MasterFormat 2016 Division 28

Access Control Changes

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Agenda

- Certification Credits
- Background and Preliminary Comments
- MasterFormat 2016
  - Division 28 Access Control Changes
  - Division 08 (Openings) – Related Changes
  - Implications
- Q & A
- Wrap Up

Certification Credits (1 hour)

- PSP
  - 02/01/04 – Applicable Codes, Standards, and Guidelines
- CPP
  - 02/06/01 – Key Concepts in the Preparation of Requests for Proposals and Bid Reviews/Evaluations
  - 05/02/04 – Bid Package Development and Evaluation Process
- Procedure for requesting certificate at end of today's webinar

Background

- June 2014 – SIA outreach to CSI
- Invitation to Participate (100+ responses)
- Technical Working Groups Established
- 3 iterations with CSI Checkpoints
- Circulation for comments
- 4/15/15 Submission to CSI
- 4/15 – 9/15 – CSI Evaluation and acceptance
- 3/31/16 – MasterFormat 2016 Issued

Realignment and Definition

MasterFormat 2014 Division 28 Main Categories

- 28 10 00 Electronic Access Control and Intrusion Detection
- 28 20 00 Electronic Surveillance
- 28 30 00 Electronic Detection and Alarm
- 28 40 00 Electronic Monitoring and Control

Realignment and Definition

MasterFormat 2016 Division 28 Main Categories

- 28 10 00 Access Control
- 28 20 00 Video Surveillance
- 28 30 00 Security Detection, Alarm, and Monitoring
- 28 40 00 Life Safety
- 28 50 00 Specialized Systems

28 10 00 Access Control

- 28 11 00 Access Control Global Applications
- 28 12 01 General Requirements for Access Control Systems
- 28 13 00 Access Control Software and Database Management
- 28 14 00 Access Control System Hardware
- 28 15 00 Access Control Hardware Devices
- 28 16 00 Access Control Interfaces

28 14 00 Access Control System Hardware

- 28 14 11 Access Control Network Controllers
- 28 14 13 Access Control Door Controllers
- 28 14 15 Access Control Inputs and Outputs
- 28 14 17 Access Control Printers and Encoders
- 28 14 19 Access Control Enclosures

Ben Williams -ASSA ABLOY

Dave Pedreira –ASSA ABLOY

August 19th, 2016

MasterFormat® 2016

Division 28 – Access Control Changes

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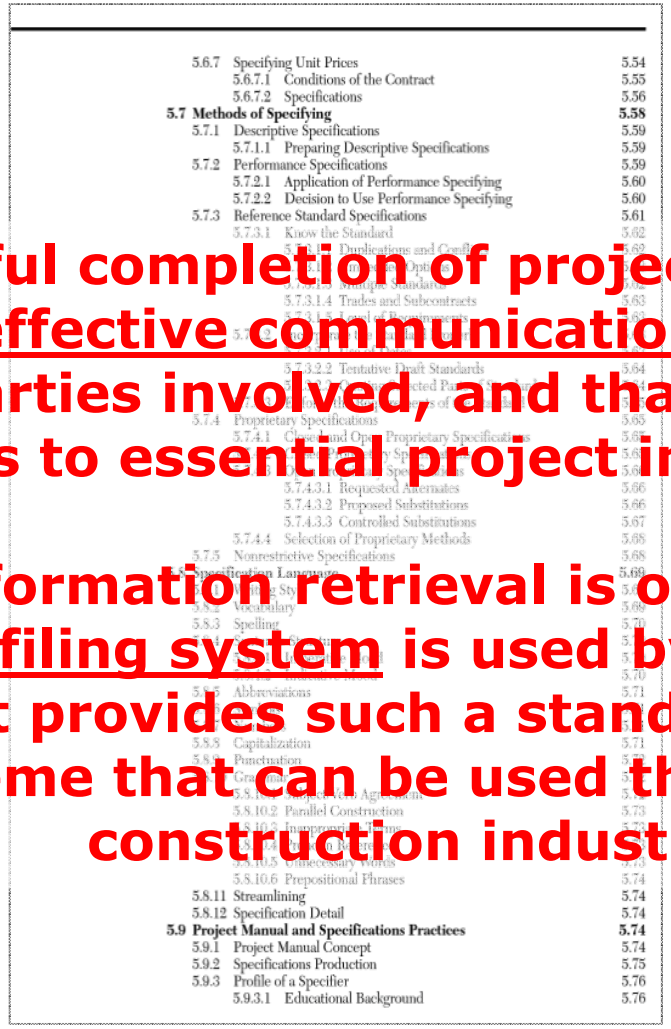
ASSA ABLOY Door Security Solutions

What is MasterFormat®?

"*MasterFormat*® is a master list of numbers and subject titles classified by work results or construction practices for **organizing information** about their requirements, products and activities into a standard sequence."

How is MasterFormat® Used?



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"Successful completion of projects requires effective communication amongst the parties involved, and that in turn requires easy access to essential project information.

Efficient information retrieval is only possible when a standard filing system is used by everyone. MasterFormat provides such a standard filing and retrieval scheme that can be used throughout the construction industry."

