# Series 500 Tech Data

**4/17/15**

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The Series 500 door system by EXPI-DOOR® Systems Inc. carries a three-year warranty for defective product or workmanship, provided it is not a result of negligence, caused by damage while in transit, improper installation, or other damage caused by second parties. The three years will commence from the date of original shipment from EXPI-DOOR®. Defective or damaged products must be returned to EXPI-DOOR® to receive credit or replacement unless otherwise instructed. If a product is not returned as required, no credit or replacement will be issued, except when special instructions are given for disposition of defective products or material.

See the following Tech Data pages for individual warranty information for each specific hardware item.

When returning product, documentation is required to identify the returned product with customer name, order number, or our invoice number, etc. A copy of the original packing slip is the best document to send. No credit or replacement can be issued if proper documentation cannot be completed.

EXPI-DOOR® will issue an invoice for the price of the replacement component or will replace the component at no charge, depending upon the agreement between EXPI-DOOR® and the purchaser of the product. It is imperative that an EXPI-DOOR® representative and the purchaser together agree on the best course of action before this determination has been made. Do not replace the product with another from a different provider as this may cause the warranty to not be applicable.

Steps to take in the event of a Warranty claim:

1. Contact EXPI-DOOR®. Provide a brief description of the problem and documentation of product purchase available.
2. Agree on a course of action with the EXPI-DOOR® representative – either product replacement or credit.
3. Return defective product to EXPI-DOOR® per EXPI-DOOR®’s instructions.
4. After receiving the product and undergoing a thorough review to confirm defect, EXPI-DOOR® will issue credit.
5. In the event that a replacement product is required prior to being able to return the defective product, EXPI-DOOR® will send out a replacement and bill the customer. Once the old product has been confirmed defective, EXPI-DOOR® will credit the full amount for the new replacement product.
6. In the event the product is not considered defective, customer will be contacted and a course of remedy will be agreed upon.
FREIGHT CLAIMS:
* Freight claims are not considered a part of the warranty process. However, EXPI-DOOR® will replace damaged freight items as a result of third party damage as quickly as possible. The freight claim must be initiated by the receiver to the company that transported the product within the time frames required by the carrier to file a claim. Additionally, once product leaves the EXPI-DOOR® dock, it becomes the freight carrier’s responsibility. When items are received by our customer, they must be examined by the receiver PRIOR to the receiver signing the delivery driver’s paperwork/delivery receipt. When the receiver signs any paperwork brought or presented by the delivery driver/shipper, it then becomes that individual’s responsibility completely. If damages or shortages are noticed any point after the driver departs from the delivery point (jobsite or building company’s dock or other) the receiver is then solely responsible to file any claims with the company that delivered that product, not EXPI-DOOR®. EXPI-DOOR® will do everything in its power to deliver new or replacement products in a timely manner, but will not be responsible for the material charges, or any other charges, including shipping charges, associated with such product.
TECH DATA PAGES

SERIES 500 SPECIFICATIONS

A. INTRODUCTION:

A.1.0 __The following information pertains to EXPI-DOOR’s current Series 500 Door offering. We will discuss the specifics of Pre-Assembled Door Systems, as well as Knock-Down Door Systems. We will also discuss all hardware components of each system, as well as the creation or grouping of these items.

A.1.01__All door systems provided by EXPI-DOOR are considered as “Medium to Heavy-Duty Commercial” type.

A.1.02__Our Series 500 offering was created specifically to offer a cost-effective product for light to medium duty environments. It should also be noted that this product line is similar, but superior to our competitor’s standard offering of door systems.

B. SUBMITTALS:

B.1.0 __For standard orders, where no special, non-stock conditions exist, our clients are encouraged to use the product data included here-in, and in the following pages. This includes door and frame gauges, hardware grades, designs and finishes, and any associated hardware grades, designs and finishes that apply to that product.

B.1.01__For non-standard orders, and where EXPI-DOOR provided a “specialized product” type quote for non-stock materials, it is required that our client contact the person responsible for that quotation and request a detailed submittal. This will be done at no cost to our client. We will provide up to six (6) copies of all pages in booklet form, or electronically either by e-mail or on a flash-drive or CD format.

B.1.02__Submittals must be approved by a signature from the client, or by way of email confirmation. In some case a document can be created by EXPI-DOOR for the client to approve by signature. In the event that a client sends EXPI-DOOR a Purchase Order for the quoted/submitted material, the P.O. will not be entered for production and no special products will be ordered until the client has authorized and specified that the submittal has been firmly approved.
C. QUALITY ASSURANCE

C.01.01 Our products pass through more than one station during fabrication and assembly. This is in order to cross-train all craftsmen and ensure all know each phase of door fabrication, construction and assembly. Quality checks are done by each station, and corrections or adjustments are made whenever or by whomever necessary.

