# Hinges

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# ASSA ABLOY

The global leader in door opening solution:



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# McKinney Condensed Catalog

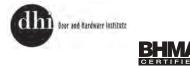


ASSA ABLOY, the global leader in door opening solutions

# McKinney ASSA ABLOY

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McKinney Products Company designs and manufactures high quality architectural hinges for commercial use. With roots in Cincinnati OH, McKinney moved to and manufactured in the heart of the Pennsylvania steel industry for many years.

McKinney became an ASSA ABLOY Group brand in 1996. With the resources of ASSA ABLOY, McKinney greatly expanded its research and development, and manufacturing capabilities. These expanded capabilities have had the greatest impact on improving custom hinge manufacturing.

A variety of materials and hinge types can be custom manufactured in our Berlin, CT plant, including the ElectroLynx<sup>®</sup> hinges and Power over Ethernet (PoE) hinges. For more information on custom manufactured hinges, call McKinney at 1-800-346-7707.

#### Innovation

To support today's need for electronic security applications, McKinney has developed a variety of electric hinges used in remote door monitoring and access control systems, and received a patent on the Power over Ethernet (PoE) hinge. In addition McKinney has teamed up with other ASSA ABLOY Group brands to offer StormPro tornado resistant solutions.

#### **Decorative Hinges**

McKinney offers decorative architectural hinges with special tips and finishes. Designed to suite with hardware from ASSA ABLOY Group brands, these commercial decorative hinges open up a whole new world of design options for your door openings.

#### LEED Certification

McKinney can help to achieve prerequisites and accumulate points in several categories and credit areas of LEED. For further information, please call 1-800-346-7707 or refer to our website www.McKinneyhinge.com.

## Sales & Support

McKinney is represented by the ASSA ABLOY Door Security Solutions team.

Phone:	1-800-DSS-EZ4U (800-377-3948)
Address:	110 Sargent Drive, New Haven, CT 06511
Web site:	www.assaabloydss.com
Email:	Contact your local ASSA ABLOY Door Security Solution Representative via e-mail by going to www.assaabloydss.com and clicking on "Sales Support".

Customer Service Representatives are available during regular business hours at 1-800-346-7707 or email customerservice@McKinneyhinge.com. The website is available 24/7 with the current catalogs, sell sheets and the most up-to-date templates.

McKinney has improved lead times through partnerships with other ASSA ABLOY facilities. A number of popular items are stocked and ready to ship from warehouses in Ventura CA, Pomona CA, Mason City IA, Memphis TN and Berlin CT. In addition, over 400 stock items are included in a 3-day QuickShip Program from the Berlin, CT plant.

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# **Technical References**

Recommended Size of Hinges Per Door, Either Wood or Metal

Door		Hinge	
Thickness In. (mm)	Width In. (mm)	Height In. (mm)	Gauge
1¾" (35)	up to 36" (914)	3 <b>½</b> " (89)	.123
1¾" (35)	over 36" (914)	4" (102)	.130
1¾" (44)	up to 36" (914)	4 <b>½</b> " (114)	.134
1¾" (44)	36" - 48" (914 - 1219)	5" (127)	.146
1¾" (44)	over 48" (1219)	6" (152)	.160
2" 2½" (51-64)	up to 42" (1067)	5" (127)	.190
2" 2½" (51-64)	over 42" (1067)	6" (152) HW	.203

## Expected Frequency of Door Operation

Door	Expected Daily Cycles	Frequency Yearly
Commercial		
Commercial Store Entrance	5,000	1,500,000
Office Building Entrance	4,000	1,200,000
Theatre Entrance	1,000	450,000
School Entrance	1,250	225,000 <u>H</u> .
School Restroom Door	1,250	225,000
Store or Bank Entrance	500	150,000
Office Building Restroom Door	400	118,000
School Corridor Door	80	15,000
Office Building Corridor Door	75	22,000 🏼 🎽
Store Restroom Door	60	22,000 Average
Residential		
Entrance	40	15,000
Restroom Door	25	9,000
Corridor Door	10	3,600
Closet Door	6	2,200

NOTE: McKinney recommends that bearing hinges be used on all above categories other than residential. One Cycle = one complete opening and closing.

Recommended Number of Hinges Per 3'0" Wide Door\*, Either Wood or Metal

Door Height In. (mm)	Number of Hinges per Door
Up to 60" (1524)	2
60" to 90" (1524 to 2286)	3
90" to 120" (2286 to 3048)	4

\* Consult factory for doors wider than 3'0". Doors up to 60" in height shall be provided with two hinges and an additional hinge for each additional 30" of door height or fraction thereof. The distance between hinges shall be permitted to exceed 30". Where spring hinges are used, a minimum of two must be provided.

#### Standards

- Template hinges are made in sizes, gauges, and with screw holes located to conform to ANSI/ BHMA A156.7 and U.S. Government standards CS9-65 and SDI. Templates are available on McKinney's Website at www.McKinneyhinge.com, or upon request
- McKinney finishes meet or exceed ANSI/BHMA A156.1, A156.18 and BHMA 1301 standards for materials and finishes
- McKinney bearing hinges meet or exceed the testing requirements of NFPA-80 Table 6.4.3.1 2010 Builders Hardware
- McKinney spring hinges meet or exceed testing requirements of ANSI/BHMA A156.17 and are UL listed in both the USA and Canada
- McKinney continuous hinges meet or exceed testing requirements of ANSI/BHMA A156.26 and are UL listed in both the USA and Canada
- \* Heavy weight hinges should be used on all heavy weight doors or those exposed to high frequency use. Five knuckle heavy weight hinges have four bearings. The following gauges of metal apply: Use weight 41(# (114), high = 100 exposed)

Heavy weight 41⁄2" (114) high = .180 gauge Heavy weight 5" (127) high = .190 gauge Heavy weight 6" (152) high = .203 gauge

NOTE: Five knuckle 8" (203) high hinges have six bearings.

Door Weights Per Square Foot Based upon 3'0" × 7'0" Door Size

## Door Weights Per Square Foot Based upon 3'0" × 7'0" Door Size

Hollow Metal Door Weights by Gauge

	o , o
	Lbs. Per Square Foot
20 Gauge	4
18 Gauge	5
16 Gauge	6
14 Gauge	7

#### Wood Door Weights by Door Thickness

	Lbs. Per Square Foot			
	1¾" door	1¾" door		
Particle/Mineral Core	4.75	5.25		
Stave Core Wood	3.75	4.25		
Hollow Core Wood	1.3	1.5		

NOTE: Weights do not include hardware. Metal and wood door weights are approximate and will vary slightly among door manufacturers.



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**Full Mortise Hinges** 

## MODERNE Two Knuckle Full Mortise

Offers the most security in a standard hinge. The bearing hinges have a stainless steel pin and anti-friction bushing in the door leaf, which provides additional protection against vertical and lateral wear.

- Plain bearing hinges have an anti-friction component inserted between the two barrels
  The slim barrel Moderne two knuckle hinge is availab
  - The slim barrel Moderne two knuckle hinge is available in steel and non-ferrous base
  - Standard and heavy weight
  - Pins in all bearing hinges are stainless steel
    - Pins in plain bearing hinges are steel; stainless steel pins are available
    - Decorative tips available
    - Standard hinges are packed with all machine by all wood screws
- By design, pins are non-rising, non-removable and tamper protected by a flush, non-removable cap at the end of the barrel. A door can not be removed when in the closed position, thus affording maximum security. Intermediate hinges can be ordered opposite hand and installed upside down, to inhibit removal of the door in an open position
- Available non-removable door (NRD) hinges have a set screw in the barrel of one hinge in the set of 3
- Two knuckle hinges are handed

		Plain B	earing	Standard Weight Bearing			Heavy Weight Bearing		
Туре	Size In. (mm)	Gauge	Steel	Gauge	Stainless Steel	Steel	Gauge	Stainless Steel	Steel
2 Knuckle	4" × 4" (102 × 102) 4½" × 4" (114 × 102) 4½" × 4½" (114 × 114) 5" × 4" (127 × 102) 5" × 4½" (127 × 114) 5" × 5" (127 × 127)	.130 .134 .134 .146 .146 .146	T2731 T2731 T2731 T2731 T2731 T2731 T2731	.130 .134 .134 .146 .146 .146	TA3331 TA3331 TA3331 TA3331 TA3331 TA3331 TA3331	TA2731 TA2731 TA2731 TA2731 TA2731 TA2731 TA2731	- .180 .180 .190 .190 .190	– TA3350 TA3350 TA3350 TA3350 TA3350 TA3350	– TA3750 TA3750 TA3750 TA3750 TA3750

## Three Knuckle Full Mortise

Bearing hinges have concealed vertical and lateral thrust twin anti-friction type bearings at both joints.

