

Grass Tiomos Soft Close Hinge for Back-to-Back/Partial Overlay Cabinets

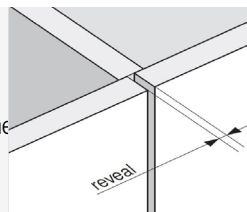
REVEAL & OVERLAY TABLES

WHAT IS A REVEAL?

When a door swings, it needs a certain amount of clearance at both ends of the door so that anything close (ie. another door or a side panel) does not interfere with the opening door. This clearance gap is called the reveal.

FOR OVERLAY DOORS

For overlay doors, the minimum reveal is important only if the door is close to something (ie door or wall). The reveal is the gap between the edge of the door and the second door or wall. If you have back-to-back doors you must consider that both doors may be open at the same time so you need a minimum reveal that is double what the second table says.



HOW TO USE THESE CHARTS

The first table below shows the reveal between two back-to-back doors based on bore distance and cabinet side wall thickness. The bore distance is the distance from the edge of the door to the edge of the cup that is drilled in the back of the door (see page two of this document for further information). When doing replacements, take your bore distance and cabinet side wall thickness to determine what your reveal will be using this hinge.

The second table below shows the minimum amount of reveal required for this hinge depending on bore distance and door thickness. This applies to both single and back-to-back door applications. For new installations, start by determining what reveal distance is possible and/or desired using the first chart. Use the second chart to verify that your door thickness will accommodate the desired reveal.

Example: If you have a 19mm thick side wall and want a 4mm reveal, you would need to have a 5mm bore distance. To determine possible door thickness options you would then use the second table. With a 5mm bore distance and a 4mm back-to-back reveal, that would allow up to a 2 mm reveal per door. This tells us that we could safely use a door ranging from 16mm to 22mm in thickness. While using a 24mm thick door is possible, it would cause binding issues between two doors if you wanted to open both at the same time.

APPOXIMATE CONVERSION CHART

| | |
|--------|----------|
| 3mm | 1/8" |
| 4mm | 5/32" |
| 5mm | 3/16" |
| 5.5mm | 7/32" |
| 6mm | 1/4" |
| 7mm | 9/32" |
| 8mm | 5/16" |
| 9mm | 11/32" |
| 9.5mm | 3/8" |
| 10mm | 13/32" |
| 11mm | 7/16" |
| 12mm | 15/32" |
| 13mm | 1/2" |
| 13.5mm | 17/32" |
| 14mm | 9/16" |
| 15mm | 19/32" |
| 16mm | 5/8" |
| 17mm | 11/16" |
| 18mm | 23/32" |
| 19mm | 3/4" |
| 20mm | 25/32" |
| 20.5mm | 7/8" |
| 21mm | 27/32" |
| 22mm | 7/8" |
| 23mm | 29/32" |
| 24mm | 15/16" |
| 25.4mm | 1" |
| 26mm | 1-1/32" |
| 27mm | 1-1/16" |
| 28mm | 1-3/32" |
| 29mm | 1-1/18" |
| 30mm | 1-3/16" |
| 31mm | 1-7/32" |
| 32mm | 1-1/4" |
| 33mm | 1-5/16" |
| 34mm | 1-11/32" |
| 35mm | 1-3/8" |
| 36mm | 1-13/32" |

BACK-TO-BACK REVEAL

| | | BORE DISTANCE | | | | |
|---------------------|------|---------------|-----|-----|-----|-----|
| | | 3MM | 4MM | 5MM | 6MM | 7MM |
| SIDE WALL THICKNESS | 16MM | 5mm | 3mm | 1mm | N/A | N/A |
| | 19MM | 8mm | 6mm | 4mm | 2mm | N/A |
| | 22MM | 11mm | 9mm | 7mm | 5mm | 3mm |

MINIMUM REVEAL (PER DOOR)

| | | BORE DISTANCE | | | | |
|----------------|------|---------------|-------|-------|-------|-------|
| | | 3MM | 4MM | 5MM | 6MM | 7MM |
| DOOR THICKNESS | 16MM | 0.6mm | 0.6mm | 0.6mm | 0.6mm | 0.6mm |
| | 19MM | 0.9mm | 0.9mm | 0.9mm | 0.9mm | 0.9mm |
| | 20MM | 1.1mm | 1.1mm | 1.1mm | 1.1mm | 1.1mm |
| | 22MM | 1.6mm | 1.6mm | 1.6mm | 1.5mm | 1.5mm |
| | 24MM | 2.4mm | 2.1mm | 2.1mm | 2.1mm | 2.0mm |

*Table values are based on doors where the edges are rounded with a 1mm radius. Numbers are reduced for doors with larger radiused corners.