D. PRODUCTS and COMPONENTS

D.01.01 Hinges – All hinges are ANSI 156.1-2000

A. **Standard: Oil-Impregnated Ball-Bearing (BB), 4.5” x 4.5”, Non-Removable-Pin (NRP), and Powder-Coated Silver Finish. Assembled in America (ANSI 156.1-2000).**

B. Optional: Standard-Weight, 4.5”x4.5” Oil-Impregnated Ball-Bearing (BB), NRP, and US32D (Brushed Stainless Steel) Finish


D. Optional: Heavy-Weight, Oil-Impregnated BB, 4.5”x4.5”, NRP and Stainless Steel (US32D) Finish. Heavy-Weight hinges typically used for 16 gauge or 14 gauge door slabs. Manufactured by Hager Hinge Co., Model #BB1199 stainless steel base – ANSI A5111. Hinge leaf material and Pin shall be constructed from Stainless Steel.

E. Surface Continuous Hinge: Extruded 6063 T6 Aluminum alloy with polyester bearings – tested and approved for UL 10B; UL10C; UBC7.2 – fire rated up to 1 ½ hours. Manufactured by Hager-Roton (780-057) or Select Hinges (SL-57).

D.01.02 Cylindrical Lockset Bored Type – ANSI A156.2, Series 4000, Grade 2, ANSI Function “F109”, Entry/Office

A. Falcon W511 – Dane – 626 w/ Schlage “C” Keyway and (2) cut keys

D.01.03 Cylindrical Lockset Bored Type – ANSI A156.2, Series 4000, Grade 1, ANSI Function “F109”, Entry/Office

A. Falcon T511 – Dane – 626 w/ Schlage “C” Keyway and (2) cut keys

D.01.04 Mortise Lockset (Mortised) Type – ANSI A156.13, Series 1000, Grade 1, ANSI Function “F21” Dormitory w/ Deadbolt

A. Falcon M571 – Dane (DN) – 626 w/ Schlage “C” Mortise Keyway and (2) cut keys. Escutcheon Trim is used, not sectional or “rose” trim & lever.
D.1.05 Exit Device – Rim Type – ANSI A156.3-2001, Grade 1 (Device & Trim), ANSI Function “F08”

A. Hager 4701 x ALM x 47CE-ALM Rim Panic with Key-In-Lever Trim, “ALM” indicates aluminum finish (poder-coated durable finish).

B. Any Series 700 Option will conform to the Series 500 door leaf & frame, therefore are completely interchangeable.

D.1.06 Closers – Surface-Mounted, Parallel-Arm Mounted for out-swinging doors – ANSI A156.4 – Grade 1. All Heavy-Duty Falcon Closers are standard as ADA Compliant with less than 5 lbs. of opening force. Heavy-Duty Falcon Closers are available with Hold-Open as an option.

A. Falcon SC61 x 689, Standard-Duty
B. Falcon SC81 x 689, Moderate-Duty
C. Falcon SC71 x 689, Heavy-Duty

D.1.07 Keyways / Cylinders

1. **Standard: round, 6-pin type – when two or more doors are present per order, keyways shall be keyed alike by EXPI-DOOR.

2. Formated: (Optional) Figure-8 type, Small Format Interchangeable or Full-Size Interchangeable type (please choose). Each core, or keyway shall be provided with (1) Change, and (1) Operating Key. Change Keys are only for the removal of the core. Operating Keys are only for locking and un-locking the keyway.

D.1.08 Auxiliary Hardware

**Manual Surface Bolts – standard on single-active 6o7o door systems and shall be applied to top & bottom of in-active door leaf. Surface-Bolts shall be manufactured with cold-formed steel with US26D Finish (brushed chromium), Heavy-Duty materials throughout.

Latchguards are available for outward-swinging doors only. These will not be applied to inward swinging doors. Latchguards shall be manufactured of solid stainless steel, with a Brushed Stainless Steel Finish, or US32D as the official designation. These are mounted to the door with special “Allen” drive carriage sex nut/bolt (see Tech Data page).

Flush-Bolts (NON-STOCK; Optional/Door Pairs only):


Coordinators (NON-STOCK; Optional/Door Pairs only):

1. Gravity Arm, 7” or 9” projection. Ives COR7G or COR9G (or equal) – US26D finish
2. Door Width, provided with mounting brackets and filler bar. Ives COR52 x FL20 (or equal) – US26D finish
__Automatic Door Bottom (NON-STOCK; Optional):
     NGP 220NA (or similar, equal), UL10B, UL10C, ANSI/BHMA 156.22-2005
  2. Mortised (Concealed) – Standard Duty w/ Vinyl Insert.
     NGP 320N (or similar, equal) UL10B, UL10C, UBC7-2, ANSI/BHMA 156.22-2005

__Screw-Applied Aluminum Weatherseal (Optional):
  1. Surface Applied – w/ Gray Vinyl Insert. NGP 155V, UL10B and UL10C,
     ANSI/BHMA 156.22-2005

__Screw-Applied Aluminum Door Bottom Sweep (Optional):
  1. Surface Applied – w/ Brush Insert. NGP OV634AV, UL10B, UL10C,
     ANSI/BHMA 156.22-2005

__Bumper-Type Threshold, ADA Compliant (Optional):
  1. Shipped Knock-Down – cannot be attached to jambs. NGP 896V w/
     Gray Vinyl Insert. Door seals against threshold - therefore does not
     require a door bottom sweep. Door Leaf is special-order as under-cut
     3/8” rather than 3/4”.

