

# Waterson® 3 in 1 Self-closing Hinge

## For Metal / Fire-rated Door



K51M-640



K51M-645



K51M-650



K51M-655



K51M-660

## Stainless Steel hinge - For Wood/Metal/Fire-Rated Doors

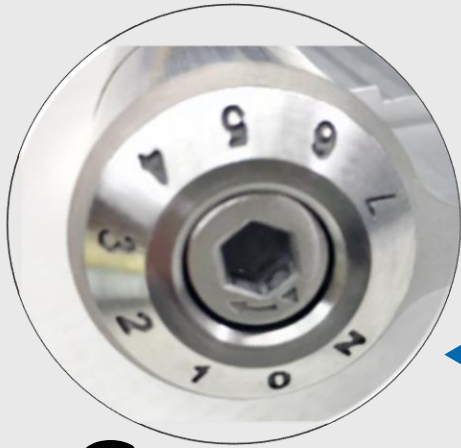
Model	Full Name	Door Thickness	Mortise Width (min)	Mortise Depth (min)	Gap of the hinged side (non-mortise)
K51M-640	6" x 4" Auto Door-Closer Hinge	40-45 mm	33.5mm	4.06 mm	10 mm
K51M-645	6" x 4.5" Auto Door-Closer Hinge	45-50 mm	38.5mm		
K51M-650	6" x 5" Auto Door-Closer Hinge	50-55 mm	43.5mm		
K51M-655	6" x 5.5" Auto Door-Closer Hinge	55-60 mm	48.5mm		
K51M-660	6" x 6" Auto Door-Closer Hinge	60-65 mm	53.5mm		



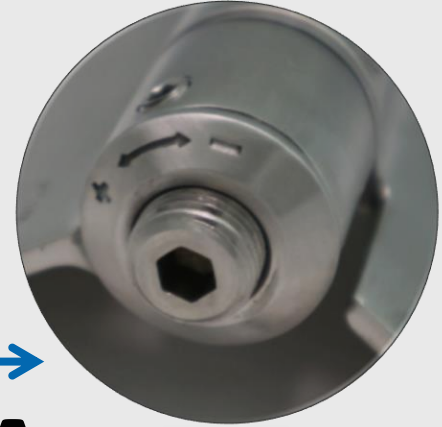
**S** (Spring Power)



**H** (Hydraulic Buffer)



**S** (Spring Power)



**A1.A** (Mechanical Buffer)

**B** (Hold-Open)

# Stainless Steel hinge Types - For Wood/Metal/Fire-Rated Doors

Type of Hinge	Top	Function	Bottom	Function	Mechanism
<b>DS</b>	<b>S</b>	Spring power ( provide closing power)	<b>S</b>	Spring power ( provide closing power)	Spring power + Spring power
<b>SA1</b>	<b>S</b>	Spring power ( provide closing power)	<b>A1</b>	Control closing speed in 0°-20°	Spring power + Mechanical buffer
<b>SA</b>	<b>S</b>	Spring power ( provide closing power)	<b>A</b>	Control closing speed in 20°-90°	Spring power + Mechanical buffer
<b>SB</b>	<b>S</b>	Spring power ( provide closing power)	<b>B</b>	Hold-open in 90° +/-5°	Spring power + Hold-open
<b>HS</b>	<b>H</b>	Hydraulic Buffer	<b>S</b>	Spring power ( provide closing power)	Hydraulic Buffer + Spring power
<b>HA</b>	<b>H</b>	Hydraulic Buffer	<b>A</b>	Control closing speed in 20°-90°	Hydraulic Buffer + Mechanical buffer

