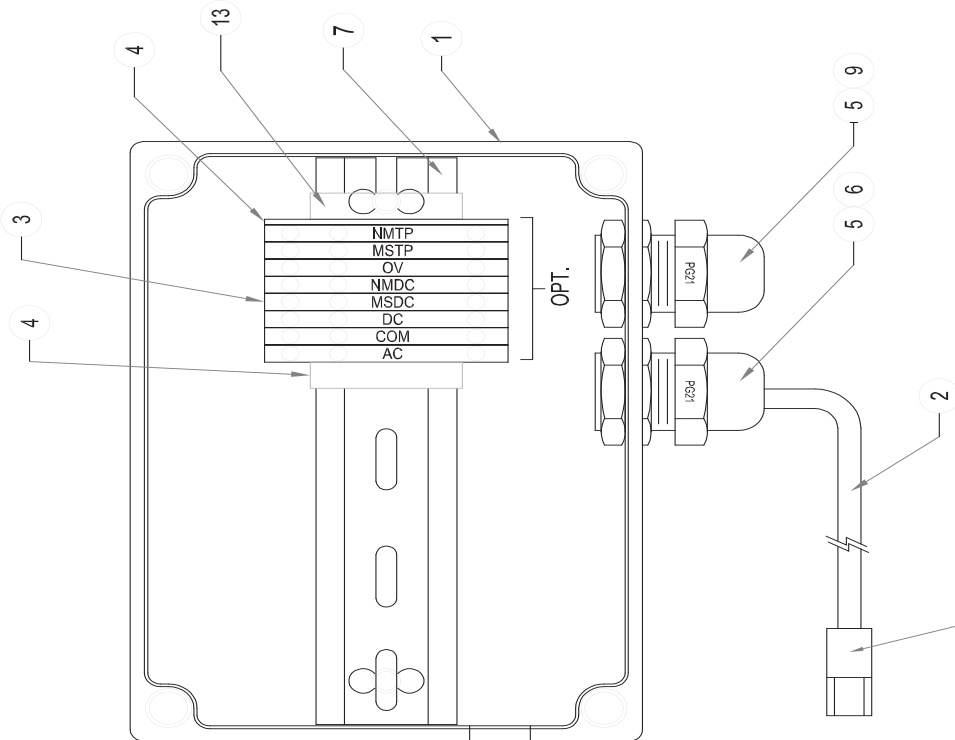
NOTES:  
 ALL WIRES ARE 18 AWG BLUE, UNLESS OTHERWISE MARKED.  
 ALL 24VDC CONTROL WIRES ARE BLUE.  
 ALL 24VAC WIRES ARE RED.  
 ALL AC NEUTRAL WIRES ARE WHITE.  
 WARNING:  
 ALL BLACK WIRES ARE AT POTENTIALLY LETHAL VOLTAGES.

# VIRTUAL VISION JUNCTION BOX

REVISION HISTORY				
REV	DESCRIPTION	ECN	DATE	BY
D	WAGO TERMINALS	5739	12/4/2008	LIP
B	CORRECT VIRT. VISION CABLE	5326	5/7/2007	RPB
C	REMOVE VIRT. VISION CBL PIN	5375	8/27/2007	RPB



COVER SHOWN  
1/2 SCALE



WIRE CABLE AS FOLLOWS:  
BK - 0V  
WH/CL - AC  
RD - DC  
GN - COM

VIRTUAL VISION OPT. (2)  
VIRTUAL VISION OPT. (12)

ITEM	QTY	PART NO.	DWG. NO.	DESCRIPTION
9	1	15550002	-	BSHG.CA.SEAL.4X6MM.12MM
8	2	67650015	-	SCA.PHP.DRTP.#BX1/2
7	1	38120006	-	DIN RAIL LOW PROFILE 6-1/2
6	1	15550045	-	BSHG.CA.SEAL.3X7MM.12MM
5	2	16860015	-	FTG.STRT.LIT.21MM
4	2	73100024	-	TERMINAL END STOP SCREWLESS
3	8	73100086	-	TERMINAL WA.CAGE.20A.3HOLE.BAR
2	1	73100085	-	TERMINAL WA.CAGE.20A.3HOLE
1	1	7822M164	-	CABLE/VIRTUAL VISION
1	1	43750124	-	ENC.LEXANT765X4

DO NOT SCALE DRAWING	
MM-DD-YY	DATE
DRAWN BY	2/7/2007
CHECKED BY	
APPROVED BY	
INITIAL EGN	

SIZE	MODEL NUMBER	DWG NO	REV
B	FasTrax	7822E009	D

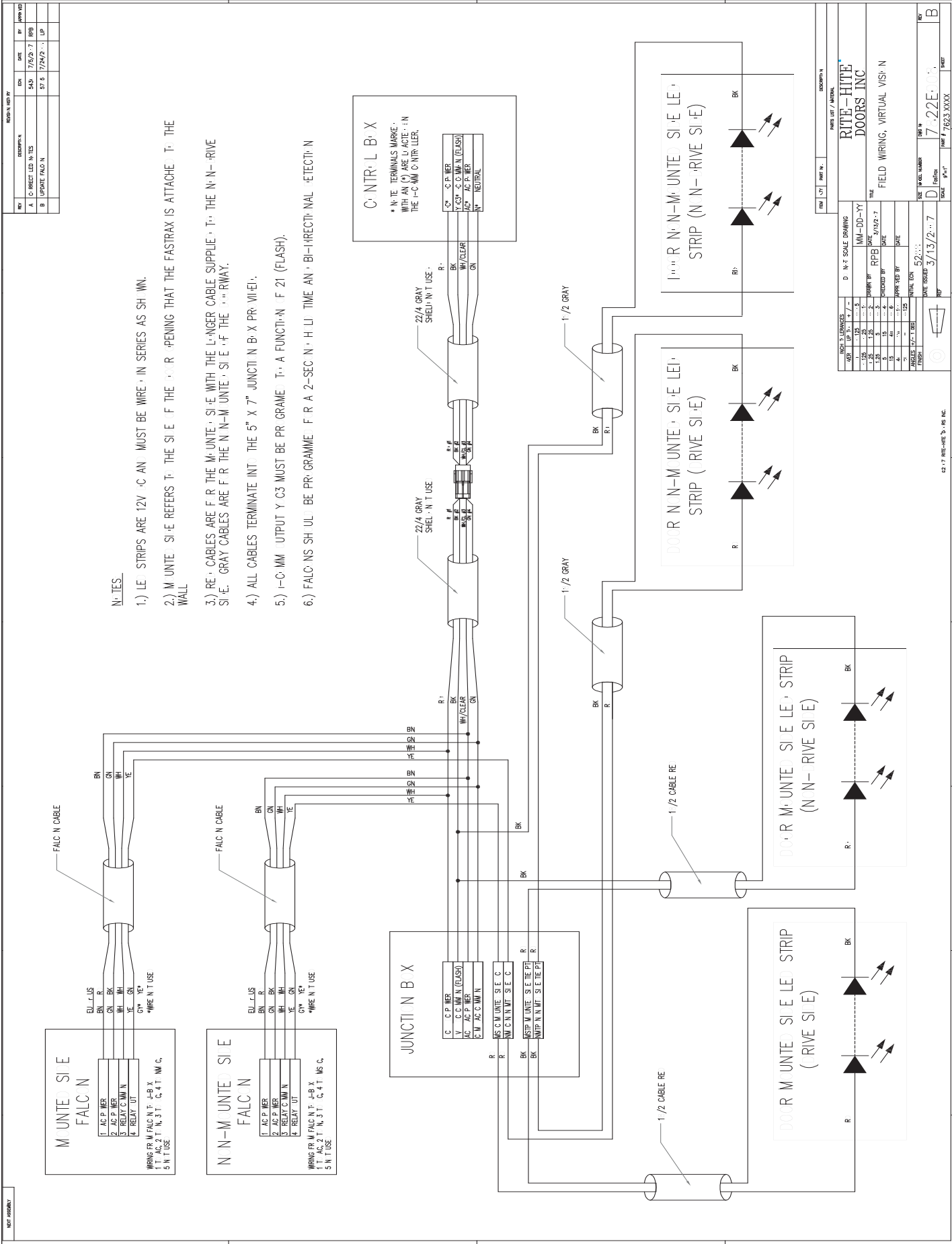
SCALE	PART #	SHEET
9"=1"	5357/....	

DATE ISSUED	5288
DATE	3/9/2007

FINISH	ANGLES	UP TO	+/-
0	0.125	0.005	
0.125	0.25	0.010	
0.25	1.25	0.020	
1.25	5	0.030	
5	15	0.040	
15	40	0.060	
40	80	0.100	
80		0.125	

NEXT ASSEMBLY	FINAL ASSEMBLY
7822M125167	7822M125167

# VIRTUAL VISION ELECTRICAL WIRING



- NOTES:**
- 1.) LEAD STRIPS ARE 12V DC AND MUST BE WIRE IN SERIES AS SHOWN.
  - 2.) M-UNITE STRIP REFERS TO THE STRIP THE OPENING THAT THE FASTRAX IS ATTACHED TO THE WALL.
  - 3.) RED CABLES ARE FOR THE M-UNITE STRIP WITH THE LONGER CABLE SUPPLY TO THE M-UNITE STRIP. GRAY CABLES ARE FOR THE N-N-M-UNITE STRIP OF THE STRIPWAY.
  - 4.) ALL CABLES TERMINATE INTO THE 5" X 7" JUNCTION BOX PROVIDED.
  - 5.) I-C-M-C-M-OUTPUT Y-C3 MUST BE PROGRAMMED TO A FUNCTION F 21 (FLASH).
  - 6.) FALCIN SHOULD BE PROGRAMMED FOR A 2-SECOND HOLD TIME AND B-I-RECTIFIED DETECTION.

