



Submittal Comments

*Architecture
Engineering
Technology
Interior Design
Landscape Architecture*

Item No: 081113, 81416, 87100-02
(CSI No:)

Item
Descript: Door Schedule – Architectural Openings

Re: **Submittal Comments**
Cascade Science Lab Renovation
2008-046.CSL 8.3

*Wil-Fra-Mar Building
320 East Vermont Street
Indianapolis IN 46204-1640
317.263.6226
317.263.6224 (fax)
www.schmidt-arch.com*

Reviewed and checked only for conformance with design concepts and with the information given in the Contract Documents. Approval does not release the Contractor from the responsibility to provide appropriate quantities, field measurements, dimensional stability, installation, anchorage, and coordination with other trades or release the Contractor from responsibility for deviations from the requirements of the Contract Documents or from responsibility for errors and omissions contained thereon.	
	Reviewed as Submitted - No Resubmittal Required.
X	Reviewed as Noted - No Resubmittal Required.
	Reviewed as Noted - Revise and Resubmit.
	Rejected - Revise and Resubmit.
	Not Required for Review - Returned.
By: ctm	
Date: 4.26.09	

Comments

Kickplates should match existing or be stainless steel.

Copy: File

McKINNEY Hinge Catalog

Full Mortise Bearing Hinges

Five Knuckle Standard Weight Series

REVIEWED *McKinney*
By Kenneth P Meiring at 3:38 pm, Apr 14, 2009

ASSA ABLOY

TA2314

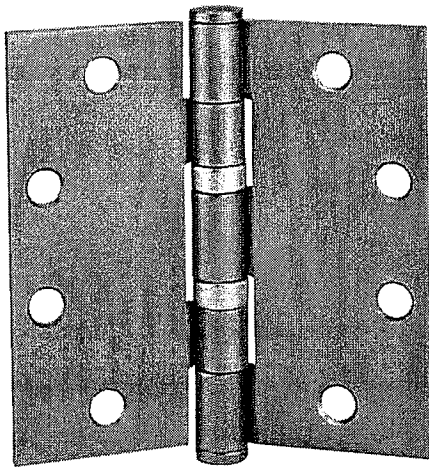
Stainless steel base or available in brass or bronze base material polished and plated or furnished in powder coat.

TA2714

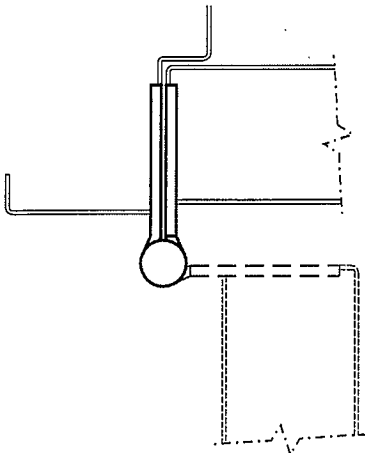
Steel base polished and plated or furnished in powder coat finish.

Available Options:

- NRP (non-removable pin)
- TB (ball bearing)
- TCA (concealed bearing)
- RC (round corner - 1/4" radius furnished unless specified otherwise)
- HT (hospital tip)
- BT (ball tip)
- ST (steeple tip)
- SSF (safety stud feature)
- QC (ElectroLynx hinge) 2, 4, 6, 8, 10 or 12 wire available
- CC (concealed circuit) 4, 6 or 8 wire available*
- MM (magnetic monitoring)
- Slip In (Type 1 or Type 2)
- Beveled Edge (where doors are beveled on hinge side specify TA4314 or TA4714)



APPLICATION



Available Sizes

Inches	MM	Gauge
3 1/2 x 3 1/2	88.9 x 88.9	.123
4 x 4	101.6 x 101.6	.130
4 1/2 x 4	114.3 x 101.6	.134
4 1/2 x 4 1/2	114.3 x 114.3	.134
5 x 4 1/2	127 x 114.3	.146
5 x 5	127 x 127	.146
6 x 6*	152.4 x 152.4	.160

*Not available in Stainless

Packing:

All standard weight full mortise non-ferrous hinges are packed with all machine x 1/2 wood screws. Steel hinges (except USP) are packed all machine x all wood screws. For special screws consult price book on availability.

Full Mortise Hinge Fasteners

Hinge Size	Machine	Wood
3 1/2 x 3 1/2	1/2 x 10-24	1 x 10
4 x 4	1/2 x 12-24	1 1/4 x 12
4 1/2 x 4	1/2 x 12-24	1 1/4 x 12
4 1/2 x 4 1/2	1/2 x 12-24	1 1/4 x 12
5 x 4 1/2	1/2 x 12-24	1 1/4 x 12
5 x 5	1/2 x 12-24	1 1/4 x 12
6 x 6	1/2 x 1/4-24	1 1/4 x 14

ANSI Cross Reference:

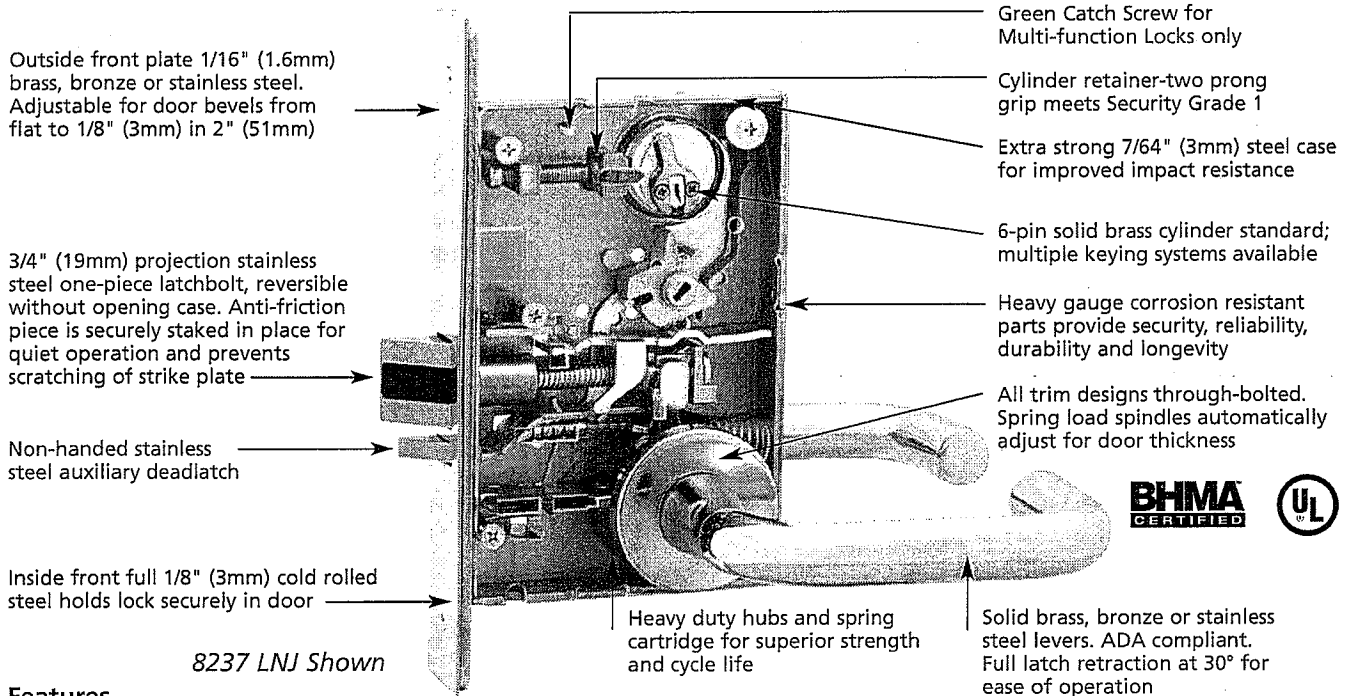
- A2112 Brass, Bronze
- A5112 Stainless
- A8112 Steel

