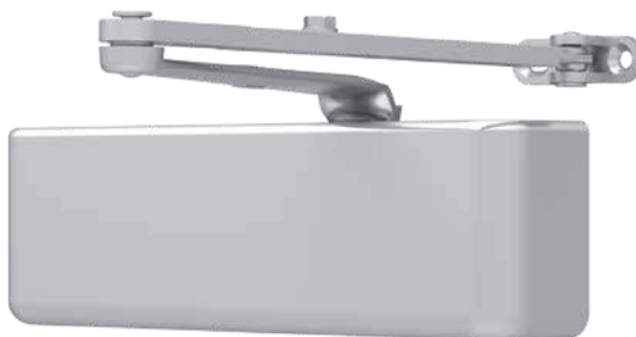


4040XP Series

Features



The 4040XP is LCN's most durable and flexible heavy duty closer designed for institutional and other demanding high traffic applications.

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body Construction	■ Cast Iron Body ■ Full Complement Bearings ■ 1-1/2" Diameter Piston ■ 3/4" Diameter Double Heat Treated Pinion Journal
Fluid	All Weather Liquid X Fluid
Handing	Non-Handed
Templating	Peel-n-Stick templates - 2-1/4" x 5" Mounting Hole Pattern
Size	Adjustable Spring Size 1-6, includes Patented Green Dial
Warranty	30 years

Cover	■ Plastic, Standard ■ Metal, Optional
Fasteners	Self Reaming and Tapping Screws (SRT)
Mounting	Hinge (Pull Side), Top Jamb (Push Side), Parallel Arm (Push Side)
Arms	Regular Arm
Finishes/Colors/ Powder Coat	■ Aluminum (689) ■ Statuary Bronze (690) ■ Light Bronze (691) ■ Black (693) ■ Dark Bronze (695) ■ Brass (696) ■ Custom colors optional ■ Optional SRI primer - powder coat only ■ Optional plated finishes

Special Templates

Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.

MOUNTING					FINISH		COVER		CYLINDER			*ARM FUNCTION						
HINGE (PULL SIDE)					POWDER COAT		PLASTIC		NON-HANDED			REGULAR (DOUBLE)		HOLD-OPEN				
TOP JAMB (PULL)					PLATED		METAL		NON-SIZED			STANDARD (SINGLE)		FUSIBLE LINK				
TOP JAMB (PUSH)									ACCESSIBILITY			DELAYED ACTION**		EDAHEDA				
PARALLEL ARM									AVG**					CUSH/HUSH				
STOP FACE														SCUSH/HUSH				
●	○	●	●	○	●	●	●	●	●	○	○	180°	180°	○	180°	110°	110°	○

● AVAILABLE
○ NOT AVAILABLE

♿ Closer available with less than 5.0 lbs. opening force on 36" door.

* Maximum opening/hold-open point with standard template.