**CONTROL BOX**

\* NOTE: TERMINALS MARKED WITH AN (\*) ARE FOR THE I-C-M-C-N-T-R-L-L-E-R.

C-P MER	C-P MER
V-C-C MM N (GLASS)	V-C-C MM N (GLASS)
AC AC P MER	AC AC P MER
N NEUTRAL	N NEUTRAL

REV	DESCRIPTION	DATE	BY
A	REVISIONS	7/19/21	RFB
B	REVISED DRAWING	7/24/21	LJP

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

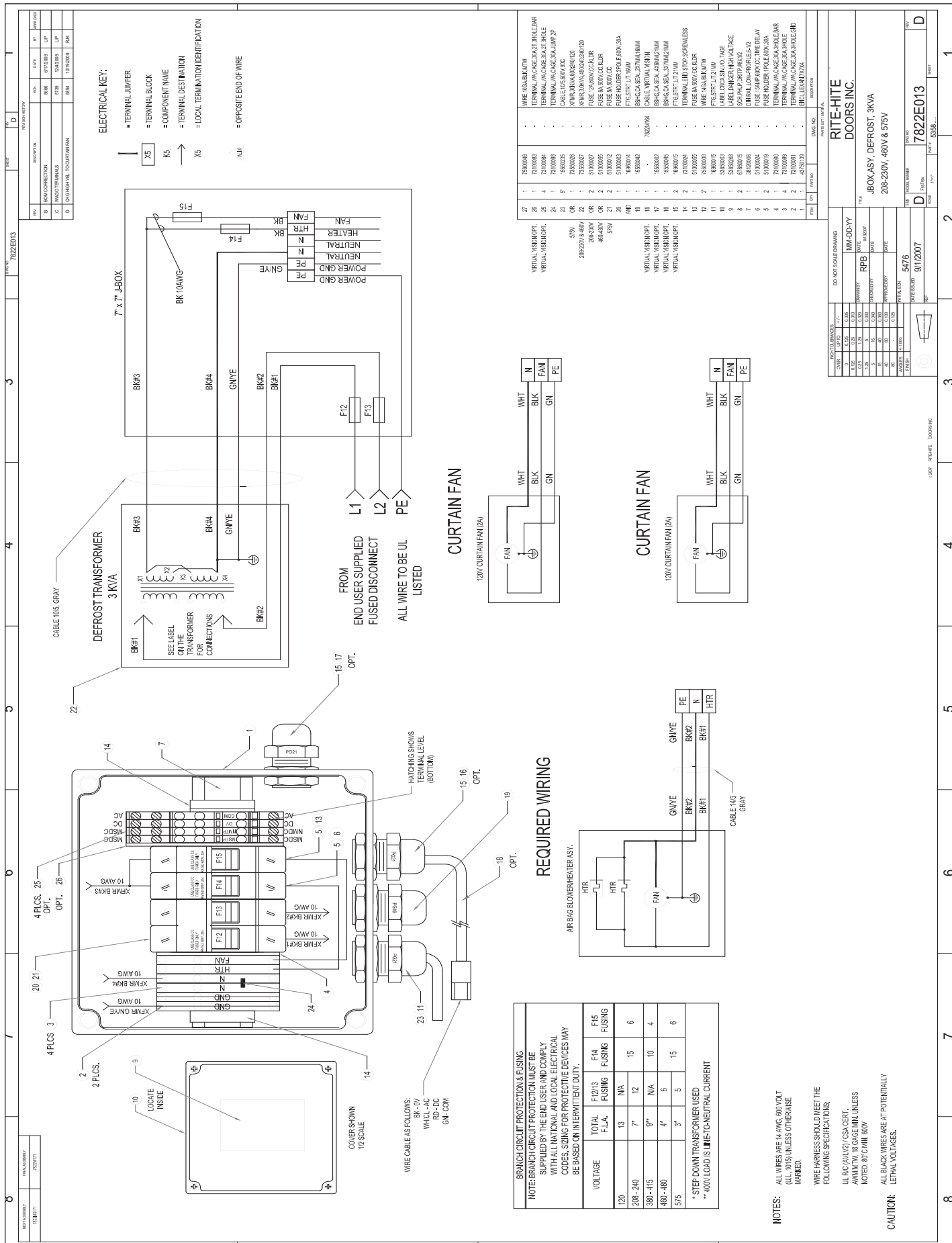
  

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

DATE	SCALE	PROJECT
7/13/21	1"=1'	7653-XXXX

# DEFROST JUNCTION BOX WIRING 208/230/460/575V



**BRANCH CIRCUIT PROTECTION & FUSING**

NOTE: BRANCH CIRCUIT PROTECTION MUST BE SUPPLIED BY THE END USER AND COMPLY WITH ALL NATIONAL AND LOCAL ELECTRICAL CODES. SIZING FOR PROTECTIVE DEVICES MAY BE BASED ON INTERMITTENT DUTY.

VOLTAGE	F12/13 FUSING F.L.A.	F14 FUSING	F15 FUSING
120	13	N/A	12
208-240	7*	12	15
330-415	9**	N/A	10
460-480	4*	6	6
575	3*	5	6

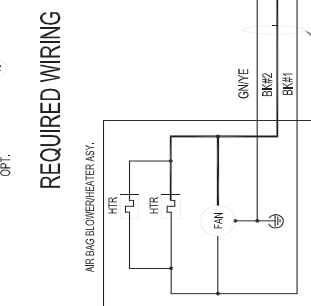
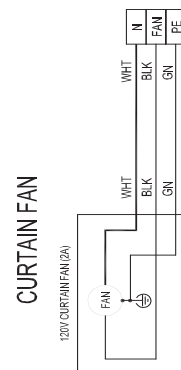
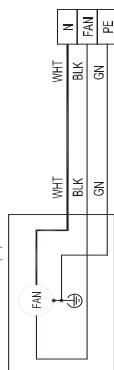
\* STEP-DOWN TRANSFORMER USED  
 \*\* 400V LOAD IS WIRE-TO-NEUTRAL CURRENT

**NOTES:** ALL WIRES ARE 14 AWG 600 VOLT (UL 1015) UNLESS OTHERWISE MARKED.

WIRE HARNESS SHOULD MEET THE FOLLOWING SPECIFICATIONS:  
 UL RC (AWL2) / CSA CERT.  
 AMM/TW, 18 GAGE MIN. UNLESS NOTED, 80°C MIN. 800V

ALL BLACK WIRES ARE AT POTENTIALLY LEthal VOLTAGES.

**CAUTION:** ALL BLACK WIRES ARE AT POTENTIALLY LEthal VOLTAGES.



# DEFROST JUNCTION BOX WIRING 120V

REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	08/11/03	LP
B	REWORK/REVISION	08/11/03	LP
C	WAGO TERMINALS	08/11/03	LP
D	COMPONENTS TO COMPONENTS	08/11/03	LP

**ELECTRICAL KEY:**

- [X5] = TERMINAL JUMPER
- [K5] = TERMINAL BLOCK
- [X5] = COMPONENT NAME
- [X5] = TERMINAL DESTINATION
- [X5] = LOCAL TERMINATION IDENTIFICATION
- [A/A] = OPPOSITE END OF WIRE

REV	DATE	BY
22	1/25/04	
21	2/10/03	
20	4/21/03	
19	1/21/03	
18	1/21/03	
17	1/21/03	
16	1/21/03	
15	1/21/03	
14	2/10/04	
13	1/21/03	
12	2/10/03	
11	1/21/03	
10	1/21/03	
9	1/21/03	
8	2/10/03	
7	1/21/03	
6	2/10/03	
5	1/21/03	
4	1/21/03	
3	1/21/03	
2	2/10/03	
1	1/21/03	

**FROM END USER SUPPLIED FUSED DISCONNECT**

**ALL WIRE TO BE UL LISTED**

**WIRE LOG-BOOK**

22	1	2500048	WIRE LOG-BOOK
21	1	2100083	TERMINAL W/ WAGO 30A 27 SHOLE BR
20	4	2100084	TERMINAL W/ WAGO 30A 27 SHOLE BR
19	1	2100085	TERMINAL W/ WAGO 30A 27 SHOLE BR
18	1	1620064	WIRE LOG-BOOK
17	1	1620065	WIRE LOG-BOOK
16	1	1620066	WIRE LOG-BOOK
15	2	1620067	WIRE LOG-BOOK
14	24	2100024	TERMINAL END STOP-SPELLESS
13	1	5100025	FUSE 1A 600V/1000V TIME DELAY
12	2	1620002	WIRE LOG-BOOK
11	1	1620003	WIRE LOG-BOOK
10	1	1620004	WIRE LOG-BOOK
9	1	1620005	WIRE LOG-BOOK
8	1	1620006	WIRE LOG-BOOK
7	1	1620007	WIRE LOG-BOOK
6	2	1620008	WIRE LOG-BOOK
5	2	1620009	WIRE LOG-BOOK
4	4	1620010	WIRE LOG-BOOK
3	4	1620011	WIRE LOG-BOOK
2	2	1620012	WIRE LOG-BOOK
1	1	1620013	WIRE LOG-BOOK

**REQUIRED WIRING**

NOTE: BRANCH CIRCUIT PROTECTION MUST BE SUPPLIED BY THE END USER AND COMPLY WITH ALL NATIONAL AND LOCAL ELECTRICAL CODES. SIZING FOR PROTECTIVE DEVICES MAY BE BASED ON INTERMITTENT DUTY.

