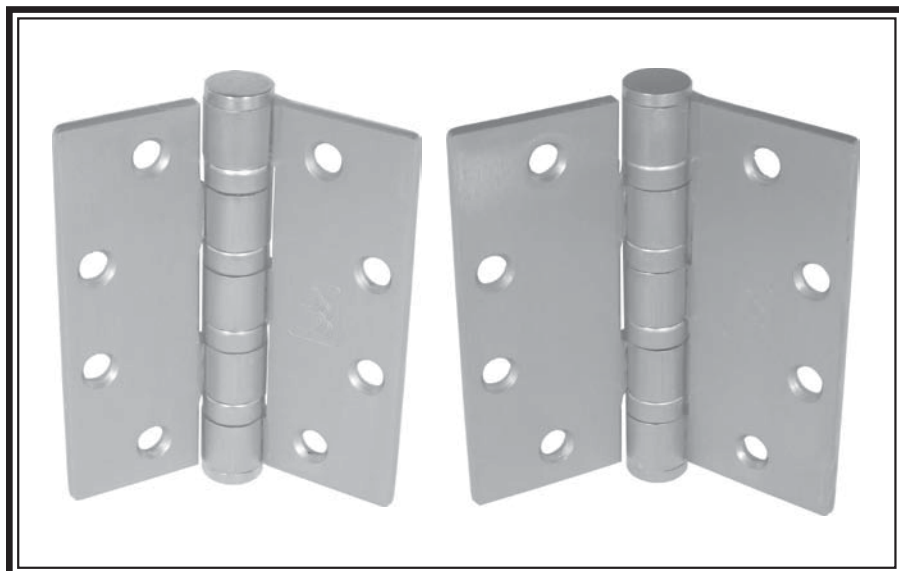




**FULL MORTISE TEMPLATE BALL BEARING**

**HEAVY WEIGHT**  
**4 1/2" x 4" 4 1/2" x 4 1/2"**

**B19**



**4B81 (ANSI A8111)**  
**Steel**-Polished and Plated or Bonderized and Prime Coated for Painting.

**4B21 (ANSI A2111)**  
**Brass**-Polished and Plated

**4B51 (ANSI A5111)**  
**Stainless Steel**-Polished and Satin Finish

- For heavy weight doors receiving high frequency service.
- Ball bearing hinges must be used on doors in conjunction with door closers and on all fire rated openings.
- For hospital type, add HT to suffix of part number.
- All hinges are ANSI template.

**GENERAL PRODUCT INFORMATION:** PBB, Inc. template hinges are manufactured to close tolerances and meet all specifications and requirements set by the American National Standards Institute (ANSI).

**HINGE SWAGING:** A standard swaging of our standard weight full mortise hinge when closed to parallel position provides a 1/16" clearance between leaves.

**OTHER SPECIFICATIONS:**

Height of hinge:  
 4.50 + .000 for 4-1/2" x 4"  
           - .015  
 4.50 + .000 for 4 1/2" x 4-1/2"  
           - .015

Width:  
 4.00 ± .015 for 4-1/2" x 4"  
 4.50 ± .015 for 4-1/2" x 4-1/2"

**MATERIAL GAUGE:**

.180 ± .005 for 4-1/2" x 4"  
 .180 ± .005 for 4-1/2" x 4-1/2"

