Special Projects Group
(888) 284-4774

FOR REFERENCE ONLY

This drawing is not a substitute for qualified field technicians. One hour of telephone support is available without charge.

NOTES:

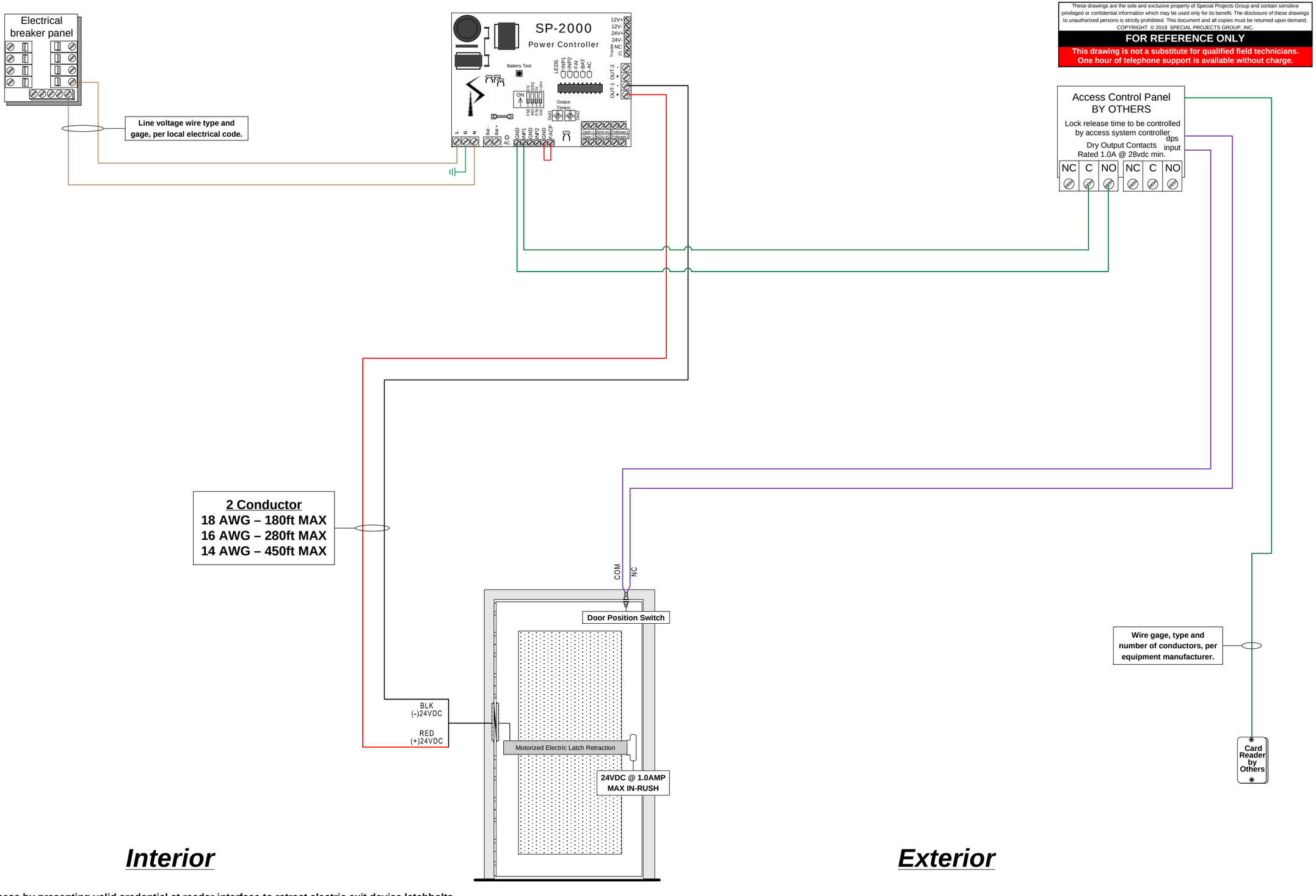
1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts.**
From exterior - unlocked condition: **Door to remain locked unless electric exit device held retracted by access control system.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit device to remain locked during utility power-loss event.**

Title: SGL MLR Exit Device SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/30/2018	Date Printed: 5/30/2018	Last Revised: 5/30/2018	4:28:45 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

FOR REFERENCE ONLY

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Special Projects Group
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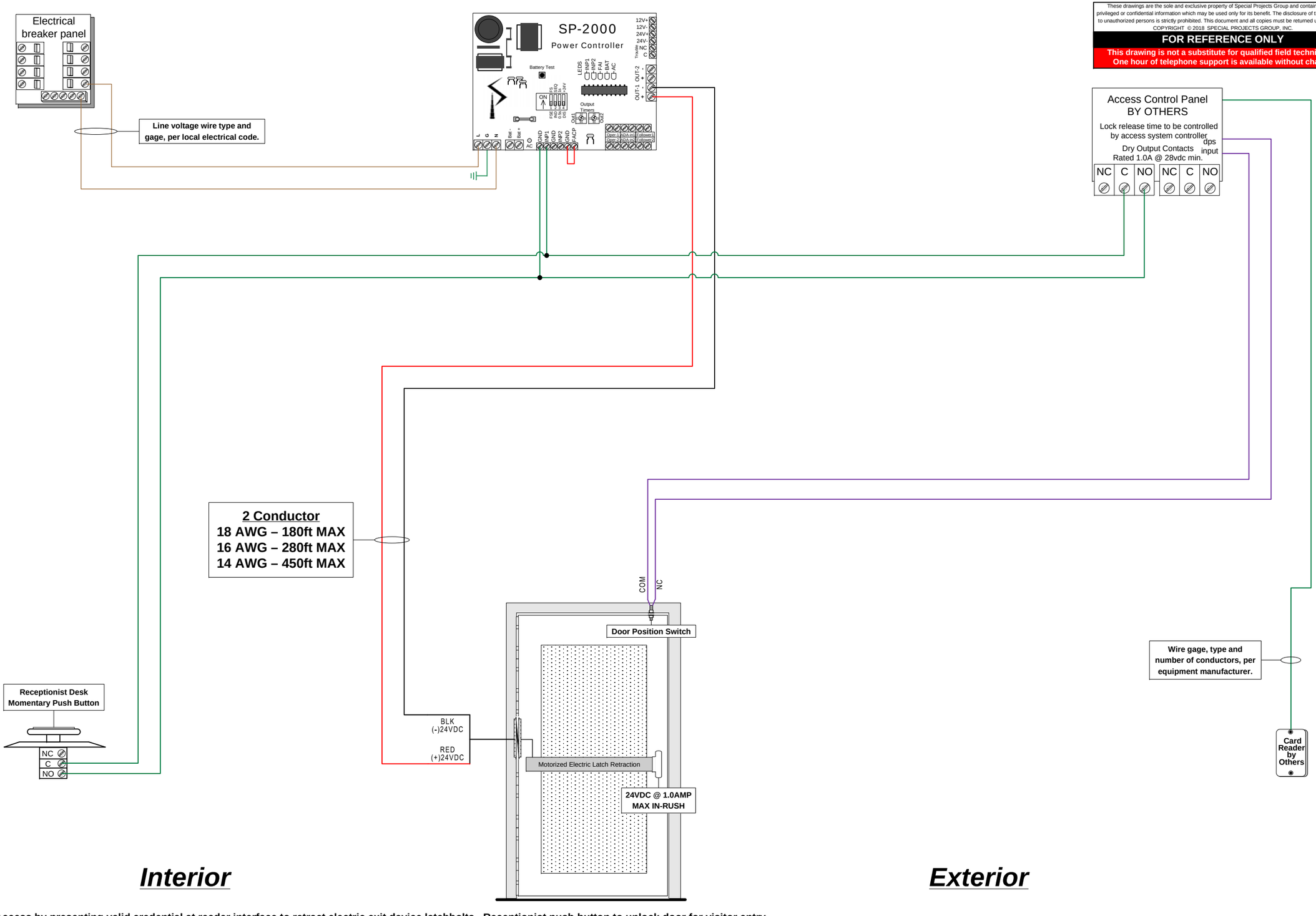
3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts. Receptionist push button to unlock door for visitor entry.**
From exterior - unlocked condition: **Door to remain locked unless electric exit device held retracted by access control system or receptionist desk push button control.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit device to remain locked during utility power-loss event.**

