SOSS®

DOOR HARDWARE

Opening the Door to Innovation

Since 1903

baukraft

www.baukraft.mx

Open Up
in a better way

At SOSS®, we've always looked at the world a bit differently, imagining how the everyday can be improved upon and made exceptional. For more than 100 years, this unique perspective has served us well, acting as the catalyst to our groundbreaking door hardware innovations. From our inventive invisible hinges—developed back in 1903 by our founder, Joseph Soss—to our revolutionary new UltraLatch® push-pull entry handle, SOSS continues to challenge the everyday status quo, providing architects, builders and designers with elegantly smart door hardware solutions that open up a world of design opportunity.

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The revolutionary

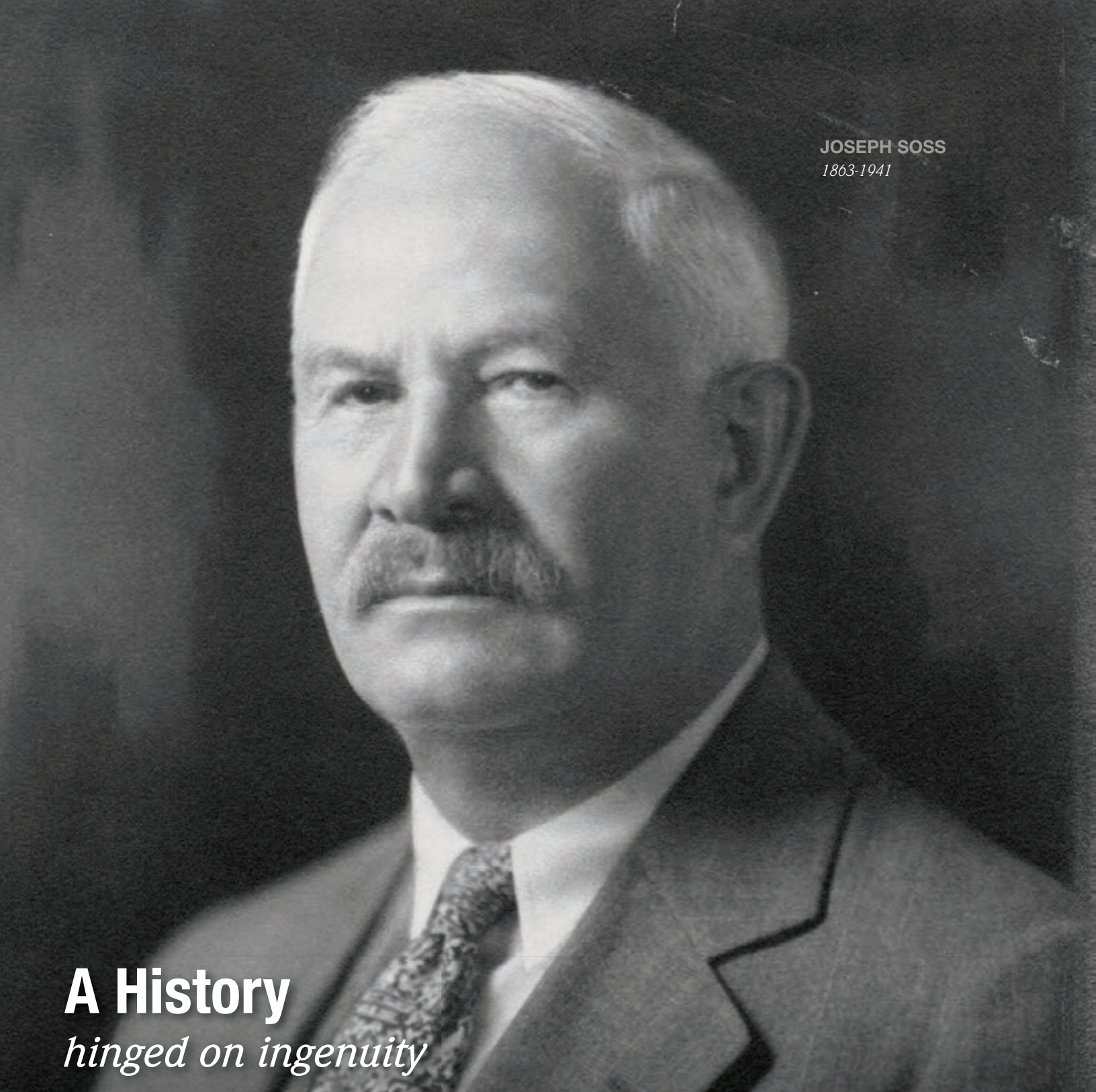
SOSS ULTRALATCH®

door handle combines sleek styling with conforming comfort, putting the future of entry hardware well within reach.

Stylish, durable… and invisible. The original concealed hinge, the

SOSS® INVISIBLE HINGE

is the perfect addition to a wide variety of elegant environments.



JOSEPH SOSS
1863-1941

A History
hinged on ingenuity

From penicillin to the pacemaker to Post-it® notes, history is filled with groundbreaking innovations that were discovered quite by accident. Such was the case in 1903 when our founding father, Joseph Soss, tripped on a protruding hinge on the deck of a ship. And while the stumble certainly wasn't planned, the resulting idea—and subsequent patent—for a concealed, invisible hinge can hardly be considered a mistake.

More than a century later, Joseph Soss' breakthrough lives on in the millions of SOSS Invisible Hinges found in buildings and homes around the world, as well as elevators, computers, jet planes… and, yes, even cargo holds on ship decks. In fact, many of the most recognized landmarks around the world are equipped with SOSS Invisible Hinges, including the White House, Buckingham Palace, Disneyland, the Mormon Temple in Salt Lake City and Esplanade By The Bay in Singapore.

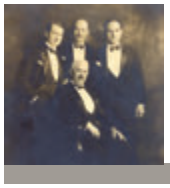
Today, the company Joseph formed remains in the family, owned by his great grandson, Neil Marko. Through Neil, the family history of innovation and entrepreneurial spirit lives on, as evidenced by the introduction of our latest concept in door handles called SOSS UltraLatch®, the perfect complement to our hinge line.

1902

Young Rumanian immigrant Joseph Soss trips over a protruding hinge on a ship deck during an ocean voyage, inspiring his invention of the world's first concealed hinge.

1903

Joseph Soss patents the SOSS Invisible Hinge and formed a company in New York to manufacture it.

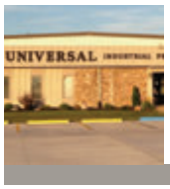


1940

After managing the company for more than 35 years, Joseph is succeeded by his sons Sam, CJ and Henry, who move the SOSS operation to the Detroit suburb of Warren, Michigan, to be closer to their key automotive customer base.

1960

After the company had gone public, Sam's son-in-law Hal Marko becomes president. During the next three decades, dozens of industrial and electronic firms are added to the company roster, increasing annual sales to over $250 million.



1977

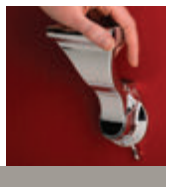
The hinge business is relocated to Pioneer, Ohio, where it remains today and is called Universal Industrial Products (UIP).

1997

Neil Marko, great grandson of Joe Soss, purchases UIP and the SOSS product line.

1999

Marko acquires the existing hinge supplier in Singapore. Today it is the Asian headquarters for sales and manufacturing.



2012

Neil Marko introduces a revolutionary new concept in door handles, the SOSS UltraLatch that features a push-pull design requiring a mere ½ inch of movement to open the door.

Did You Know?

HIDDEN TREASURES

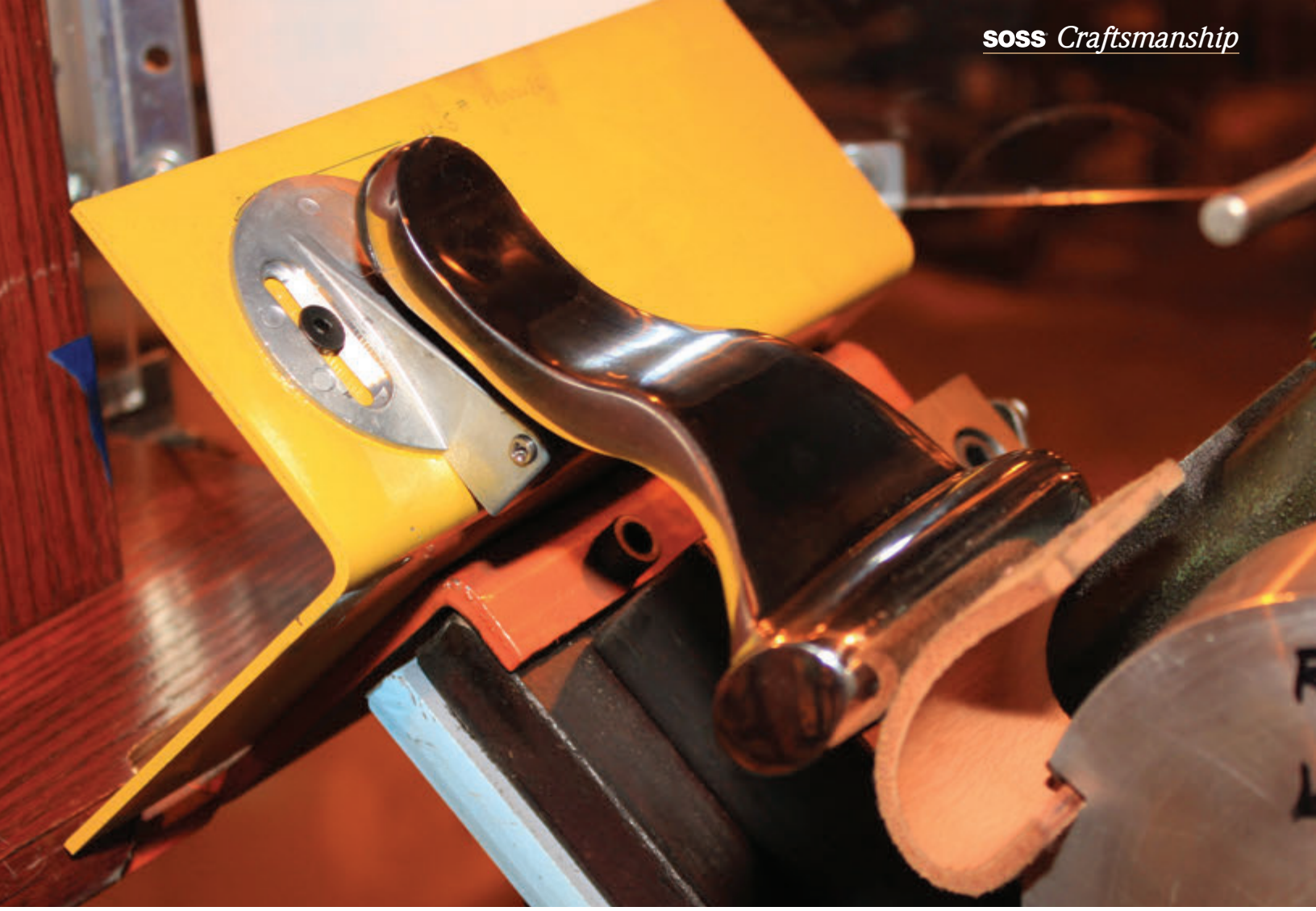
Upon its inception more than 110 years ago, the SOSS Invisible Hinge quickly became the choice of designers, scientists, agencies and historical luminaries alike.