D.1.09 **Standard Sweep; Weatherstripping and Threshold**:

**U-Sweep – Dual Finger, Black Neoprene material, concealed in door
bottom channel w/ TEK screws.

**Weatherstripping – Black sponge silicone, self-adheres to door stops @
strike jamb and header – applied to door rabbet (soffit) of hinge jamb.

Threshold – ADA Compliant, Fluted, Saddle-Type, ½” High Max, attached
with TEK screws through reverse side of each jamb – two (2) screws per side
– four (4) total per opening.

D.1.10 **Hardware Finishes**

A. **ANSI US26D / BHMA 626 / Brushed Chromium all
standard locksets, surface bolts, flush-bolts

B. **ANSI US32D / BHMA 630 / Brushed Stainless Steel
for optional hinges (see hinges page), and for Kick-
Plates

C. **BHMA 689 / Powder-Coated “Aluminum” all
standard closers and for the standard Panic and the
Lever Trim for Panic (“ALM” abbreviation)
D.1.11_ Warranty

B.

1. Door & Frame Assembly (before hardware) 3 Years
2. Falcon Closers 10 Years
3. Standard EXPI Hinges 3 Years
4. HAGER Exit Devices 3 Years from EXPI-DOOR or 2 years more from factory
5. Falcon Mortise Locks 10 Years
6. Falcon Cylindrical Locks & Deadbolts 3 Years (5 years factory)

E. DOORS, FRAMES and SUBFRAME

E.1.01_Door Leaves, Referred to as “HM” [Hollow Metal):

1. Gauge: 18 standard (20 gauge available)
2. Steel: A40 Galvannealed Quality Carbon Steel
3. Paint: White or Bronze, Baked-On Primer Paint, applied per ANSI A250.10
   A. Salt Spray Test, 120 Hours, ASTM B117
   B. Condensation, 240 Hours, ASTM D4585-1992
   C. Impact Test, Gardner Direct 20 in. lbs. w/ ½” ball
   D. Adhesion, ASTM D3359
4. Core: Polyurethane
   A. U-Value Per ASTM C1363 = 0.498 (old method ASTM C236 = 0.09)
   B. R-Value Per ASTM C1363 = 2.01 (old method ASTM C236 = 11.1)
5. Construction per ANSI A250.8, 1998, hardware reinforcements per ANSI 250.6-1997, and hardware locations per ANSI/DHI A115:
   A. Inverted, welded-in top channel (rail) shall be 14 gauge. Steel top-cap shall be fastened in by EXPI-DOOR.
   B. Inverted, welded-in bottom channel (rail) shall be 14 gauge.
   C. Closer reinforcement “tube” of 14 gauge shall be inserted prior to insertion of core and prior to final joining of face sheets.
   D. Prepared @ Lock Stile for Mortise Lock, Gov. 86, ANSI A115.1
   E. Prepared @ Lock Stile for Cylindrical Lever Lock, Gov. 61L, ANSI 115.2
   F. Prepared @ Lock Stile for Cylindrical Lock, Gov. 161, ANSI 115.2
   G. Reinforced only @ Lock & Hinge Stile for Rim or Mortise Exit Device w/ 14 gauge “tube” prior to insertion of core and prior to final joining of face sheets.
   H. 7 Gauge, prepared @ Hinge Edge for 1 ½ pair standard weight 4.5” high mortised hinges. Shall be provided with adjustable set-screws to allow clearance for Heavy-Weight hinges if preferred or specified.
E.1.02 Door Frames, Referred to as “HM” [Hollow Metal]:

1. Material: shall be of high quality carbon steel, A40 Galvanized, 16 gauge
2. Frame finishes shall consist of baked-on primer paint per ANSI A250.10 in either WHITE or BRONZE tinted paint. Paint shall also consist of zinc-based, rust-inhibitive properties to ensure long-life. This paint finish can be “scuffed” and painted over in the field by others.
3. Reinforcements and Preperations:
   A. Strike prep shall be 4 7/8” high, ASA. Strike prep shall be filled, or covered with a filler plate in the panic (exit) device applications.
   B. Hinge preparations shall be of 7 gauge steel. Frames shall consist of 1 ½ pair, fully-mortised, 4.5” high, set-up for standard-weight hinges, with optional heavy-weight hinge set-up.
4. Attachment of Threshold: EXPI-DOOR will attach the standard Threshold to the frames to create a fully pre-assembled unit. This is accomplished by inserting (2) self-drilling, self-tapping TEK Hex Head screws into the reverse of the frame, and into the fluted channels on the under-side of the threshold. All “special” thresholds do not have this capability, and will be shipped loose from the assembly.
5. Corner connections:
   A. **Standard: Square-End Jambs & Header fro BUTTED connection. Header shall sit atop the jambs; fasteners are driven down through two ttal screw-boss locations in each end of header, into pre-welded-on L-clips in each jamb throat.
   B. **OPTIONAL**: Mitered each end of Header and top of each Jamb. Slot-and-Tab connection then back-welded by EXPI-DOOR before final assembly. Used for Fire-Rated Doors, or per customer request in order to meet “special” Frame specifications, per job, or preference.

