Technical
Clean lines, sleek contemporary style, unique concealed fixings – Moddica hinges are the evolution of the door hinge.

All hinges are crafted from extruded brass with a stainless steel pin and stainless steel screws.

**Standard Finishes**

- Bright Brass
- Satin Brass
- Satin Brass Oxidized Oil Rubbed
- Dark Oxidized Oil Rubbed
- Satin Nickel
- Bright Nickel
- Bright Chrome
- Satin Chrome

Moddica’s standard finishes are not lacquered. Lacquered & custom finishes are available on request. POA.

Screws are supplied in oil rubbed bronze, brass & stainless steel finishes.

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**Guide to Ordering**

*Moddica hinges are available with removable or non-removable pins.*

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moddica 4” hinge code removable pin</td>
<td>MH 03</td>
</tr>
<tr>
<td>Moddica 4” hinge code non removable pin</td>
<td>MH 04</td>
</tr>
<tr>
<td>E.g. Moddica 4” hinge with a removable pin, left hand in Satin Nickel</td>
<td>MH 03 – LH – Satin Nickel</td>
</tr>
<tr>
<td>Moddica Jig</td>
<td>MJ</td>
</tr>
<tr>
<td>Moddica Telescopic Slide</td>
<td>MTS</td>
</tr>
<tr>
<td>E.g. Telescopic Jig to suit 3-hinge arrangement = 3 Jigs &amp; 2 telescopic Slides</td>
<td>MJ x 3 – MTS x 2</td>
</tr>
</tbody>
</table>
Moddica’s Telescopic Jig

Use a genuine Moddica Telescopic Jig Set for accurate installation. Simply lift the assembled jig set from door to door & jamb to jamb. Secure with clamps and rout mortises.

- **Use vertically or horizontally.** Suitable for pre-hanging and onsite installation.
- **Numerous configurations.** 3 - 5 hinges per door.
- **Suits door heights to 10 feet.**
- **Single jigs can be purchased separately and used with a spacing template fabricated from dressed timber.**

**Use Moddica's Telescopic Jig with the following equipment:**

- Plunge router
- 5/8” OD guide bushing
- Long reach router bit with a 1/4” cutter diameter
- Clamps
Wood Joinery. Flush mounted solid core and hollow core doors (with standard wood edge banding frames), including most doors with face panels of wood veneer & laminate.

Doorjambs. Hardwood & softwood, including Pinus Radiata, NOT fiberboard e.g. MDF.

Minimum jamb thickness: 3/4" (19mm)
Minimum door thickness: 1 3/8" (35mm)

Moddica hinges are best suited for flush mounted and thick grooved doorjambs, and are NOT suitable for thin rebated doors or thin grooved jambs.

**Recommended number of Moddica hinges for residential doors up to 4 ft wide**

<table>
<thead>
<tr>
<th>Door Size &amp; Weight</th>
<th>6’8” x 2’8”</th>
<th>7’0” x 3’6”</th>
<th>7’6” x 4’</th>
<th>8’ x 4’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollow core doors - up to 50lb (23kg)</td>
<td>2-3</td>
<td>2-3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Solid core doors - up to 79kg</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

This information is intended as a guideline for residential/light frequency use. Other factors may affect hinge performance. Consult your project architect or engineer to determine the number of hinges required for your particular project conditions and refer to industry Factor Of Safety calculations.
Handing of Moddica Hinges

The correct hinge orientation is shown below. RH & LH hinges are fitted to doorjambs. Symmetric hinges are always fitted to doors.
Plan views RH and LH opening doors definition

LH opening door hinge arrangement shown in various colors for clarity

Stud & door jamb shown transparent. No wall lining or architrave shown

LH Leaf colored yellow fitted to Jamb

RH opening hinge leaf fitted to door jamb and symmetric leaf to door

LH opening hinge leaf fitted to door jamb and symmetric leaf to door

Stud & door jamb shown transparent. No wall lining or architrave shown

RH opening (or LH hung) door

LH opening (or RH hung) door

SECTION B-B
Moddica Mortise Size & Dimension Tolerances

- 40 + _ 2 from apex
- 0.15

- 6.35 - 0.05

- 10.2 + _ 0.4

VIEW A

Architrave
Wall lining
Door jamb
Stud
6mm typical reveal gap
19mm standard jamb
6/2 hardwood
6/2 softwood
6/2 hardwood
6/2 softwood

6.35 - 0.05

6.35 - 0.05
Hinge Spacing & Clearances

Moddica Jigs are designed so that the top of the top hinge can be located 5” down from the rabbet in the top doorjamb. Space center hinge(s) evenly between the top and bottom hinge.

