



BEST 
dormakaba Group

Detention Hardware by BEST



Trusted experts. Proven reliability. Simply BEST.

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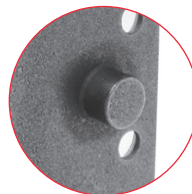
Detention Hardware

Heavy Weight Concealed Bearing Prison Hinges

IHTCB1995R – (ANSI A8111) – 3 knuckle – full mortise – steel – phosphated and painted

IHTCB1995R – (ANSI A5111) – 3 knuckle – full mortise – stainless steel – satin finish (32D)

- Specially designed for detention facilities
- Investment cast 304 stainless steel
- Available with or without shear resistant stud (SRS)
- Limited lifetime warranty
- Concealed bearing for trouble free, long life – no oil, no grease, no maintenance
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Stainless steel, hardened, free turning, completely concealed pin
- Hinges can be furnished as follows:
 - with concealed switch (CS)
 - with shear resistant studs (SRS)



Shear Resistant Stud

Size Open		Gauge of Metal		Number of Flat Head Security Machine Screws Per Hinge		Quantity Per Box	Quantity Per Carton	Case Weight	
Inches	(mm)	Inches	(mm)					Lbs.	(Kg)
4-1/2" x 4-1/2"	(114 x 114)	.188	(4.8)	8 - 1/4-20 x 1/2	8-9 x 1	3 ea.	30 ea.	46	(20.9)

Suggested Specifications

Institutional type hinges should be fabricated from investment cast stainless steel. All dimensions as to size, thickness, and screw holes shall conform to ANSI-A156.7 "Standard for Template Hinge Dimensions". Both lateral and vertical loads will be accommodated by bearings which include anti-friction, self-lubricating materials. Pins shall be non-removable. The top and bottom ends of the hinge barrel shall be contoured to a uniform slope.

Hinges shall be tested to cycle a 300 lbs. (136 Kg) door a minimum of 2,500,000 times, (0°- 90°- 0°), installed in accordance with ANSI-156.1 type test fixtures. Vertical wear shall not exceed .030" (.76mm) and lateral wear shall not exceed .060" (1.5mm).

All hinges shall be subjected to a Door Impact Test in accordance with ASTM F1758-96 Standard Test Method for Detention Hinges Used on Detention-Grade Swinging Doors. They shall be capable of withstanding 200 repetitive blows of 200 foot pounds. (271.2-J) of force delivered on the door within 6" (152m) of each hinge.

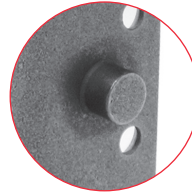
Detention Hardware

Heavy Weight Concealed Bearing Prison Hinges

IHTCB1901R – (ANSI A8111) – 3 knuckle – full mortise – steel – phosphated and painted

IHTCB1961R – (ANSI A5111) – 3 knuckle – full mortise – stainless steel – satin finish [32D]

- Specially designed for detention facilities
- Limited lifetime warranty
- Concealed bearing for trouble free, long life – no oil, no grease, no maintenance
- Sloped ends deter hangings
- Stainless steel, hardened, free turning, completely concealed pin
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Hinges can be furnished as follows:
 - with concealed switch (CS)
 - with current conducting feature (CE)
 - with shear resistant studs (SRS)
 - with 1/4-20 punching



Shear Resistant Stud

Size Open		Gauge of Metal		Number of Flat Head Security Machine Screws Per Hinge		Quantity Per Box	Quantity Per Carton	Case Weight	
Inches	[mm]	Inches	[mm]					Lbs.	[Kg]
4-1/2" x 4-1/2"	[114 x 114]	.180	[4.6]	8 - 12-24 x 1/2	8 - 12 x 1-1/4	3 ea.	36 ea.	54	[24.5]
5" x 4-1/2"	[127 x 114]	.190	[4.8]	8 - 12-24 x 1/2	8 - 12 x 1-1/4	3 ea.	24 ea.	42	[19]

Suggested Specifications

Institutional type hinges should be fabricated from wrought steel or stainless steel. All dimensions as to size, thickness, and screw holes shall conform to ANSI-A156.7 "Standard for Template Hinge Dimensions". Both lateral and vertical loads will be accommodated by bearings which include anti-friction, self-lubricating materials. Pins shall be non-removable. The top and bottom ends of the hinge barrel shall be contoured to a uniform slope.

Hinges shall be tested to cycle a 300 lbs. (136 Kg) door a minimum of 2,500,000 times, [0°- 90°- 0°], installed in accordance with ANSI-156.1 type test fixtures. Vertical wear shall not exceed .030" (.76mm) and lateral wear shall not exceed .060" (1.5mm).