F.1.01 Anchorage:

A. **Sub-Frames: 7”, 8”, 8.5”, 10” or 11.5” Galvanized 16 gauge (14 gauge for heavier doors) “sub-frames” w/ 12 gauge galvanized Girt & Base Clip Anchors. Includes all TEK fasteners and Zinc Plated Concrete Sleeve Anchors. When Jamb Extensions are required to allow the door sub-frames to reach an additional or higher than usual first girt, extensions are provided and made of same material. Each extension channel will reach to a maximum height of 13'-0” AFF. The width or depth of these extension pieces shall be ¼” less than the over-all sub-frame, or girt, depth (over-all width).
   Example: 7” Sub-Frame w/ Extension – Extension depth shall be 6 ¾” and shall be set in to the sub-frame and extend up (field located by others).

B. Full Height Masonry, including (8) Wire Anchors, 1/8” diameter wire, Zinc Plated. For use in pre-existing or new block or poured concrete wall type.
C. Partial Height Masonry, including sub-frame w/ 12 gauge galv. Girt & Base Clip Anchors from top of stem wall (wainscote) to Girt. Bottom shall be equipped with either Wire Anchors, or Existing Masonry Application Anchors (jams drilled & dimpled w/ “Hat-Spacers” welded in).

D. Existing Opening Application, including dimpled jambs (4 per jamb) on top of stops, and preferred anchor to attach to existing wall type. Choose one of the following:

1. Self-Drilling, Self-Tapping, ¼” diameter, zinc plated – prime painted, 4” length, #4 Phillips Driver
2. Expandable Concrete sleeve anchor, zinc plated – prime painted, 3/8” diameter, 5” length, #4 Phillips Driver
3. Wood Screw, ¼” diameter, 4” length, zinc plated – prime painted, #4 Phillips Driver
4. Threaded-Rod, 3/8” diameter, 4” length, zinc plated – prime painted, w/ Star Washer and Lock-Nut, #4 Phillips Driver
5. Fully-Threaded Hanger Bolt x 4-1/2” length, zinc plated – prime painted, #4 Phillips Driver

F.1.02 _Jamb Insulation:_

A. **All jambs shall be filled full with “Batt” or Fiberglass insulation, with approximate “R” value of 24 or better.**

G.1.01 _Swing type (Door Handing):_

1. Customer is to choose from the below chart at time of order confirmation or prior to submitting a Purchase Order to EXPI-DOOR.

3070 & 6070-1 (Single-Active Pair) Swing Designations Chart:
** Doors w/ subframes are loaded on to a 4’x8’ pallet, and fastened down through the 1-3/4” subframe leg.
** Each door is then stacked in the same manner, and fastened to the door below in the same manner.
** A lid is created from 2x4’s and OSB, and set on top of top door.
** End caps are then fastened to each girt & base clip, and in to the ends of the 2x4’s of the lid.

** Doors that do not receive subframes, such as Masonry Anchor Doors, or Stud Wall Anchor Doors, shall be set on 2x4 runners, with 2x4 “sticks” between each door to create appropriate space between lockset and door leaf to prevent damage.
** Sides and ends are then covered completely with OSB panels to prevent shifting and freight damage.
Door Leaf Details - Core & Preps - Series 500

Top Cap
Screw-In Galvanized Steel

Lock Preps:
Cylindrical Lock
Gov. 163, 2 1/8" Bore, 2 3/4" B.S.

Mortise Lock
Gov. 86, Edge Prep, 2 3/4" B.S.

Channels:
Inverted Top
Inverted Bottom

Polyurethane Core
"R" Value: 11.1
"U" Value: 0.09

Hinges
1 1/2 Pair Standard 7 Gauge
Construction 4.5" high
Includes Closure Plate HW
Hinge Conversion
"Pips" (to be ground down or drilled through)
Door Leaf Details - Hardware Locations - Series 500
Standard Door SubFrame Details - Series 500

GIRT ANCHOR (L-CLIP)
12 GAUGE GALVANIZED
5 3/4" wide x 9 1/2" long

SUBFRAME
* Typical EA. JAMB
* 16 GAUGE GALV.
* 14 GAUGE AVAIL. FOR HEAVIER DOORS

BASE ANCHOR (L-CLIP)
12 GAUGE GALVANIZED
5 3/4" Wide x 3" High

Depths Available: 9", 8 1/2", 10", 11 1/2"

Depths Available: 3/4" LESS THAN SUB-FRAME DEPTH
9" = 6 3/4" Extension Piece Depth
8 1/2" = 7 3/4" Extension Piece Depth
8 1/2" = 8 1/4" Extension Piece Depth
8 1/4" = 9 3/4" Extension Piece Depth
10" = 10 1/2" Extension Piece Depth
11 1/2" = 11 1/2" Extension Piece Depth
Optional SubFrame Attachment Details - Series 500

Flush-Mount Subframe Attachment
Typical @ Header and Jambs
DEFAULT SubFrame Attachment Details - Series 500

Off-Set Subframe Attachment
Typical @ Header and Jambs
Latchguard Details - Series 500

Stainless Steel Latchguard
*Included in Standard EXPI-DOOR Package*

Latchguard for Cylindrical (Bored) Locksets

Latchguard for Mortise Locksets

Specialty Carriage Sex Nut/Bolt w/ Allen Driver
The “1” in the above part number indicates that this is a multi-sized closer, adjustable from 1 thru 6.