Title: SGL MLR-SP2000-pushbutton.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/30/2018	Date Printed: 5/30/2018	Last Revised: 5/30/2018	5:04:42 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

FOR REFERENCE ONLY

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Special Projects Group
(888) 284-4774

NOTES:

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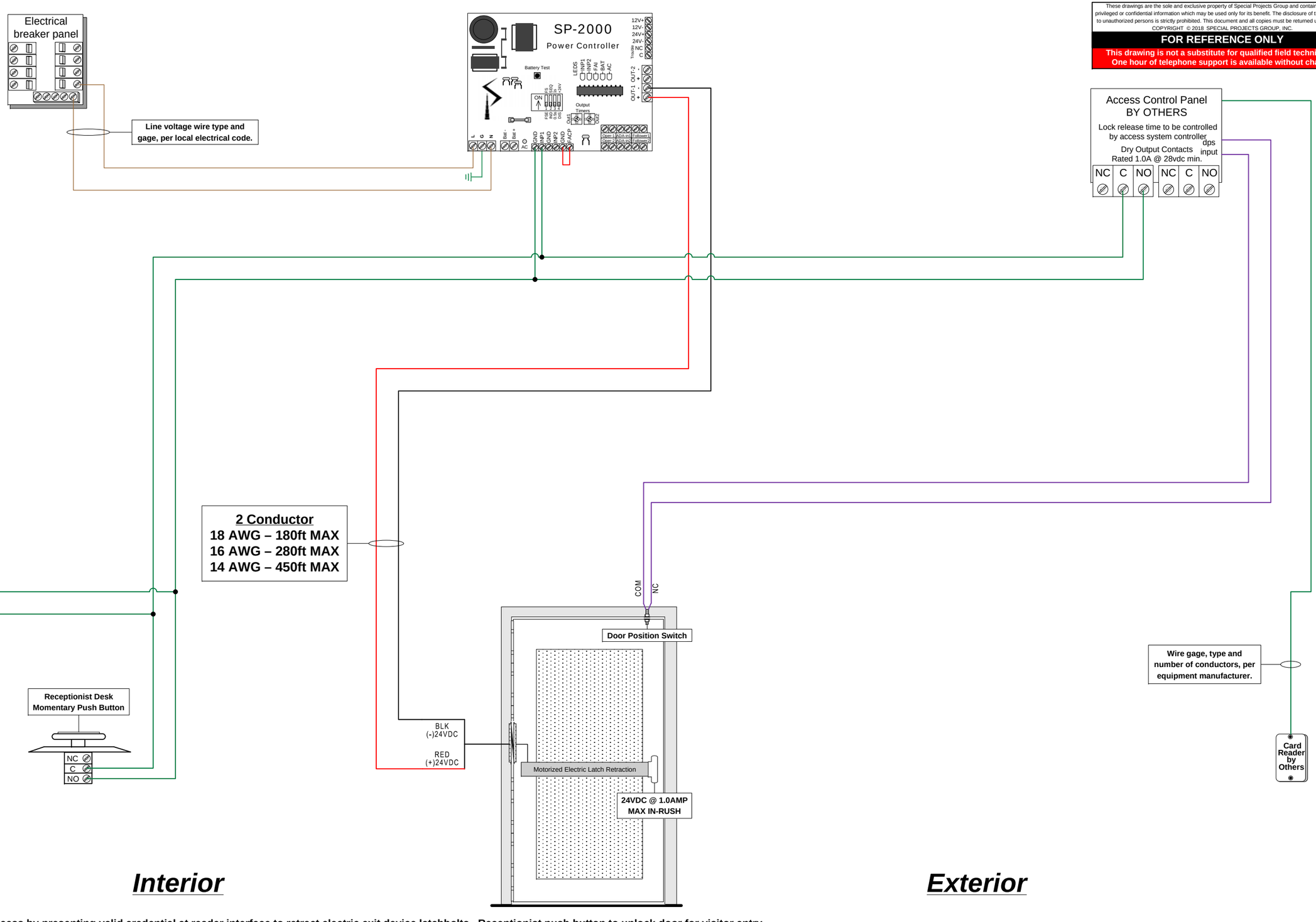
2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts. Receptionist push button to unlock door for visitor entry.**
From exterior - unlocked condition: **Door to remain locked unless electric exit device held retracted by access control system, receptionist desk push button control or maintained key-switch control.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit device to remain locked during utility power-loss event.**

Title: SGL MLR-SP2000-PB-KSWCH.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/30/2018	Date Printed: 5/30/2018	Last Revised: 5/30/2018	5:12:52 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

FOR REFERENCE ONLY

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NOTES:

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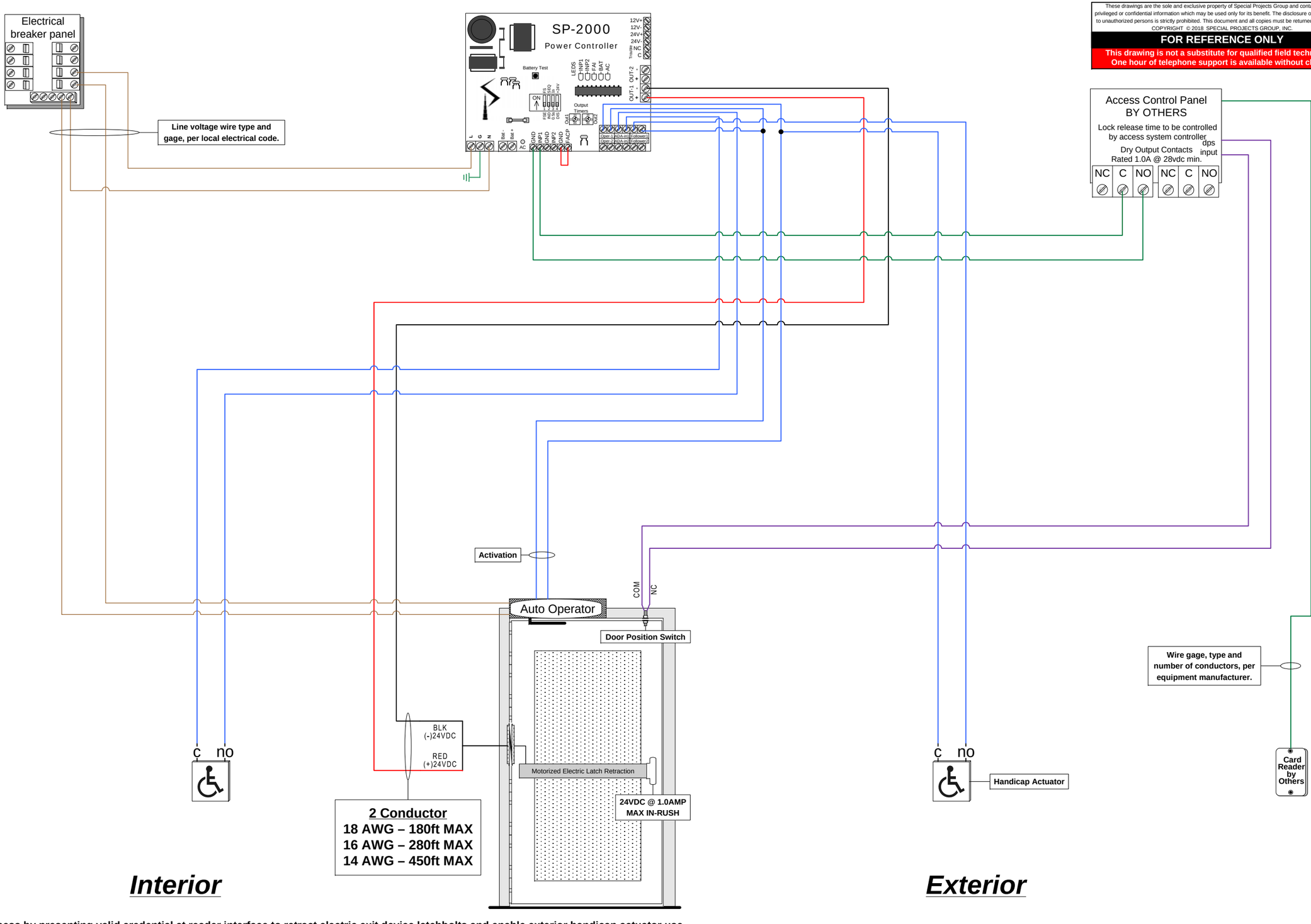
2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts and enable exterior handicap actuator use.**
From exterior - unlocked condition: **Door to remain locked unless electric exit device held retracted by access control system. When unlocked, exterior handicap actuator to be available.**
From interior - locked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operator.**
From interior - unlocked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operator.**
General: **Fail-secure electric latch retraction exit device to remain locked during utility power-loss event.**