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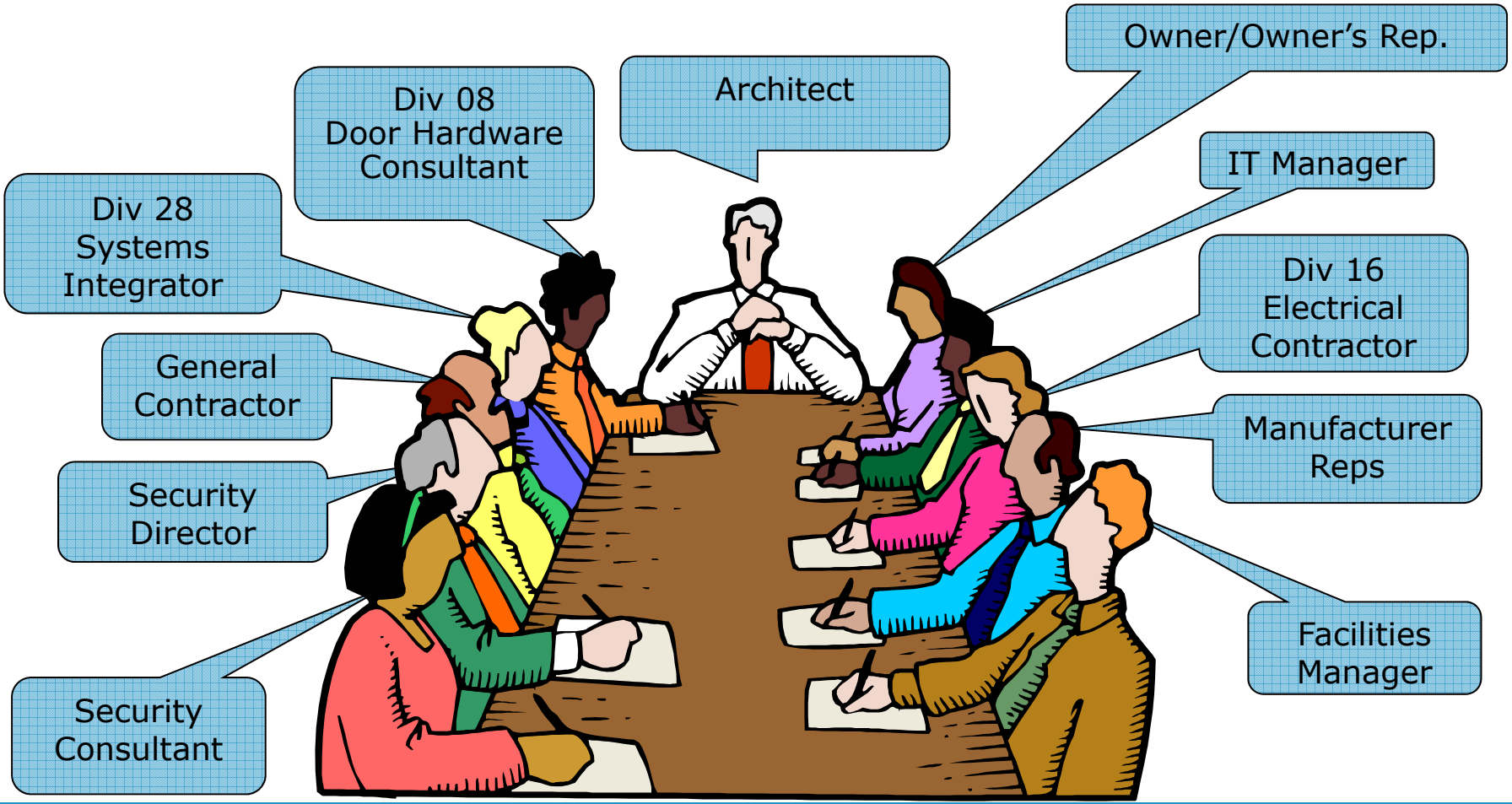
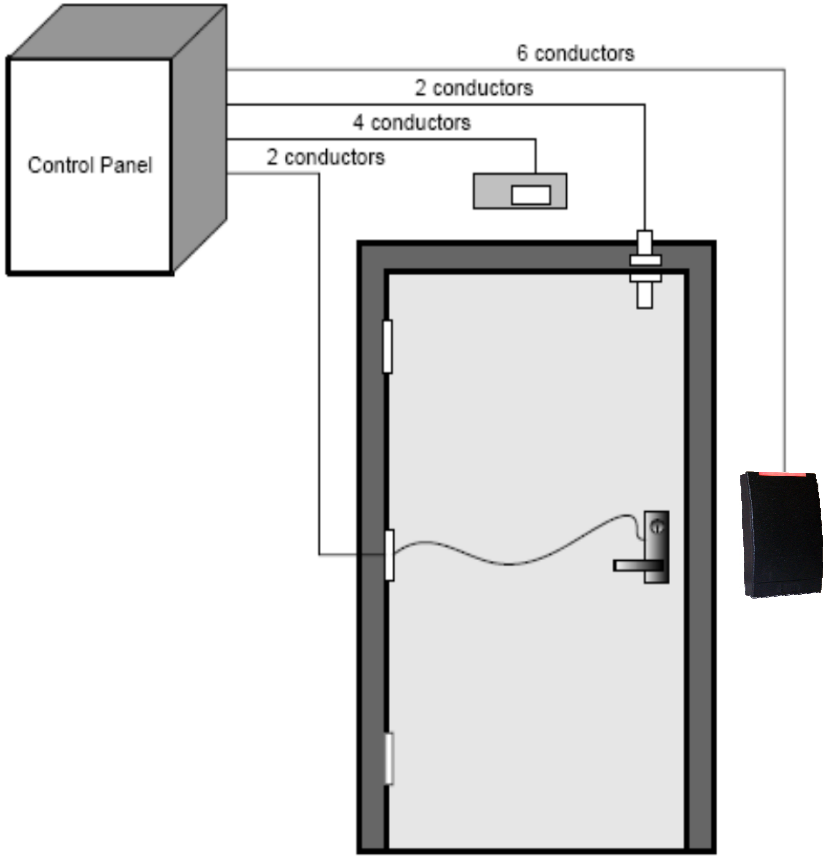
Project Influencers