Recommended for standard weight, medium frequency doors, or doors with closing devices.

7800 8200 Mortise Locks Features

SARGENT®
ASSA ABLOY

SARGENT Mortise Locks (Patent Pending) are designed and constructed with high quality components to provide maximum security, performance and durability. These locks represent over a century of innovation and experience in manufacturing hardware and are the industry's benchmark for mortise locks: Strong - Durable - Flexible - Innovative and Secure



Features

Maximum Strength & Durability

- Certified to and exceeds ANSI A156.13, Series 1000, Operational Grade 1 and Security Grade 1 with all standard trims
- Meets and exceeds ASTM F1577-95b paragraph 6.2 detention impact level 1 for deadbolt functions, level 3 for latchbolt only functions
- 12 gauge (.109) steel case and cap
- 1/8" (.125) cold-rolled steel inside front holds lock securely in door
- Heavy duty wrought steel hubs and high carbon steel spring cartridge provide superior strength and cycle life
- 3/4" stainless steel latchbolt. One piece construction to offer 1" total bearing surface against the strike
- Stainless steel hubs available
- One-piece hardened stainless steel deadbolt with 1" (25mm) projection
- Exceeds 8 times the ANSI/BHMA A156.13 Grade 1 standard for cycle testing!
- 10 Year mechanical warranty. No service required to maintain warranty

Maximum Flexibility

- Fast and easy installation. Lock is easily re-handed without removing parts or opening the lock case
- Aesthetic design. Many escutcheon and lever styles available to match a wide range of styles
- 12 Standard architectural grade finishes, including new US15 Satin Nickel
- Multi-functional lockbody makes it easy to change functions in the field!
- 58 functions including 4 electrical functions and 4 Profile/keypad functions. The most in the industry for a broad range of applications!
- Versatile. Offered for door thicknesses ranging from 1-3/8" (35mm) to 6" (152mm)

- Available with vandalism deterrent trim and/or secure fastener options for high abuse conditions
- UL Listed (10C and UBC 7-2, 1997) for use on fire doors up to 4'x10' and 8' x 10' double door applications
- Available with push/pull trim. Perfect for hospital applications
- SARGENT uses engineered solutions and flexible manufacturing processes to accommodate special applications

Innovation

- **First in the industry** to offer a multi-functional lockbody that embodies 9 functions in 1 lockbody!
- 18 new functions, for a total of 58 to meet virtually every specification
- Easy operation. Only 30° of lever rotation required to retract latchbolt
- Lever springs contained inside of the lock case for easier installation
- Unique spring design. Provides longer lock life, no lever sag and simple installation
- SARGENT's revolutionary SARGuard™ available. This antimicrobial silver-based finish coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. EPA and NSF approved and FDA listed
- Broad offering of electro-mechanical configurations offer higher security for the most demanding access/egress control applications featuring ElectroLynx quick connectors

Security

- Torx® and spanner screws
- Classroom and hospital security functions available
- Multiple security trim options available: Free-wheeling, security escutcheon and anti-vandal pull trim (patent pending)
- Security key systems available (V-10, Signature, Keso, Keso F1, & XC)

7800 8200

Mortise Locks
Levers with Rose Designs

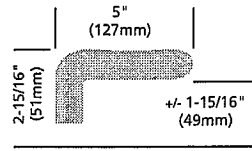
SARGENT®

ASSA ABLOY

- All lever meet ADA guidelines.
- Lever designs C, J, L and P have lever returns within 1/2" (13mm) or less of door face and meet California State Reference Fire Code
- All lever designs on this page are available with only with Standard rose and escutcheon designs, which does NOT include Coastal Series or Studio Collection designs.

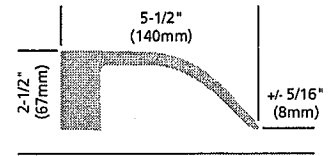
A Lever Design

- Lever: A-Solid forged or cast
- Must specify hand when ordering



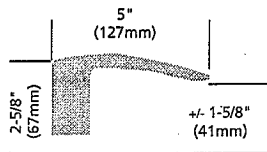
P Lever Design

- Lever: P-Solid forged or cast



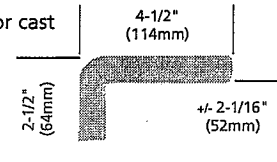
B Lever Design

- Lever: B-Solid forged or cast



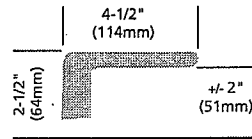
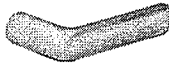
W Lever Design

- Lever: W-Solid forged or cast



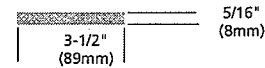
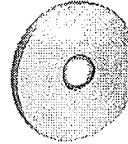
E Lever Design

- Lever: E-Solid forged or cast



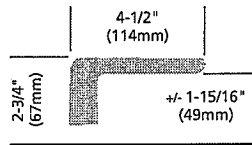
L Rose Design

- Rose: L-Heavy wrought



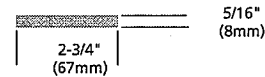
F Lever Design

- Lever: F-Solid forged or cast



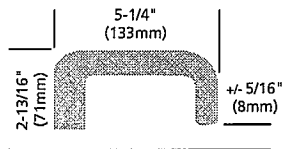
O Rose Design

- Rose: O-Heavy wrought



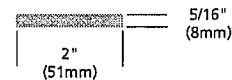
J Lever Design

- Lever: J-Solid forged or cast



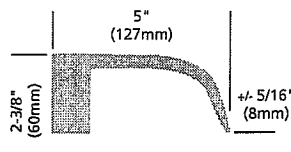
LN Rose Design

- Rose: LN-Heavy wrought



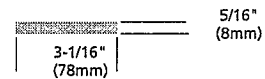
L Lever Design

- Lever: L-Solid forged or cast



E Rose Design

- Rose: E-Heavy wrought

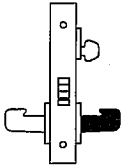


NOTE: All lever height (+/- 1/16") measurements represent total distance from door face.