Title: SGL MLRexit_Operator SP2000.vsd		Project: Example	
HWSET: Example		Door: EXT-1	
Date: 5/31/2018	Date Printed: 5/31/2018	Last Revised: 5/31/2018	11:07:39 AM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***

Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

SP-2000
Power Controller

Access Control Panel
BY OTHERS
Lock release time to be controlled by access system controller
dps input
Dry Output Contacts
Rated 1.0A @ 28vdc min.
dps input
NC C NO NC C NO

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

BLK (-)24VDC
RED (+)24VDC

COM
NC

Door Position Switch

Motorized Electric Latch Retraction

24VDC @ 1.0AMP MAX IN-RUSH (each)

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

BLK (-)24VDC
RED (+)24VDC

COM
NC

Motorized Electric Latch Retraction

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts.**
From exterior - unlocked condition: **Doors to remain locked unless electric exit device held retracted by access control system.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit devices to remain locked during utility power-loss event.**

Title: 2 Singles MLR Exits SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/31/2018	Date Printed: 5/31/2018	Last Revised: 5/31/2018	3:48:50 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

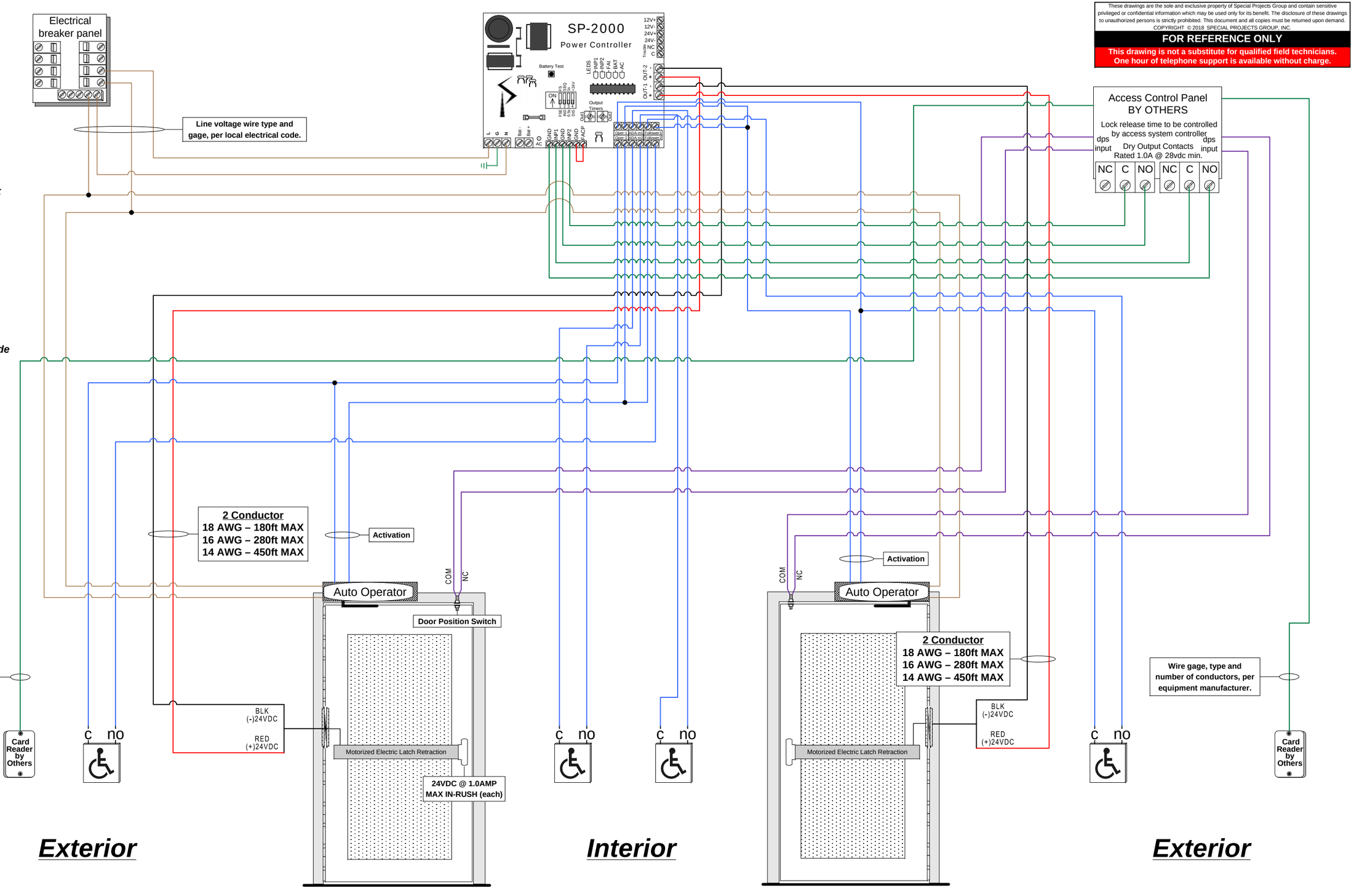
1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts and enable exterior handicap actuator use.**
From exterior - unlocked condition: **Doors to remain locked unless electric exit device held retracted by access control system. When unlocked, exterior handicap actuators available for use.**
From interior - locked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operator activation.**
From interior - unlocked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operator activation.**
General: **Fail-secure electric latch retraction exit devices to remain locked during utility power-loss event.**

Title: 2 Singles MLR_SP2000_Operators.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/31/2018	Date Printed: 5/31/2018	Last Revised: 5/31/2018	4:39:29 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

FOR REFERENCE ONLY

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Special Projects Group
(888) 284-4774

NOTES:

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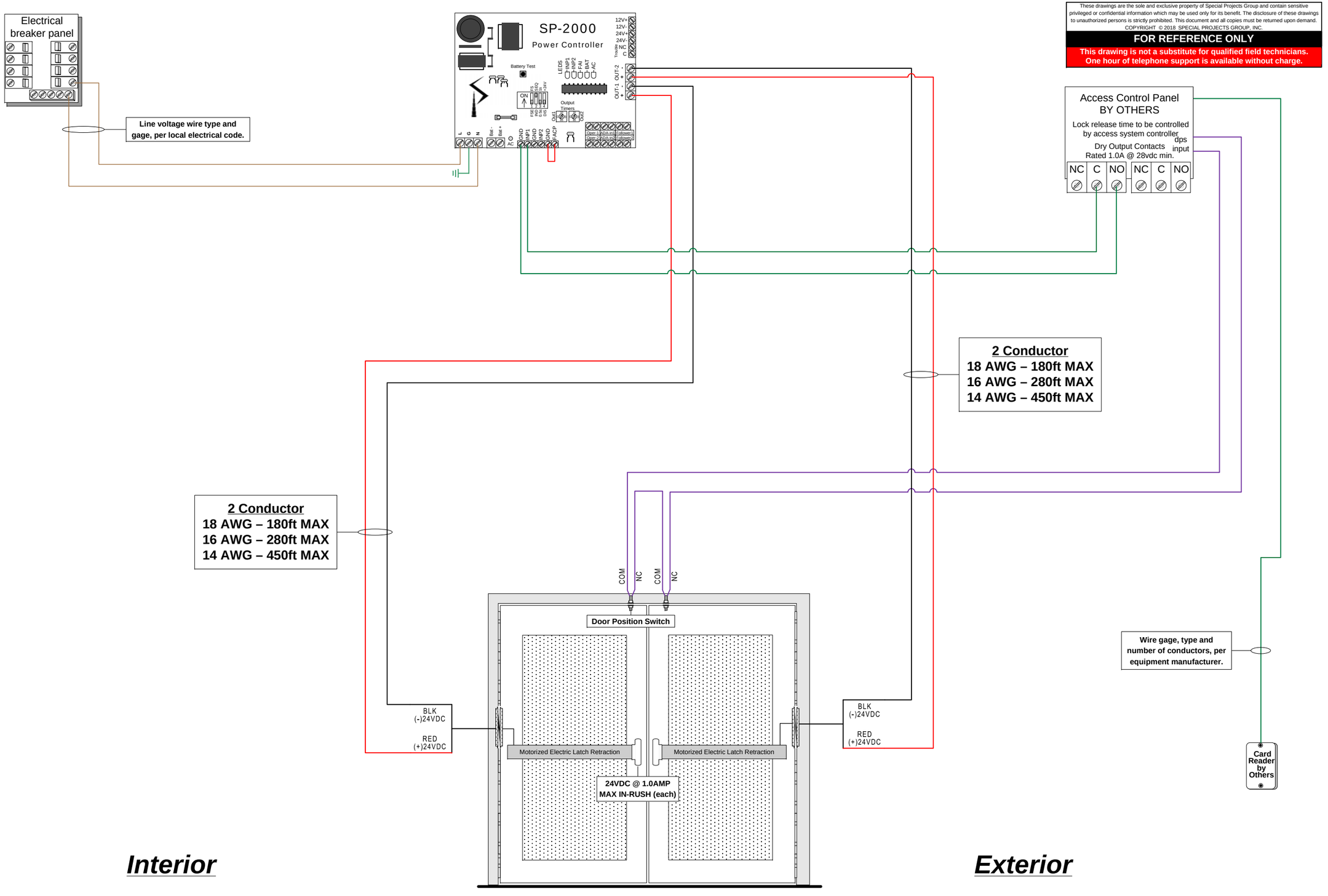
3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts.**
From exterior - unlocked condition: **Doors to remain locked unless electric exit device held retracted by access control system.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit devices to remain locked during utility power-loss event.**

Title: Pair MLR Exit Device SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/30/2018	Date Printed: 5/30/2018	Last Revised: 5/30/2018	5:31:01 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

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Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

SP-2000
Power Controller

Access Control Panel
BY OTHERS
Lock release time to be controlled by access system controller
Dry Output Contacts Rated 1.0A @ 28vdc min.
dps input
NC C NO NC C NO

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

Receptionist Desk Momentary Push Button
NC
C
NO

COM NC COM NC

Door Position Switch

BLK (-)24VDC
RED (+)24VDC

Motorized Electric Latch Retraction
Motorized Electric Latch Retraction

BLK (-)24VDC
RED (+)24VDC

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts. Receptionist push button to unlock doors for visitor entry.**
From exterior - unlocked condition: **Doors to remain locked unless electric exit device held retracted by access control system or receptionist desk push button control.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit devices to remain locked during utility power-loss event.**

Title: Pair MLR-SP2000-pushbutton.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/30/2018	Date Printed: 5/30/2018	Last Revised: 5/30/2018	5:26:44 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

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Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

SP-2000
Power Controller

Access Control Panel
BY OTHERS
Lock release time to be controlled by access system controller
Dry Output Contacts Rated 1.0A @ 28vdc min.
dps input
NC C NO NC C NO

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

Maintained Mortise Keyswitch
NO
C
NC

Receptionist Desk Momentary Push Button
NC
C
NO

BLK (-)24VDC
RED (+)24VDC

COM NC COM NC

Door Position Switch

Motorized Electric Latch Retraction
Motorized Electric Latch Retraction

24VDC @ 1.0AMP MAX IN-RUSH

BLK (-)24VDC
RED (+)24VDC

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts. Receptionist push button to unlock doors for visitor entry.**
From exterior - unlocked condition: **Doors to remain locked unless electric exit device held retracted by access control system, receptionist desk push button control or maintained key-switch control.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric latch retraction exit devices to remain locked during utility power-loss event.**

Title: Pair MLR-SP2000-PB-KSWCH.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/30/2018	Date Printed: 5/30/2018	Last Revised: 5/30/2018	5:21:58 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

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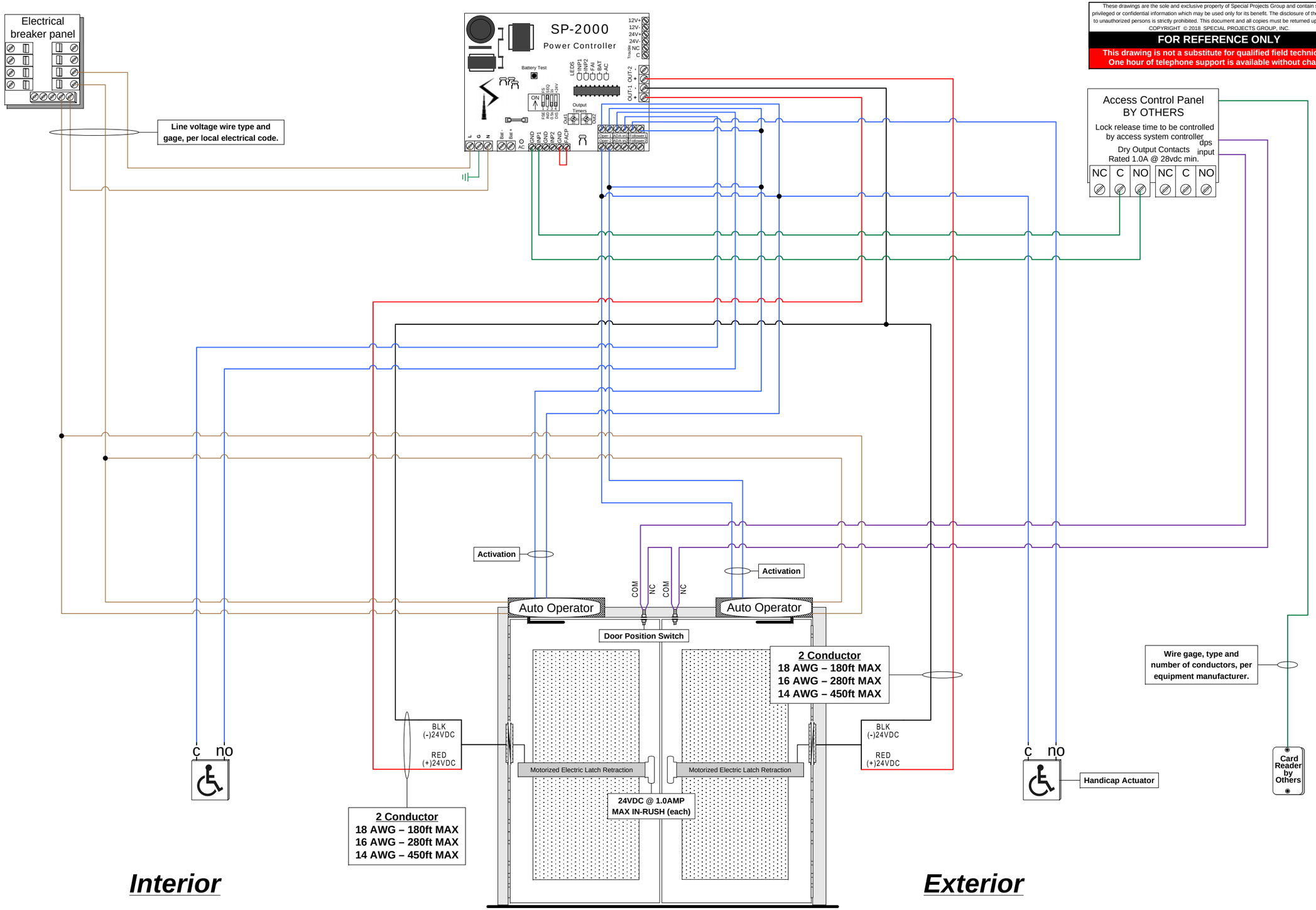