- Notable early customers of the SOSS Invisible Hinge included Singer Sewing Machines, Otis Elevator, Burroughs Adding Machines and Player Pianos.
- Automotive pioneer Henry Ford used the SOSS hinge on the glove boxes of his early model automobiles.
- Legendary architect Frank Lloyd Wright specified the SOSS hinge on many of his most prominent commercial and residential structures, including Pennsylvania's Fallingwater, considered one of the finest private homes in America.
- Government agencies favored SOSS invisible hinges for security purposes. Today most post offices and hundreds of courthouses throughout the U.S. are equipped with SOSS invisible hinges.
- Designers specify the SOSS hinge in engineered plastics and other space age materials where flush fit, compact size and smooth operation are required, including computers, corporate jets, copy machines and medical devices.

Classic Craftsmanship

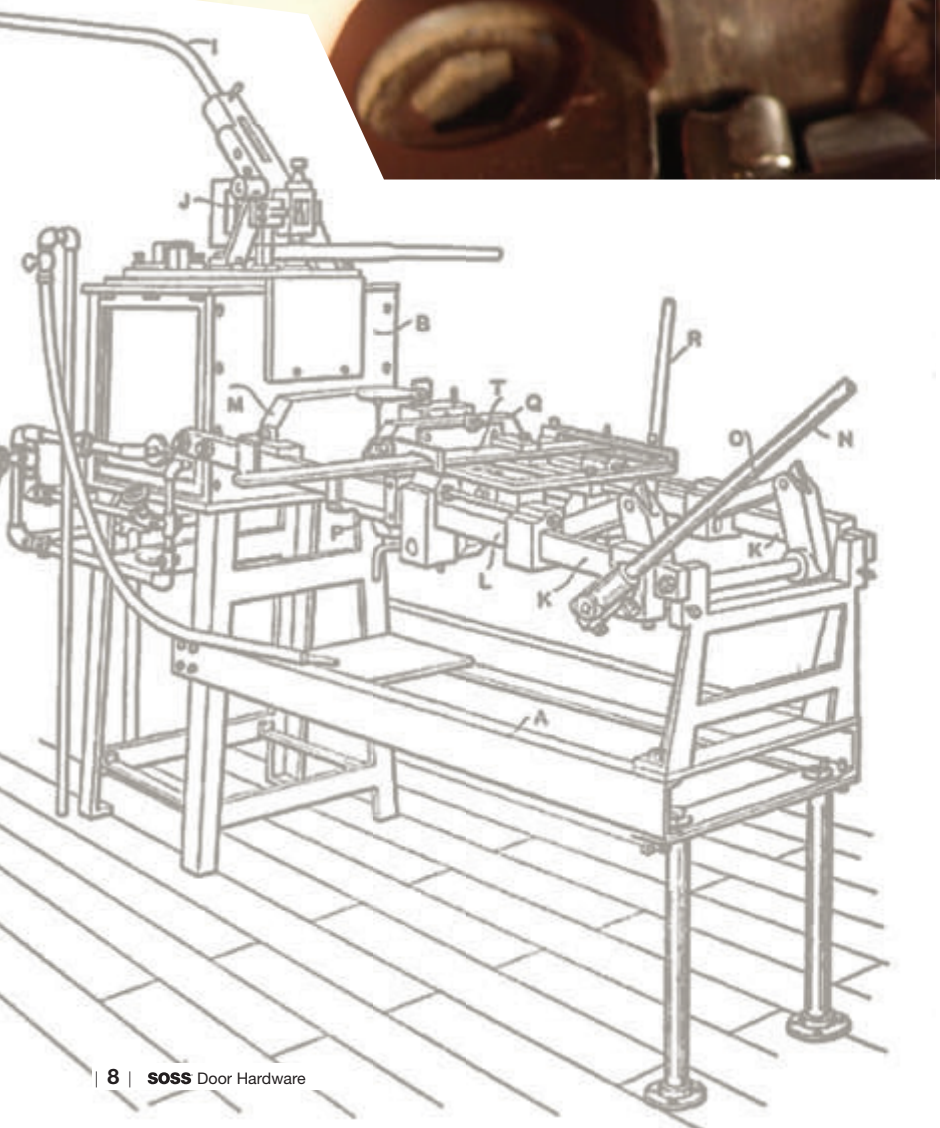
meets modern manufacturing

Our founder, Joseph Soss, built our company upon the bedrock of ingenuity and invention, evidenced by his creation of the groundbreaking concealed hinge more than a century ago. But his work didn't end with innovative ideas alone; he saw his ideas through to quality production, tweaking and enhancing his products to meet his own high standards. This approach to quality control actually led to the development and patent of the SOSS die-casting machine, allowing Mr. Soss to address concerns over breakage with the original hinge prototypes. This spirit of innovation informing manufacturing lives on at SOSS today. From superior material selection through constant, on-going testing, SOSS hinges are manufactured to deliver better form, fit and function across a wide variety of applications and environments. And the best practices learned from more than a century of manufacturing exceptional hinges have been brought to bear with the production of our revolutionary UltraLatch entry handle, made in Pioneer, Ohio, USA.



↑ *Testing the finish on UltraLatch.*

← *Finishing operation on the invisible hinge.*



Invisible hinge pins being installed during assembly.

BIRTH OF AN ENGINEERING MARVEL

Developed by Joseph Soss in the early 1900s, the SOSS die-cast machine was the first die-casting machine to be sold in the open market in North America, advancing the art of die casting and becoming the springboard for the die-casting industry as a whole.

Invisible hinge inspection process

London
Buckingham Palace

Across the Globe
and across the street

From some of the most recognized global landmarks—including the White House, Buckingham Palace and Disneyland—to healthcare facilities, offices, schools and homes just down the street, SOSS door hardware adds sophisticated style and fine functionality to more discriminating environments all over the world.

Marrying visionary innovation and a century-long reputation for industry-leading quality, our collection of premium concealed hinges and next-generation door hardware together provide the perfect entrance to any room that is deserving of advanced aesthetics.

Washington D. C.
The White House

Health Care

In Your Home Town

Home

Office

THE MIRA HOTEL

Interiors of the iconoclastic and indulgent Mira Hotel were meticulously designed by visionary architect Charles Allem and famed stylist-to-the-stars Colin Cowie. So it's a safe bet that every single detail of this downtown Hong Kong retreat was painstakingly considered when appointing its nearly 500 ultra-chic guestrooms and suites. Among the upscale appointments inside the rooms, one will find SOSS door hardware, perfectly picked to meet the unique blend of experimental design and modern technology featured within.

THE MARINA BAY SANDS

From its boat-shaped 'SkyPark' some 55 stories high and its breathtaking 360-degree views of the Singapore skyline, to its indoor canal and the largest atrium casino in the world, the Marina Bay Sands resort in Singapore has been dubbed the 'world's most expensive hotel.' The more than 2,500 guestrooms at this stunning resort boast an appropriately modern style, appointed with the most chic furnishings, including the SOSS door hardware that fits the elegant ambiance seamlessly… literally.

MGM GRAND

With 16 restaurants, six nightclubs, a variety of theaters and arenas and a seven-acre pool complex boasting five separate pools, the MGM Grand is the epitome of the larger-than-life Las Vegas experience. Inside the complex are more than 5,000 hotel rooms of various sizes and accommodations. While varying in approach, rooms feature a contemporary design with a glamorous Las Vegas touch… including the fashionable SOSS door hardware that flawlessly complements the room.

Ergonomics Taken Seriously

Within the healthcare industry, innovation is the key to success. And innovation is also the foundation that our company was built upon. More than 100 years ago, we revolutionized door hinges with the invention of the SOSS concealed hinge that not only provides obvious aesthetic advantages, but also requires less cleaning and maintenance.

Today, we continue to be industry trailblazers, as evidenced by the introduction of our groundbreaking UltraLatch door latch design. With its conforming shape and no-twist movement, UltraLatch is the most ADA-friendly design available. No surprise, then, that today's progressive healthcare facilities look to SOSS for their door hardware solutions.

THE ERGONOMIC DESIGN OF ULTRALATCH ALLOWS THE WRIST TO MAINTAIN A NEUTRAL POSITION, WHICH IS HIGHLY ADVANTAGEOUS FOR INDIVIDUALS WITH ANY OF A WIDE VARIETY OF UPPER EXTREMITY LIMITATIONS.

- J.C. Moore
Licensed Physical Therapist

The hands-free SOSS UltraLatch door handle provides the perfect entry solution for assisted living centers around the globe, like Good Shepherd in Fostoria, Ohio.

No Hands? No Problem.

It is often said that your home is your castle. And for those with more discriminating tastes, the choices they make in designing and decorating each room within provides them with a special look perfect for their personal kingdom.

From entry doors to cabinet doors to fine furniture, SOSS concealed hinges provide a beautiful, streamlined solution to door hardware for such regal residences. Which is why they can be found—or not found, one might say—in more and more of today's high-end homes. And they're not always alone, increasingly accompanied by our revolutionary UltraLatch door latch, a solution that is as effortlessly elegant as it is perfectly practical.

The breakthrough push-pull design of the SOSS UltraLatch door handle requires just a ½ inch of latch movement, allowing hands-free entry on any door.

Beautiful Office Beautiful Hardware

Today's forward-thinking office settings are finding more and more ways to redefine their space, creating new environments that are as streamlined as they are stylish. In these advanced work places, SOSS concealed hinges often can be found.

From hidden presentation boards to removable walls, these invisible innovations are providing smarter ways to utilize shared spaces while also offering a unique aesthetic especially at home in modern environs. And with the introduction of our radical, hands-free UltraLatch door handle, these progressive workplaces are now opening up to SOSS door hardware in even more ways.

UltraLatch shown in textured black.

Hidden kitchenette in conference room.

Top of the Class

From elementary schools to high schools to college campuses, educational facilities of all types are creating inspiring environments that foster a sense of community, with spaces that allow for varied purposes and shared usage. SOSS concealed hinges are the perfect classroom complement to such forward-thinking educational environs, providing a streamlined aesthetic and the opportunity for space-saving design.

Additionally, our UltraLatch door latch design provides hands-free entry into classrooms, particularly beneficial for busy teachers and students alike whose hands seem always filled with papers, books, laptops and more. It's no wonder why more and more educational facilities are giving SOSS such high marks for our door hardware solutions.

Hillsdale College selected the SOSS UltraLatch, providing staff and students alike with an easier way in… and out.

Strong, beautiful. and invisible.

The use of SOSS Invisible Hinges is what makes the design of this hidden room so successful. From custom cabinetry in corporate jets and space-saving folding trays in passenger trains, to hidden rooms and moving walls in residential and commercial environments, SOSS concealed hinges are selected for use in an endless array of specialty applications where compact size, smart operation and superior appearance are required.

That's why discerning eyes will find SOSS hardware in computers, cash registers, copy machines, medical equipment, cases, scales, office equipment, communication room safety doors, pharmaceutical storage areas, courtrooms and churches… just to name a few places.

