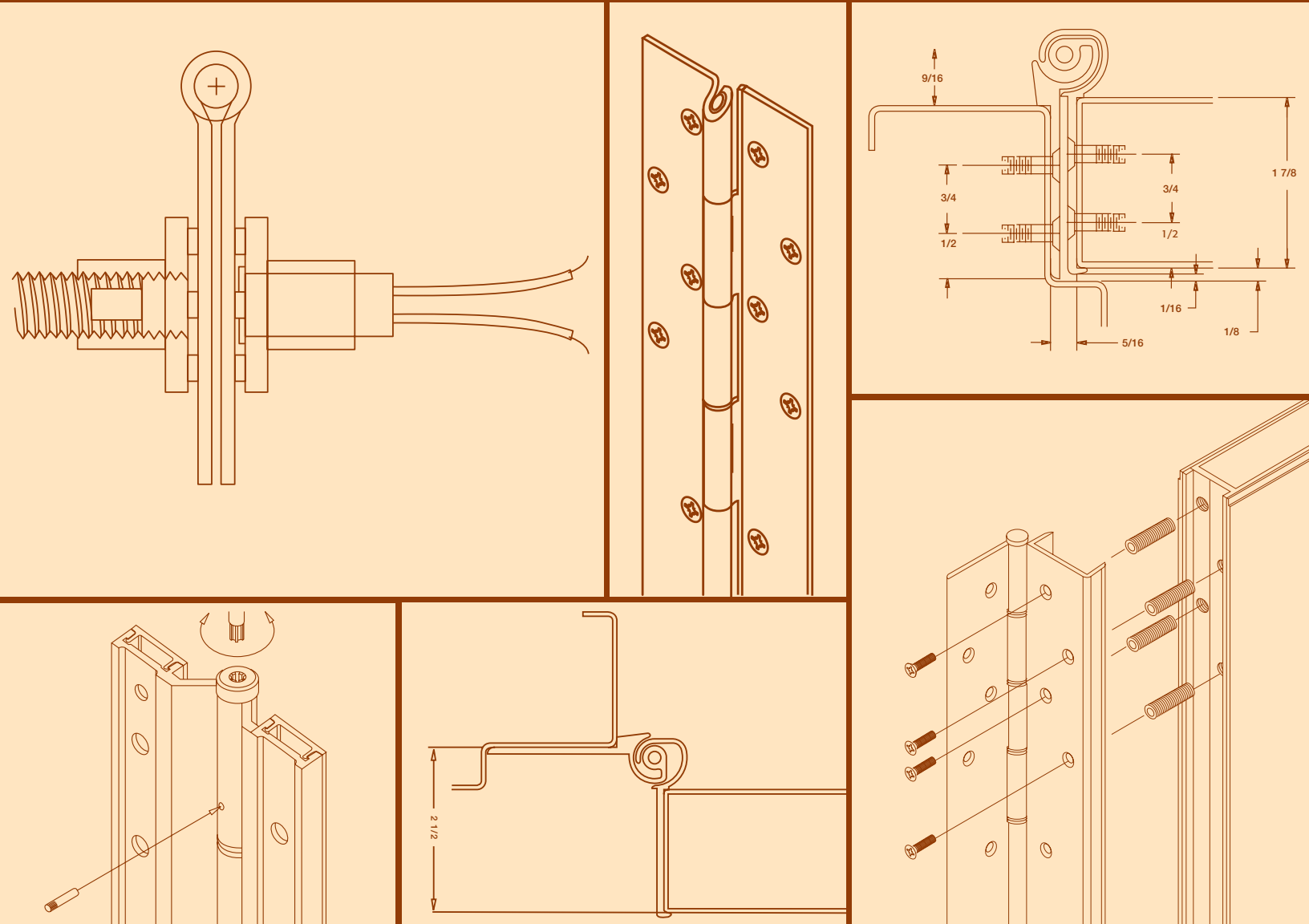


# RECOMMENDED DOOR CLEARANCE CHART



FORMULAS FOR UNDER-SIZING DOORS:  
ADJUSTABLE/NON-ADJUSTABLE HINGES  
AND HINGE/EDGE GUARD APPLICATIONS



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# MARKAR'S RECOMMENDED DOOR CLEARANCE CHART

LET US DO THE MATH FOR YOU

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2008

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Markar Architectural Products, Inc.

