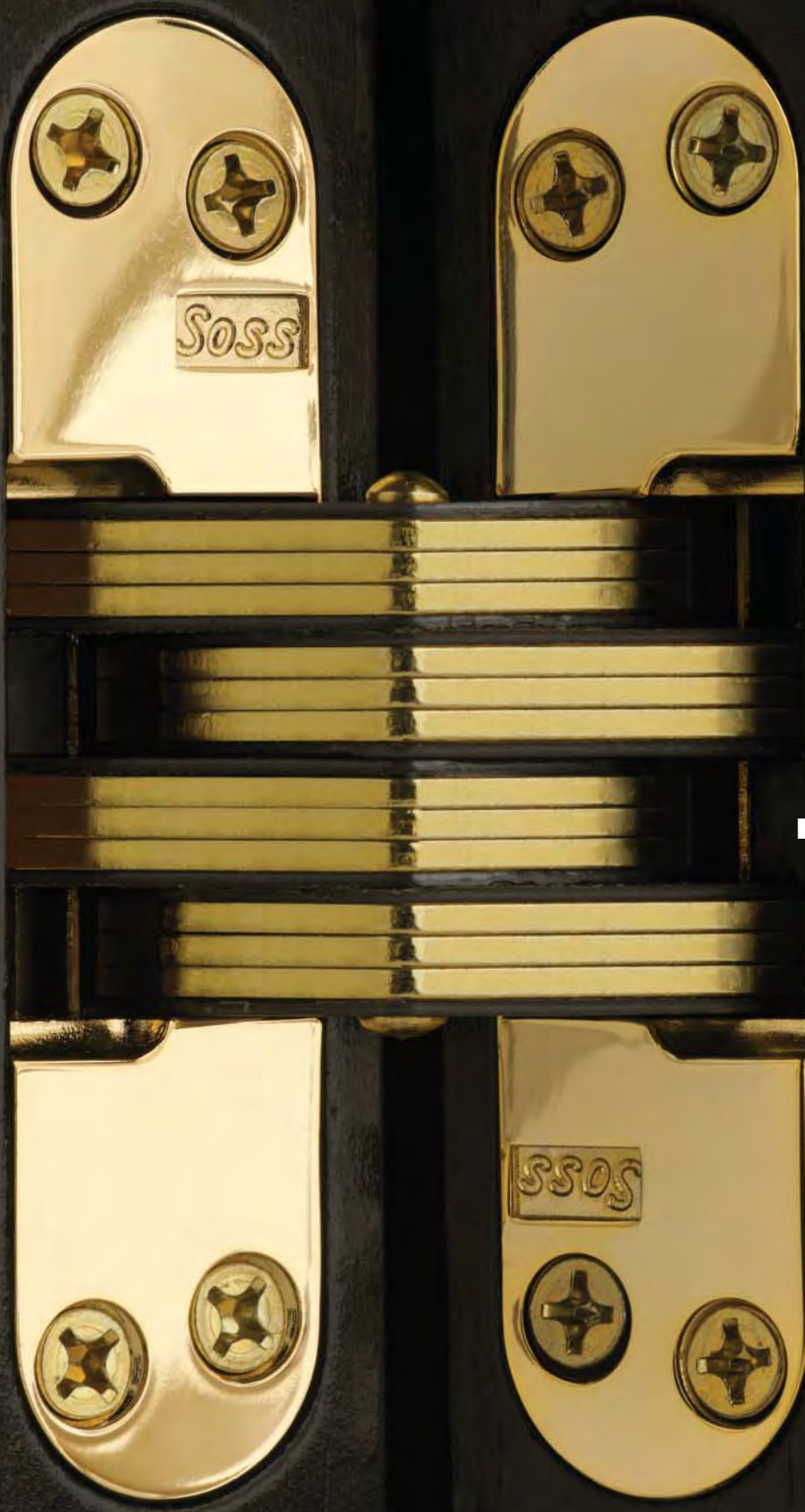


Strong... Beautiful... *Invisible!*



SOSS[®]
Invisible
Hinges and
Magnetic
Door Holders

**Beautiful When Open...
Invisible When Closed**



Wide Range of Sizes

Twenty-nine standard sizes, from light duty to heavy duty. Our larger sizes will handle doors of nearly any size.

Choice of Finishes

29 sizes available from light to heavy duty. Our standard finishes are:

- Satin Brass – US4 (BHMA #678)
- Satin Chrome – US26D (BHMA #682)
- Satin Nickel – US15 (BHMA #619E)
- Bright Chrome – US26 (BHMA #681)
- Bright Brass – US3 (BHMA #677)
- Bright Nickel – US14 (BHMA #618E)
- Unplated – UNP
- Black – E-Coat

(Please refer to price list for available finishes for each hinge size.)

Security

When closed, the SOSS Invisible Hinge cannot be seen or tampered with. When opened, the riveted hinge pin is non-removable.

Safety

The moving pivot point remains inside the hinge during travel until fully opened, eliminating an external pinch point on the back side of the door.

Strength

The installed hinge is firmly anchored in a deep, full mortise, which assists the screws in supporting the door, assuring a stronger, more rigid installation.

Superior Construction

SOSS Invisible Hinges are designed to give dependable operation for years. Standard hinges are made of high strength plated steel and heavy duty zinc alloy castings. A selection of hinges are made of 316 Stainless Steel, see page 9 for available sizes. The #418 and #420 are available in Alloy Steel as well as Stainless Steel, see page 8 for further information.

Smooth Operation

All hinges have been designed to give smooth performance. The engineered, laminated link construction of the #218 and #220 models reduces friction for smooth, free hinge operation. On models #216, #218 and #220, an anti-friction space age material is used.

Fire Rated

SOSS Invisible Hinges are available in fire rated versions, from 20 minutes to three hours by Underwriters Laboratories UL. See page 8.

Engineering/Design Assistance

For special applications, unusual sizes and weights, engineering and design assistance is available free of charge. Consult the SOSS office.

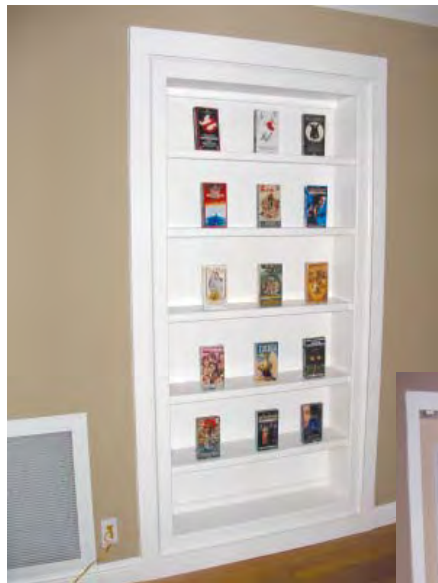
SOSS® In Use



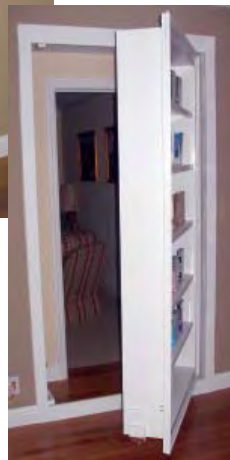
SOSS Invisible Hinges are used in the galley on Cessna Bravo corporate jets.

With the only limitation being the imagination of the designer, SOSS Invisible Hinges are used in Cessna Bravo corporate jets, custom furniture, custom casework, cabinetry and the display industry where a smooth, flush look is of paramount importance. SOSS Invisible Hinges open a full 180° and are a single action hinge. Ideally suited for mirrored or applied doors and panels, pass doors, electronic cabinets, computer and communication room doors for security, pharmaceutical storage areas, courtrooms, churches and wall units.

As versatile as the engineered plastics themselves, SOSS Invisible Hinges have been used by designers, architects and engineers to help solve design problems when working with today's space age materials. Our hinges are found in many applications where flush fit, compact size and smooth operation are necessary features. SOSS Invisible Hinges have applications in computers, cash registers, copy machines, medical equipment and cases, scales and office equipment.