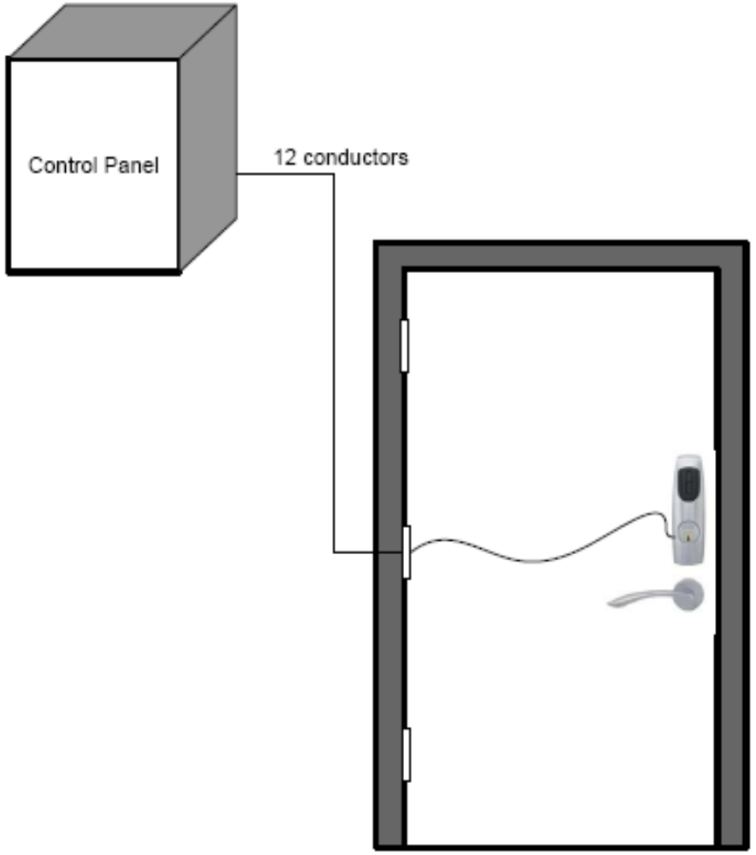
Division 28 Successfully Adapting

While Products are Evolving

Traditional



Evolving Trends



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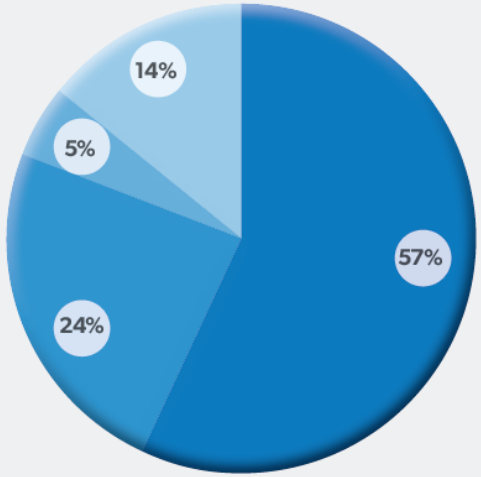
Current Division 08/28 Challenges

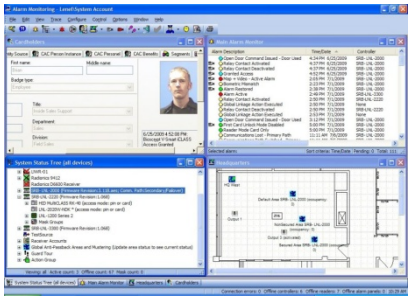
Does your organisation/business already operate an electronic access control system?

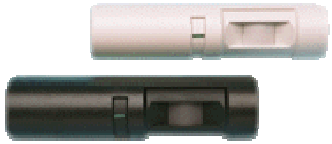
- Yes, a traditional wired system using access cards/tags **57%**
- Yes, a combined system of wired and wireless doors using access cards/tags **24%**
- Yes, full wireless access control **5%**
- No, we currently don't have an electronic access control system **14%**



Basic Components of Access Control Doors

- Software GUI
- Door Controller
- Card Reader
- Credential
- Locking Device
- Power Supply
- Request to Exit (REX)
- Door Position Switch (DPS)





CSI MasterFormat® 2014 - Division 08

08 70 00 Hardware

08 71 00 Door Hardware

- 08 71 13 Automatic Door Operators
- 08 71 53 Security Door Hardware
- 08 71 63 Detention Door Hardware

08 74 00 Access Control Hardware

- 08 74 13 Card Key Access Control Hardware
- 08 74 16 Keypad Access Control Hardware
- 08 74 19 Biometric Identity Access Control Hardware

CSI MasterFormat® 2014 - Division 28

28 13 00 Access Control

28 13 13 Access Control Global Applications
28 13 16 Access Control Systems and Database Management
28 13 19 Access Control Systems Infrastructure
28 13 26 Access Control Remote Devices
28 13 33 Access Control Interfaces