** Advanced Variable Backcheck.

*** Delay feature incorporates standard 4040 cylinder (not XP).

LCN Door Control Catalog

phone: 877-671-7011 ■ fax: 800-248-1460 ■ www.allegion.com/us ■ 009426 rev. 2/16

LCN®

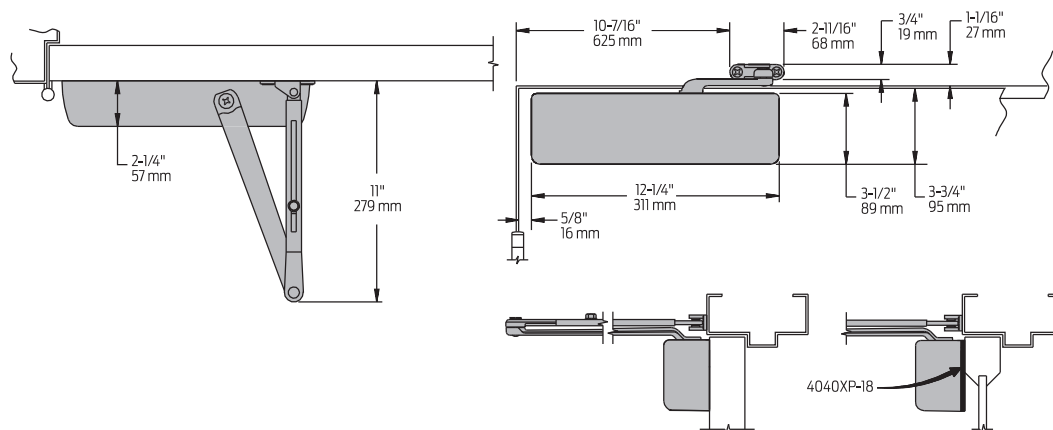
37

Interdisciplinary Science Building
Webster University

4040XP Series

Mounting details

Hinge (Pull Side) Mounting

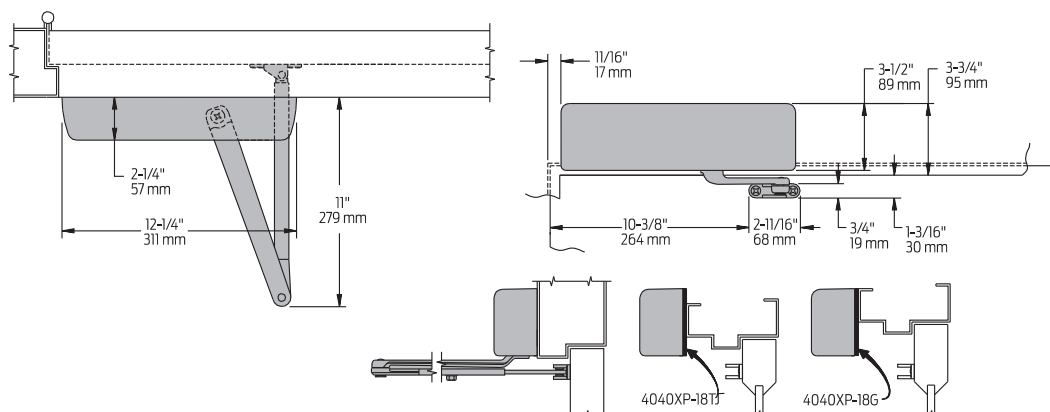


Butt Hinges	■ Should not exceed 5" (127 mm) in width
Auxiliary Stop	■ Recommended at hold-open point or where a door cannot swing beyond 120°
Reveal	■ Should not exceed 3/4" (19 mm) for regular arm or hold-open arm
Top Rail	■ Less than 3-3/4" (95 mm) requires PLATE, 4040XP-18. Plate requires 2" (51 mm) minimum
Clearance	■ 2-3/8" (60 mm) behind door required for 90° installation
Delayed Action	■ Incorporates standard 4041 cylinder, without XP cylinder ■ Delays closing from 120° to 70° ■ Delay time adjustable up to approximately 1 minute
Maximum Opening	■ Templating allows up to 120°. ■ Hold-open points 90° up to 120° with hold-open arm.

4040XP Series

Mounting details

Top Jamb (Push Side) Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width		
Auxiliary Stop	Recommended at hold-open point or where a door cannot swing beyond 120°		
Reveal	Arm Type	Reveal	Max Opening
	Regular Arm	2-9/16"	Up to 120°
	Long	4-13/16"	Up to 120°
	Hold-Open	2-9/16"	Up to 120°
	Long Hold-Open Arm	8"	Up to 120°
Top Rail	- Requires 1-1/4" (32 mm) minimum 2-1/4" (57 mm) minimum with closer on PLATE, 4040XP-18TJ 3" (76 mm) minimum with closer on PLATE, 4040XP-18G		
Head Frame	- Less than 3-1/2" (89 mm) requires PLATE, 4040XP-18TJ - With flush ceiling, use PLATE, 4040XP-18G, Either plate requires 1-3/4" (44 mm) minimum		
Maximum Opening	- Templating allows up to 120°. - Hold-open points 85° up to 120° with hold-open arm.		
Delayed Action	- Incorporates standard 4041 cylinder, without XP cylinder - Delays closing from 120° to 70° - Delay time adjustable up to approximately 1 minute		