Single Cylinder without Deadbolt

*#04 Storeroom or Closet

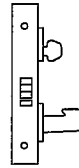
8204, 7804



- Key outside or lever/knob inside retracts latchbolt
- Lever/Knob outside rigid at all times
- Lever/Knob inside retracts latchbolt
- Auxiliary deadlatch
- A Multi-Function Lock Body
- ANSI F07

*#36 Closet

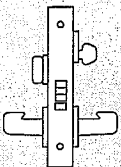
8236, 7836



- Key outside locks and unlocks outside lever/knob
- Lever/Knob outside retracts latchbolt, except when locked
- Inside: no lever/knob or cylinder
- A Multi-Function Lock Body
- Auxiliary deadlatch

*#05 Office or Entry

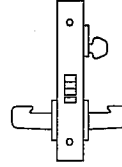
8205, 7805



- Key outside retracts latchbolt when outside lever/knob is locked
- Lever/Knob inside retracts latchbolt only, outside Lever/Knob remains locked
- Lever/Knob outside is locked/unlocked by thumb turn inside or by key outside
- Auxiliary deadlatch
- A Multi-Function Lock Body
- ANSI F04

*#37 Classroom

8237, 7837



- Key outside locks and unlocks lever/knob outside
- Key outside retracts latchbolt
- Lever/Knob outside retracts latchbolt, except when outside lever/knob is locked by key
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- A Multi-Function Lock Body
- ANSI F05

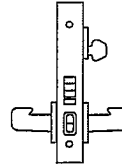
The Multi-Function Advantages with Rose Trim:

- (1) This lock will accommodate 04,05,15 & 37 Functions without additional parts.
- (2) By adding an additional Cylinder, this lock will accommodate 17 & 38 Functions.
- (3) By adding a Trim One Side Kit, this lock will accommodate 06, 13, 31 & 36 Functions.

Note: Office/Entry Function with toggle is available—order as a 55 function.

55 Office or Entry

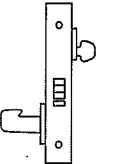
8255, 7855



- Key outside retracts latchbolt when outside lever/knob is locked
- Lever/Knob inside retracts latchbolt only, outside Lever/Knob remains locked
- Lever/Knob outside is locked by toggle only
- Auxiliary deadlatch
- ANSI F04

06 Storeroom or Service

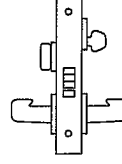
8206, 7806



- No outside lever/knob, cylinder only
- Lever/Knob inside or key outside retracts latchbolt
- Auxiliary deadlatch
- Same as 04 Function without lever/knob outside
- A Multi-Function Lock Body

56 Office & Inner Entry Lock

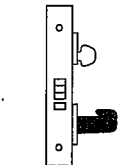
8256, 7856



- Key outside retracts latchbolt when outside lever/knob is locked
- Lever/Knob inside retracts latchbolt and unlocks outside lever/knob
- Lever/Knob outside is locked by thumb turn or key
- Auxiliary deadlatch

*#31 Utility

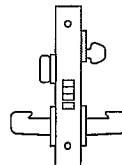
8231, 7831



- Key outside retracts latchbolt
- Lever/Knob outside is always rigid
- Inside: no lever/knob or cylinder
- A Multi-Function Lock Body
- Auxiliary deadlatch

67 Institutional Privacy

8267, 7867



- Key outside retracts latchbolt, with override of turn inside when held in locked position
- Lever/Knob outside retracts latchbolt except when locked by thumb turn
- Lever/Knob outside unlocks when the door closes or operating lever/knob inside
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- ANSI F26
- Note:** Key does not lock outside lever, only unlocks it

*8200 Available with Freewheeling Trim

‡7800 Available with Push/Pull Trim

‡CAUTION: Not recommended for use on any door used for Life Safety egress



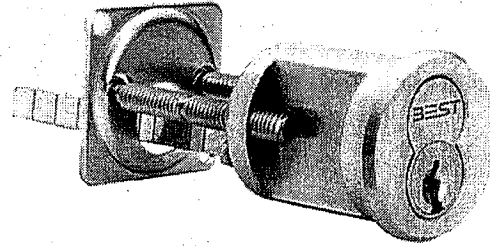
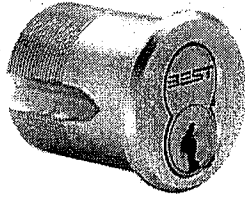
If shaded, knob or lever rigid at all times

TABLE OF CONTENTS		Page	Page	
1E Series Features		2	Eurocylinders	7
1E Series Specs/How to Order		2	Cylinders and Cams	8
1E Series Rings/Spindles/Mortise Service Equipment		3	1E Cylinder Special Rings	9
1E Series Special Cylinders		4, 5	5E Series Specs/Accessories	10
1E7J4/1E7K4 High Security Cylinders		6	5E Series How to Order	11
Patented Keying		6		

*** 1E SERIES - FEATURES**

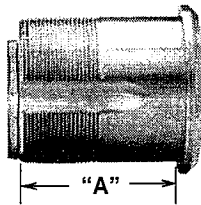
1E Mortise Cylinder

Standard mortise applications require use of BEST's 1E series cylinders with standard 1E-C4 cam. BEST cylinders may be altered to function with other manufacturers' locks by use of different cams (see page 8) and different cylinder rings (see page 9). Special cylinder variations are available for most applications (see pages 4 & 5). BEST cylinders are machined from brass or bronze bar stock and are available in a variety of finishes. Additional security is provided by a set screw that mounts diagonally in the cylinder wall and when tightened, holds the cylinder securely in the housing. BEST mortise cylinders feature the BEST interchangeable core and may be master-keyed into any existing BEST system. Contact your local Stanley Security Solutions sales office for information on special cylinder applications not listed in this catalog.



1E Rim Cylinder

Standard rim cylinder applications require the use of BEST's 1E rim cylinder series. BEST rim cylinders are interchangeable with other manufacturers' rim cylinders. BEST rim cylinders are machined from solid bar stock and are available in a variety of finishes. The standard package for the BEST rim cylinder includes cylinder, RP3 ring package, 1E-S2 spindle, clamp plate and clamp plate screws. BEST rim cylinders feature the BEST interchangeable core and may be master-keyed into any existing Best system.