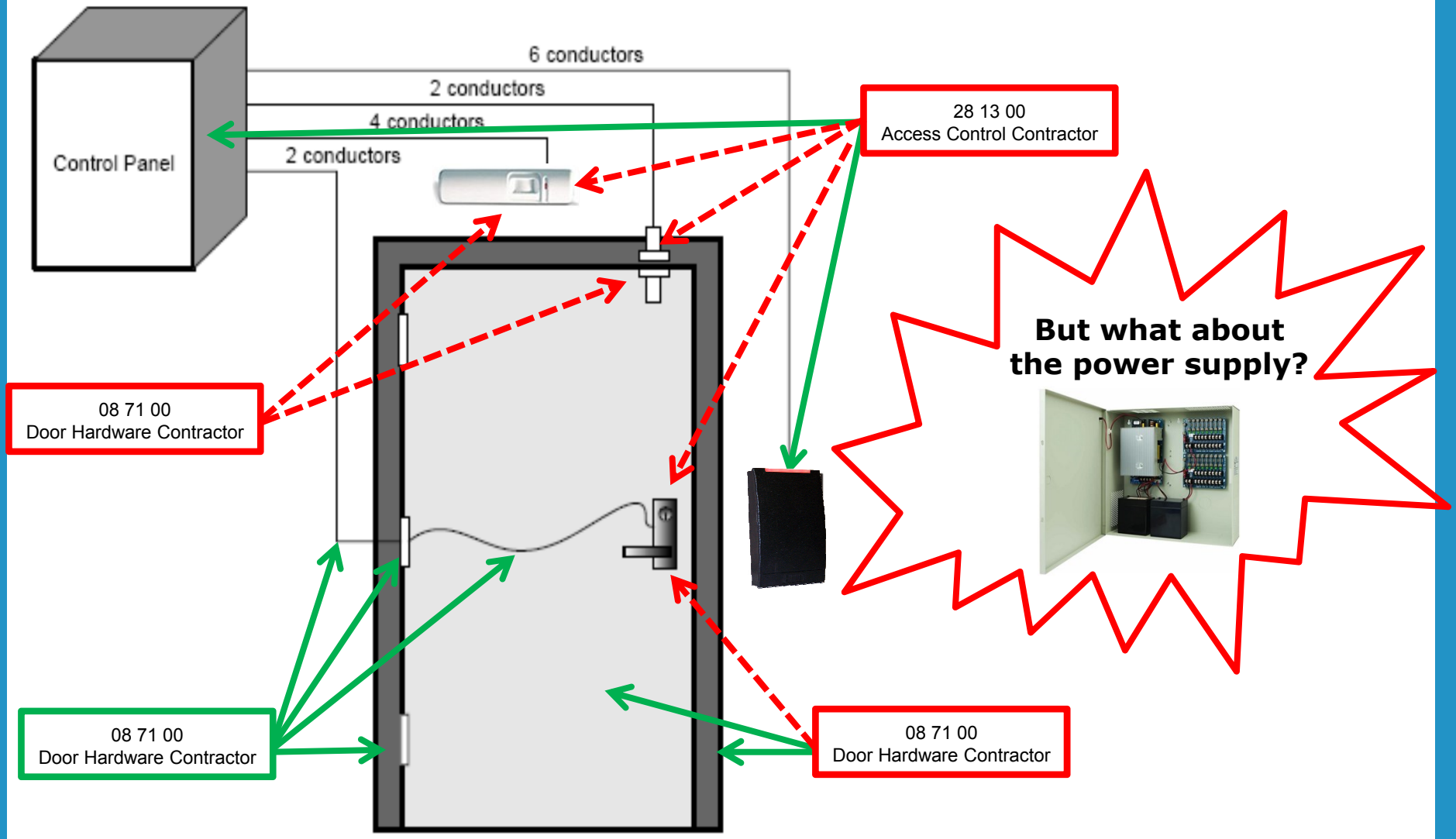
28 13 33.16 Access Control Interfaces to Access Control Hardware
28 13 33.26 Access Control Interfaces to Intrusion Detection
28 13 33.33 Access Control Interfaces to Video Surveillance
28 13 33.36 Access Control Interfaces to Fire Alarm

28 13 43 Access Control Identification Management Systems
28 13 53 Security Access Detection

