

GENERAL INFORMATION

All Steelcraft frames, doors and stick systems are routinely prepared for various types and grades of architectural hardware. The preparations for the specified hardware are in accordance with the hardware manufacturer's registered and/or published template information.

This section of the Steelcraft TD Manual is designed to help educate users of how Steelcraft products interface and function with the major architectural hardware products. It is also intended to be a frame and door supplement to the information published by the hardware manufacturer being used and/or specified.

HARDWARE

Architectural hardware items are any device, sensor or auxiliary item attached to a frame or door, which is either specified and/or required for the operation and functionality of the door assembly. The hardware attached to the frame and/or door can be purely mechanical, electrical (wired into the alarm and monitoring systems of the building) or pneumatic. The architect, specification writer and/or the purchaser of the door assembly specifies these hardware items.

HARDWARE PREPARATION TYPES:

There are three (3) major types of hardware preparations to be considered.

- **Mortised hardware:**

Any hardware device or item (including sensors) attached to the frame or door that requires a cutout and reinforcement be made prior to attaching the hardware item to the door and/or frame.

- **Surface applied and reinforced hardware:**

Any hardware device or item (including sensors) attached to the frame or door which do not require a cutout be made prior to attaching the hardware item to the frame and/or door, however, the hardware manufacturer or specifier requires a reinforcement be built into the frame or door to support the attached piece of hardware or its function.

- **Surface applied hardware:**

Any hardware device or item (including sensors) attached to the frame or door which does not require either a cutout or reinforcement to be made prior to attaching the hardware item to the frame and/or door.

HARDWARE CATEGORIES:

The architectural hardware attached to a door assembly, usually falls into one of the following device categories:

- **Hinging** - These devices perform the functions of suspending and swinging the door in the frame. Hinging systems are usually attached to the door edge and hinge jamb. The most commonly used hinging devices are:

Butt hinges – mortised to both the door edge and hinge jamb

Continuous hinges – surface applied and reinforced to the door edge and hinge jamb

Pivots – mortised to both door edge and hinge jamb.

- **Locking** - These devices perform the functions of holding the door in a closed position by the means of a latch or lock bolt projecting from the door into a strike. The strike is located in either the frame or inactive leaf of a pair of doors. All of these devices are mortised into the door edge and the strike jamb. The most commonly used locking devices are:

Latches and locks

Deadlocks

Exit devices (some are surface applied on the door face)

Auxiliary locks

- **Closing** – These devices perform the functions of mechanically closing the door once it is opened, and are mainly categorized as:

Surface closers – surface applied and reinforced on the door face and head of the frame.

Concealed closers – mortised to both door top channel and head of the frame.

Floor closers – mortised into the door bottom channel and attached into the floor.

- **Protecting** – These devices are designed to protect the frame and door against foreseen damage from abuse and function. They are mainly surface applied and internally reinforced only when specified. The most commonly used devices in this category are:

Kick plates

Push pull plates

Coordinators

Holders – may be concealed and reinforced when specified

Stops – may be concealed and reinforced when specified

- **Weather Sealing** – These devices perform the functions of limiting weather, smoke and sound penetration through the operating clearances around the installed and operable door, frame and hardware assembly. These devices are mainly surface applied. The most commonly used devices in this category are:

Perimeter weather seals – usually surface attached to the rabbet of the jambs and head

Door bottoms – mortised into the bottom of the door, or surface applied to the bottom of the door face.

Astragals – used in double door applications and surface attached to the edge of one of the doors.

ANSI COMPLIANCE

Steelcraft hardware preparations and reinforcements are in accordance with ANSI A250.6-1997. Locations are in accordance with ANSI/DHI A115.