While several hinge models are designed specifically for metal applications, the entire line can be used in metal. There are many applications for SOSS Invisible Hinges in metal, including steel entry doors, metal cabinet doors, machine tools and transportation vehicles. One of the benefits of using SOSS in metal is its ability to offer superior appearance and durability, while saving assembly time.



Hidden bookcase door manufactured by Hidden Door Company, www.hiddendoors.com, 877-218-5434

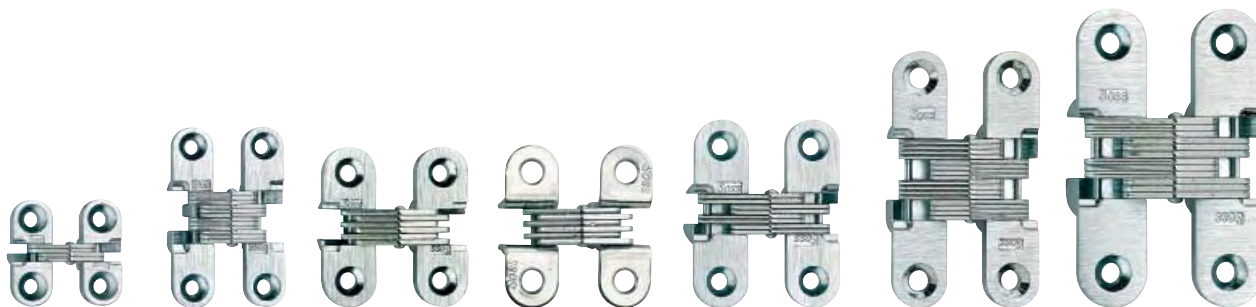


SOSS Invisible Hinges are used in custom cabinetry applications in restaurants, homes and offices and bi-fold applications for creating a clean look.

SOSS® Invisible Hinges

For Wood or Metal

Hinge illustrations are shown half size.

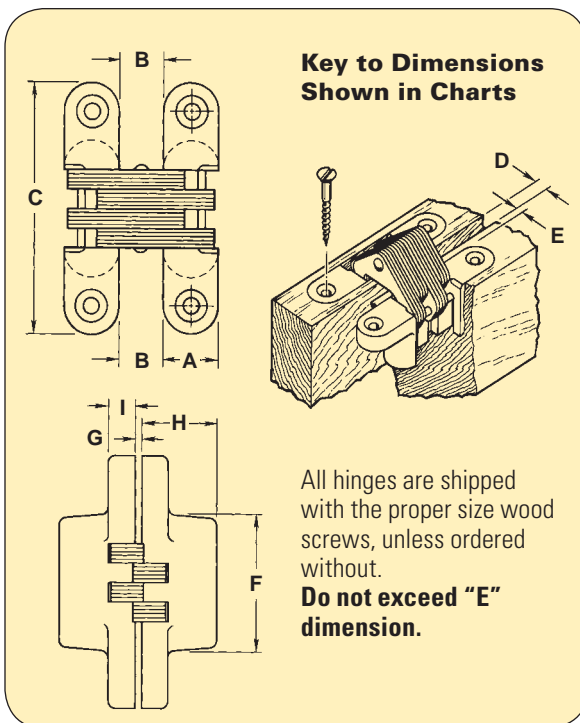
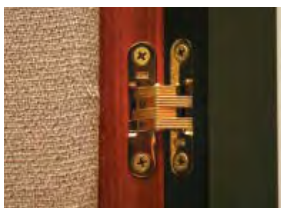


Dimension	100	101	103	303	203	204	208
A	3/8"(9.53mm)	3/8"(9.53mm)	1/2"(12.70mm)	1/2"(12.70mm)	1/2"(12.70mm)	1/2"(12.70mm)	5/8"(15.8mm)
B	9/32"(7.14mm)	19/64"(7.54mm)	3/8"(9.53mm)	3/8"(9.53mm)	23/64"(9.13mm)	23/64"(9.13mm)	29/64"(11.51mm)
C	1"(25.40mm)	1 11/16"(42.86mm)	1 1/2"(38.10mm)	1 1/2"(38.10mm)	1 3/4"(44.45mm)	2 3/8"(60.33mm)	2 3/4"(69.85mm)
D	3/32"(2.38mm)	7/64"(2.78mm)	1/8"(3.18mm)	1/8"(3.18mm)	7/64"(2.78mm)	7/64"(2.78mm)	9/64"(3.57mm)
E	3/32"(2.38mm)	3/32"(2.38mm)	1/8"(3.18mm)	1/8"(3.18mm)	1/8"(3.18mm)	1/8"(3.18mm)	5/32"(3.97mm)
F	3/8"(9.53mm)	7/8"(22.23mm)	1 1/16"(17.46mm)	39/64"(15.08mm)	3/4"(19.05mm)	1 1/4"(31.75mm)	1 11/32"(34.13mm)
G	1/32"(.79mm)	1/32"(.79mm)	1/32"(.79mm)	1/32"(.79mm)	1/32"(.79mm)	1/16"(1.59mm)	3/64"(1.19mm)
H	15/32"(11.91mm)	29/64"(11.51mm)	19/32"(15.08mm)	21/32"(16.68mm)	23/32"(18.26mm)	23/32"(18.26mm)	29/32"(23.02mm)
I	15/64"(5.96mm)	7/32"(5.56mm)	7/32"(5.56mm)	.054"(1.37mm)	3/16"(4.76mm)	1/4"(6.35mm)	9/32"(7.14mm)
Min. Matl. Thickness	1/2"(12.70mm)	1/2"(12.70mm)	3/4"(19.05mm)	1 1/16"(17.46mm)	3/4"(19.05mm)	3/4"(19.05mm)	1"(25.40mm)
Wood Screw Sizes	#5x3/4"(3.5x19mm)	#5x3/4"(3.5x19mm)	#6x1"(3.5x25mm)	#5x3/4"(3.5x19mm)	#6x1"(3.5x25mm)	#7x1 1/4"(3.9x32mm)	#8x1 1/4"(4.2x32mm)
Soft Wood Pilot Hole	No. 53	No. 53	No. 52	No. 53	No. 52	No. 51	No. 48
Hard Wood Pilot Hole	No. 47	No. 47	No. 44	No. 47	No. 44	No. 39	No. 35
Machine Screw Sizes	#4-40x1/2"	#4-40x1/2"	#6-40x1/2"	#5-40x1/2"	#6-40x1/2"	#8-32x5/8"	#8-32x5/8"
Hinge Weight	.04 lb.	.07 lb.	.09 lb.	.05 lb.	.11 lb.	.20 lb.	.34 lb.

Note: Refer to page 15 for assistance with choosing the right hinge for the job.



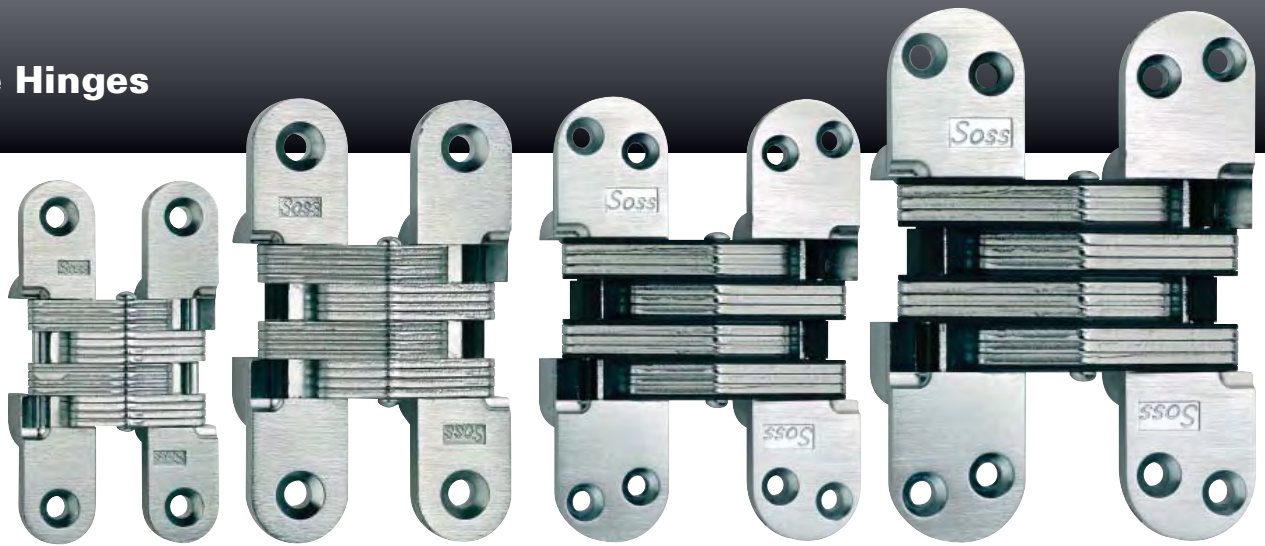
SOSS Invisible Hinge #204 used in the Visible Presentation Board, manufactured by Nucraft Furniture, www.nucraft.com, 877-682-7238.



