



## HIGH PERFORMANCE ADJUSTABLE LIFT OFF CONCEALED BALL BEARING HINGE

### Rockwell Hi-Performance Lift-Off Hinge Technical Data Sheet

Part Numbers: 1228 series and 1230 series

Hi-Performance Lift Off Hinge is suitable for Medium to high frequency Residential door applications according to ANSI/BHMA 156.1. The Rockwell Hi-Performance Hinge has been independently tested to exceed ANSI/BHMA 156.1 with 3 hinges on a 180lbs door for 350,000 cycles.

Minimum Door Thickness: 1-3/4" (44mm)

Maximum Adjusted Door Weight with 3 hinges: 180 lbs.

Maximum Adjusted Door Weight with 4 hinges: 240 lbs.

### Installation Instructions

Rockwell Hi-Performance Lift Off Hinges are Handed.

The Hinge body with the Pin is fitted onto the door panel with the Pin Pointing Down.

The Hinge leaf with the Knuckle is installed on the door Frame with the knuckle hole pointing up to receive the Pin.

Hi-Performance Lift Off Hinges are precisely manufactured with minimum clearances or play. Ensure the Hinge Body and Hinge leaf are accurately installed on both horizontal and vertical planes and the axis of the Hinge Pin and Hinge Knuckle are Inline.

Hi-Performance Lift Off Hinges are pre-lubricated. Depending on the extreme weather conditions the hinge may need lubrication. Lithium Grease is the recommended lubricant.

Please take care not to damage the Stainless Steel Washer when assembling the door panel to the Frame.

Prepare the Door Panel and the Frame. Mark and Mortise both the door panel and Frame.

Drill Pilot holes, in the size to suit the door material being used.

Fasten hinge bodies to the Door Panel using #10 screws. Minimum 1-1/4" length is recommended on the door Panel.

Ensure the hinge Pin is pointing down.

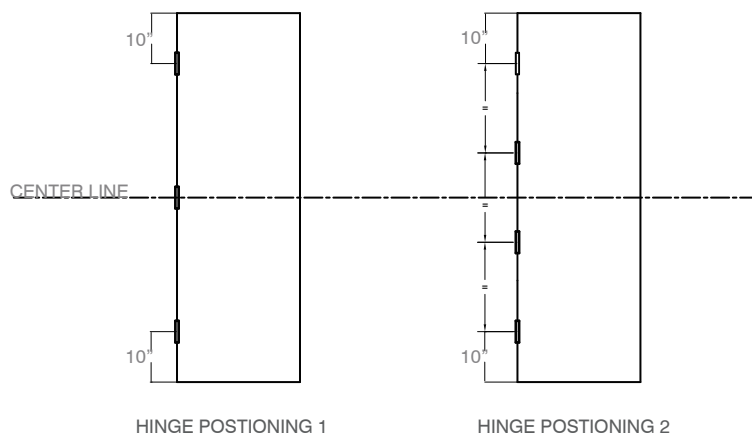
Fasten the hinge leaf onto the Door Frame, #10 by minimum 3/4" length is recommended. One screw hole is typically left out without a screw and is installed with a 1-1/2" or 2" long screw to reach the stud after the door is positioned into the rough opening.

Screw Lengths and types vary depending on the materials utilized. Ensure screws are fully tightened.

Hinges are pre-set in the Mid-position for 4 way adjustment. Do not adjust hinge until it is positioned into the rough opening to ensure maximum 4 way adjustment. Always adjust hinges vertically prior to horizontal adjustment.

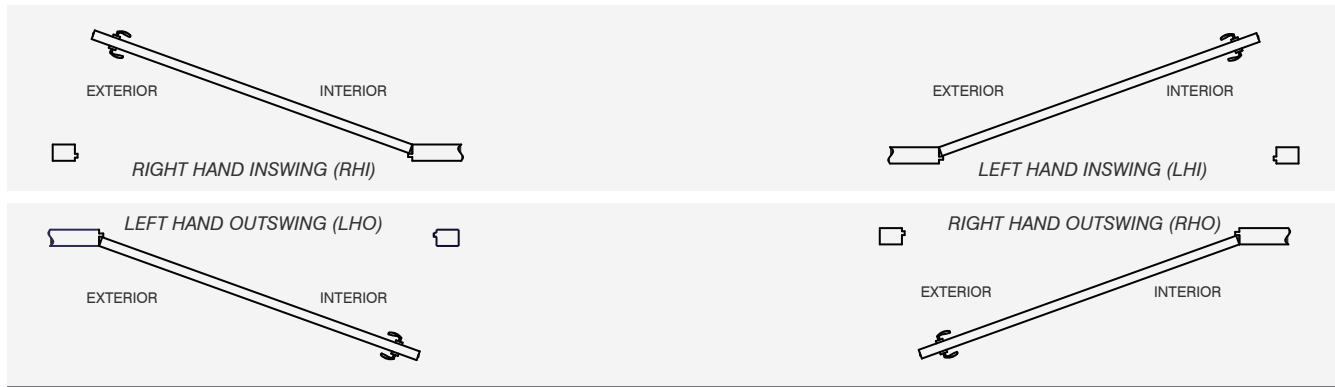
### Hinge Positioning

For best results and maximum resistance against warping, position the hinges with equal spacing as illustrated.





# HIGH PERFORMANCE ADJUSTABLE LIFT OFF CONCEALED BALL BEARING HINGE



PART NO.	HANDLING	FINISH	PART NO.	HANDLING	FINISH
12281002R	RIGHT HAND (RHI)	BRUSHED CHROME	12281102L	LEFT HAND (LHI)	BRUSHED CHROME
12281003R	RIGHT HAND (RHI)	BRUSHED NICKEL	12281103L	LEFT HAND (LHI)	BRUSHED NICKEL
122810BLR	RIGHT HAND (RHI)	BLACK	122811BLL	LEFT HAND (LHI)	BLACK
122810WHR	RIGHT HAND (RHI)	WHITE	122811WHL	LEFT HAND (LHI)	WHITE
122810FBR	RIGHT HAND (RHI)	FAUX BRONZE	122811FBL	LEFT HAND (LHI)	FAUX BRONZE

## Adjustment Instructions

### Introduction

The Rockwell Lift off hinge is adjustable in both vertical and horizontal directions. Preset in the neutral mid-position the hinges have a 4 way adjustment.

### Required Tools

- 1. Philips head HAND Screwdriver (**NO POWER TOOLS**)

**Adjust Hinges Vertically prior to Horizontal Adjustment.**

### Vertical Adjustment

With the door open:

1. Use a Philips screwdriver
2. To raise the panel, use a Philips screwdriver to turn the vertical adjustment screw of the top-most Hinge to achieve the desired height adjustment. Once it has reached the desired height, adjust the other hinges 1 turn past the onset of resistance to distribute the panel weight evenly between the Hinges.
3. To lower the panel, use a Philips screwdriver to loosen as much as possible of the Top-most Hinge, then proceed down to the other hinges. At the bottom Hinge, the panel will lower to the desired adjustment. Retighten the adjustment screws of all hinges 1 turn past the onset of resistance to distribute the panel weight evenly between the Hinges.

### Horizontal Adjustment

With the door open:

1. Insert a Philips head screwdriver into the horizontal adjustment screw.
2. Turn clockwise to decrease the margin and counterclockwise to increase the margin on the hinge side. There are 1-1/4 turns each way. Please ensure not to overtighten the screws.