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REVEAL & OVERLAY TABLES

PARTIAL OVERLAY APPLICATIONS

While half cranked European hinges are most commonly used in back-to-back installations, they can also be used for single doors with a small (aka partial) overlay. Use the table below to determine if this hinge will work for you, depending on your bore distance. Note that these hinges are adjustable +2mm after installation. The true overlay dimension is in the middle of this listed range (e.g. 2.5mm to 6.5mm is a 4.5mm overlay dimension before adjustment).

OVERLAY TABLE

| | | BORE DISTANCE | | | | |
|---------------|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 3MM | 4MM | 5MM | 6MM | 7MM |
| OVERLAY RANGE | 3.5MM TO 7.5MM | 3mm Plate (SKU 701382) | | | | |
| | 4.5MM TO 8.5MM | | 3mm Plate (SKU 701382) | | | |
| | 5.5MM TO 9.5MM | | | 3mm Plate (SKU 701382) | | |
| | 6.5MM TO 10.5MM | | | | 3mm Plate (SKU 701382) | |
| | 7.5MM TO 11.5MM | | | | | 3mm Plate (SKU 701382) |

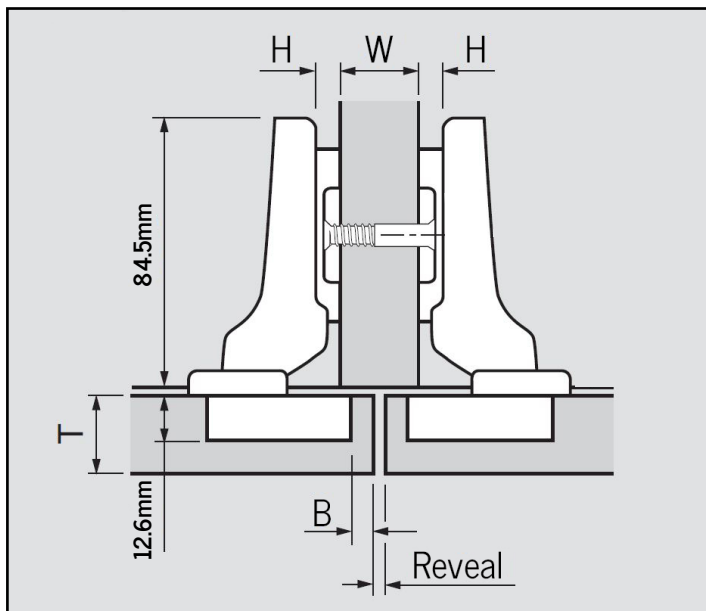
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BORE DISTANCE

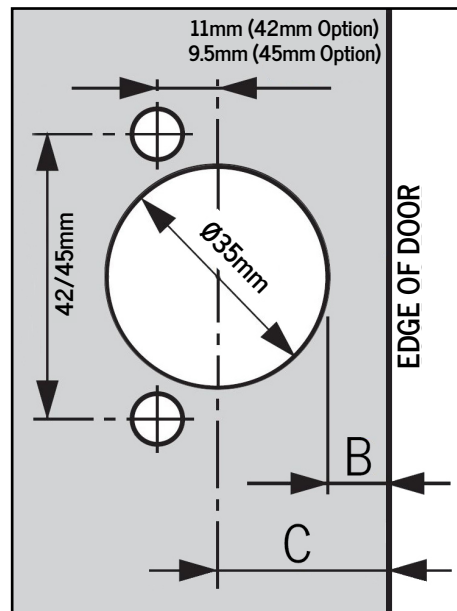
Bore distance (also commonly referred to as the "tab") is how far the hole in the back of your door is drilled from the edge of the door. It is important to get an accurate bore distance measurement to make sure your doors sit in the proper position for both replacements and new installations. The diagrams below can be used to help further understand the back-to-back installation in general, as well as more specific dimensions such as reveal and bore distance.

BACK-TO-BACK INSTALLATION (TOP-DOWN VIEW)



H = Plate Height W = Side Panel Thickness T = Door Thickness

BORE HOLE PATTERN (BACKSIDE OF DOOR)



B = Bore Distance C = Cup Centerpoint