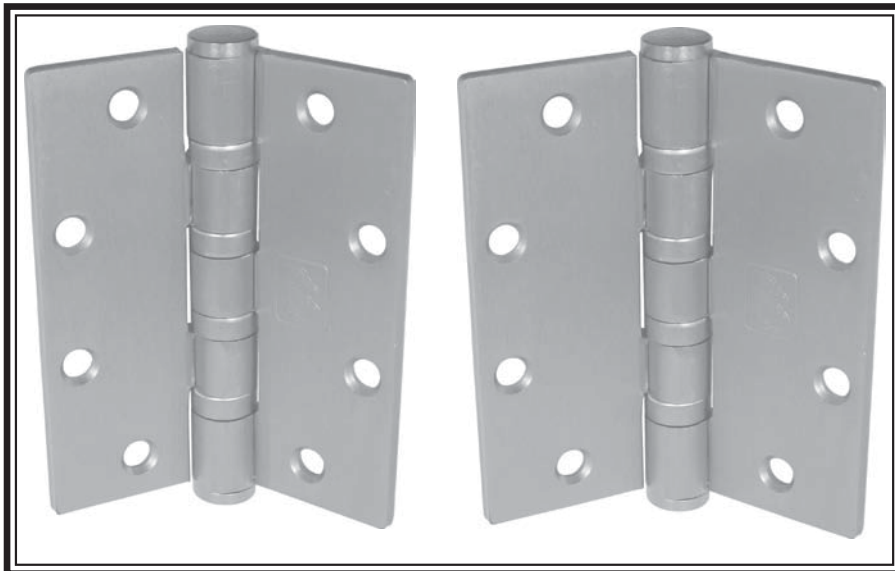
4-1/2" STANDARD SCREW SIZE
FHMS - 12-24 x 1/2" FHWS - 12 x 1-1/4"



**FULL MORTISE TEMPLATE BALL BEARING**

**B20**

**HEAVY WEIGHT**  
**5" x 4" 5" x 4 1/2" 5" x 5"**



**4B81 (ANSI A8111)**  
**Steel**-Polished and Plated or Bonderized and Prime Coated for Painting.

**4B21 (ANSI A2111)**  
**Brass**-Polished and Plated

**4B51 (ANSI A5111)**  
**Stainless Steel**-Polished and Satin Finish

- Recommended for over 3'4" width doors and having a thickness of 2" or more.
- For heavy weight doors receiving high frequency service.
- Ball bearing hinges must be used on doors in conjunction with door closers and on all fire rated openings.
- For hospital type, add HT to suffix of part number.
- All hinges are ANSI template.

**GENERAL PRODUCT INFORMATION:** PBB, Inc. template hinges are manufactured to close tolerances and meet all specifications and requirements set by the American National Standards Institute (ANSI).

**HINGE SWAGING:** A standard swaging of our standard weight full mortise hinge when closed to parallel position provides a 1/16" clearance between leaves.

**MATERIAL GAUGE:**  
.190 ± .005 for 5" x 4"  
.190 ± .005 for 5" x 4-1/2"  
.190 ± .005 for 5" x 5"

**OTHER SPECIFICATIONS:**

Height of hinge:  
5.00 + .000 for 5" x 4"  
          - .015  
5.00 + .000 for 5" x 4-1/2"  
          - .015  
5.00 + .000 for 5" x 5"  
          - .015

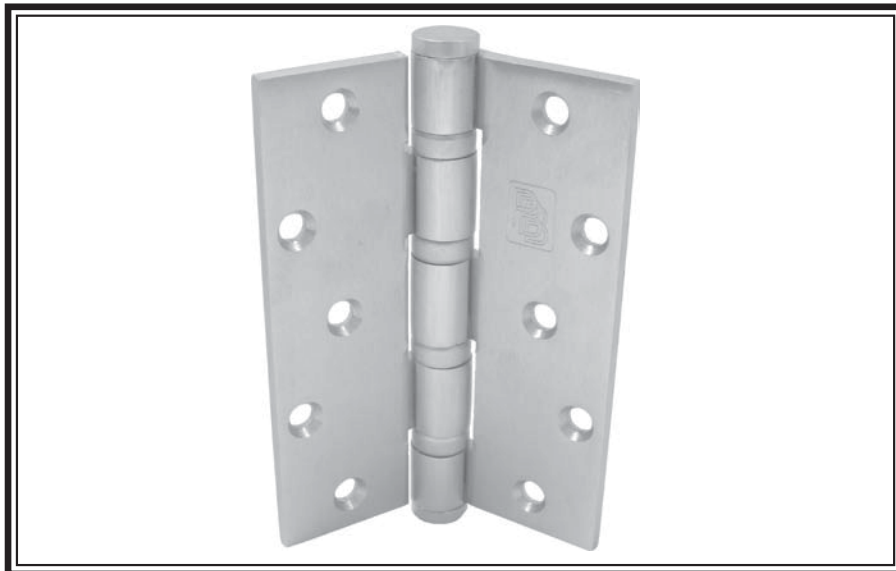
Width:  
4.00 ± .015 for 5" x 4"  
4.50 ± .015 for 5" x 4-1/2"  
5.00 ± .015 for 5" x 5"