- Pins in all non-ferrous bearing hinges are
- stainless steel

all wood screws

- Pins in all ferrous hinges are steel
- Pins in all hinges are non-rising typeStandard hinges are packed with all machine by
- Decorative tips available
- Available in 3K-ET style, furnished with button tips (same pin and plug as five knuckle hinge)

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		Plain B	earing	Standard Weight Bearing			Heavy Weight Bearing		
Туре	Size In. (mm)	Gauge	Steel	Gauge	Brass/ Stainless Steel	Steel	Gauge	Brass/ Stainless Steel	Steel
3 Knuckle	$\begin{array}{l} 3\frac{1}{2}'' \times 3\frac{1}{2}'' & (89 \times 89) \\ 4'' \times 4'' & (102 \times 102) \\ 4\frac{1}{2}'' \times 4'' & (114 \times 102) \\ 4\frac{1}{2}'' \times 4\frac{1}{2}'' & (114 \times 114) \\ 5'' \times 4'' & (127 \times 102) \\ 5'' \times 4\frac{1}{2}'' & (127 \times 114) \\ 5'' \times 5'' & (127 \times 114) \\ 8'' \times 6'' & (203 \times 152) \\ 8'' \times 8'' & (203 \times 203) \end{array}$	.123 .130 .134 .134 .146 .146 .146 .146 _ _	T714 T714 T714 T714 T714 T714 T714 T714	.123+ .130+ .134 .134 .146+ .146+ .146+ _ _	TA314 TA314 TA314 TA314 TA314 TA314 TA314 TA314 -	TA714 TA714 TA714 TA714 TA714 TA714 TA714 TA714 	- .180+ .180 .190+ .190 .190+ .225*+ .225*+	– TA386 TA386 TA386 TA386 TA386 TA386 TA386 TA386	– TA786 TA786 TA786 TA786 TA786 TA786 TA786 TA786
	oor is beveled on hinge fy handing required				TA5314	TA5714		TA5386	TA5786

+Not available in brass

\*Not available in stainless steel

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# **Full Mortise Hinges**

## Five Knuckle Full Mortise



Bearing hinges are furnished with an oil impregnated (TA) bearing on hinges up to 5" high.

Plain Poaring Standard Waight Poaring

- Pins in all non-ferrous bearing hinges are
- stainless steel
- Pins in all ferrous hinges are steel
- Pins in all hinges are non-rising type
- Standard hinges are packed with all machine by all wood screws



_	

Plain Be			n Bearing Standard Weight Bearing			Heavy Weight Bearing			
Туре	Size In. (mm)	Gauge	Steel	Gauge	Brass/ Stainless Steel	Steel	Gauge	Brass/ Stainless Steel	Steel
5 Knuckle	$3\frac{1}{2}$ " × $3\frac{1}{2}$ " (89 × 89) 4" × $4$ " (102 × 102) $4\frac{1}{2}$ " × $4$ " (114 × 102) $4\frac{1}{2}$ " × $4\frac{1}{2}$ " (114 × 114) $5$ " × $4\frac{1}{2}$ " (127 × 114) $5$ " × $4\frac{1}{2}$ " (127 × 127) 6" × $6$ " (152 × 152) 8" × $6$ " (203 × 152) 8" × $8$ " (203 × 203)	.123 .130 .134 .134 .146 .146 .160 - -	T2714 T2714 T2714 T2714 T2714 T2714 T2714 T2714 -	.123+ .130+ .134 .134 .146+ .146+ .160+ -	TA2314 TA2314 TA2314 TA2314 TA2314 TA2314 TA2314 TA2314 TA2314	TA2714 TA2714 TA2714 TA2714 TA2714 TA2714 TA2714 TA2714 TA2714	- .180 .180 .190 .190+ .203+ .203+^ .203+^	– – T4A3386 T4A3386 T4A3386 T4A3386 T4A3386	- T4A3786 T4A3786 T4A3786 T4A3786 T4A3786 T4A3786 T4A3786 T4A3786
	oor is beveled on hinge ify handing required		T4714		TA4314	TA4714		T4A4386	T4A4786

\* Not available in stainless steel

+ Not available in brass

^ 8" x 6" (203 x 152) and 8" x 8" (203 x 203) hinges have six bearings and seven knuckles

## Wide Throw Full Mortise

• For use when necessary for door to open around a large reveal

		Star	ndard Weigl	ht Bearing	5	Heavy	Weight Bearing		
Туре	Size In. (mm)	Gauge	Door Thickness In. (mm)	Steel	Stainless Steel	Gauge	Door Thickness In. (mm)	Steel	Stainless Steel
5 Knuckle	4½" × 6" (114 × 152) 4½" × 7" (114 × 178) 4½" × 8" (114 × 203) 5" × 7" (127 × 178) 5" × 8" (127 × 203)	.134 .134 .134 .146 .146	1 <sup>3</sup> ⁄4" (44) 1 <sup>3</sup> ⁄4" (44) 1 <sup>3</sup> ⁄4" (44) 1 <sup>3</sup> ⁄4" (44) 1 <sup>3</sup> ⁄4" (44)	TA2798 TA2798 TA2798 TA2798 TA2798 TA2798	TA2398 TA2398 TA2398 TA2398 TA2398 TA2398	.180 .180 .180 .180 .190 .190	1¾" (44) 1¾" (44) 1¾" (44) 1¾" (44) 1¾" (44) 1¾" (44)	T4A3786 T4A3786 T4A3786 T4A3786 T4A3786	T4A3386 T4A3386 T4A3386 T4A3386 T4A3386 T4A3386
	oor is beveled on hinge ify handing required		_	TA4798	TA4398		-	T4A4786	T4A4386



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# **Full Mortise Hinges**

## Swing Clear Full Mortise



Hinge allows maximum clearance for passage of beds, tables and other equipment through doorway for barrier free access.

- Packed with all wood and all machine screwsAvailable with CC or QC option for Electric Hinges

	Standard We	tandard Weight Bearing					Heavy Weight Bearing				
Туре	Size In. (mm)	Gauge	Door Thickness In. (mm)	Steel	Stainless Steel	Size In. (mm)	Gauge	Door Thickness In. (mm)	Steel	Stainless Steel	
3 Knuckle	_	-	-	-	-	5" (127)	.190	1¾" (44)	TA795	-	
	oor is beveled on anding required	hinge side,		-	_		-		TA5795	_	
5 Knuckle	41⁄2" (114)	.134	1-3/4 (44)	TA2895	TA2395	4 <b>½</b> " (114) 5" (127)	.180 .190	1¾" (44) 1¾" (44)	T4A3795 T4A3795	T4A3395 T4A3395	
	oor is beveled on anding required	hinge side,		TA4895	TA4395				T4A4795	T4A4395	

• Available with Hospital Tips

# Half Mortise Hinges

## Half Mortise



Door leaf is mortised into the edge of the door, and jamb leaf is surface applied into jamb.