Hidden bookcase door

Tray table on NYC to Washington D.C. commuter train

Used in the galley of the Cessna brand corporate jet

- *medical equipment*
- *office equipment*
- *computer and communications*
- *transportation and aviation*
- *custom furniture and cabinetry*
- *entry and security doors*
- *pharmaceutical storage*
- *courtrooms*
- *churches*

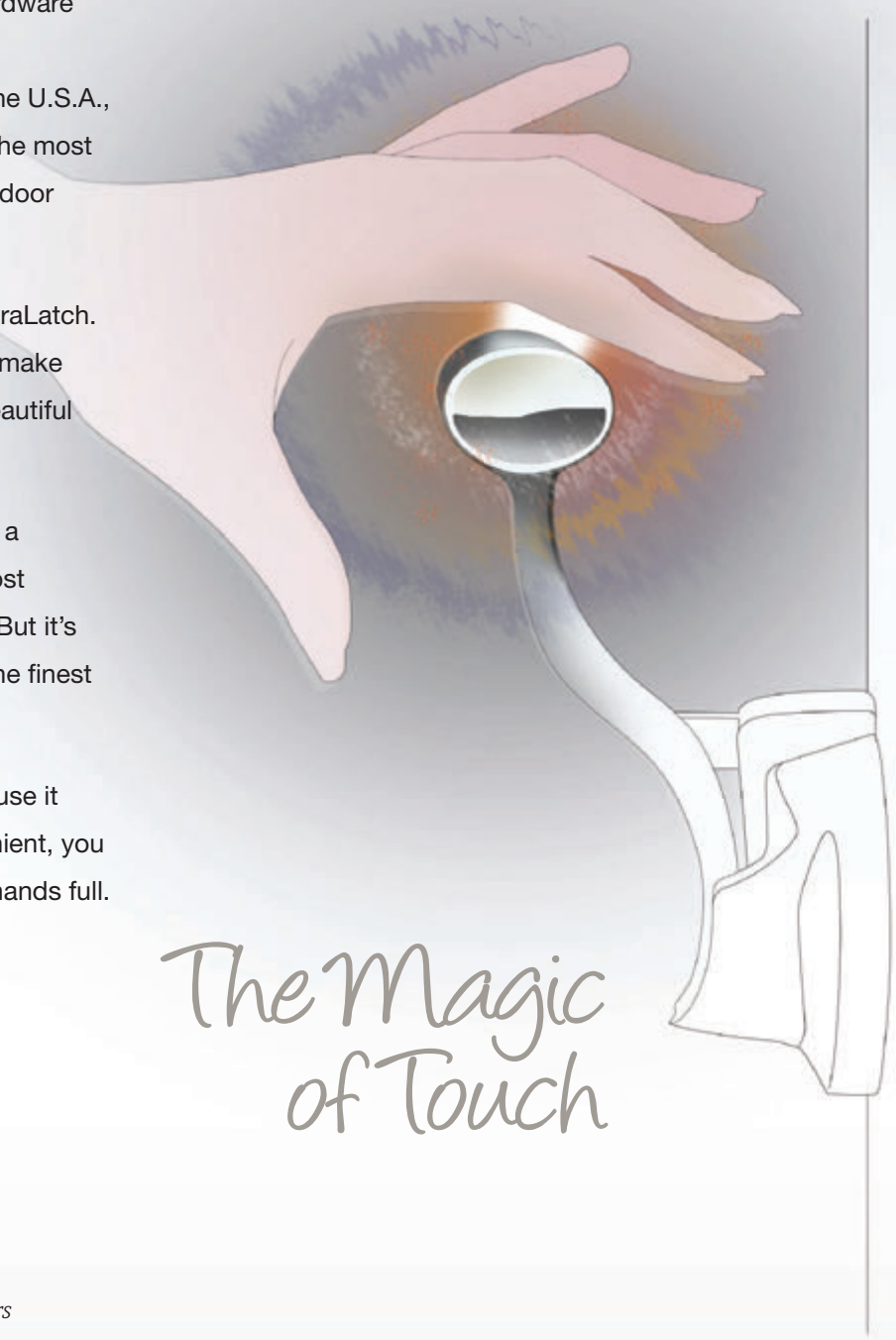
SOSS UltraLatch

The SOSS UltraLatch is the latest addition to the SOSS door hardware line of products. Conceived, engineered and perfected in the U.S.A., UltraLatch's goal is to create the most comfortable and user-friendly door opening device in existence.

Nothing else exists like the UltraLatch. Its flowing lines and solid feel make it a pleasure to use... and a beautiful statement of style.

The elegant UltraLatch makes a bold statement in even the most sophisticated home or office. But it's built for everyday use, using the finest materials and workmanship.

So intuitive, a small child can use it without instruction. So convenient, you can open any door with your hands full.



The Magic of Touch

Intertek

CERTIFIED FIRE-RATING

The SOSS UltraLatch provides confidence to match its convenience, certified for 20-minute fire-rated doors by Intertek's Warnock Hersey, the industry's most widely recognized certification mark.

ANSI GRADE 1

The SOSS UltraLatch has been independently-tested to meet or exceed ANSI Grade 1 specifications.

Specifications

The UltraLatch is:

STRONG... It is made of only top quality materials and constructed in the U.S.A. The base material for the SOSS UltraLatch is available in 316 stainless steel investment cast or zinc die cast.

COMFORTABLE... The UltraLatch is designed to conform to the shape of the hand and allows clearance for your knuckles.

CONVENIENT... Because of the UltraLatch's comfortable shape, opening doors is convenient for anyone. If you cannot grab the UltraLatch with your hand, this revolutionary door hardware works well with your hip or elbow.

FEATURES:

- UltraLatch is available for standard door thicknesses of 1⅜", 1¾" or 2" and metric door thicknesses of 32.5–37 mm, 42–47 mm, or 47–52 mm. Additionally, it is designed for a 2⅜" (60 mm) or 2¾" (70mm) backset.
- You may purchase the Ultralatch with or without a privacy lock, or as a stationary handle, without the internal mechanism.
- Matching keyed deadbolts are also available for further security.
- Limited Lifetime Warranty: SOSS UltraLatch is warranted against defects in material or workmanship. Made in the U.S.A., patented in the United States and other countries.

BENEFITS:

- UltraLatch has been specifically designed to fit the 2⅛" (54 mm) diameter hole that is standard in most doors.
- The handles fit either right or left handed doors. All necessary hardware is packed with each UltraLatch.
- Easy Open: Ergonomic shape and location create the ideal function, eliminating the need to grip or rotate. Push/pull motion is easy for any size hand to operate.
- UltraLatch can be installed as a retrofit to existing doors as well as in new installations.

SPECIFICATIONS:

- ADA compliant
- Latch movement: ½" max— push/pull
- Each handle to have independent spring mechanism designed to control latch.
- Function: Passage / Privacy as listed in hardware sets

APPLICATIONS: Healthcare, Patient Room Doors, Assisted Living Facilities, Disabled Housing, Educational Institutions, Home or Office

ANSI GRADE 1
The SOSS UltraLatch has been independently-tested to meet or exceed ANSI Grade 1 specifications.

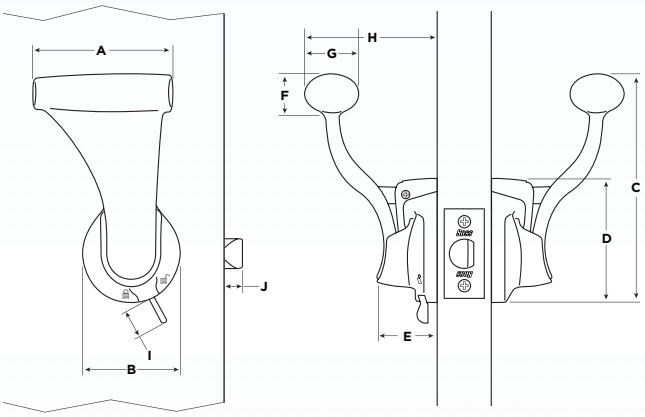
FIRE-RATING
The SOSS UltraLatch has passed a Positive Pressure Fire Test and Hose Stream test for 20-minute fire-rated doors.

HANDLE SHOWN IN OIL RUBBED BRONZE

THE SOSS ULTRALATCH IS AVAILABLE IN 10 DIFFERENT FINISHES:

- BHMA #704 Oil Rubbed Bronze **US10B**
- BHMA #677E Bright Brass, PVD **US3**
- BHMA #681E Bright Nickel, PVD **US14**
- BHMA #678E Satin Brass, PVD **US4**
- BHMA #682E Satin Nickel, PVD **US15**
- BHMA #629 Bright Stainless Steel **US32**
- BHMA #676 Textured Black **US19**
- BHMA #630 Satin Stainless Steel **US32D**
- BHMA #681 Bright Chrome **US26**
- BHMA #682 Satin Chrome **US26D**

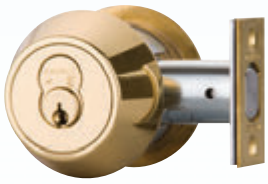
ULTRALATCH DIMENSIONS



Dimension	Inches	MM
A	3 9/16"	90.49 mm
B	4 15/32"	47.62 mm
C	5 25/32"	127 mm
D	3 1/8"	76.20 mm
E	1 1/2"	38.10 mm
F	1 1/16"	26.99 mm
G	1 3/8"	34.93 mm
H	3 3/8"	85.73 mm
I	23/32"	18.26 mm
J	29/64"	11.51 mm

Standard Door Thickness: 1⅜", 1¾" or 2"
Metric Door Thickness: 32.5–37 mm, 42–47 mm or 47–52 mm
Backset: 2⅜" (60 mm) or 2¾" (70 mm)

MATCHING KEYED MEDECO DEADBOLT



AVAILABLE IN THE FOLLOWING FINISHES:

- Oil Rubbed Bronze **US10B**
- Bright Chrome **US26**
- Bright Nickel **US14**
- Satin Chrome **US26D**
- Satin Nickel **US15**
- Bright Brass **US3**
- Black **US19**
- Satin Brass **US4**

How to Order

The UltraLatch can be ordered through any SOSS dealer. Please use the Dealer Locator section of our website to find an authorized dealer.

www.soss.com/ultralatch

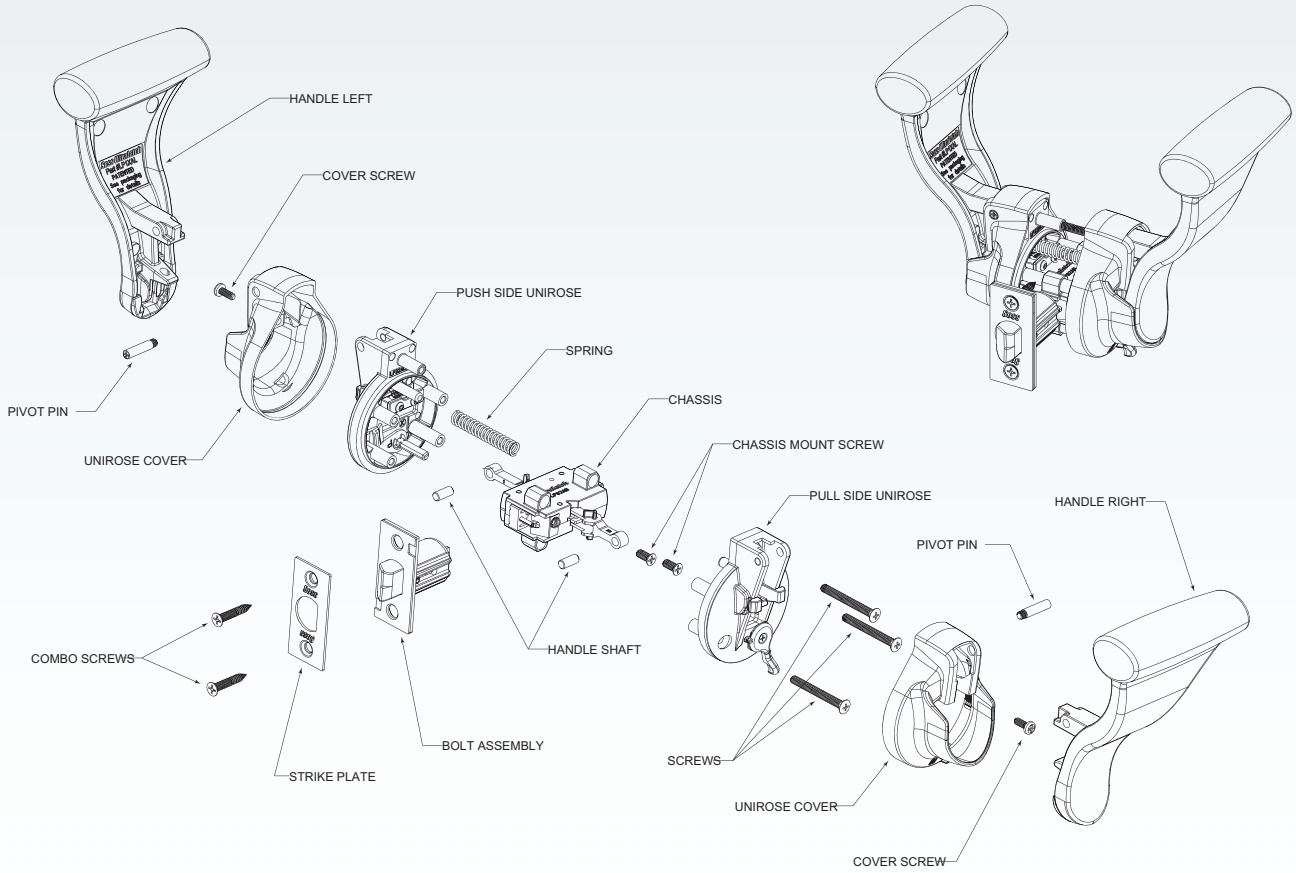
Your SOSS dealer will need the following information to order the correct setup for your UltraLatch:

1. The total quantity of UltraLatches needed.
2. Number required with privacy lock.
3. Finish required—a list of finishes can be found on page 29.
4. The standard door thickness (1⅜", 1¾" or 2") or the metric door thickness (32.5–37 mm, 42–47 mm or 47– 52 mm).
5. The backset: 2⅜" (60 mm) or 2¾" (70 mm).
6. Number of stationary (no internal mechanism) handles needed.
7. Number of deadbolt locks needed.
8. Backset finish required—a list of finishes can be found on page 29.
9. Backset for any deadbolts that are needed.
10. Type of key (keyed alike, keyed different or master key).

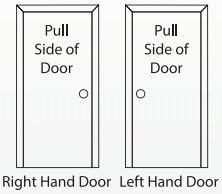
An UltraLatch order form is available on the SOSS Website for your convenience. You may also contact SOSS directly for assistance with ordering.

ULTRALATCH SHOWN IN BRIGHT BRASS

Installation



When you receive your UltraLatch from the factory, it will be ready for installation into a left hand door. Instructions are provided with the UltraLatch for changing the assembly to fit a right hand door.



To determine your door orientation, notice the bore hole location when facing the pull side of the door. If the bore hole is on the right, it's a right hand door and if on the left, it's a left hand door.

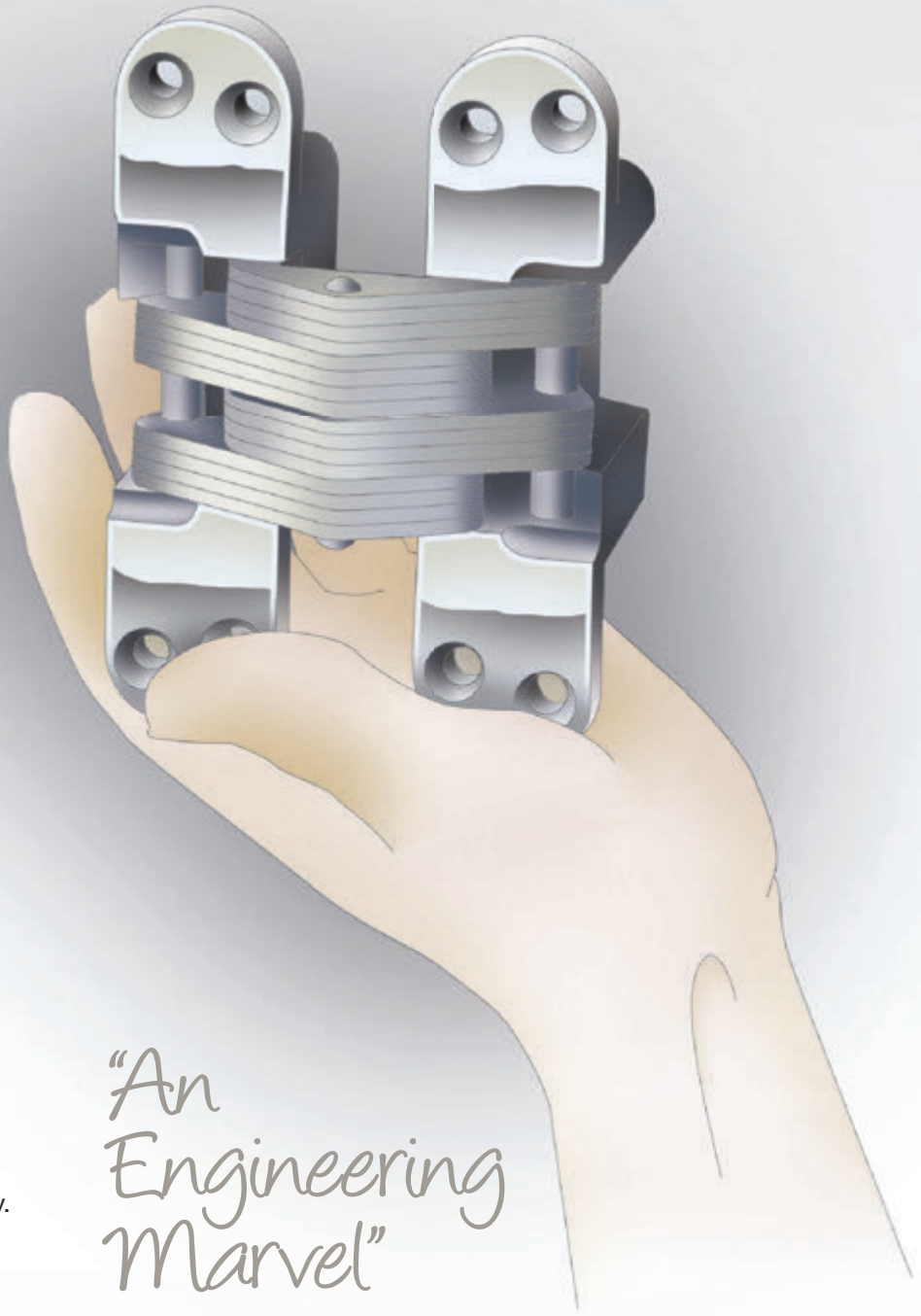
The following tools are required for installing the UltraLatch:

- Flat screwdriver
- Torpedo level
- Adjustable square
- 1" flat wood chisel
- Pencil
- #2 Phillips screwdriver
- Hammer
- Electric drill
- 1/8", 11/64" and 9/32" drill bits
- Small needle nose pliers
- Safety goggles or glasses
- UltraLatch drill guide (Recommended)

ULTRALATCH DRILL GUIDE, PART # LDG

The UltraLatch requires a precisely located screw hole drilled perpendicular to the door face above the face hole. This is why we highly recommend the purchase of the optional UltraLatch drill guide to ensure the proper location of this hole.

SOSS Invisible Hinges



"An Engineering Marvel"

For more than 110 years, SOSS Invisible Hinges have been found in many applications where flush fit, compact size and smooth operation are necessary. They are available in 29 standard sizes, from light duty to heavy duty, fitting nearly any size door imaginable.

SOSS Invisible Hinges are unparalleled in safety and security. The moving pivot point remains inside the hinge during travel, eliminating an external pinch point on the back side of the door. When closed, the SOSS Invisible Hinge cannot be seen or tampered with. When open, the riveted hinge pin is non-removable. This makes our hinge ideal for high security areas such as courtrooms, hospitals or government facilities.

New Product!

Power Transfer Hinge

The new SOSS Power Transfer Hinge gives you the ability to send power through our hinges. Two models, the 218PT and 220PT, are currently available. The 218PT is for doors with a 1¾" thickness and the 220PT is for doors of 2" or more. Both models have been labeled by Underwriters Laboratories for use on hollow metal, sheet metal, tin clad, steel composite or wood core swinging type fire doors and frames with 20-minute ratings.

These hinges are available with either 9" wires on both sides or 4' wires on one side and 1' on the other. Please see chart below.

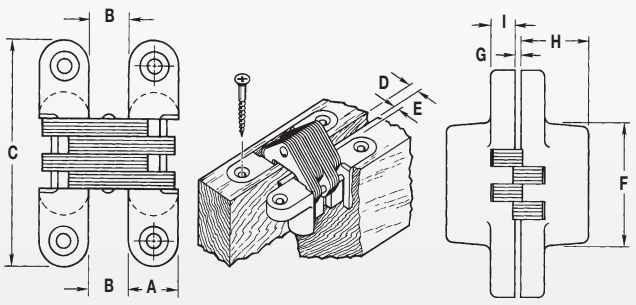
The SOSS Power Transfer Hinges are for use with **four or six** wire applications and **interior use only. Maximum wire rating is one ampere at 20 volts of direct current**. For devices requiring **more than one AMP, do not use** SOSS Power Transfer Hinge. The maximum total current for a four wire hinge is two times the maximum current shown in the electrical ratings chart: two wires in, two wires out of door. The wires are 24 & 26 AWG for both the #218 and #220 PT1 & PT4 hinges. These wires are **not** to be connected to wires larger than 18 AWG wires.

Model 218PT1 and 218PT4			Model 220PT1 and 220PT4		
Dimension	**Inches**	**mm**	**Dimension**	**Inches**	**mm**
A	1⅛"	28.58 mm	A	1⅜"	34.93 mm
B	⅞"	22.23 mm	B	1 1⁄16"	26.99 mm
C	4⅝"	117.48 mm	C	5½"	139.70 mm
D	⅜"	9.53 mm	D	½"	12.70 mm
E	¼"	6.35 mm	E	9⁄32"	7.14 mm
F	2 15⁄32"	11.91 mm	F	2 15⁄16"	74.61 mm
G	1⁄16"	1.59 mm	G	1⁄16"	1.59 mm
H	1 41⁄64"	41.67 mm	H	1 63⁄64"	50.40 mm
I	13⁄32"	10.32 mm	I	15⁄32"	11.91 mm
Min. Mat. Thickness: 1¾" (44.45 mm)			Min. Mat. Thickness: 2" (50.80 mm)		
Wood Screw Size: #10x1½"			Wood Screw Size: #12x1½" (5.5x38 mm)		
Soft Wood Pilot Hole: No. 43			Soft Wood Pilot Hole: No. 38		
Hard Wood Pilot Hole: No. 31			Hard Wood Pilot Hole: No. 25		
Machine Screw Size: #10-24x1"			Machine Screw Size: #12-24x1"		
Hinge Weight: 1.95 lb.			Hinge Weight: 3.24 lb.		

SOSS Power Transfer Hinge Amperage Rating

Model	Wire Length Supplied	Max Amperage @ 20VDC
218PT1	9 in. / 9 in.	1.0 Amps
218PT4	4 ft. / 1 ft.	.4 Amps
220PT1	9 in. / 9 in.	1.0 Amps
220PT4	4 ft. / 1 ft.	.4 Amps

KEY TO DIMENSIONS SHOWN IN CHARTS



All hinges are shipped with the proper size wood screws unless ordered without. **Do not exceed "E" dimension.**

SECURITY UL LISTED

EQUIPMENT
218PT / 220PT
PT101 Installation Instructions
POWER TRANSFER HINGE
S25098

Specifications

SOSS Invisible Hinges are available in 11 standard finishes in addition to bright and satin stainless steel and 24 karat gold plate. SOSS offers finishes to fit any décor.

