

# SofterClos™

## The Latest Innovation

Adjustable soft closing hinges for  
wooden or metal doors

SOFTERCLOS™



### Soft Closing

Eliminates the  
use of door  
closers or floor  
springs

### Dual Patented

Designed for  
indoor and  
outdoor use

### Reliable

Durable and  
maintenance free



 **PRIMERO** INDUSTRIES  
*Innovating the Future*



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## ABOUT PRIMERO INDUSTRIES

Primero Industries is part of a group of companies that innovates, manufactures and markets superior quality and high performance products. Over the years, we have successfully designed and developed a wide range of architectural and lifestyle products that are registered, trademarked and multi patented. Apart from our current range of products, we continue to innovate and develop new products for the market to remain relevant and ahead of our competitors.

Our products are marketed worldwide through our associated companies in America, Europe, South Asia, the Middle East, South East Asia and Australasia.

## OUR MISSION

Primero Industries continually aims to develop and supply products to the market that are unparalleled in design, quality and performance.

## QUALITY ASSURANCE

Primero Industries closely monitors quality controls of all incoming raw materials and supplies to ensure the highest standard and specific compliances are met. We regularly perform relevant corrosion resistant test, materials composition analysis and load testing of products we supply.

*For a list of our office locations and contact details, please refer to the back page.*





# INTRODUCTION

**SOFTERCLOS™** hinges are the first in the market to allow softer closing of doors without the need for traditional door closers. A patented design, these hinges outperform many existing products in the market. Manufactured in SS316L (for pool fences) and SS304 or colour-coated mild steel, **SOFTERCLOS™** hinges are designed for both interior and exterior use. Installation of these hinges is easy and their adjustability is unrivalled. These soft closing adjustable hinges can also be quickly fitted on existing doors. **SOFTERCLOS™** hinges are a reliable and an affordable alternative to traditional door closers and floor springs.

## Features:

- Soft Closing – Eliminate the use of door closers or floor springs
- Australian standards compliance
- Reliable and durable
- Competitively priced
- Dual patented
- Easy to install and adjust
- Minimal maintenance needed
- Cost effective

## Why choose SOFTERCLOS™ over traditional floor springs?

1. Installation of traditional floor springs is difficult and could damage existing floor tiles.
2. Good quality floor springs generally cost more and are complicated to adjust.
3. Water often accumulates in the cavities underneath the cover plate of traditional floor springs. This causes rusting and it could become a source of contamination to the surrounding surfaces.
4. Generally, floor springs are made of cast iron and rust easily.

## Why choose SOFTERCLOS™ over ordinary door closers?

1. Ordinary door closers have extensions and connectors that easily come loose over time, therefore becoming noisy and malfunction.
2. Ordinary door closers often leak oil, hence reduces the lifespan of the item.
3. Most door closers are externally mounted, unsightly and need regular maintenance.

*The hinges in this catalogue are only suitable for wooden/metal doors. Please refer to the SOFTERCLOS™ catalog for frameless glass doors at [www.primerindustries.com](http://www.primerindustries.com)*

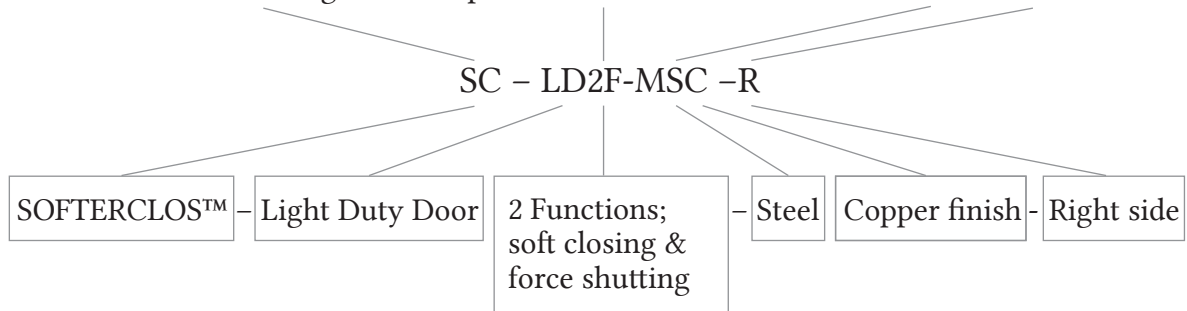


## SPECIFICATIONS

1. All our products are assigned a product code which contain the following information:

For example:

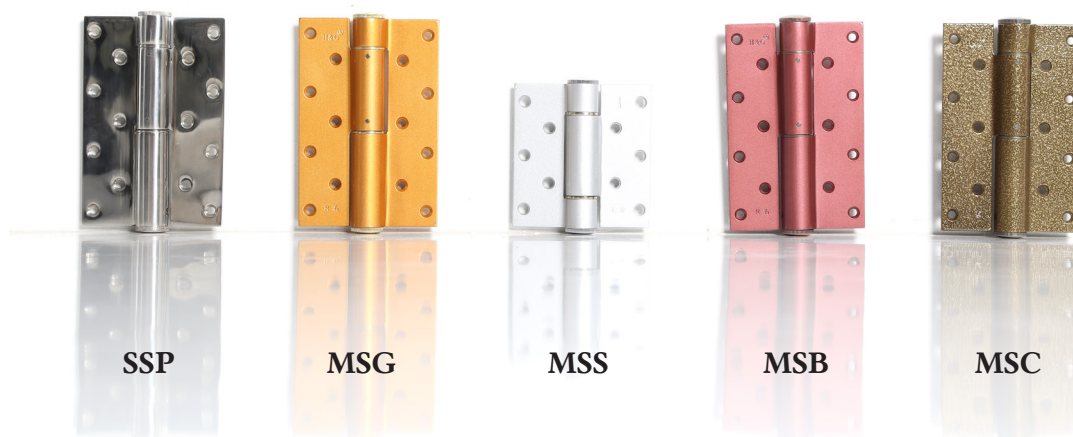
Product Range – Description of Product & Functions – Colour – Side



2. The material, colour code and the side of which the hinge is to be applied is shown in the table below.

| Colour Code | Material | Finish | Side of Application (L/R) |
|-------------|----------|--------|---------------------------|
| MSB         | Steel    | Bronze | L or R                    |
| MSC         | Steel    | Copper | L or R                    |
| MSG         | Steel    | Gold   | L or R                    |
| MSS         | Steel    | Silver | L or R                    |
| SSP         | SS304    | Polish | L or R                    |

3. Picture of colour code



4. Hinges with specific or unique applications are also available on request.



# SC-LD SERIES

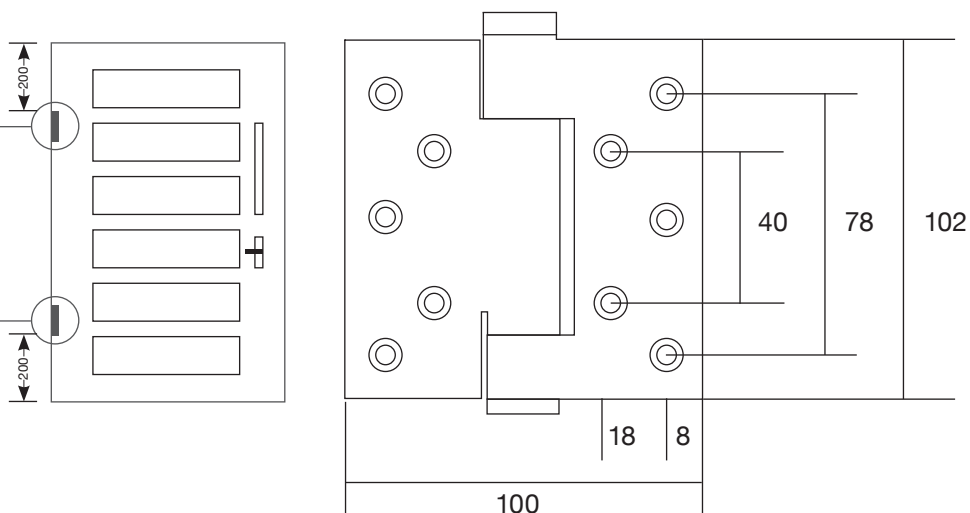
## LIGHT DUTY SOFT CLOSING HINGES



|                              |  |
|------------------------------|--|
| <b>Function</b>              | With soft closing, stopper or force-shutting functions.  |
| <b>Features</b>              | Allows door closing under control, variable closing force and speed, pre-set angle of door stopper, force-shutting to ensure latching. |
| <b>Angle of Door Stopper</b> | Approximately 82 degrees (pre-set in factory)  |
| <b>Size</b>                  | Shaft diameter 23mm, 100(L)X100(W) thickness 3.5mm   |
| <b>Door Weight</b>           | Up to 45kg   |
| <b>Door Thickness</b>        | 42 – 60 mm   |
| <b>Material</b>              | Steel (other materials only on special request)  |
| <b>Detail</b>                | 2 pieces / set   |
| <b>Application</b>           | Lightweight doors or access doors in fence gate.   |

