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TRACTION DC

Engineering Data Form – Page 1

160701

Warning: Review Before Submittal

- Failure to Provide Accurate and Complete Information could result in the following: Delayed Controller Shipment, Price Change, and Incurred Engineering Charges.
- If a job specification is included you must complete the 'Build to Job Specification' section on page 3.
- All Fixtures must be 24 VDC/6 Watts Max.
- If a category is not completed, the **default** option will be assumed.

TRACTION DC - Table of Contents by Page

- | | |
|-----------------------------------|--------------------------------|
| 1. Job Information | 6. Fixtures |
| 2. Shipping & Pre-Wire | 7. Car Door Data |
| 3. General Controller Information | 8. Landings and Openings |
| 4. Motor/Encoder, and Brake Data | 9. Elevator(s) Physical Layout |
| 5. Features & Functions | |

This document can be edited, saved, and submitted electronically using Adobe Reader.

Job Details

Job Name:
PO #:
Job Location (City & State)

Market Segment:

☐ Federal

☐ Education

☐ Health Care

☐ Hospitality

☐ Financial

☐ Residential

☐ Other

Purchasers Information: (If packager fill in End User Info on right)

Name:
Title:
Company:
Phone: Fax:
Cell:
Email:

Engineering Contact Information: (If different than above)

Name:
Phone: Fax:
Cell:
Email:

Date Filled Out

End User Information: (for packager use only)

Name:
Title:
Company:
Phone: Fax:
Cell:
Email:

Notes and Special Instructions

Shipping Information

Contact Name:

Phone:

Contact Fax/Email:

Smartrise Call Prior to Shipping:

Yes

No

Carrier Call for Delivery Appointment:

Yes

No

Lift Gate Required:

Yes

No

Freight Terms

Use Smartrise Carrier:

Yes

No

Will Call

Pre-paid

Customer's Carrier Name:

Carrier's Account Number:

Collect

Third Party

Third Party Billing (Duties & Taxes)

Ship to Name/Company:

Shipping Address:

Bill To Address:

Shipping Schedule

Controller(s)	Desired Ship Date from Smartrise	Controller(s)	Desired Ship Date from Smartrise

Note: Desired ship date from Smartrise is not an arrival date.

Additional Shipping Instructions

Pre-wire Fixtures (Must be 24 VDC/6 Watt Max)

Not Required

Pre-wire COP Boards:

Yes

No (default)

Pre-wire Hall Boards:

Yes

No (default)

Fixture Manufacturer

Innovation

ECC

Other

Monitor

MAD

PTL

Otis

RSL Car Calls

RSL Hall Calls

Company Name:

Ship to Address:

Job Reference:

Contact Person at Mfg.

Electrical Main Line and Transformer Specification

Main Line Specification:

Main Line Volts (Transformer required if motor volts are 10% greater than main line)

☐ Three Phase (default)

☐ Single Phase

Hz (Main Line is 60Hz unless stated otherwise)

Main Line Transformer (If Customer Requires)

☐ Provided by Smartrise

☐ Provided By Customer (custom to provide drawing)

Secondary Voltage

kVA

☐ Data Plate Copy Included

Configuration

☐ Simplex # Cars

☐ Group # Cars in Group # of Hall Risers/Group

☐ Group Redundancy

☐ Swing Riser, Car #

☐ Selective Collective (2 buttons/floor, multiple calls)

☐ Non-Selective Collective (1 button/floor, multiple calls)

☐ Non-Selective Non-collective (1 button/floor, 1 call at a time)

Build to Job Specifications

Not Required

☐ We will review the spec and will provide a list of exceptions when necessary.

☐ Job needs to be built to meet Engineering Specifications in Document provided EXCEPT those listed below (Provide Page/Section & Description of exceptions)

Environmental Considerations

Not Required

☐ Controller Cabinet Air-pressure cooled (add Vortex)
(Customer to provide Air Compressor)

☐ Controller Cabinet Air conditioned cooled (add A/C Unit) Controller

☐ Cabinet Forced Air cooled (add Fan and Filter)

☐ Arc Flash Protection

☐ Special attention to hoist-way shaft (provide details in notes below)

☐ Outdoor or Hostile (Industrial Environment)

NEMA Rating for Machine Room Controller Cabinet
(if required, default NEMA 1)

NEMA Rating for Top of Car Enclosure (if required,
default NEMA 1)