SOSS® Invisible Hinges

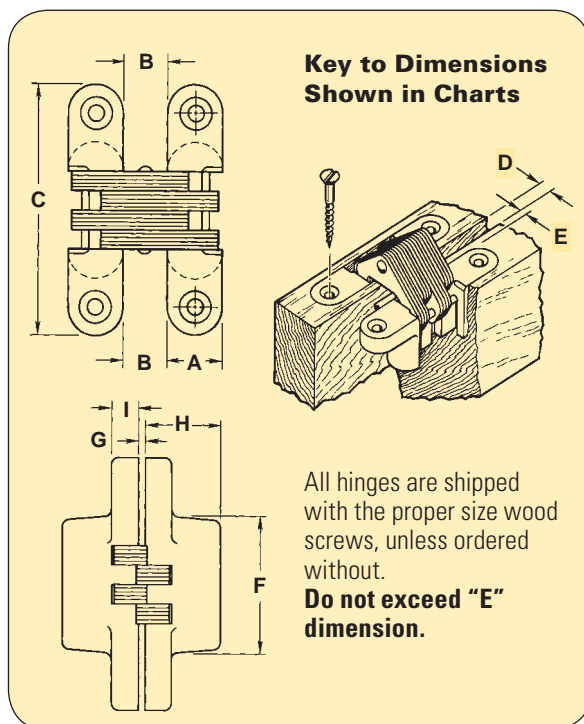
For Wood or Metal

Hinge illustrations are shown half size.



Dimension	212	216	218/218FR	220/220FR
A	3/4" (19.05mm)	1" (25.40mm)	1 1/8" (28.58mm)	1 3/8" (34.93mm)
B	1 7/32" (13.49mm)	2 3/32" (18.26mm)	7/8" (22.23mm)	1 1/16" (26.99mm)
C	3 3/4" (95.25mm)	4 5/8" (117.48mm)	4 5/8" (117.48mm)	5 1/2" (139.70mm)
D	5/32" (3.97mm)	7/32" (5.56mm)	3/8" (9.53mm)	1/2" (12.70mm)
E	3/16" (4.76mm)	1/4" (6.35mm)	1/4" (6.35mm)	9/32" (7.14mm)
F	2 1/16" (52.39mm)	2 19/32" (65.88mm)	2 7/16" (61.91mm)	2 15/16" (74.61mm)
G	3/64" (1.19mm)	1/16" (1.59mm)	1/16" (1.59mm)	1/16" (1.59mm)
H	1 5/64" (27.38mm)	1 7/16" (36.51mm)	1 41/64" (41.67mm)	1 15/16" (49.21mm)
I	3/8" (9.53mm)	1 5/32" (11.91mm)	1 3/32" (10.32mm)	1 5/32" (11.91mm)
Min. Matl. Thickness	1 1/8" (28.58mm)	1 3/8" (34.93mm)	1 3/4" (44.45mm)	2" (50.80mm)
Wood Screw Sizes	#10x1 1/4" (4.8x32mm)	#14x1 1/2" (6.3x38mm)	#10x1 1/2" (4.8x38mm)	#12x1 1/2" (5.5x38mm)
Soft Wood Pilot Hole	No. 43	No. 32	No. 43	No. 38
Hard Wood Pilot Hole	No. 31	No. 10	No. 31	No. 25
Machine Screw Sizes	#10-24x3/4"	#1/4-20x1"	#10-24x1"	#12-24x1"
Hinge Weight	.75 lb.	1.65 lb.	1.86 lb.	3.15 lb.

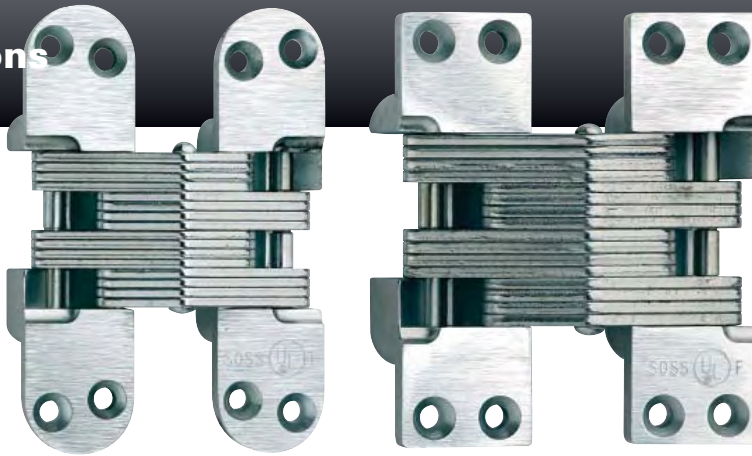
Note: Refer to page 15 for assistance with choosing the right hinge for the job. Refer to page 8 for FR (Fire Rated) information.



SOSS Invisible Hinge #220 used in Modernfold® Moving Walls to provide a projectionless, smooth look that is also tamper-proof and provides extra safety.

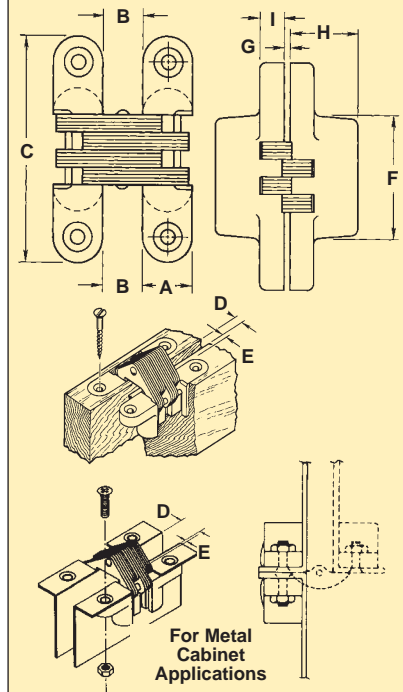
Fire Rated Applications

For Wood or Metal
Hinge illustrations are shown half size.



Dimension	418	420
A	1 1/8" (28.58mm)	1 3/8" (34.93mm)
B	7/8" (22.23mm)	1 1/16" (26.99mm)
C	4 5/8" (117.48mm)	4 1/2" (114.30mm)
D	3/8" (9.53mm)	1/2" (12.70mm)
E	1/4" (6.35mm)	9/32" (7.15mm)
F	2 7/16" (61.91mm)	2 15/16" (74.62mm)
G	1/16" (1.59mm)	3/32" (2.38mm)
H	1 19/32" (40.48mm)	1 15/16" (49.22mm)
I	13/32" (10.32mm)	15/32" (11.91mm)
Min. Matl. Thickness	1 3/4" (44.45mm)	2" (50.80mm)
Wood Screw Sizes	#10x2 1/2"	N/A
Soft Wood Pilot Hole	No. 43	N/A
Hard Wood Pilot Hole	No. 31	N/A
Machine Screw Sizes	#10-24x3/4"	#12-24x1"
Hinge Weight	2.15 lb.	3.44 lb.

Key to Dimensions Shown in Charts



All metal cabinet hinges are shipped without screws unless otherwise specified.

