



Concealed Electric Hinges

TW4 and TW8 - Concealed Through-wire

MON - Concealed Monitor

TW4M and TW8M Concealed Through-wire with Monitor

1 Important notes prior to installation.

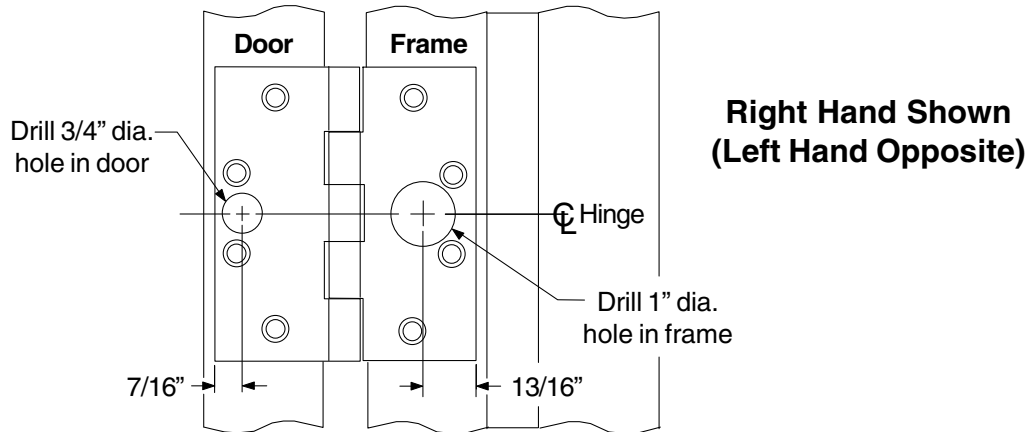
Failure to follow these instructions will void manufacturer's warranty.

- Install 7" tall by 1-21/32" depth mortar guard on mortar filled frames. Failure to install mortar guard will void manufacturer's warranty. Mortar guard supplied by door frame manufacturer or others.
- Insulate all ends and do not cut off unused wires.
- Electric hinge must be installed in non-load bearing center hinge position.
- Do not attempt to disassemble hinge.
- Steel hinges for interior use only.
- Brass and stainless steel hinges for interior and exterior use.

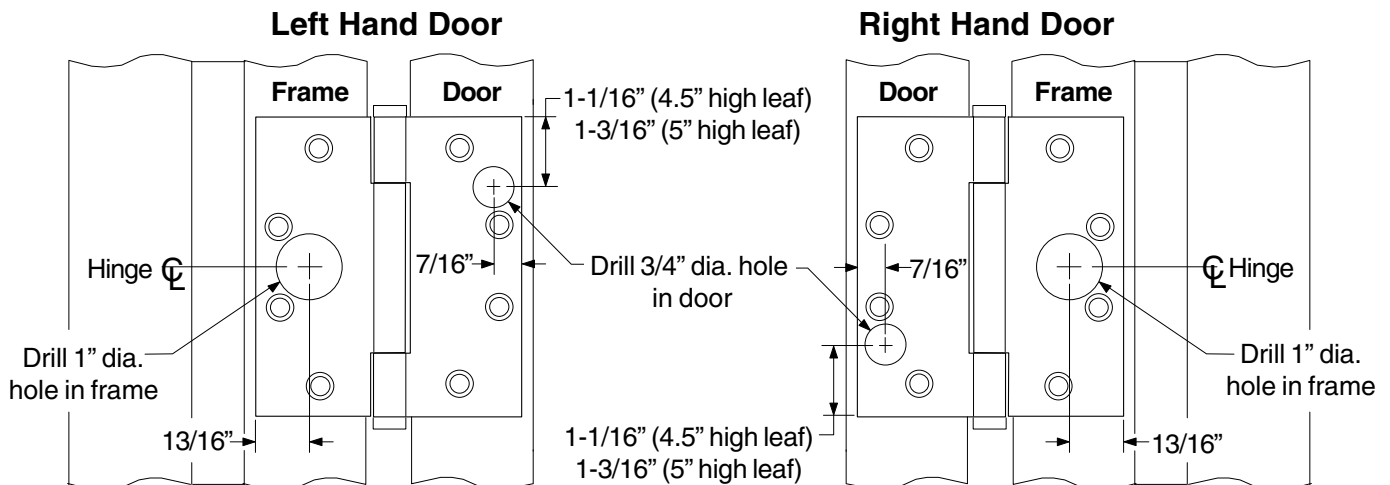
2 Prepare door and frame.

Prepare center hinge position of door and frame as shown below for 3 knuckle hinge or 5 knuckle hinge. Note that the swing clear 5 knuckle model uses the same preparation as the 3 knuckle hinges. Deburr holes to prevent wire damage.