NEMA For Landing System (if required, default NEMA 1)

Connection Package

☐ SmartConnect Package - Recommended
(Pre-Wired Car Top Inspection Box Included)

Car Operating Panel

☐ Single Panel (default)

☐ Other

☐ Dual Panels

☐ Remote Panel

Notes and Special Instructions

ASME 17.1 Elevator Safety Code Compliance

☐ 2016

☐ 2013

☐ 2010

☐ 2007

☐ 2004

☐ 2000

Additional Local Code

☐ NYC (Appendix K)

☐ No Fire Service

☐ MASSACHUSETTS

Controller Layout Preference

☐ Standard (MR, CT, and COP) (default)

☐ No Cartop

☐ No COP

☐ Custom:

We will notify you if the preference chosen cannot be honored

Traction Features, Motor/Encoder, and Brake Data

TRACTION DC - Engineering Data Form – Page 4

Traction Features (<input type="checkbox"/> Features for all cars is the same as car 1) Failure to provide data will result in delay of controller shipment				
Car	Contract Speed	Capacity	Encoder Provided By	Customer Supplied Encoder Info
1			<input type="checkbox"/> Smartrise (default) <input type="checkbox"/> None <input type="checkbox"/> Customer (Include info in notes)	Make
2			<input type="checkbox"/> Smartrise (default) <input type="checkbox"/> None <input type="checkbox"/> Customer (Include info in notes)	
3			<input type="checkbox"/> Smartrise (default) <input type="checkbox"/> None <input type="checkbox"/> Customer (Include info in notes)	Model
4			<input type="checkbox"/> Smartrise (default) <input type="checkbox"/> None <input type="checkbox"/> Customer (Include info in notes)	

Additional Motor Data for DC Motors (<input type="checkbox"/> Data for all cars is the same as car 1)									Below values measured at what Car Speed: <input type="text"/>			
Field Values - Failure to provide data will result in delay of controller shipment									Armature Values (at Contract Speed) <small>Failure to provide data will result in delay of controller shipment</small>			
Car	Forcing Voltage	Full Speed Voltage	Standing Voltage	Ripple Filter	Coil Config.	Field Resistance	Resistance Value Acquired From	Resistance Value While Coil Is ...	Up at Contract Speed (VDC)	Down at Contract Speed (VDC)	Up at Full Capacity (amps)	Down at Full Capacity (amps)
1				<input type="checkbox"/>	<input type="checkbox"/> Series <input type="checkbox"/> Parallel		<input type="checkbox"/> Datasheet <input type="checkbox"/> Measured	<input type="checkbox"/> Cold <input type="checkbox"/> Hot				
2				<input type="checkbox"/>	<input type="checkbox"/> Series <input type="checkbox"/> Parallel		<input type="checkbox"/> Datasheet <input type="checkbox"/> Measured	<input type="checkbox"/> Cold <input type="checkbox"/> Hot				
3				<input type="checkbox"/>	<input type="checkbox"/> Series <input type="checkbox"/> Parallel		<input type="checkbox"/> Datasheet <input type="checkbox"/> Measured	<input type="checkbox"/> Cold <input type="checkbox"/> Hot				
4				<input type="checkbox"/>	<input type="checkbox"/> Series <input type="checkbox"/> Parallel		<input type="checkbox"/> Datasheet <input type="checkbox"/> Measured	<input type="checkbox"/> Cold <input type="checkbox"/> Hot				

Motor/Encoder Data (<input type="checkbox"/> Data for all cars is the same as car 1) Failure to provide data will result in delay of controller shipment													
Car	Machine Brand/Model	Motor Volts	FLA	HP	RPM	Machine Type	Location	Rope Ratio	Sheave Dia.	Gear Ratio	Encoder PPR	Enc Cbl Length	Enc Shaft Dia
1						<input type="checkbox"/> Geared <input type="checkbox"/> Gearless	<input type="checkbox"/> Overhead <input type="checkbox"/> Basement						
2						<input type="checkbox"/> Geared <input type="checkbox"/> Gearless	<input type="checkbox"/> Overhead <input type="checkbox"/> Basement						
3						<input type="checkbox"/> Geared <input type="checkbox"/> Gearless	<input type="checkbox"/> Overhead <input type="checkbox"/> Basement						
4						<input type="checkbox"/> Geared <input type="checkbox"/> Gearless	<input type="checkbox"/> Overhead <input type="checkbox"/> Basement						