• Furnished with a NRP which allows the hinge to be reversible

• Supplied with all machine screws

			Plain Bearing		Standard Weight Bearing			Heavy Weight Bearing		
Туре	Size In. (mm)	Door Thickness In. (mm)	Gauge	Steel	Gauge	Stainless Steel	Steel	Gauge	Stainless Steel	Steel
3 Knuckle	4½" (114) 5" (127) 6" (152) 6" (152)	1¾" (44) 1¾" (44) 1¾" (44) 2¼" (57)		_ _ _	.134 .146  -	TA374 TA374 	TA774 TA774  -	.180 .190 .203 .203	TA384 TA384 TA384 TA384 TA384	TA784 TA784 TA784 TA784
	oor is beveled on anding required	hinge side,		-	-	TA5374	TA5774	_	TA5384	TA5784
5 Knuckle	4½" (114) 5" (127) 6" (152) 6" (152)	1¾" (44) 1¾" (44) 1¾" (44) 2¼" (57)	.134 - - -	T2774  	.134 .146 - -	TA3374 TA3374 	TA2774 TA2774  -	.180 .190 .203 .203	T4A3384 T4A3384 T4A3384 T4A3384 T4A3384	T4A3784 T4A3784 T4A3784 T4A3784 T4A3784
	oor is beveled on anding required	hinge side,		_	_	TA4374	TA4774	_	T4A4384	T4A4784

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# Half Mortise Hinges

## Swing Clear Half Mortise



- Swing clear hinges allow for maximum clearance for passage of beds, tables and other equipment.
- Door leaf is mortised into the edge of the door
- Jamb leaf is surface applied into jamb
- Hospital tips available

- Furnished with a NRP which allows the hinge to be reversible
- Supplied with wood and machine screws



	Heavy Weig	Heavy Weight Bearing								
Туре	Size In. (mm)	Gauge	Door Thickness In. (mm)	Steel						
3 Knuckle	5" (127)	.190	1¾" (44)	TA789						
When door specify handi	is beveled on hinge side ng required	5,		TA5789						
5 Knuckle	5" (127)	.190	1¾ (44)	T4A3789						
When door i specify handi	is beveled on hinge side ng required	2		T4A4789						

# **Full Suface Hinges**

## Full Surface



Door leaf is applied to the surface of the door with grommet nuts and bolts.

• Narrow leaf is applied to the surface of the jamb with machine screws



		Standard Weight Bearing			Heavy Weight Bearing			
Туре	Size In. (mm)	Gauge	Stainless Steel	Steel	Gauge	Stainless Steel	Steel	
3 Knuckle	4½" (114) 5" (127)	.134 .146	TA371 TA371	TA771 TA771	.180 .190	TA381 TA381	TA781 TA781	
5 Knuckle	4½" (114) 5" (127) 6" (152)	.134 .146 –		TA2771 TA2771 TA2771	.180 .190 .203*	T4A3381 T4A3381 T4A3381	T4A3781 T4A3781 T4A3781	

\* Not available in TCA style

## Swing Clear Full Surface

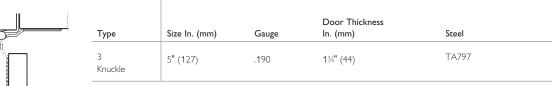
Swing clear hinges allow for maximum clearance for passage of beds, tables and other equipment.



• Door leaf is applied to surface of the door

• Jamb leaf is surface applied into jamb

## Heavy Weight Bearing



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# Half Surface Hinges

## Half Surface

Mortised into the frame, surface mounted to the door. Used for retrofit applications.

• Machine screws supplied for jambs, thru bolts and grommets on the door

• Furnished with NRP which allows the hinge to be reversible

		Plain Bearing		Standard Weight Bearing			Heavy Weight Bearing			
Туре	Size In. (mm)	Door Thickness In. (mm)	Gauge	Steel	Gauge	Stainless Steel	Steel	Gauge	Stainless Steel	Steel
3 Knuckle	4½" (114) 5" (127)	1¾" (44) 1¾" (44)	-	_	.134 .146	TA372 TA372	TA772 TA772	.180 .190	TA382 TA382	TA782 TA782
5 Knuckle	4½" (114) 5" (127) 6" (152) 6" (152)	1¾" (44) 1¾" (44) 1¾" (44) 2¼" (57)	.134 - -	T2772  	.134 .146 	TA3372 TA3372 	TA2772 TA2772  -	.180 .190 .203* .203*	T4A3382 T4A3382 T4A3382 T4A3382 T4A3382	T4A3782 T4A3782 T4A3782 T4A3782 T4A3782

\* Not available in TCA style Backplates available (BP-10 Series)

## Swing Clear Half Surface

Swing clear hinges allow for maximum clearance for passage of beds, tables and other equipment

• Door leaf is mortised into the edge of the door

Jamb leaf is surface applied into jamb

	Heavy Weigh	t Bearing		
Туре	Size In. (mm)	Gauge	Door Thickness In. (mm)	Steel
3 Knuckle	5" (127)	.190	1¾ (44)	TA796
5 Knuckle	5" (127)	.190	1¾" (44)	T4A3796

## **Custom Hinges**

The McKinney facility in Berlin, CT can manufacture a variety of custom hinges including special hole patterns, special sizes, special swages. Consult factory for availability, call 860-828-7221.

## Full Mortise Interim Hinges

Recommended for installations where door and frame are prepped for two different size hinges.

- For new or retrofit installations
- which allows the hinge to be reversible

Heavy Weight Bearing

Steel T4A3786

T4A3386

Gauge

.190

.190

- Available in both standard (TA2714; TA2314) and heavy weight (T4A3786; T4A3386)
- Consult factory for other sizes
- of the leaf • Interim hinges are supplied with a no hole bottom plug and the pin is held in place by an NRP set screw

Gauge

.146

.146

Standard Weight Bearing

Steel

TA2714

TA2314

• An equal amount is trimmed from the top and bottom

	Size In. (mm)
O= <u></u> ]	5" × 4½" (114 × 114)
	5" × 4 <b>½</b> " (127 × 114)

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# **Custom Hinges**

## **Raised Barrel Hinges**



Standard weight raised barrel hinges are recommended for use on average frequency and/or medium weight wood or metal doors where the door is set in a deep revealed frame. Heavy weight raised barrel hinges are recommended for use on high frequency and/or heavy wood or metal doors where the door is set in a deep revealed frame.

Gauge

.180



• Standard weight raised barrel hinges are supplied with a no hole bottom plug and the pin is held in place by an NRP set screw which allows the hinge to be reversible. Specify RB-TA4714/RB-TA4314 for doors beveled on hinge side

Gauge

.134

Standard Weight Bearing

RB-TA2714

Steel

Stainless

RB-TA2314

Steel

• Heavy weight raised barrel hinges are supplied with a no hole bottom plug and the pin is held in place by an

Size In. (mm)

41/2" × 41/2" (114 × 114)

NRP set screw which allows the hinge to be reversible. Specify RB-T4A4786/RB-T4A4386 for doors beveled on hinge side • Door leaf mortised into door

- Frame leaf may be mortised or surface applied
- Reversible Hinge

Heavy Weight Bearing

Steel

RB-T4A3786

• Available in QC or CC Electric Hinge Options

Stainless

RB-T4A3386

Steel

Square Edge Application



Beveled Edge Application

## Slip-In Hinge: Type 1 and Type 2



Type 1

Type 2



Recommended for use on average frequency and/or medium weight aluminum doors with aluminum frames in schools, hospitals and other public buildings where medium traffic is experienced.

#### Type I

- One leaf has standard punching and countersinking and the other leaf is drilled and tapped so it can be inserted through a slot in the door or frame
- Both leaves are specially swaged to provide <sup>3</sup>/16" clearance between leaves when parallel
- Hinges are handed Indicate hand when ordering
- Packed with wood and machine screws

#### Type 2

- Both leaves are drilled and tapped so they can be inserted through a slot in the door and frame
- Both leaves are specially swaged to provide <sup>5</sup>/16" clearance between the leaves when parallel
- Hinges are non-handed
- Packed with all machine screws

Type 1



Type 2 Application

s	
Type Size In. (mm) Gauge Steel S	stainless Steel
	FA2314 FA2314
	FA2314 FA2314



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MACPRO<sup>®</sup> by McKinney

The MacPro line by McKinney offers contract grade hinges to get the job done right. High quality and lower prices equal an extraordinary value, ideal when you need large quantities of standard hinges. Five knuckle series and spring hinge series available.