Do not exceed "E" dimension.

Note: See page 8 for further information.

Metal Cabinet Applications

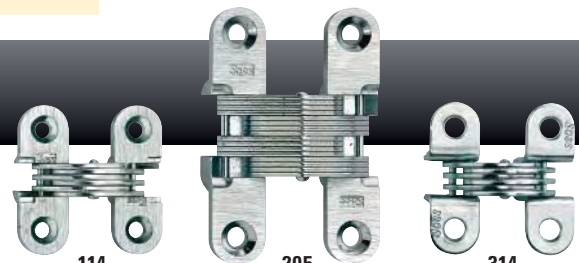
An assortment of specially modified SOSS Invisible Hinges is available for use in cabinets, computers, copiers and other electronic equipment. If you have a unique hinge installation application for our invisible hinge, modifications can be made to any of our standard models.

Installation of Metal Cabinet Hinges

Hinges 114, 205 and 314 are designed for easy installation in metal cabinets. A typical installation is shown in the above Key to Dimensions chart. Hinge is shown in the open and closed position.

When installing hinges, sheet metal flange should be slotted for link bunch and drilled for fastener.

Hinge illustrations are shown half size.

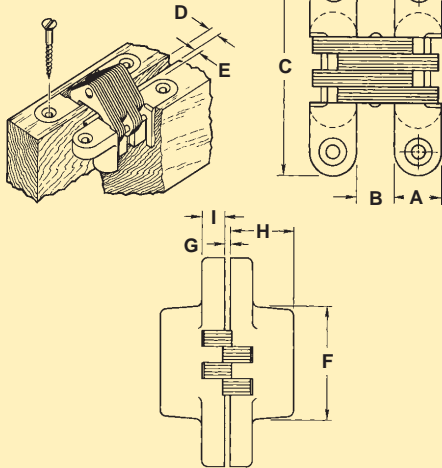


Dimension	114	205	314
A	1/2" (12.70mm)	1/2" (12.70mm)	1/2" (12.70mm)
B	7/16" (11.11mm)	37/64" (14.68mm)	7/16" (11.11mm)
C	1 1/2" (38.10mm)	2 3/8" (60.33mm)	1 1/2" (38.10mm)
D	1/8" (3.18mm)	21/64" (8.33mm)	1/8" (3.18mm)
E	5/32" (3.97mm)	1/8" (3.18mm)	5/32" (3.97mm)
F	1 1/16" (17.46mm)	1 1/4" (31.75mm)	39/64" (15.08mm)
G	3/32" (2.38mm)	1/4" (6.35mm)	3/32" (2.38mm)
H	19/32" (15.08mm)	23/32" (18.26mm)	5/8" (15.88mm)
I	7/32" (5.56mm)	1/4" (6.35mm)	.054" (1.37mm)
Min. Matl. Thickness	N/A	N/A	N/A
Machine Screw Sizes	#6-40x1/2"	#8-32x5/8"	#5-40x1/2"
Hinge Weight	.10 lb.	.22 lb.	.06 lb.

Note: Refer to page 15 for assistance with choosing the right hinge for the job.

Modifications to Standard Hinges

Key to Dimensions Shown in Charts



Special Applications
Hinge illustrations are shown half size.

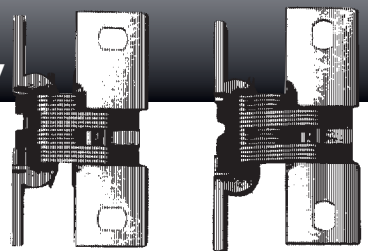


Dimension	101M	203M
A	3/8"(9.53mm)	1/2"(12.70mm)
B	19/64"(7.54mm)	23/64"(9.13mm)
C	11 1/16"(42.86mm)	13 3/4"(44.45mm)
D	7/64"(2.78mm)	7/64"(2.78mm)
E	3/32"(2.38mm)	1/8"(3.18mm)
F	7/8"(22.23mm)	3/4"(19.05mm)
G	1/32"(.79mm)	1/32"(.79mm)
H	29/64"(11.51mm)	23/32"(18.26mm)
I	7/32"(5.56mm)	3/16"(4.76mm)
Min. Matl. Thickness	1/2"(12.70mm)	3/4"(19.05mm)

Counter boring available by special request.

Metal Applications Only

Special Applications
Hinge illustrations are shown half size.



Dimension	204M	205M
A	2.49"(63.25mm)	2.49"(63.25mm)
B	1.89"(48mm)	1.89"(48mm)
C	.05"(1.27mm)	.23"(5.84mm)
D	.41"(10.41mm)	.41"(10.41mm)
E	1.25"(31.75mm)	1.25"(31.75mm)
F	.11"(2.79mm)	.11"(2.79mm)
G	.50"(12.70mm)	.50"(12.70mm)
H	.36"(9.14mm)	.58"(14.73mm)
I	.31"x.22"(7.87x5.59mm)	.31"x.22"(7.87x5.59mm)
J	-	.18"(4.57mm)
K	.80"(20.32mm)	.80"(20.32mm)
Hinge Weight	.20 lb.	.22 lb.

Concealed Surface Mount

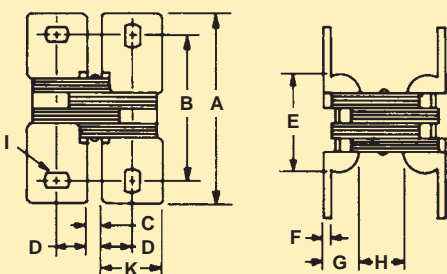
Hinge illustrations are shown half size.



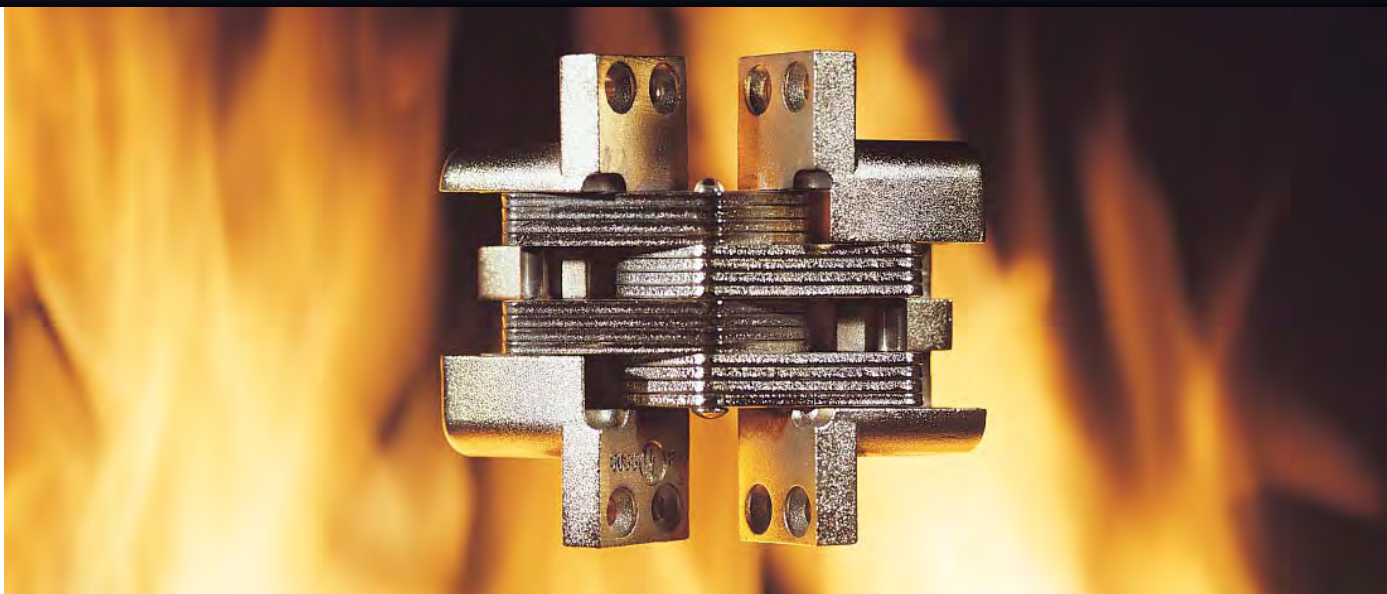
Dimension	106
Length of Plates	2 3/8"(60.33mm)
Width of Plates	19/32"(15.08mm)
Depth of Mortise	5/8"(15.88mm)
Thickness	N/A
Clearance (open)	7/16"(11.11mm)
Min. Wood Thickness	N/A
Size Wood Screw	N/A
Hinge Gap (closed)	13/64"(5.16mm)
Hinge Weight	.18 lb.