5" STANDARD SCREW SIZE
FHMS - 12-24 x 1/2" FHWS - 12 x 1-1/2"



**FULL MORTISE TEMPLATE BALL BEARING**

**HEAVY WEIGHT**  
**6" x 4 1/2" 6" x 5" 6" x 6" B21**



**4B81 (ANSI A8111)**  
**Steel**-Polished and Plated or Bonderized and Prime Coated for Painting.

**4B21 (ANSI A2111)**  
**Brass**-Polished and Plated

**4B51 (ANSI A5111)**  
**Stainless Steel**-Polished and Satin Finish

- Recommended for over 3'4" width doors and having a thickness of 2" or more.
- For heavy weight doors receiving high frequency service.
- Ball bearing hinges must be used on doors in conjunction with door closers and on all fire rated openings.
- For hospital type, add HT to suffix of part number.
- All hinges are ANSI template.

**OTHER SPECIFICATIONS:**

Height of hinge:

6.00	+ .000	for 6" x 4-1/2"
	- .015	
6.00	+ .000	for 6" x 5"
	- .015	
6.00	+ .000	for 6" x 6"
	- .015	

Width:

4.50 ± .015	for 6" x 4-1/2"
5.00 ± .015	for 6" x 5"
6.00 ± .015	for 6" x 6"

**GENERAL PRODUCT INFORMATION:** PBB, Inc. template hinges are manufactured to close tolerances and meet all specifications and requirements set by the American National Standards Institute (ANSI).

**HINGE SWAGING:** A standard swaging of our standard weight full mortise hinge when closed to parallel position provides a 1/16" clearance between leaves.

**MATERIAL GAUGE:**  
.200 ± .005 for 6" x 4-1/2"  
.200 ± .005 for 6" x 5"  
.200 ± .005 for 6" x 6"

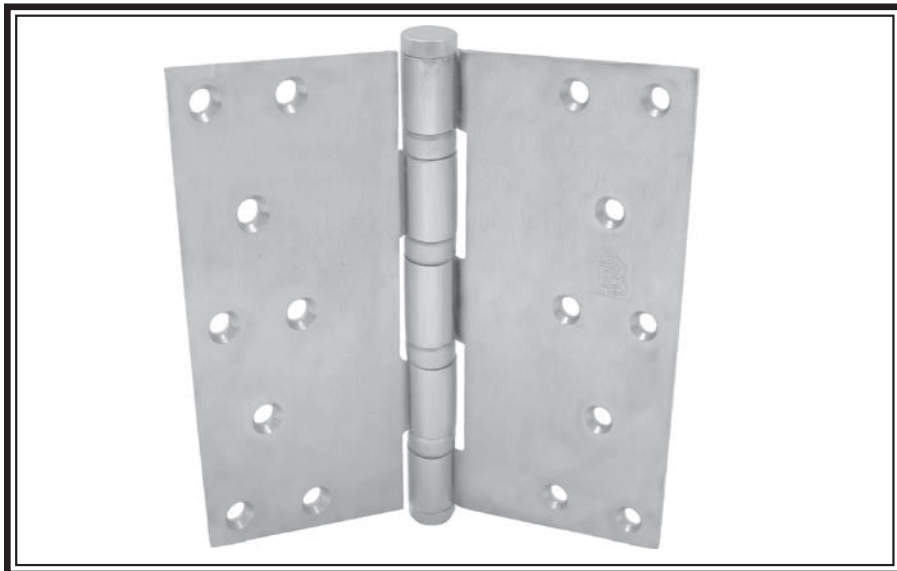
<b>6" STANDARD SCREW SIZE</b>
FHMS - 1/4-20 x 1/2"
FHWS - 14 x 1-1/2"