SPRING  
HINGE

HYDRAULIC  
HINGE



| Product Code | Description   | No of hinges | No of functions | Weight (kg) |
|--------------|---|--------------|-----------------|-------------|
| SC-LD1       | <b>SOFTERCLOS™</b> light duty soft closing door hinges with soft closing function (up to 45kg)                          | 2            | 1               | 0.9         |
| SC-LD2F      | <b>SOFTERCLOS™</b> light duty soft closing door hinges with soft closing and forced shutting function (up to 45kg)      | 2            | 2               |             |
| SC-LD2S      | <b>SOFTERCLOS™</b> light duty soft closing door hinges with doorstop and slow closing function (up to 45kg)             | 2            | 2               |             |
| SC-LD3       | <b>SOFTERCLOS™</b> light duty soft closing hinges with doorstop, soft closing and forced shutting function (up to 45kg) | 2            | 3               |             |

More information on how to order and specify the sides, colours and material you want can be found on Page 3.

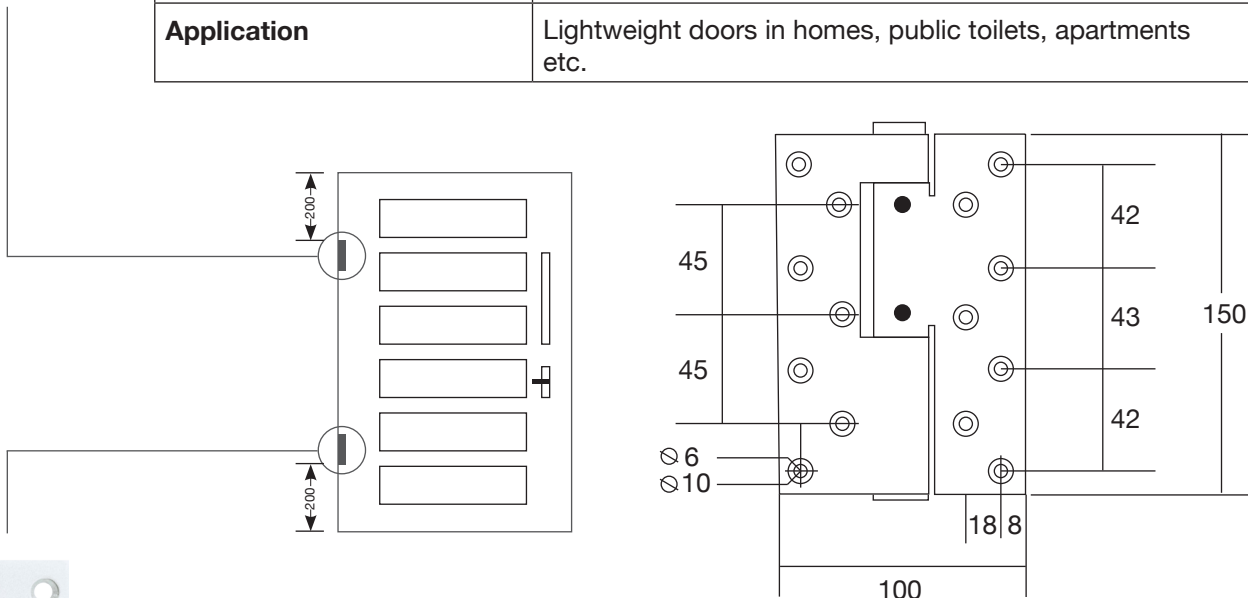


# SC-MD SERIES

## MEDIUM DUTY SOFT CLOSING HINGES



|                              |  |
|------------------------------|--|
| <b>Function</b>              | With soft closing, stopper or force-shutting functions.  |
| <b>Features</b>              | Allows door closing under control, variable closing force and speed, pre-set angle of door stopper, force-shutting to ensure latching. |
| <b>Angle of Door Stopper</b> | Approximately 82 degrees (pre-set in factory)  |
| <b>Size</b>                  | Shaft diameter 23mm, 150(L)x100(W) thickness 3.5mm   |
| <b>Door Weight</b>           | Up to 50kg   |
| <b>Door Thickness</b>        | 42 – 60 mm   |
| <b>Material</b>              | Steel or Stainless Steel SS304 (other grades on request)   |
| <b>Detail</b>                | 2 pcs / set  |
| <b>Application</b>           | Lightweight doors in homes, public toilets, apartments etc.  |