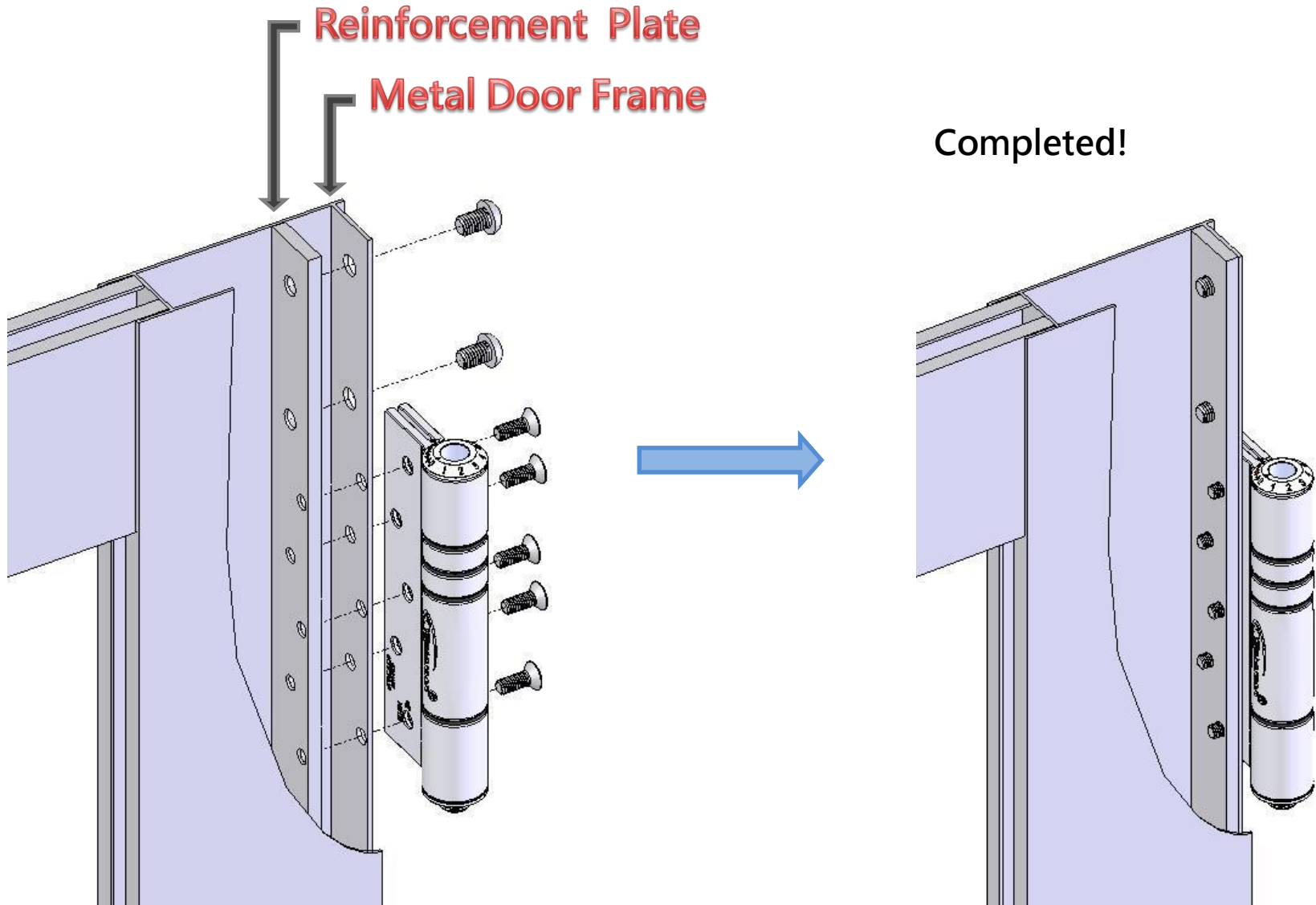
# For 6" Barrel: Hinge Combination and Installation Position

		Self-Closing						Self-closing & Hold-open	
Door Weight Position	40 kg	70 kg		120 kg		150 kg		70 kg	
	Top	SA1	HS	SA	HS	SA1	HS	DS	HS
Middle	/	/	HA	SA	SA	SA	SA	/	SA
						SA			
Bottom	HA	SA	SA1	SA1	SA	SA1	SA1	SB	SB

