08 06 70 - Hardware Schedule

Key Schedule

Use this area to list all keys provided on project referencing appropriate Sections. The Campus prefers to have one listing for all keys

Key Schedule for {project name} {building number}						
Purpose / Location	Room Numbe r	Keys Required	Tota I Keys	Model Numbe r	Manufactur er	Section Reference
Toilet Accessories		2/ each building restroom/ accessory keyed differently				10 28 00 Toilet, Bath, and Laundry Accessories
Equipment		2 each				Division 11 – Equipment sections
Furnishings		2 each				Division 12 – Furnishings sections
Elevators		3 keys, 1 installed in elevator pit.				14 20 00 – Elevators
Fire Control Cabinets		2/ each cabinet				21 00 00 – Fire Suppression
Fire Control Padlocks		2/ each Padlock (SFIC cores)				21 00 00 – Fire Suppression
Plumbing		2/ Each were applies				22 00 00 – Plumbing
Plumbing Padlocks		2/ each Padlock (SFIC cores)				22 00 00 – Plumbing

Key Schedule for {project name} {building number}						
Purpose / Location	Room Numbe r	Keys Required	Tota I Keys	Model Numbe r	Manufactur er	Section Reference
HVAC Equipment Panels		2/ each Panel				23 00 00 – HVAC
HVAC Yard, Doors and Equipment Padlocks		2/ each Padlock (SFIC cores)				23 00 00 – HVAC
Electrical Panels		2/ each panel				26 00 00 – Electrical
Emergency Generator Panels and Equipment		2/ each Padlock (SFIC cores)				26 00 00 – Electrical
Lighting Control Panels		2/ each Panel				26 00 00 – Electrical
Lighting Switches		2/ each switch				26 00 00 – Electrical
Electrical Yard, Equipment, & Switches Padlocks		2/ each Padlock (SFIC cores)				26 00 00 – Electrical
Communication s Equipment		2/ each lock				27 00 00 - Communication s
Emergency Telephones (Blue Light Phones)		2/ each				27 00 00 - Communication s
Communication s Equipment Padlocks		2/ each Padlock (SFIC cores)				27 00 00 - Communication s

Key Schedule for {project name} {building number}						
Purpose / Location	Room Numbe r	Keys Required	Tota I Keys	Model Numbe r	Manufactur er	Section Reference
Electronic Safety and Security Panels		2/ each panel				28 00 00 – Electronic Safety and Security
Electronic Safety and Security Equipment Padlocks		2/ each Padlock (SFIC cores)				28 00 00 – Electronic Safety and Security
Irrigation Equipment		2/ each				32 80 00 – Irrigation
Utilities		2/ each				33 00 00 - Utilities

Closeout Submittal: Key Schedule – Provide hard copies and one electronic copy of completed Key Schedule along with keys separated and labeled.

08 11 13 - Hollow Metal Doors and Frames

Basis of Design:

1. Steelcraft

Three-piece knockdown frames shall not be permitted.

Option for knockdown frames shall be submitted to Cal Poly for review and approval, Timely door frames are not preferred.

Steel Doors:

- Exterior: Full flush doors (ANSI A250.8-1998 (SDI-100)), 1-3/4 inches thick, galvannealed steel (ASTM A653/A653M-07), 14 gage closer reinforcement top and bottom with snap-in top caps.
- Interior: Full flush doors (ANSI A250.8-1998 (SDI-100)), 1-3/4 inches thick, 14 gage closer reinforcement top and bottom.

- Hardware preparation and reinforcement: Prepare for commercial hardware (ANSI A250.6-1997) and mortised locks (ANSI A115.1), no face holes unless coordinated with hardware schedule. Factory reinforce for surface applied hardware 14 gage for closer. Locations per ANSI/DHI A115.
- Preferred Manufacturer and Model: Steelcraft L16 Series

Steel Door Frames:

- Exterior: 16 gage welded door frames; A60 hot dipped galvannealed steel.
- Flush Frames: F-Series Frames, 16 gage.

http://www.steelcraft.com/downloads/pdfs/steelcraft_spec_I1.pdf

- Interior: 16 gage knock-down door frames.
- o Drywall Frames: DW-Series (using Baseboards) and K-Series (Not using Baseboards), 16 gage.
- http://www.steelcraft.com/pc_frames_drywall.asp
- http://www.steelcraft.com/downloads/pdfs/steelcraft_spec_dw1.pdf
- Reinforcement: 14 gage for closer, 4-7/8 inches ASA strike, and 4-1/2 inches hinges.
- Preferred Manufacturer: Steelcraft.

08 14 00 - Wood Doors

36 inches minimum, solid core, birch veneer.

Closeout Submittals: Samples for University Paint Shop: Submit documentation of painting system used on "pre-finished" doors, including two manufacturer's sample finishes for each color and system used on the project.

08 41 00 - Entrances and Storefronts

No underfloor closures

08 71 00 - Door Hardware

Keying System:

University Facility Services Campus Key Coordinator designs keying system.

Contractor:

General: Submit proposed keying system to Architect for review and written approval by Trustees, and copy of Best Access (Stanley Security Solutions) Purchase Order Number to Architect for Trustees Records.

Closeout Submittal: Submit three hard copies and one electronic copy of final keying schedule.

Products: Key locks and cores at factory and maintain permanent records of information.

Execution: After submittal and approval of keying system by Trustees, submit manufacturer's Purchase Order Number for Trustees to order cores and keys. Manufacturer shall deliver permanent keys, control keys and cylinder cores directly to Trustees Representative. Installation of cores shall be by the University.

Coordinate installation of permanent cores by University Lock Shop with Trustees Representative.