| Product Code | Description   | No of hinges | No of functions | Weight (kg) |
|--------------|---|--------------|-----------------|-------------|
| SC-MD1       | <b>SOFTERCLOS™</b> medium duty soft closing door hinges with soft closing function (up to 55kg)                               | 2            | 1               | 0.9         |
| SC-MD2F      | <b>SOFTERCLOS™</b> medium duty soft closing door hinges with soft closing and forced shutting function (up to 55kg)           | 2            | 2               |             |
| SC-MD2S      | <b>SOFTERCLOS™</b> medium duty soft closing door hinges with doorstop and soft closing function (up to 55kg)                  | 2            | 2               |             |
| SC-MD3       | <b>SOFTERCLOS™</b> medium duty soft closing door hinges with doorstop, soft closing and forced shutting function (up to 55kg) | 2            | 3               |             |

More information on how to order and specify the sides, colours and material you want can be found on Page 3.



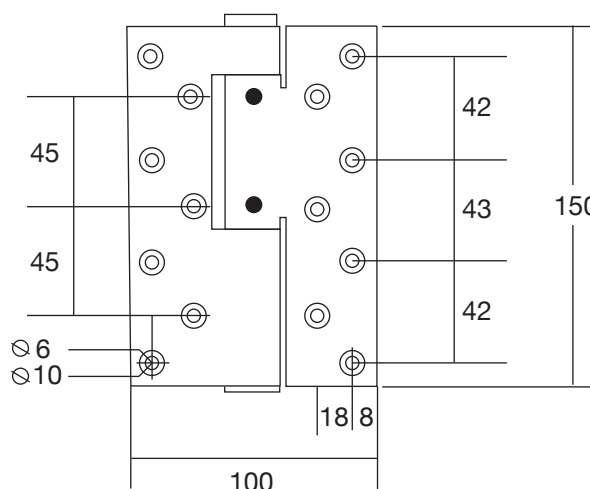
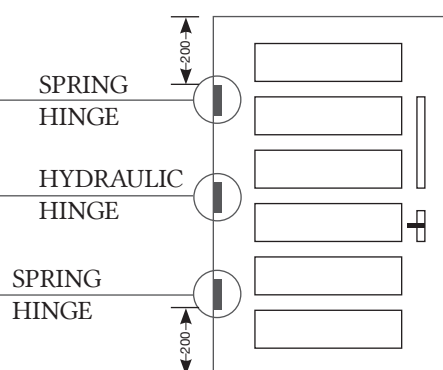


# SC-HD SERIES

## HEAVY DUTY SOFT CLOSING HINGES



|                              |  |
|------------------------------|--|
| <b>Function</b>              | With slow closing, stopper or force-shutting functions.  |
| <b>Features</b>              | Allows door closing under control, variable closing force and speed, pre-set angle of door stopper, force-shutting to ensure latching. |
| <b>Angle of Door Stopper</b> | Approximately 82 degrees (pre-set in factory)  |
| <b>Size</b>                  | Shaft diameter 23mm, 150(L)X 100(W), thickness 3.5mm   |
| <b>Door Weight</b>           | Up to 85 kg  |
| <b>Door Thickness</b>        | 42 – 60 mm   |
| <b>Material</b>              | Steel or Stainless Steel SS304 (other grades on request)   |
| <b>Detail</b>                | 3 pcs / set  |
| <b>Application</b>           | Heavy duty wooden solid doors requiring various closing functions in homes, offices, exhibition halls, hotel rooms etc.                |



| Product Code | Description  | No of hinges | No of functions | Weight (kg) |
|--------------|--|--------------|-----------------|-------------|
| SC-HD1       | <b>SOFTERCLOS™</b> heavy duty soft closing door hinges with soft closing function (up to 85kg)                               | 3            | 1               | 2.1         |
| SC-HD2F      | <b>SOFTERCLOS™</b> heavy duty soft closing door hinges with soft closing and forced shutting function (up to 85kg)           | 3            | 2               |             |
| SC-HD2S      | <b>SOFTERCLOS™</b> heavy duty soft closing door hinges with doorstop and soft closing function (up to 85kg)                  | 3            | 2               |             |
| SC-HD3       | <b>SOFTERCLOS™</b> heavy duty soft closing door hinges with doorstop, soft closing and forced shutting function (up to 85kg) | 3            | 3               |             |



More information on how to order and specify the sides, colours and material you want can be found on Page 3.