**FULL MORTISE TEMPLATE BALL BEARING**

**HEAVY WEIGHT**  
**8" x 6" 8" x 8"**

**B22**



**4B81 (ANSI A8111)**  
**Steel**-Polished and Plated or Bonderized and Prime Coated for Painting.

**4B21 (ANSI A2111)**  
**Brass**-Polished and Plated

**4B51 (ANSI A5111)**  
**Stainless Steel**-Polished and Satin Finish

- Recommended for over 3'4" width doors and having a thickness of 2" or more.
- For heavy weight doors receiving high frequency service.
- Ball bearing hinges must be used on doors in conjunction with door closers and on all fire rated openings.
- For hospital type, add HT to suffix of part number.
- All hinges are ANSI template.

**GENERAL PRODUCT INFORMATION:** PBB, Inc. template hinges are manufactured to close tolerances and meet all specifications and requirements set by the American National Standards Institute (ANSI).

**HINGE SWAGING:** A standard swaging of our standard weight full mortise hinge when closed to parallel position provides a 1/16" clearance between leaves.

**MATERIAL GAUGE:**  
.200 ± .005 for 8" x 6"  
.200 ± .005 for 8" x 8"

**OTHER SPECIFICATIONS:**

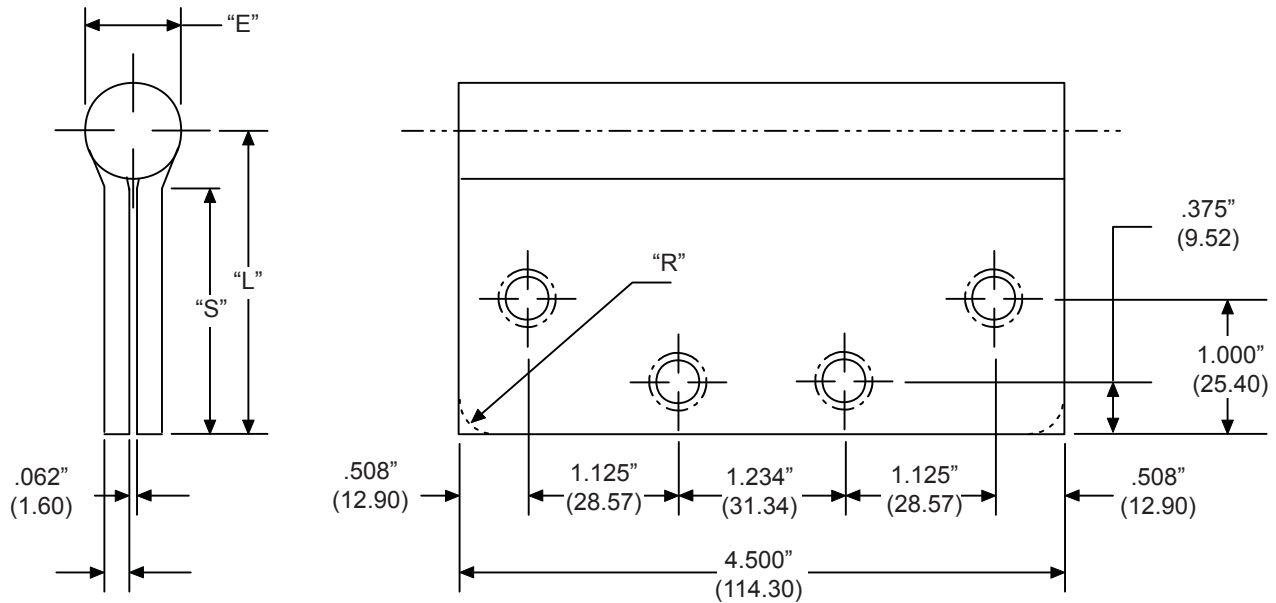
Height of hinge:  
 8.00 + .000 for 8" x 6"  
           - .015  
 8.00 + .000 for 8" x 8"  
           - .015  
 Width:  
 6.00 ± .015 for 8" x 6"  
 8.00 ± .015 for 8" x 8"