Model 106: Mounts on BACK of door and frame and requires no mortise. Hinge is visible from the back, maximum door thickness is 5/64".

Key to Dimensions Shown in Chart Above



SOSS® Fire Rated Invisible Hinges



SOSS now offers a complete line of fire rated invisible hinges. Whatever the door or opening, there is a SOSS hinge for you. Whether your doorway is made of wood or metal, rated 20 minutes or 3 hours, there now is a SOSS fire rated hinge that will comply and still give you the “uniquely invisible” hinge that you expect from SOSS.

The chart below lists the SOSS Invisible Hinges that are currently available.

Special door and jamb preparation is required for all fire rated hardware.

#420

The SOSS Invisible #420 Hinge is specifically designed with square edges for metal doors.

The Underwriters Laboratories labeled #420 SOSS Invisible Hinge can be used on hollow metal, sheet metal, tin clad and steel composite swinging type fire doors and frames rated up to and including **3 hours**. Additionally, they can be used on wood core doors and frames rated up to **20 minutes**.

Use at least one fire rated hinge for every **20"** of door height or portion thereof, or one

hinge for every **60 lbs.** or fraction thereof, whichever calculation demands more hinges. They are not to be used on a door that normally is held open.

#418

The Underwriters Laboratories labeled #418 SOSS Invisible Hinges can be used on hollow metal, sheet metal, tin clad, and steel composite swinging type fire doors and frames rated up to and including **3 hours**. They also can be used on wood core doors and frames rated up to **20 minutes**.

Additionally, they can be used on wood/plastic composite doors and frames constructed with Georgia Pacific FSM-1 or FSM-2 banding for a rating up to and including **90 minutes**.

Use at least one fire rated hinge for every **20"** of door height or portion thereof, or one hinge for every **60 lbs.** or fraction thereof, whichever calculation demands more hinges. They are not to be used on a door that normally is held open.

#218FR and #220FR

The Underwriters Laboratories labeled #218FR and #220FR SOSS Invisible Hinges can be used on hollow metal, sheet metal, tin clad, steel composite or wood core swinging type fire doors and frames with **20 minute** ratings.

Use at least one fire rated hinge for every **20"** of door height or portion thereof, or one hinge for each **60 lbs.** or fraction thereof, whichever calculation demands more hinges.

Hinge No.	Description	Door Material	Rating Minutes	Min. Door Thickness
218FR	#218 hinge with UL Rating	wood/metal	20/20	1 3/4"
220FR	#220 hinge with UL Rating	wood/metal	20/20	2"
418	Similar to #218, but made of alloy steel	wood/metal	90/180*	1 3/4"
418SS	Similar to #218, but made of stainless steel	wood/metal	90/180*	1 3/4"
420	Similar to #220, but made of alloy steel	metal	180	2"
420SS	Similar to #420, but made of stainless steel	metal	180	2"

*The #418 SOSS hinge is for use on 90 minute wood faced doors constructed to Georgia Pacific specifications utilizing 2" No. 10 screws; the hinge style must be a minimum of 2-3/16" wide. This may be made up from two pieces of 1" firestop and 3/16" of wood.

Note:

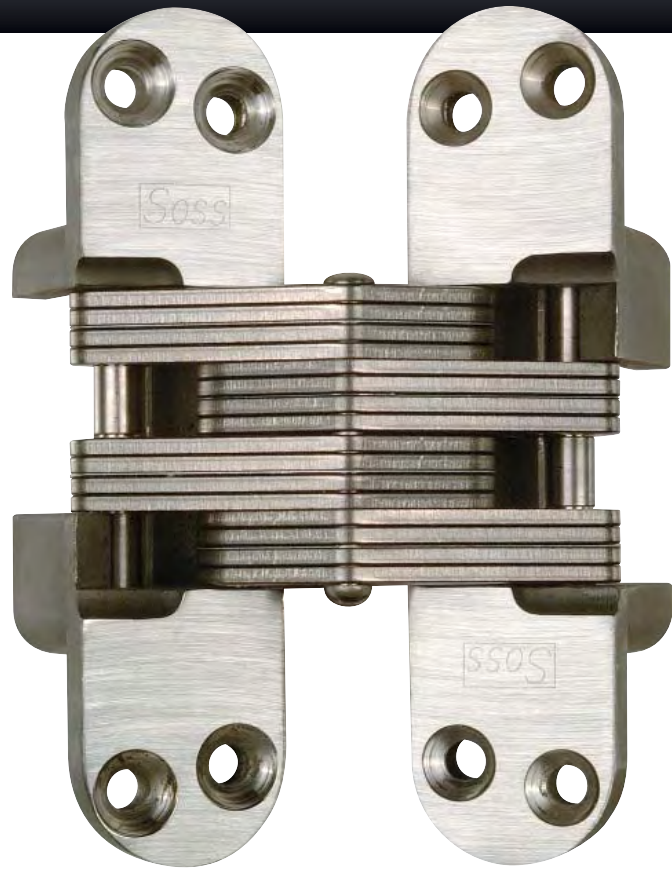
SOSS Invisible Hinge product specifications available upon request. Never exceed maximum door size of 4' wide by 8' tall for fire rated doors only.

SOSS® Stainless Steel Hinges

SOSS Invisible Hinges now are available in stainless steel in the #101, #203, #204, #208, #212, #216, #220, #418 and #420 sizes. The stainless steel hinges are ideal for clean rooms, marine use, hospital MRI areas or wherever rust and corrosion resistance, a clean look and security are essential.

Made of 316 stainless steel with stainless screws, the hinges are offered in US32D (Satin Stainless) and US32 (Bright Stainless) finishes.

For dimensions refer to pages 4, 5 and 6.

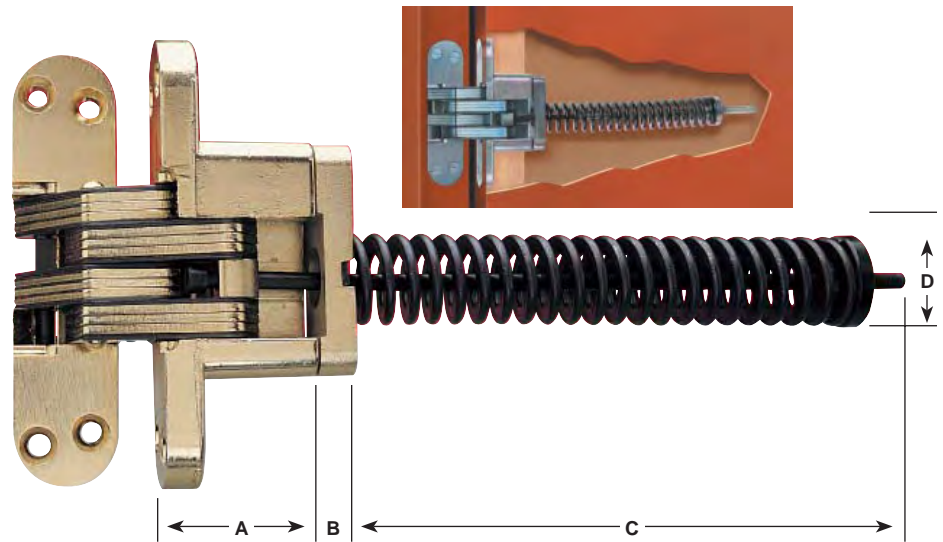


Invisible Spring Closer Hinge

The SOSS Invisible Spring Closer gives you a spring closer that is totally invisible from either side when the door is closed. When the door is open, you see only the hinge face and links.