**Under-sizing Required For All Door Applications:**

- Markar's Hinge Side Clearance ..... Dimension Specific Per Model
- Lock side clearance ..... 1/8" Per N.F.P.A. (For single as well as between a pair of doors)
- Allowance for frame irregularities ..... 1/16"

**The two formulas below are based on a standard Non-Adjustable Application**

Example for Standard Single Door:

**MODEL: (HG-305)** ..... 3/8" Markar's Hinge Side Clearance  
 1/8" Lock-side Clearance  
 +1/16" Frame Irregularity  
**9/16" (As shown in 300 Series Standard Non-Adjustable Chart)**

Example for Standard Pair of Doors:

**MODEL: (HG-305)** ..... 3/8" Markar's Hinge Side Clearance (Door 1)  
 3/8" Markar's Hinge Side Clearance (Door 2)  
 1/8" Lock-side Clearance (Between Pair of Doors)  
 +1/16" Frame Irregularity  
**15/16" (As shown in 300 Series Standard Non-Adjustable Chart)**

**For adjustable models used in an Adjustable Application, an additional 1/8" of clearance is required as shown in the two formulas below**

Example for Adjustable Single Door:

**MODEL: (HG-305)** ..... 3/8" Markar's Hinge Side Clearance  
 1/8" Lock-side Clearance  
 1/16" Frame Irregularity  
 +1/8" Additional Adjustment Clearance  
**11/16" (As shown in 300 Series Adjustable Chart)**

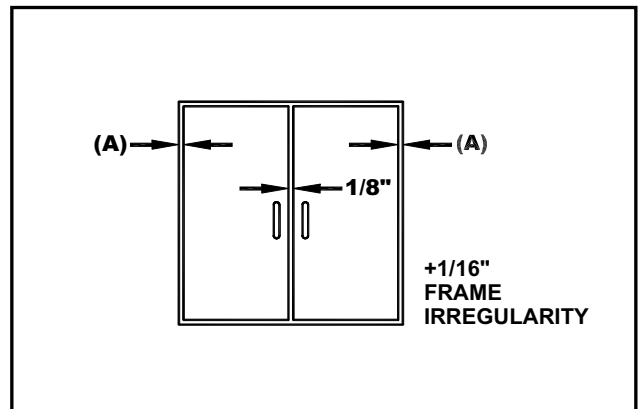
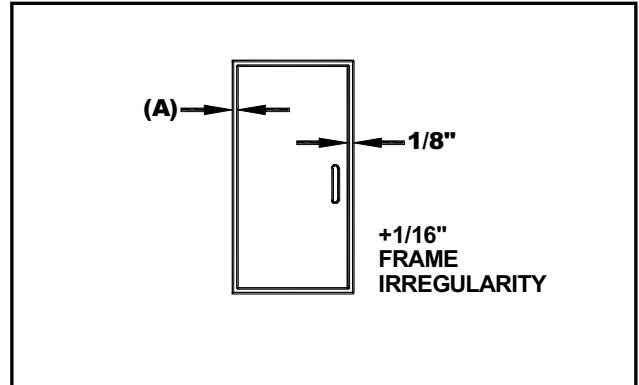
Example for Adjustable Pair of Doors:

**MODEL: (HG-305)** ..... 3/8" Markar's Hinge Side Clearance (Door 1)  
 3/8" Markar's Hinge Side Clearance (Door 2)  
 1/8" Lock-side Clearance (Between Pair of Doors)  
 1/16" Frame Irregularity  
 1/8" Additional Adjustment Clearance (Door 1)  
 +1/8" Additional Adjustment Clearance (Door 2)  
**1 3/16" (As shown in 300 Series Adjustable Chart)**

## Standard “Non-Adjustable” application

MODEL	Clearance (A)	Single Door	Pair of Doors
FM-300	1/4	7/16	11/16
*FS-301	1/8	5/16	7/16
*FS-302	1/8	5/16	7/16
*HS-303	1/8	5/16	7/16
*HM-304	1/8	5/16	7/16
HG-305	3/8	9/16	15/16
*HG-306	1/8	5/16	7/16
*FS/SC-309	1/8	5/16	7/16
HG-310	1/4	7/16	11/16
*HG-311	1/8	5/16	7/16
HG-315	1/4	7/16	11/16
*FS-321	1/8	5/16	7/16
HG-322	5/16	1/2	13/16
HG-323	5/16	1/2	13/16
HG-326	3/8	9/16	15/16
FM-327	11/16	7/8	1 9/16
HG-329	1/4	7/16	11/16