<b>8" STANDARD SCREW SIZE</b>
FHMS - 1/4-20 x 1/2"
FHWS - 14 x 1-1/2"



**FULL MORTISE HEAVY WEIGHT TEMPLATE**

**2B - 2P - 4B - 4C - 4F**  
**4-1/2" x 4", 4-1/2" x 4-1/2"**



**L10**

Part Number			Gauge of Metal	"E" Outside Dia.	"L" Leaf Width	"S" Swage Line	"R" Corner Radius
Steel	Brass	Stainless					
2B81/2P81	-	2B51/2P51	.134"	.600"	2.00"	1.63"	Square
2B81/2P81	-	2B51/2P51	.134"	.600"	2.25"	1.88"	Square
4B81*/4C81	4B21/4C21	4B51/4C51	.180"	.720"	2.00"	1.57"	Square, 1/4", 5/8"
4B81*/4C81	4B21/4C21	4B51/4C51	.180"	.720"	2.25"	1.82"	Square, 1/4", 5/8"

\*Also available as welding butts with identical dimensions and the exclusion of screw holes.

**NOTE:**

- 1 screw pack includes all machine screws (24), and 1/2 wood screws (12). ATMS & AWS also available.
- Screw size: FHMS - 12-24 x 1/2"  
FHWS - 12 x 1-1/4"
- All hinges are ANSI template.

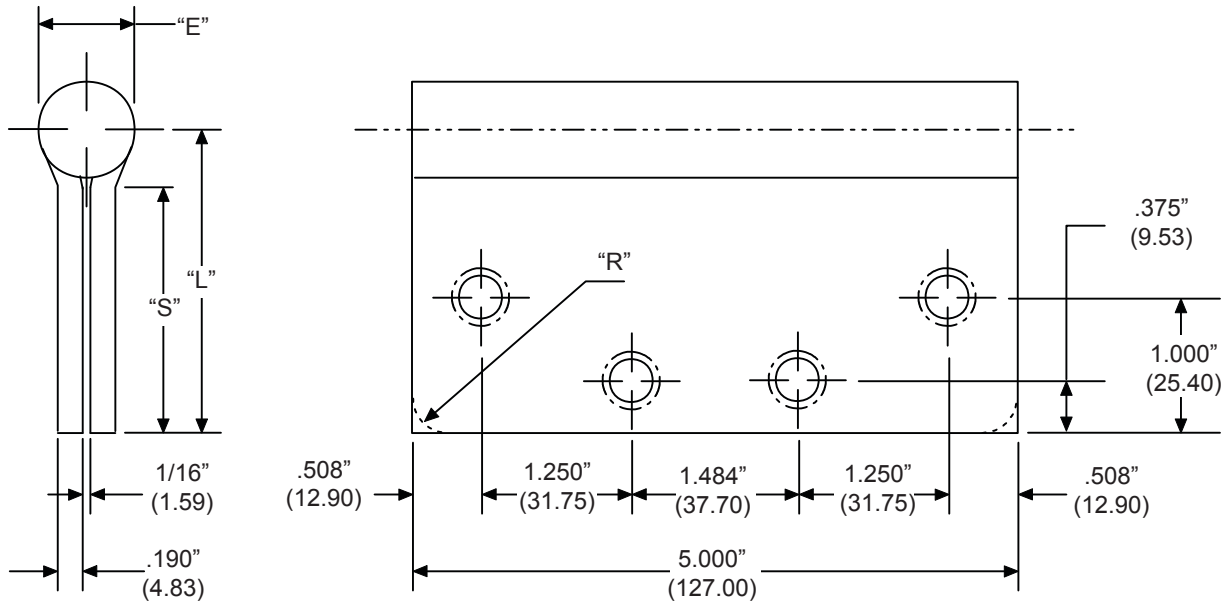
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 PBB reserves the right to make changes without notice.