The closure rate is completely adjustable with an allen wrench after installation, and does not require removal of the spring closer. Installation can be either inside the door itself or inside the door jamb. Allow one spring closer for each 75 lbs. of door weight for all spring closers.

The SOSS Invisible Spring Closer is ideally suited for all types of doors 1 3/8" thick or more. Recommended spacing is one half of the distance from the center of the door to the center of the top hinge.



Door Thickness	Spring Closer #	Description	A	B	C	D
1 3/8"	216IC	Spring Closer with regular hinge	1 7/16"	3/8"	6 1/4"	3/4"
1 3/4"	218IC	Spring Closer with regular hinge	1 41/64"	3/8"	7"	1"
2"	220IC	Spring Closer with regular hinge	1 15/16"	3/8"	7"	1"

Magnetic Door Holder & Stop

Sturdy, practical and easy to install, SOSS® Magnetic Door Holder and Stop holds doors open even in a heavy wind.

Mount either vertically to the floor or horizontally to baseboard or wall.

Available for bulk shipment or in full-color point-of-purchase cards.

7 finishes available: Antique Bronze, Satin Nickel, Black Powdercoat, Satin Chrome, Bright Gold, White Powdercoat or Bright Chrome.

Dimensions

Overall Length 3 5/16"
Main Stem Length 2 11/16"
Base Length 1 1/16"
Base Diameter 1 3/4"

Material

Zamac & Steel

Holding Power

SOSS Magnetic Door Holders have a magnetic holding power of 12.5 lbs. when installed properly.

Multiple Position Mounting

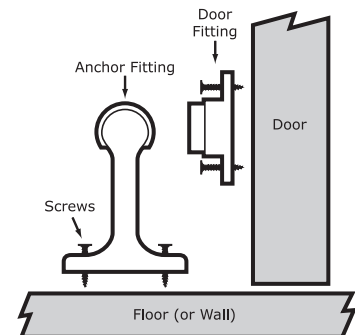
SOSS Magnetic Door Holders mount either vertically to the floor or horizontally to the baseboard or wall.

Hardware

3 plastic anchors and 6, #7-1" screws are included.



U.I.P. #	Finish Description
MDHCUS10	Antique Bronze
MDHCUS15	Satin Nickel
MDHCUS19	Black Powdercoat
MDHCUS26D	Satin Chrome
MDHCUS3	Bright Gold
MDHCWH	White Powdercoat
MDHCUS26	Bright Chrome



Reinforcements for Metal Door Applications

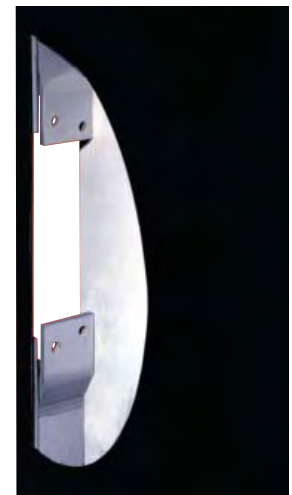
Save time and expense by using these all-steel reinforcements that are ready to weld into place. Reinforcements are available for the SOSS hinges #216, #218, #418 and #220. Hinge reinforcement drawings available. Contact the SOSS office for further information.

SOSS offers ready-made reinforcements for easy prep of steel doors



U.I.P. #	Description	Hinge
216SDB	Steel, Two Pieces Per Side	216
218SDB	Steel, Two Pieces Per Side	218, 418
220SDB	Steel, Two Pieces Per Side	220

As seen from the inside of the door looking out.

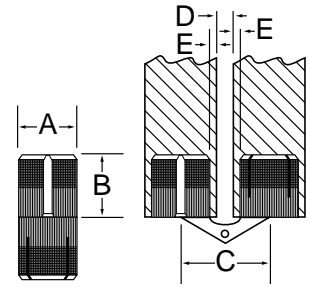


Barrel Hinges

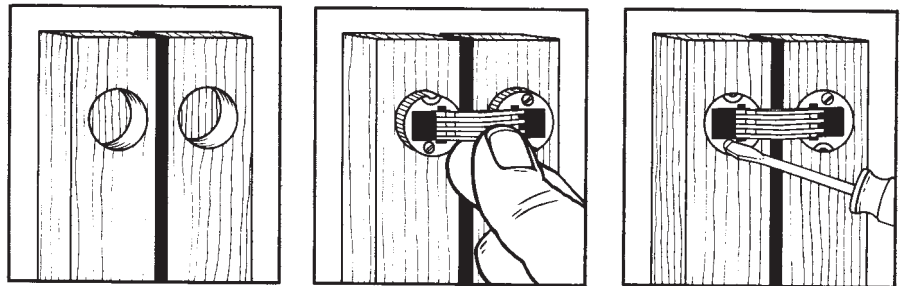
SOSS Invisible Barrel Hinges are made of solid brass with brass links. They are easily installed. Just drill to the proper size and insert the hinge. SOSS Invisible Barrel Hinges are totally invisible from either side when the door is closed.

Easily Installed

Secure mounting in the wood door or panel is assured by tightening the tensioning screw. To accommodate more demanding light weight applications, the cylinders can be additionally secured by installing a chipboard or wood screw in the groove on the exposed end.



Not recommended for vertical or load bearing applications.
No load recommendations available.
Light applications only.



U.I.P. #	Min. Door Thickness	Drill Bit (mm)	Drill Bit (in.)	Dimensions (mm)				
				A	B	C	D min.	E max.
BH084	7/16"	8 mm	Letter "O"	8	9.6	11.6	1.9	1.1
BH104	1/2"	10 mm	25/64"	10	11	16.5	2.5	2
BH124	5/8"	12 mm	15/32"	12	13.5	20	2.5	2
BH144	3/4"	14 mm	35/64"	14	15.5	23	3	3
BH164	7/8"	16 mm	5/8"	16	16.5	25	3	3
BH184	1 1/8"	18 mm	45/64"	18	17.5	27	3	3
BH244	1 1/4"	24 mm	15/16"	24	25	36.5	3.5	3.5

Quadrant Hinges

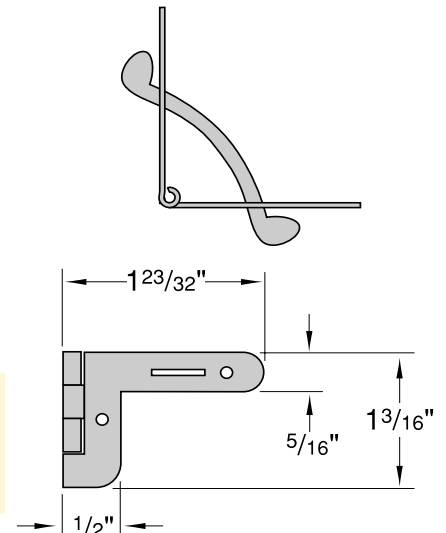


Constructed of solid brass, the SOSS Quadrant Hinge is now available for woodworkers or manufacturers of high quality wood products. The hinge support is mortised into the case or frame so when the case is closed it is virtually invisible.

Available in either a bright gold or bright brass finish, the SOSS Quadrant Hinge adds a custom touch to that special wood project.

U.I.P. #	Description
QH4	Quadrant Hinge, Bright Gold Finish
QH5	Quadrant Hinge, Bright Brass Finish

Packaged two per bag, screws included.



Accessories to Aid Installation

Router Guides

SOSS Invisible Hinges now can be installed easier and faster than ever before. Router guide templates are available for hinges as shown on the chart.

A perfect routed outline is foolproof (the only critical dimension is the depth of the shallow mortise), so you can expect a perfect installation every time.

Each router guide template is individually handcrafted for exactness. The template is held on the door and jamb with nails; guide pins locate the deep mortise. The edges of the template assure a perfect outline when used with SOSS RGB100 Template Guide and Lock Nut, or the Porter-Cable Template Guide #42024 (Lock Face Routing) and #42237 (Lock Nut).