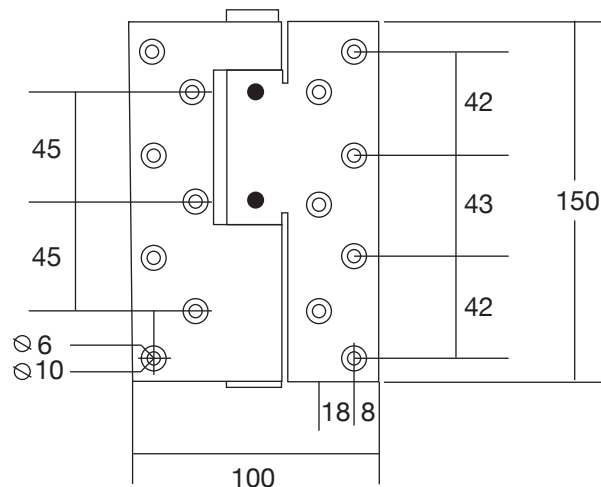
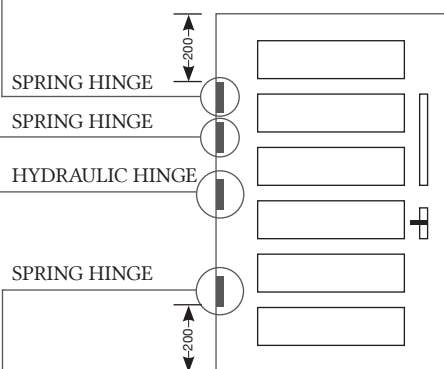




# SC-UD SERIES

## ULTRA HEAVY DUTY SOFT CLOSING HINGES

|                              |   |
|------------------------------|---|
| <b>Function</b>              | With soft closing, stopper or force-shutting functions.   |
| <b>Features</b>              | Allows door closing under control, variable closing force and speed, pre-set angle of door stopper, force-shutting to ensure latching.        |
| <b>Angle of Door Stopper</b> | Approximately 82 degrees (pre-set in factory)   |
| <b>Size</b>                  | Shaft diameter 23mm, 150(L)X100(W). thickness 3.5mm   |
| <b>Door Weight</b>           | Up to 100kg   |
| <b>Door Thickness</b>        | 42 – 60 mm  |
| <b>Material</b>              | Steel, Stainless Steel SS304 (other grades on request)  |
| <b>Detail</b>                | 4 pcs / set   |
| <b>Application</b>           | Ultra heavy duty metal or wooden doors requiring various closing functions in hotels, factories, institutions, high security environment etc. |



| Product Code | Description   | No of hinges | No of functions | Weight (kg) |
|--------------|---|--------------|-----------------|-------------|
| SC-UD1       | <b>SOFTERCLOS™</b> ultra heavy duty self closing door hinges with self closing function (up to 110kg)                               | 4            | 1               | 2.8         |
| SC-UD2F      | <b>SOFTERCLOS™</b> ultra heavy duty self closing door hinges with self closing and forced shutting function (up to 110kg)           | 4            | 2               |             |
| SC-UD2S      | <b>SOFTERCLOS™</b> ultra heavy duty self closing door hinges with doorstop and self closing function (up to 110kg)                  | 4            | 2               |             |
| SC-UD3       | <b>SOFTERCLOS™</b> ultra heavy duty self closing door hinges with doorstop, self closing and forced shutting function (up to 110kg) | 4            | 3               |             |