## MacPro Five Knuckle Series



- Plain bearing hinges are for standard weight doors only
- For doors with a closing device, MPB79 bearing hinge must be used
- For heavy weight doors with a closing device, select a MPB68, heavy weight bearing hinge
- MacPro by McKinney templated hinges are made to conform to ANSI/BHMA 156.1, 156.7



	Plain Be	Plain Bearing		Standard Weight Bearing			Heavy Weight Bearing		
Size In. (mm)	Gauge	Steel	Gauge	Stainless Steel	Steel	Gauge	Stainless Steel	Steel	
4 <sup>1</sup> ⁄ <sub>2</sub> " × 4" (114 × 102) 4 <sup>1</sup> ⁄ <sub>2</sub> " × 4 <sup>1</sup> ⁄ <sub>2</sub> " (114 × 114)	.134	MP79	.134 .134	MPB91	MPB79 MPB79	.180	MPB99	MPB68	



MacPro	Spring	Hinde	Series
TIACTIO	Spring	ninge	Series



- Coil spring provides dependable closing power
- Two concealed tee bearings for vertical and lateral loads

•	
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	Heavy Weight Bearing		
Size In. (mm)	Gauge	Steel	
4 <sup>1</sup> ⁄2" × 4 <sup>1</sup> ⁄2" (102 × 102)	.134	MPS60	
4 <sup>1</sup> ⁄2" × 4 <sup>1</sup> ⁄2" (102 × 102)	.134	MPB679 Set+	

+ Set includes two MPS60 spring hinges and one MPB79 butt hinge

# McKinney StormPro® Tornado Resistant Hinges



Application

Built to withstand the extreme wind speeds and flying debris associated with severe weather conditions, McKinney StormPro<sup>®</sup> hinges are part of the integrated unit when used with CECO StormPro<sup>®</sup> 361, Curries StormPro<sup>®</sup> 361 and Baron F-5 doors and frames, along with other StormPro<sup>®</sup> hardware by ASSA ABLOY Group brands.

- Use for the common flush door/frame/wall application
  - Fire rated thru 3 hours Packed with stainless steel machine screws
  - Available with QC Electric Hinge option

	Heavy Weight Bearing				
Size In. (mm)	Gauge	Stainless Steel	Steel		
4 <sup>1</sup> ⁄2" × 4 <sup>1</sup> ⁄2" (127 × 102)	.180	SP3386	SP3786		
5" × 4 <sup>1</sup> ⁄2" (127 × 102)	.180	SP3386	SP3786		



StormPro® Tornado resistant hinges should be specified and ordered as a complete integrated unit including the frame and door along with other StormPro<sup>®</sup> hardware

McKinney Condensed Catalog

800-346-7707 www.mckinneyhinge.com

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## **Decorative Hinges**

McKinney offers decorative architectural hinges designed to suite with hardware from the ASSA ABLOY Group brands. Open up a whole new world of design options for your door openings.

## Two Knuckle Hinge / Three Knuckle Hinge



- Standard weight
- 4 × 4, 4.5 × 4, 4.5 × 4.5, 5 × 5 sizes available
- Electrified options available
- ElectroLynx<sup>®</sup> quick connect
- Concealed circuit
- Two knuckle are handed
- Three knuckle are non-handed

## Tips

FT -



- Steeple Tip and Ball Tip are available on 3 knuckle and 5 knuckle hinges • Flat Tip and Round Tip are available
- on 2 knuckle and 3 knuckle hinges

## Split Finishing



- Split finishing, where the hinge and tips are different finishes, can create a dramatic look by mixing dark with light or satin with polished
- Available on 2, 3, and 5 knuckle hinges





Flat Tip



Round Tip

## the good design studio

The Good Design Studio - your resource for beautiful doors, frames and hardware from ASSA ABLOY Group brands. Visit www.thegooddesignstudio.com to learn more.



CORBIN RUSSWIN 25M and SARGENT REM lever

McKINNEY 2 knuckle hinge with square end tips



ROCKWOOD door pull, door stop and coat hook

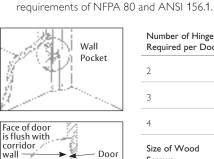
# Specialty Hinges and Accessories

## Pocket Hinges



No

protruding edge



recessed into wall

pocket

Number of Hinges Required per Door	Maximum D Ft. (mm)	oor Size	Maximum Door Size Lbs. (kg)
2	3'0" × 7'0" (	914 × 2134)	150 (68)
3	3'0" × 7'0" (	914 × 2134)	250 (113)
4	4'0" × 7'0" (	1219 × 2134)	350 (159)
Size of Wood Screws	Gauge	Each per Box	Size of Machine Screws
1 <b>½"</b> × 12	.187	3	<b>¾</b> × 12-24

Pivot style fully mortised, semi-concealed hinges constructed of investment cast steel, with two thrust bearings for vertical loads, and roller bearings for lateral support. For standard 2" (51) frame.

UL listed (USA and Canada) for use on both hollow metal or steel covered composite fire doors rated up to three hours, and wood core type fire doors rated 20 minutes. Meets material and performance





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## Security Hinges

## Full Mortise Institutional



Full mortise institutional hinges (prefix HTB) are designed especially for maximum security installations including hospitals, high security schools, institutions, and prisons. Institutional hinges are available in either steel or stainless steel. Available with Torx pin head security machine screws (suffix TXS).

- One piece non-removable pin is held intact by the insertion of two sets of dowels held in double shear into an internally constructed shelf
  - Knuckles with tapered hospital tips prevent tampering and removal of pins
- To further enhance its security, this hinge is available with an optional prison safety feature (suffix PSF)
- Single studs projecting from the back of each leaf fit into the hinge reinforcement on jamb and door to prevent shearing of screws
- Consult the factory for additional information regarding our security hinge line which includes additional sizes and electrification of hinge (magnetic monitoring not available with PSF security stud)
- Additional finishes are available in steel
- Ball bearings are supplied as a standard on institutional hinges

Hospital Tip



Size, In. (mm)	Gauge Diameter	Outside Diameter	Stud Projection	Stud	Steel Hinges	Stainless Steel Hinges
41⁄2" × 41⁄2" (114 × 114)	.180	.720 (18)	7/16 (11.1)	<b>½"</b> (12.7)	HTB786	HTB386 (32D)
41⁄2" × 41⁄2" (114 × 114)	.180	.720 (18)	7/16 (11.1)	<b>½</b> " (12.7)	HTB786 PSF	HTB386 PSF (32D)

NOTE: PSF = prison safety feature

#### Full Mortise Anchor



Anchor hinges are used in abusive areas in which the door, jamb, and hinges experience unusual strain. All anchor sets consist of the top anchor and two  $5" \times 4\frac{1}{2}"$  (127 × 114) three knuckle full mortise heavy weight hinges. Anchor sets are handed.

- NRP furnished on set as standard. (Set consists of one anchor and two heavy weight full mortise three knuckle hinges)
- Anchor hinges are handed
- Can be swaged for either square edge or beveled (hinge side) edge



TA792 Anchor Hinge Set

				Square Edge Door		Beveled	Edge Door
Туре	Size, In. (mm)	Gauge	Application	Steel	Stainless Steel	Steel	Stainless Steel
3 Knuckle	5" × 4½" (127 × 114)	.190	Anchor plate for top of door only	TA791	TA391	TA5791	TA5391
			Anchor plate for top of door and frame header	TA792	TA392	TA5792	TA5392
			Anchor plate for frame header only	TA793	TA393	TA5793	TA5393
			Anchor plate for top of door and frame header	TA794*	TA394*	TA5794*	TA5394*
			*Door plate is 4" (102) and are recommended for doors where door holders, door closers, or other hardware present mounting conflicts with the standard hinge anchor plate.				

McKinney ASSA ABLOY

# Rescue Hardware

## Jamb Mount Pivot Set: EP5-J



EP5-J

For use on average frequency double acting interior doors in schools, hospitals, institutions, and other public buildings. Header pivot solid brass material. Top door pivot has an oil impregnated porous metal bearing and rounded corners. Bottom jamb bracket solid brass material with <sup>1</sup>/<sub>4</sub>" (6) vertical adjustment. Bottom door pivot has an anti-friction bearing unit and rounded corners. Pivot point 1<sup>1</sup>/<sub>4</sub>" (32) from jamb. Full mortise only on jambs and door.

Number	Maximum Door Weight, Lbs. (kg)	Maximum Door Size Ft. (mm)
EP5-J Jamb Mounted Pivot	up to 125 (57)	3'6" × 8'0" (1067 × 2438)

## Combination Strike and Stop: CSS-9



Recommended for installations on hospital or nursing home bathroom doors along with McKinney EP5-J. This unit allows center hung or 1/8" inset doors to be opened in both directions without damaging the frame.

CSS-9 Offset Hung

CSS-9 Center Hung

- .095 gauge brass material polished and plated
  Manufactured for use with cylindrical or bored locks
- Packed with  $\frac{1}{2} \times 8-32$  machine screws
- Consult the factory for use with Mortise locks by
- ASSA ABLOY brands. Cannot be used with deadbolts

## Emergency Door Stop: DS-6



For use with McKinney EP5-J pivots in schools, hospitals, institutions, and other public buildings. Used for converting double acting doors, hung on center pivots, to single acting doors.

