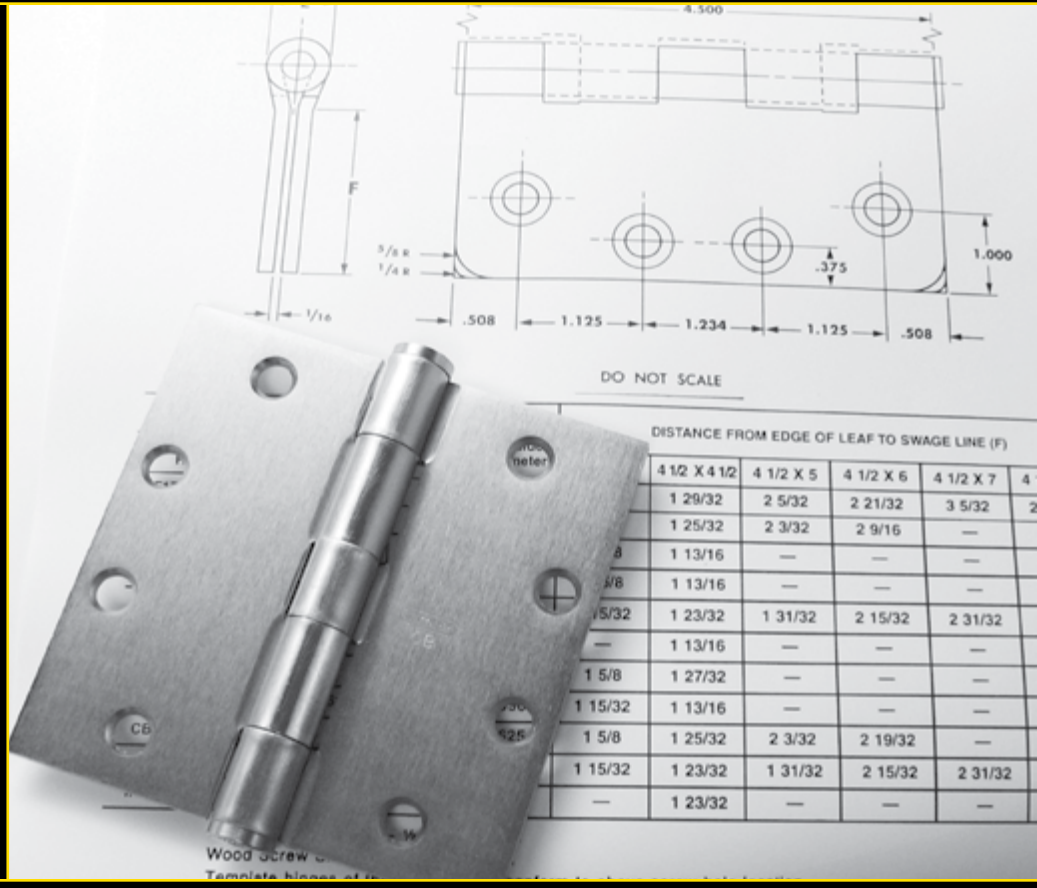


**STANLEY**



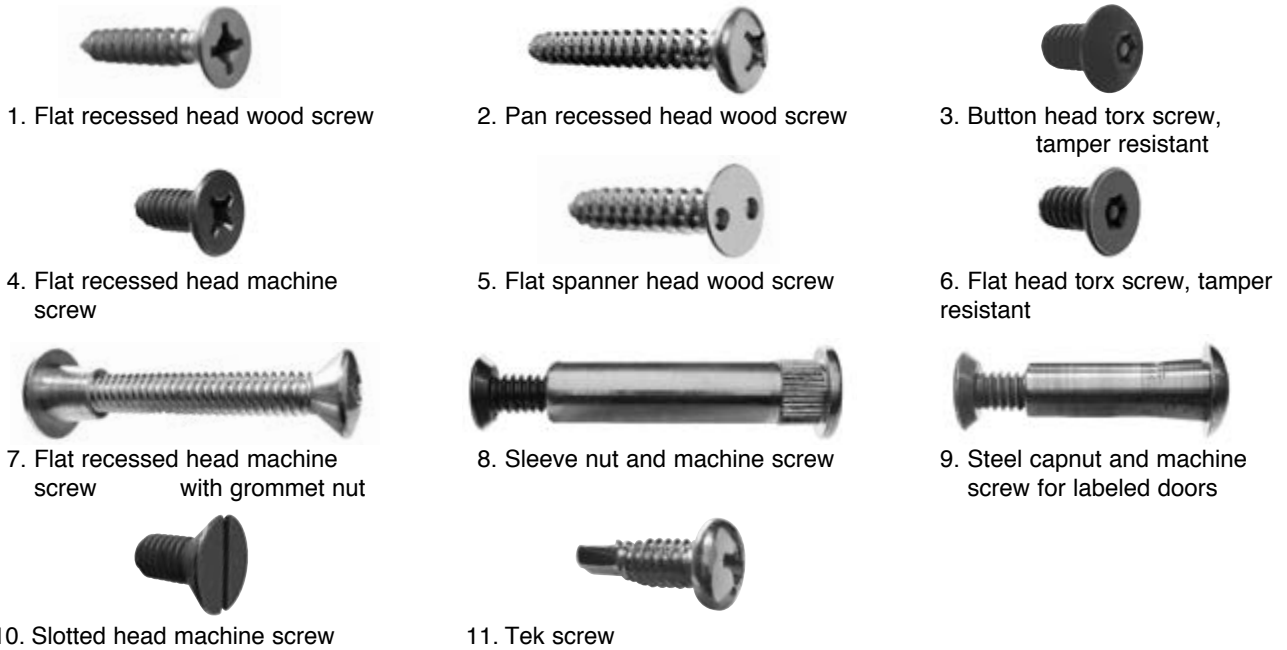
# GENERAL HINGE

Information

**STANLEY**  
Security Solutions

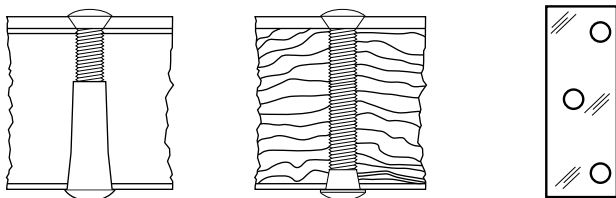
# GENERAL HINGE INFORMATION

## Fasteners



## Half and Full Surface Hinge Fastenings

Application of machine screw and cap nut and machine screw and grommet nut.



Machine screw and cap nut

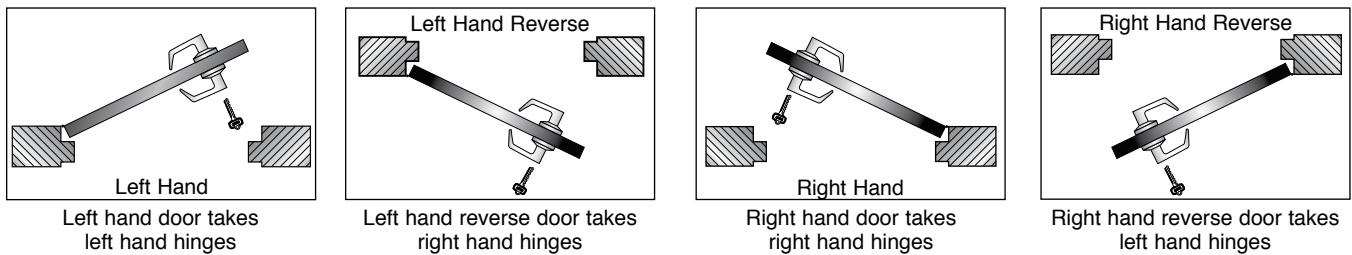
Machine screw and grommet nut

BP-1  
Hinge Back Plate  
[4 1/2" (114mm) size shown]

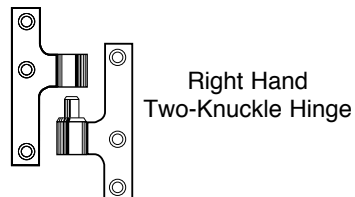
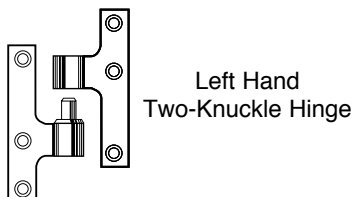
- Through-bolts and grommet nuts regularly furnished with half surface and full surface hinges
- Through-bolts and sleeve nuts available on special order
- Hinge back plates, BP-1, available for hinge sizes 4 1/2" (114mm) and 5" (127mm). Holes accommodate either sleeve nuts or grommet nuts
- Special back plates are also available for swing clear hinges