All hinges shall be subjected to a Door Impact Test in accordance with ASTM F1758-96 Standard Test Method for Detention Hinges Used on Detention-Grade Swinging Doors. They shall be capable of withstanding 200 repetitive blows of 200 foot pounds. (271.2-J) of force delivered on the door within 6" (152m) of each hinge.

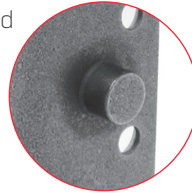
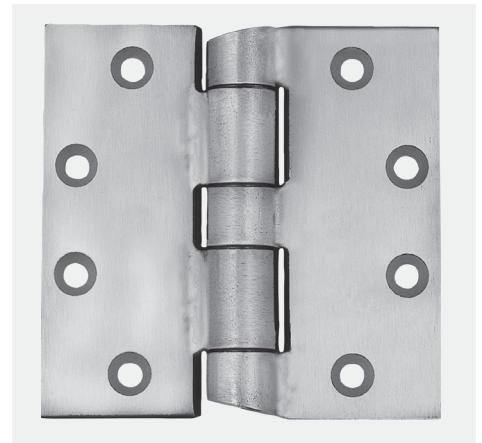
Detention Hardware

Heavy Weight Concealed Bearing Prison Hinges

IHTCB168 – (ANSI A8111) – 5 knuckle – full mortise – steel – phosphated and painted, or polished and plated

IHTCB199 – (ANSI A5111) – 5 knuckle – full mortise – stainless steel – satin finish (32D)

- Specially designed for detention facilities
- Limited lifetime warranty
- Concealed bearing for trouble free, long life – no oil, no grease, no maintenance
- Sloped ends deter hangings
- Stainless steel, hardened, and completely concealed pin
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Steel based painted hinges and stainless steel hinges are fully welded
- Steel based plated hinges are cross pinned, top and bottom
- Hinges can be furnished as follows:
 - with concealed switch (CS)
 - with current conducting feature (CE)
 - with shear resistant studs (SRS)
 - with 1/4-20 punching



Shear Resistant Stud

Size Open		Gauge of Metal		Number of Flat Head Security Machine Screws Per Hinge		Quantity Per Box	Quantity Per Carton	Case Weight	
Inches	[mm]	Inches	[mm]					Lbs.	[Kg]
4-1/2" x 4-1/2"	[114 x 114]	.180	[4.6]	8 - 12-24 x 1/2	8 - 12 x 1-1/4	3 ea.	36 ea.	54	[24.5]
5" x 4-1/2"	[127 x 114]	.190	[4.8]	8 - 12-24 x 1/2	8 - 12 x 1-1/4	3 ea.	24 ea.	42	[19]

Suggested Specifications

Institutional type hinges should be fabricated from wrought steel or stainless steel. All dimensions as to size, thickness, and screw holes shall conform to ANSI-A156.7 "Standard for Template Hinge Dimensions". Both lateral and vertical loads will be accommodated by bearings which include anti-friction, self-lubricating materials. Pins shall be non-removable. The top and bottom ends of the hinge barrel shall be contoured to a uniform slope.

Hinges shall be tested to cycle a 300 lbs. (136 Kg) door a minimum of 2,500,000 times, (0°- 90°- 0°), installed in accordance with ANSI-156.1 type test fixtures. Vertical wear shall not exceed .030" (.76mm) and lateral wear shall not exceed .060" (1.5mm).

All hinges shall be subjected to a Door Impact Test in accordance with ASTM F1758-96 Standard Test Method for Detention Hinges Used on Detention-Grade Swinging Doors. They shall be capable of withstanding 200 repetitive blows of 200 foot pounds. (271.2-J) of force delivered on the door within 6" (152mm) of each hinge.