- Furnished in brass material with rubber bumper insert
- Spring action stop with fingertip release using a pullman-type latch
- Highly polished, then naturally finished or finely plated
- Mortise only on frame

DS-6

# Number Size of Surface Plates In. (mm) Screws DS-6 4½" × 15%" (114 × 41) ½" × 12-24

## Double Lipped Strike: DLS-8



DLS-8

Recommended for installations on hospital or nursing home doors along with the EP5-J and DS-6. This unit allows center hung or 1/8" inset doors to be opened in both directions without damaging the frame.

- Made from .095 gauge brass
- Polished and plated
- Available in center hung or offset
- For frame size 5¾" (146) and 6¾" (171)
- Supplied with six each 1/2" × 8" machine screws
- Other sizes available upon request



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## Spring Hinges

## Full Mortise Single Acting



Grade 1, surpassing

a million cycles

c(<sup>W</sup>L)us

For use on wood or metal doors in apartments, hotels, motels, offices, and other public buildings. Two concealed tee bearings for vertical and lateral loads. Coil spring design provides dependable closing power.

• The 1500 Series has infinite adjustment, and tension can be added or reduced

Locking screw prevents tampering after tension is set
NFPA 80 requires a minimum of two spring hinges on labeled doors 1502 Now available in reverse action, specify 1502R
Consult the factory for the TRS security option

			Steel		Stainless Steel
Size In. (mm)	Gauge	Door Thickness In. (mm)	Single Hinge	Set	Single Hinge
4" × 4" (102 × 102)	.130	1¾" (44)	1502 (Full Mortise)	_	_
4½" × 4" (114 × 102) 4½" × 4½" (114 × 114)	.134 .134	1¾" (44) 1¾" (44)	1502 (Full Mortise) 1502 (Full Mortise)	1522 (Set of 2 1502 spring hinges and 1 springless)	1552 (Full Mortise)
4½" (114)	.134	1¾" (44)	1572 (Half Mortise)	_	_

#### Applications

Hinge	Hinges Per Door		Maximum Door Size and Weight		
		Size	Weight, Lbs.	Door Width, Ft.	Door Height, Ft.
1502	3	4" × 4"	125	3'0"	7'0"
1502, 1552	3	4½"×4"	150	3'0"	7'0"
1502, 1552, 1572*	3	4½" × 4½"	150	3'0"	7'0"
1522	1 Set	4½" × 4"	115	3'0"	7'0"
1522	1 Set	4½" × 4½"	115	3'0"	7'0"

\* Backplates available (BP-12 Series)

## Full Mortise Double Acting

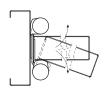


Double acting hinge is designed to be applied directly to the jamb without the use of a hanging strip. Door flange requires a shallow mortise. Springs are made of high grade tempered steel.

- 3" (76), 4" (102), 5" (127) and 6" (152) hinges are for wood doors not weighted with plate glass or heavy hardware
- Hinge capacity decreases as door height increases
- For stock hollow metal doors, use 6" × 4½" (152 × 114)
- 8" (203) 9001 is designed for use on wood or heavy doors of metal construction

3 Hinges Per Door

• 8" (203) 19001 is designed for use on trucking doorways



Hinge	Size, In. (mm)	Maximum Door Thickness, In. (mm)	Door Width, Ft. (mm)	Weight, Lbs. (kg)	Door Width, Ft. (mm)	Weight, Lbs. (kg)	Door Height, Ft.
1001 1001 1001 1001 1001	3" (76) 4" (102) 5" (127) 6" (152) 6" × 4½"	¾" to 1" (19 to 25)         ¾" to 1¼" (22 to 32)         1½" to 1½" (29 to 38)         1¼" to 1¾ "(32 to 44)         1¾" (44) (152 x 114)	2'0" (610) 2'4" (711) 2'8" (813) 2'8" (813) 2'8" (813)	35 (16) 60 (27) 65 (29) 75 (34) 75 (34)	2'8" (813) 3'0" (914) 3'0" (914) 3'0" (914) 3'0" (914)	40 (18) 75 (34) 90 (41) 107 (49) 107 (49)	5'0" (1524) 6'8" (2032) 6'8" (2032) 7'0" (2134) 7'0" (2134)
9001	8" (203)	1½" to 2" (38 to 51)	3'6" (1067)	100 (45)	4'0" (1219)	143 (65)	7'0" (2134)
19001	8" (203)	1¾" (44)	3'6" (1067)	100 (45)	4'0" (1219)	143 (65)	7'0" (2134)

2 Hinges Per Door

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## **Full Mortise Electric Hinges**

## ElectroLynx<sup>®</sup> Hinge (QC option)



McKinney

ASSA ABLO

- Features concealed plug connectors that eliminate the need for separate or exposed wiring. Standard connectors make installation quick and simple. Brass eyelets add protection and durability.
  - The QC option is available on standard and heavy weight full mortise bearing hinges as well as swing clear and wide throw hinges
  - Electric hinges allow a constant flow of energy from the power source through the hinge to electrified door hardware. No external wires can be seen, eliminating tampering and improving the aesthetics of the door opening
  - Materials: brass, stainless steel, and steel

Standard ElectroLynx Retrofit Cable Sizes

- For 4 amp continuous @ 24 volts AC or DC per circuit, 28 gauge multi-strand wires are used. A pigtail is provided for connection to the source wiring
- An 8 position connector is used for QC2, QC4, QC6 and QC8 wire hinges. An 8 position and a 4 position

connector is used for QC12 wire hinges. A QC2A wire hinge is available for power on, power off applications

- Hand of hinge must be specified on two knuckle hinges
- Full Mortise QC hinges are available in most BHMA and McKinney powder coat finishes
- Wires are coordinated to work with other ASSA ABLOY Group brands electro-mechanical hardware
- Electric hinges should be installed in the center position on the door. Installation instructions are packed with each hinge
- Hinges are factory tested and specially packaged to minimize against damage during shipment

#### 12 Conductor and Actual Cable 12 Conductor and Molex Length Molex both ends one end, pinned one end Typical Application 3" QC-C003 QC-C003P 6" OC-C006 OC-C006P Between hinge and the end of an exit device

0	Q 0 0000	Q 0 0000.	Betheel hinge and the one of an extrem
12"	QC-C012	QC-C012P	
26"	QC-C200	QC-C200P	
32"	QC-C206	QC-C206P	
38"	QC-C300	QC-C300P	Between hinge and through the door to the lockset or exit device trim.
44"	QC-C306	QC-C306P	
50"	QC-C400	QC-C400P	
15' 2"	QC-C1500	QC-C1500P	From the hinge location, up the jamb to above the ceiling, or up and around full lite or half lite metal door.

## ElectroLynx<sup>®</sup> Power over Ethernet Hinges



The patented McKinney ElectroLynx<sup>®</sup> Power over Ethernet (PoE) Quick Connect hinge provides for the passing of Ethernet data through the door opening. Installation is a snap with the friendly "plug and play" connectors which allow power to be linked from the incoming source through the door to the electrified hardware. PoE data is bidirectional.

Patent No. 7,824,200



- Brass eyelets add protection and durability to the PoE hinge which features common wire colors coordinated to work with intelligent Power over Ethernet electromechanical hardware from SARGENT and Corbin Russwin
- The PoE hinge should be installed in the second from bottom hinge position on the door. Once installed, it will give no outward indication of its function and will transfer power and data efficiently and reliably, as long as the wire capacity is not exceeded
- All PoE hinges are factory tested and specially packaged to minimize damage during shipment. Installation instructions are packed with each hinge.
- Along with the PoE hinge, mating PoE door and frame side harnesses are required to complete the opening. The required PoE harnesses must be ordered separately
- See full line catalog for PoE harness part numbers. Specify suffix PoE
- \* Refer to individual full line catalog pages regarding the availability of these options.

#### Hardwiring Made Easv



#### ElectroLynx<sup>®</sup>



As part of their promise to provide innovative, fast and effective high security solutions to their customers, certain ASSA ABLOY Group brands offer ElectroLynx<sup>®</sup>, a universal quick-connect system that simplifies the electrification of the door opening.  $\mathsf{ElectroLynx}^{\texttt{B}}$  is a registered trademark of ASSA ABLOY Inc.



# Yale 36. Hinges

# 36. Hinges Stainless steel butt hinges

High quality stainless steel butt hinges.