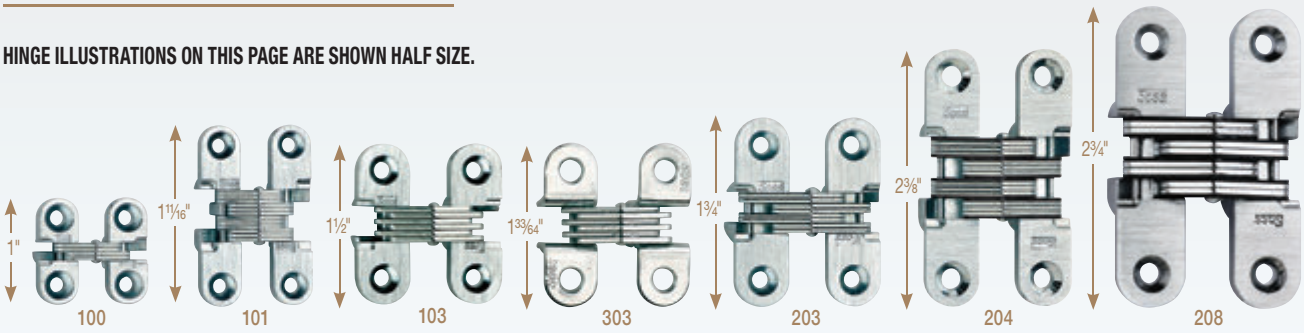
- Unplated **UNP**
- White E-Coated **WHT**
- Oil Rubbed Bronze, Lacquered **US10BL**
- Bright Nickel **US14**
- Satin Nickel **US15**
- Black E-Coated **US19**
- Bright Chrome **US26**
- Satin Chrome **US26D**
- Bright Brass **US3**
- Satin Brass **US4**
- Antique Brass **US5**
- 24 Karat Gold Plate **GOLD** (Special Order Only)
- BHMA #629 **US32** Bright Stainless Steel
- BHMA #630 **US32D** Satin Stainless Steel

The superior construction of the SOSS Invisible Hinges will give you strength and dependable operation for years. Standard hinges are made of high-strength plated steel and heavy-duty zinc alloy castings. A selection of hinges are also made of 316 stainless steel and alloy steel. 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.

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

Specifications

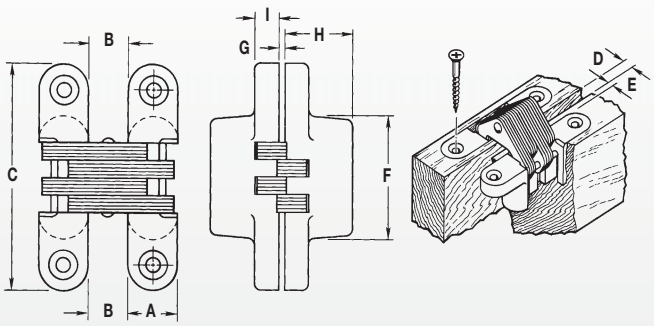
HINGE ILLUSTRATIONS ON THIS PAGE ARE SHOWN HALF SIZE.



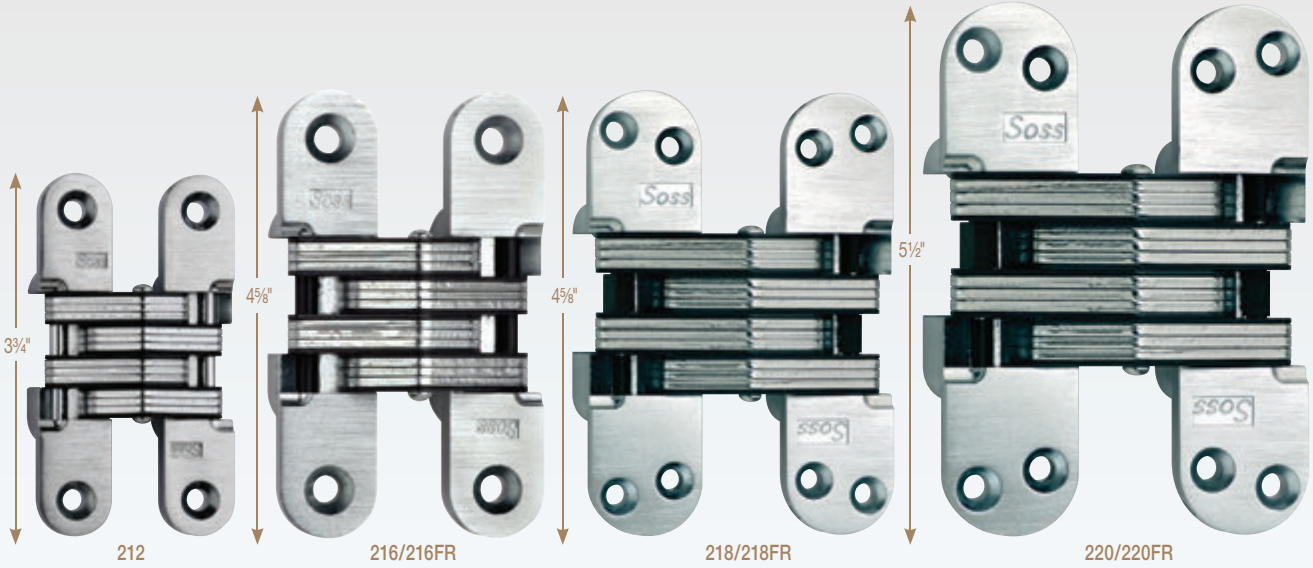
Dimension	100	101	103	303	203	204	208
A	3/8"(9.53mm)	3/8"(9.53mm)	1/2"(12.70mm)	1/2"(12.70mm)	1/2"(12.70mm)	1/2"(12.70mm)	5/8"(15.8mm)
B	9/32"(7.14mm)	19/64"(7.54mm)	3/8"(9.53mm)	3/8"(9.53mm)	23/64"(9.13mm)	23/64"(9.13mm)	29/64"(11.51mm)
C	1"(25.40mm)	1 11/16"(42.86mm)	1 1/2"(38.10mm)	1 33/64"(38.50mm)	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)	11/16"(17.46mm)	19/32"(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)	1/32"(0.79mm)	3/64"(1.19mm)
H	15/32"(11.91mm)	29/64"(11.51mm)	19/32"(15.08mm)	41/64"(16.27mm)	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)
Minimum Material Thickness	1/2"(12.70mm)	1/2"(12.70mm)	3/4"(19.05mm)	11/16"(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 43 for assistance with choosing the right hinge for the job.

KEY TO DIMENSIONS SHOWN IN CHARTS



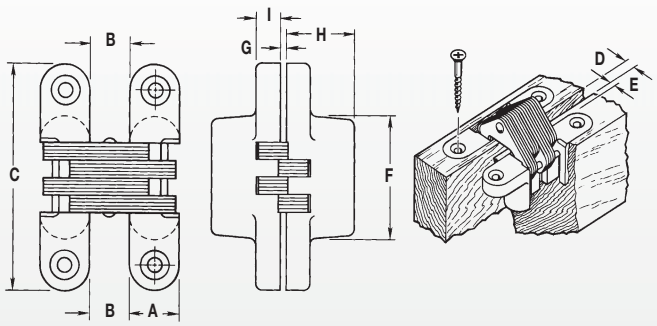
All hinges are shipped with the proper size wood screws unless ordered without. Machine screws available upon request for an additional charge. **Do not exceed "E" dimension.**



Dimension	212	216/216FR	218/218FR	220/220FR
A	¾"(19. 05mm)	1"(25.40mm)	1⅛"(28.58mm)	1⅜"(34.93mm)
B	35/64"(13.89mm)	47/64"(18.65mm)	⅞"(22.23mm)	1 1/16"(26.99mm)
C	3¾"(95.25mm)	4⅝"(117.48mm)	4⅝"(117.48mm)	5½"(139.70mm)
D	11/64"(4.37mm)	15/64"(5.95mm)	⅜"(9.53mm)	½"(12.70mm)
E	3/16"(4.76mm)	¼"(6.35mm)	¼"(6.35mm)	9/32"(7.14mm)
F	2 1/16"(52.39mm)	2 19/32"(65.88mm)	2 15/32"(62.71mm)	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 15/32"(37.31mm)	1 41/64"(41.67mm)	1 63/64"(50.40mm)
I	⅜"(9.53mm)	15/32"(11.91mm)	13/32"(10.32mm)	15/32"(11.91mm)
Minimum Material Thickness	1⅛"(28.58mm)	1⅜"(34.93mm)	1¾"(44.45mm)	2"(50.80mm)
Wood Screw Sizes	#10x1¼"(4.8x32mm)	#14x1½"(6.3x38mm)	#10x1½"(4.8x38mm)	#12x1½"(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	#10-24x¾"	#¼-20x1"	#10-24x1"	#12-24x1"
Hinge Weight	.75 lb.	1.65 lb.	1.86 lb.	3.15 lb.

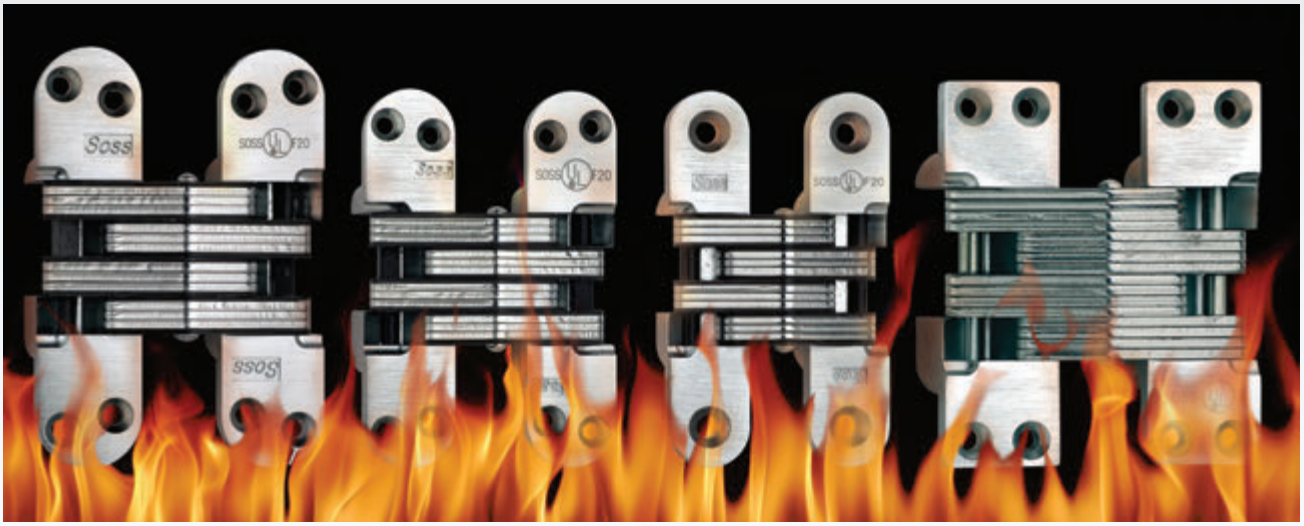
NOTE: Refer to page 43 for assistance with choosing the right hinge for the job.
Refer to page 38 for fire-rated information.

KEY TO DIMENSIONS SHOWN IN CHARTS



All hinges are shipped with the proper size wood screws unless ordered without. Machine screws available upon request for an additional charge.
Do not exceed "E" dimension.