5 Knuckle Hinge (Except Swing Clear Models)



3 Knuckle Hinge (and Swing Clear 5 Knuckle Models)



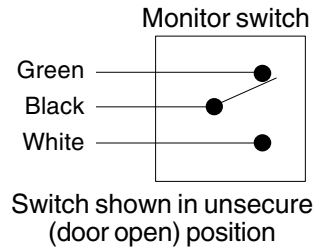
3 For hinges with monitor switch, determine correct wiring configuration.

(Using black and white wires)

When door is secure (closed position) the monitor switch shows a closed contact.
When the door is unsecure (open position) contact is open.

(Using black and green wires)

When door is secure (closed position) the monitor switch shows an open contact.
When the door is unsecure (open position) contact is closed.



4 Connect wiring and install hinge.

4.1. Check hinge fit in prepared door and frame.

Hinge should fit easily without binding.

Warning: Do not hammer hinge for any reason as it can cause serious damage and shortened life.

4.2. Open door to 90 degrees or more for access to jamb preps.

4.3. Extract exterior wiring through the prep holes from the door jamb.

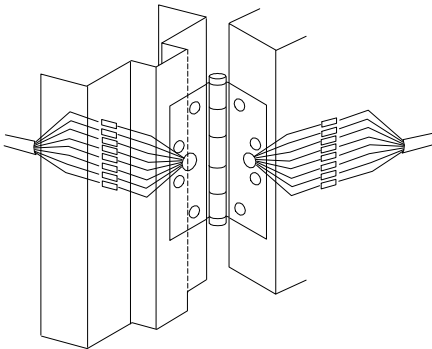
4.4. Attach wires in accordance with project wiring diagrams.

4.5. Terminate wire connections with appropriate crimp splices or wire nuts.

Note: It is helpful to stagger terminations. This allows for easier insertion of wires through prep hole.

Warning: Do not hang hinge by wires during installation or serious damage could occur.

4.6. After all terminations are completed, carefully slide wires through prep hole making sure that wires are placed so they will not be cut or pinched as hinge is installed.



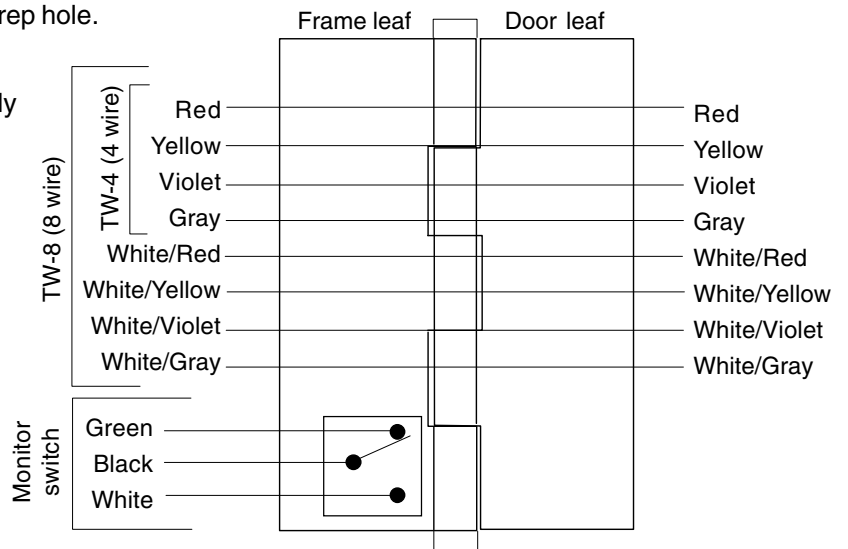
ELECTRICAL SPECIFICATIONS

Through-wires

- For use with 4 and 8 wire applications
- Each wire is 28 AWG and rated 50 Volts AC/DC at 3.5 amps (max.) continuous, or 16 amps (max.) pulse.
- Maximum pulse width: 400 msec.
- Minimum "off" time between pulses: 10 seconds

Electric Monitor Switch

- Maximum rating of switch 30 VDC at .5 amps



5 For hinges with monitor switch, adjust hinge gap if needed for desired operation.

Note: All concealed monitor hinges (MON & TWM) are pre-adjusted at the factory to 3/16" - 3/8" gap between hinge leaves.

5.1. Remove hinge leaf from frame side by removing mounting screws.

5.2. Swing hinge out of frame prep hole to expose the brass switch enclosure.

5.3. Using a small standard blade screwdriver, turn screw clockwise to increase gap. Turn screw one-half turn, then check gap between hinge leaves. Repeat process until desired switch gap is achieved.