The vertical reveal between the door & jamb is 2.0mm +/- 0.5mm depending on actual mortise depth.

Consult your architect or engineer to determine appropriate hinge placement for your project conditions & doors.

Right hand opening door open at 180 degrees. (Left)

Cycle Test & Load Abuse Test Results

Load tested to 365kg including the mass of the door in closed position.

For further information and reports please contact Moddica.

Cycle testing & load abuse test results available soon.
Installation Instructions

SAFETY: Ensure all those in the work area are using hearing and eye protection while operating a plunge router & installing Moddica hinges.

Equipment list:

<table>
<thead>
<tr>
<th>Moddica Hinges &amp; Screws</th>
<th>Correctly handed to suit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Genuine Moddica Telescopic Jig</strong></td>
<td>Configured to suit your application. E.g. 3-hinge configuration = 3 jigs &amp; 2 telescopic slides. 4-hinges = 4 jigs &amp; 3 telescopic slides.</td>
</tr>
<tr>
<td>Plunge Router</td>
<td>Maximum 6 1/2” router base diameter. Larger router bases may interfere with clamps.</td>
</tr>
<tr>
<td>5/8” OD Router Template Guide Bushing</td>
<td>Maximum inlay bushing length 9/16” (14.5mm).</td>
</tr>
<tr>
<td>1/4” diameter Long Reach Router Bit</td>
<td>2 1/2” overall length. The router bit needs a minimum reach of 1 1/4”. Refer to page 13 for router bit selection. A 1/2” shank will reduce cutter vibration.</td>
</tr>
<tr>
<td><strong>Clamps</strong></td>
<td>2 C clamps per jig. Spreader clamps can be used for installed jambs with wall linings already in place</td>
</tr>
<tr>
<td><strong>Drill bit and #0 square drive for screws</strong></td>
<td>Approx 1 3/4” reach for drilling screw pilot holes. Typically a 2mm diameter drill bit for softwood &amp; 2.5mm diameter for hardwood.</td>
</tr>
<tr>
<td><strong>Wood spacer sticks</strong></td>
<td>See table below</td>
</tr>
</tbody>
</table>

Spacer Stick Guide

<table>
<thead>
<tr>
<th>Door Height</th>
<th>3 Hinge Spacer</th>
<th>4 Hinge Spacer</th>
<th>5 Hinge Spacer</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’8”</td>
<td>410.00</td>
<td>158.00</td>
<td>28.00</td>
</tr>
<tr>
<td>7’0”</td>
<td>469.00</td>
<td>192.00</td>
<td>53.50</td>
</tr>
<tr>
<td>7’6”</td>
<td>545.00</td>
<td>243.00</td>
<td>91.75</td>
</tr>
<tr>
<td>8’0”</td>
<td>622.00</td>
<td>294.00</td>
<td>130.00</td>
</tr>
</tbody>
</table>

This table is offered as a guide only. The actual spacing required for your job may vary.
Moddica does NOT recommend installing Moddica hinges without a genuine Moddica Telescopic Jig Set.

To avoid installation problems, read through all installation steps and carry out a practice installation on the same type of wood as your doors & jambs. Perfect the process before routing mortises on your application & confirm wood suitability.

Measure your test cuts to confirm your mortise depth is accurate. Adjust your depth setting if necessary until the correct depth is achieved.

Check the bit is centered and the finished 1/4" width of the mortise is exactly 1/8" each side of the apex of the wood.

Ensure your practice mortises are perfectly sized with a clean edge & smooth finish.

