

## **HARDWARE PREPARATION ON COMMERCIAL DOORS**

The preparation of commercial wood doors for hardware is a specialized part of the door industry. The specialization comes from the great variety of hardware that can be used. Another unique aspect is that the door jambs are usually steel and are handled separately from the doors.

Commercial doors are usually flush wood doors with some type of fire rating that is administered by Warnock Hersey, which is a national testing organization. Door preparation facilities are licensed by the door manufacturer and each door will have a fire rating label attached after it is prepared for hardware.

The following will describe the different processes usually involved with preparing commercial doors for installation and recommended tools for performing the operations.

**RESTILING AND RERAILING** - In order to achieve the greatest flexibility from the doors in inventory it is necessary to be able to cut doors down in height or width. This process involves cutting the door to the desired size, removing the core material between the two skins and gluing in a new stile or rail.

### **Recommended Equipment**

Plymate Door Cut-off Guide- Norfield part no. PLY 8.

&

Porter-Cable Circular Saw- Norfield part no. POR 347.

&

Norfield Stylizer- Norfield part no. MFG 77000.

**SIZING AND EDGE BEVELING**- Many doors come pre-beveled on one or both edges. However, others will need to be beveled and if a door is restiled it will need to be sized and beveled.

### **Recommended Equipment**

Norfield Magnum Door and Jamb Machine.

**HINGE PREPARATION-** The hinge sizes are normally 4 inch, 4 ½ inch and 5 inch, however there are two different thicknesses. The other variables are the hinge locations on the door which includes the spacing and the backset (the distance from the edge of the door to the hinge). The hinge preparation system needs to be quickly adjustable for these variations.

**Recommended Equipment**

DoorTech HS 3000- Norfield part no. TNS 3000.

or

Norfield Magnum Door and Jamb Machine.

**CYLINDER LOCK PREPARATION-** This can include the basic lock and a dead bolt lock with the normal hole size being 2 1/8 inches.

**Recommended Equipment**

Templaco Boremaster “Junior” - Norfield part no. TEM 101.

or

Norfield Magnum Door and Jamb Machine.

**MORTISE LOCK PREPARATION-** Mortise lock preparation includes the pocket for the lock body, the faceplate on the edge of the door and the function holes for the door knobs, keys, etc.

**Recommended Equipment**

Porter-Cable Lock Mortiser- Norfield part no. POR 513.

&

Porter-Cable Lock Face Template- Norfield part no. POR 517.

or

DoorTech Router Template System (faceplate)- Norfield part no. TNS 4100.

&

DoorTech Lock Function Guides (function holes)- Norfield part no. varies.

**EXIT DEVICES, CARD LOCKS, FLUSH PULLS-** These require simple to complex preparations in the face of the door. The preparations can be different on both sides of the door.

**Recommended Equipment**

DoorTech Face Template System- Norfield part no. TNS 1000.

**FLUSH BOLTS-** There are a variety of flush bolts including standard units, automatic units and extension units for tall doors. These preparations are on the edge of the door.

**Recommended Equipment**

DoorTech Router Template System- Norfield part no. TNS 4001.

&

Norfield Extension Flush Bolt Drill Fixture- Norfield part no. MFG 50.

**SOSS HINGES, LABELS, LATCH MORTISES, ROLLER LATCHES, PIVOTS-**

This group of hardware includes a wide variety of preparations all of which are on the edge of the door.

**Recommended Equipment**

DoorTech Router Template System- Norfield part no. TNS 4001.

**STRIKE PLATES-** Strike plates are required as part of a double door installation. The strike plate may need to be installed in the edge of the door or in an astragal attached to the edge of the door.

**Recommended Equipment**

DoorTech Router Template System- Norfield part no. TNS 4001.

or

Norfield T-master (for T-Astragal installations)- Norfield part no. TNS 211.

**HINGE SCREW PRE-DRILL-** Pre-drilling hinge screws helps to prevent wood splitting and insures that the screws enter the wood at the correct angle to the hinge.

**Recommended Equipment**

Vic Self-Centering Bit- Norfield part no. varies.

or

Click's Kwik Drill- Norfield part no. CST 45.

**CORNER CHISEL-** Hinge mortises made with a router have round corners. Many hinges require square corners and a corner chisel is used to make the square corner.

**Recommended Equipment**

Pneumatic Corner Chisel- Norfield part no. SUC 70.

or

1/4 inch Corner Chisel- Norfield part no. POR 42234.

or

5/8 inch Corner Chisel- Norfield part no. WOO 58.

or

Double Corner Chisel- Norfield part no. varies..

**ADA LEVER LOCKS-** Fixtures are available for field installation or retrofit of ADA lever locks.

**Recommended Equipment**

Pro-Lok Templates- Norfield part no. varies.

or

Major Templates- Norfield part no. varies.

**DOOR HOLDERS-** Many of the tools work best with the door in a vertical position and a holding device is used to hold the door.

**Recommended Equipment**

Automaticgrip Door Clamp- Norfield part no. JER 10.

or

Norfield Door Holder- Norfield part no. MFG 200.

or

Norfield “Door Dolly” - Norfield part no. MFG 76410.

**DOOR CART-** Commercial doors can be very heavy and a cart is useful in moving doors in the shop or on the jobsite.

**Recommended Equipment**

Norfield “Door Dolly” - Norfield part no. MFG 76410.

## COPYRIGHT POLICY

The material contained in this document is the property of Norfield Industries. It is intended for the use of our customers and copies can be made for their internal use. Any commercial distribution of this material is prohibited without the written approval of Norfield Industries.