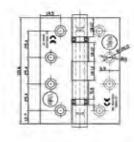
## Specifications:

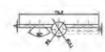
- •Butt hinge with ball bearings
- •Stainless steel AISI 304
- •Square corners
- •Can be used on doors up to 120 kg

#### Features:

- •CE marked
- •Tested to EN 1935:2002 class 13
- •Fire tested to EN1634-1:2014
- •Available in satin and polished stainless steel and PVD finishes









D	T
2BB403030-SSS	Set of butt hinges 4" x 3" x 3 mm (101 x 76 x 3 mm) - Satin stainless steel
2BB403530-SSS	Set of butt hinges 4" x 3.5" x 3 mm (101 x 89 x 3 mm) - Satin stainless steel
2BB404030-SSS	Set of butt hinges 4" x 4" x 3 mm (101 X 101 X 3mm) - Satin stainless steel
2BB454030-SSS	Set of butt hinges 4.5" x 3.5" x 3mm (114 X 101 X 3 mm) - Satin stainless steel
2BB454530-SSS	Set of butt hinges 4.5" x 4.5" x 3mm (114 X 114 X 3 mm) - Satin stainless steel
2BB454035-SSS	Set of butt hinges 4.5" x 4" x 3.5 mm (114 X 101 X 3.5 mm) - Satin stainless steel
2BB454535-SSS	Set of butt hinges 4.5" x 4.5" x 3.5mm (114 X 114 X 3.5 mm) - Satin stainless steel
2BB403030-PSS	Set of butt hinges 4" x 3" x 3 mm (101 x 76 x 3 mm) - Polished stainless steel
2BB403530-PSS	Set of butt hinges 4" x 3.5" x 3 mm (101 x 89 x 3 mm) - Polished stainless steel
2BB404030-PSS	Set of butt hinges 4" x 4" x 3 mm (101 X 101 X 3mm) - Polished stainless steel
2BB454030-PSS	Set of butt hinges 4.5" x 3.5" x 3mm (114 X 101 X 3 mm) - Polished stainless steel
2BB454530-PSS	Set of butt hinges 4.5" x 4.5" x 3mm (114 X 114 X 3 mm) - Polished stainless steel
2BB454035-PSS	Set of butt hinges 4.5" x 4" x 3.5 mm (114 X 101 X 3.5 mm) - Polished stainless steel
2BB454535-PSS	Set of butt hinges 4.5" x 4.5" x 3.5mm (114 X 114 X 3.5 mm) - Polished stainless steel
2BB403030-PVD	Set of butt hinges 4" x 3" x 3 mm (101 x 76 x 3 mm) - PVD
2BB403530-PVD	Set of butt hinges 4" x 3.5" x 3 mm (101 x 89 x 3 mm) - PVD
2BB404030-PVD	Set of butt hinges 4" x 4" x 3 mm (101 X 101 X 3 mm) - PVD
2BB454030-PVD	Set of butt hinges 4.5" x 3.5" x 3mm (114 X 101 X 3 mm) - PVD
2BB454530-PVD	Set of butt hinges 4.5" x 4.5" x 3mm (114 X 114 X 3 mm) - PVD
2BB454035-PVD	Set of butt hinges 4.5" x 4" x 3.5 mm (114 X 101 X 3.5 mm) - PVD
2BB454535-PVD	Set of butt hinges 4.5" x 4.5" x 3.5mm (114 X 114 X 3.5 mm) - PVD

# Pivot and Pivot Sets

Architectural Solutions for Durable and Efficient Hanging of Doors

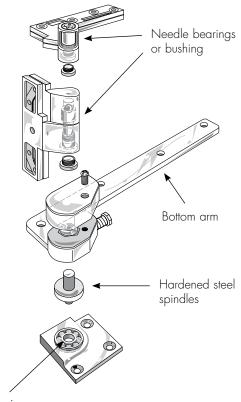


ASSA ABLOY, the global leader in door opening solutions



Pivot sets provide the best possible means of hanging a door. They are designed to work with the laws of physics to provide long-lasting performance and reliability.

- The weight of the door is supported at the bottom by the floor
  - Uses principles of gravity to its advantage
- Door swings with less resistance
- Heavier doors can be accommodated
- Reduced stress on frame
  - Fasteners are in shear, not tension
  - Eliminates door sag
  - Vertically adjustable
- Heavy-duty hardened steel spindles
  - Thrust bearing supports vertical load
  - Needle bearings and bushings for lateral force
  - Extra heavy-duty models also have an additional surface applied thrust bearing to handle heavier or high-traffic doors
- Offset pivots provide better weight distribution and can accommodate taller doors
- Intermediate pivots are used for alignment and to ensure proper installation of bottom pivot or floor closer
- Center hung pivots are used for aesthetics or if the pivot point is going to be moved nearer the lock edge of the door
- PIVOTS DO NOT RETURN DOORS TO CENTER. Pivots in this section are for door hanging means only. For door control see door closer catalog sections.



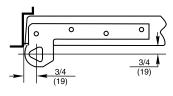
Thrust bearing

147 Pivot set and M19 Intermediate pivot shown (recommended)

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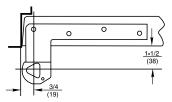
RIXSC

## 1. OFFSET VS. CENTER HUNG APPLICATION



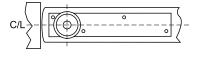
3/4" Offset

Pivot point located 3/4" from the heel edge of the door and 3/4" from face of door



#### 1-1/2"Offset

Pivot point located 3/4" from the heel edge of the door and 1-1/2" from face of door. Extended offsets should be used when there is cladding on the face of door or trim on the frame



## Center Hung

Pivot point centered in thickness of door.

## 2. SIZE OF DOOR (WIDTH, HEIGHT, THICKNESS)

		Estimated door weights p	ounds per square foot (PSF)		
		DOOR THICKNESS			
DOOR MATERIAL	1-3/4"	2-1/4"	3"		
Hollow Metal	6.5	7	—		
Solid Core Wood	7	9	11.5		
Aluminum/Glass Storefront	3.5	4	—		
Bullet Resistent	20	21	—		
MDF	7	9	11.5		
	GLASS THICKNESS				
TEMPERED GLASS	3/8"	1/2"	3/4"		
	5	7	9.75		
	LEAD THICKNESS				
LEAD LINING (add to door weight)	1/16"	1/8"	1/4"		
(add 10 door weight)	5	8	9.75		
	CLADDING MATERIAL				
3/4" CLADDING (add to door weight)	Wood	Stone	Bronze		
	3	10.5	28		

# Example: 3/6 X 8/0 X 1/2" Tempered Glass Door Door: 28sq ft x 7lb./sq ft = 196lbs

## For doors of other sizes, consult factory

Example: 3/0 X 7/0 X 1-3/4" WD X 1/4" Lead lining

Door: 21 sq ft x 7lb./sq ft = 147lbs Lead Lining: 9.75 = 204.75lbs

Total Door weight: 351.75lbs

## 2. SIZE OF DOOR (WIDTH, HEIGHT, THICKNESS)

Application	Daily Cycles	Yearly Cycles	
Large department store entrance	5,000	1,500,000	
Large office building entrance	4,000	1,200,000	
Theater entrance	1,000	365,000	
School entrance	1,250	225,000	High
School restroom door	1,250	225,000	
Store or bank entrance	500	150,000	
Office building restroom door	400	118,000	
School corridor door	80	15,000	
Office building corridor door	75	22,000	Average
Store restroom door	60	18,000	Ū
Residential entrance door	40	15,000	
Residential restroom door	25	9,000	
Residential hallway door	10	3,600	Low
Residential closet door	6	2,200	



## Fire Rated – Prefix F 🔍

Pivots for fire rated doors (**up to 3 hours**) include a steel top pivot and must have additional steel intermediate pivots. For F519 pocket pivot, door assemblies must have been tested with pocket pivots.

## Twenty-minute label – Suffix - 20 🔍

This UL rating is for 20-minute assemblies. Product with this rating has an authorized label.

## Handing

All offset pivots and pivot sets are handed. Suffix RH or LH.

## Extended Spindle - Suffix extra length needed

Any special coverings or severe door undercuts will affect the spindle height. In these applications, an extended spindle may be required. Most standard spindle heights accommodate door undercuts up to 1/2". Extended spindles available in 1/2" increments up to 2" longer than standard. See template.