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts and enable exterior handicap actuator use.**
From exterior - unlocked condition: **Door to remain locked unless electric exit device held retracted by access control system. When unlocked, exterior handicap actuator to be available.**
From interior - locked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operators.**
From interior - unlocked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operators.**
General: **Fail-secure electric latch retraction exit device to remain locked during utility power-loss event.**

Title:	Pair MLR_Operators SP2000.vsd			Project: Example	
	HWSET: Example			Door: EXT-1	
Date:	5/31/2018	Date Printed:	5/31/2018	Last Revised: 5/31/2018	12:21:54 PM
Drawn By:	Cody Richardson	For:	Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

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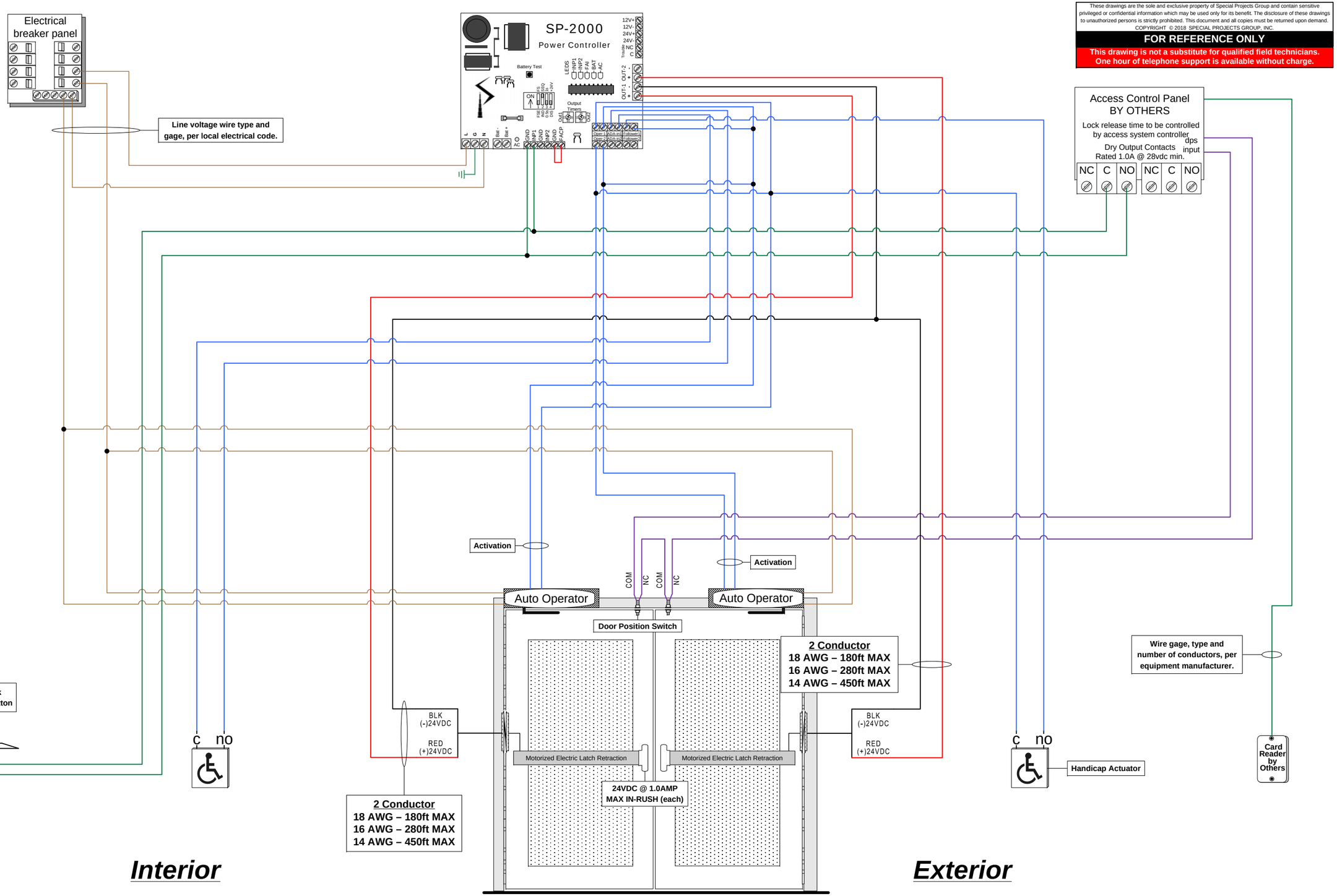

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to retract electric exit device latchbolts and enable exterior handicap actuator use. Receptionist push button to unlock doors for visitor entry.**
From exterior - unlocked condition: **Door to remain locked unless electric exit device held retracted by access control system or receptionist push button. When unlocked, exterior handicap actuator to be available.**
From interior - locked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operators.**
From interior - unlocked condition: **Free egress at all times by means of exit device or by pressing interior handicap actuator to retract electric exit device latchbolts and initiate automatic operators.**
General: **Fail-secure electric latch retraction exit device to remain locked during utility power-loss event.**

Title: Pair MLR_PB_Operators SP2000.vsd		Project: Example	
HWSET: Example		Door: EXT-1	
Date: 5/31/2018	Date Printed: 5/31/2018	Last Revised: 5/31/2018	12:42:56 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