LCN Door Control Catalog

phone: 877-671-7011 ■ fax: 800-248-1460 ■ www.allegion.com/us ■ 009426 rev. 2/16

LCN®

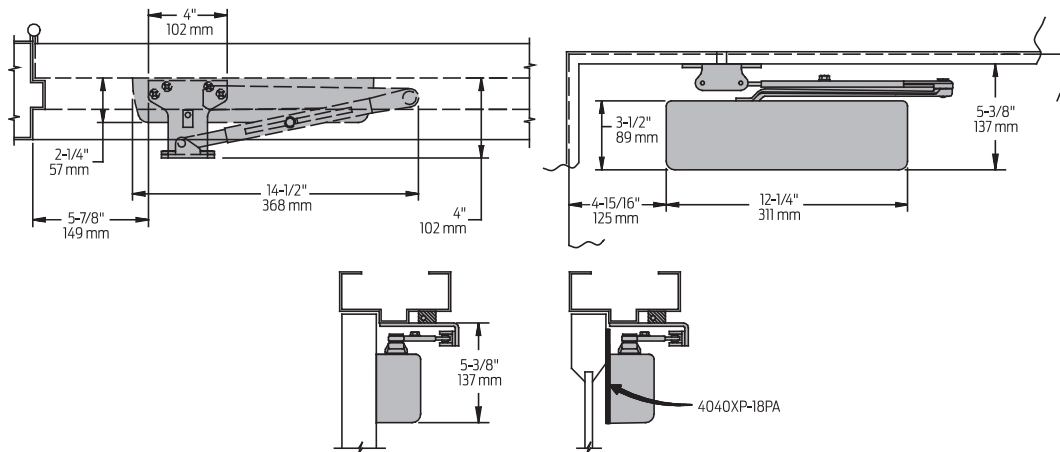
39

Interdisciplinary Science Building
Webster University

4040XP Series

Mounting details

Parallel Arm (Push Side) Mounting

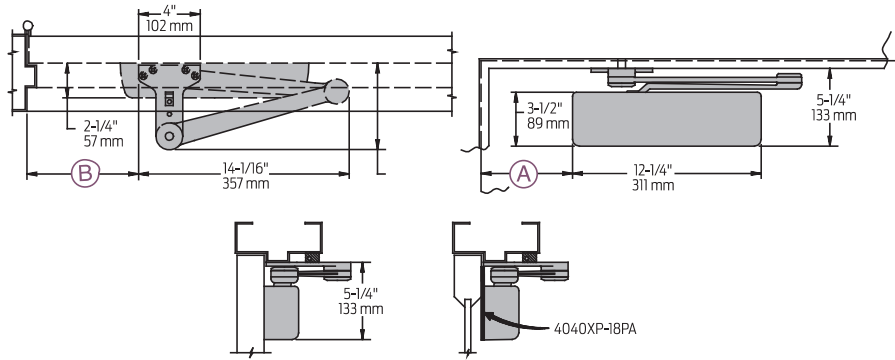


Butt Hinges	Should not exceed 5" (127 mm) in width
Auxiliary Stop	Recommended at hold-open point, where the door cannot swing 180°, or where CUSH-N-STOP arm is not used
Reveal	Should not exceed 7/32" (6 mm)
Top Rail	Less than 5-3/8" (137 mm) measured from the stop requires PLATE, 4040XP-18PA. Plate requires 2" (51 mm) minimum from the stop
Head Frame	Flush or rabbetted requires PA SHOE ADAPTER, 4040XP-419
Stop Width	Minimum 1" (25 mm). CUSH arm requires minimum 1-1/2" (38 mm)
Blade Stop	Clearance requires 1/2" (13mm) BLADE STOP SPACER, 4040XP-61.
Clearance	■ 4040XP-62PA shoe is 4" (102 mm) from door face. ■ EDA shoe projects 5-1/2" (140 mm) from door face. ■ CUSH shoe projects 6" (152 mm) from door face
Delayed Action	■ Incorporates standard 4041 cylinder, without XP cylinder ■ Delays closing from 120° to 70°. ■ Delay time adjustable up to approximately 1 minute.
Maximum Opening	■ 180° opening/hold-open points with all except CUSH arms ■ 110° opening/hold-open with CUSH arms