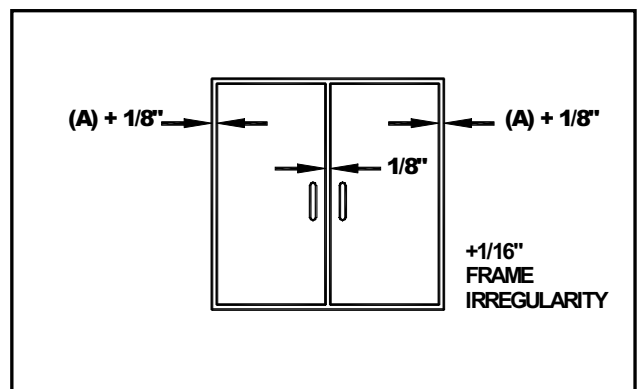
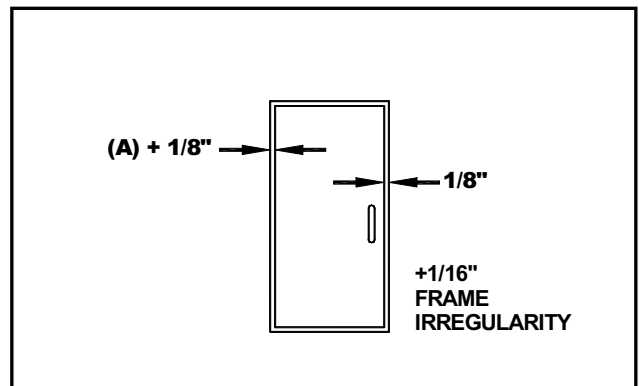
Models with \* will work with Industry Standard Clearances.



## “Adjustable” application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
HG-305	3/8	11/16	1 3/16
HG-310	1/4	9/16	15/16
HG-322	5/16	5/8	1 1/16
HG-326	3/8	11/16	1 3/16

Proper door reinforcement is required for adjustable feature. See Markar's Tech Memo section in catalog.

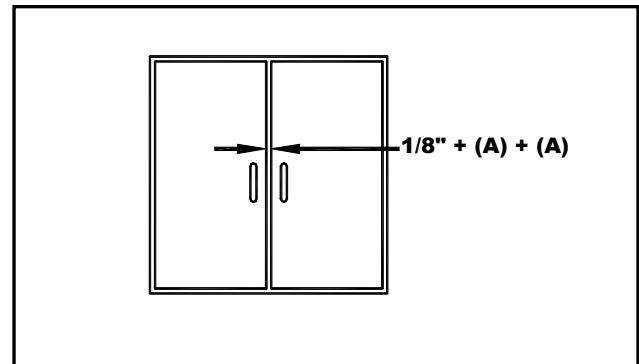
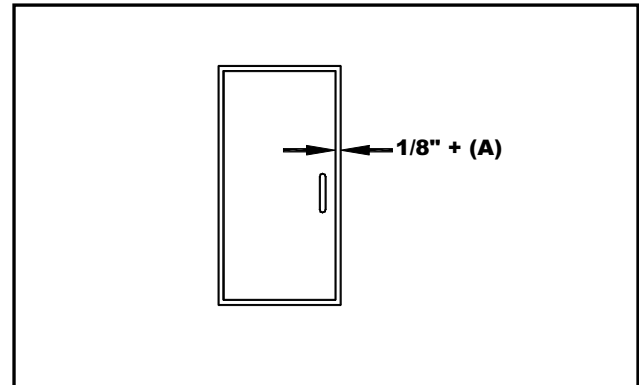


### Standard “Non-Adjustable” application

Markar's MODEL	Markar's Edge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
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EG-308	1/16	3/16	1/4
EG-C-308	1/16	3/16	1/4
EG-T-308	1/16		1/4

In a stand-alone application, where the EG-T-308 is used on a pair of doors while the opposite door contains no edge guard, the **Total Under-sizing for the pair of doors** would be 3/16”.