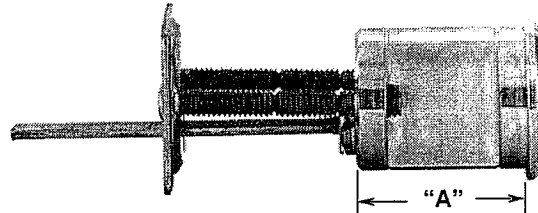


Specifications

Cylinder Nomenclature	Dimension "A"	Door Thickness
1E-64	1 1/8"	1 5/8" to 2 1/4"
*1E-74	1 1/4"	1 7/8" to 2 1/2"

Cylinder diameter- 1 5/32"
To order: see below example: 1E74-C4-RP3-626

Products covered by on or more of the following patents:
4,437,695 4,633,690 4,616,394



Specifications

Cylinder Nomenclature	Dimension "A"	Door Thickness
1E-62	1 3/16"	1" to 2 3/4"
1E-72	1 11/32"	1 1/4" to 3"

Cylinder diameter- 1 5/32"
To order: see below example: 1E72-S2-RP3-626

1E - HOW TO ORDER

STEP A	B	C	D	E	F	G	**
1E	7	4		C4	RP3	626	
Cylinder Diameter	Core Housing	Function Code Length	Standard Mortise Code	Cam or Spindle	Rings	Standard Finishes	
1E- 1 5/32"	0- dummy	2- rim **	Blank- standard	C4- standard cam	RP1- tapered cyl.	605 606	
3E- 1 1/2"	6- 6 pin	4- mortise*	22- 1 3/8"	C181- Adams Rite	RP2- 6 pin mortise	612 613	
5E- see pages 10,11	7- 7 pin housing	6- tapered mortise	24- 1 1/2" up to 96- 6"	MS cam	RP3- std. package	622 625	
8E- see page 7	accepts all Best cores	see pages 4-5 for special cylinders	(see page 4-5)	S2- standard spindle	RP4- 3E mortise	626 690	
				(For special cams see page 8)	(For special rings see page 9)	Specify hand if required	

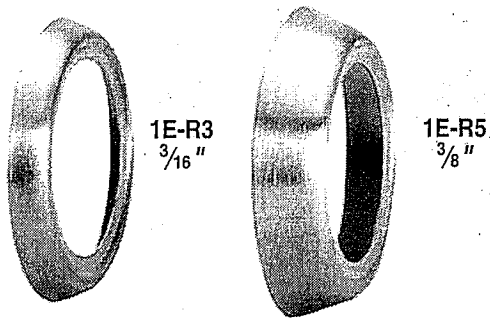
* For additional special mortise cylinders, see pages 4 and 5.
** Must specify keymark and number of keys or designate L/C for less core.



STANDARD RINGS

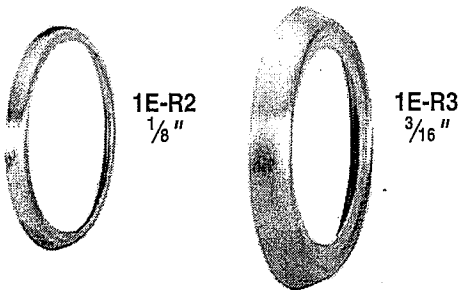
RP Standard Ring Package

The RP standard ring package includes a 1E-R3 ($\frac{3}{16}$ ") and 1E-R5 ($\frac{3}{8}$ ") ring.



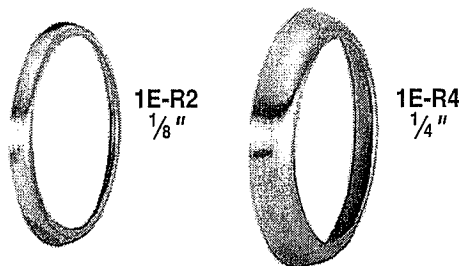
RP1 Ring Package

The RP1 ring package for the 1E-76 cylinder includes a 1E-R2 ($\frac{1}{8}$ ") and 1E-R3 ($\frac{3}{16}$ ") ring.



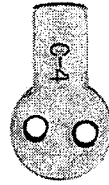
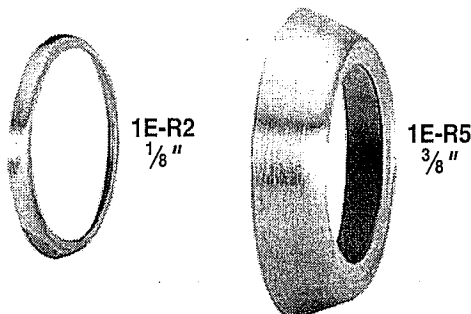
RP2 Ring Package

The RP2 ring package for the 1E-64 cylinder includes a 1E-R2 ($\frac{1}{8}$ ") and 1E-R4 ($\frac{1}{4}$ ") ring.



RP3 Ring Package

The RP3 ring package for the 1E-62, 1E-72 and 1E-74 cylinders includes a 1E-R2 ($\frac{1}{8}$ ") and a 1E-R5 ($\frac{3}{8}$ ")



STANDARD CAM

Standard Cam for 1E-64, and 1E-74 Mortise Cylinders

Unless otherwise specified, the 1E-C4 cam is supplied on all 1E mortise cylinders.

Standard 1E-C4 Cam

Commonly used cams are listed on page 8.

If a cam other than the variety listed is needed, a sample cam should be forwarded to your local BEST office along with the lock manufacturer's name and lock series or identification number.

SPINDLES



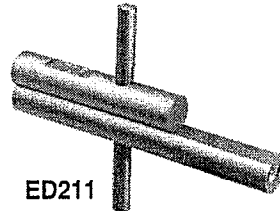
1E-S2 Spindle (Steel) - A-40100-SH

1E-S3 Spindle (Bronze) - A-40100-Z

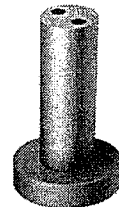
5" Spindle - A-54950; $\frac{5}{32}$ " Spindle - A-40101

The 1E-S2 flat spindle is supplied standard on all 1E rim cylinders. If marine application is necessary, request "marine construction" (1E-S3 bronze spindle and non ferrous materials supplied). A five (5) inch spindle is available for thick door applications.

MORTISE SERVICE EQUIPMENT



ED211



ED212

ED211 Mortise Cylinder Wrench

The Best mortise cylinder wrench and test handle is an essential dual-purpose tool. The double end is used primarily to install or remove BEST mortise cylinders without marring the cylinder surface finish. The single end may be used to test the lock operation, as well as align the throw pins.

To order specify: ED211 mortise cylinder wrench.

ED212 Mortise Cylinder Cam Assembly Tool

Mortise cylinder cams are quickly changed with the use of this tool. Approximate length 1 $\frac{3}{4}$ ".

To order specify: ED212 assembly tool.

