

STUDENT HOUSING

GENERAL

The following supplemental guidelines apply to Student Housing projects and override the related Campus Standards and Design Guide (CSDG).

MECHANICAL SYSTEMS

With the exception of the residential room fan coils, all mechanical systems including domestic hot water production shall be controlled by a DDC/EMS system with local, building level, and network/ server/ administrator capabilities and be compatible with the Siemens APOGEE and Insight systems currently in use at the University.

Additional Requirements:

- Position elevator equipment room to minimize noise impact on residents. Do not place near a meeting room. Position near electrical, mechanical, maintenance, custodial or student storage closets and/or vending machine/ laundry room areas.
- Access Panels: provide access panels with screw lock type closure, no keyed locks.

BUILDING METERING

Refer to Division 33 for Building Metering requirements.

DATA/VOICE/ELECTRICAL

802.11 a/b/g/n wireless will be the primary vehicle for data connection. All areas of the complex shall have wireless connectivity but conduit runs with NAMs to each room shall be in place for any future wired connection needs or requests. The IDF closets shall be sized appropriately to handle future switches as needed.

The property does not need to have wired voice runs to each bedroom location. Activation of phone lines by residents is zero. However, we will want voice over IP capability for bedroom locations. There will be specific locations called out for hard phone lines. These will include all office spaces and the Senior Resident Advisor apartments and resident advisor bedrooms.

Additional Specifications:

- Network Access Modules (NAMs) for voice, data and cable TV shall be of the style that is recessed so that co-axial cable and voice and data connectors are NOT sticking out into the room beyond the wall plane surface where they are often bumped.
- Cover Plates: Provide stainless steel cover plates; Bryant SS1 or equal, for all cover plates including but not limited to; convenience outlets, and light switches in all public spaces and residential rooms.

PLUMBING

Student Housing supports water use reduction and as such specifies 1.5 gpm shower heads by Oxygenics, Skin Care 600 series (600XLF 2.0) chrome with white lever, or equal. These shower heads are rated at 2.0 gpm, @ 60 psi, but since UCD water pressure is 50 psi at grade, they dispense 1.5 gpm at ground floor and about .15 gpm less per floor above, 1.0 gpm Laminar flow tamper proof lavatory flow control devices from Utility Savers (www.utility savers.com), or equal and 1.1/1.6 toilets with automatic dual-flush valves. Student Housing will support even lower flow

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needle spray flow lavy flow control device faucets at specific locations such as first floor public bathrooms.

The plumbing system needs to have appropriate shut off valve zoning to allow for ease of maintenance with minimal shutdown impact to residents. Shut off valves shall serve each bathroom, each Senior Resident Advisor apartment and each building. Refer to plumbing specifications.

Incoming domestic water supply shall have a strainer on it with "blow down" capability to keep well water sediment out of the buildings' water supply and fixtures. #20 Mesh (1/32 inch) should be used in this strainer. Incoming domestic water should be plumbed with injector fittings for water system chlorination testing. Floor drains and hose bibs shall be in place in all first floor trash rooms, all laundry rooms and all bathrooms.

Additional Specifications:

- Grey water waste lines at vanities and showers shall be designed properly with sweeps rather than "Ts" to allow for easy snaking when blockage occurs.
- Shower valves shall be Moen "Moentrol Legend" Model #L-3150 valves, or equal. Equivalent valve for Sr. RA apt tub/shower combo is the Moen "Moentrol Legend" Model # L-3250, or equal.
- All water re-circulating pumps shall be Grundfos bronze body pumps, or equal. Laundry room sink faucets shall be Moen "Sani-Stream" Model #8948, or equal.
- Custodial "slop sink" faucets shall be American Standard Service Sink faucet #8344.112.004 Rough Chrome, 6 inch spout with Top Brace, or equal.
- Custodial "slop sinks" shall be recessed into the floors as much as possible to avoid back injuries to staff trying to lift heavy full mop buckets out of and into slop sinks.
- Drain line pipes to bathrooms shall be cast iron for noise attenuation, rather than plastic pipe of any sort.