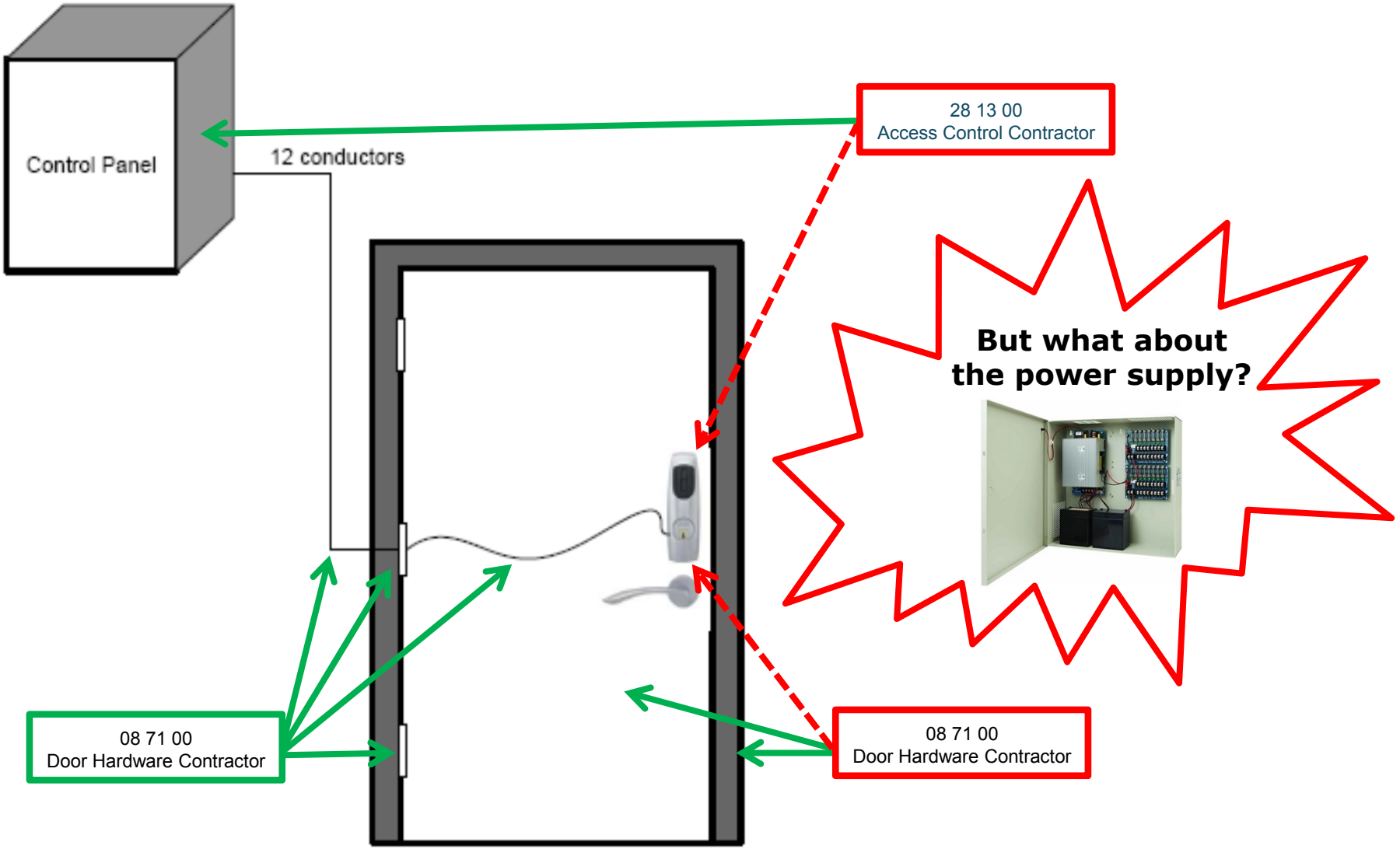
28 13 53.13 Security Access Metal Detectors
28 13 53.16 Security Access X-Ray Equipment
28 13 53.23 Security Access Explosive Detection Equipment
28 13 53.29 Security Access Sniffing Equipment

28 13 63 Access Control Vehicle Identification System

CSI MasterFormat® 2014



CSI MasterFormat® 2014



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Specification Procedure

Division 08 / 28, Coordinate vs. Write

2.02 SYSTEM DESCRIPTION

A. The security related provisions for new Security Doors include access control, intrusion detection and duress/assistance alarm equipment, video surveillance cameras and recording equipment, and security system monitoring and control. All security measures are to be applied to interior and/or exterior locations as shown on the drawings. Wherever possible, unless specified elsewhere in the Specifications or Drawings, materials, equipment and installation shall conform to existing LAWA Standards for ACAMS system.

B. The access control system for LAWA is a GE Picture Perfect system. Security Control Panels (SCPs) shall be located in identified communications and electrical rooms throughout the terminal as indicated in the drawings.

C. The SCPs shall communicate to the existing GE Picture Perfect CPU and software system for monitoring and control. Communications between the GE Picture Perfect CPU shall be via the LAX data network utilizing full duplex Ethernet TCP/IP protocol.

D. Security system electrified door hardware included under this contract as specified in Section 08 71 00, Door Hardware shall be provided and installed by the door hardware Contractor. The Security Systems Contractor shall coordinate with the door hardware Contractor. It shall be the responsibility of the Security Systems Contractor to complete the low voltage electrical connections of the electrified door hardware.

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Utilizing Schedules for Better Coordination

28 01 00 – Operation & Maintenance of Electronic Safety & Security

28 05 00 – Common Work Results for Electronic Safety & Security

28 06 00 – Schedules for Electronic Safety & Security

28 08 00 – Commissioning of Electronic Safety & Security

28 13 00 – Access Control Software & Database Management

28 14 00 – Access Control System Hardware

28 15 00 – Access Control Hardware Devices

28 16 00 – Access Control Interfaces

28 17 00 – Access Control Identification Management Systems

28 19 00 – Access Control Vehicle Identification Systems

28 23 00 – Video Surveillance

28 31 00 – Intrusion Detection

28 46 00 – Fire Detection and Alarm

28 47 00 – Mass Notification

28 51 00 – Information Management & Presentation

28 52 00 – Detention Security Systems

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Utilizing Schedules for Better Coordination