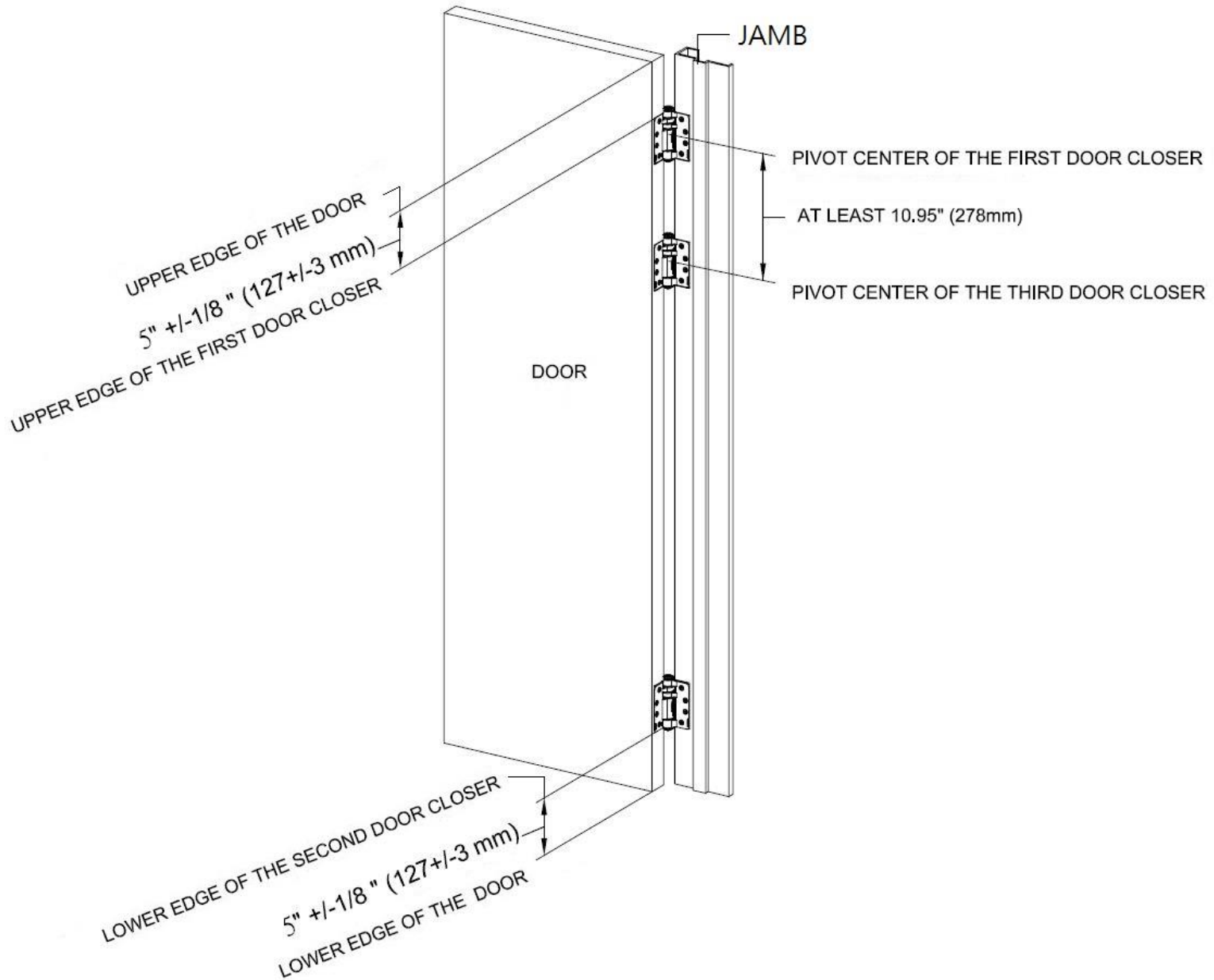
# Comparison Chart of Waterson Mechanical & Hydraulic Type

Waterson Auto Door-Closer hinge	Mechanical Type	Hydraulic Type
Closing Style	Smooth, with average closing speed	Smooth, with a distinct speed buffering zone in the last phase of closing
Wind/Slam Resistant	No	Yes
Need of Maintenance	No	No
Combination of Uses ( in the case of 3 pcs/set)	3 mechanical hinges	2 mechanical hinges 1 hydraulic hinge
Speed Adjustment	Yes	Yes
Demo Video	<a href="https://www.youtube.com/watch?v=MZdexp_Bzqs">https://www.youtube.com/watch?v=MZdexp_Bzqs</a>	

To keep the door from warping, install reinforcement plate for relatively flexible/soft door and frame.

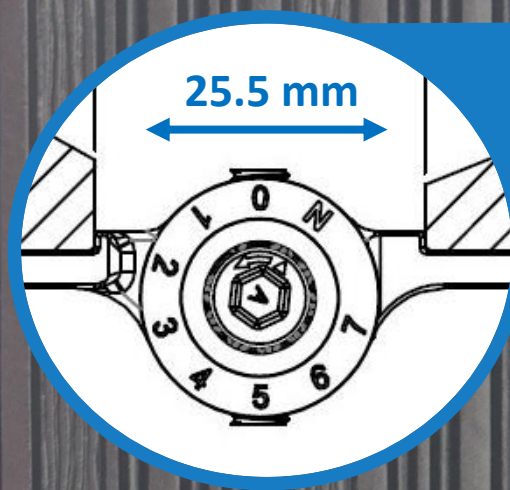


# Installation Guide for Wooden & Metal Door





Save a little space for me!



# PACKAGING INFORMATION

ITEM NO.	lbs/PCS (Accessories included)	QTY			N.W. (lbs)/ CTN.	G.W. (lbs)/ CTN.	CARTON SIZE (Inch)			
		PCS/ BOX	PCS/ CTN.	BOX/ CTN.			W	H	L	CUFT
K51M-640	2.02	3	24	8	48.48	52.90	10	6	12	0.46
K51M-645	2.16	3	24	8	51.84	56.26	10	6	12	0.46
K51M-650	2.26	3	24	8	54.24	58.66	10	6	12	0.46
K51M-655	2.40	3	24	8	57.60	62.02	10	6	12	0.46
K51M-660	2.62	3	24	8	62.88	67.3	10	6	12	0.46

# Installation Example Fire-rated Door



# Installation Example

## Glass Door with Metal Frame



**BEFORE**



**AFTER**