SC60 Series

When you need a dependable closer for a light to medium-duty application, the Falcon SC60 Series gets the job done. Designed for interior use with an aluminum storefront, the SC60 Series offers ANSI Grade 1 durability backed by a ten-year warranty. Most common hole pattern in the industry for versatile use and easy retrofit.

Standard Features
- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 1
- UL Listed
- 1¾” diameter piston
- Closer mounts hinge side, top jamb or parallel arm when either the Rw/PA or Hw/PA arm is specified.
- Adjustable sizes 1-4 (SC61), 2-5 (SC60), and fixed sizes 4 & 5.
- Single piece cast aluminum body
- Staked valves
- Non-handed for left or right swinging doors
- Separate adjustable general speed, latch speed and backcheck
- Heat-treated steel piston
- Heat-treated pinion
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications

The Falcon SC60 Series is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally, the SC61 is designed to meet the American Disabilities Act (ADA) and ANSI A117.1. The SC60 Series is ANSI/BHMA A156.4, Grade 1 certified.

SC60 Series Parallel (Push Side)

Complete Installed Appearance – Side View
EXPI-Door® Moderate-Duty Closer / SC81 x 689

The "1" in the above part number indicates that this is a multi-sized closer, adjustable from 1 thru 6

SC80 Series
Medium-duty applications like retail storefronts, cafes and clinics that need a closer that makes door operation smooth and secure. The Falcon SC80 Series brings ANSI Grade 1 durability and reliable performance to interior and exterior aluminum storefronts. An adjustable design ensures flexible installation and ADA compliance.

Standard Features
- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 1
- UL Listed
- 1 1/4" diameter piston
- Closer mounts hinge side, top jamb or parallel arm when either the Rw/PA or Hw/PA arm is specified.
- New for 2009 - adjustable sizes 1-6
- Single piece cast aluminum body
- Non-handed for left or right swinging doors
- Separate adjustable general speed, latch speed and backcheck
- Heat-treated steel piston
- Heat-treated pinion
- Cover is high-impact UL Listed fire retardant plastic that meets UL 10C and UBC 7-2 (1997) fire test
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications
The Falcon SC81 is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally, the SC81 is designed to meet the American Disabilities Act (ADA) and ANSI A117.1. The SC81 is ANSI/BHMA A156.4, Grade 1 certified.

SC80 Series Parallel (Push Side)

Completed Installation Appearance
Side-View
EXPI-Door® Heavy-Duty Closer / SC71 x 689

The "1" in the above part number indicates that this is a multi-sized closer, adjustable from 1 thru 6.

SC70 Series

Falcon SC70 Series heavy duty closers are built for busy commercial applications that demand reliable door control and easy maintenance. Designed for use with aluminum storefronts, SC70 Series closers are ANSI Grade 1, ADA compliant and deliver tough performance. Choose the SC70 for interior or exterior doors in retail shops, restaurants and small offices.

SC70 Series Parallel (Push Side)

Side-View

Butt Hinges should not exceed 5" (127mm) in width.
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.
Top Rail less than 6" (152mm) measured from stop requires plate SC70-18PA.
Delayed Action add suffix "DEL" to selected cylinder (ex. SC70 DEL). Delays closing from maximum opening to approx. 70°, with adjustable delay time.

Additional Information

Standard Features
- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 1
- UL Listed
- 1 1/2" diameter piston
- Closer mounts hinge side, top jamb or parallel arm when either the Rv/PA or Hw/PA arm is specified.
- Adjustable sizes 1-6
- Single piece cast aluminum body
- Staked valves
- Non-handled for left or right swinging doors
- Fast and easy installation
- Separate adjustable general speed, latch speed and backcheck
- Heat-treated forged steel piston
- Double heat-treated pinion
- Cover is high-impact UL Listed fire retardant plastic that meets UL 10C and UBC 7-2 (1997) fire test
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications
The Falcon SC71 is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally, the SC71 is rated ANSI/BHMA A156.4, Grade 1 and designed to meet the American Disabilities Act (ADA) and ANSI A117.1
Crash Chain Details - Series 500

Specifications:
Zinc Plated (US2C) Chain Material
Spring Loaded Shock Absorbers @ Each End
Grey Vinyl Cover
Used alone, or in conjunction with any surface-mount closer

Attachment:
Pre-measured and installed w/ #10 x 1" #2 Phillips Pan Head Screws
Mounts to Door Stop (Sofit) surface of door frame and to the door leaf, by connecting through the internal closer reinforceme
Grade 2 - Standard Lock Details - Series 500