VOLTAGE	TOTAL FUSING	F12/F13 FUSING	F14 FUSING	F15 FUSING
120	13	7"	12	15
208-240	7"	9"	12	15
380-415	9"	12"	15	18
480-480	12"	15"	18	22
575	15"	18"	22	25

\* STEP DOWN TRANSFORMER USED  
\*\* 400V LOAD IS LINE-TO-NEUTRAL CURRENT

**NOTES:**

- ALL WIRES ARE 14 AWG 600 VOLT (CUL-1015) UNLESS OTHERWISE INDICATED.
- WIRE HARNESS SHOULD MEET THE FOLLOWING SPECIFICATIONS:
  - UL RC (AN/2) CSA CERT.
  - AWM/PLW, 80°C MIN. UNLESS NOTED, 80°C MIN. 600V
- ALL BLACK WIRES ARE AT POTENTIALLY LETHAL VOLTAGES.

**CAUTION**

**COMPONENT REQUIREMENTS:**

- 1 120V 1A AIR BAG BLOWER
- 1 120V 1000W AIR BAG HEATER (2REQ'D)
- 1 120V 2A CURTAIN FAN

**DO NOT SCALE DRAWING**

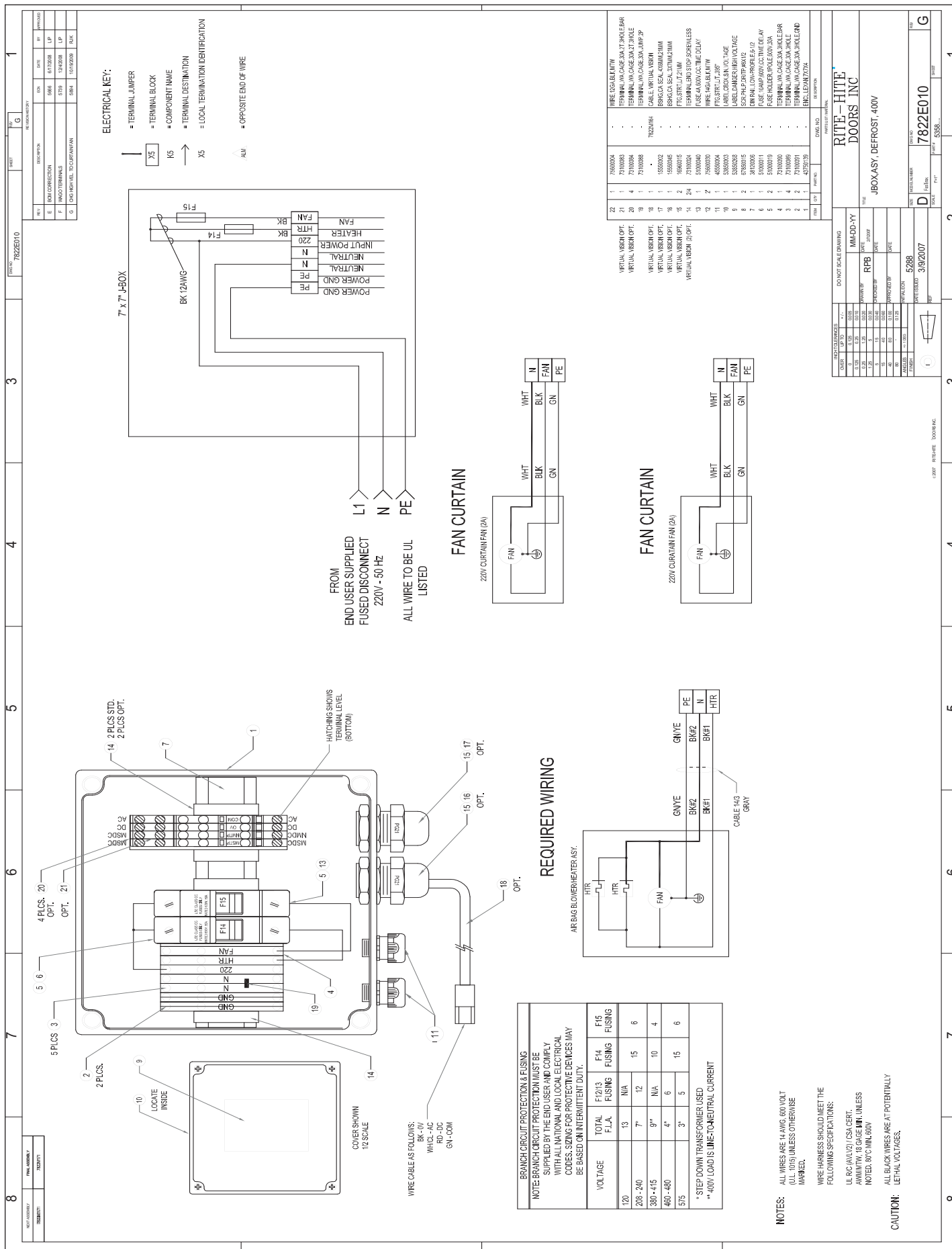
DATE: 9/1/2007

SCALE: 1" = 1"

PROJECT: 7822E014

REV: D

# DEFROST JUNCTION BOX WIRING 400V



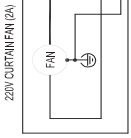
**ELECTRICAL KEY:**

- = TERMINAL JUMPER
- X5 = TERMINAL BLOCK
- K5 = COMPONENT NAME
- X5 = TERMINAL DESTINATION
- X5 = LOCAL TERMINATION IDENTIFICATION
- △ ALL = OPPOSITE END OF WIRE

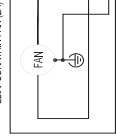
FROM  
END USER SUPPLIED  
FUSED DISCONNECT  
220V - 50 Hz

ALL WIRE TO BE UL  
LISTED

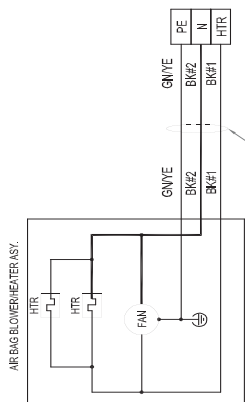
### FAN CURTAIN



### FAN CURTAIN



### REQUIRED WIRING



**BRANCH CIRCUIT PROTECTION & FUSING**  
NOTE: BRANCH CIRCUIT PROTECTION MUST BE SUPPLIED BY THE END USER AND COMPLY WITH ALL NATIONAL AND LOCAL ELECTRICAL CODES. SIZES FOR PROTECTIVE DEVICES MAY BE BASED ON INTERMITTENT DUTY.

VOLTAGE	TOTAL F.L.A.	F2/13 FUSING	F14 FUSING	F15 FUSING
120	13	N/A	15	6
208-240	7*	12	10	4
380-415	9**	N/A	10	4
480-480	4*	6	6	6
575	3*	5	15	6

\* STEP DOWN TRANSFORMER USED  
\*\* 400V LOAD IS LINE-TO-NEUTRAL CURRENT

**NOTES:** ALL WIRES ARE 14 AWG, 600 VOLT (UL L 1015) UNLESS OTHERWISE MARKED.

WIRE HARNESS SHOULD MEET THE FOLLOWING SPECIFICATIONS:  
UL RC (ANUL) CSA CERT  
UL 1007 (UL) OR UL 1008 (UL) UNLESS NOTED. 80°C MIN. 600V

**CAUTION:** ALL BLACK WIRES ARE AT POTENTIALLY LETHAL VOLTAGES.

WIRE COLOR (M/N)	TERMINAL IN CAGE 3X4 HOLE BAR	TERMINAL IN CAGE 3X4 HOLE BAR
1	155000A	7020A/HA
2	210000A	
3	210000A	
4	210000A	
5	1550002	
6	1550004	
7	1660015	
8	210000A	
9	210000A	
10	210000A	
11	4550004	
12	4550004	
13	4550004	
14	210000A	
15	3350003	
16	3350003	
17	3350003	
18	3350003	
19	3350003	
20	3350003	
21	3350003	
22	3350003	

DO NOT SCALE DRAWING	DATE	BY
MM-DD-YY	3/19/2007	5288
REV	DATE	BY
1	3/19/2007	5288
2	3/19/2007	5288
3	3/19/2007	5288
4	3/19/2007	5288
5	3/19/2007	5288
6	3/19/2007	5288
7	3/19/2007	5288
8	3/19/2007	5288
9	3/19/2007	5288
10	3/19/2007	5288
11	3/19/2007	5288
12	3/19/2007	5288
13	3/19/2007	5288
14	3/19/2007	5288
15	3/19/2007	5288
16	3/19/2007	5288
17	3/19/2007	5288
18	3/19/2007	5288
19	3/19/2007	5288
20	3/19/2007	5288
21	3/19/2007	5288
22	3/19/2007	5288