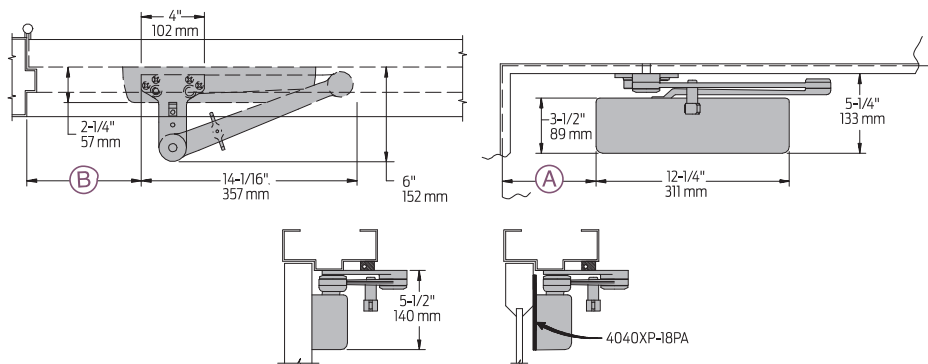
Notes:

- Optional mounting requires PA SHOE, 4040XP-62PA for regular or HOLD-OPEN arms
- Add prefix "P" to closer description (eg. P4040XP)
- P4040XP closer includes 4040XP-201 FIFTH HOLE SPACER to support PA SHOE

EDA mount



CUSH mount



Clearance	4040XP-62EDA is 5-1/2" (140 mm) from door face, 6" (152 mm) for CUSH	
Head Frame	Flush or rabbetted requires CUSH FLUSH PANEL ADAPTER, 4040XP-419	
CUSH ARM	Requires SHOE SUPPORT, 4040XP-30 for fifth screw anchorage for narrow frames	
Delayed Action	- Incorporates standard 4041 cylinder, without XP cylinder. - Delays closing from maximum opening to; 115° with 180° template, 95° with 110° template, 85° with 100° template, 75° with 90° template. Delay time adjustable up to approximately 1 minute.	
Maximum Opening	EDA arm can be templated for points at:	CUSH arms can be templated for opening/hold-open point at:
	110°: A = 6-3/8" (162 mm) B = 7-3/4" (197 mm)	85°: A = 7-15/16" (202 mm) B = 9-1/8" (232 mm)
	or 180°: A = 2-7/8" (73 mm) B = 4-1/4" (108 mm)	90°: A = 7-3/16" (183 mm) B = 8-1/2" (216 mm)
	Hold-open points up to maximum opening with HEDA arm	100°: A = 6-1/16" (154 mm) B = 7-1/4" (184 mm)
		or 110°: A = 5-1/16" (129 mm) B = 6-3/8" (162 mm)

Notes:

- 4040XP Series closers ordered with EDA or CUSH arms include 4040XP-201 FIFTH HOLE SPACER to support the shoe
- Spring Cush stop points are approximately 5° more than templated stop point
- Hold open at templated stop points

4040XP Series

Mounting details

EDA and CUSH Mounting

LCN Door Control Catalog

phone: 877-671-7011 ■ fax: 800-248-1460 ■ www.allegion.com/us ■ 009426 rev.2/16

LCN®

41

Interdisciplinary Science Building
Webster University

4040XP Series

Accessories

Cylinders



4040XP-3071
Cast Iron Cylinder Assembly

- Non-handed
- Heavy duty



4041-3071 DEL
Cast Iron Cylinder Assembly

- Used for delayed action closing
- Non-handed
- Heavy duty

Covers



4040XP-72
Plastic Cover

- Includes 4040XP-54 snap-on cover clip
- Non-handed
- Standard



4040XP-72MC
Metal Cover

- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Installation Accessories



4040XP-18
Plate

- Required for hinge side mount where top rail is less than 3-3/4" (95 mm)
- Requires minimum 2" (51 mm) minimum top rail



4040XP-18G
Plate

- Locates top jamb mounted closer flush with top of head frame face in flush ceiling condition
- Requires 1-3/4" (44 mm) minimum head frame



4040XP-18TJ
Plate

- Centers top jamb mounted closer vertically on head frame where face is less than 3-1/2" (89 mm). Plate requires 1-3/4" (44 mm) minimum head frame