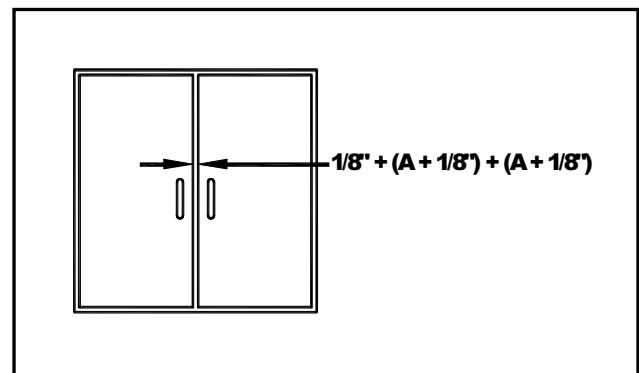
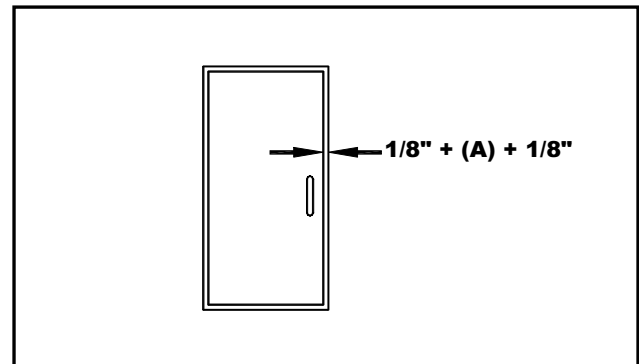
### “Adjustable” application

Markar's MODEL	Markar's Edge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
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EG-308	1/16	5/16	1/2
EG-T-308	1/16		1/2
		W/ EG-308	

In a stand-alone application, where the EG-T-308 is used on a pair of doors while the opposite door contains no edge guard, the **Total Under-sizing for the pair of doors** would be 5/16”.

Proper door reinforcement is required for adjustable feature  
 See Markar's Tech Memo section in catalog.



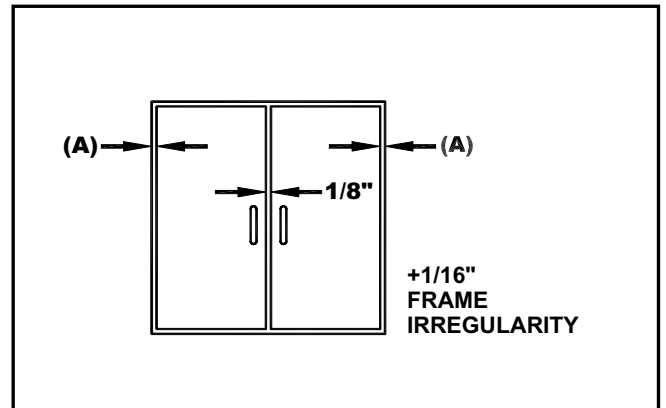
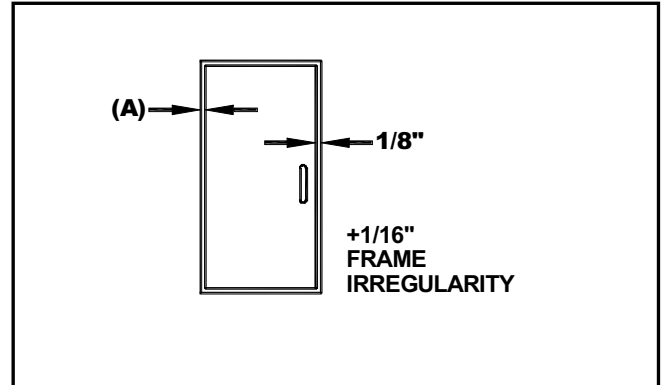
## 200 Series Pin & Barrel Carbon Steel Continuous Hinges

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### Standard "Non-Adjustable" application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
FM-200	1/4	7/16	11/16
*FS-201	1/8	5/16	7/16
*FS-202	1/8	5/16	7/16
*HS-203	1/8	5/16	7/16

Models with \* will work with Industry Standard Clearances.