# RADIAL ARCHITECTURAL DRAWING

APPROVED:  YES  NO  AS MARKED

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

REVISION HISTORY

REV	DESCRIPTION	ECN	DATE	BY	APPROVED
G	ADD VISOR NITE F.R. EXT APP	5-29	1/12/2019	RJK	
E	Change PE, Chain Hist	5-31	2/26/2019	MDB	
F	ADD COLRS	5-79	7/6/2019	LIP	

## SPECIFICATIONS

**SPEED:** UP TO 1" [25.4MM] SEC WITH STAN AR. VARIABLE FREQUENCY DRIVE. TOP SPEED IS OPEN ENT. NITE SIZE.

**SIZE:** MAXIMUM 16" [412.7MM] wide x 16" [412.7MM] high  
MINIMUM 5" [127MM] wide x 7" [177.8MM] high

**CURTAIN MATERIAL:**  6 MIL PLYR-PYLENE (BLUE)  
 1 MIL PLYR-PYLENE (BLU) OR DORY CORN (MHT DRE)  
 27 VINY(N- MAXVIEW AVAIL.) (BLU) OR RG DORY CORN

**SIDE FRAMES:** P.W.E.R. CO. ALUMINUM EXTRUSION, 4 1/2" [114MM] WIDE x 4 3/4" [119MM] DEPTH

**DRIVE SYSTEM:** 2 HP, M.T.R. VARIABLE FREQUENCY DRIVE, CUSHIONED M.T.R. UNITS. TRAMI-N DRIVE SYSTEM - C-INSTING - F.A. DRIVE GEAR, DRIVE SPHERES AN - A C-MP SITE E-GE MATERIAL WHICH IS ATTACHED TO THE CURTAIN.

**ELECTRICAL REQUIREMENTS:** SINGLE PHASE  220V - 24V, 6 HZ (INVERTER ONLY)  
THREE PHASE  208V, 6 HZ (INVERTER ONLY)  
 240V, 6 HZ  
 480V, 5/6 HZ  
 480V, 6 HZ  
 575V, 6 HZ

**VISION OPTIONS:**  MAXVIEW x 32" [812MM] HIGH (INTERIOR UNITS ONLY)  
 2" x 2" [50.8MM x 50.8MM] VISION PANELS  
NOTE: IN EXTERIOR TYPE APPLICATIONS WITH 2" x 2" VISIONS, THE VISIONS PROVIDED WILL BE REPLACEABLE.

**CONTROL BOX:** SIZE 14" x 16" x 4" [354MM x 406MM x 101MM]

**CURTAIN RETENTION:** WEAR RESISTANT LEAN WIN - GUAGES KEEP TENSION IN THE CURTAIN THE ENTIRE LENGTH OF THE SIDE FRAME. STAN AR WIN PRESSURE (1.75 MPH [4.18 KPH]) FOR INTERIOR USE. ANU 1.75 MPH [4.18 KPH] FOR EXTERIOR USE. INCLUDES TRUE AUTO-REFEED SYSTEM IN CASE OF ACCIDENTAL IMPACTS TO CURTAIN.

**SAFETY FEATURES:** SAFETY TECH LOG, T.W. THRU-BEAM PHOTO EYES MOUNTED AT 1" [25.4MM] AN. 54" [1372MM] OFF THE FLOOR.

**WARRANTY:** LIMITED 1-YEAR PARTS AND LABOR IN ALL COMPONENTS, INCLUDING ELECTRICAL LIMITED 5-YEAR CURTAIN REPLACEMENT IN URBAN MAX 6' AN URBAN MAX MATERIAL. EXCLUSIVE 1-YEAR METAL BACK GUARANTEE IF CUSTOMER SATISFACTION.

**INCH TOLERANCES**

INCH	TOLERANCE
0 - 1/8"	+0.000 / -0.005
1/8 - 1/4"	+0.005 / -0.010
1/4 - 3/8"	+0.010 / -0.015
3/8 - 1/2"	+0.015 / -0.020
1/2 - 3/4"	+0.020 / -0.025
3/4 - 1"	+0.025 / -0.030
1 - 1 1/4"	+0.030 / -0.035
1 1/4 - 1 1/2"	+0.035 / -0.040
1 1/2 - 1 3/4"	+0.040 / -0.045
1 3/4 - 2"	+0.045 / -0.050
2 - 2 1/4"	+0.050 / -0.055
2 1/4 - 2 1/2"	+0.055 / -0.060
2 1/2 - 2 3/4"	+0.060 / -0.065
2 3/4 - 3"	+0.065 / -0.070
3 - 3 1/4"	+0.070 / -0.075
3 1/4 - 3 1/2"	+0.075 / -0.080
3 1/2 - 3 3/4"	+0.080 / -0.085
3 3/4 - 4"	+0.085 / -0.090
4 - 4 1/4"	+0.090 / -0.095
4 1/4 - 4 1/2"	+0.095 / -0.100
4 1/2 - 4 3/4"	+0.100 / -0.105
4 3/4 - 5"	+0.105 / -0.110
5 - 5 1/4"	+0.110 / -0.115
5 1/4 - 5 1/2"	+0.115 / -0.120
5 1/2 - 5 3/4"	+0.120 / -0.125
5 3/4 - 6"	+0.125 / -0.130

**FINISH** 1/2-1 DBS

**ANGLES** 1/2-1 DBS

**INITIAL ECN** 52

**DATE ISSUED** 2/23/2019

**SCALE** 3/4" = 1"

**REVISIONS**

NO.	DESCRIPTION	DATE
1	ISSUED FOR CONSTRUCTION	2/23/2019

**NOTE:** INTERIOR SENSORS ARE REQUIRED TO BE MOUNTED IN THE INTERIOR OF THE BUILDING FOR USE IN EXTERIOR.

DOOR OPENING HEIGHT	DIM "A"	DIM "B"
8'0" [2439MM] < DOH ≤ 10'0" [3048MM]	24.5" [623MM]	26.5" [674MM]
10'0" [3048MM] < DOH ≤ 12'0" [3657MM]	28.5" [724MM]	24.5" [623MM]
12'0" [3657MM] < DOH ≤ 14'0" [4267MM]	28.5" [724MM]	26.5" [674MM]
14'0" [4267MM] < DOH ≤ 16'0" [4876MM]	28.5" [724MM]	30" [762MM]

**PARTS LIST / MATERIAL**

RITE-HITE  
DOORS INC

RITE HITE  
ARCHITECTURAL APPROVAL  
FASTRAX, RADIAL

**DESCRIPTION:** NITE





# STANDARD LIFT ARCHITECTURAL DRAWING

REVISION HISTORY

REV	DESCRIPTION	ECN	DATE	BY	APPROVED
D	Change PE, Chain, H-st	5.938	2/26/2009	MDB	
E	ADD C LRS	5.79	7/6/2009	LIP	
F	ADD NOTE FOR EXT APP	5.29	1/12/2009	RJK	

## SPECIFICATIONS

**SPEED:** UP TO 1.7" [254MM]/SEC WITH STAIN AIR VARIABLE FREQUENCY DRIVE. UP SPEED IS OPEN ENTIRE DOOR SIZE.

**SIZE:** MAXIMUM 16" [412MM] wide x 16' [4.76M] high  
MINIMUM 5" [127MM] wide x 7' [2139MM] high

**CURTAIN MATERIAL:**

- 6 MIL POLYPROPYLENE (BLUE)
- 11 MIL POLYPROPYLENE (BLACK)  RG DORY DORN DIRT CRE
- 27 -Z VINYL (MAXVIEW AVAL)  RG DORY DORN

**SIDE FRAMES:** POWERS CO. ALUMINUM EXTRUSION, 4 1/2" [115MM] W x 4 3/4" [121MM] P x RECT-N.

**DRIVE SYSTEM:** 2 H.P. MOTOR, VARIABLE FREQUENCY DRIVE, CUSHION MOTOR MOTOR UNITS, TRACKING SYSTEM - CONSISTING OF A DRIVE GEAR, DRIVE SPHERES AND A C-MIP SITE GEAR MATERIAL WHICH IS ATTACHED TO THE CURTAIN.

**ELECTRICAL REQUIREMENTS:**

- SINGLE PHASE
- 220 V - 24 V, 60 HZ (INVERTER NLY)
- THREE PHASE
- 208 V, 60 HZ (INVERTER NLY)
- 24 V, 60 HZ
- 4 V, 5/16 HZ
- 46 V, 6 HZ
- 575V, 6 HZ

**VISION OPTIONS:**

- MAXVIEW x 32" [812MM] HIGH (INTERIOR UNITS NLY)
- 2" x 2" [51MM x 51MM] VISION PANELS

**NOTE:** EXTERIOR TYPE APPLICATIONS WITH 2"x2" VISION, THE VISION PERMITS WILL BE REPLACEABLE.

**CONTROL BOX:** I-CMM DIGITAL CONTROLLER, VARIABLE FREQUENCY DRIVE.  
Size 14" x 16" x 2" [256MM x 406MM x 25MM]

**CURTAIN RETENTION:** WEAR RESISTANT LEXAN WINDOW GUARDS KEEP STAIN IN THE CURTAIN THE ENTIRE LENGTH OF THE STAFF FRAME. STAIN RESISTANT WINDOW PRESSURE 25 MPH [40 KPH] FOR INTERIOR. RESISTANCE ANTI-IMPACT 75 MPH [120 KPH] FOR EXTERIOR. RESISTANCE INCLUDES TRUE AUTORELEASE SYSTEM IN CASE OF ACCIDENTAL IMPACTS TO CURTAIN.