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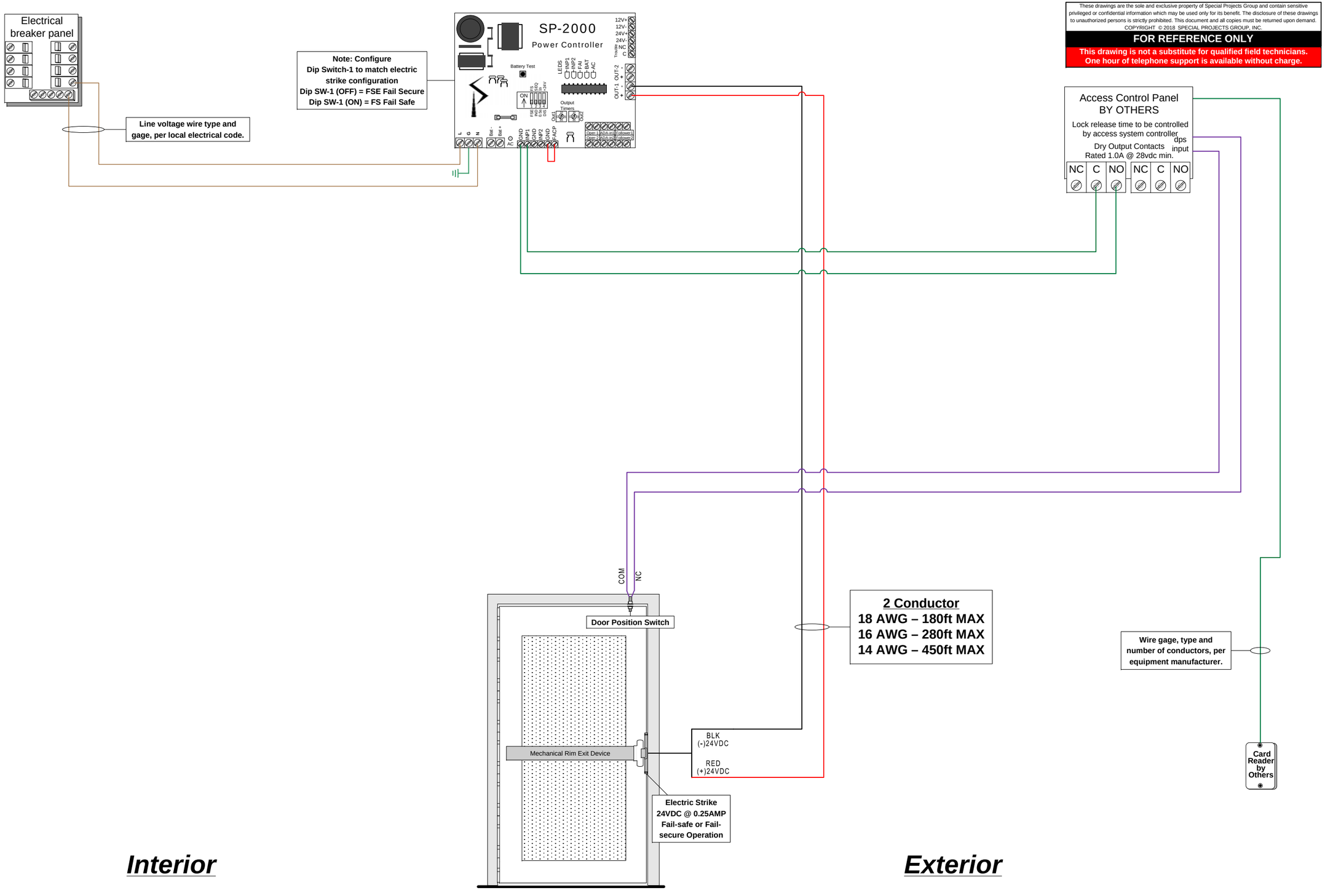


Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior ***Exterior***

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to unlock/release electric strike gate and permit ingress.**
From exterior - unlocked condition: **Door to remain locked unless electric strike unlocked by access control system. If fail-safe electric strike, door will be unlocked during utility power-loss event.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric strike to remain locked during utility power-loss event. If fail-safe electric strike, door will be unlocked during utility power-loss event.**

Title: SGL Electric Strike SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/31/2018	Date Printed: 5/31/2018	Last Revised: 5/31/2018	4:59:56 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

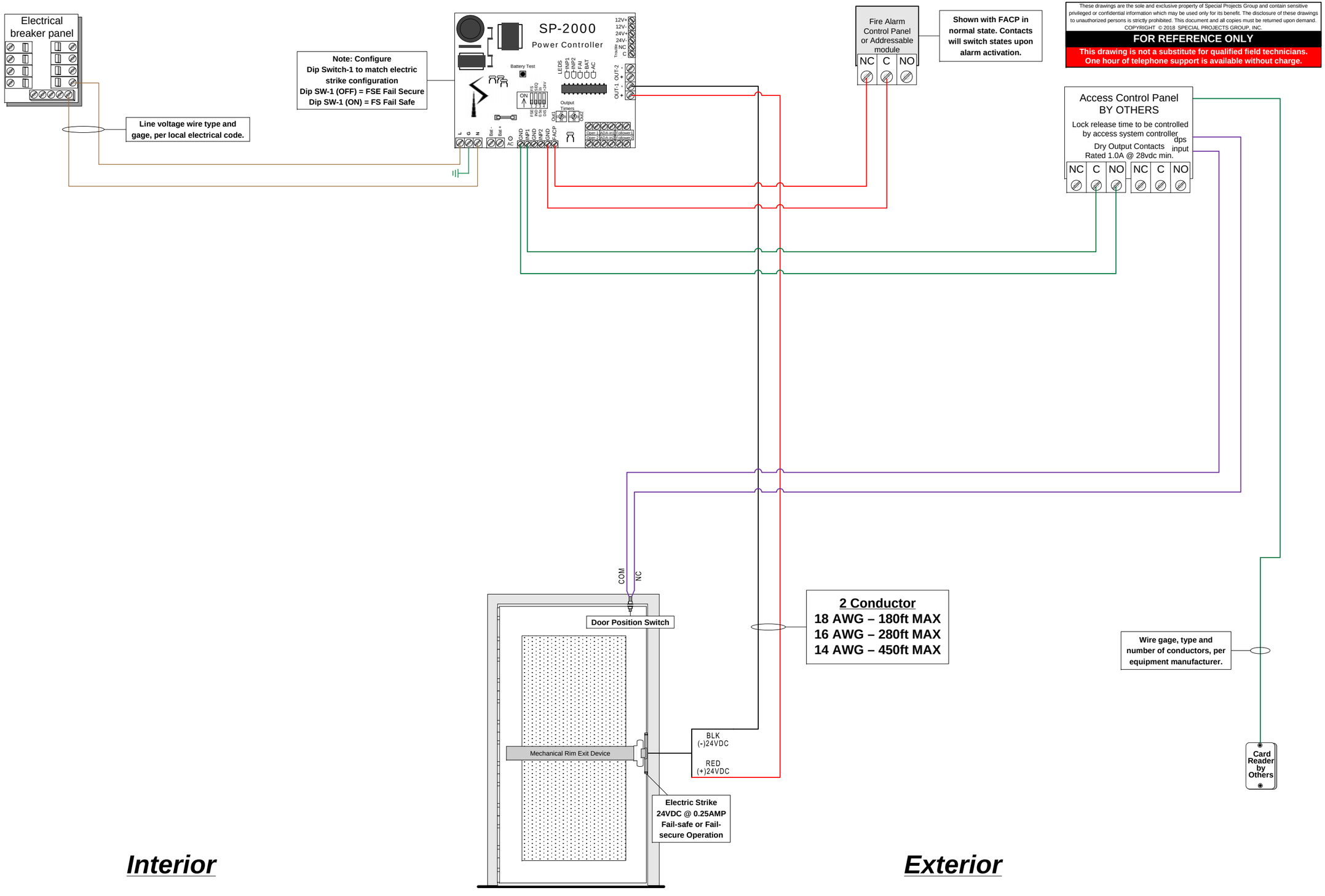
1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to unlock/release electric strike gate and permit ingress.**
From exterior - unlocked condition: **Door to remain locked unless electric strike unlocked by access control system. If fail-safe electric strike, door will be unlocked during utility power-loss or active fire alarm event.**
From interior - locked condition: **Free egress at all times by means of exit device.**
From interior - unlocked condition: **Free egress at all times by means of exit device.**
General: **Fail-secure electric strike to remain locked during utility power-loss or active fire alarm event. If fail-safe electric strike, door will be unlocked during utility power-loss or active fire alarm event.**

Title: SGL Electric Strike SP2000_FACP.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 5/31/2018	Date Printed: 5/31/2018	Last Revised: 5/31/2018	4:59:03 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

FOR REFERENCE ONLY

This drawing is not a substitute for qualified field technicians. One hour of telephone support is available without charge.