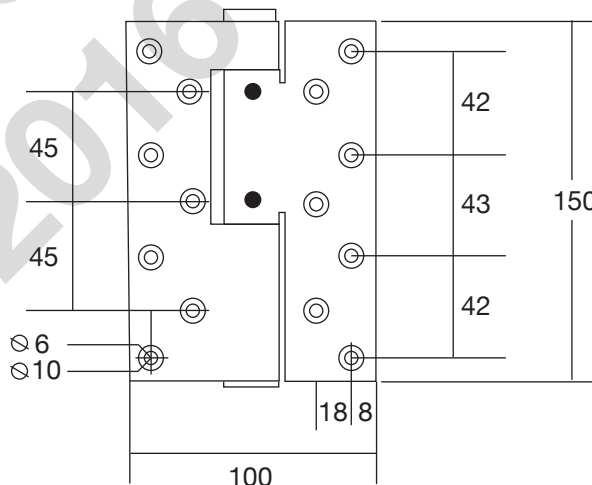
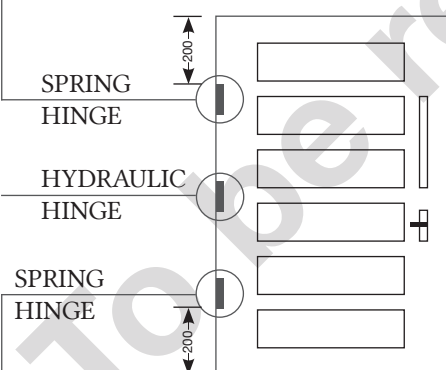
More information on how to order and specify the sides, colours and material you want can be found on Page 3.



# SC-FD SERIES

## FIRE RATED HEAVY DUTY SOFT CLOSING HINGES

|                              |  |
|------------------------------|--|
| <b>Function</b>              | With soft closing, stopper or force-shutting functions.  |
| <b>Features</b>              | Allows door closing under control, variable closing force and speed, pre-set angle of door stopper, force-shutting to ensure latching.                                   |
| <b>Angle of Door Stopper</b> | Approximately 82 degrees (pre-set in factory)  |
| <b>Size</b>                  | Shaft diameter 23mm, 150(L)X100(W), thickness 3.5mm  |
| <b>Door Weight</b>           | Up to 85kg   |
| <b>Door Thickness</b>        | 42 – 60 mm   |
| <b>Material</b>              | Steel or Stainless Steel SS304 (other grades on request)   |
| <b>Detail</b>                | 3 pcs / set  |
| <b>Application</b>           | Fire-rated heavy duty metal or wooden doors requiring various closing functions such as apartments, hotels, commercial buildings, government institutions, airports etc. |



| Product Code | Description   | No of hinges | No of functions | Weight (kg) |
|--------------|---|--------------|-----------------|-------------|
| SC-FD1       | <b>SOFTERCLOS™</b> fire-rated heavy duty soft closing door hinges with soft closing function (up to 85kg)                               | 3            | 1               | 2.1         |
| SC-FD2F      | <b>SOFTERCLOS™</b> fire-rated heavy duty soft closing door hinges with soft closing and forced shutting function (up to 85kg)           | 3            | 2               |             |
| SC-FD2S      | <b>SOFTERCLOS™</b> fire-rated heavy duty soft closing door hinges with doorstop and soft closing function (up to 85kg)                  | 3            | 2               |             |
| SC-FD3       | <b>SOFTERCLOS™</b> fire-rated heavy duty soft closing door hinges with doorstop, soft closing and forced shutting function (up to 85kg) | 3            | 3               |             |

More information on how to order and specify the sides, colours and material you want can be found on Page 3.



## Do's & DON'TS

### Recommendations:

- Fasten flush against door and door frame and avoid undue stress.
- Avoid cleaning with water or corrosive cleaning agents. If required, simply wipe over with a dry microfiber cloth.
- **Do not** scratch with hard tools.
- **Do not** knock or hammer the hinges.
- **Do not** weld.
- **Do not** exceed 110° when opening the door.

### A. SELECTION OF HINGES

SOFTERCLOS™ hinges comes in left or right-closing sets. Different countries have their own interpretation of hinge sides. To complicate matters, where one stands also affects how we determine whether the hinges are left-handed or right.

**To avoid confusion, we recommend the following standardisation; the user or installer must stand in the position where he or she can see the cylinder (also called shaft or knuckle). The hinge to his or her left (with his eyes affixed to the hinge cylinder, shaft or knuckle) shall be called the LEFT hinges, and the hinge to his or her right the RIGHT hinges. Please refer to Diagram 1 below.**