**SAFETY FEATURES:** SAFETY EDGE TECHNOLOGY THROUGH-BEAM PHOTOEYES MOUNTED AT 1.7" [457MM] AND 54" [1372MM] FROM THE FLOOR.

**WARRANTY:** LIMITED 1-YEAR PARTS AND LABOR. IN ALL CIRCUMSTANCES, INCLUDING ELECTRICAL LIMITS. 5-YEAR CURTAIN REPLACEMENT IN URBAN MAXIMUM AN URBAN MAXIMUM. MATERIAL - EXCLUSIVE 1-YEAR WARRANTY BACK GUARANTEE. CUSTOMER SATISFACTION.

APPROVED  YES  NO  AS MARKED

APP'D BY \_\_\_\_\_ DATE \_\_\_\_\_

**INCH TOLERANCES**

VER	UP	T	+ / -
125	25	5	
25	25	1	
125	125	2	
125	15	3	
15	15	4	
15	4	6	
4	4	1	
4	1	125	

ANGLES 1/2" - 1 DEG  
FINISH \_\_\_\_\_

DONT SCALE DRAWING

MM-DD-YY

DRAWN BY **JTD** DATE 9/25/2006

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

INITIAL ECN 52.013

DATE ISSUED 2/23/2007

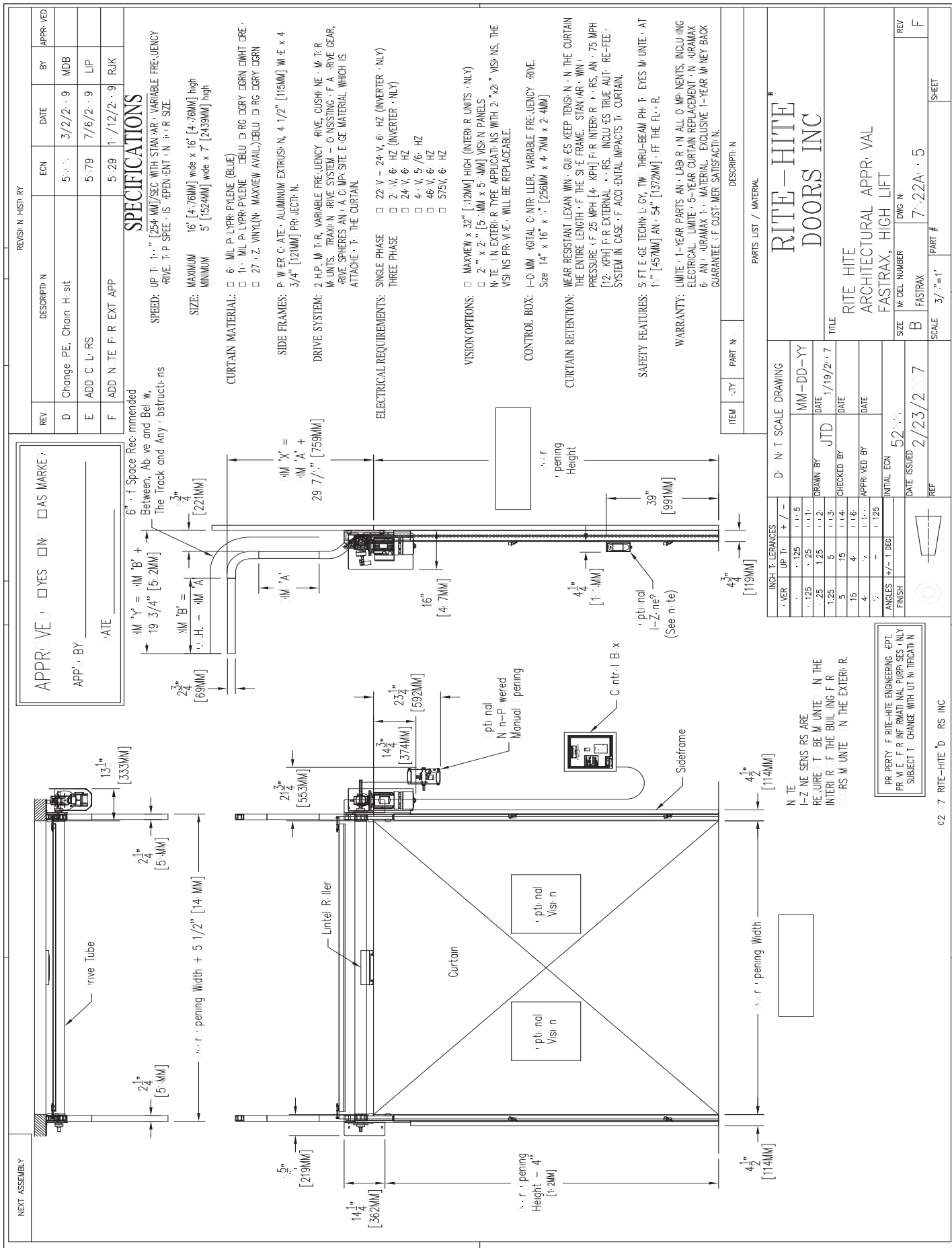
REF \_\_\_\_\_

NOTE: INTERIOR SENSORS ARE REQUIRED TO BE MOUNTED IN THE INTERIOR OF THE BUILDING FOR DOORS MOUNTED IN THE EXTERIOR.

PERMISSION FOR RITE-HITE ENGINEERING, EPT. FOR VIEWING INFORMATIONAL PURPOSES ONLY. SUBJECT TO CHANGE WITHOUT NOTIFICATION.

c2 - 6 RITE-HITE DOORS INC.

# HIGH LIFT ARCHITECTURAL DRAWING



REV  
D Change PE, Chain H-st  
E ADD C L R S  
F ADD N T E F R EXT APP

REV	DESCRIP N	ECN	DATE	BY	APPR VED
D	Change PE, Chain H-st	5-77	3/2/2-9	MDB	
E	ADD C L R S	5-79	7/6/2-9	LIP	
F	ADD N T E F R EXT APP	5-29	1-12/2-9	RJK	

### SPECIFICATIONS

**REVISION HISTORY**

**DESCRIPTION**

**DATE**

**BY**

**APPROVED**

**DRIVE SYSTEM:** 2 HP M T R VARIABLE FREQUENCY DRIVE, CUSHING, M T R M UNITS, TRAXION DRIVE SYSTEM - CONSISTING OF A DRIVE GEAR, DRIVE SPHERES AND A C-MR SITE E-GE MATERIAL WHICH IS ATTACHED TO THE CURTAIN.

**ELECTRICAL REQUIREMENTS:** SINGLE PHASE 220V - 240V, 60 HZ (INVERTER - NLY), THREE PHASE 208V, 240V, 60 HZ (INVERTER - NLY), 480V, 575V, 60 HZ

**VISION OPTIONS:** MAXVIEW x 32" [813MM] HIGH (INTERIOR UNITS - NLY), 2" x 2" x 5/8" [51MM x 51MM x 16MM] VISION PANELS

**CONTROL BOX:** 100MM DIGITAL CONTROLLER, VARIABLE FREQUENCY DRIVE, Size 14" x 16" x 4" [254MM x 406MM x 102MM]

**CURTAIN RETENTION:** WEAR RESISTANT LEXAN WINDOW GUIDES KEEP TENSION IN THE CURTAIN THE ENTIRE LENGTH OF THE SIDE FRAME, STAN VAPOR MINIMUM PRESSURE OF 25 MPH [40 KPH] FROM INTERIOR TO EXTERIOR, ANTI-75 MPH [120 KPH] FROM EXTERIOR TO INTERIOR, INCLUDES TRUE AUTO-REFEED SYSTEM IN CASE OF ACCIDENTAL IMPACT TO CURTAIN.

**SAFETY FEATURES:** SAFETY EDGE TECHNOLOGY, TWIN THRU-BEAM PHOTO EYES MOUNTED AT 1" [25MM] ANGLE, 54" [1372MM] FROM THE FLOOR.

**WARRANTY:** LIMITED 1-YEAR PARTS AND LABOR IN ALL COUNTRIES, INCLUDING ELECTRICAL, LIMITED 5-YEAR CURTAIN REPLACEMENT IN UPRMAX 6 ANTI-UPRMAX 1-YEAR MATERIAL, EXCLUSIVE 1-YEAR MONEY BACK GUARANTEE, IF CUSTOMER NOT SATISFIED.