Grade 2 Entry Lever
*Included in Standard EXPI-DOOR Package*

FEATURES

SPECIFICATIONS:
* Falcon Grade 2 Entry Lever, Keyed
* Bored/Cylindrical
* 2 3/4” Back-Set
* Brushed Chromium (US26D) Finish
* Stainless Steel Latchbolt w/ 2” Throw, Deadlocking / Anti-Vandal
* Steel Lock Chassis, Zinc Dichromated for Corrosion Resistance
* Fits standard Gov. 1614, or 6.6L Prep w/Thru-Bolting Thru Door
* Free-Wheeling Vandal-Resistant Lever
* Solid Cast Levers
* Independent Lever Return Springs
* Strike 1 1/4” x 4 7/8” ANSI
* Schlage “C” Keyway 6-Pin Cylinder
* Meets ANSI A117.1 Accessibility (ADA) Code
* Meets ANSI A156.2 Series 4000, Grade 2
* UL Listed up to “A” Label (3-Hour) Single Swing Doors
* (2) Year Limited Warranty

Optional Keyway:
Small Format Interchangeable Core (SFIC)
Dane shown

To accept “Best” brand primarily
Grade 1 - Standard Lock Details - Series 500

**FEATURES**
- Proven compression spring design supports levers, eliminating lever sag and provides years of reliable service.
- Heavy wrought brass or bronze roses over steel through-bolted rose inserts.
- Pressure release on outside lever disengages when locked to protect internal mechanisms.
- Thumbturn (interior)

**SPECIFICATIONS:**
- Falcon Grade 1 Entry Lever, Keyed
- Bored/Cylindrical
- 2 3/4" Back-Set
- Brushed Chromium (US26D) Finish
- Stainless Steel Latchbolt w/1/2" Throw, Deadlocking / Anti-Vandal
- Steel Lock Chassis, Zinc Dichromated for Corrosion Resistance
- Fits standard Gov. 161, or 6SL Prep w/Thru-Bolting Thru Door
- Free-Wheeling Vandal-Resistant Lever
- Solid Cast Levers
- Independent Lever Return Springs
- Strike 1 1/4" x 4 7/8" ANSI
- Schlage "C" Keyway 6-Pin Cylinder
- Meets ANSI A117.3 Accessibility (ADA) Code
- Meets ANSI A156.2 Series 4000, Grade 1
- UL Listed up to "A" Label (3-Hour) Single Swing Doors
- (5) Year Limited Warranty

**Optional Keyway:**
Small Format Interchangeable Core (SFIC)
To accept "Best" brand primarily
Default Panic (Exit Device) with Key-In-Lever Trim - Grade 1 Standard-Duty - Series 500

HAGER 4701-ALM x 47KE-ALM

Available from stock for 2'-6" door size up to 3'-0" door size.
Panic Devices for 4'-0" doors are SPECIAL-ORDER

Key-In-Lever Exterior Trim with 6-Pin Conventional Schlage C123 Keyway
*All locks, per order, shall be keyed alike by EXPI-DOOR, prior to shipping.

**OPTIONAL**
Lever on Escutcheon Trim and Keyed Mortise
Cylinder with Schlage *Conventional Core 6-Pin C123
DefaultValue Function: ANSI "F08", Key Locks/Unlocks Trim
_Escutcheon: 2-5/8" x 8"
_Finish: "ALM" (Aluminum)
_Requires Mortise Cylinder (Included)
_Projection: 2-3/4"
*Available from stock; OPTIONAL Mortise Cylinder with SFIC (Small Format Interchangeable Core) 'BEST Access' brand compatible. (1)Control Key per order and (2)Operating Cut Keys per door. Keyed alike by default.

Hardware Finish Abbreviations & Definitions:

<table>
<thead>
<tr>
<th>Term</th>
<th>ANSI/BHMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALM</td>
<td>US28/689</td>
</tr>
</tbody>
</table>

Definition:
Powder-Coated Aluminum
Fist Bar & Lever Trim Both

CERTIFICATIONS:
곤_ANSI A156.3-2001, Grade 1 Standard-Duty Commercial
곤_UL/cUL Listed for up to 3 hours for "A" label single doors
곤_UL10C/UBC 7-2 (1997) Positive Pressure Rated
곤_UL10B Neutral Pressure Rated
곤_Hex dogging feature standard on non-fire labeled doors
곤_Warnock-Hersey listed
곤_ANSI A117.1 for accessible buildings and facilities (Handicap)
곤_UL305 listed for panic hardware
곤_Member BHMA
곤_ANSI A250.13 Severe Windstorm Resistant
곤_Five-year warranty
곤_Two years after EXPI-DOOR's standard 3-year warranty expires

* All locks on one order shall be keyed alike by EXPI-DOOR. <UNLESS> we are instructed otherwise, at time of order processing, to do one of the following:
1. Key all locks different but with (2) Master Keys per order
2. Key different, or alike, in specific groups, at which point a Keying Schedule must be provided to EXPI-DOOR.
Formatted, Interchangeable Core (SFIC) Information - Series 500

Mortise Keyway Housing - Used for Mortise Locks, Mortise Exit Devices, Cylindrical Dogging for Any Exit Device (add option), and Most Auxiliary Hardware
- Provided with (1) Control Key for core removal from Lockset
- and-
- (2) Operating keys to lock/unlock the lever or device
Permanent Cores provided by Manufacturer Only, and Sold Directly to End-User

Figure-8 SFIC Keyway (Cylinder) for use with all Cylindrical Locks and Falcon 19-R Exit Device Trim Levers - Provided with (1) Control Key for core removal from Lockset
- and-
- (2) Operating keys to lock/unlock the lever or device
Permanent Cores provided by Manufacturer Only, and Sold Directly to End-User