Fire-rated



SOSS offers a complete line of fire-rated invisible hinges. Whether your doorway is made of wood or metal, rated 20 minutes or three hours, there is a SOSS fire-rated hinge that will comply and still give you the "uniquely invisible" hinge that you expect from SOSS.

SOSS Invisible Hinge models #418, #418SS, #220AS, #220SS, #420 and #420SS are classified in accordance with Underwriters Laboratories test standards UL10C and UBC7-2(1997).

The chart below lists the SOSS Invisible Hinges that are currently available for fire-rating.

420 and 420SS
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 **three 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.

416, 416SS, 418, 418SS, 220AS and 220SS
The Underwriters Laboratories labeled 416, 416SS, 418, 418SS, 220AS and 220SS 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 **three 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 constructed with Georgia Pacific FS I or FS II 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.

216FR, 218FR, 220FR, 218PT1, 218PT4, 220PT1 and 220PT4
The Underwriters Laboratories labeled 216FR, 218FR, 220FR, 218PT1, 218PT4, 220PT1 and 220PT4 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.

Special door and jamb preparation may be required for all fire-rated hinges.

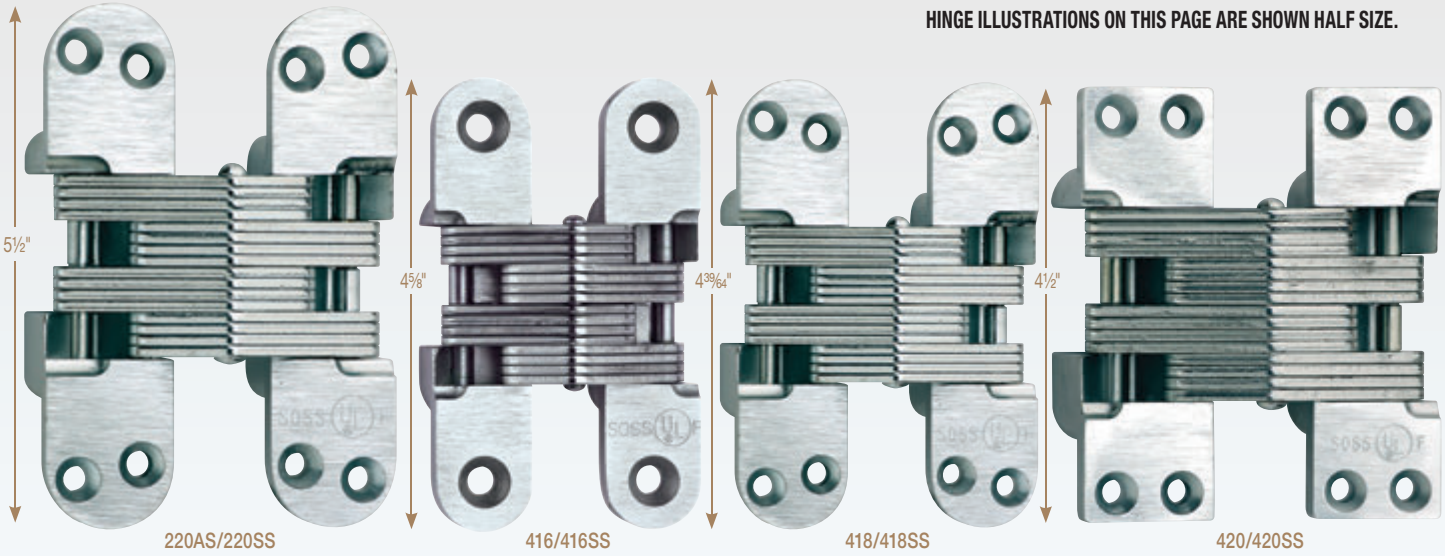
NOTE: SOSS Invisible Hinge product specifications available on request.

Never exceed maximum door size of 4' wide by 8' tall for fire-rated doors only.

Hinge No.	Description	Door Material	Rating (Mins.)	Min Door Thickness
216FR	#216 hinge with UL Rating	wood/metal	20	1⅜"
218FR	#218 hinge with UL Rating	wood/metal	20	1¾"
220FR	#220 hinge with UL Rating	wood/metal	20	2"
218PT1	#218, 1 amp power transfer hinge with UL Rating	wood/metal	20	1¾"
218PT4	#218, 4 amp power transfer hinge with UL Rating	wood/metal	20	1¾"
220PT1	#220, 1 amp power transfer hinge with UL Rating	wood/metal	20	2"
220PT4	#220, 4 amp power transfer hinge with UL Rating	wood/metal	20	2"
416	Similar to #216, but made of alloy steel	wood/metal	90/180*	1⅜"
416SS	Similar to #216, but made of stainless steel	wood/metal	90/180*	1⅜"
418	Similar to #218, but made of alloy steel	wood/metal	90/180*	1¾"
418SS	Similar to #218, but made of stainless steel	wood/metal	90/180*	1¾"
220AS	Similar to #220, but made of alloy steel	wood/metal	90/180*	2"
220SS	Similar to #220, but made of stainless steel	wood/metal	90/180*	2"
420	UL rated hinge for metal made of alloy steel	metal	180	2"
420SS	UL rated hinge for metal made of stainless steel	metal	180	2"

* The #416, #416SS, #418, #418SS, #220AS, and #220SS SOSS Hinges are used on 90 minute wood faced doors constructed to Georgia Pacific Specifications utilizing 2" No. 14, No.10 and No. 12 screws respectively; the door style (hinge side) must be a minimum of 2¼" wide.

HINGE ILLUSTRATIONS ON THIS PAGE ARE SHOWN HALF SIZE.

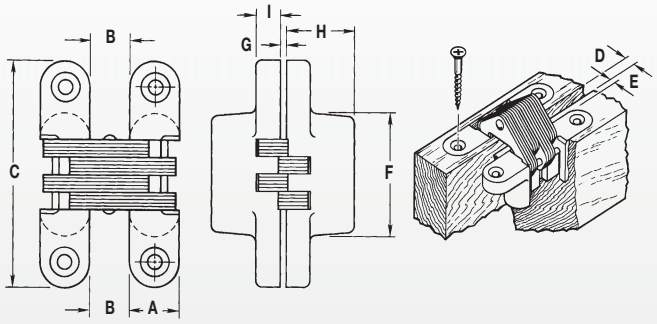


Fire-Rated Applications for Metal or Wood

Dimension	220AS/220SS	416/416SS	418/418SS	420/420SS
A	1⅜" (34.93mm)	1" (25.40mm)	1⅛" (28.58mm)	1⅜" (34.93mm)
B	1⅛" (26.99mm)	⁴⁷⁄₆₄" (18.65mm)	⁵⁵⁄₆₄" (21.83mm)	1⅜" (26.59mm)
C	5½" (139.70mm)	4⅝" (117.48mm)	4³⁹⁄₆₄" (117.08mm)	4½" (114.30mm)
D	½" (12.70mm)	¹⁵⁄₆₄" (5.95mm)	²³⁄₆₄" (9.13mm)	³¹⁄₆₄" (12.30mm)
E	⁹⁄₃₂" (7.14mm)	¼" (6.35mm)	¼" (6.35mm)	⁹⁄₃₂" (7.15mm)
F	2³¹⁄₃₂" (75.41mm)	2³⁹⁄₆₄" (66.28mm)	2⁷⁄₁₆" (61.91mm)	2¹⁵⁄₁₆" (74.62mm)
G	³⁄₃₂" (2.38mm)	¹⁄₁₆" (1.59mm)	¹⁄₁₆" (1.59mm)	³⁄₃₂" (2.38mm)
H	1⁶³⁄₆₄" (50.40mm)	1¹⁵⁄₃₂" (37.31mm)	1⁴¹⁄₆₄" (41.67mm)	1³¹⁄₃₂" (50.01mm)
I	¹⁵⁄₃₂" (11.91mm)	¹⁵⁄₃₂" (11.91mm)	¹³⁄₃₂" (10.32mm)	¹⁵⁄₃₂" (11.91mm)
Min. Mat. Thickness	2" (50.80mm)	1⅜" (34.93mm)	1¾" (44.45mm)	2" (50.80mm)
Wood Screw Sizes	#12x2½"	#14x2½"	#10x2½"	N/A
Soft Wood Pilot Hole	No. 38	No. 32	No. 43	N/A
Hard Wood Pilot Hole	No. 25	No. 10	No. 31	N/A
Machine Screw Sizes	#12-24x1"	#¼-20x1"	#10-24x¾"	#12-24x1"
Hinge Weight	3.80 lbs.	1.92 lbs.	2.15 lbs.	3.44 lbs.

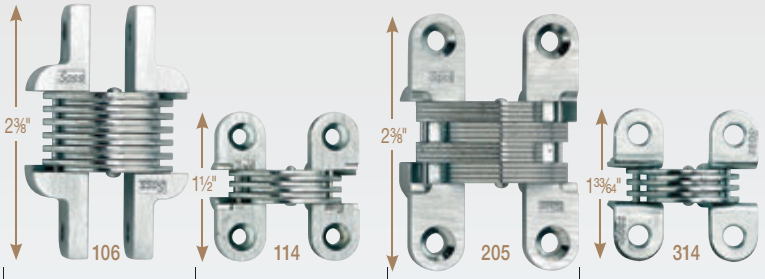
NOTE: Refer to page 38 for selecting the right hinge for fire-rated applications.

KEY TO DIMENSIONS SHOWN IN CHARTS



All hinges are shipped with the proper size wood screws unless ordered without. Machine screws available upon request for an additional charge.
Do not exceed "E" dimension.

Metal Cabinet Applications



HINGES ARE SHOWN HALF SIZE.

An assortment of specially modified SOSS Invisible Hinges are 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

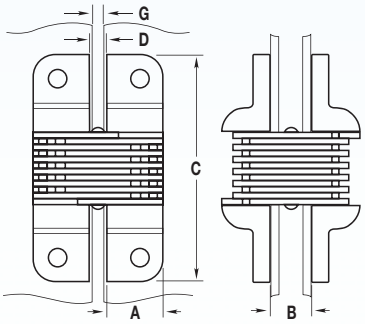
Hinges 114, 205 and 314 are designed for easy installation in metal cabinets. A typical installation is shown in adjacent drawings. Hinge is shown in the open and closed position.

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

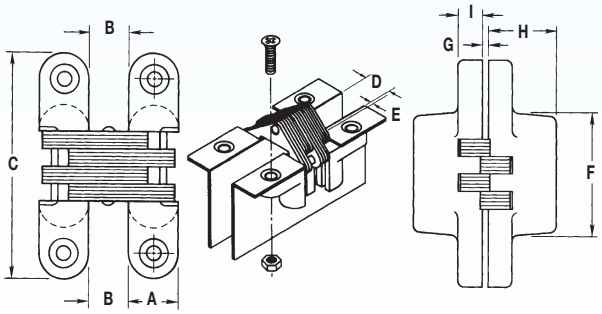
Model 106:
Mounts on BACK of door and frame and requires no mortise. Hinge is visible from the back, maximum door thickness is 5/64".