4040XP-18PA
Plate

- Required for parallel arm mounting where top rail is less than 5-1/2" (140 mm), measured from the stop
- Requires 2" (51 mm) minimum top rail



4040XP-62PA
PA Shoe

- Required for parallel arm mounting

Arms

4040XP Series

Accessories



4040XP-3077
Regular Arm

- Non-handed
- Mounts pull side or top jamb with shallow reveal P4041 closer includes PA SHOE, 4040XP-62PA required for parallel arm mounting



4040XP-3077L
Long Arm

- Non-handed
- Includes LONG ROD AND SHOE, 4040XP-79LR for top jamb mount
- Optional



4040XP-3077ELR
Extra Long Arm

- Non-handed
- Includes EXTRA LONG ROD AND SHOE, 4040XP-79ELR for top jamb mount with deep reveal
- Optional



4040XP-3049
Hold-Open Arm

- Non-handed
- Mounts pull side or top jamb with shallow reveal, hold-open adjustable shoe
- 4040XP closer includes 4040XP-62PA shoe required for parallel arm mounting
- Optional



4040XP-3049L
Long Hold-Open Arm

- Non-handed
- Includes LONG HEAD AND TUBE, 4040XP-3048L for top jamb mount
- Optional



4040XP-3077EDA
Extra Duty Arm

- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- Optional



4040XP-3049EDA
Hold-Open Extra Duty Arm

- Handed
- Parallel arm features forged, solid steel main and forearm for potentially abusive installations
- Hold-open function is adjusted at the shoe
- Optional



4040XP-3077EDA/62G
Extra Duty Arm with 62G

- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance
- Optional



4040XP-3049EDA/62G
Hold-Open Extra Duty Arm with 62G

- Handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance. Hold-open function is adjusted at the shoe
- Optional



4040XP-3077CNS
Cush-N-Stop® Arm

- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe.
- Optional



4040XP-3049CNS
HCUSH Arm

- Non-handed
- Hold-open function with templated stop/hold-open points
- Handle controls hold-open function
- Optional



4040XP-3077SCNS
Spring CUSH Arm

- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional



4040XP-3049SCNS
Spring HCUSH Arm

- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold-open function
- Optional

LCN Door Control Catalog

phone: 877-671-7011 ■ fax: 800-248-1460 ■ www.allegion.com/us ■ 009426 rev. 2/16

LCN®

43

Interdisciplinary Science Building
Webster University

4040XP Series

Accessories

Installation Accessories cont.



4040XP-30
CUSH Shoe Support

- Provides anchorage for fifth screw used with CUSH arms, where reveal is less than 3-1/16" (78 mm)
- Optional



4040XP-61
Blade Stop Spacer

- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop
- Optional



4040XP-419
PA Flush Panel Adapter

- Provides horizontal mounting surface for parallel arm shoe on single rabbetted or flush frame
- Optional



4040XP-62A
Auxiliary Shoe

- Requires a top rail of 7" (178 mm)
- Shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop
- Optional



4040XP-54
Snap-On Cover Clip

- Used to secure 4040XP-72 Plastic Cover to cylinder body

4040XP Series

Ordering Information

How-to-order 4040XP Series closers

1. Select finish

- ☐ Standard Powder Coat _____
- ☒ Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass.

Closer will be shipped with:

- Standard cylinder
- Standard cover
- Regular arm
- Self-reaming and tapping screws unless options listed below are selected.

Closer options

Cylinder

- ☐ Delayed Action (4041 DEL)

Cover

- ☐ Metal (specify right or left hand) (MC)

Finish

- ☐ Custom Powder Coat (RAL) _____ (handed metal cover required)
- ☐ Plated Finish, US _____ (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Arm