## 1-1/2" Offset - Suffix 1-1/2

Offset is the distance from the face of the door to the pivot point. Extended offsets should not be used unless there is cladding on the face of the door or there is trim to clear on the frame. 1-1/2" offset arms and pivots are for doors with cladding or trim that project 3/4" from the face of the door. The greater the offset the less weight can be carried by the pivot.

## Less Top Pivot – Suffix LTP

For conditions requiring special top pivots or for arch top doors, the pivot set should be ordered less top pivot – LTP. For offset installations, an additional load bearing intermediate (side jamb) M190 pivot is required. All intermediate pivots for that opening should be M190's, not M19's.

## Special Layouts – Suffix SPLO#

Unique installations or specially engineered products are called special layouts. These numbers must be assigned by the technical support department and they must be called out specifically by their number when ordering.

## Door Thickness - Suffix 1-3/4", 2", 2-1/4", 2-1/2" or 3"

When ordering L series pivot for lead-lined doors, the thickness of the door must be given. The purpose of the L product is to have screws spaced so they straddle the lead in the center of the door. Also used when lead lining is under the skins of the door. Recommended for use on extra heavy or high traffic doors.

## ElectroLynx<sup>®</sup> Connectors – Suffix QC – Number of Wires

The plug-in connectors, with easy color coded wire system, eliminate matching wires. Must be used with ASSA ABLOY doors, frames and hardware. Available 4, 6, 8 or 12 wires for most products.

Hardwiring Made Easy®



## CERTIFICATIONS BHMA

All Rixson® pivots and pivot sets are in compliance with ANSI/BHMA A156.4 Standards. See individual products for sub sections.

## LIMITED WARRANTY

Rixson pivot sets are warranted for 2 years for defect. See Rixson Price Book for specific details of the limited warranty.

## SPECIFICATIONS

All pivots and pivot sets shall be of one manufacturer. All heavy-duty pivots shall have a minimum of 2 bearings internal to the bottom pivot. One shall be a thrust bearing and the other a needle bearing. Separate bearing surfaces shall be in the top pivot. Lead-lined door units and high traffic pivots shall have additional thrust bearing. Fire rated pivot sets shall have steel top pivots. Fire rated doors require steel intermediate pivots.

## MODEL 117-1/4

## Application

- Interior Doors
- Weight to 250 lbs.\*
- Door Width up to 3'6"
- (1067mm)
- Handed



## ANSI /C07172

\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

## MODEL 117

## Application

- Interior Doors
- Weight to 300 lbs.\*
- Door Width up to 3'6" (1067mm)
- Handed



ANSI/C07162/C07202

\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

## Product Description & Features

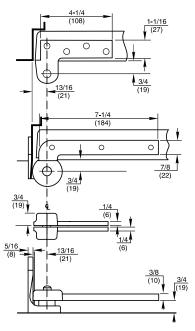
- Standard top pivot 180 included
- 119 intermediate pivot recommended (order separately); see page 18
- Bottom pivot mortised into side jamb
- Not available for fire-rated doors
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
  - Door edges must be beveled 1/8" in 2"
- Weight of door borne by floor
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard

#### **Technical Information**

RIXSON

ASSA ABLOY

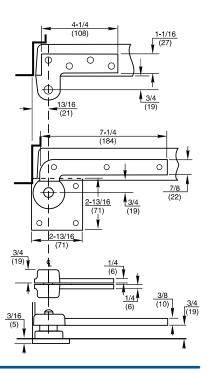
Frame stop required



#### **Product Description & Features**

- Standard top pivot 180 included
- 119 intermediate pivot recommended (order separately); see page 18
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours – specify F117. Intermediate pivot required by UL. Specify FM19, (order separately), see page 18
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Available for 1-1/2" (38mm) offset (door weight 150 lbs) for doors with cladding or frame molding.
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

## **Technical Information**



# PIVOTS AND PIVOT SETS OFFSET HUNG

## MODEL L147

#### Application

- Exterior or Interior Doors
- Lead-Lined/Heavy/High Traffic Doors
- Weight to 800 lbs.
- Door Width up to 4'0" (1219mm) Handed



ANSI/C07162/C07202

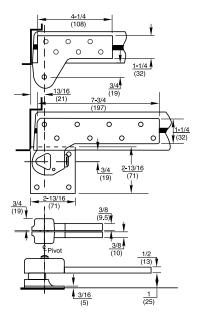
## Product Description & Features

- Standard top pivot L180 included
- ML19 intermediate pivot required (order separately), see page 19
- Bottom pivot mounts directly to floor
- Doors with lead lining under the skin should also use this product.
- Screw holes in top pivot and bottom arm spaced to straddle lead lining in the middle of the door
- Available for fire door assemblies up to three hours for 1-3/4" (44mm) doors only (ferrous material) – specify FL147. Intermediate pivot required by UL. Specify FML19 (order separately), see page 19
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- Available to accommodate lead in door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify when ordering
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

## Technical Information

RIXSON

ASSA ABLOY



1-3/4" door shown

# PIVOTS AND PIVOT SETS OFFSET HUNG

## MODEL L117

## Application

- Exterior or Interior Doors
- Lead-Lined/Heavy/High Traffic Doors
- Weight to 1,750 lbs.\*
- Door Width up to 4'0"
- (1219mm)
- Handed



ANSI/C07111

\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

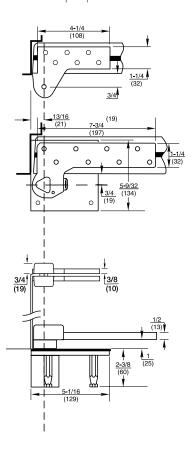
## Product Description & Features

- Standard top pivot L180 included
- ML19 intermediate pivot required (order separately), see page 19
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours (ferrous material). Specify FL117. Intermediate pivot required by UL. Specify FML19 (order separately), see page 19. Note: UL listing for 1-3/4" thick doors only
- Available to accommodate lead in door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify when ordering
- Additional thrust bearing for greater load capacity
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material for top pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

## **Technical Information**

RIXSON

ASSA ABLO



Pivot for 1-3/4" door shown



## MODEL 180

#### Application

- Full Mortise
- Non-handed



#### **Product Description & Features**

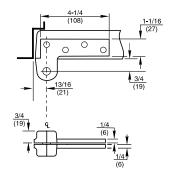
- Standard top pivot for most offset pivot sets and floor closers
- Oil-impregnated sintered bronze bushing
- Non-ferrous base material
- Available for fire door assemblies (ferrous material) – specify F180 or FH180
- For 20-minute label suffix "-20" to the part number
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Available for 1-1/2" (38mm) offset
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- For extra wide or high traffic prefix "H" H pivots have heavy-duty needle bearings; available in 1-1/2" (38mm) offset

#### **Technical Information**

PIVOTS AND PIVOT SETS

OFFSET HUNG TOP PIVOTS

Frame stop required



## MODEL 180 X 102

#### Application

- Full Mortise
- Non-handed

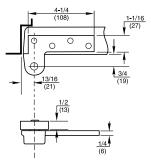


#### **Product Description & Features**

- Special top pivot for doors in deep reveals or unusual door details where one leaf is too long for the normal door or frame portion
- Oil-impregnated sintered bronze bushings
- Non-ferrous base metal
- Available for 1-1/2" (38mm) offset
- May be inverted
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

#### **Technical Information**







# PIVOTS AND PIVOT SETS INTERMEDIATE OR SIDE JAMB PIVOTS

## MODEL 119

## Application

- Full Mortise
- Handed



ANSI/C07382

## MODEL M19

#### Application

- Full Mortise
- Handed



ANSI/C07321/C07371

## MODEL M190

## Application

- Heavy-Duty Full Mortise
- Handed



ANSI/CO7321/CO7371

## Product Description & Features

- Not load-bearing
- Maintains door alignment
- Available 3/4" (19mm) offset only
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- Door edges must be beveled in 1/8" in 2"
  Used with 117, 117-1/4, 195 pivot sets
- and 127 and 427 floor closers
- Furnished with wood and machine screws

## **Product Description & Features**

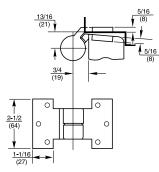
- Not load-bearing
- Maintains door alignment
- Aids in installing floor closers and bottom pivots
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base metal
- 3/4" (19mm) offset
- Available for 1-1/2" (38mm) offset
- Available for fire door assemblies (ferrous material) specify FM19
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