BUILDING ENVELOPE

Building envelope shall be designed for efficiency, maintainability, security and privacy.

- Low-e glass.
- Bedrooms shall have sliding windows, no single or double hung windows.
- Window insect screens on all operable windows that do not have security screens.
- Ensure no petrochemical mastic/sealant is used under flashings associated with the roof membrane.
- Add automatic door openers to a set number of bedrooms and bathrooms for ADA.
- Plug receptacles and hose bibs shall be provided on all roofs.
- All interior and exterior tile grout shall be caulked to match both color and texture.
- Provide stainless steel corner guards at exterior corners near all utility entrances including trash rooms, and exterior entrances to utility type spaces.
- Security screens on windows: security screens are required on all 1st floor residential windows with the exception of bathroom windows and laundry room windows. Operable 1st floor bathroom windows and laundry room windows shall have a maximum opening width of 6-inches. No casement windows. Awning windows preferred, insect screens required.
- Exterior downspouts: In locations where downspouts are adjacent to residential windows, install a part-way box at the midpoint of the downspout length for noise control. Provide direct connection to catchbasins for all exterior downspouts. No daylighting or overland flow.

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- Exterior hose bibs: Provide commercial grade hose bibs in a hydrant box (Zurn or equal) in convenient locations around the perimeter of each building for maintenance purposes.
- Ensure that low roofs, if produced through design, are not accessible from upper residential or public space operable windows for safety purposes.
- Keep pigeon population in mind when designing exterior features such as eaves, corbels, cornices, overhangs, etc. Eliminate conditions attractive to pigeons whenever/wherever possible.

BUILDING SIGNAGE

- Provide both interior and exterior code required signage, operational signage and wayfinding signage for all buildings. Exterior building identification signs shall include backlighting or spotlighting. Work with the University for operational signage required. Anticipate approximately 12 custom operational type signs per building.

BUILDING SITE

The current buildings on site have had termite infestation; properly treat prior to new construction to eliminate infestation.

BUILDING TRASH ROOMS

Trash rooms shall be sized according to the project requirements (200ASF).

- Provide an enclosure on the exterior of each trash room for staging of two each, 2-yard trash bins. Enclosure must visually conceal the trash bins from public view.
- Provide a hose bib and distribution of electrical convenience outlets in each trash room.
- Coiling 1st floor trash room door shall operate with remote control AND keyed motor on/off switch on both interior and exterior sides of door that use 7 pin interchangeable core for keyway.

VENDING

Vending rooms shall be sized according to the project requirements (100ASF).

LAUNDRY

Openings for washer/dryers shall be oversized to accommodate change in equipment size and move-in of equipment. Opening shall be framed/trimmed out after equipment installation to conceal gaps.

BOTTLE FILLING STATIONS

Provide ELKAY Easy H2O refrigerated touch free water filter system or equal including the following features; filter status indicator, unit shall be integrated into water fountain basin, include automatic counter to indicate quantity of water dispensed. Such bottle filling station shall be in the main entry area of each building on the 1st floor and in the foyer of the lecture hall incorporated into the regular high-low ADA dual height drinking fountain unit. There shall be no drinking fountains or bottle filling stations on the upper floors.

LOCKS & SECURITY

Student Housing uses a networked hard-wired access system (C-Cure) for all exterior entry doors and a stand-alone battery operated card reader system (Onity) for all bedroom doors, custodial closets and other misc. locations.

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Student Housing does use closed circuit video cameras at specified public areas such as entry points, vending areas, bike parking areas. Conduit junction and mounting boxes shall be installed for designated camera locations with cameras being installed by Student Housing after the project is completed.