28 10 00	**Access Control**
28 11 00	**Access Control Global Applications**
28 12 01	General Requirements for Access Control Systems
28 13 00	**Access Control Software and Database Management**
28 13 11	Access Control Software
28 13 11.11	Access Control Operating Systems
28 13 11.13	Access Control Application Services
28 13 11.15	Access Control Mobile Applications
28 13 13	Access Control Software Interfaces
28 14 00	**Access Control System Hardware**
28 14 11	Access Control Network Controllers
28 14 13	Access Control Door Controllers
28 14 15	Access Control Inputs and Outputs
28 14 17	Access Control Printers and Encoders
28 14 19	Access Control Enclosures

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Utilizing Schedules for Better Coordination

28 15 00	**Access Control Hardware Devices**
28 15 11	Integrated Credential Readers and Field Entry Management
28 15 11.11	Standard Card Readers
28 15 11.13	Keypads
28 15 11.15	Biometric Identity Devices
28 15 11.17	Combination Reader Devices
28 15 13	Access Control Credentials
28 15 13.11	Access Control Cards
28 15 13.13	Wireless Key Fobs
28 15 15	Electrified Locking Devices & Accessories
28 15 15.11	Direct Interface Integrated Locking Devices
28 15 15.13	Wireless Integrated Locking Devices
28 15 15.15	Intelligent Ethernet Integrated Locking Devices
28 15 15.17	Status Monitoring and Egress Devices
28 15 17	Egress Management Devices
28 15 17.11	Magnetic Lock Delayed Egress Devices
28 15 17.13	Panic Hardware Delayed Egress Devices
28 15 19	Access Control Remote Devices
28 15 19.11	Smart Phone Interface Requirements
28 15 19.13	Wireless Access Control Devices
28 15 21	Telephone Entry Systems
28 15 23	Intercom Entry Systems
28 15 23.11	Audio Intercom (Analog)
28 15 23.13	Audio Video Intercom (Analog)
28 15 23.15	Audio Intercom (IP)
28 15 23.17	Audio Video Intercom (IP)
28 15 25	Electronic Key Management Systems
28 15 27	Access Control Electronic Turnstiles & Mobility Systems

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Utilizing Schedules for Better Coordination

28 05 00	**Common Work Results for Electronic Safety and Security**
28 05 07	Power Sources for Electronic Safety and Security
28 05 07.11	Power Sources for Access Control
28 05 07.13	Power Sources for Video Surveillance
28 05 07.15	Power Sources for Intrusion Detection
28 05 07.17	Power Sources for Fire Detection and Alarm
28 05 07.19	Solar Power Sources for Electronic Safety and Security
28 05 07.21	Poe Power Sources for Electronic Safety and Security
28 05 07.23	Uninterruptible Power Supply
28 05 07.25	Power Source Monitoring
28 05 07.27	Power Source Monitoring Appliances
28 05 07.29	Power Source Monitoring Software
28 05 09	Surge Protection for Electronic Safety and Security
28 05 09.11	Surge Protection for Access Control
28 05 09.13	Surge Protection for Video Surveillance
28 05 09.15	Surge Protection for Intrusion Detection
28 05 09.17	Surge Protection for Fire Detection and Alarm

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Utilizing Schedules for Better Coordination

28 17 00	**Access Control Identification Management Systems**
28 17 11	Visitor Management Systems
28 17 13	Self Check In and Kiosk Visitor Systems
28 17 15	Contractor & Vendor Management Systems
28 17 17	Mobile Access Identification Management Systems
28 18 00	**Security Access Detection Equipment**
28 18 11	Security Access Metal Detectors
28 18 13	Security Access X-Ray Equipment
28 18 15	Security Access Explosive Detection Equipment
28 18 17	Security Access Sniffing Equipment
28 19 00	**Access Control Vehicle Identification Systems**
28 19 11	Loading Dock Access Management Systems
28 19 13	Parking Garage Access Management Systems
28 19 15	Perimeter Vehicle Access Management Systems

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Sections Related to Access Control

08 06 71 – Door Hardware Schedule

08 10 00 – Doors & Frames

08 30 00 – Specialty Doors and Frames

08 40 00 – Entrances, Storefronts, & Curtain Walls

08 71 00 – Door Hardware

08 79 00 – Hardware Accessories

27 10 00 – Structured Cabling

27 20 00 – Data Communications

27 52 13 – Patient Monitoring & Telemetry Systems

CSI MasterFormat® 2016 - Division 08

Utilizing Schedules for Better Coordination

08 06 00 Schedules for Openings

- **08 06 10 Door Schedule**
  - 08 06 10.13 Door Type Schedule
  - 08 06 10.16 Frame Type Schedule
- **08 06 40 Schedules for Entrances, Storefronts, and Curtain Walls**
- **08 06 41 Entrance Schedule**
- **08 06 42 Storefront Schedule**
- **08 06 50 Window Schedule**
- **08 06 60 Skylight Schedule**
- **08 06 70 Hardware Schedule**
- **08 06 71 Door Hardware Schedule**
- **08 06 80 Glazing Schedule**
- **08 06 90 Louver and Vent Schedule**

MasterFormat® "Schedules" are designated Level 2 -"06" in all Divisions

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Utilizing Schedules for Better Coordination