ED221 Mortise Cylinder Thread Repair Die

Tool for re-threading 1 $\frac{5}{32}$ " diameter cylinders.

To order specify: ED221 thread repair die.

ED222 Cylinder Cam Testing Tool

Special cylinder /wrench assembly. Screws provide rapid means to install cams for testing.

To order specify: ED222 cam testing tool.

ED225 Hole Tap For 1 $\frac{5}{32}$ " Mortise Cylinder

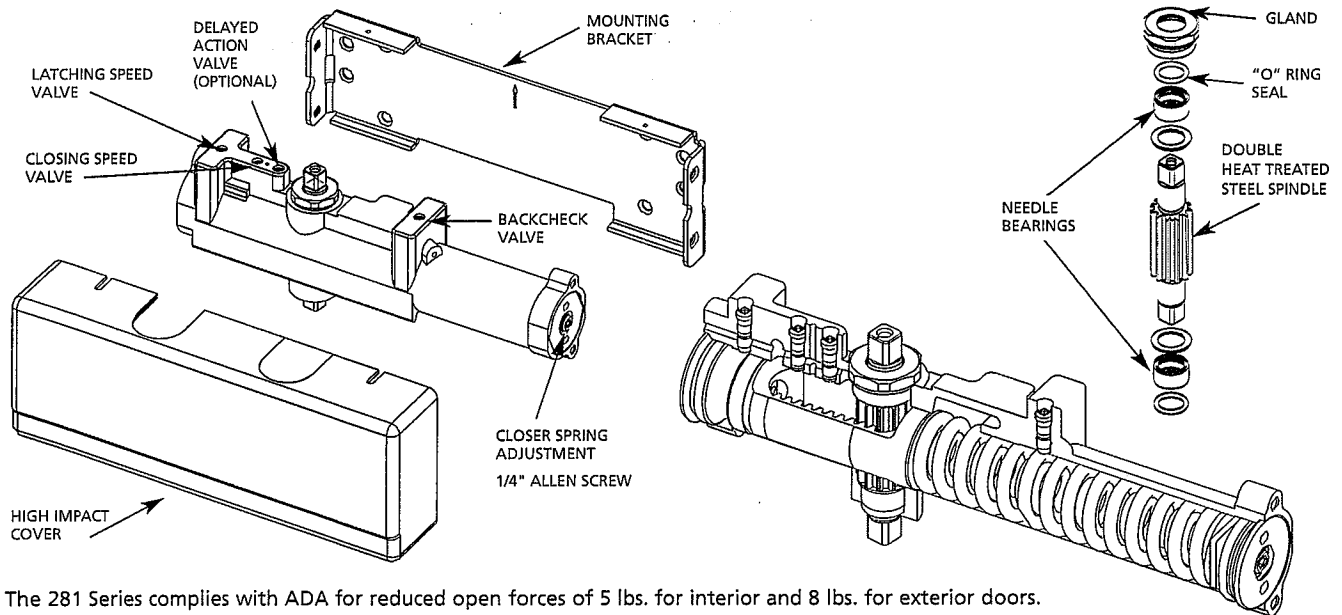
Tap tool used to re-thread housing threads for 1E Mortise Cylinders.

A40095 Standard Throw Pins

281 Series Powerglide® Door Closer Features and Benefits



SARGENT®
ASSA ABLOY



The 281 Series complies with ADA for reduced open forces of 5 lbs. for interior and 8 lbs. for exterior doors.



BHMA
CERTIFIED

UL US
LISTED

Features

- ANSI/BHMA Grade 1 (A156.4)
- Conforms to standards UL 10C and UBC 7-2 for positive pressure fire test
- Ten year or 10 million cycle Warranty
- Versatile mounting applications permit standard, top jamb, parallel and track installations with the same closer body
- UL and cUL listed for use on fire doors
- Adjustable spring power allows 281 closers a size range of 1 through 6. Closers are adjusted to Size 3
- Closer bodies are non-handed
- ADA requirements are met with the 281 model in all applications (except track)
- Standard pressure relief valves for both opening and closing cycles protect the door & frame from damage caused by abuse
- Heavy duty mounting bracket for easy installation of full size iron closer
- Retrofits existing SARGENT 250 and 1250 Series Closer installations
- High impact non-corrosive plastic covers standard (Optional metal cover available)
- Cover secured by machine screws

- All weather fluid allows closer to operate effectively in extreme heat and cold without readjustment
- The Advanced Backcheck (ABC) option begins to slow the door down at approximately 15° sooner than standard backcheck in the open cycle. The (ABC) option is used when the door needs to slow down earlier than the standard back check of 70°.

Heavy Duty Construction

- Heat treated full rack and pinion for high strength & wear resistance
- Heavy duty one piece cast iron body provides superior strength and wear resistance
- 1/2" arm engagement over a 7/16 square spindle ensures a wear-resistant tight joint

Full Complement of Arm Types

- Standard and parallel arms
- Push and pull track arms
- Security track
- Security parallel arm
- Heavy duty forged steel arms are finely finished and interchangeable between SARGENT 281 and 1431, 250, 1250 and 351 Series

Valves

- Separate brass low sensitivity control valves offer ability to separately regulate door speed, latching, backcheck and optional delayed action
- All valves are captured to prevent accidental removal, adjustable with an 1/8" Allen wrench
- Adjustable backcheck protects the door and hardware from damage during the opening cycle
- Adjustable delayed action (optional) permits easy access for physically impaired individuals

Innovation

- Revolutionary finish coating available on all SARGENT product lines, utilizes a silver-based antimicrobial compound from AgION Technologies



MicroShield™

As part of its promise to provide innovative solutions to their customers, ASSA ABLOY Group companies offer the MicroShield technology, a silver-based antimicrobial coating designed to stem the spread of germs and bacteria. MicroShield™ is a trademark of the respective ASSA ABLOY Group company.