Brake Data (<input type="checkbox"/> Data for all cars is the same as car 1) Failure to provide data will result in delay of controller shipment													
Car	DC/AC	Pick Volts (DC or AC)	Hold Volts (DC Only)	Coil Resistance	Coil Amperage	Emergency (2 nd) Brake				Independent (2 nd) Brake Data			
1	<input type="checkbox"/> DC (default) <input type="checkbox"/> AC (3 Phase) <input type="checkbox"/> AC (1 Phase)					<input type="checkbox"/> 120vac Hollister-Whitney Rope Gripper <input type="checkbox"/> Draka Rope Brake (* below)	<input type="checkbox"/> Independent 2nd DC Brake on Motor						
2	<input type="checkbox"/> DC (default) <input type="checkbox"/> AC (3 Phase) <input type="checkbox"/> AC (1 Phase)					<input type="checkbox"/> 120vac Hollister-Whitney Rope Gripper <input type="checkbox"/> Draka Rope Brake (* below)	<input type="checkbox"/> Independent 2nd DC Brake on Motor						
3	<input type="checkbox"/> DC (default) <input type="checkbox"/> AC (3 Phase) <input type="checkbox"/> AC (1 Phase)					<input type="checkbox"/> 120vac Hollister-Whitney Rope Gripper <input type="checkbox"/> Draka Rope Brake (* below)	<input type="checkbox"/> Independent 2nd DC Brake on Motor						
4	<input type="checkbox"/> DC (default) <input type="checkbox"/> AC (3 Phase) <input type="checkbox"/> AC (1 Phase)					<input type="checkbox"/> 120vac Hollister-Whitney Rope Gripper <input type="checkbox"/> Draka Rope Brake (* below)	<input type="checkbox"/> Independent 2nd DC Brake on Motor						

Hollister-Whitney Rope Gripper if NOT 120vac. Specify Voltage:

* For Draka 6501 Rope Brake (If Supplied by Smartrise)

☐ Rope Spread ☐ Rope Diameter

Motor Control Preference

- ☐ Magnetek DSD 412 (default)
☐ Magnetek Quattro DC (regen included)

We will notify you if the preference chosen cannot be honored

Filters

- ☐ Line Reactor
☐ EMI/RFI Filter
☐ Harmonic Filter

Notes and Special Instructions

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Special Features	Not Required <input type="checkbox"/>
<input type="checkbox"/> Remote (2 nd) Fire Keyswitch & Lamp	<input type="checkbox"/> Shunt-Trip
<input type="checkbox"/> Earthquake (Includes Buzzer and Lamp)	<input type="checkbox"/> Flood Sensor
<input type="checkbox"/> Car-to-Lobby Keyswitch	<input type="checkbox"/> 'S' Button
<input type="checkbox"/> Fan and Light Auto Shutoff Circuit (CT only)	
<input type="checkbox"/> Machine Room Cabinet Light	
<input type="checkbox"/> Machine Room Cabinet Power Plug	
<input type="checkbox"/> Mechanical Normal Limits (Mechanical Switches not provided by Smartrise)	

Special Modes of Operation	Not Required <input type="checkbox"/>
<input type="checkbox"/> Independent Service (default)	
Hoistway Access <input type="checkbox"/> Yes (default) <input type="checkbox"/> No	
<input type="checkbox"/> In-Car Inspection Switch (uses top/bottom car calls)	
<input type="checkbox"/> CT Inspection requires an In Car Inspection (Hoist-way or IC)	
<input type="checkbox"/> Non-standard	
<div style="border: 1px solid black; padding: 5px;"> Medical Emergency Service (provide floor(s) on page 8) <div style="margin-top: 5px;"> <input type="checkbox"/> Building is a Hospital with keys at every floor <small>In Car Buzzer, In Car Lamp, and Hallway Lamp at each Floor are included</small> </div> <div style="margin-top: 5px;"> <input type="checkbox"/> Non-hospital – Phase 1 key at main level only <small>In Car Buzzer and In Car Lamp are included</small> </div> </div>	
<input type="checkbox"/> Sabbath (attach spec)	
Other <div style="border: 1px solid black; height: 30px; width: 100%;"></div>	