28 06 00	**Schedules for Electronic Safety and Security**
28 06 10	Schedules for Access Control
28 06 20	Schedules for Video Surveillance
28 06 30	Schedules for Security Detection, Alarm, and Monitoring
28 06 40	Schedules for Detention Monitoring and Control
28 06 50	Schedules for Information Management and Display
28 06 60	Schedules for Mass Notification
28 06 70	Schedules for Life Safety
28 06 80	Schedules for Fire Detection and Alarm
28 08 00	**Commissioning of Electronic Safety and Security**
28 08 11	Testing for Baseline Performance Criteria

08 06 71 Specification Procedure:

Article 3.1.C from 08 06 71 explains this requirement:

- Suppliers of products listed in the Door Hardware Sets must meet the requirements described in the specification sections noted.
  - Section 08 71 00 – Door Hardware
  - Section 08 71 13 – Automatic Door Operators
  - Section 28 05 07 – Power Sources for Electronic Safety & Security
  - Section 28 15 00 – Access Control Hardware Devices
- Architect / Owner / Security Consultant / Door Hardware Consultant meet during the Pre-Bid phase to discuss coordination and communication to address issues.
- Pre-Submittal conference in Part 1 of the specification must be enforced through the Architect to the General Contractor/ Construction Manager.

Better Specification Coordination

08 06 71 Door Hardware Schedule **Example**

Notice electric hinges and wire harnesses are in 087100 but the EAC Mortise Lock is in 281500 and the Power Supply is listed in 280507

Set: 2.0

Doors: Integrated Wiegand SE – Fail Secure Single

2	Hinge	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1	Hinge	TA2314 QC12 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1	Access Control Lock	DG264 M1-82271-12V-IPS LNMD	US26D	SA	281500
1	Core	DG2 6300	US15	SA	087100
1	Door Closer	UNI7500	689	NO	087100
1	Threshold	172A		PE	087100
1	Gasketing	S773BL		PE	087100
1	Door Bottom	420APKL		PE	087100
1	ElectroLynx Harness	QC-C1500P		MK	087100
1	ElectroLynx Harness	QC-C300		MK	087100
1	Power Supply	AQD3-8F8R		SU	280507

Operations Description: The integrated concealed switch will be connected to the security system and the door shall be normally closed and locked. Electrified lockset shall be fail secure and remain locked without power. Authorized entry by means of integrated card reader will momentarily disable the concealed switch and send power to the electrified mortise lockset unlocking the outside lever handle permitting entry. Opening the door from the outside by mechanical key over ride will activate the concealed switch. Rotating the lever handle from the inside will activate the request to exit switch momentarily shunting the concealed switch allowing authorized egress at all times.

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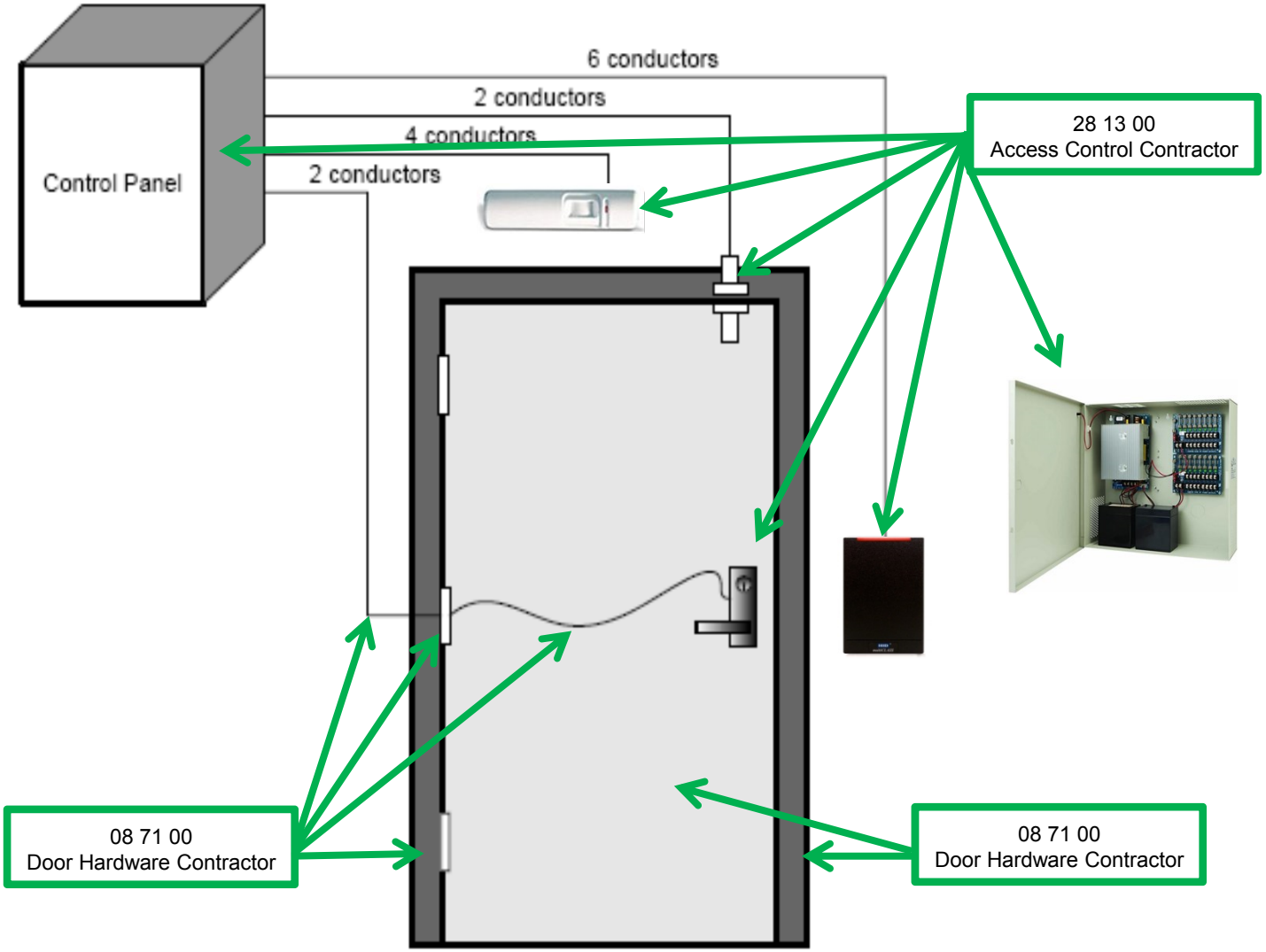
Utilizing Schedules for Better Coordination