Dimension	106	114	205	314
A	19⁄32"(15.08mm)	½"(12.70mm)	½"(12.70mm)	½"(12.70mm)
B	7⁄16"(11.11mm)	29⁄64"(11.51mm)	37⁄64"(14.68mm)	29⁄64"(11.51mm)
C	2⅜"(60.33mm)	1½"(38.10mm)	2⅜"(60.33mm)	1 33⁄64"(38.50mm)
D	13⁄64"(5.16mm)	13⁄64"(5.16mm)	21⁄64"(8.33mm)	13⁄64"(5.16mm)
E	N/A	⅛"(3.18mm)	⅛"(3.18mm)	⅛"(3.18mm)
F	N/A	1 1⁄16"(17.46mm)	1¼"(31.75mm)	19⁄32"(15.08mm)
G	19⁄32"(15.08mm)	3⁄32"(2.38mm)	15⁄64"(5.95mm)	3⁄32"(2.38mm)
H	N/A	19⁄32"(15.08mm)	23⁄32"(18.26mm)	41⁄64"(16.27mm)
I	N/A	7⁄32"(5.56mm)	¼"(6.35mm)	1⁄16"(1.59mm)
Min. Matl. Thickness	N/A	N/A	N/A	N/A
Machine Screw Sizes	????	#6-40x½"	#8-32x⅝"	#5-40x½"
Hinge Weight	.18 lb.	.10 lb.	.22 lb.	.06 lb.

KEY TO DIMENSIONS FOR FOR 106 HINGE ONLY



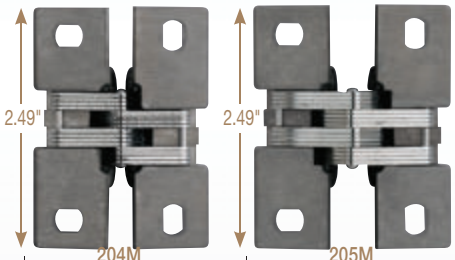
KEY TO DIMENSIONS SHOWN IN CHARTS



All metal cabinet hinges are shipped without screws unless otherwise specified.
Do not exceed "E" dimension.

Metal Applications

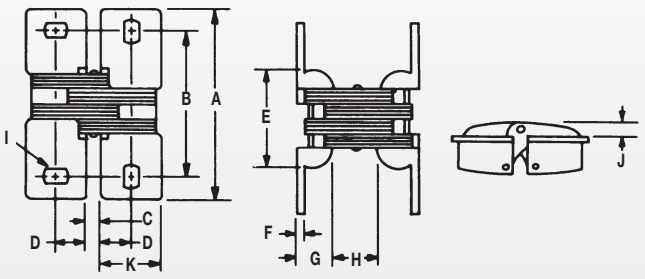
Special Applications



HINGES 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.

KEY TO DIMENSIONS SHOWN IN CHARTS

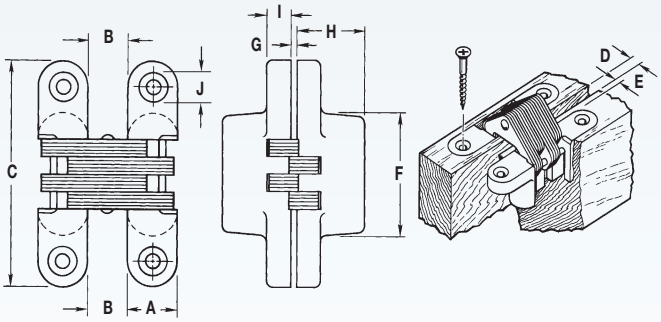


Modifications Are Available!

HINGES AT RIGHT ARE SHOWN HALF SIZE.

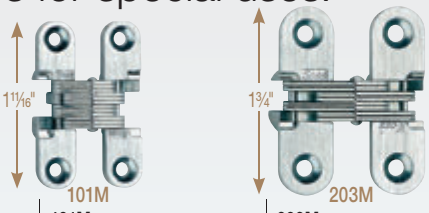
For special applications, unusual sizes and weights, engineering and design assistance is available free of charge. Please consult the SOSS Home Office.

KEY TO DIMENSIONS SHOWN IN CHARTS



All hinges are shipped with the proper size wood screws unless ordered without. **Do not exceed "E" dimension.**

We have modified the screw hole sizes for special uses.



Dimension	101M	203M
A	3/8"(9.53mm)	1/2"(12.70mm)
B	19/64"(7.54mm)	23/64"(9.13mm)
C	1 11/16"(42.86mm)	1 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)
J	.150"(w/.281" Countersink)	.230"(w/3/8" dia. x .09" Deep C'Bore)
Min. Mat. Thickness	1/2"(12.70mm)	3/4"(19.05mm)

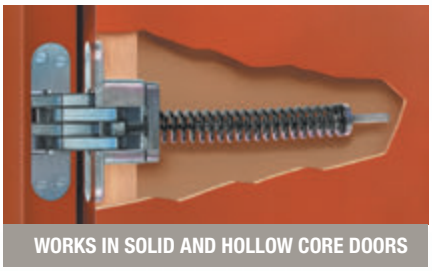
Counterboring available by special request.

Invisible Spring Hinge Closer

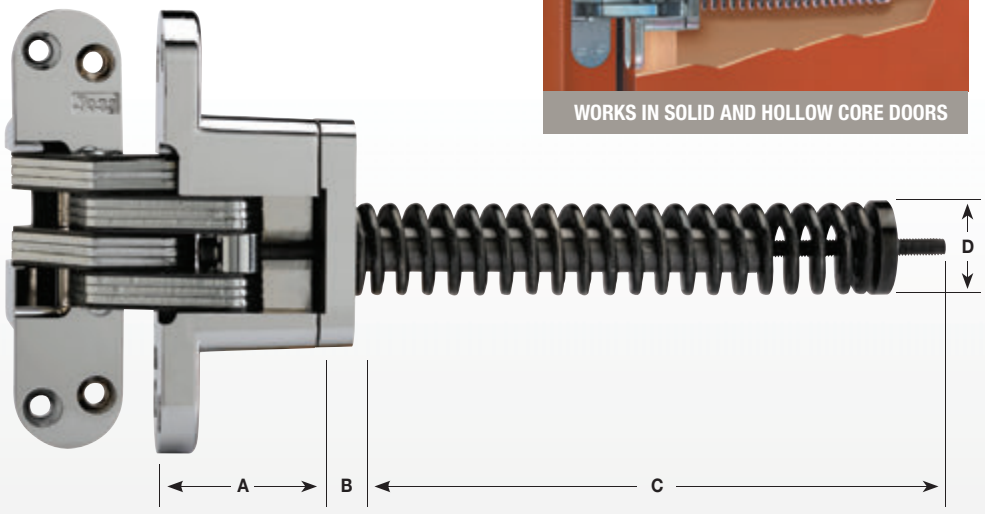
The SOSS Invisible Spring Closer gives you a spring closer that is totally invisible from either side when the door is closed. When the door is open, you see only the hinge face and links.

The closure rate is completely adjustable with an Allen wrench after installation. Installation can be either inside the door itself or inside the door jamb. Allow one spring closer for each 75 lbs. of door weight. See sizing chart for number of hinges required.

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.



WORKS IN SOLID AND HOLLOW CORE DOORS



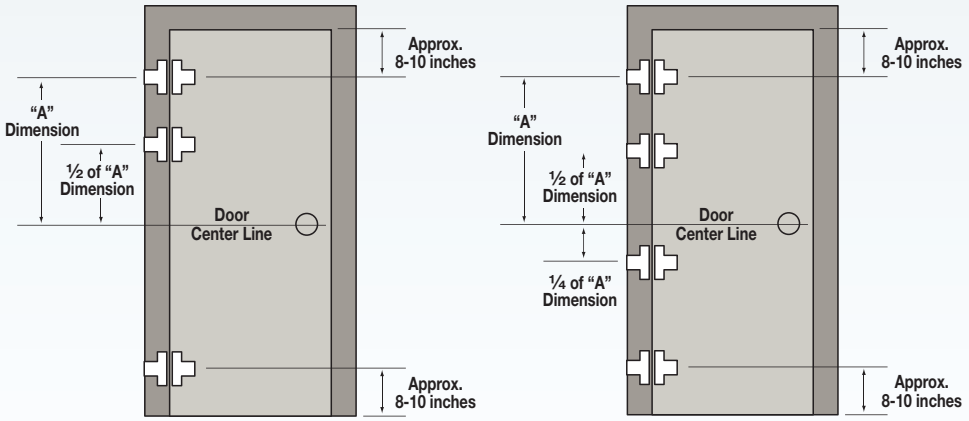
Door Thickness	Spring Closer #	Description	A	B	C	D
1 3/8"	216IC	Spring Closer with regular hinge	1 15/32"	3/8"	6 5/16"	3/4"
1 3/4"	218IC	Spring Closer with regular hinge	1 41/64"	3/8"	7"	1"
2"	220IC	Spring Closer with regular hinge	1 63/64"	3/8"	6 7/8"	1"

Installation Information

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.

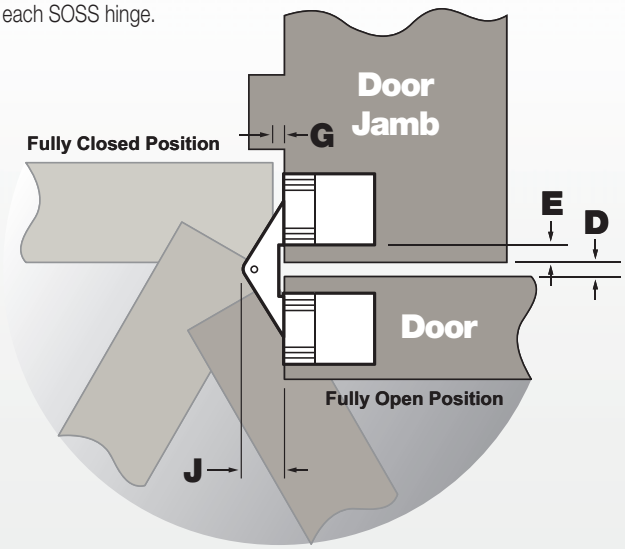
On installations requiring four SOSS Invisible Hinges, the second hinge from the top should be located one-half the distance from the door's horizontal center line to the center line of the top hinge. The third hinge from the top should be located one-quarter of the "A" dimension below the horizontal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



NOTE: For spacing information beyond what is shown, visit 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.



	Dimensions							
	E		D		G		J	
Hinge No.	Inch	mm	Inch	mm	Inch	mm	Inch	mm
101	3/32	2.4	7/64	2.78	1/32	0.8	11/64	4.37
103	1/8	3.2	1/8	3.18	1/32	0.8	7/32	5.56
303	1/8	3.2	1/8	3.18	1/32	0.8	15/64	5.95
314	1/8	3.18	13/64	5.16	3/32	2.4	1/4	6.35
203	1/8	3.2	7/64	2.78	1/32	0.8	15/64	5.95
204	1/8	3.2	7/64	2.78	1/32	0.79	15/64	5.95
208	5/32	4.0	9/64	3.57	3/64	1.2	5/16	7.94
212	3/16	4.8	11/64	4.37	3/64	1.2	3/8	9.53
216	1/4	6.4	15/64	5.95	1/16	1.6	33/64	13.10
218	1/4	6.4	3/8	9.53	1/16	1.2	1/2	12.70
220	9/32	7.1	1/2	12.7	1/16	1.6	39/64	15.48

Choosing the Right Hinge and the Right Number of Hinges

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 not on the chart, consult the factory.