<input type="checkbox"/> Attendant Service (Is NOT Independent Service) <div style="margin-top: 5px;"> <input type="checkbox"/> In Car Buzzer <input type="checkbox"/> In Car Lamp </div> <div style="margin-top: 5px;"> Choose 1: <input type="checkbox"/> Hall Call Above/Below Lamps (default) </div> <div style="margin-top: 5px;"> <input type="checkbox"/> Non-directional (all hall call lamps) </div> <div style="margin-top: 5px;"> <input type="checkbox"/> Other : _____ </div>

Emergency Power (if generator cannot run all cars) Not Required <input type="checkbox"/>
E.P. Contact from Generator is <input type="checkbox"/> Normally Open <input type="checkbox"/> Normally Closed
Power Pre-Transfer Contact from Generator is <input type="checkbox"/> Normally Open <input type="checkbox"/> Normally Closed <input type="checkbox"/> Not Present (default)
<input type="checkbox"/> Emergency Power Car Selector Switch <input type="checkbox"/> Single Car Selection <input type="checkbox"/> Multiple Car Selection (provide details below) (default)
<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <input type="text"/> </div> Number of cars the generator can operate simultaneously. <small>(default value is 1 car)</small>
<input type="checkbox"/> Generator powers other Simplex/Groups.

Car Call Security (specify floors on page 9) Not Required <input type="checkbox"/>
<input type="checkbox"/> Using COP Floor Buttons as Code Entry
<input type="checkbox"/> Using Dry Contacts from Card Readers and/or Keyswitches <input type="checkbox"/> Input in Car Station (default) <input type="checkbox"/> Input in Machine Room
<input type="checkbox"/> Override Security When on Independent Service or Attendant Service
<input type="checkbox"/> Provide a Car Call Security Override Input <input type="checkbox"/> Input in Car Station (default) <input type="checkbox"/> Input in Machine Room
<input type="checkbox"/> Door Open Button Functions on Secured Landings
Other Considerations <div style="border: 1px solid black; height: 150px; width: 100%;"></div>

Hall Call Security Not Required <input type="checkbox"/>
<input type="checkbox"/> Provide Enable/Disable all Hall Calls Input (simplex)
<input type="checkbox"/> Provide a Hall Call Security Override Input (per floor) <input type="checkbox"/> Dry Contacts in Hall Fixtures <input type="checkbox"/> Signals in Machine Room (default)
Other Considerations <div style="border: 1px solid black; height: 50px; width: 100%;"></div>

Controller Monitoring System Not Required <input type="checkbox"/>
<u>Designed and Manufactured by Smartrise Engineering</u> <input type="checkbox"/> SmartView 2.0 Monitoring Quantity <div style="margin-top: 5px;"> <input type="text"/> Number of 7 Inch Viewing Devices </div> <div style="margin-top: 5px;"> <input type="text"/> Number of 11 Inch Viewing Devices </div> <div style="margin-top: 5px;"> <input type="text"/> Number of 19 Inch Viewing Devices </div> <div style="margin-top: 10px;"> <input type="checkbox"/> Access outside of Machine Room <small>Outside machine room requires cloud subscription through Smartrise and internet access. Inside the machine room requires WiFi on PC or tablet.</small> </div>
<u>Designed and Manufactured by Integrated Display Systems</u> <input type="checkbox"/> Lift-Net (interface only)
<u>Designed and Manufactured by Kings III of America</u> <input type="checkbox"/> ORM (interface only)

• Custom Traveler and Hoist-way Cable (Purchase from Smartrise)Not Required ☐**Traveler Cable**

- ☐ Traveler Cable: Part # TCSX33SR
Four 14 AWG
Twenty 18 AWG
Four 20 AWG Shielded
Jacketed Pairs
One RG 6/U Coaxial Cable
Steel Core
Textile Braid and PVC Jacket
Kellum Support Grip Pair

Length of Cable(s)
Per car (in feet)

<input type="text"/>	Car 1	<input type="text"/>
<input type="text"/>	Car 2	<input type="text"/>
<input type="text"/>	Car 3	<input type="text"/>
<input type="text"/>	Car 4	<input type="text"/>
<input type="text"/>	Car 5	<input type="text"/>
<input type="text"/>	Car 6	<input type="text"/>

Hoistway Cable

- ☐ Hoistway Cable, Part #HC2118SR Twenty-one
18 AWG Insulated Conductors

• All Fixtures must be 24 VDC/6 Watts Max.**In Car Position Indicator**Not Required ☐