## How to Determine Hand of Hinge

- The hand of a hinge is determined from the outside of the door to which it is applied
- The outside of a cupboard, bookcase or closet door is the room side. For other doors, the outside is usually the side from which security is necessary



- It will be observed that this method of determining the hand of loose joint cabinet hinges is exactly the opposite from the furniture manufacturers' standard rule
- To determine the hand of a loose joint hinge: open the hinge with its face toward you. If the knuckle of the right leaf is at the bottom, it is a right hand hinge. If the knuckle of the left leaf is at the bottom, it is a left hand hinge



**HINGE TYPE AND DESIGN SELECTION CHART**

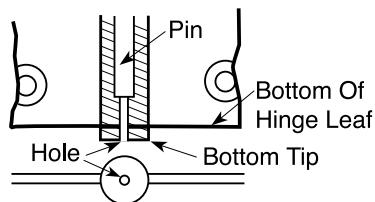
				3 Knuckle Concealed Bearing Shown	3 Knuckle CB			
					Std. Weight Steel	Non-ferrous	Heavy Weight Steel	Non-ferrous
	<b>Full Mortise</b>	<b>Doors</b> Solid Core Wood Hollow Metal Mineral Core Wood Doors w/ minimum 3/4" Edge Style	<b>Frames</b> Wood Hollow Metal		CB1900R	CB1960R	CB1901R	CB1961R
	<b>Half Mortise</b>	<b>Doors</b> Solid Core Wood Hollow Metal	<b>Frames</b> Channel Iron Tubular		CB1920R	CB1980R	CB1921R	CB1981R
	<b>Half Surface</b>	<b>Doors</b> Hollow Core Wood Mineral Core Wood Doors with less than 3/4" Edge Style	<b>Frames</b> Wood Hollow Metal		CB1910R	CB1970R	CB1911R	CB1971R
	<b>Full Surface</b>	<b>Doors</b> Hollow Core Wood Kalamein	<b>Frames</b> Channel Iron Tubular		CB1930R	CB1990R	CB1931R	CB1991R
	<b>Swing Clear Full Mortise</b>	<b>Doors</b> Wood	<b>Frames</b> Hollow Metal		CB1946R for beveled edge doors  CB1947R for square edge doors	STS CB1946R for beveled edge doors  STS CB1947R for square edge doors	CB1948R for square edge doors  CB1949R for beveled edge doors	STS CB1948R for square edge doors  STS CB1949R for beveled edge doors
	<b>Swing Clear Half Mortise</b>	<b>Doors</b> Wood	<b>Frames</b> Channel Iron		—	—	CB1941R for square edge doors  CB1942R for beveled edge doors	STS CB1941R for square edge doors  STS CB1942R for beveled edge doors
	<b>Swing Clear Half Surface</b>	<b>Doors</b> Mineral Core	<b>Frames</b> Hollow Metal		—	—	CB1959R	STS CB1959R
	<b>Swing Clear Full Surface</b>	<b>Doors</b> Mineral Core	<b>Frames</b> Channel Iron		—	—	CB1951R	STS CB1951R
	<b>Pivot Reinforced Full Mortise</b>	<b>Doors</b> Solid Core Wood Hollow Metal	<b>Frames</b> Hollow Metal		—	—	CB1907R frame plate only  CB1908R frame & door plate for square edge doors  CB1909R frame & door plate for beveled edge doors	CB1967R frame plate only  CB1968R frame & door plate for square edge doors  CB1969R frame & door plate for beveled edge doors

## GENERAL HINGE INFORMATION

### Pin Design

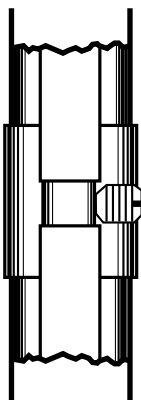


- **Non-rising pin** construction features an easily seated pin that will not rise
- Hole in bottom tip provides for easy pin removal on button and flush tip hinges
- Pin is removed by inserting a punch or a thin rod through bottom hole of tip and tapping upward
- Helps prevent marring of the hinge or hinge finish
- Standard feature on size 3" x 3" (76mm x 76mm) and larger hinges