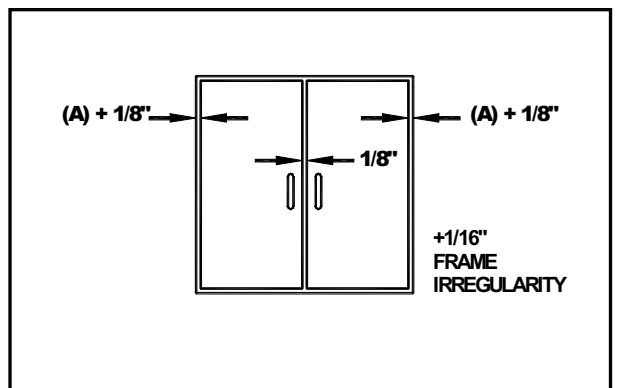
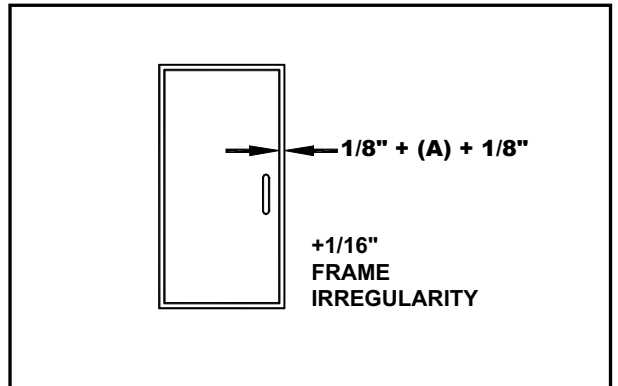
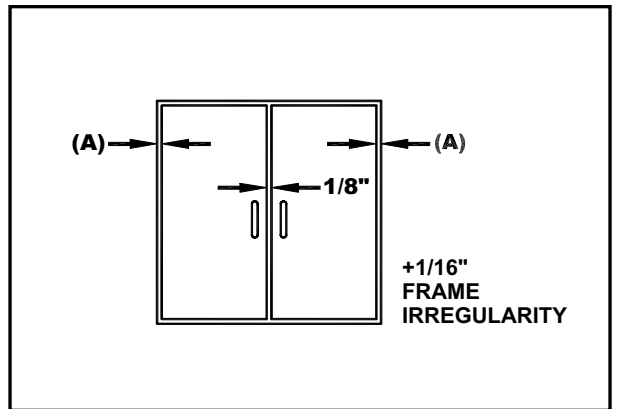
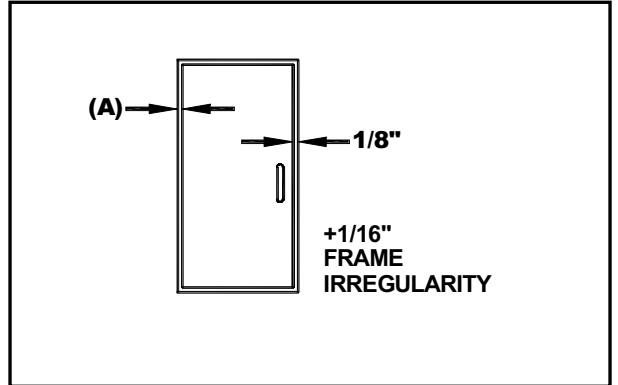


### Standard "Non-Adjustable" application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
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FM-100	3/8	9/16	15/16
FM-100BEV.	7/16	5/8	1 1/16
*FS-101	1/8	5/16	7/16
*FS-102	1/8	5/16	7/16
HS-103	3/16	3/8	9/16
HM-104	3/16	3/8	9/16
HG-105	3/8	9/16	15/16

Models with \* will work with Industry Standard Clearances.