- ☐ Regular (REG)
- ☒ Regular w/62PA (Rw/PA)
- ☐ Regular w/62A (R/62A)
- ☐ Long (LONG)
- ☐ Extra Long (XLONG)
- ☐ Hold-Open (H)
- ☐ Hold-Open w/62PA (Hw/PA)
- ☐ Long Hold-Open (HLONG)
- ☐ Extra Duty Arm (EDA)
- ☐ Extra Duty Arm with 62G (EDA/62G)
- ☐ Hold Open Extra Duty Arm (HEDA) (Handed)
- ☐ Hold Open Extra Duty Arm with 62 (HEDA/62G)(Handed)
- ☐ Cush-N-Stop (CUSH)
- ☐ HCush-N-Stop (HCUSH)
- ☒ Spring Cush (SCUSH)
- ☐ Spring HCush (SHCUSH)

Optional Screw Packs

- ☐ TB* w/Self-Reaming and Tapping (TBSRT)
- ☐ Wood & Machine Screw (WMS)
- ☐ TB*, Wood & Machine Screw (TBWMS)
- ☐ TORX Machine Screw (TORX)
- ☐ TB* & TORX Machine Screw (TBTRX)
- * Specify door thickness if other than 1-3/4".

Installation Accessories

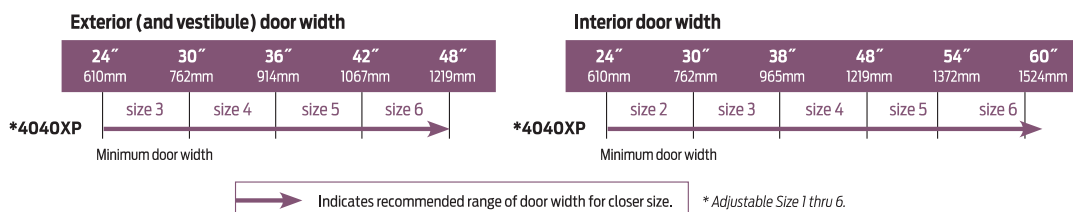
- ☐ Plate, 4040XP-I8
- ☐ Plate, 4040XP-I8TJ
- ☐ Plate, 4040XP-I8G
- ☐ Plate, 4040XP-I8PA
- ☐ CUSH Shoe Support, 4040XP-30
- ☐ Blade Stop Spacer, 4040XP-61
- ☐ Auxiliary Shoe, 4040XP-62A
- ☐ PA Flush Panel Adapter, 4040XP-419

Special Template

- ☐ ST- _____

Table of sizes

- 4040XP cylinders are adjustable from size 1 through size 6 and is shipped set to size 3
- Closing power of 4040XP Series closers may be adjusted 50%



Reduced opening force 4040XP Series closers

CAUTION ! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to POWER OPERATORS section for information on systems that meet reduced opening force requirements without effecting closing power.

DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4040XP	4040XP
	5.0* lbs.	4040XP	4040XP

* Maximum opening force.

LCN Door Control Catalog

phone: 877-671-7011 ■ fax: 800-248-1460 ■ www.allegion.com/us ■ 009426 rev. 2/16

LCN®

45

Interdisciplinary Science Building
Webster University

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB

PROJECT NAME

8274 BIG BEND BLVD

ADDRESS

NUMBER

WEBSTER UNIVERSITY

OWNER

CANNON DESIGN

ARCHITECT / ENGINEER

DEVIN D GATES

SUBMITTED BY

087100.01-001

CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

087100.01

SPECIFICATION SECTION / PARAGRAPH

MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

☐

CRITICAL

ITEM BEING SUBMITTED (check only one)

- ☐ Shop Drawings
☐ Samples
 (_____ copies)
☐ LEED Submittal
☐ Other _____
- ☐ Certification /
 Qualifications
☒ Record Documents
☐ Product Data
- ☐ Coordination Drawing
☐ Calculations
☐ Schedules
☐ O&M Manuals

ITEM BEING SUBMITTED FOR (check only one)

- ☒ Action
☐ Information Only
☐ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)



PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC
CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination
with other trades and compliance with contract documents.