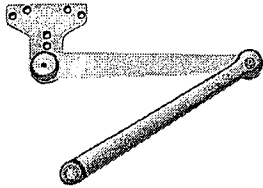
© SARGENT Manufacturing Company

281 Series Powerglide® Door Closer Heavy Duty Parallel Arms



SARGENT® ASSA ABLOY

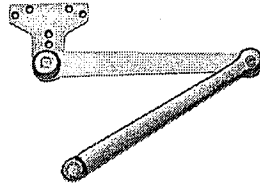
P10 - Heavy Duty Parallel Arm



- Forged Steel Arm, 11-1/4" (286mm) long
- Non-handed
- Easily installed
- Permits 120° opening at standard mounting
- Permits 180° opening at alternate mounting

Order as 25-P10 x finish for arm only
Includes: 63-0641 - Main arm
63-3727 - Arm and bracket assembly
63-3481 & 63-2392 - Screw packs

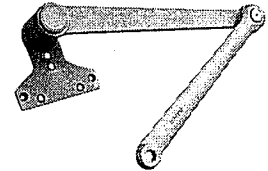
PH10 - Heavy Duty Friction Hold Open Parallel Arm



- Equipped with adjustable friction holder
- Adjustable hold open from 75° to 180°
- Forged steel arm, 11-1/4" (286mm) long
- Handed same as door
- Use friction hold open arms for doors subject to moderate hold open use

Order as 25-PH10 x finish for arm only
Includes: 63-0641 - Main arm
63-3839 - Left hand arm and bracket assembly
63-3840 - Right hand arm and bracket assembly
63-3481 & 63-2392 - Screw packs

PD10 - Heavy Duty Parallel Drop Arm



- Arm to be used with surface overhead applied stops
- Forged Steel Arm, 11-1/4" (286mm) long
- Lowers closer 1 1/4" on door
- Non-handed
- Easily installed
- Permits 120° opening at standard mounting
- Permits 180° opening at alternate mounting

Order as 25-PD10 x finish for arm only
Includes: 63-0641 - Main arm
63-4317 - Arm and bracket assembly
63-3481 & 63-2392 - Screw packs

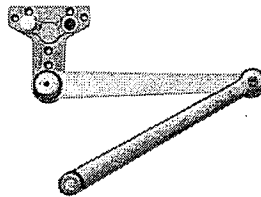
Heavy Duty Hold Open and Stop Arms

Common features:

- Forged steel arms
- Non-handed
- Easy installed and adjusted

- Use positive stop hold open arms for doors subjected to repetitive hold open

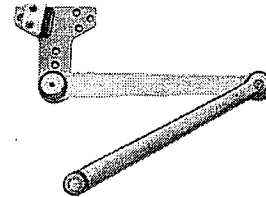
PS - Heavy Duty Parallel Arm with Positive Stop



- Provides built in stop from 85° to 110°

Order as 25-PS x finish for arm only
Includes: 63-0641 - Main arm
63-3837 - Arm and bracket assembly
63-3481 & 63-2392, 63-2396 - Screw packs

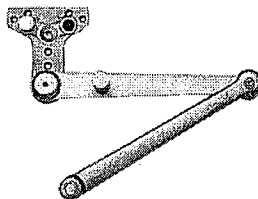
CPS - Heavy Duty Parallel Arm with Compression Stop



- Provides built in compression stop from 85° to 105°
- Dead stop within 3°

Order as 25-CPS x finish for arm only
Includes: 63-0641 - Main arm
63-3830 - Arm and bracket assembly
63-0516 - Bumper holder
63-3493 - Bumper
63-3481 & 63-2398 - Screw packs

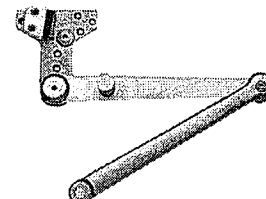
PSH - Heavy Duty Parallel Hold Open Arm with Positive Stop



- Adjustable hold open tension
- Hold open function may be disengaged
- Permits 85° to 110° door opening

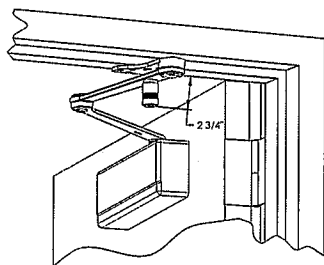
Order as 25-PSH x finish for arm only
Includes: 63-0641 - Main arm
63-3833 - Arm and bracket assembly
63-3481 & 63-2392, 63-2396 - Screw packs

CPSH - Heavy Duty Hold Open Parallel Arm with Compression Stop



- Adjustable hold open tension
- Hold open function may be disengaged
- Provides built in compression stop and holder mechanism from 85° to 105°
- Dead stop within 3°

Order as 25-CPSH x finish for arm only
Includes: 63-0641 - Main arm
63-3836 - Arm and bracket assembly
63-0516 - Bumper holder
63-3493 - Bumper
63-3481 & 63-3487 - Screw packs



The PSH and CPSH arms project 2 3/4" below the head stop

281 Series Powerglide® Door Closer Regular Duty Parallel Arms

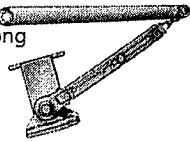


SARGENT® ASSA ABLOY

Hold Open Arms

P4H - Flush Frame, Friction Hold Open Arm

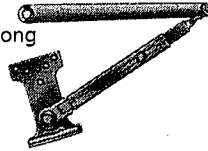
- Forged Steel Arm 11-1/4" (286mm) long
- Holds open from 75° to 180°
- Easily adjusted by wrench
- Non-handed
- Use on frames where stop or soffit is too narrow to mount the standard hold open foot bracket



Order as 25-PH4 x finish for arm only
Includes: 63-2229 - Main arm and link assembly
61-2303 - Foot assembly
64-0050 - Foot bracket
63-3481 & 63-2391 - Screw packs

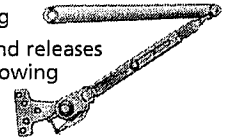
PH9 - Friction Hold Open Arm

- Forged Steel Arm 11-1/4" (286mm) long
 - Holds open from 75° to 180°
 - Easily adjusted by wrench
 - Non-handed
- Order as 25-PH9 x finish for arm only
Includes: 63-2229 - Main arm and link assembly
61-2303 - Foot assembly
64-0039 - Foot bracket (125 PH9)
63-3481 & 63-2391 - Screw packs



PF9 - Fusible Link Hold Open Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Fusible link melts and releases hold mechanism allowing door to close
- 160°F fusible link standard, 125°F link optional
- Equipped with adjustable friction holder
- Holds door open from 75° to 180°
- Easily adjusted by wrench
- Handed same as door

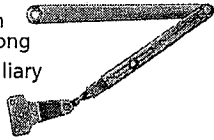


Order as 25-PF9 x hand x fusible link degree x finish for arm only
Includes: 63-2229 - Main arm and link assembly
63-2245 - Left hand foot assembly
63-2246 - Right hand foot assembly
63-3481 & 63-2391 - Screw packs

Offset Bracket Arms

P3 - 1" Offset Bracket for use with Auxiliary Holder/Stop

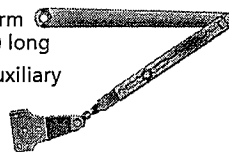
- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders
- Foot bracket is offset 1" more than P-9, allowing door closer to be lowered on door face
- Non-handed



Order as 25-P3 x finish for arm only
Includes: 63-2607 - Main arm and link assembly
63-2270 - Foot assembly
63-3481 & 63-2391 - Screw packs

P3A - 1-3/4" Offset Bracket for use with Auxiliary Holder/Stop

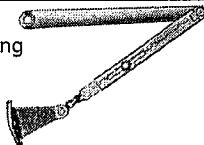
- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders and door coordinators
- Foot bracket lowers door closer an additional 3/4" below P3 bracket
- Non-handed