Perforated Bottom Tip

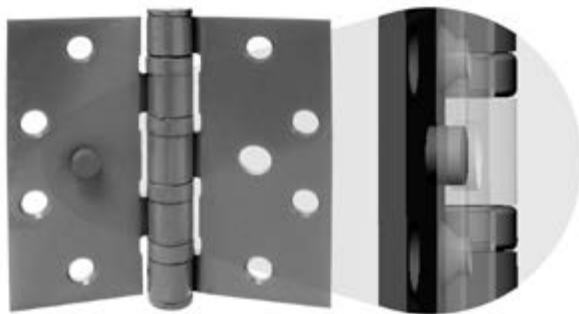
### Non-Removable Pins



- NRP – Set screw in barrel intercepts groove in loose pin as shown. Set screw is not accessible when door is closed. Not available on size 3" (76mm) and smaller. Specify "**NRP**" (non-removable pin) when ordering



### Security Stud



- Full mortise hinges are available with security studs for added safety
- With the door in its closed position, a stud attached to one leaf of the hinge projects into a hole in the matching leaf
- Hinged side of door cannot be moved, even with hinge pins removed, because the stud prevents the leaves from being slid apart
- Specify "**with security stud**" when ordering

### Shear Resistant Stud



- Optional feature for prison hinges
- Withstands 200 foot pound (271.2-J) ram test
- Dimensionally consistent
- Keeps hinge in position even if all the screws break under attack
- Studs engage into door and frame
- Specify "**SRS**" when ordering

# GENERAL HINGE INFORMATION

## Special Situation Products

### Raised Barrel Hinges

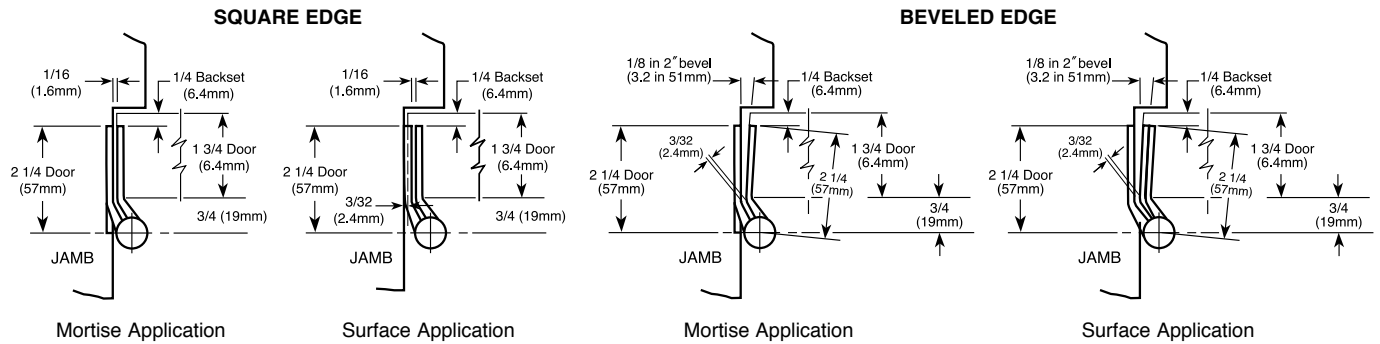
Specify hand of door when ordering  
 Specify whether hinges are for square edge or beveled edge doors on the hinge side  
 Specify equal or unequal leaves when ordering



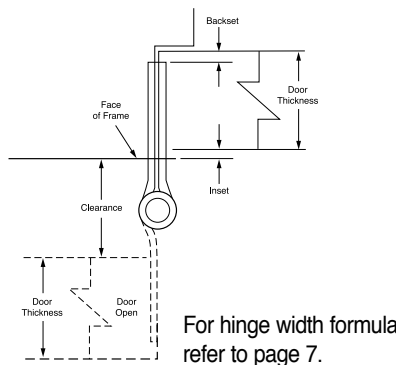
- For application where doors are set deep on a wide frame
- Frame leaf may be either surface mounted or mortised as illustrated in sketches below
- Available special for doors that must open 180 degrees
- Supply detail of door and frame condition
- For other hinge types than listed below, consult factory

Can be furnished on the following class numbers:

RBCB179	RBCB191	RBCB168	RBCB199
RFBB179	RFBB191	RFBB168	RFBB199
RBCB1900R	RBCB1960R	RBCB1901R	RBCB1961R



- A full mortise hinge with wider than normal leaves, positions the door out further, when open, than with conventional hinges
- Normally used when doors are set in a reveal and are required to open 180°
- **Specify whether hinges are for square or beveled edge doors on the hinge side when ordering**

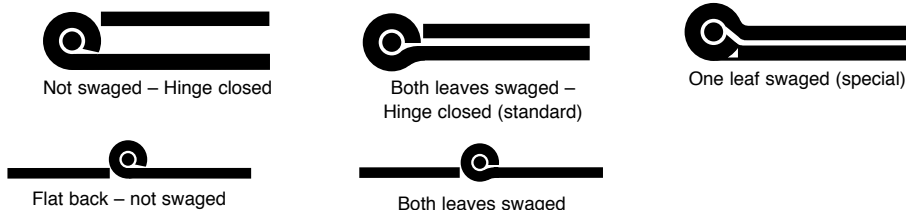


### Wide Throw Hinge



### Hinge Swaging

- Swaging is a slight offset of the hinge leaf at the barrel which permits the leaves to come closer together when parallel
- Hinges are slightly less in width when both leaves are not swaged
- Not swaged leaf is shorter when only one leaf is swaged. EXCEPTION: Specify "leaves must be equal" when ordering template hinges for metal door and metal frame (furnished all machine screws) when both leaves must be the same width
- When leaves are parallel, standard swaging for most architectural hinges provides a 1/16" (1.6mm) clearance.



**GENERAL HINGE INFORMATION**

**Special Situation Products**

- “CE” Concealed electric hinges conduct current regardless of door position to electric locks, exit devices, or hold open devices where tamper-proof hinge is required. Also to transmit signals from code readers on doors to remote computers for access control
- No electrical parts are exposed when hinge is installed
- Permanent fast pin
- Hinges should be installed in the center hinge location
- Not available as swing clear or raised barrel
- Hinges may be equipped with both concealed wires and concealed switches. When both are desired on the same hinge use prefix “CECS”
- Packed one per box with all machine screws and installation instructions
- When ordering specify class number, size, finish and number of wires  
Suffix -54 for 4 wires, 56 for 6 wires -66 for 6 wires (2@24AWG, 4@28AWG), 58 for 8 wires or 10 for 10 wires
- Should be used along with a junction box
- Can be furnished with hospital tips

**CECB179**  
**CECB168**  
**CECB191**  
**CECB199**  
5-Knuckle  
Concealed  
Bearings



**CEFBB179**  
**CEFBB168**  
**CEFBB191**  
**CEFBB199**  
5-Knuckle  
Exposed  
Bearings



**CECB1900R**  
**CECB1901R**  
**CECB1960R**  
**CECB1961R**  
3-Knuckle  
Concealed  
Bearings



Not  
Handed



Not  
Handed



Handed  
Specify  
RH or LH



Electrical Ratings				
Suffix	# Wires	Wire Gage	Volts (AC or DC)	
			6, 12, 24	48
Current				
-54	4	28AWG	1 amp/wire	5 milli-amp/wire
-56	6	28AWG	.7 amp/wire	5 milli-amp/wire
-58	8	28AWG	.5 amp/wire	5 milli-amp/wire
-10	10	28AWG	.4 amp/wire	5 milli-amp/wire
-66*	6	2@24AWG	2 amp/wire	5 milli-amp/wire
		4@28AWG	1 amp/wire	5 milli-amp/wire

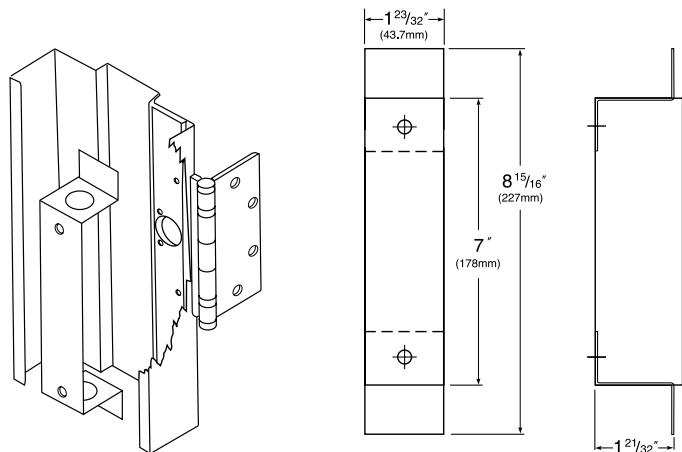
Inrush 15A for .05 second/wire  
“CE” hinges are listed by UL at these ratings  
\* Not available in FBB168 and FBB199