Caution:

Do not use resharpened bits.

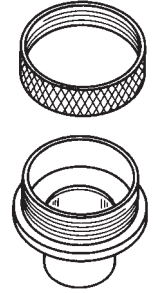


SOSS Hinge Model	Router Bit Size	Router Guide #
#101	1/4"	101IT
#103	3/8"	103IT
#203	3/8"	203IT
#204	3/8"	204IT
#208	3/8"	208IT
#212	3/8"	212IT
#216	1/2"	216IT
#218	1/2"	218IT
#220	1/2"	220IT
#418	1/2"	418IT

SOSS RGB100 Router Guide Bushing & Locknut

Guide bushing and locknut for use with SOSS Invisible Hinge Router Guide. Guide bushing I.D. 21/32"; O.D. 3/4"; Distance past base 9/16"; locknut fits bushing.

Fits most routers.

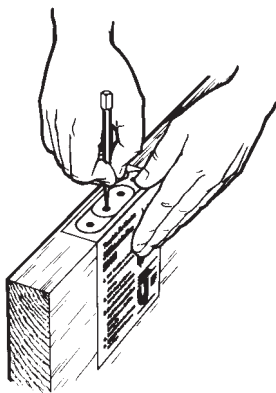


Invisible Hinge Installation Instructions

All SOSS Invisible Hinges for wood are packaged with detailed installation instructions and a paper template.

A detailed instruction booklet is packaged with each Router Guide Template.

1 Lay the paper template on the edge of the door as shown, with the template corresponding with the mark you have made in measuring the proper distance from the top of the door.



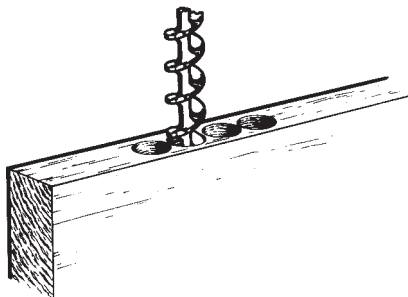
2 Bend or crease the template on the scored line over the edge of the door as illustrated below. On the template are drill-point indicators. Punch a hole through the drill-point indicators to mark their location on the door.

3 Using a router or drill of the proper size, bore holes to required depth.

Note:

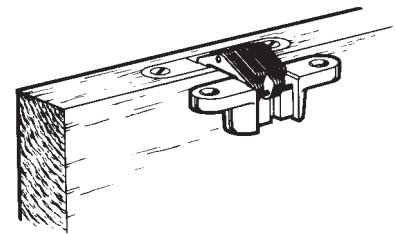
To minimize the observable gap between the door and the frame in single swing pass doors in the closed position, each half of the hinge can be mortised 1/32" below flush.

Start each hole at the point indicated by the hole punched through the paper template.



4 Using a router or chisel, remove wood to connect the holes for a smooth mortised surface.

5 Insert one-half of the hinge into mortise, install screws.



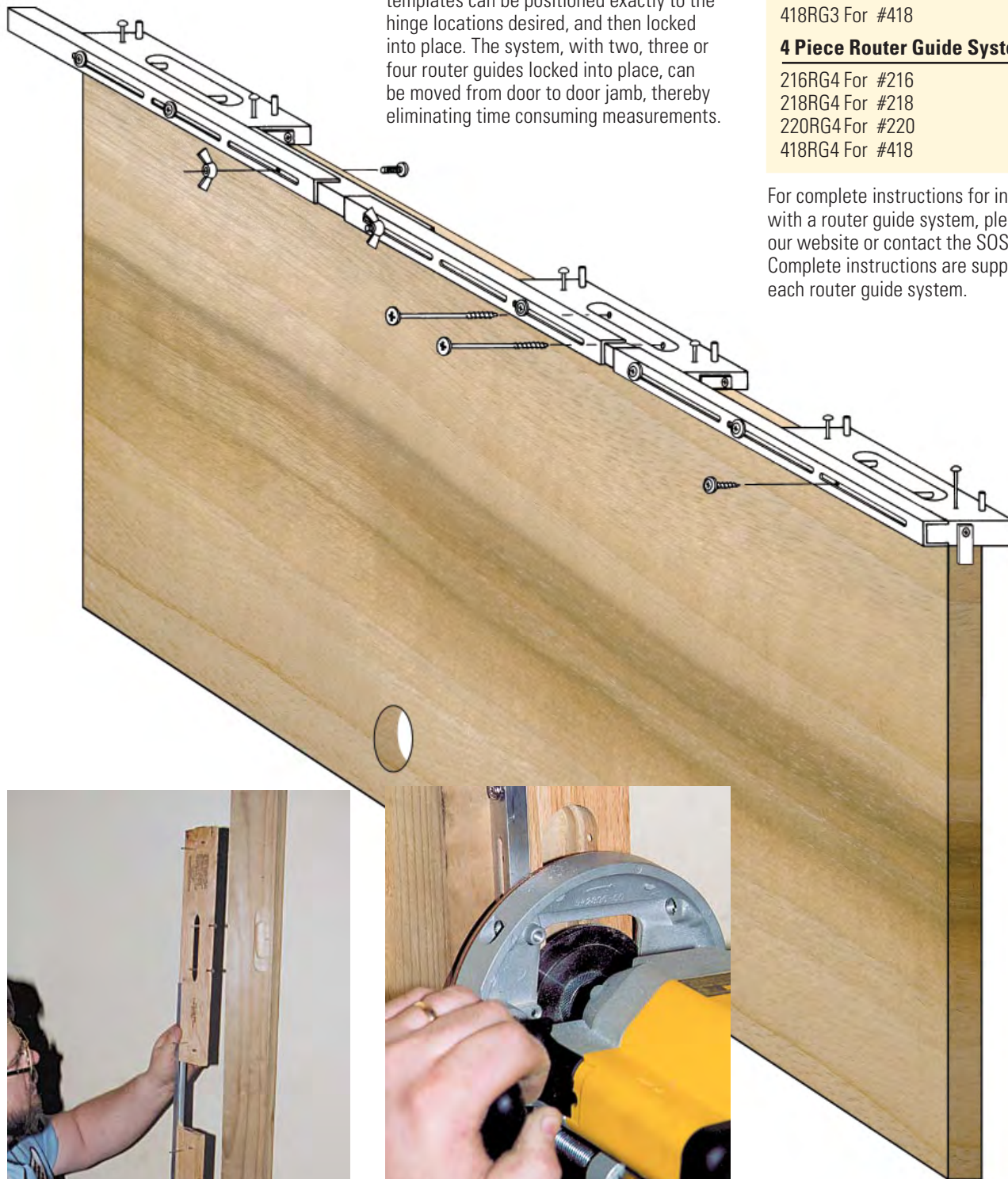
6 Repeat above steps to install hinge in jamb.

For complete instructions for installation with a router please visit our website or contact your SOSS main office. Instructions are supplied with each router guide template.

Accessories to Aid Installation

Router Guide System Easily Applied to Door and Door Frame

The SOSS Router Guide System saves you time and measurements. The router guide templates can be positioned exactly to the hinge locations desired, and then locked into place. The system, with two, three or four router guides locked into place, can be moved from door to door jamb, thereby eliminating time consuming measurements.



3 Piece Router Guide System

216RG3 For #216
218RG3 For #218
220RG3 For #220
418RG3 For #418

4 Piece Router Guide System

216RG4 For #216
218RG4 For #218
220RG4 For #220
418RG4 For #418

For complete instructions for installation with a router guide system, please visit our website or contact the SOSS office. Complete instructions are supplied with each router guide system.