- ☐ CE Micro Com (default) ☐ Discrete Signals (one line per floor)
☐ Emotive 3-Wire ☐ Discrete Signals (binary)
☐ DL-20 (interface only) ☐ RSL
Other: _____

In Car Arrival LanternNot Required ☐

- ☐ CE Micro Com (default) ☐ Discrete Signals
☐ Emotive 3-Wire Bulb/Chime wattage (if Discrete):
☐ RSL
Other: _____

In Car Passing ChimeNot Required ☐

- ☐ CE Micro Com (default) ☐ Discrete Signal ☐ RSL
☐ Emotive 3-Wire Bulb/Chime wattage (if Discrete):

In Car Voice AnnunciatorNot Required ☐

- ☐ CE Micro Com ☐ Emotive 3-Wire ☐ Speaker is Remote
☐ RSL
Provided By: ☐ Smartrise ☐ Customer (must be CE or Emotive 3 wire)
Other: _____

Load WeighingNot Required ☐

- Load Weigher Provided By ☐ Overload Lamp
☐ Smartrise (EMCO) ☐ Customer ☐ Anti-Nuisance
 # Ropes Rope Diameter ☐ 1:1 Roping
☐ 2:1 Roping

In Hall Position IndicatorNot Required ☐

- ☐ CE Micro Com (default) ☐ Discrete Signals (one line per floor)
☐ Emotive 3-Wire ☐ Discrete Signals (binary)
☐ EX-51/EX31 (interface only) ☐ RSL
 # of Floors with Hall Position Indicators
Other: _____

In Hall Arrival LanternsNot Required ☐

- ☐ First Floor Only (Discrete) ☐ CE Micro Com Lanterns (Type: SA130M Req.)
☐ All Floors (Smartrise Hall Boards) ☐ Emotive 3-Wire
☐ EX-51/EX31 (interface only) ☐ RSL
☐ If Lamps/Gongs are not 24VDC/6 Watt. (explain below)

Lobby PanelNot Required ☐

- ☐ Door Open Lamp ☐ In Use Lamp
☐ On Independent Svc. Lamp ☐ In Service Lamp
☐ Emergency Power Lamp

Other Requirements

Door Type 1	Use this door for all cars, or specify which cars use it				
	All <input type="checkbox"/> F <input type="checkbox"/> R	Car 1 <input type="checkbox"/> F <input type="checkbox"/> R	Car 2 <input type="checkbox"/> F <input type="checkbox"/> R	Car 3 <input type="checkbox"/> F <input type="checkbox"/> R	Car 4 <input type="checkbox"/> F <input type="checkbox"/> R

Hall Door Type

☐ Auto Passenger (default)
 ☐ Powered Freight (see * below)
 ☐ Manual
 ☐ Other

Select Door Operator

<input type="checkbox"/>	Abell	ATS 0090	Field "EZ"
<input type="checkbox"/>	GAL	MODCTL	24vdc interface relays
<input type="checkbox"/>	GAL	MOD	L, G, or X
<input type="checkbox"/>	GAL	MOVFR	230vac input voltage
<input type="checkbox"/>	Kone	Mac	104 or 105D interface board
<input type="checkbox"/>	Kone	PMSSC	104 or 105D interface board
<input type="checkbox"/>	Otis	AT-400	240 AC/120 VDC Interface
<input type="checkbox"/>	Otis	AT-400/Glide P	Multi-Drop
<input type="checkbox"/>	TKE	Dover HD-03	Requires IO Card: 6300TX2 (110vac)
<input type="checkbox"/>	TKE	Dover HD-73	Type D/I/O
<input type="checkbox"/>	TKE	Dover HD-91	DC Motor
<input type="checkbox"/>	TKE	HDLM	Requires UIT_I/O Card
<input type="checkbox"/>	Fermator	VVVF5	Linear Door Operator
<input type="checkbox"/>	None		Manual Car Gate
<input type="checkbox"/>	Peelle	Wireless	*Input Freight/door information at bottom
<input type="checkbox"/>	Courion	ILearn	
<input type="checkbox"/>	EMS		
<input type="checkbox"/>	Other		*Input Other door information at bottom

☐ **Door Protection**

☐ Photo Eye/Light Curtain (default)
 ☐ Mechanical Safety Edge
 ☐ Door Hold Button