### "Adjustable" application

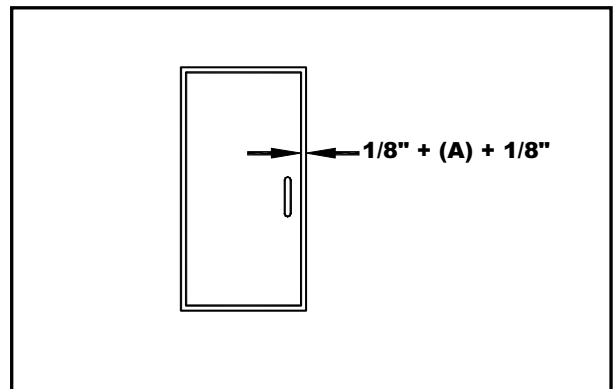
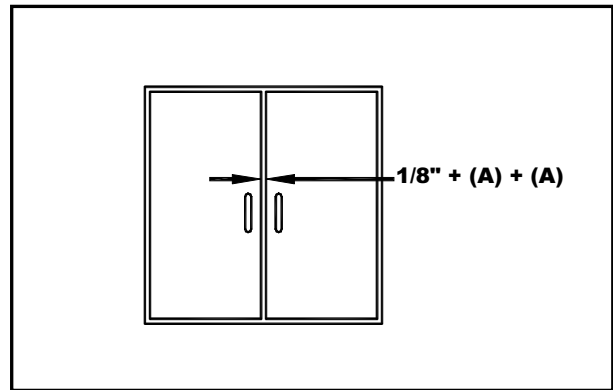
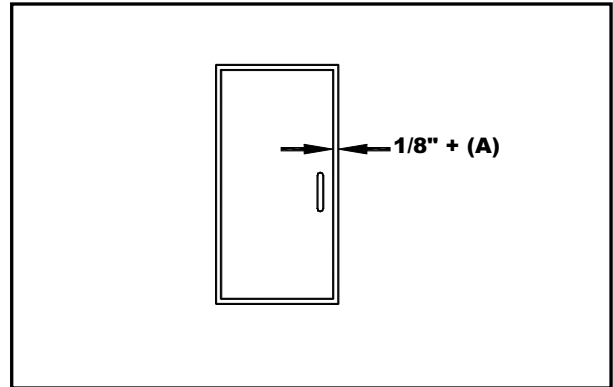
Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
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HG-105	3/8	11/16	1 3/16
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Proper door reinforcement is required for adjustable feature.  
 See Markar's Tech Memo section in catalog.

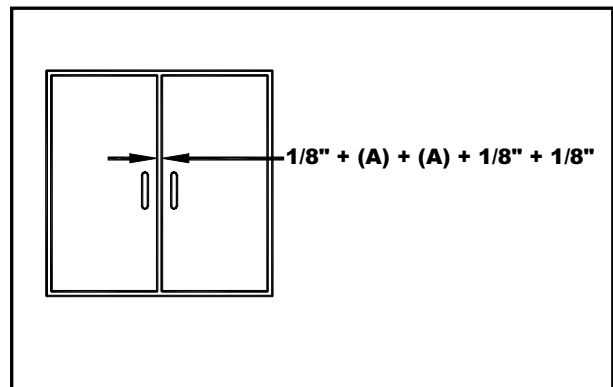
### Standard "Non-Adjustable" application

Markar's MODEL	Markar's Edge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
EG-108	1/8	1/4	3/8



### "Adjustable" application

Markar's MODEL	Markar's Edge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
EG-108	1/8	3/8	5/8



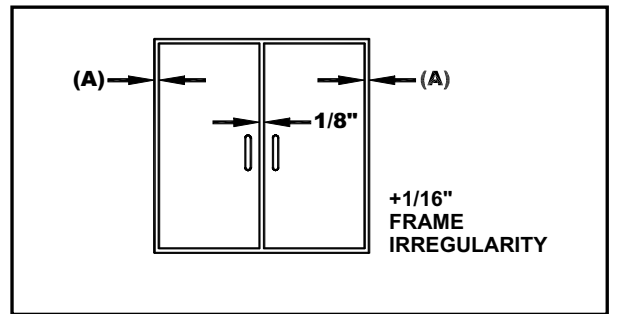
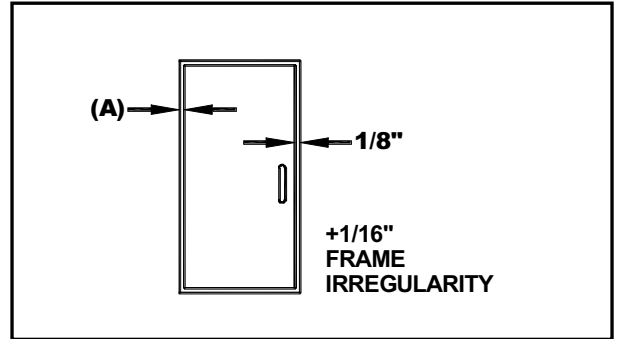
Proper door reinforcement is required for adjustable feature. See Markar's Tech Memo section in catalog.