Template: 2B45/4B45



**FULL MORTISE HEAVY WEIGHT TEMPLATE**

**4B - 4C - 4F**  
**5" x 4", 5" x 4-1/2", 5" x 5"**



Part Number			Gauge of Metal	"E" Outside Dia.	"L" Leaf Width	"S" Swage Line	"R" Corner Radius
Steel	Brass	Stainless					
4B81*/4C81	4B21/4C21	4B51/4C51	.190"	.740"	2.00"	1.56"	Square, 1/4", 5/8"
4B81*/4C81	4B21/4C21	4B51/4C51	.190"	.740"	2.25"	1.81"	Square, 1/4", 5/8"
4B81*/4C81	4B21/4C21	4B51/4C51	.190"	.740"	2.50"	2.06"	Square, 1/4", 5/8"

\*Also available as welding butts with identical dimensions and the exclusion of screw holes.

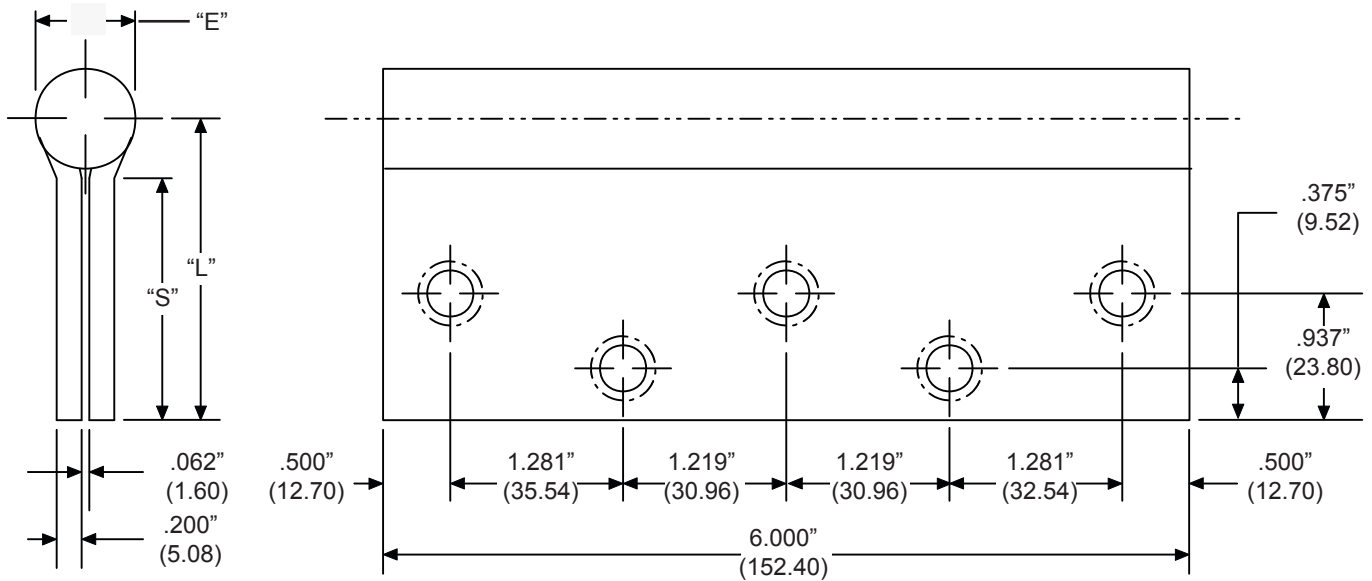
**NOTE:**

- 1 screw pack includes all machine screws (24), and 1/2 wood screws (12). ATMS & AWS also available.
- Screw size: FHMS - 12-24 x 1/2"  
FHWS - 12 x 1-1/2"
- All hinges are ANSI template.