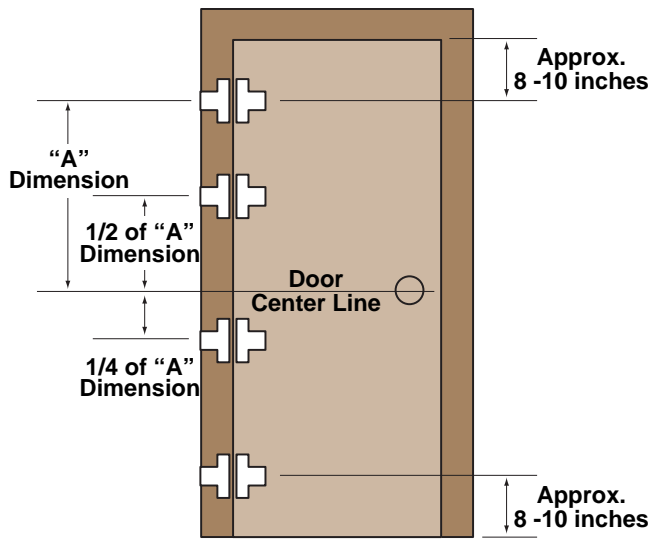
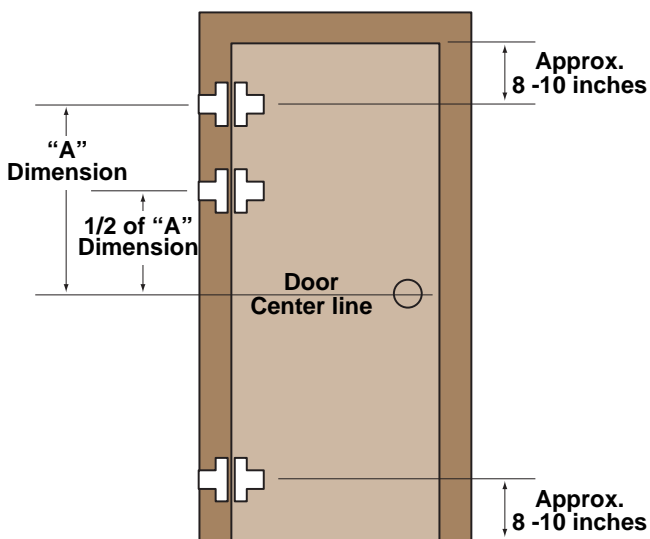
Recommended Spacing

Notice in the illustration showing three hinges, that the "center" hinge is not shown in the usual location near the center of the door. The "center" hinge should be located one-half the distance from the horizontal center line of the door to the center line of the top hinge.

On installations requiring four SOSS Invisible Hinges, the second hinge from the top should be located one half the distance from the door's horizontal center line to the center line of the top hinge. The third hinge from the top should be located one-quarter of the "A" dimension below the horizontal centerline of the door.

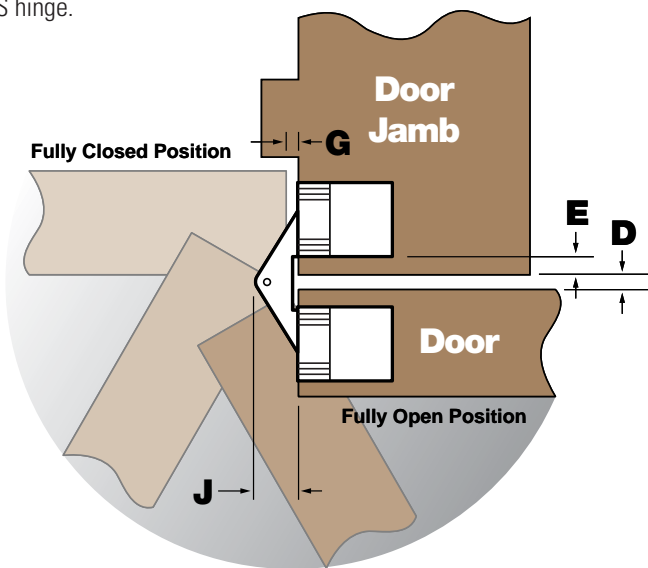
Note:

For spacing information beyond what is shown, look up our website at www.soss.com. Click on "Product Information" then click on "CAD Drawings", then click on your choice of file for the "Vertical Hinge Location on Door".



Path & Clearance for Doors

The diagram below shows the typical path of a SOSS hinged door. The table shows the door clearance when fully opened for each SOSS hinge.



SOSS Hinge No.	Dimension							
	E		D		G		J	
	in	mm	in	mm	in	mm	in	mm
101	3/32	2.4	7/64	2.78	1/32	0.8	3/16	4.72
103	1/8	3.2	1/8	3.18	1/32	0.8	1/4	6.35
303	1/8	3.2	1/8	3.18	1/32	0.8	1/4	6.35
314	5/32	4.0	1/8	3.18	3/32	2.4	9/32	7.14
203	1/8	3.2	7/64	2.78	1/32	0.8	1/4	6.35
204	1/8	3.2	7/64	2.78	1/16	1.6	1/4	6.35
208	5/32	4.0	9/64	3.57	3/64	1.2	5/16	7.94
212	3/16	4.8	5/32	3.97	3/64	1.2	13/32	10.32
216	1/4	6.4	7/32	5.56	1/16	1.6	9/16	14.29
218	1/4	6.4	3/8	9.53	1/16	1.2	17/32	13.49
220	9/32	7.1	1/2	12.7	1/16	1.6	11/16	17.42

Choosing the Right Hinge for the Job

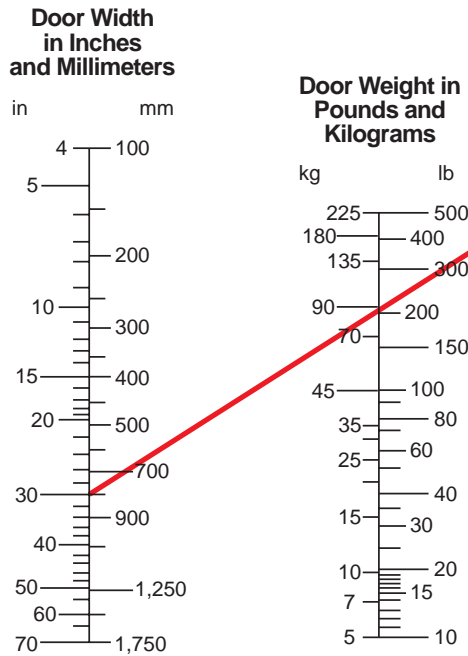
The nomograph below has been developed to assist you in determining the correct size and number of hinges for your installation.

If the information you need is off the chart, consult the factory.

The general rule used to determine the number of hinges is:

Every door should be provided with at least one hinge for every thirty inches in height or portion thereof; however, more hinges may be required per chart below.

For example, a 90" door needs three hinges and a 91" door needs four.



Note: For #418 and #420 hinge, use formula described on page 7.

Example

A wood door 30" wide, 200 lbs., with a thickness of 1³/₄" will require four #218 SOSS Invisible Hinges. The red line shows how the sizing and selection were determined from the nomograph.

The nomograph above has been developed to assist you in determining the correct size and number of hinges for your installation.

Directions

After determining the weight and width of the door, draw a straight line through the door width and weight to line "A", as indicated in the example. Continue with a horizontal line sideways from the point of intersection with line "A" until the door

thickness is reached. Use the number of hinges and the model number indicated on this line.

To use this chart as a working guide, we suggest that you photocopy this page.

Hinge Number	Door Material		Minimum Door Thickness	Number of Hinges Required
	METAL	WOOD & METAL		
	9/16	5/8		
114				
314				
205				
106				
100				
101				
303				
103				
203				
204				
208				
212				
216				
218				
220				

SOSS® CD Information Center



The SOSS Invisible Hinge catalog is available on a CD. The CD offers the entire SOSS catalog with updates, complete CAD drawings that can be exported to CAD programs, all literature and instructions, and a 10 minute video that explains how to install the SOSS Invisible Hinge easily using wood templates. The CD is based on Adobe Acrobat Reader and operates similarly to the Sweet Source Discs.

Visit SOSS® on the World Wide Web



Visit SOSS on the World Wide Web
SOSS Invisible Hinge makes it easy to obtain detailed information on our complete line through our website.

The website, at <http://www.soss.com>, contains dimension charts, color photographs and a printable sizing chart for most SOSS hinges.

The SOSS website gives detailed information about our specialty hinges and accessories, and gives you direct, immediate access to the factory.

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