By:

Devin D. Gates

DEVIN D GATES

REVIEWED BY

10/31/16

DATE

To be completed by Reviewer

08 7100.01-001

CANNON DESIGN SUBMITTAL NUMBER

10/31/16

RECEIVED DATE

- ☐ A. No Exceptions Taken
 No further review of submittal is required.
- ☒ B. Make Corrections Noted
 Incorporate corrections in work;
 resubmission is not required.
- ☐ C. Revise and Resubmit
 Revise as noted, and resubmit for review.
- ☐ D. Rejected
 Submittal is not in compliance with Contract Documents;
 provide new submittal.
- ☐ E. For Record / Information Only
 Submittal was reviewed for Record / Information
 purposes only.
- ☐ F. Not Required for Review
 Submittal is not required by Contract Documents
 and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS

☒ See attached sheet(s) for additional comments

SEE MARKUP

SEE LETTER ON FOLLOWING PAGE

Lynn Grossman

Digitally signed by Lynn Grossman
DN: cn=Lynn Grossman, o=Cannon
Design, cn=Lynn Grossman
Date: 2016.12.05 18:32:59-06'00'

12.05.16

REVIEWED BY

DATE



Allegion, PLC
6810 Hillsdale Ct.
Indianapolis, IN 46250 USA
Office 877.238.2022 Fax 317.715.4055
allegion.com

Submittal Review

Specification Section: 087100 Door Hardware

Date: 11/10/2016

Project: Webster University - ISB
Webster, MO

Firm: Cannon Design
Attn: Kelvin Patel
1100 Clark Ave
St. Louis, MO 63102
(314) 425-8756

Kelvin,

I have reviewed this submittal for the door hardware per specification section 087100. This review is for specification compliance based on the specifications submitted to you for the above referenced project. I did not review for doors and frames and nor did I respond to any questions or comments regarding doors and frames. The Contractor remains responsible for the accuracy and completeness of submittal including, but not limited to, dimensions, quantities, fabrication, and construction techniques. General Conditions of contract documents apply.

You will need to review the door and frame submittal for compliance based on your plans, door schedule, and door/frame elevations. If any changes were made through addenda or RFI please update my comments appropriately.

Submittal Action:

Door Hardware Submittal dated 10/31/16 -

Reviewed / Reviewed As Noted

Submittal Notes/Comments:

- Revise all closers to 4010/4110 DEL series per email revision
- Provide Exit Devices with NL-OP trim where specified versus the submitted NL trim

Door Hardware Submittal—

Note: The general comments are listed to save time for repetitious items, comments, and/or concerns. The specific comments listed for individual headings are subject to the general comments listed below.

1. General:
 - a. I did not review submittal for handing.
 - b. Operational Description: Operational Description, of openings with electrified hardware, needs to be included in the door hardware schedule. [Reference Section 087100, Article 1.3.C.3.]

Please remind the contractor to coordinate the hardware being supplied by the Aluminum Door supplier with the hardware from this package. The hardware for aluminum doors is specified in Section 087100. This submittal references aluminum hardware as “by others”. All the hardware is required to be of the same manufacturer and model and meet the requirements of Section 087100.

- ✓ Single Source Responsibility: Obtain each type of hardware (ie. latch and locksets, hinges, exit devices, closers, etc.) from a single manufacturer. [Reference Section 087100, Article 1.4.D.]

The door hardware specification includes some project controls to assist in a smooth project. Please remind the general contractor of the following specification items in Section 087100:

- ✓ Article 1.3.C.3.I.3. Riser and Wiring Diagram – Please advise hardware supplier to provide riser and (point-to-point) Wiring Diagrams per approved finish hardware schedule.
- ✓ Articles 1.3.D. and 2.6. Keying – Please advise the hardware supplier to schedule and complete the keying conference prior to ordering hardware to avoid issues with keying or lock functions.
- ✓ Articles 1.6. and 1.7. Coordination – Please advise general contractor to schedule pre-installation, installation coordination, and electrified hardware coordination conferences prior to installation of any finish hardware.

Also, put the following items on the check-list at project completion time:

- ✓ Article 3.1 Installation
- ✓ Articles 3.1.L and 3.2 Adjustment and Field Inspections

As a reminder the following services are available to you for this project:

- ✓ Provide product training to installers.
- ✓ Assist you with “Jobsite Inspection” and creation of a detailed punch-list.
- ✓ Provide product training to owner.

Please review and contact us at the above telephone number or via email at aaron.owens@allegion.com with any questions or if you need further assistance. Thank you for your time and allowing me to follow up on this project.

Sincerely,

Aaron Owens

<Aaron Owens>