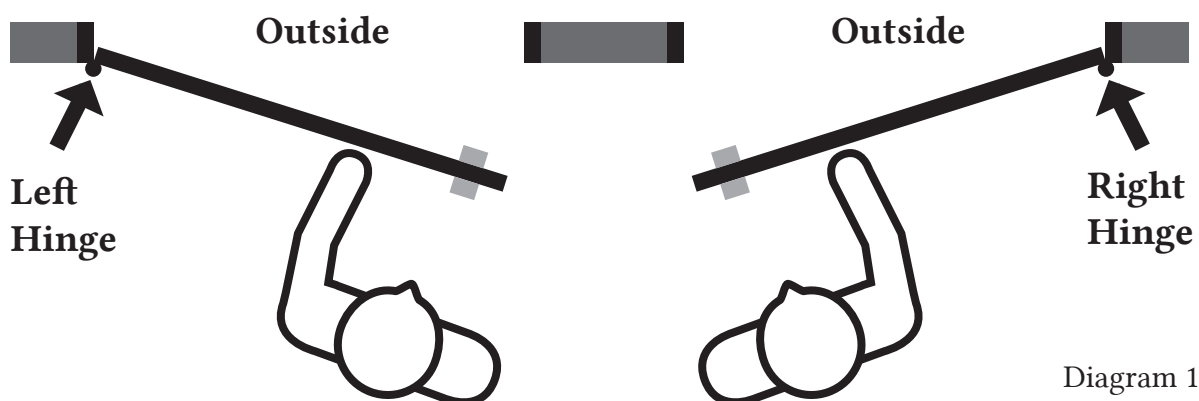


Diagram 1.

| RECOMMENDATIONS:   | PRECAUTIONS:  |
|--|---|
| Door thickness axis: 40 to 60mm<br>Door width (metre) : 0.8 to 1m<br>Door height : 1.8 to 2.5mm<br>Door weight : 30 to 100kg | Ensure that the hinge shaft is on the same axis and the depth of hinges is the same. Otherwise door will not close properly and the lifespan of hinges will be reduced. |



## B. PRE-INSTALLATION POINTERS

Installation of SOFTERCLOS™ hinges, are generally similar to that of ordinary hinges.

**Please take note of the following:**

- Pay attention to the positioning of respective hinges which have specific functions and are thus different from one another.
  - Wrong positioning may render the hinges ineffective and prevent them from working. For correct positioning, **please refer to Diagram 1 on page 9.**
1. Determine door is left or right-handed and choose appropriate hinges.
  2. The spring hinges with door stop must be installed at the top and bottom of the door (the cylinder of the hinge has two SS pins one above the other). The hydraulic hinge must be installed in the middle (the cylinder of the hinge has two pins placed horizontally at the top).
  3. The top and bottom hinges should be installed approximately 200mm from the top and bottom of edge of the door panel respectively.
  4. If the gap between door jamb and door panel is more than 5mm; the door frame must not butt against the hinge cylinder.
  5. If the clearance between door jamb and door panel is less than 5mm; the door panel can be installed against the cylinder of the hinge (Ø23mm).
  6. Ensure that the hinges are in a free hanging state (the door can open and close freely by hand).
  7. The suggested door panel thickness is 42-50mm.





## C. INSTALLATION

1. Inspect and confirm appropriate hinge closing direction (L or R).
2. Mill out slots on both the door panel and door frame in the predetermined location for installation of the hinges. Ensure the hinges are on the same axis and are level with the surface of the door. **Avoid** twisting the hinge during installation as this may affect its functionality. The dimensions of each slot is as follows:

**Slot length:** 150+0.5mm

**Slot width:** 37+0.5mm

**Slot thickness:** 9+0.5mm

3. **Sit the hinge into the slot tightly.** Mark the location of the seven installation holes and drill the holes with **Ø3mm diameter drill bit**. Use self-tapping screws to fasten the top and bottom hinges, making sure that the screw heads are neither inclined nor higher than the surface of the hinges. All hinges must be on a common axis.
4. **Install the door panel unto the door frame as per the following instructions:**
  - A. Stand the door in an upright position; ensure that the clearance between the top of the door panel and bottom of the door frame is approximately 2mm. The clearance between the bottom of door panel and the finished floor level should be more than 5mm. The clearance between door panel thickness and door frame seal should be approximately 2mm.
  - B. **Draw the outline of the hinges** on the door frame and installation hole.
  - C. Drill **3mm-diameter** pilot holes in marked hole positions of the top, middle and bottom hinges.
  - D. Ensure the top and bottom hinges are on a common axis when fastening them to the door frame.
  - E. Test for successful fixing of the door panel by moving the door back and forth and making sure it opens easily as well as quietly.