# 1100 Series Pin & Barrel Aluminum Continuous Hinges

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## Standard "Non-Adjustable" application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
FM-1100	5/16	1/2	13/16
FM-1111	5/16	1/2	13/16

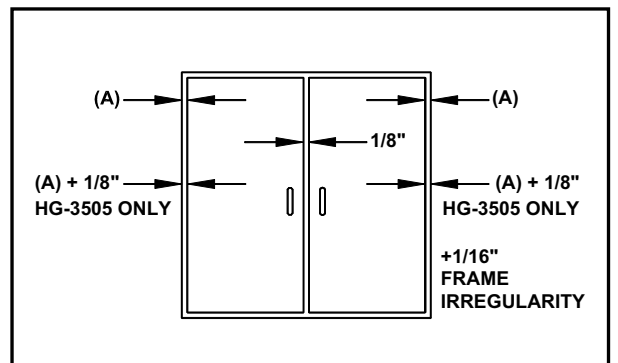
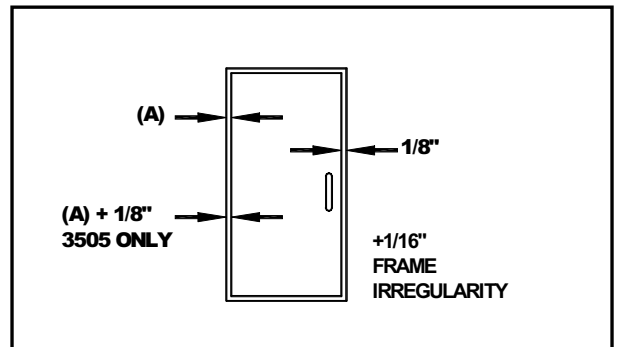


# 3500 Series Pin & Barrel Stainless Steel Security Hinges

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## Standard "Non-Adjustable" application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
FM-3500	5/16	1/2	13/16
FS-3501	1/8	5/16	7/16
FS-3502	1/8	5/16	7/16
HG-3505	7/16	5/8	1 1/16



## "Adjustable" application

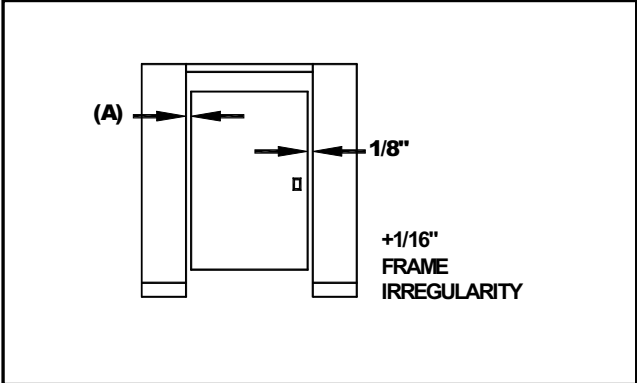
Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
HG-3505	7/16	3/4	1 5/16

## 400 Series Aluminum Pin & Barrel Toilet Partition Hinges

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### Standard “Non-Adjustable” application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door
FS-402	1/8	5/16