☐ **Cam**

☐ Mechanical
 ☐ DC
 ☐ AC (3 Phase)
 ☐ AC (Single Phase)

Volts	Amps

☐ **Gate Release**

☐ DC
 ☐ AC (3 Phase)
 ☐ AC (Single Phase)

Volts	Amps

Other Door Considerations

* Freight/Other Door Operator Info

Manufacturer

Model

Reference #'s

Job Prints from Door Manufacturer are Required

Door Type 2	Use this door for all cars, or specify which cars use it				
	All <input type="checkbox"/> F <input type="checkbox"/> R	Car 1 <input type="checkbox"/> F <input type="checkbox"/> R	Car 2 <input type="checkbox"/> F <input type="checkbox"/> R	Car 3 <input type="checkbox"/> F <input type="checkbox"/> R	Car 4 <input type="checkbox"/> F <input type="checkbox"/> R

Hall Door Type

☐ Auto Passenger (default)
 ☐ Powered Freight (see * below)
 ☐ Manual
 ☐ Other

Select Door Operator

<input type="checkbox"/>	Abell	ATS 0090	Field "EZ"
<input type="checkbox"/>	GAL	MODCTL	24vdc interface relays
<input type="checkbox"/>	GAL	MOD	L, G, or X
<input type="checkbox"/>	GAL	MOVFR	230vac input voltage
<input type="checkbox"/>	Kone	Mac	104 or 105D interface board
<input type="checkbox"/>	Kone	PMSSC	104 or 105D interface board
<input type="checkbox"/>	Otis	AT-400	240 AC/120 VDC Interface
<input type="checkbox"/>	Otis	AT-400/Glide P	Multi-Drop
<input type="checkbox"/>	TKE	Dover HD-03	Requires IO Card: 6300TX2 (110vac)
<input type="checkbox"/>	TKE	Dover HD-73	Type D/I/O
<input type="checkbox"/>	TKE	Dover HD-91	DC Motor
<input type="checkbox"/>	TKE	HDLM	Requires UIT_I/O Card
<input type="checkbox"/>	Fermator	VVVF5	Linear Door Operator
<input type="checkbox"/>	None		Manual Car Gate
<input type="checkbox"/>	Peelle	Wireless	*Input Freight/door information at bottom
<input type="checkbox"/>	Courion	ILearn	
<input type="checkbox"/>	EMS		
<input type="checkbox"/>	Other		*Input Other door information at bottom

☐ **Door Protection**

☐ Photo Eye/Light Curtain (default)
 ☐ Mechanical Safety Edge
 ☐ Door Hold Button

☐ **Cam**

☐ Mechanical
 ☐ DC
 ☐ AC (3 Phase)
 ☐ AC (Single Phase)

Volts	Amps

☐ **Gate Release**

☐ DC
 ☐ AC (3 Phase)
 ☐ AC (Single Phase)

Volts	Amps

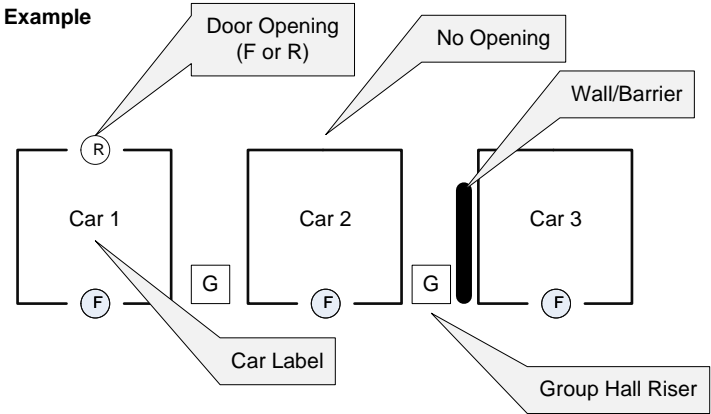
Other Door Considerations

Notes and Special Instructions:

Notes and Special Instructions:

Important: Provide Physical Layout on Sheet 9

Elevator(s) Physical Layout



Draw a topographical map of elevator(s) location on grid provided.

- * Accurately label each car by number/letter
- * Mark openings: F (front) or R (rear)
- * Label risers as:
 - G = Group Riser
 - I = Inconspicuous Riser
 - H = Hospital Service Riser
- * Draw in walls/barriers (heavy line)

Notes/Special Considerations