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

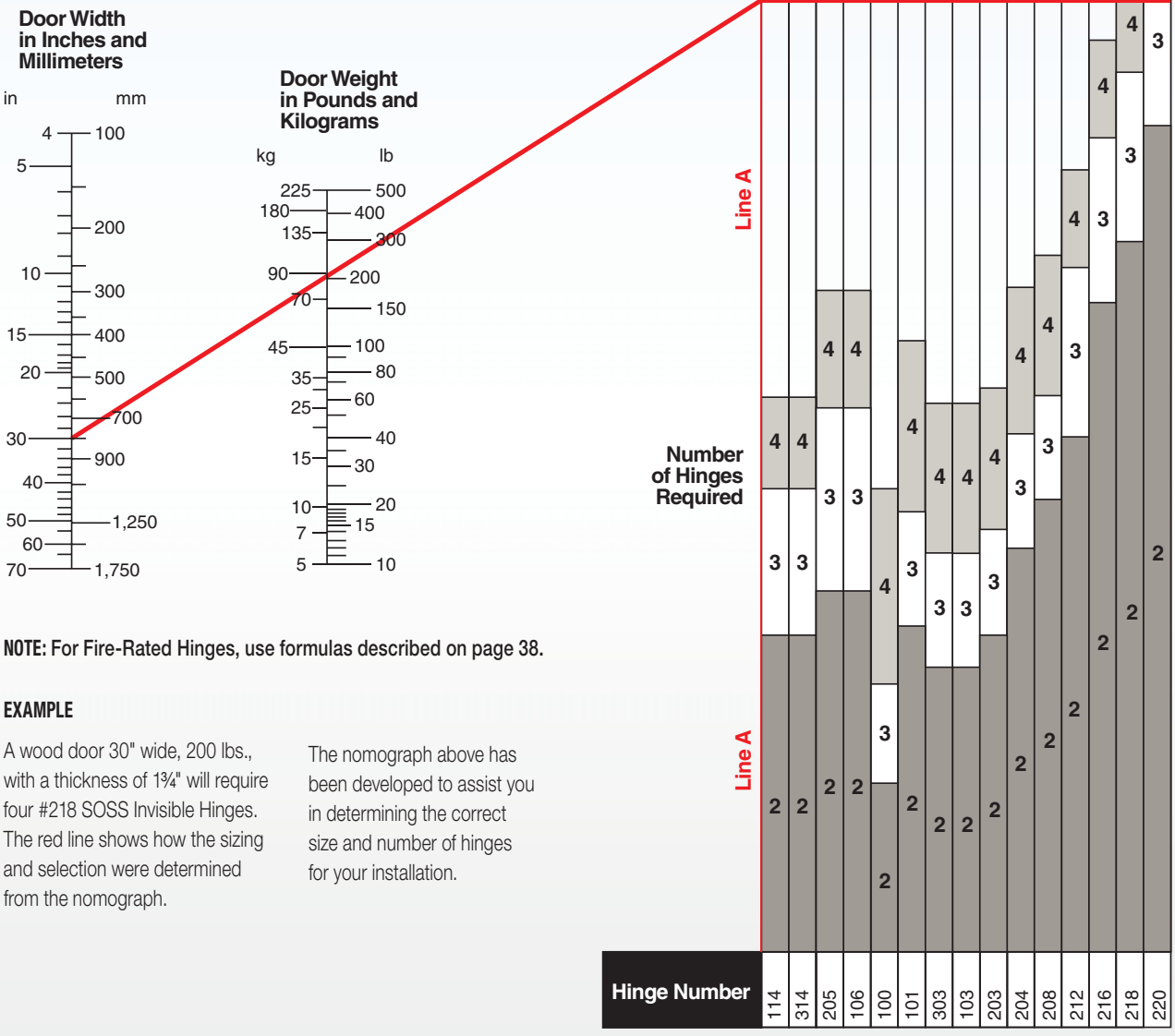
Every door should be provided with at least one hinge for every 30 inches in height or portion thereof; however, more hinges may be required per chart below.

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

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.



NOTE: For Fire-Rated Hinges, use formulas described on page 38.

EXAMPLE

A wood door 30" wide, 200 lbs., with a thickness of 1¾" will require four #218 SOSS Invisible Hinges. The red line shows how the sizing and selection were determined from the nomograph.

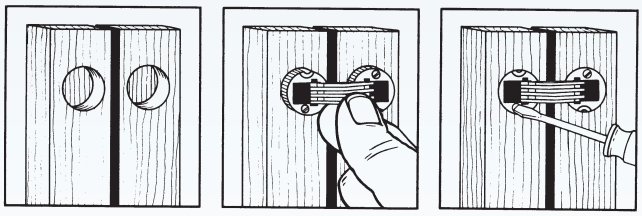
The nomograph above has been developed to assist you in determining the correct size and number of hinges for your installation.

Barrel Hinge

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

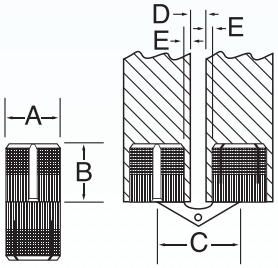
SOSS Invisible Barrel Hinges are made of solid brass with brass links. They are easily installed. Just drill to the proper size and insert the hinge. SOSS Invisible Barrel Hinges are totally invisible from either side when the door is closed.

Hinge BH104 used in solid wood flybox manufactured by Southern Heritage Craftsmen, 843-342-5393.



EASILY INSTALLED

Secure mounting in wooden door or panel is assured by tightening the tensioning screw on all models except BH085. It is held in place with #2 screws supplied with each hinge. On all other models to accommodate more demanding weight applications, the cylinders can be additionally secured by installing a chipboard or wood screw in the groove on the exposed end.



Part #	Min. Door Thickness	Drill Bit (mm)	Drill Bit (in.)	Dimensions (mm) A	B	C	D min.	E max.	Wood Screw
BH085	7⁄16"	8 mm	Letter "O"	8.18	9.9	11.6	1.9	0.8	#3x3⁄8"
BH104	1⁄2"	10 mm	25⁄64"	10	11.5	15.7	2	1.8	#3x3⁄8"
BH124	5⁄8"	12 mm	15⁄32"	12	13.3	19	2.7	2.1	#4x1⁄2"
BH144	3⁄4"	14 mm	35⁄64"	14	15.5	23	3	3	#6x1⁄2"
BH164	7⁄8"	16 mm	5⁄8"	16	16.5	23.5	3	2.3	#6x5⁄8"
BH184	1 1⁄8"	18 mm	45⁄64"	18	18	27	3	3	#6x3⁄4"
BH244	1 1⁄4"	24 mm	15⁄16"	24	24.9	35.1	4.1	3.5	#10x1 1⁄4"

If desired, a customer-supplied secondary screw may be installed in the groove that is 180 degrees from the tensioning screw; this is optional and not supplied with the hinges.

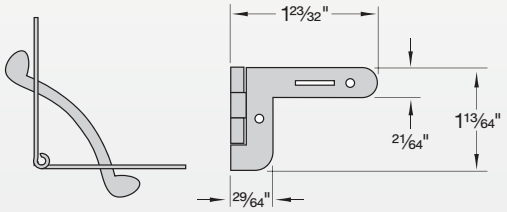
Quadrant Hinge

Constructed of stainless steel, 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.

Part #	Description
QH6	Quadrant Hinge, Bright Gold on Stainless Steel
QH7	Quadrant Hinge, Bright Brass on Stainless Steel

Packaged two per bag, #2x3⁄8" flat head Phillips wood screws included.



Magnetic Door Holder & Stop

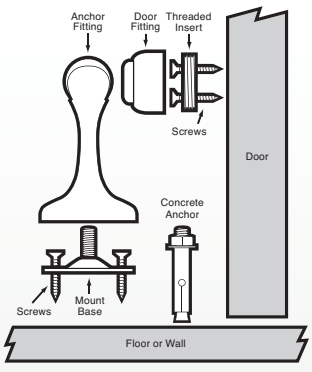
Sturdy, practical and easy to install, SOSS Magnetic Door Holder and Stop holds doors open even in a heavy wind.

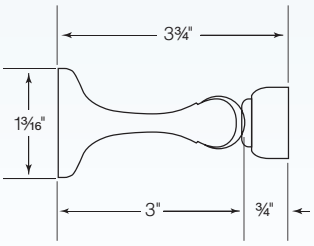
Mount either vertically to the floor or horizontally to baseboard or wall.

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

EIGHT FINISHES AVAILABLE:
Oil Rubbed Bronze, Antique Bronze, Satin Nickel, Black Powdercoat, Satin Chrome, Bright Chrome, Bright Gold and White Powdercoat.

Part #	Finish Description
MDHBUS10B-HS	Oil Rubbed Bronze
MDHBUS10-HS	Antique Bronze
MDHBUS15-HS	Satin Nickel
MDHBUS19-HS	Black Powdercoat
MDHBUS26D-HS	Satin Chrome
MDHBUS26-HS	Bright Chrome
MDHBUS3-HS	Bright Gold
MDHBWH-HS	White Powdercoat





DIMENSIONS

Overall Length	3¾"
Main Stem Length	3"
Base Length	¾"
Base Diameter	1³⁄₁₆"

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

Three plastic anchors, five #7-1" screws and one ¼x20x1¹³⁄₁₆" concrete anchor are included.

Router Guide Templates & Template System

ROUTER GUIDE TEMPLATES

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.

Hinge Model	Router Bit Size	Router Guide Template #
#101	¼"	101IT
#103	⅜"	103IT
#203	⅜"	203IT
#204	⅜"	204IT
#208	⅜"	208IT
#212	⅜"	212IT
#216	½"	216IT
#218	½"	218IT
#220	½"	220IT
#416	½"	416IT
#418	½"	418IT

ROUTER GUIDE SYSTEM EASILY APPLIED TO DOOR AND 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.

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.

Three-Piece Router Guide System	For Hinge#
212RG3	#212
216RG3	#216 and #416
218RG3	#218 and #418
220RG3	#220
Four-Piece Router Guide System	**For Hinge#**
212RG4	#212
216RG4	#216 and #416
218RG4	#218 and #418
220RG4	#220

Router Bits

SOSS Door Hardware now has available Amana Tool Router Bits to be used with each of our router guides. These router bits are manufactured with the highest quality materials, so you can expect the same great quality from Amana Tool that SOSS Door Hardware has been providing for over 100 years.

Recommended Amana Tool® Router Bits

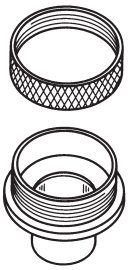
SOSS Router Guide #	Router Bit Part Number
101IT	43828
103IT	46259S
203IT	46259S
204IT	46259S
208IT	46259S
212IT	46259S
216IT	51310
218IT	51310
220IT	51310
416IT	51310
418IT	51310

Router Guide Bushing & Lock Nut

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. ¾"; distance past base 9⁄16"; locknut fits bushing.

Fits most routers.



Steel Door Reinforcements

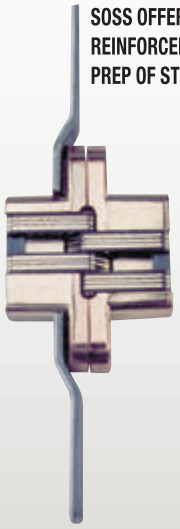
Save time and expense by using these all-steel reinforcements that are ready to weld into place. Reinforcements are available for the SOSS hinges #216, #218, #220, #416 and #418.

Hinge reinforcement drawings are available. Contact the SOSS office for further information.

U.I.P. #	Description	Hinge
216SDB	Steel, Two Pieces Per Side	216, 416
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.

SOSS OFFERS READY-MADE REINFORCEMENTS FOR EASY PREP OF STEEL DOORS.



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Falling Waters House	*Mill Run, PA*
The Rosewood Georgia Hotel	*Vancouver, BC*
The Aria Hotel	*Las Vegas, NV*
Pelican Hills Resort	*Newport Beach, CA*
The Presidential Palace	*Mexico City, Mexico*
Weston Riverfront Resort	*Avon, CO*
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The Hilton Waikolola Village Island	*Big Island of Hawaii*
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SOSS®

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