#### 5. How to set the closing strength of the top and bottom hinges:

- A. Remove the caps of the top and bottom hinges by turning caps in an **anti-clockwise direction**.
- B. Insert the Allen key into the cavity located at the bottom end of the hinge.
- C. Turn the Allen key in the direction of door closing.
- D. Align the holes and insert the fixed pin to engage the force needed for door to close. (Start with first hole alignment and increase until door closes)

#### 6. How to adjust the speed of the hydraulic hinge closing:

- A. Remove the top cap of the hydraulic hinge.
- B. With the flat head screwdriver provided, turn the valve clockwise slowly until the desired closing speed is achieved.
- C. Move the door panel back and forth between 60-90°. When resistance is met, run half ring with the screwdriver and turn 20-30° until door is completely closed.  
**If door cannot be closed, refer to Step 5** and adjust the power of door closing, increasing the force until the door can close.
- D. For door latching, insert the Allen key into the bottom of the hydraulic hinge and turn it in the direction of door closing.
- E. Align the holes and insert the pin to engage the force needed for door to latch.

#### 7. How to adjust the door stopper:

- A. Remove the top cap of the spring hinge.
- B. Insert the small trough inside the centre hole with a screwdriver, rotate clockwise in fixed open angle until a power rise is felt.
- C. Test if door frame can be stopped with the fixed angles (90°, 120°, 150°) under current door closing power conditions; if it is not successful, increase the pressure until door frame is able to stop.

#### 8. For best results:

- A. Allow door closing to complete with the minimum door closing strength.
- B. Accelerate the closing of the door before door reaches between 20-30°.
- C. Ensure door can be stopped at the prescribed angles upon opening (adjust door stopper power if needed).



## D. PRECAUTIONS AFTER INSTALLATION

1. Open door **more than 60°** to avoid being hit by door while it is closing.
2. After prolonged usage, screws should be checked and tightened if they loosen over time.
3. The higher the power of door closing, the faster the door closes and the greater the impact. This increases the risk of door frame damage.
4. External weather elements, such as wind direction and intensity may affect door closing.

## E. IMPORTANT NOTES

1. When installing the hinges, ensure that the top and bottom hinges are on a common axis and aligned.
2. Hinges must be installed as per the direction of markings on the wings of the hinges.
3. Allow the door to close; therefore do not assist or hasten closing by pulling the door panel.

## F. TROUBLESHOOTING

1. **Door panel stops at 20° and will not close.**  
**Cause:** Hinge is not loaded sufficiently.  
**Remedy:** Increase loading as set out as above.
2. **Door panel does not close at all.**  
**Cause:** Wrong side of hinge is installed.  
**Remedy:** Replace spring.
3. **Door panel closes too quickly or slams shut against door jamb.**  
**Causes:** Hydraulic adjustment needs tuning or there is insufficient hydraulic fluid.  
**Remedy:** Adjust closing controls or top up the hydraulic fluid.



## PRIMERO RANGE OF PRODUCTS



ARCHITECTURAL AND STRUCTURAL STAINLESS STEEL PROFILES



SOFT CLOSING HYDRAULIC HINGE SYSTEMS



ARCHITECTURAL STAINLESS STEEL FITTINGS SYSTEMS



MULTIPURPOSE BBQ PITS



ENERGY EFFICIENT GLAZE UNITS

### **Australasia Head Office:**

No. 4/2 Heald Road, Ingleburn, NSW 2565, Australia

Phone: +61 2 96816881 Mobile: +61 419 828 933

E-mail: [info@primeroindustries.com](mailto:info@primeroindustries.com)

Website: [www.primeroindustries.com](http://www.primeroindustries.com)

### **Middle East Regional Office:**

P.O. Box 38117, Dubai, UAE

E-mail: [me.sales@primeroindustries.com](mailto:me.sales@primeroindustries.com)

Website: [www.primeroindustries.com](http://www.primeroindustries.com)

### **South Asia Regional Office:**

No. 6/45, Kannan Nagar, Chromepet, Chennai – 600 044, India

Phone: +91 44 2265 4951 Mobile: +91 98414 87135

E-mail: [sa.sales@primeroindustries.com](mailto:sa.sales@primeroindustries.com)

Website: [www.primeroindustries.com](http://www.primeroindustries.com)

### **South East Asia Regional Office:**

No. 4012, Ang Mo Kio Avenue 10, Techplace 1, #04-07 Singapore 569628

Phone: +65 64520218 Mobile: +65 96300244 Fax: +65 64515298

E-mail: [sea.sales@primeroindustries.com](mailto:sea.sales@primeroindustries.com)

Website: [www.primeroindustries.com](http://www.primeroindustries.com)