Additional Requirements:

- Install conduit, junction and mounting for security cameras within public/entry areas.
- Install Onity locks (or equal) on all interior doors, including residential and utility spaces, and at main entries as back up to C-Cure
- C-Cure (or equal) at main entry and all other exterior public entries, excluding utility room spaces.
- Install "service phone" within site or at entry points.
- Install local door prop alarms on all doors that once entered will get a person into the building core.
- Emergency exit doors shall use Von Duprin 33 Series Crash Bars, U.S. 26 finish, or equal. These crash bars shall have cylinders that accept BEST (or equal) inter-changeable cores for "lock-down" activation rather than the standard hex activated turn device.
- Automatic Door Closers shall be LCN 4100 Series-parallel arm, or equal.
- All electro-magnetic door hold-open devices shall be mounted with sex bolts.
- Exit signs – ceiling mounted shall be cast aluminum, not plastic.
- Exit signs – wall mounted photo luminescent type shall be SmartSign # EXIT-AG-101 type or equal.
- Architectural 1 1/2 inch by 1 1/2 inches by 4 foot peel and stick corner guards shall be provided at all outside corners in high traffic areas such as main hallways, lobbies, main stair, building entrances, restroom entrances, floor and study lounge spaces and outside corner of closet in bedrooms. An additional stock of corner guards shall be provided (20% in excess of the installed amount) for future use by the University.

LANDSCAPE AND BIKE PARKING

Landscape shall be designed in a way that minimizes water use, is easily maintainable. Provide logical paths of travel for pedestrians and bicyclists while also providing outdoor community space.

Additional Requirements:

- Use drought tolerant native plants.
- Implement natural storm water drainage/absorption to handle all storm water on-site.
- Reduce or eliminate the use of DG. Bike parking shall be separated from entry points with a hard surface.
- Install Creative Pipe brand "Lightning Bolt", or equal (no known equal), bike racks.
- The minimum standard for amount of bike parking is 1.33 bike parking spots per pillow. Bike parking also needs to be in place to serve program spaces.
- Seat walls shall be designed with integral anti-skateboarding features such as notching and beveled edges (no after-market metal clips).
- Provide sufficient landscape seating areas, benches near entrances are preferred.
- Keep in mind discouraging skateboarders when designing hardscapes, slopes of roads and paths through project, etc.

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BEDROOMS

Bedrooms shall be in double and single occupancy configuration with the ability for double occupancy bedrooms to be converted to triple occupancy. All bedrooms shall have sliding windows, built in closets, carpet tiles with carpet base, tackable wall surfaces, overhead lighting to provide adequate and standard foot candles, wireless internet connection, ability to request hard wired internet, window coverings, door peep holes, towel bars, robe hooks, fire evacuation signs and full length mirrors. Construction of rooms should include measures to maximize noise attenuation. Bedroom wall plugs on all side walls (not on window walls) shall be Hubbell 4-plex "diamond configuration" #HBL420W White 15 amp, 125 volt, 3-pole wired grounded "quads" with Hubbell 4APW white 4-plex adapter plate, or equal.

Additional Specifications:

- Room doors shall be 1 3/4 inch diameter birch solid core with metal kick plates. Metal kick plates (U.S. 26 finish) shall be 20 inches tall. Doors shall have fire rated view finders that are 9/16 inch in diameter with 190 degree viewing radius. Backset on doors shall be 2 3/4 inch. Doors shall have 3 hinges. 5 inch butt hinges are preferred. All room doors shall have an electro-magnetic door hold open device connected to the fire alarm system. Automatic door closer shall be installed on each bedroom door and all other doors opening onto fire exiting paths and shall be attached to wood doors with six bolts rather than wood screws
- Door stops/bumpers shall be wall mounted at elevation where door knobs would otherwise hit walls. Door stops/bumpers shall be 2 3/8 inch diameter with concave rubber bumpers. Door stops/bumpers shall be screwed through sheetrock and into horizontal 2 by 6 inch "fire-blocking" installed within the stud bays or similar framing detail that is at correct elevation to receive the door stop/bumper and therefore the impact of door slamming into door stop/bumper. In some cases lower profile/flat door stops/bumpers might be required where there is not enough space for concave rubber bumpers
- All towel bars, robe hooks, etc. are to have end posts mounted onto surface mounted wood molding-type "backers" that run at least stud to stud.
- Window sills shall have a minimum return of 4 1/2 inches and be made of cultured marble.
- Tackable wall surface bottom edge should be 44 1/2 inches above finished floor to accommodate captain's bed with mattress and quilt.