Special Projects Group
(888) 284-4774

NOTES:

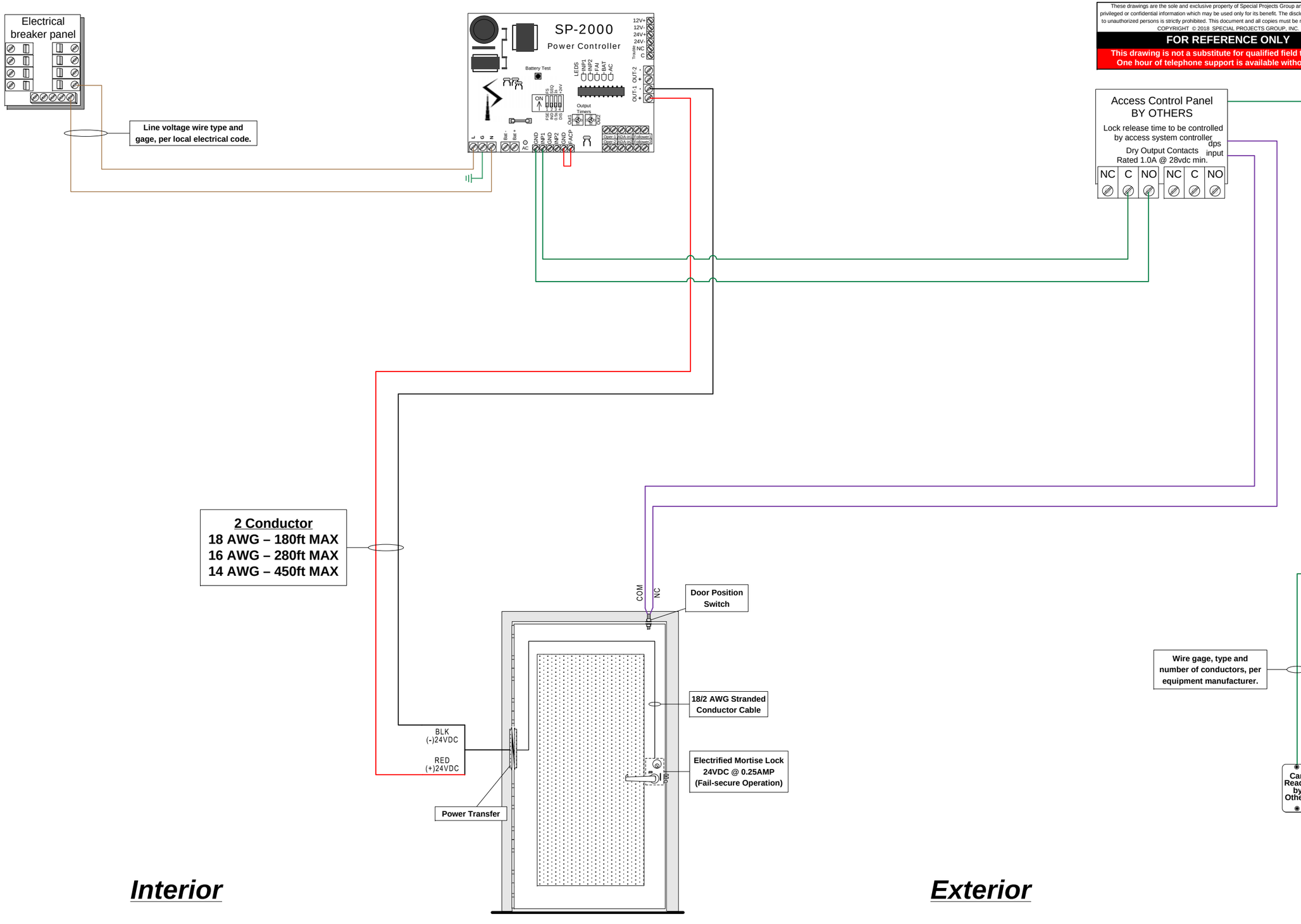
1) Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.

2) All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.

3) All line voltage power to be I/A/W local electrical code.

4) All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.

5) It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to unlock electrified mortise lock lever trim and permit ingress. Manual entry by key override.**
From exterior - unlocked condition: **Door to remain locked unless electrified mortise lockset held unlocked by access control system.**
From interior - locked condition: **Free egress at all times by means of lever trim.**
From interior - unlocked condition: **Free egress at all times by means of lever trim.**
General: **Fail-secure electrified mortise lockset to remain locked during utility power-loss event.**

Title: SGL FSE-ElecMortiseLock SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 6/1/2018	Date Printed: 6/1/2018	Last Revised: 6/1/2018	2:07:39 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***
2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***
3) ***All line voltage power to be I/A/W local electrical code.***
4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***
5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***

Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

SP-2000 Power Controller

Dip Switch-2 Operation:
ON = Sequential Lock Outputs
OFF = Independent Lock Outputs

Access Control Panel
BY OTHERS
Lock release time to be controlled by access system controller
dps input
Dry Output Contacts
Rated 1.0A @ 28vdc min.
dps input
NC C NO NC C NO

Input-2 Signal Contact If 2-Door Independent Output Application

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

COM NC
Door Position Switch
18/2 AWG Stranded Conductor Cable
BLK (-)24VDC
RED (+)24VDC
Electrified Mortise Lock 24VDC @ 0.25AMP (Fail-secure Operation)
Power Transfer

Wire gage, type and number of conductors, per equipment manufacturer.
Card Reader by Others

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to unlock electrified mortise lock lever trim and permit ingress. Manual entry by key override.**
From exterior - unlocked condition: **Door to remain locked unless electrified mortise lockset held unlocked by access control system.**
From interior - locked condition: **Free egress at all times by means of lever trim.**
From interior - unlocked condition: **Free egress at all times by means of lever trim.**
General: **Fail-secure electrified mortise lockset to remain locked during utility power-loss event.**

Title: 2 SGL FSE-ElecMortiseLock SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 6/1/2018	Date Printed: 6/1/2018	Last Revised: 6/1/2018	4:20:09 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***

FOR REFERENCE ONLY

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Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

Note: Turn Dip Switch-1 ON for FAIL-SAFE locking applications

SP-2000
Power Controller

Fire Alarm Control Panel or Addressable module
NC C NO

Shown with FACP in normal state. Contacts will switch states upon alarm activation.

Access Control Panel BY OTHERS
Lock release time to be controlled by access system controller
Dry Output Contacts Rated 1.0A @ 28vdc min.
dps input
NC C NO NC C NO

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

COM
NC
Door Position Switch

18/2 AWG Stranded Conductor Cable

BLK (-)24VDC
RED (+)24VDC

Electrified Mortise Lock 24VDC @ 0.25AMP (Fail-safe Operation)

Power Transfer

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to unlock electrified mortise lock lever trim and permit ingress. Manual entry by key override.**
From exterior - unlocked condition: **Door to remain locked unless electrified mortise lockset unlocked by access control system.**
From interior - locked condition: **Free egress at all times by means of lever trim.**
From interior - unlocked condition: **Free egress at all times by means of lever trim.**
General: **Fail-safe electrified mortise lockset to remain unlocked during utility power-loss or active fire alarm event. Manual reset required after active fire alarm for lock to resecure.**

Title: SGL FS-ElecMortiseLock SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 6/1/2018	Date Printed: 6/1/2018	Last Revised: 6/1/2018	12:46:10 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***

FOR REFERENCE ONLY

This drawing is not a substitute for qualified field technicians. One hour of telephone support is available without charge.

Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

Dip Switch-2 Operation:
ON = Sequential Lock Outputs
OFF = Independent Lock Outputs

SP-2000 Power Controller

Fire Alarm Control Panel or Addressable module
NC C NO

Shown with FACP in normal state. Contacts will switch states upon alarm activation.