## Product Description & Features

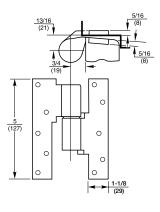
Used when frame condition does not allow standard top pivot

- Lateral load-bearing
- Maintains door alignment
- Aids in installing floor closers and bottom pivots
- Heavy-duty needle bearing
- Non-ferrous base metal
- 3/4" (19mm) offset standard
- Available for 1-1/2" (38mm) offset
- Available for fire door assemblies (ferrous material) – specify FM190
- For 20-minute label suffix "-20" to part number
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

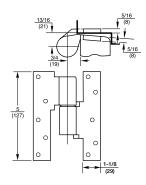
## Technical Information



Technical Information



## **Technical Information**



# PIVOTS AND PIVOT SETS ELECTRIFIED INTERMEDIATE OR SIDE JAMB PIVOTS



## MODEL E-M19

## Application

- Offset Hung
- Electric Pivot for Power Transfer
- Handed

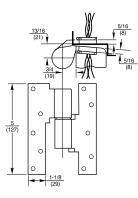


Whenever power transfer pivots are used, the leaves must not be separated

## Product Description & Features

- Not load-bearing
- Door and jamb portion are factory assembled and cannot be separated
- Always use M19 intermediate pivot to install door
- Specify four, six, eight or twelve wires
- ElectroLynx<sup>®</sup> option available, suffix "QC#" (number of wires)
- 24-gauge wire is rated at 2 amps for low voltage, class II wiring applications
- Available for fire door assemblies (ferrous material) – specify E-FM19
- For 20-minute label, suffix "-20" to the part number
- 3/4" (19mm) offset
- Available 1-1/2" offset
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

#### **Technical Information**



Hardwiring Made Easy®



## MODEL E-M19U

## Application

- Offset Hung
- Electric Pivot for Power Transfer
- Handed
- For Electrified Panic Devices with Large Inrush Current

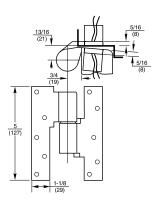


Whenever power transfer pivots are used, the leaves must not be separated

#### **Product Description & Features**

- Not load-bearing
- Always use M19 intermediate pivot to install door
- Door and jamb portion are factory assembled and cannot be separated
- Junction boxes are supplied with pivots
- Two each 18 gauge wires. Each wire is rated at 2 amps continuously. UL listed for 24-volt, Class I wiring
- ElectroLynx<sup>®</sup> option not available
- Not available in ferrous material
- 3/4" (19mm) offset
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

#### **Technical Information**



# PIVOTS AND PIVOT SETS CENTER HUNG TOP PIVOTS

## MODEL 320

#### Application

- Fully Concealed
- Non-handed



## MODEL 340

#### Application

- Fully Concealed
- Non-handed



## MODEL H340

## Application

- Fully Concealed
- Heavy-Duty
- Non-handed



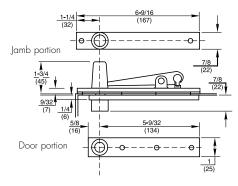
## Product Description & Features

- Standard top pivot for Models 127-3/4, 128-3/4, and 176 pivot sets
- Walking beam-type pivot 1/2" (13mm) diameter pivot pin with 3/4" (19mm) engagement
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

## **Technical Information**

RIXSON

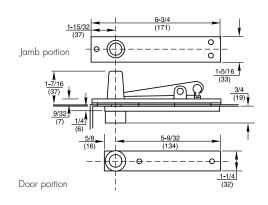
ASSA ABLOY



## Product Description & Features

- Standard top pivot for Models 370 and 117-3/4 pivot sets. Also used for 28, 30, 40 and 50 Series floor closers
- Walking beam-type pivot 1/2" (13mm) diameter pivot pin with 3/4" (19mm) engagement
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

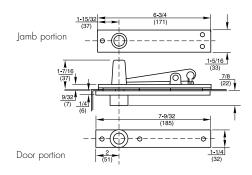
## Technical Information



## Product Description & Features

- Standard top pivot for Model H117-3/4 pivot set. Also used for H28 and H40 Series floor closers
- Can be used with any floor closer or pivot set with pivot point 2-3/4, or greater, from edge of the door
- Walking beam-type pivot 11/16" (17mm) diameter pivot pin with 3/4" (19mm) engagement
- Heavy-duty needle bearing
- Completely concealed when door is closed
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

Technical Information





## MODEL 345

#### Application

- Fully Concealed
- Center Hung
- Non-handed
- Earthquake Tolerant
- Taller Doors



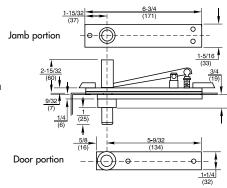
## Product Description & Features

- Optional top pivot
- Ideal for locations where there is a fear of dramatic building settling or for doors over 8'6" in height
- Long pivot pin engages in top of door 1-3/4" (44mm)
- Can be used with any center hung bottom pivot or floor closer. Order pivot set or floor closer LTP (less top pivot) with 345 on separate line item
- Walking beam-type pivot –1/2" (13mm diameter pivot pin
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Furnished with wood and machine screws

## **Technical Information**

PIVOTS AND PIVOT SETS

CENTER HUNG TOP PIVOTS



## MODEL H345

#### Application

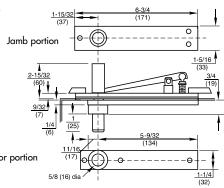
- Fully Concealed
- Center Hung
- Non-handed
- Earthquake Tolerant
- Taller Doors



#### Product Description & Features

- Ideal for locations where there is a fear of dramatic building settling or for doors over 8'6" in height
- Long pivot pin engages in top of door 1-3/4"(44mm)
- Can be used with any center hung bottom pivot or floor closer whose pivot point is 2-3/4, or greater, from the edge of the door. Order pivot set or floor closer LTP (less top pivot) with H345 on separate line item
- Walking beam-type pivot 11/16" Door portion (17mm) diameter pivot pin
- Heavy-duty needle bearing
- Completely concealed when door is closed
- Furnished with wood and machine screws

#### Technical Information





# PIVOTS AND PIVOT SETS ELECTRIFIED CENTER HUNG TOP PIVOTS

## MODEL E-H340

#### Application

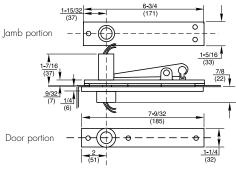
- Center Hung
- Top Pivot for Power Transfer
- Non-handed



#### Product Description & Features

- Walking beam type pivot -11/16" (17mm) diameter pivot pin with 3/4" (19mm) engagement
- Can be used with any center hung bottom pivot or floor closer. Order the pivot set LTP (less top pivot) with E-H340 as a separate line
- Heavy-duty needle bearing
- Specify two, four, six, eight or twelve wires
- Two-wire is available in 18 gauge and is not available ElectroLynx<sup>®</sup>
- Four, six, eight and twelve wires are 24 gauge and available in ElectroLynx<sup>®</sup>. Suffix QC# (number of wires)
- Completely concealed when door is closed
- Available with longer pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- Furnished with wood and machine screws

#### Technical Information







## MODEL E-H345

## Application

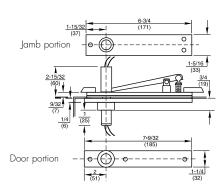
- Fully Concealed
- Center Hung
- Top Pivot for Power Transfer
- Non-handed
- Earthquake Tolerant
- Taller Doors



## Product Description & Features

- Walking beam-type pivot 11/16" (17mm) diameter pivot pin
- Longer pivot pin throw engages in top of door 1-3/4" (44mm). Ideal for locations where there is a fear of dramatic building settling
- Can be used with any center hung bottom pivot or floor closer whose pivot point is 2-3/4", or greater, from the edge of the door. Order the pivot set LTP (less top pivot) with E-H345 as a separate line
- Used with heavy-duty pivots & floor closers
- Heavy-duty needle bearing
- For doors over 8'6" in height
- Specify two, four, six, eight or twelve wires
- Two-wire is available in 18 gauge and is not available with Electrolynx<sup>®</sup>
- Four, six, eight and twelve wires are 24 gauge and available in ElectroLynx<sup>®</sup>. Suffix QC# (number of wires)
- Furnished with wood and machine screws

## Technical Information



Hardwiring Made Easy\*