Order as 25-P3A x finish for arm only
Includes: 63-2607 - Main arm and link assembly
63-2274 - Foot assembly
63-3481 & 63-2391 - Screw packs

P4 - 1" Offset Flush Frame Arm for use with Auxiliary Holder/Stop

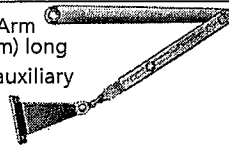
- Forged Steel Arm 11-1/4" (286mm) long
- Foot bracket is attached to frame or transom face
- Foot bracket is offset 1" more than P9, allowing door closer to be lowered on door face
- For use where stop or soffit is too narrow for the standard P9
- Permits 120° opening with standard mounting
- Permits 180° opening with alternate mounting
- Non-handed



Order as 25-P4 x finish for arm only
Includes: 63-2607 - Main arm and link assembly
63-2295 - Foot assembly
63-3481 & 63-2391 - Screw pack

P4A - 1-3/4" Offset Flush Frame Arm for use with Auxiliary Holder/Stop

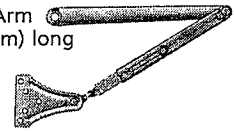
- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders
- Foot bracket is attached to frame or transom face
- Foot bracket lowers door closer an additional 3/4" below P4 bracket
- Non-handed



Order as 25-P4A x finish for arm only
Includes: 63-2607 - Main arm and link assembly
63-2272 - Foot assembly
63-3481 & 63-2391 - Screw packs

P9 - Standard Parallel Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Non-handed



Order as 25-P9 x finish for arm only
Includes: 63-2607 - Main arm and link assembly
63-2271 - Foot assembly
63-3481 & 63-2391 - Screw packs

UO Package

- Universal arm package provides arms and brackets to install closer in standard top jamb or parallel application



Screw packs
63-3481 & 63-2391

125-P9

UH Package

- Universal hold open arm package provides brackets and arms to install closer in top jamb, standard or parallel applications



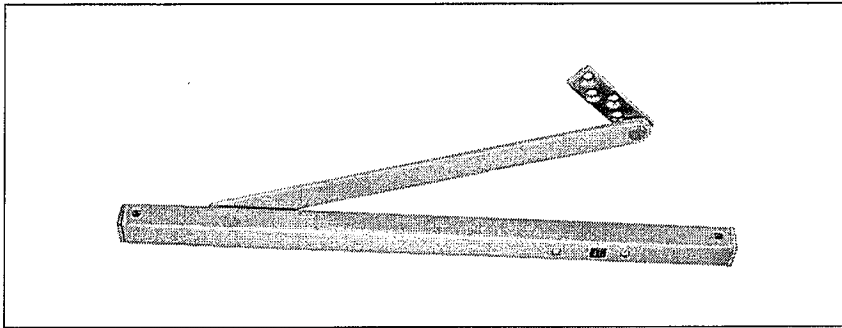
Screw packs
63-3481 & 63-2391

125-PH9

Heavy-duty overhead door holder and stop for exterior, vestibule or interior doors, single acting

**Now available
US32D & US32**

**9000 SERIES
SURFACE MOUNTED**



STANDARD FEATURES

- For all Stainless Steel Components - Prefix N
- Non-handed/reversible
- Single point hold-open in increments of 5° from 85° to 110°
- Hold-open knob can be disengaged to act as a stop only
- 5° to 7° shock compression following hold-open point
- Steel shock absorbing spring
- Die cast end block and shock block
- Maximum opening 110°, minimum door thickness 1 3/4"
- Wood, machine screws and sex bolts included
- Available in all BHMA plated and sprayed finishes

**All Stops
Warnock Hersey
listed**

SPECIFY ANGLE JAMB BRACKET 90541 FOR HINGE SIDE OR FLUSH TRANSOM MOUNTING

**WHEN ORDERING,
please list:**

Model number

Door closer number or other hardware

Mounting means of the door and butt size

Hold-open or dead-stop degree

Door opening and thickness

Finish

SPECIFICATIONS:

Stop only function to be Warnock Hersey listed as manufactured by ABH.

Material:
bronze/steel/stainless steel; channel 3/32" thick and 1 1/8" depth; arm 1/4" thick and 1" wide; jamb bracket 1/4" thick and 1" wide; sliding block shall have easy access for tension adjustment.

STAINLESS STEEL SPECIFICATIONS:

All parts stainless steel as manufactured by ABH.

DOOR FRAME OPENING		HOLDER NUMBER		
BUTTS OFFSET PIVOTS	CENTER HUNG	HOLD- OPEN	STOP	FRICTION
28" - 29 15/16"	30" - 33 15/16"	9011	9021	9031
30" - 31 15/16"	34" - 35 15/16"	9012	9022	9032
32" - 35 15/16"	36" - 38 15/16"	9013	9023	9033
36" - 39 15/16"	39" - 40 15/16"	9014	9024	9034
40" - 41 15/16"	41" - 44 15/16"	9015	9025	9035
42" - 43 15/16"	45" - 46 15/16"	9016	9026	9036
44" + Greater	47" + Greater	9017	9027	9037
BHMA NUMBER		C02511	C02541	C02531
FED. SPEC TYPE		1161	1161A	-

Contact ABH for special templating or other door opening
Average weight/unit 6 lbs.

www.abhmfg.com
E-mail: abhinfo@abhmfg.com
Architectural Builders Hardware Mfg., Inc.
 1222 Ardmore Ave., Itasca, IL 60143
630.875.9900; FAX 800.9FAXABH (932.9224)