Housings and I.C. Keyways by Schlage or Falcon. Must specify when ordering if "Small Format" or "Full Size" cores are needed.
Mortise Lever Lock Details - Series 500

Grade 1 Mortise Entry Lever

Mortised (Concealed)
Lock Body w/ Lever & Integral Deadbolt
Thumb-turn Inside - Key Outside

STEEL STRIKE PLATE
ANSI 4-9/16"
DEACK FINISH

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Function</th>
<th>Description</th>
<th>ANSI No. &amp; Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>M571</td>
<td></td>
<td>Dormitory Lock: Latch bolt by knobs/levers except when outside knob/lever is locked by projecting deadbolt. Key outside retracts dead bolt and unlocks outside knob/lever. Rotating inside knob/lever retracts both bolts.</td>
<td>F13-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>F13-2</td>
</tr>
</tbody>
</table>

- *ANSI As56.13 Series 1000, Grade 1
- *UL Listed for "A" Label (3-Hour) Fire Doors
- *2 3/4" Back-Set / Field Reversible Lock-Body
- *Brushed Chromium (US26D) Finish
- *Steel Latchbolt MolyDag Black with 3/4" Throw, Deadlocking / Anti-Vandal
- *Brass / Anti-Friction Constructed Deadbolt w/ 2" Throw
- *Lever Retracts Deadbolt from Thumb-Turn Side for Life-Safety Compliance
- *Fits standard Gov., 86 & 86E Prep w/Thru-Bolting Thru Door
- *Cases are Cold-Rolled Formed Steel 0.090" Thick - Zinc
- *Solid Forged Brass Handles and Escutcheons
- *Strike: 1 1/4" x 4 7/8" ANSI
- *Standard Keyway: Schlage "C" Keyway 6-Pin Cylinder / SFIC is OPTION only

Optional Keyway:

Mortise Keyway Housing - Used for Mortise Locks, Mortise Exit Devices, Cylindrical Dogging for Any Exit Device (add option), and Most Auxiliary-Hardware Provided with (1) Control Key for core removal from Lockset and
(2) Operating keys to lock/unlock the lever or device

To accept "Best" brand primarily

Control Key
Operating Keys
Standard Hinges
1 1/2 pair per single door
3 pair per double door

*ANSI A156.1-2000
*Stainless Steel Material and US32D Finish
*4.5" x 4.5" (114mm x 114mm)
*0.134" Gauge Standard Weight
*Non-Removable Pin
*5-Knuckle w/ Button Tip & Plug
*(2) Oil-Impregnated Ball-Bearings

HAGER HINGE CO. Model# BB1193
*ANSI A156.1-2000
*Stainless Steel Leaf & SS Pin
*4.5" x 4.5" (114mm x 114mm)
*0.134" Gauge Standard Weight
*Non-Removable Pin
*5-Knuckle w/ Button Tip & Plug
*(2) Oil-Impregnated Ball-Bearings
*ANSI A5112

HAGER HINGE CO. Model# BB1199
*ANSI A156.1-2000
*Stainless Steel Leaf & SS Pin
*4.5" x 4.5" (114mm x 114mm)
*0.180" Gauge HEAVY Weight
*Non-Removable Pin
*5-Knuckle w/ Button Tip & Plug
*(4) Oil-Impregnated Ball-Bearings
*ANSI A5111

*Powder-Coated SILVER Finish
*4.5" x 4.5" (114mm x 114mm)
*0.134" Gauge Standard Weight
*Non-Removable Pin
*5-Knuckle w/ Button Tip & Plug
*Oil-Impregnated Ball-Bearings

**Heavy-Weight Hinges Available Upon Request
EXPI-Door® Standard Hinges for 4/0 x 7/0 Door - Series 500 Only

HAGER HINGE CO. Model# BB1199
*ANSI A156.1-2000
*Sainless Steel Leaf & SS Pin
*4.5" x 4.5" (114mm x 114mm)
*0.180" Gauge HEAVY Weight
*Non-Removable Pin
*5-Knuckle w/ Button Tip & Plug
*(4) Oil-Impregnated Ball-Bearings
*ANSI A5111

Quantity for 4/0 x 7/0 Door System: 3 total (1-1/2 Pair Architecturally Speaking)

Heavy-Weight Hinges for Doors Over 3'-0" Wide x 7'-0" High

Hinge size in MM: 114 x 114
Gauge of Metal: 0.180
Hole Count: 8
Screw Size: Machine Type, 1/2 x 12-24
EXPI-Door® Standard Full-Surface Continuous Hinge

Optional for all doors, but DEFAULT for Series 700 4/0 x 7/0 Door Systems

**Product Specifications**

**Fasteners:**
- Standard #12-24 x 11/16" self-drilling pan head machine screw
- 1/4" - 20 thru bolts for 1-3/4" doors

**Length Options:**
- Length to be ordered should be one inch LDH (Less Door Height)

**Door Reinforcement:**
- None required

**Frame Reinforcement:**
- None required to 200 lbs. Heavier weight use 16-gauge reinforcing channel welded-in behind face