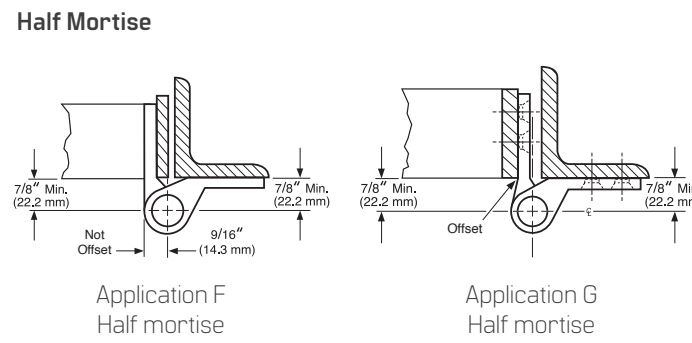
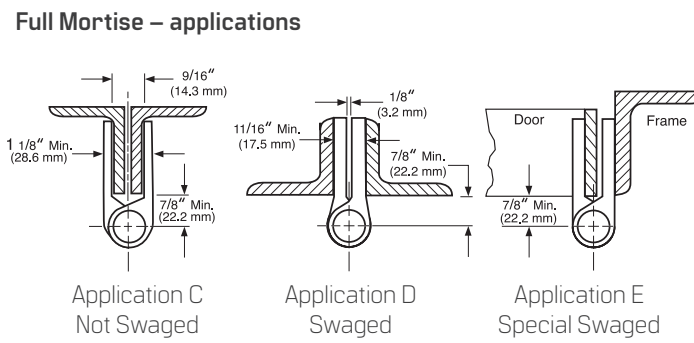
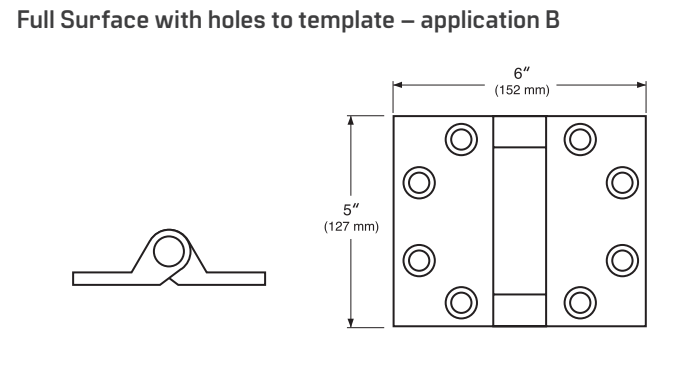
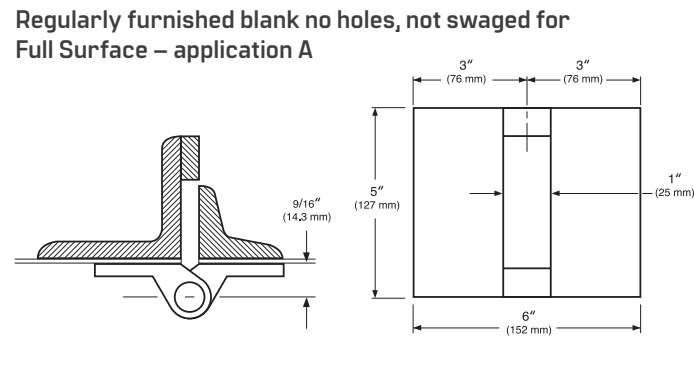
Detention Hardware

Heavy Weight Concealed Bearing Prison Hinges

- BB855** – [ANSI A8381] – steel with welded pin. Phosphated and prime coated for painting
- For lead-lined doors to x-ray rooms and other exceptionally heavy doors
 - Made of double weight steel capable of carrying doors weighing up to 800 lbs. [363 Kg] [Based on a 3' x 7' door with 3 hinges]
 - Each of the 2 concealed hardened steel races contains sixteen 1/8" [3.2 mm] hardened and ground steel balls which are assembled within a jacket
 - Concealed bearings are well lubricated insuring smooth, long lasting operation
 - Rolled knuckles are welded and machined
 - Typically made not swaged, no holes [application A] for full surface applications, or for full mortise [applications C] application. All other configurations are made to order



Typical applications of BB855



For all full mortise applications the center of barrel should be set 7/8" [22.2 mm] from door and frame so welded joints will clear. Leaves can be swaged apart any distance between 1/16" [1.6 mm] to 9/16" [14.3 mm]

Variations of half mortise or half surface types can be obtained by further bumping or swaging of mortise leaf to accommodate any required construction. Specify hand when ordering

Furnished on order with holes and with machine screws, at additional cost. When screw holes are required they are accurately punched to template. If above details do not show your particular construction submit details and specifications.

**Application H available as made to order

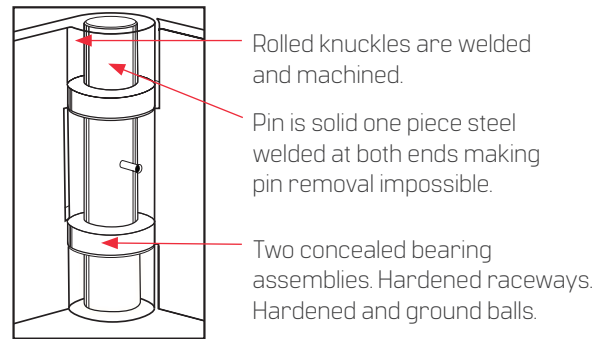
No holes, not swaged for applications "A" or "C"	Catalog Number	USP/EDP Number	Length of Joint		Gauge of Metal		Diameter of Pin		Quantity Per Carton	Case Weight			
			Inches	[mm]	Inches	[mm]	Inches	[mm]		Inches	[mm]	Lbs.	[Kg]
	BB855	02 9468	5	[127]	6	[152]	281	[7.1]	1/2	[12.7]	2 Ea.	7	[3.2]