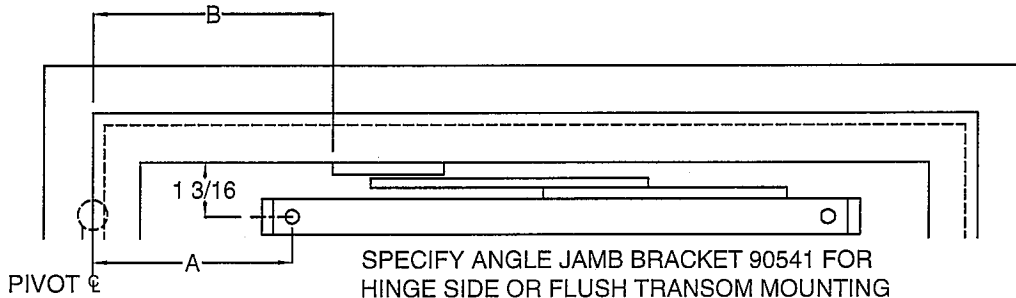
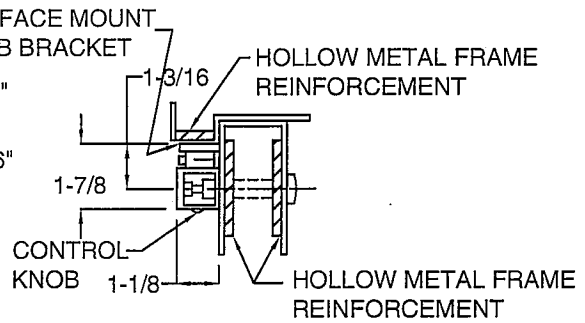
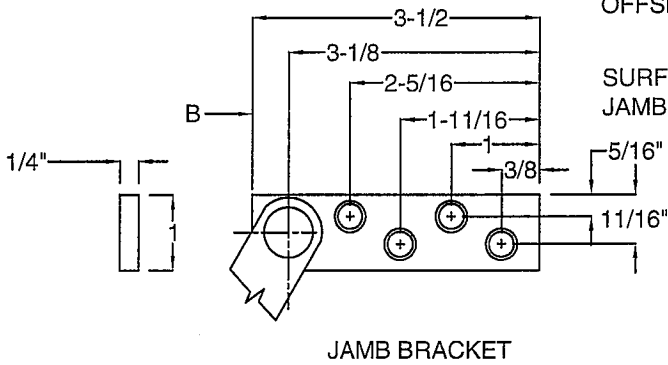
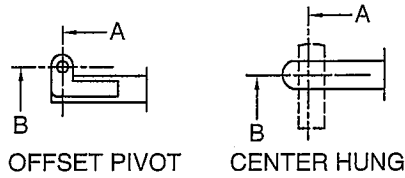
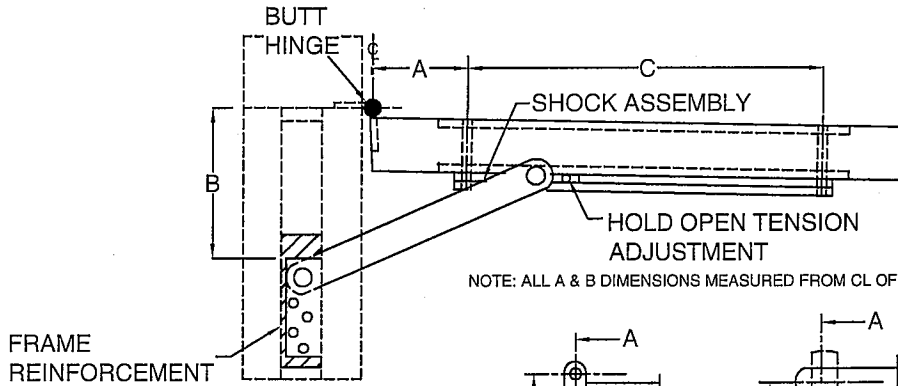
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Printed in USA 02/05



REVERSIBLE

9000 SERIES HOLDERS & STOPS
FOR SINGLE ACTING DOORS ONLY

NON - HANDED



NOTE: A, B, & C DIMENSIONS MEASURED AS SHOWN

SCREW DETAIL			
	QTY	WOOD	METAL
JAMB	4	#14 X 1-1/2" F.H.W.S.	1/4-20 X 3/4" F.H.W.S.
DOOR	2	5/16 18 R.D.H.M.S. 1/2" DIA. SEX BOLT	5/16-18 RD.H.M.S. 1/2" DIA. SEX BOLT

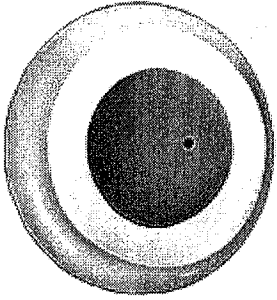
ALWAYS REQUEST LATEST TEMPLATE DRAWINGS FOR NEW INSTALLATIONS

DO NOT SCALE DRAWINGS
ALL DIMENSIONS ARE IN INCHES

www.abhmfg.com
E-mail: abhinfo@abhmfg.com
Architectural Builders Hardware Mfg., Inc.
 1222 Ardmore Ave., Itasca, IL 60143
630.875.9900; FAX 800.9FAXABH (932.9224)

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Printed in USA 02/05





232W

Description:

Stops > Wall Stops & Holders

Application:

Meets ANSI A156.16 for L02101

Diameter - 2 1/2" (64mm)

Projection - 13/16" (30 mm)

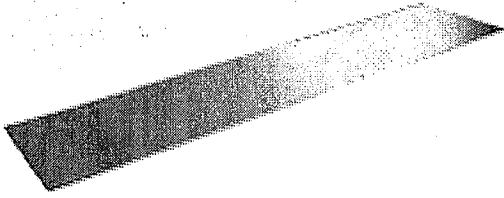
Stop - Rubber

Materials - Wrought Brass, Bronze, Stainless Steel

Finishes - US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D

Fasteners - #10 x 1-1/4" concealed mounting with shield and toggle bolt

Note - Specify Add 232T for Machine screw and toggle nut screw pack



194S

Description:

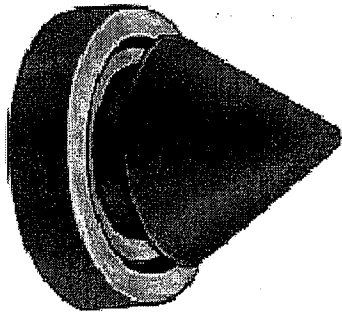
Door Protection Plates > .050" Gauge

Mop Plate: 4" (102 mm) and 6" (152 mm) high, 1" (25 mm) less than door width

Kick Plate: 8" (203 mm), 10" (254 mm), and 12" (305 mm) high, 2" (51 mm) less than door width.

Armor Plate: 14" (356 mm) to 48" (1219 mm) high

Gauge	- 0.050" (1.3 mm)	Options	- Self-adhesive tape available on all plates
Materials	- Aluminum, Brass, Bronze, Stainless Steel		- Torx head screws
Finishes	- US3, US4, US10, US10B, US28, US32, US32D		- UL, armor plate stamped
Fasteners	- #6 X 5/8" truss head screws		- Spanner head screws
Bevel	- 4 edges		- Round corners
Order	- Plates are sized on even inches. Odd size available and priced to next larger size.		- Wrap around side and bottom return
	- May be ordered with counter sunk holes (specify "CSK") at extra charge.		- 0.125" material
	- Furnish item #, height, width, and finish (i.e., 194S - 6" x 30", US32D).		



307D

Description:

Miscellaneous > Door Silencers > Door Silencer - Metal

Application:

Meets ANSI 156.16 for L03011

For use with metal frames

Base Diameter - 1/2" (12.5 mm)

Length - 31/64" (12.3 mm)

Material - Gray Rubber

307D Quantity Box	307D Quantity Case
10each	100 each