Class Number			Sizes Available	
CB179, FBB179, CB1900R				
CB168, FBB168, CB1901R	4 1/2" x 4"	(114mm x 102mm)		
CB191, FBB191, CB1960R	4 1/2" x 4 1/2"	(114mm x 114mm)		
CB199, FBB199, CB1961R	5" x 4"	(127mm x 102mm)		
	5" x 4 1/2"	(127mm x 114mm)		
	5" x 5"	(127mm x 127mm)		
	6" x 4 1/2"	(152mm x 114mm)		
	6" x 5"*	(152mm x 127mm)		
	6" x 6"*	(152mm x 152mm)		

\* Not available in CB191, FBB191, CB1900R and CB1960R

**JB2R – Junction Box**

- Note: Install in middle hinge location
- Can be shop welded or field installed – before frames are set
- Fits either 4 1/2" (114mm) or 5" (127mm) size hinges



Junction Box  
Top View

Right Side  
View

## GENERAL HINGE INFORMATION Special Situation Products

- “CS” (Concealed Switch) Allows opening monitoring, switch operates when door is either open or closed.  
Used to activate alarms, monitoring devices, or other security equipment when a tamper-proof hinge is required
- Single pole double throw switch
- Packed one per box with screws and installation instructions
- No electrical parts are exposed when hinge is installed
- Hinges should be installed in the center hinge location
- When ordering specify class number, size, finish and hand of door
- Hinges are available as follows:
  - with Non-Removable Pins (NRP)
  - with hospital tips (HT)

**CSCB179**  
**CSCB168**  
**CSCB191**  
**CSCB199**  
5-Knuckle  
Concealed  
Bearings



**CSFBB179**  
**CSFBB168**  
**CSFBB191**  
**CSFBB199**  
5-Knuckle  
Exposed  
Bearings



**CSCB1900R**  
**CSCB1901R**  
**CSCB1960R**  
**CSCB1961R**  
3-Knuckle  
Concealed  
Bearings



Electrical Ratings		
Volts AC or DC	Current Rating	
	Resistive	Inductive
6	.30amp	.30amp
12	.25amp	.25amp
24	.20amp	.15amp
48	.15amp	.12amp

Class Number			Sizes Available	
CB179,	FBB179,	CB1900R	4 1/2" x 4"	(114mm x 102mm)
CB168,	FBB168,	CB1901R	4 1/2" x 4 1/2"	(114mm x 114mm)
CB191,	FBB191,	CB1960R	5" x 4"	(127mm x 102mm)
CB199,	FBB199,	CB1961R	5" x 4 1/2"	(127mm x 114mm)
			5" x 5"	(127mm x 127mm)
			6" x 4 1/2"	(152mm x 114mm)
			6" x 5"*	(152mm x 127mm)
			6" x 6"*	(152mm x 152mm)

\* Not available in CB191, FBB191 and CB1960

Hinges may be equipped with both concealed wires and concealed switch. When both are desired use prefix CECS. Specify hand.



5-Knuckle  
Concealed Bearings



5-Knuckle  
Ball Bearings



3-Knuckle  
Concealed Bearings

**GENERAL HINGE INFORMATION**  
**Special Situation Products**

**Pivot Reinforced Hinges**

Designed to reduce door maintenance

THEY'RE SHOCKPROOF

- The Stanley pivot reinforced hinge is recommended for use on doors that get hard usage, especially those equipped with overhead door holders that bring doors to sudden, jarring stops
- Combines a pivot and a butt hinge in one compact, interlocked unit, in which they share the same pin to assure perfect alignment



See  
 3 Knuckle  
 Hinge Section

See  
 5 Knuckle  
 Hinge Section

**Shock Arrestor**

- Protects against loosened screws and bent hinge leaves.
- 225R – Solid steel



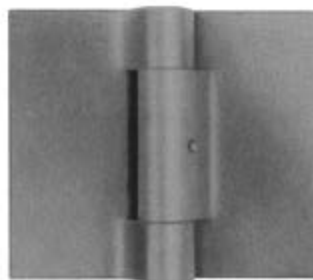
See  
 Miscellaneous  
 Door Hardware  
 Section