Detention Hardware

Triple Weight Concealed Ball Bearing Prison Hinges

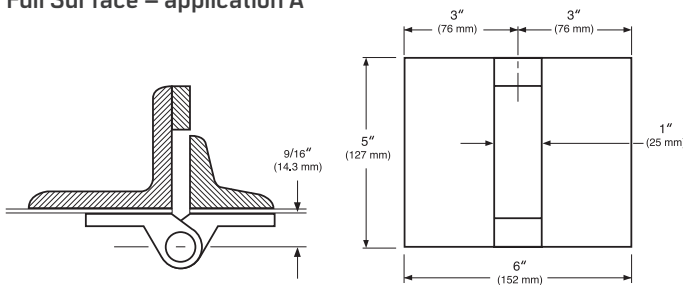
BB852 – (ANSI A839I) – steel with welded pin. Phosphated and prime coated for painting

- For lead-lined doors to x-ray rooms and extremely heavy doors and gates
- For hinged cell-front doors and grated steel doors of penitentiaries, jails, reformatories, etc.
- Made of triple weight steel capable of carrying doors weighing up to 1200 lbs. (544 Kg) [Based on a 3' x 7' door with 3 hinges]
- Each of the 2 concealed hardened steel races contains sixteen 3/16" (4.8 mm) hardened and ground steel balls which are assembled within a jacket
- Provision has been made in the barrel of the hinge for forced lubrication if further lubrication is necessary
- Typically made not swaged, no holes (application A) for full surface applications, or for full mortise (applications C) application. All other configurations are made to order

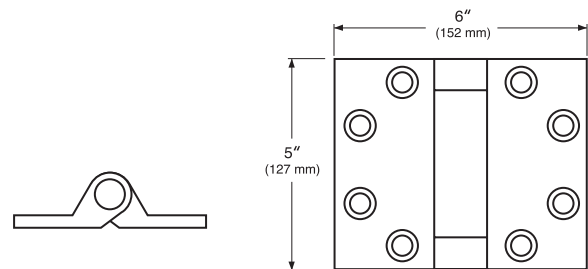


Typical applications of BB852

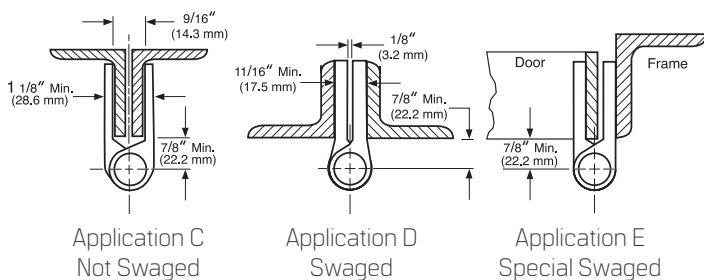
Regularly furnished blank no holes, not swaged for Full Surface – application A



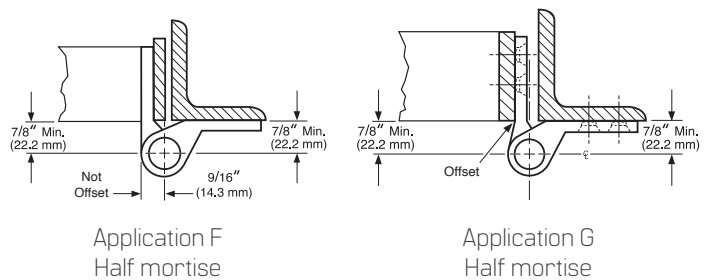
Full Surface with holes to template – application B



Full Mortise – applications



Half Mortise



For all full mortise applications the center of barrel should be set 7/8" (22.2 mm) from door and frame so welded joints will clear. Leaves can be swaged apart any distance between 1/16" (1.6 mm) to 9/16" (14.3 mm)

Variations of half mortise or half surface types can be obtained by further bumping or swaging of mortise leaf to accommodate any required construction. Specify hand when ordering

* Furnished on order with holes and with machine screws, at additional cost. If above details do not show your particular construction submit details and specifications

	Catalog Number	USP/EDP Number	Length of Joint		Gauge of Metal		Diameter of Pin		Quantity Per Carton	Case Weight			
			Inches	(mm)	Inches	(mm)	Inches	(mm)		Lbs.	(Kg)		
No holes, not swaged for applications "A" or "C"	BB852	02 9388	5	[127]	6	[152]	3/75	[9.5]	3/4	[19.1]	2 Ea.	10	[4.5]



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For questions about ordering and to be sure you get the right configuration for your needs, [contact your BEST dormakaba sales representative.](#)
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