**Fire-Rating:**
- Up to 3 hour metal and 90 minute wood composite (with fire-studs)
- When ordering, must specify if UL stamp is required

**Warranty:**
- All Roton products have a lifetime warranty. Electronic transfer hinges shall carry a one-year warranty.

**Material:**
- Aluminum 6063T6
Installation of Standard Sweep on Existing Door Leaf - Series 500

[THE DOOR LEAF MUST BE REMOVED FROM THE JAMBE IN ORDER TO GAIN ACCESS TO THE BOTTOM OF THE DOOR LEAF FOR INSERTION/ATTACHMENT OF THE NEW U-SWEEP]

Door Bottom Sweep - "U" Profile

1. Solid and flexible Neoprene Black
2. IBC, UBC, UL, ICC, UL10B Approved
3. Smoke, Air, Sound, Vermin, resistant
4. Available in any length up to 4'-0"
5. Fastened as shown, into the door's bottom channel
6. Width: 13/16" (20.637 mm)
7. Profile Height: 1-1/4" (31.59 mm)

DATE: 1/28/14
Default Perimeter Gasketing (Weather Seal) - Self-Adhesive Durable Resilient - Series 500

*NGP™ 5050C*

**Color:** "C" is "Charcoal" (Black)

**Material:** Silicone

**Description:** Semi-Flexible Silicone material, semi-compressible,
Fire, Smoke, Air, Sound and Moisture Resistant per testing shown.

**Availability:** Multiple pre-cut lengths, or pre-measured rolls.

**Application:** Applies to new or existing door frames, easily.

Applies to STOP of Door, Sidelite, Transom Frame & Bar, and Borrowed Lite Frames alike. Applies to Rabbet of Hinge Jamb of Door Frame. *(see detail)*

**CERTIFICATIONS:**
- Meets requirements of ROHS Directive 2002/95/EC
- Fire Rating/Positive Pressure, up to 3 Hours:
  a. IBC, UL207B & CAN 4-5204-80M Classified
  b. NFPA 80 & NFPA 252, Category "J"
- Smoke & Draft Control, up to 3 Hours:
  a. IBC classified
  b. UL1784 & NFPA 105 for use on "S" labeled Positive Pressure
- Steel Doors
- Acoustical Tested to ASTM E90 Standard Test Method for Lab Measurement of Airborne Sound Transmission
EXPI-Door® Standard A.D.A. Compliant Threshold

All Thresholds shall be fastened to the base of each jamb, on the interior door side Rabbet and the exterior door side Rabbet, from the reverse-side of the jamb (Jamb Throat). Fasteners are run through the Jamb Throat area directly into “Flutes” (round Screw-Boss channels) located on the under-side of the Threshold. These Flutes run the entire length of each Threshold, thus allowing the Threshold to be trimmed down to accommodate a more narrow door and frame such as a 2'-6", or 2'-8" sized door.

For anchorage to the concrete floor, Thresholds shall be produced with pre-punched, countersunk holes to accept 1/4" diameter concrete Sleeve Anchors (provided by EXPI-DOG). Three-foot single door system Thresholds shall consist of four (4) countersunk bores, and shall be “staggered” across the length of the Threshold.

Fastening the Threshold to the frame, in the factory, is a bonus advantage for several reasons.

1. EXPI-DOG’s Threshold is pre-notched at each end to fit around the door jamb’s Soffit portion of the frame.
2. EXPI-DOG’s Threshold is pre-attached to each jamb, thus ensuring proper alignment of door with frame.
3. EXPI-DOG’s Threshold, because it is attached at the factory, assures strong reinforcement at the base of the frame, as opposed to older methods of securing the frame at the base, temporarily.

Our pre-attachment process is far superior to the common process in place for some of our competitors, as well as being the standard for many years for “Knock-Down” door systems.

Each Threshold, per door is/was shipped loose, for on-site matching at each end as well as fastening directly to the floor, as opposed to securing the Threshold to the door frame and creating an actual solid, pre-assembled door system.

**Top & End View - 36” Threshold:**
Number of Anchor Holes for 3’ and 4’ Threshold shall be (4); Number of Holes for 6’ shall be (6) total

**Floor Anchors**
1/4” Hole Size x 1-1/2” Embedment / Actual Anchor: 1/4” x 2”
Kick Plate Details - Series 500

8" High x 2" Less Door Width (LDW) x 0.050" Thick Stainless Steel w/ TEK Fasteners for Attachment

*ANSI A156.6
*Stainless Steel Material and US32D Finish
* 0.050" thick, 18 Gauge
Double Door Details - Series 500

- Single Active Door System
  - W/Surface Bolts
  - EXPI Designation: 6670-1
  - W/Flush Bolts
  - EXPI Designation: 6670-1FB

- Double Active Door System
  - EXPI Designation: 6670-2

- Seal Type Pairs w/ Rim Panics & Mullion
  - Closed Cell Foam Self-Stick Seal Applied to Mullion by EXPI DOOR

- Seal Type Pairs w/ Surface or Concealed Vertical Rod Exit Device
  - Aluminum/EPDM Surface Screw Applied By-Passing Seals - Full Height Applied to Interior by EXPI