**Double Weight Hinges**

Full Surface\*, Ball Bearing  
**BB855 5x6**

Steel – with welded pin, – phosphated and prime coated for painting

- Made of double weight steel capable of carrying doors weighing up to 800 lbs. (362 Kg)



See  
 Detention  
 Hardware  
 Section

**Triple Weight Hinges**

Full Surface\*, Ball Bearing  
**BB852 5x6**

Steel – with welded pin, – phosphated and prime coated for painting

- Made of triple weight steel capable of carrying doors weighing up to 2000 lbs. (906 Kg)



See  
 Detention  
 Hardware  
 Section

**Slip-In Hinges for Aluminum Doors and Frames**

Slip-in hinges – prefix “slip-in”

CB179, FBB179, CB1900R, CB191, FBB191 and CB1960R are available for “Slip-In” applications for aluminum doors and frames



See  
 3 Knuckle  
 Hinge Section

See  
 5 Knuckle  
 Hinge Section



**GENERAL HINGE INFORMATION**  
**Special Situation Products**

**Swing Clear Hinges**

- Wherever doors are required to meet barrier – free codes, or are required to swing completely out of the opening so that wide equipment can pass through without damaging doors and frames or the equipment



Full Mortise



Half Mortise



Full Surface



Half Surface

See  
3 Knuckle  
Hinge Section

See  
5 Knuckle  
Hinge Section

**Decorative Hinges**

Olive Knuckle

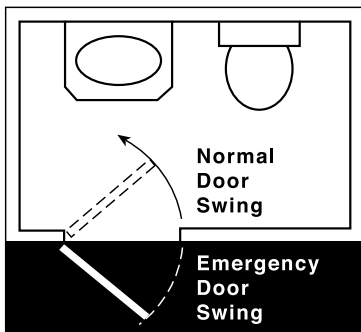


See  
Miscellaneous  
Door Hardware  
Section

BB95 – 6" x 3 7/8" (152 x 98mm)

**Hospital Emergency Rescue Hardware**

- For application to doors from patient rooms to private baths. Permits door to normally swing into the bath, thus saving space, yet swing out into the bedroom in case of emergency when a patient is trapped inside

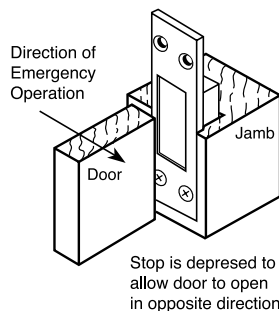
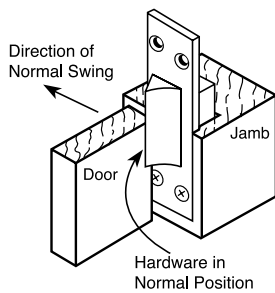


DAP-3  
Double Acting Pivot



ES-1  
Emergency  
Door Stop

See  
Emergency  
Hardware  
Section



DLS - 1  
Double Lipped Strike  
For 1/8" Inset Hung Doors



DLS - 2  
Double Lipped Strike  
For Center Hung Doors

## GENERAL HINGE INFORMATION

### HINGE TIPS

#### Button Tips



- Button tips are standard for all “F” line 5 knuckle hinges
- Button tip pins in standard weight steel hinges are made in one piece steel [except on 6” (152mm) sizes]

#### Hospital Tips



- Hospital type barrel ends are sloped, making cleaning easier, and making it difficult to attach rope, wearing apparel, etc. The pin is held in place by a cross pin for increased security. Prefix “HT” to class number
- For “IHT” Institutional Hospital Tips see detention hardware section

#### Steeple Tips



- Solid brass steeple tips furnished on order at an extra cost by specifying “steeple tips” as a suffix to the class number. Available for “CB” and “F” lines
- See 3 knuckle and 5 knuckle hinge sections

#### Ball Tips



- Solid brass ball tips furnished on order at an extra cost by specifying “ball tips” as a suffix to the class number. Available for “CB” and “F” lines
- See 3 knuckle and 5 knuckle hinge sections

#### Crown Tips



- Solid brass crown tips furnished on order at an extra cost by specifying “crown tips” as a suffix to the class number. Available for “CB” and “F” lines
- See 3 knuckle and 5 knuckle hinge sections