ITEM	QTY	PART N	DESCRIPTION
			PARTS LIST / MATERIAL

**SCALE:** 3/4" = 1'

**DATE ISSUED:** 2/23/2007

**DATE:** 1/19/2-7

**DRAWN BY:** JTD

**CHECKED BY:**

**APPROVED BY:**

**INITIAL ECN:** 52

**DATE:** 2/23/2007

**SCALE:** 3/4" = 1'

**PART #:** 7-22A-5

**REV:** F

**SHEET:**

INCH	FRAC	MM
1/8	1/8	3.175
1/4	1/4	6.35
3/8	3/8	9.525
1/2	1/2	12.7
5/8	5/8	15.875
3/4	3/4	19.05
7/8	7/8	22.225
1	1	25.4
1 1/8	1 1/8	28.575
1 1/4	1 1/4	31.75
1 3/8	1 3/8	34.925
1 1/2	1 1/2	38.1
1 5/8	1 5/8	41.275
1 3/4	1 3/4	44.45
1 7/8	1 7/8	47.625
2	2	50.8
2 1/8	2 1/8	53.975
2 1/4	2 1/4	57.15
2 3/8	2 3/8	60.325
2 1/2	2 1/2	63.5
2 5/8	2 5/8	66.675
2 3/4	2 3/4	69.85
2 7/8	2 7/8	73.025
3	3	76.2
3 1/8	3 1/8	79.375
3 1/4	3 1/4	82.55
3 3/8	3 3/8	85.725
3 1/2	3 1/2	88.9
3 5/8	3 5/8	92.075
3 3/4	3 3/4	95.25
3 7/8	3 7/8	98.425
4	4	101.6
4 1/8	4 1/8	104.775
4 1/4	4 1/4	107.95
4 3/8	4 3/8	111.125
4 1/2	4 1/2	114.3
4 5/8	4 5/8	117.475
4 3/4	4 3/4	120.65
4 7/8	4 7/8	123.825
5	5	127

**REVISIONS ARE REQUIRED TO BE MOUNTED IN THE INTERIOR OF THE BUILDING FOR DOORS MOUNTED ON THE EXTERIOR.**

**FOR RITE-HITE ARCHITECTURAL PURPOSES ONLY SUBJECT TO CHANGE WITH OUT NOTIFICATION**

**02. RITE-HITE DOORS INC**

# 45° TILT ARCHITECTURAL DRAWING

APPROVED  YES  NO  AS MARKED

APP' BY: \_\_\_\_\_

DATE: \_\_\_\_\_

REVISION HISTORY

REV	DESCRIPTION	EON	DATE	BY	APPROVED
G	ADD NITE R EXT APP	5.29	1-/12/2-9	RJK	
E	Change PE, Chain Hist	5.29	2/26/2-9	MDB	
F	ADD C LRS	5.79	7/6/2-9	LIP	

## SPECIFICATIONS

**SPEED:** UP TO 1" [25.4MM] SEC WITH STAN-AR VARIABLE FREQUENCY DRIVE. TIP SPEED IS OPEN ENT. NITE R SIZE.

**SIZE:** MAXIMUM 16" [412.7MM] wide x 16" [412.7MM] high  
MINIMUM 5" [127MM] wide x 7" [178MM] high

**CURTAIN MATERIAL:**

- MIL POLYPROPYLENE (BLUE)
- MIL POLYPROPYLENE (BLACK) OR CORY DORN DIMIT CRE
- 27 Z-VNYL (NITE MAXVIEW AVAIL) OR CORY DORN

**SIDE FRAMES:** P WER C-ATE ALUMINUM EXTRUSION 4 1/2" [114MM] WIDE x 4 3/4" [120MM] DEPTH

**DRIVE SYSTEM:** 2 HP MOTOR, VARIABLE FREQUENCY DRIVE, CUSHIONED MOTOR, TRAXN DRIVE SYSTEM - CUSHIONED, STAN-AR WIN PRESSURE DRIVE SPHERES AND C-AMP SITE E-GE MATERIAL WHICH IS ATTACHED TO THE CURTAIN.

**ELECTRICAL REQUIREMENTS:**

- SINGLE PHASE
- THREE PHASE
- 220 V - 240 V, 60 HZ (INVERTER - ONLY)
- 240 V, 60 HZ
- 480 V, 3-Phase, 60 HZ
- 575 V, 60 HZ

**VISION OPTIONS:**

- MAXVIEW 32" [813MM] HIGH (INTERIOR UNITS - ONLY)
- 2" x 2" [50.8MM x 50.8MM] VISION PANELS
- NITE EXTERIOR TYPE APPLICATIONS WITH 2" x 2" VISIONS, THE VISIONS PROVIDED WILL BE REPLACEABLE.

**CONTROL BOX:** 1-C-AMP DIGITAL CONTROLLER, VARIABLE FREQUENCY DRIVE. Size 14" x 16" x 4" [356MM x 406MM x 102MM]

**CURTAIN RETENTION:** WEAR RESISTANT LEXAN WINDOW GUIDES KEEP TENSION IN THE CURTAIN THE ENTIRE LENGTH OF THE SIDE FRAME. STAN-AR WIN PRESSURE 25 MPH [40 KPH] INTERIOR WINDS, AN 75 MPH [120 KPH] EXTERIOR WINDS. INCLUDES TRUE AUTOREFEEL SYSTEM IN CASE OF ACCIDENTAL IMPACT TO CURTAIN.

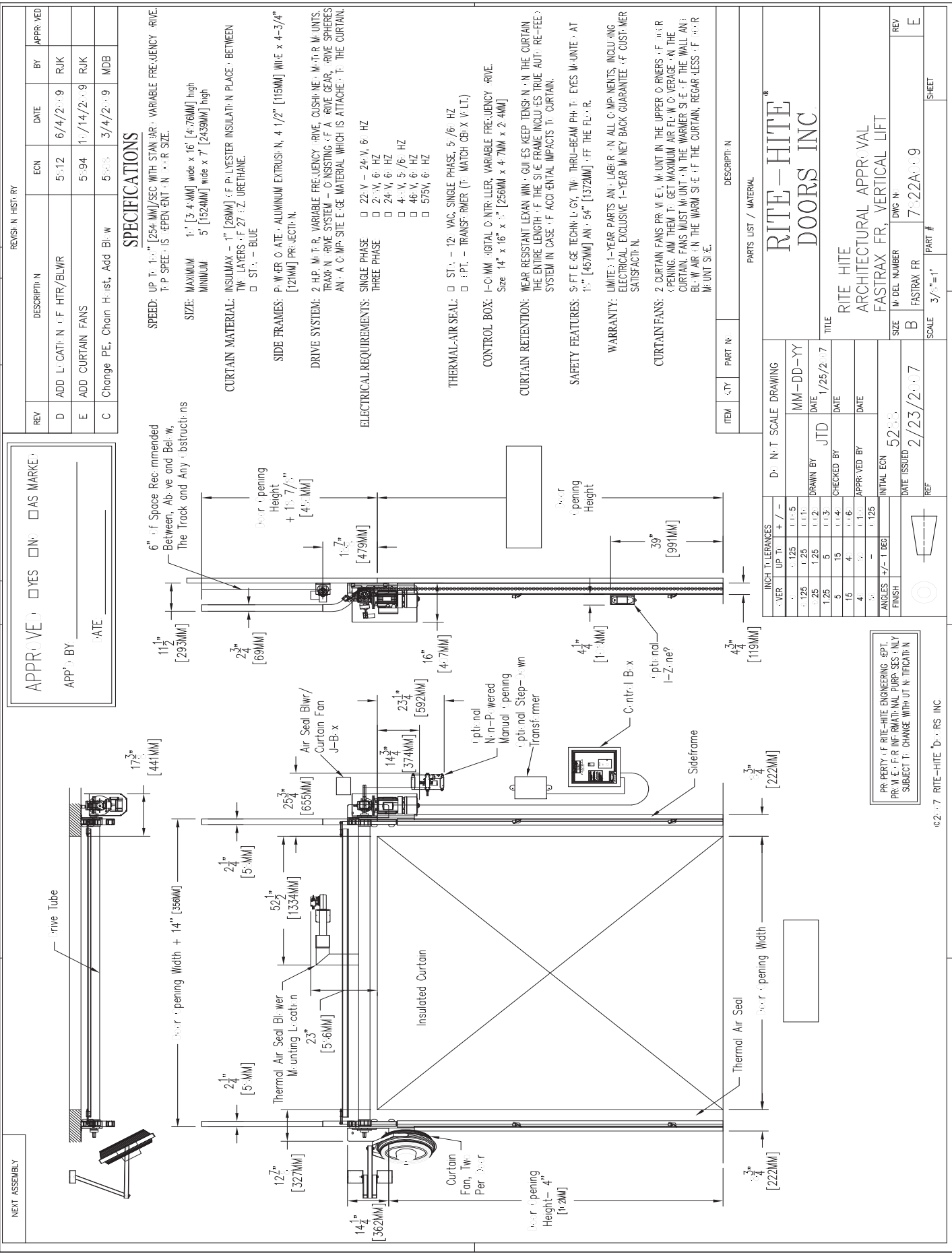
**SAFETY FEATURES:** SAFETY TECHNIQUE THROUGH-BEAM PHOTO EYES MOUNTED AT 1" [25.4MM] AND 54" [1372MM] FROM THE FLOOR.

**WARRANTY:** LIMITED 1-YEAR PARTS AND LABOR IN ALL COUNTRIES INCLUDING ELECTRICAL LIMITED 5-YEAR CURTAIN REPLACEMENT IN JURISDICTIONS WHERE MAXIMUM 1-YEAR MATERIAL EXCLUSIVE 1-YEAR MONEY BACK GUARANTEE FOR CUSTOMER SATISFACTION.