The hinge leaf fit should allow the hinge leaf to be pushed firmly in by hand or with a light tap from a soft face hammer.

Avoid removing and refitting the router bit between routing the door and the jamb to ensure your depth tolerance is consistent for all hinge mortise pockets.

Installers must be experienced plunge router operators.

1. **Prepare the plunge router.** 5/8” guide bushing and 1/4” router bit.

2. **Set the depth of the cutter to 29mm.** Mortise depth should be 14mm from the actual apex of the wood. The face of the jig to work piece is approximately 15mm. Note: A decreased depth setting will increase the vertical reveal, and an increased depth will decrease the vertical reveal.

3. Prepare a dressed wood spacer stick and cut to the appropriate length for your application and number of hinges. Mark the center of the spacer stick for later use.

4. Assemble the telescopic slides into the jigs on alternating sides and place over the door or jamb.
5. Place your spacer stick between each of the jigs on the telescopic slides, positioning the slides evenly into each end of the jig by aligning the centre mark on your spacer stick with the centre mark on the slides.

6. Fit the socket head cap screws through the jigs into the telescopic slides and fasten firmly with the hex key. Use 2 cap screws for each connecting end of the slides as shown. This prevents losing the spacing set up between door & jamb when routing mortises.

7. Secure the telescopic jig
   a) Doorjambs - check the top face of the jig sits up against the inside top of the jamb face & is firmly fitted over the correct edge of the jamb.
b) Doors - to set the reveal at the top of the door at 1/8” (3mm), align the small face in the center of the notch at the top of the jig with the top face of the door. Check the jigs are firmly fitted over both faces of the corner edge of the door as shown.

Rout hinge mortises
Doors & Doorjambs - Position plunge router firmly into the jig guide slot. Advance the router into the work piece keeping the guide bushing pressed tightly against the face of the jig. Rout out the cavity in several passes, cutting no more than 1/8” with each pass until you reach the full depth. Move the router back and forth to clean out waste in the cavity.
9 **Fit symmetric hinge leaves to the door first.**
Check orientation carefully – ensure the flat face of the symmetric leaf will match the flat face of the non-symmetric leaf. Use a soft face hammer to tap into place if necessary.
Drill pilot holes and set screws – do not over torque screws. Screw heads should be recessed approximately 1/16” (1.5mm) below the leaf face.

10 **Fit non-symmetric leaves to the doorjamb. Drill pilot holes and set screws in the bottom leaf only.**

11 Put the door and jamb together. If necessary, tap the unfastened doorjamb leaves up or down with a soft face hammer to align hinges. Insert the hinge pins while one person holds the door in place during the following steps.

12 Withdraw the top hinge pin and insert the pin upside down. This provides access to the top screw hole in the top jamb leaf while the hinges are perfectly aligned. Drill a pilot hole and set the top screw in the top jamb leaf. Reinsert the hinge pin right way up. Repeat for the remaining hinge(s).

13 Remove the door. Drill pilot holes and set remaining screws.

14 Re-hang door and insert hinge pins right way up.
Selecting the best router bit for your application

Choose the best router bit for your application & type of wood. Always use a sharp solid carbide router bit for the best result.

Down shear router bits will produce the cleanest edge. Take extra care to clear the mortise with each pass. Alternatively an up cut spiral or straight bit can be used.

Whatever router bit you choose; always take several passes increasing the depth with each pass.

Make certain your router bit is centered in the guide bushing. Brass bushings are often preferred over steel.

View our technical E-Brochure at www.moddica.com for links to plunge routing tips.

http://www.highlandwoodworking.com/routersgoleft.aspx
http://www.newwoodworker.com/rtrfeeddir.html
http://blog.festoolusa.com/post/2013/01/03/How-to-set-the-plunge-depth-on-a-router.aspx

Stockists of guide bushings & router bits:

USA
www.toolstoday.com
www.amanatool.com
www.vortextool.com

Australia
www.apworkshop.com.au
www.carbitool.com.au

New Zealand
www.linbide.co.nz
www.optc.co.nz