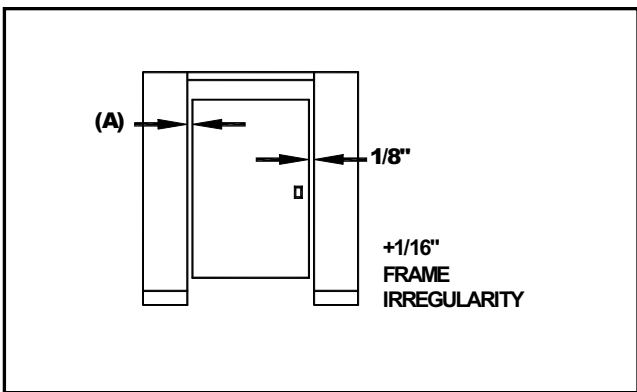


## 900 Series Aluminum Pin & Barrel Toilet Partition Hinges

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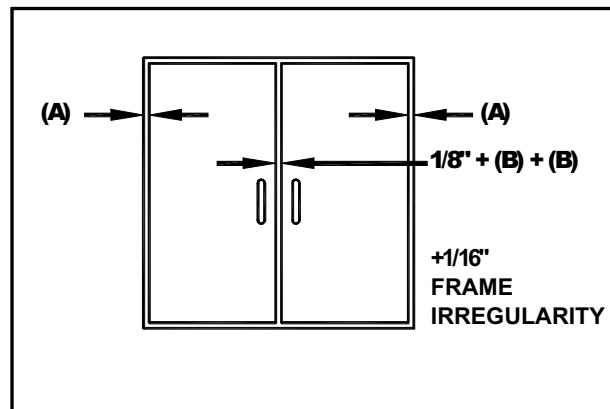
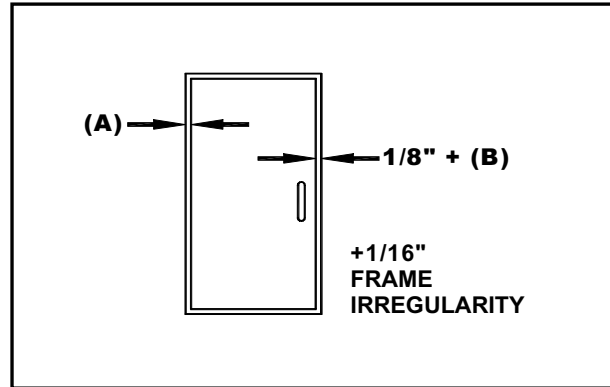
### Standard “Non-Adjustable” application

Markar's MODEL	Markar's Hinge Side Clearance (A)	Total Under-sizing For Single Door
FS-902	1/8	5/16



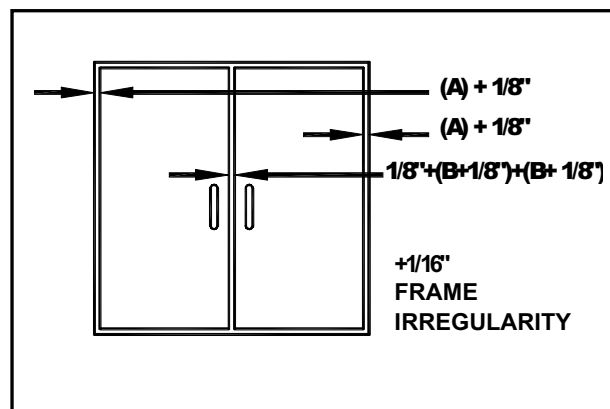
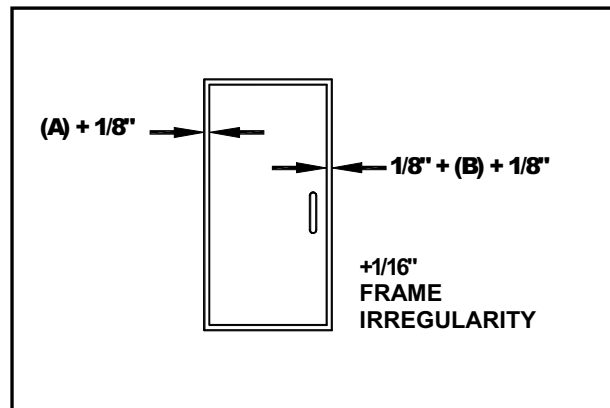
**Standard “Non-Adjustable” application**

Markar's Combination Model's	Markar's Hinge Side Clearance (A) & Edge Guard Clearance (B)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
HG-305 & EG-308	(A) = 3/8 (B) = 1/16	5/8	1 1/16
HG-315 & EGC-308	(A) = 1/4 (B) = 1/16	1/2	13/16
HG-305 & EG-T-308	(A) = 3/8 (B) = 1/16	5/8	1 1/16
HG-105 & EG-108	(A) = 3/8 (B) = 1/8	11/16	1 3/16
HG-329 & EG-308	(A) = 1/4 (B) = 1/16	1/2	13/16



**“Adjustable” application**

Markar's Combination Model's	Markar's Hinge Side Clearance (A) & Edge Guard Clearance (B)	Total Under-sizing For Single Door	Total Under-sizing For Pair of Doors
HG-305 & EG-308	(A) = 3/8 (B) = 1/16	7/8	1 9/16
HG-315 & EG-308	(A) = 1/4 (B) = 1/16	3/4	1 5/16
HG-305 & EG-T-308	(A) = 3/8 (B) = 1/16	7/8	1 9/16
HG-105 & EG-108	(A) = 3/8 (B) = 1/16	15/16	1 11/16
HG-3505 & EG-308	(A) = 7/16 (B) = 1/16	15/16	1 11/16



Proper door reinforcement is required for adjustable feature. See Markar's Tech Memo section in catalog.



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Founded in 1969, Markar Architectural Products, Inc. is a market leader in architectural grade continuous hinges and edge guards for security, safety and control. The company's customer base includes specifiers, architects and designers.