FULL MORTISE HEAVY WEIGHT TEMPLATE

4B - 4C - 4F  
6" x 4-1/2", 6" x 5", 6" x 6"



L12

Part Number			Gauge of Metal	"E" Outside Dia.	"L" Leaf Width	"S" Swage Line	"R" Corner Radius
Steel	Brass	Stainless					
4B81/4C81	4B21/4C21	4B51/4C51	.200" *	.740"	2.25"	1.80"	Square, 1/4", 5/8"
4B81/4C81	4B21/4C21	4B51/4C51	.200" *	.740"	2.50"	2.05"	Square, 1/4", 5/8"
4B81/4C81	4B21/4C21	4B51/4C51	.200" *	.740"	3.00"	2.55"	Square, 1/4", 5/8"

**NOTE:**

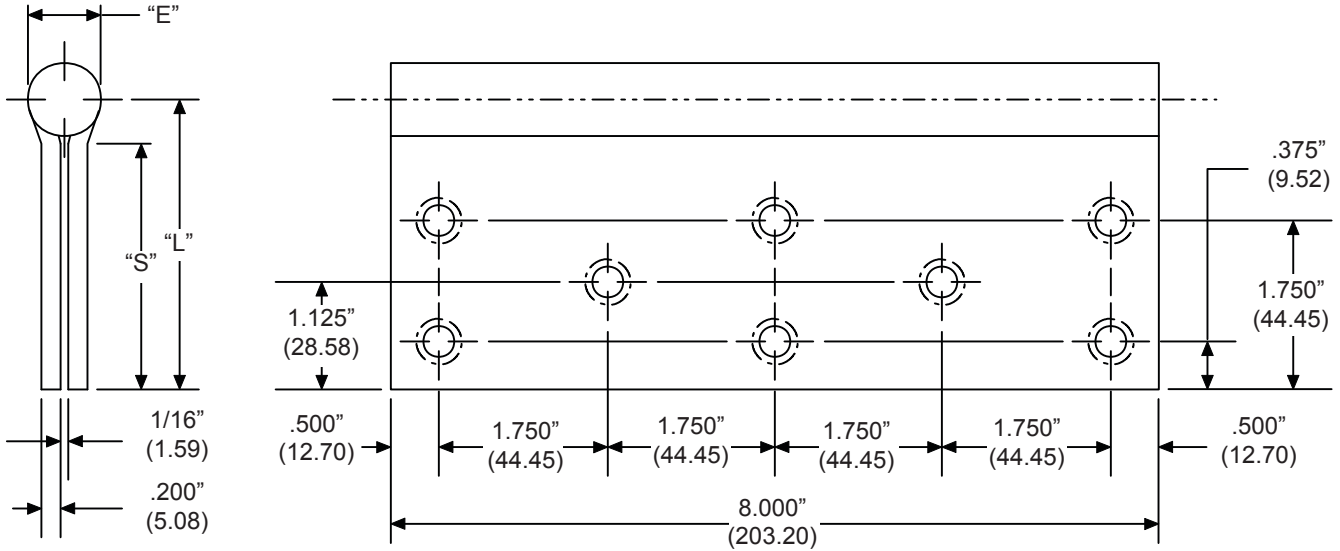
- 1 screw pack includes all machine screws (30), and 1/2 wood screws (15). ATMS & AWS also available.
- Screw size: FHMS - 1/4-20 x 1/2"  
FHWS - 14 x 1-1/2"
- \*Stainless steel hinges have .190" (4.83) material thickness.
- All hinges are ANSI template.

Template: 4B60



**FULL MORTISE HEAVY WEIGHT TEMPLATE**

**4B-4F**  
**8" x 6", 8" x 8"**



Part Number			Gauge of Metal	"E" Outside Dia.	"L" Leaf Width	"S" Swage Line	"R" Corner Radius
Steel	Brass	Stainless					
4B81/4F81	4B21/4F21	4B51/4F51	.200" *	.766"	3.00"	2.46"	Square, 1/4", 5/8"
4B81/4F81	4B21/4F21	4B51/4F51	.200" *	.766"	4.00"	3.46"	Square, 1/4", 5/8"

**NOTE:**

- 1 screw pack includes all machine screws (48), and 1/2 wood screws (24). ATMS & AWS also available.
- Screw size: FHMS - 1/4-20 x 1/2"  
FHWS - 14 x 1-1/2"
- \*Stainless steel hinges have .190" (4.83) material thickness.
- All hinges are ANSI template.

Template: 4B80