REVISION HISTORY

REV	DESCRIPTION	EON	DATE	BY	APPROVED
G	ADD NITE R EXT APP	5.29	1-/12/2-9	RJK	
E	Change PE, Chain Hist	5.29	2/26/2-9	MDB	
F	ADD C LRS	5.79	7/6/2-9	LIP	

# FR VERTICAL ARCHITECTURAL DRAWING



# FR STANDARD ARCHITECTURAL DRAWING

APPROVED BY: [Signature]

DATE: 6/4/2009

BY: RJK

DESCRIPTION: ADD CURTAIN FANS

DATE: 1/13/2009

BY: RJK

CHANGE: Change PE, Chain H.st, Add Bl.w

DATE: 3/2/2009

BY: MDB

REVISION HISTORY

REV	DESCRIPTION	EON	DATE	BY	APPROVED
D	ADD L. CATI-N. F. HTR./BLWR	5-12	6/4/2009	RJK	
E	ADD CURTAIN FANS	5-94	1/13/2009	RJK	
C	Change PE, Chain H.st, Add Bl.w	5-11	3/2/2009	MDB	

### SPECIFICATIONS

**SPEED:** UP TO 1" [25.4MM]/SEC WITH STAIN-AR. VARIABLE FREQUENCY DRIVE. T.P. SPEED IS DEPENDENT ON MOTOR SIZE.

**SIZE:** MAXIMUM: 1" [3.4MM] wide x 16" [412.7MM] high  
 MINIMUM: 5" [152.4MM] wide x 7" [243.9MM] high

**CURTAIN MATERIAL:** INSULMAX - 1" [26MM] P.P. LESTER INSULATION PLACE BETWEEN TWO LAYERS. F.T.Z. URETHANE.  
 □ ST. - BLUE

**SIDE FRAMES:** POWER COATED ALUMINUM EXTRUSION, 4 1/2" [115MM] WIDE x 4-3/4" [121MM] PROJECTION.

**DRIVE SYSTEM:** 2 HP. MOTOR, VARIABLE FREQUENCY DRIVE, CUSHIONED MOTOR MOUNTS. TRANSFER DRIVE SYSTEM - MISSING. IF A DRIVE GEAR, DRIVE SPHERES AND A COMPOSITE GEAR MATERIAL WHICH IS ATTACHED TO THE CURTAIN.

**ELECTRICAL REQUIREMENTS:**  
 SINGLE PHASE □ 220V - 240V, 60 HZ  
 THREE PHASE □ 208V, 60 HZ  
 □ 240V, 60 HZ  
 □ 480V, 50/60 HZ  
 □ 460V, 60 HZ  
 □ 575V, 60 HZ

**THERMAL-AIR SEAL:** □ ST. - 12" VAC, SINGLE PHASE, 5/16" HZ  
 □ PT. - TRANSFERMER (MATCH CURTAIN V.L.T.) 9" [229MM] x 11" [279MM]

**CONTROL BOX:** LOGIC CONTROL, VARIABLE FREQUENCY DRIVE.  
 SIZE: 14" x 16" x 7" [256MM x 406MM x 178MM]

**CURTAIN RETENTION:** WEAR RESISTANT LEXAN WINDOW GUARDS KEEP TENSION IN THE CURTAIN THE ENTIRE LENGTH OF THE SIDE FRAME. INCLUDES TRUE AUTO REFEED SYSTEM IN CASE OF ACCIDENTAL IMPACTS TO CURTAIN.

**SAFETY FEATURES:** SAFETY EDGE TECHNOLOGY, THROUGH-BEAM PHOTO EYES MOUNTED AT 1" [25.4MM] AND 54" [1372MM] FROM THE FLOOR.

**WARRANTY:** LIMITED 1-YEAR PARTS AND LABOR IN ALL COUNTRIES, INCLUDING ELECTRICAL EXCLUSIVE 1-YEAR MONEY BACK GUARANTEE IF CUSTOMER NOT SATISFACTORY.

**CURTAIN FANS:** TWO CURTAIN FANS PROVIDED IN THE UPPER CORNERS OF EACH PANEL. FANS MUST BE MOUNTED IN THE WARMER SIDE OF THE WALL AND BLow AIR IN THE WARM SIDE OF THE CURTAIN, REGARDLESS OF THE MOUNT SIDE.

INCH TOLERANCES	UP	T	DOWN
OVER	+		-
.125	+.125		-.125
.25	+.25		-.25
1.25	+1.25		-1.25
5	+5		-5
15	+15		-15
4	+4		-4
125	+125		-125

ANGLES: +/- 1 DEG  
 FINISH: [Symbol]

PROPERTY OF RITE-HITE ENGINEERING - DEPT. OF MECHANICAL PARTS ONLY  
 SUBJECT TO CHANGE WITHOUT NOTICE

© 2007 RITE-HITE DOORS, INC.

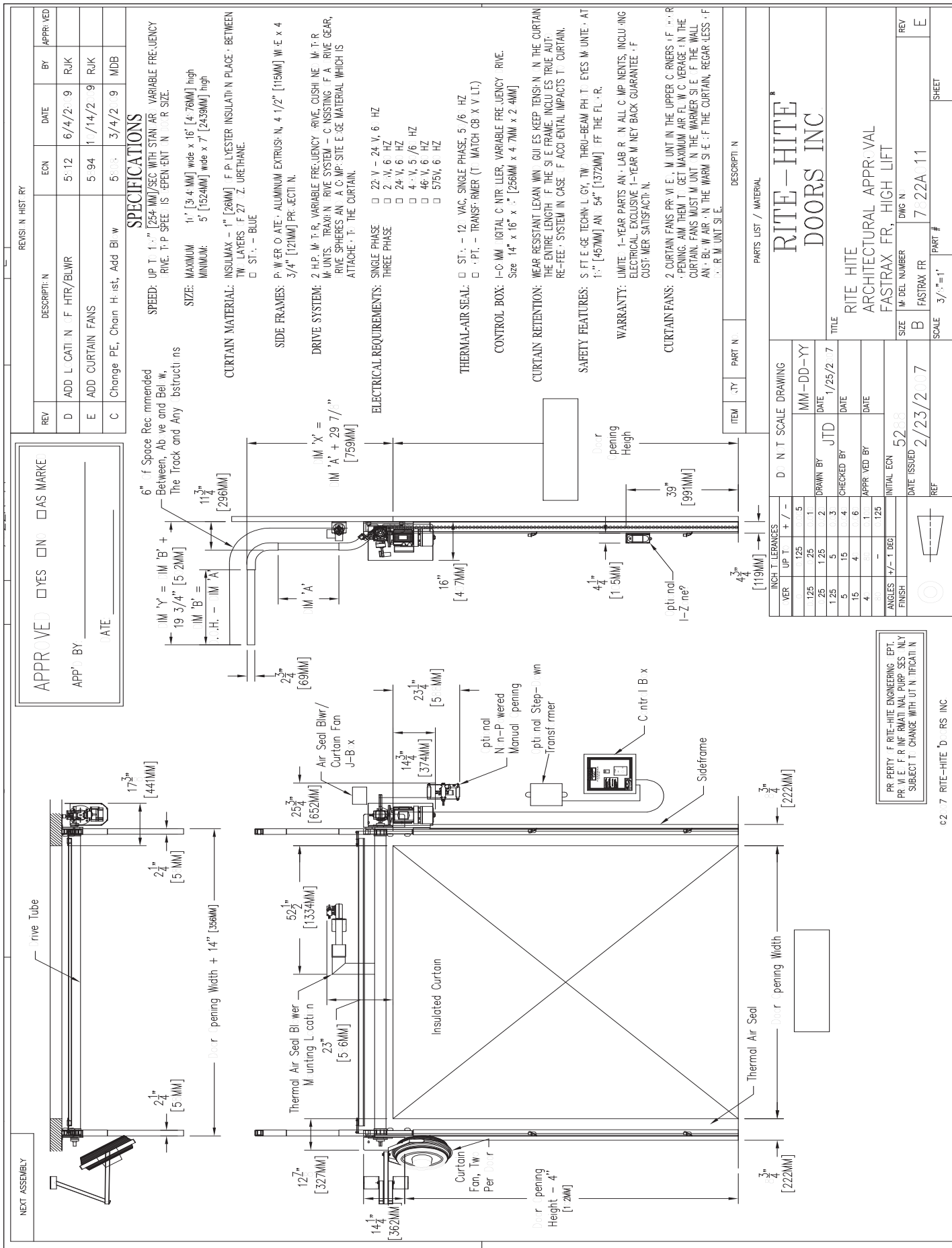
ITEM	QTY	PART N.	DESCRIPTION
			PARTS LIST / MATERIAL
			RITE-HITE DOORS INC

DRAWING: MM-DD-YY  
 DRAWN BY: JTD  
 DATE: 1/24/2007  
 CHECKED BY: [Blank]  
 DATE: [Blank]  
 APPROVED BY: [Blank]  
 DATE: [Blank]

INITIAL EON: 52  
 DATE ISSUED: 2/23/2007  
 REF: [Blank]