Keys:

Keys shall be provided by and issued by the University Key Shop. This is to ensure chain of custody and to provide a level of security acceptable to the University.

Hinges and Pivots:

Campus Preferred Manufacturers:

- Hager Companies: Exterior -- Stainless Steel, Ball Bearing Part #BB1191; Interior Plated with 626 Finish, #BB1279BB
- McKinney Products Company, Division of Assa Abloy
- Stanley.
- Continuous hinges are not preferred, use adjustable pivots.

Pivots and Pivot Hinges:

All pivots shall be adjustable. A top, bottom and intermediate pivot is required.

Campus Preferred Manufacturers:

- Ives; Division of Allegion
- Rixson-Firemark, Inc.; Div. of Assa Abloy
- National Manufacturing 101 Retro Kit

Continuous Pin and Barrel Hinges:

Continuous hinges must have University approval prior to specifying or installing. These are allowed under special conditions only.

- Pemko
- Markar Products, Inc.

McKinney Products Company; Div. of Assa Abloy

Mechanical Locks and Latches:

The campus standard are mortise locksets that use an 86-door prep. The Cylinder spec shall be SFIC (Small Format Interchangeable Core) for Best cores, not to be confused with FSIC. Cylindrical locksets shall not be permitted.

Campus Preferred Manufacturers:

Best Access Systems – 45H Series

Campus Acceptable Manufacturers:

Schlage Lock Company; an Ingersoll-Rand Company – L94 Series (may be used with approval
of the University)

Electric Mortise Locksets:

Campus Preferred Manufacturer:

- Best Access Systems 45H Series.
- Schlage L-Series

Surface Bolt:

Campus Preferred Manufacturer:

- Door Controls International
- Don-Jo Manufacturing
- Hager Companies
- Ives: H.B. Ives
- Rockwood Manufacturing Company
- Triangle Brass Manufacturing Company, Inc.

Flush Bolts:

- Door Controls International
- Don-Jo Manufacturing
- Hager Companies

- Ives: H.B. Ives
- Rockwood Manufacturing Company
- Triangle Brass Manufacturing Company, Inc.

Exit Devices:

Prefer rim device over vertical rods. Preferred Manufacturer:

Von Duprin, Division of Allegion – Series 98 or 99.

Not Recommended:

- Adams Rite Manufacturing Co. Products are low quality and don't hold up.
- Corbin Russwim Push pads rust and become a maintenance issue.

Cores and Cylinders:

Small format interchangeable core type, constructed from brass or bronze, stainless steel, or nickel silver.

Number of Pins: Seven

Mortise Type: Threaded cylinders with rings and appropriate cam to suit lock function and type.

Required Manufacturer:

- Best Access Systems.
- Medeco Keymark

Construction Keying:

Construction Master Keys:

Provide temporary construction master keys (provide adequate number of master keys during construction for University access and inspection.) See Section 08 06 05 – Key Schedule for other keys.

Construction Cylinders:

- Provide construction cores.
- Permanent Keying: University installs permanent cores.

Electric Strikes:

Campus Preferred Manufacturers:

• Best F2164 – Fail Secure, continuous duty

- Hes Innovations (1006, 9600)
- Von Duprin

Operating Trim (push/pulls):

Campus Preferred Manufacturers:

- Don-Jo Manufacturing
- Forms & Surfaces
- Triangle Brass Manufacturing Company, Inc.

Accessories for Pairs of Doors:

Campus Preferred Manufacturers:

- Coordinators:
 - Don-Jo Manufacturing
 - Hager Companies
 - o Ives: H.B. Ives
 - o Door Controls Internationals
- Removable Mullions:
 - o Von Duprin, Division of Allegion
 - o Note: "Key Removable" when needed.
- Astragals:
 - National Guard Products, Inc.
 - Pemko Manufacturing Company, Inc.
 - o Reese Enterprises, Inc.

Closers:

- Surface-Mounted Closers:
 - Preferred LCN, Division of Ingersol-Rand, 4040 Series, mounting: inside of door, parallel arm preferred.
 - o Acceptable with University approval Corbin Russwin, DC6200 Series.
- Electromechanical Closers:
 - o LCN, Division of Allegion

- Norton, Division of Assa Abloy
- Concealed Floor Closers: Not preferred because replacement is expensive and difficult.
- Closer Holder Release Devices:
 - o Not preferred because of wear and tear on top hinge.
 - Corbin Russwin Architectural Hardware, Division of Assa Abloy.
 - o Rixson-Firemark, Inc., Division of Assa Abloy.
- Overhead Stops: Not preferred because pull hinges out causing door to sag, and damages door jambs.

Protective Trim Units:

Campus Preferred Manufacturers:

Metal Protective Trim Units:

- Don-Jo Manufacturing
- IPC Door and Wall Protection Systems, Inc.
- Triangle Brass Manufacturing Company, Inc.

Stops and Holders:

Preferred Manufacturers: Metal Protective Trim Units:

- Don-Jo Manufacturing
- Ives: H.B. Ives
- Norton Door Controls, Division of Assa Abloy.
- Rixson-Firemark, Inc., Division of Assa Abloy.
- Triangle Brass Manufacturing Company, Inc.

Door Gasketing:

- Door Gasketing:
 - o National Guard Products, Inc.
 - Pemko Manufacturing Company, Inc.
- Door Bottoms:
 - National Guard Products, Inc.
 - Pemko Manufacturing Company, Inc.

Thresholds:

- Thresholds: Meet ADA Access requirements.
 - o National Guard Products, Inc.
 - o Pemko Manufacturing Company, Inc.
 - o Rixson-Firemark, Inc., Division of Assa Abloy.