BATHROOMS

Residential bathrooms serving the student rooms shall be designed with an operable window in place. Bathrooms shall have countertops with integrally molded sinks and shall be solid surface (LG Hi-Macs, Samsung Starron, WilsonArt, Formica or equal). Bathroom partitions shall provide good privacy with no site lines between doors and walls. Shower enclosures, including shower pans, shall be Estelle Solid Surface or equal, fiberglass is not preferred. Epoxy grout shall be used when tiling bathrooms. Where grout lines abut dissimilar surfaces such as shower pans and hallway carpet, as well as all inside corners, sanded Sonolastic NP-1 caulking, or equal should be used rather than grout. Bathroom toilets shall be floor mounted.

Additional Requirements:

- Mirrors mounted in bathrooms shall sit on back of backsplash rather than using "J moldings" at bottom edge. Gunther's or Palmer's Mirror Mastic or equal shall be used as adhesive. All mirrors shall be at least 1/4 inch thick with seamed/polished edges.

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- Lavy faucets shall be American Standard #6502140.002 Monterrey Widespread Lavatory Faucet, or equal, no known equal with conventional spout with 8 inch rigid copper connections with grid drain and lever handles. Chrome finish.
- All Toilets shall be American Standard Madera toilet Model #3461.128 (ADA, elongated, floor-mounted, white, low-flow), or equal.
- Flush valves shall be Sloan ECOS® Dual-Flush Flushometers, or equal, no known equal.
- Toilet Seats shall be Olsonite elongated White Extra-Heavy Duty toilet seats #10CC, or equal, no known equal
- Shower pans shall be one piece solid plastic, Estelle solid surface or equal, to match wall panels. No tile pans. No hot mop pan application. No thin set pan application. Estelle Solid Surface, or equal and not fiberglass.
- All tile grout (interior/exterior) to be sealed.
- Epoxy grout shall be used in all bathrooms.
- Plumbing walls shall be insulated for noise attenuation.
- Toilet partition specs: to be coordinated with University's Representative.
- Shower partition specs: to be coordinated with University's Representative.
- Doors leading to all restrooms and janitor closets shall be equipped with an electro-magnetic door hold open device connected to the fire alarm system.
- Cubby system in restrooms shall be constructed as follows:
 - Overall dimensions: 4 feet 5 inches wide by 3 feet 4 inches tall by 8 feet deep.
 - 4 cubbies wide by 3 cubbies tall.
 - Each cubby 1 foot by 1 foot by 7 inches deep.
 - Constructed from 3/4 inch plywood with laminate plastic face on exposed sides and edges.
 - Mounted to wall to wood shim. #11 10x2 type 'S'P. H.W.S. at 16 inches on center into wood backing with scribe to top wall with caulk.
- Access panels required in restrooms shall not be placed within a bathroom stall. Exception: access panels for fire smoke dampers may be located in ceilings as required, even if within bathroom stall footprint.
- If Plumbing shroud is used under sinks it shall incorporate access panels for easy maintenance. Access panels shall be screw lock release 14 x 14 inch minimum.
- The following bathroom accessories: Hand towel dispensers and soap dispensers, shall be owner furnished, contractor installed.
- Toilet seat cover dispensers, toilet tissue dispensers, sanitary napkin dispensers, sanitary napkin receptacles, shower curtain rods and shower curtains shall be contractor furnished and contractor installed. Toilet tissue dispensers shall be Royce Rolls Ringer Model #TP-2 with clips, or equal.
- Floor tile shall be minimum 3 inches and maximum 6 inches in size.

LOBBY/ENTRYWAY/STAIRS

- Flooring in lobby preferred to be tile or other hard surface (not carpet).
- Main entry stair: stainless steel handrail, continuous welded, wall protection required at half landings; wainscot is acceptable, no precast treads/risers.