SIZE: B  
 FASTRAX FR: 7.22A-6  
 SCALE: 3/4"=1"  
 SHEET: E

# FR HIGH LIFT ARCHITECTURAL DRAWING



**RITE-HITE DOORS INC**

ARCHITECTURAL APPROVAL  
FASTRAX FR, HIGH LIFT

DATE ISSUED: 2/23/2007

SCALE: 3/4" = 1"

SHEET: E

REVISIONS

REV	UP	DOWN	DATE	BY	APPROVED
1	+	-	1/25/2007	JTD	
2	+	-			
3	+	-			
4	+	-			
5	+	-			
6	+	-			

INITIAL ECN: 5288

DATE ISSUED: 2/23/2007

SCALE: 3/4" = 1"

INCH TOLERANCES

VER	UP	DOWN	DATE	BY	APPROVED
1	+	-	1/25/2007	JTD	
2	+	-			
3	+	-			
4	+	-			
5	+	-			
6	+	-			

INITIAL ECN: 5288

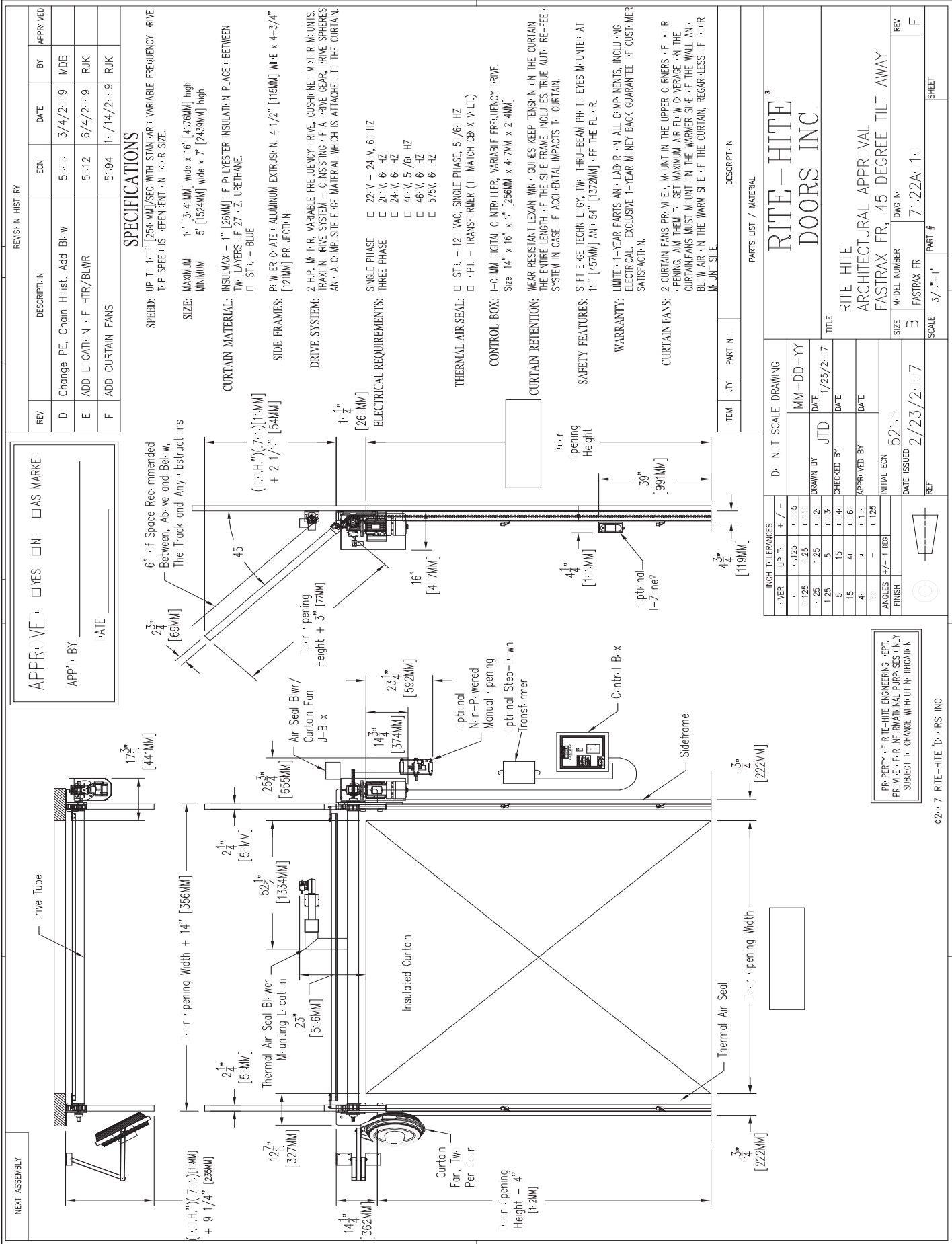
DATE ISSUED: 2/23/2007

SCALE: 3/4" = 1"

PR. PROPERTY OF RITE-HITE ENGINEERING. EPT. PROJECTS ARE THE PROPERTY OF RITE-HITE ENGINEERING. ALL RIGHTS RESERVED. SUBJECT TO CHANGE WITHOUT NOTICE.

62-7 RITE-HITE DOORS INC

# FR 45° TILT ARCHITECTURAL DRAWING



REVISION HISTORY

REV	DESCRIPTION	EON	DATE	BY	APPROVED
D	Change PE, Chain Hist, Add Blw	5-12	3/4/2-9	MDB	
E	ADD L-CAT-N-F HTR/BLWR	5-12	6/4/2-9	RJK	
F	ADD CURTAIN FANS	5-94	1-14/2-9	RJK	

### SPECIFICATIONS

**SPEED:** UP TO 1" [25.4MM]/SEC WITH STAN-AR VARIABLE FREQUENCY DRIVE. TYP SPEED IS DEPENDENT ON MOTOR SIZE.

**SIZE:** MAXIMUM 1" [3-4MM] wide x 16" [4-76MM] high  
MINIMUM 5" [152.4MM] wide x 7" [243.9MM] high

**CURTAIN MATERIAL:** INSULMAX - 1" [26MM] POLYESTER INSULATION PLACED BETWEEN TWO LAYERS OF 27-Z URETHANE.  
STITCHING - BLUE

**SIDE FRAMES:** POWER COATED ALUMINUM EXTRUSION 4 1/2" [115MM] (WIDE x 4-3/4" [121MM] DEPTH)

**DRIVE SYSTEM:** 2 HP MOTOR, VARIABLE FREQUENCY DRIVE, CUSHIONED MOTOR MOUNTS, TRAXI DRIVE SYSTEM - MISSING FAN DRIVE GEAR, RIVE SPHERES, ANTI-COMPRESSIVE MATERIAL WHICH IS ATTACHED TO THE CURTAIN.

**ELECTRICAL REQUIREMENTS:** SINGLE PHASE  
THREE PHASE  
220V - 240V @ 60 HZ  
240V - 60 HZ  
480V - 50/60 HZ  
480V - 60 HZ  
575V - 60 HZ

**THERMAL-AIR SEAL:** STITCHING - 12: VAC, SINGLE PHASE, 5/6 HZ  
PT. - TRANSFORMER (MATCH BOX VOLT)

**CONTROL BOX:** LOGICAL CONTROLLER, VARIABLE FREQUENCY DRIVE.  
Size 14" x 16" x 16" [256MM x 4-7MM x 2-4MM]

**CURTAIN RETENTION:** WEAR RESISTANT LEXAN WINDOW GUARDS KEEP TENSION IN THE CURTAIN THE ENTIRE LENGTH OF THE SIDE FRAME INCLUDING TRUE AUTOREFEEL SYSTEM IN CASE OF ACCIDENTAL IMPACT TO CURTAIN.

**SAFETY FEATURES:** SAFETY TECH: UG/TW THRU-BEAM PHOTO EYES MOUNTED AT 1" [457MM] AND 54" [1372MM] FROM THE FLOOR.

**WARRANTY:** LIMITED 1-YEAR PARTS AND LABOR IN ALL COUNTRIES, INCLUDING ELECTRICAL, EXCLUSIVE 1-YEAR MECH BACK GUARANTEE FROM CUSTOMER SATISFACTION.

**CURTAIN FANS:** 2 CURTAIN FANS PROVIDED; MOUNT IN THE UPPER CORNERS OF CURTAIN. PENDING APPROVAL, GET MAXIMUM AIR FLOW CAPACITY IN THE CURTAIN. FANS MUST BE MOUNTED IN THE WARMER SIDE OF THE WALL. ANTI-COMPRESSIVE MATERIAL MUST BE USED TO PROTECT THE CURTAIN REGARDLESS OF MOTOR MOUNT SIDE.

APPROVED BY: [Signature]

DATE: [Date]

SCALE: 3/8" = 1"

REV: F

SHEET: [Number]

DESCRIPTION: RITE-HITE DOORS INC.

PARTS LIST / MATERIAL

ITEM	QTY	PART N°	DESCRIPTION
			RITE-HITE DOORS INC.

DATE ISSUED: 2/23/2007

SCALE: 3/8" = 1"

PROPERTY OF RITE-HITE ENGINEERING - NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING.

DATE: 1/25/2007

DRAWN BY: JTD

CHECKED BY: [Name]

APPROVED BY: [Name]

INITIAL EON: 52

DATE ISSUED: 2/23/2007

SCALE: 3/8" = 1"

REV: F

SHEET: [Number]