Access Control Panel BY OTHERS
Lock release time to be controlled by access system controller
dps input
Dry Output Contacts Rated 1.0A @ 28vdc min.
NC C NO NC C NO
dps input

Input-2 Signal Contact If 2-Door Independent Output Application

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

COM NC

Door Position Switch

18/2 AWG Stranded Conductor Cable

BLK (-)24VDC
RED (+)24VDC

Electrified Mortise Lock 24VDC @ 0.25AMP (Fail-secure Operation)

Power Transfer

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to unlock electrified mortise lock lever trim and permit ingress. Manual entry by key override.**
From exterior - unlocked condition: **Door to remain locked unless electrified mortise lockset unlocked by access control system.**
From interior - locked condition: **Free egress at all times by means of lever trim.**
From interior - unlocked condition: **Free egress at all times by means of lever trim.**
General: **Fail-safe electrified mortise locksets to remain unlocked during utility power-loss or active fire alarm event. Manual FACP reset required after active fire alarm for mortise locks to resecure.**

Title: 2 SGL FSA-ElecMortiseLock SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 6/1/2018	Date Printed: 6/1/2018	Last Revised: 6/1/2018	4:17:33 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

Special Projects Group
(888) 284-4774

NOTES:

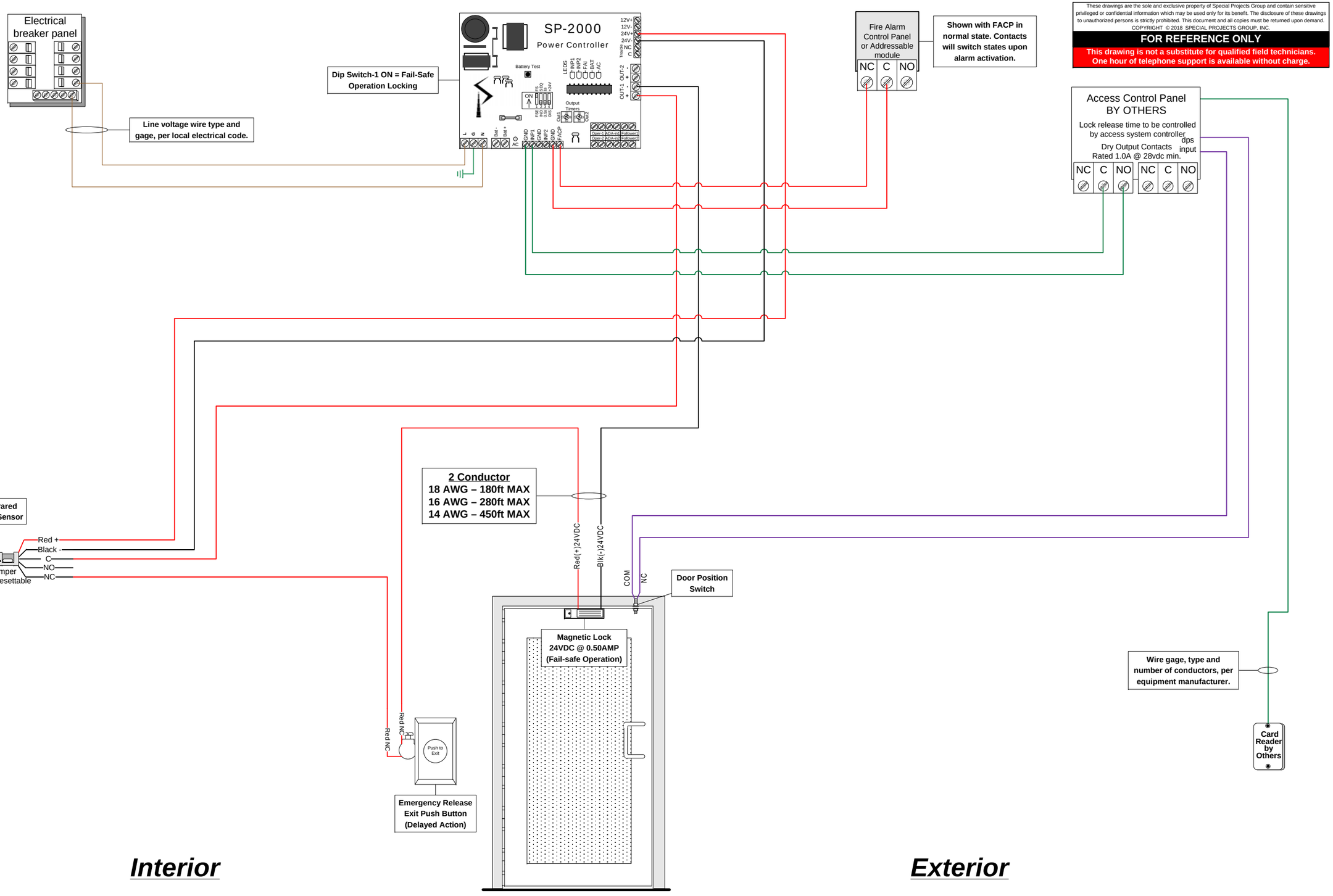
1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***



Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to release magnetic lock and permit ingress.**
From exterior - unlocked condition: **Door to remain secure by maglock unless maglock power released by access control system, push button, motion sensor, active fire alarm or utility power-loss event.**
From interior - locked condition: **Free egress at all times by means of PIR motion sensor or emergency release exit push button to release maglock power.**
From interior - unlocked condition: **Free egress at all times by means of PIR motion sensor or emergency release exit push button to release maglock power.**
General: **Fail-safe magnetic lock to remain de-energized/unsecure during utility power-loss or active fire alarm event. Upon active fire alarm event, manual FACP reset required to resecure maglock.**

Title: SGL Maglock SP2000.vsd			Project: Example
HWSET: Example			Door: EXT-1
Date: 6/1/2018	Date Printed: 6/1/2018	Last Revised: 6/1/2018	3:47:59 PM
Drawn By: Cody Richardson	For: Special Projects Group	SO: n/a	Pg: 1 OF 1

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(888) 284-4774

NOTES:

1) ***Verify that each component requiring or supplying power has been configured for proper system voltage before applying power.***

2) ***All wires to be 18 awg 100' max unless otherwise noted on drawing. Refer to manufacturers instructions for proper wire gauge on any power supply, electric device or electrified lock hardware. Manufacturers requirements take precedence.***

3) ***All line voltage power to be I/A/W local electrical code.***

4) ***All low voltage wires to be stranded copper unless superseded by local electrical code or electric device manufacturer.***

5) ***It is considered good electrical practice to run spare wires at any location that may be difficult to access after construction.***

Electrical breaker panel

Line voltage wire type and gage, per local electrical code.

SP-2000 Power Controller

Dip Switch-1 ON = Fail-Safe Operation Locking

Fire Alarm Control Panel or Addressable module

NC C NO

Shown with FACP in normal state. Contacts will switch states upon alarm activation.

Access Control Panel BY OTHERS

Lock release time to be controlled by access system controller

Dry Output Contacts Rated 1.0A @ 28vdc min.

dps input

NC C NO NC C NO

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

2 Conductor
18 AWG – 180ft MAX
16 AWG – 280ft MAX
14 AWG – 450ft MAX

Passive Infrared REX Motion Sensor

Red +
Black -
C
NO
NC

Select jumper for Non-resettable

Red(+)24VDC
Blk(-)24VDC
COM
NC
COM
NC
Red(+)24VDC
Blk(-)24VDC

Magnetic Lock 24VDC @ 0.50AMP each (Fail-safe Operation)

Door Position Switch

Red NC
Red NC

Push to Exit

Emergency Release Exit Push Button (Delayed Action)

Wire gage, type and number of conductors, per equipment manufacturer.

Card Reader by Others

Electrical Circuit Legend
Red = (+)VDC Power
Black = (-) VDC Power
Green = Signaling
Blue = Activation
Violet = Monitoring/Supervisory
Brown = AC High Voltage

Interior

Exterior

Function Statement:

From exterior - locked condition: **Access by presenting valid credential at reader interface to release magnetic locks and permit ingress.**
From exterior - unlocked condition: **Doors to remain secure by maglocks unless maglock power released by access control system, push button, motion sensor, active fire alarm or utility power-loss event.**
From interior - locked condition: **Free egress at all times by means of PIR motion sensor or emergency release exit push button to release maglock power.**
From interior - unlocked condition: **Free egress at all times by means of PIR motion sensor or emergency release exit push button to release maglock power.**
General: **Fail-safe magnetic locks to remain de-energized/unsecure during utility power-loss or active fire alarm event. Upon active fire alarm event, manual FACP reset required to resecure maglocks.**

Title:	Pair Maglocks SP2000.vsd			Project: Example	
HWSET: Example				Door: EXT-1	
Date:	6/1/2018	Date Printed:	6/1/2018	Last Revised: 6/1/2018	3:40:22 PM
Drawn By:	Cody Richardson	For:	Special Projects Group	SO: n/a	Pg: 1 OF 1