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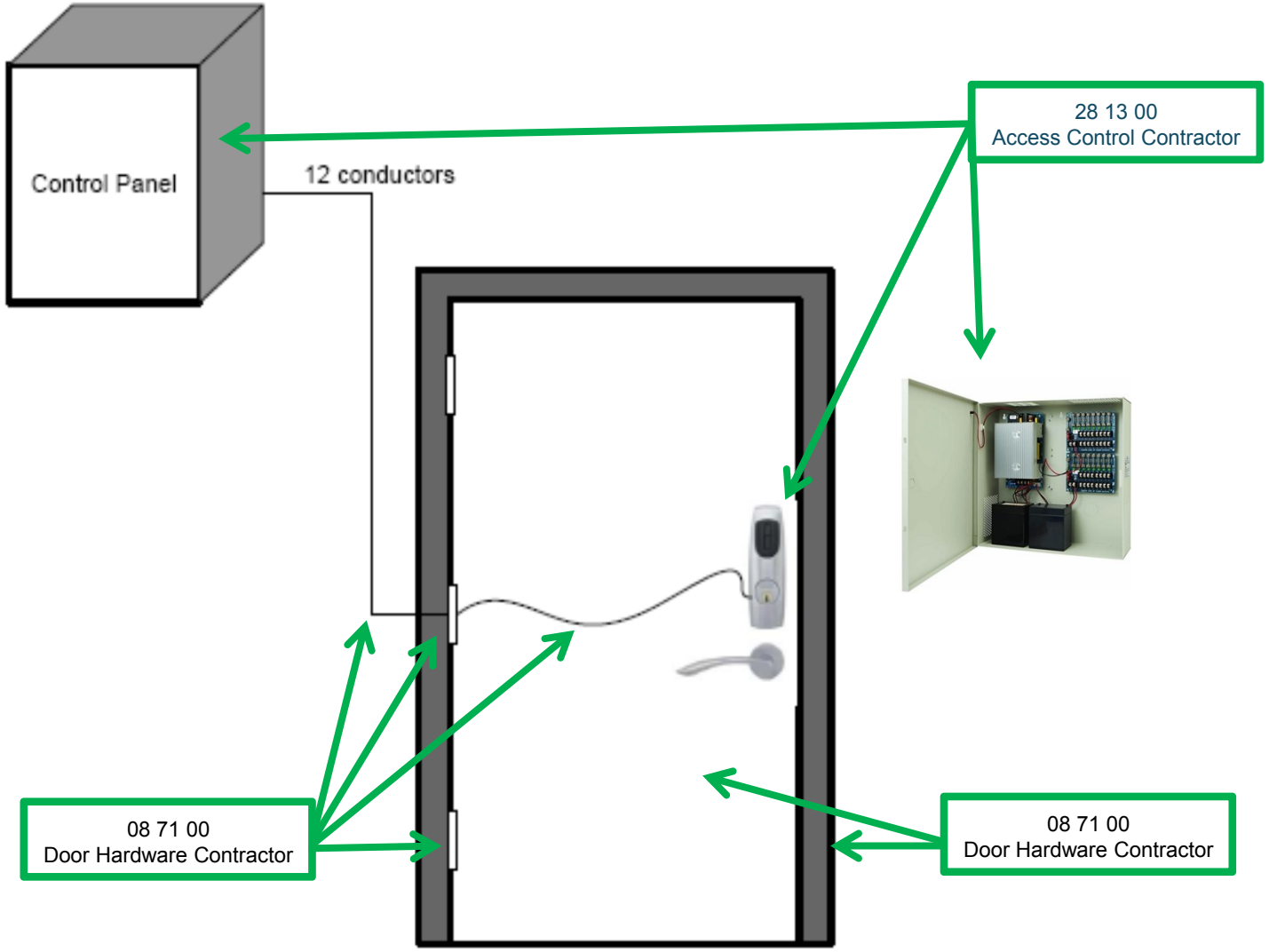
Utilizing Schedules for Better Coordination



For Additional Information

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Wrap Up

- Available on SecuritySpecifiers.com:
  - Webinar Recording (also on SecurityIndustry.org)
- Next Webinar – Friday Sept. 16 @ 11 AM EDT
  - Video, Networking & Storage
- MasterFormat 2018 Update
  - Indicate interest
  - Send comments, recommendations
  - Email ray@SecuritySpecifiers.com

PSP/CPP Credits

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