

# UC DAVIS HEALTH

**Building Department and Fire Prevention**

**Plan Submittal Checklist  
Version Number: 1.5**

The contents of this document may change periodically. Please visit our website at <https://health.ucdavis.edu/facilities/work-with-us/permitting> for an up-to-date version of these instructions.

**REVISION HISTORY**

This section records the revision history of changes made to this living document:

<b>Date</b>	<b>Version #</b>	<b>Description of Change</b>	<b>Author</b>
5/2/2023	1.0	First draft version	Shruti Gadhok
6/6/2023	1.1	Updated Mechanical/Plumbing Plan requirements	Sabrina Preciado / Alex Muscat
6/8/2023	1.2	Updated Electrical Plan requirements	Del Kirkish / Shruti Gadhok
6/27/2023	1.3	Updated and addressed all the comments	Shruti Gadhok
8/21/2023	1.4	Final Version	Shruti Gadhok
3/12/2024	1.5	Updated the document to include new information	Shruti Gadhok

**Table of Contents:**

1. General Plan Checklist .....4

2. Building Plan Checklist .....6

3. Building and Life Safety Plan Checklist .....7

4. Plumbing Plan Checklist .....8

5. Mechanical Plan Checklist .....9

6. Electrical Plan Checklist .....10

7. Food Equipment Plan Checklist .....12

8. Fire Department Checklist .....12

9. Landscape & Irrigation Plan Checklist .....12

10. CALGreen Checklist .....13

11. HCAI Plan Checklist .....13

Appendix A: Resources .....13

**1. General Plan Checklist**

The following items shall be provided when plans are submitted to the Building Department and Fire Prevention for the plan review and permit issuance of new projects. A comprehensive list of items required on the plans has been identified for each discipline. The list may also identify when a plan is necessary for submittal.

**Note:** Additional information on the plans may be required at the discretion of the discipline reviewing the plans.

Y	N	General Plan
<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Minimum Size and Drawing Scale Requirements:</b></p> <ul style="list-style-type: none"> <li>No less than 24" x 36"</li> <li>Plans must be drawn and saved "To Scale" to ensure proper measuring of lines and areas electronically. Include a scale on each sheet or include the measurements for each object</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Electronic Submittal Requirements:</b></p> <ul style="list-style-type: none"> <li>Each "Plan" or "Plan set" must be saved in <b>PDF format</b> and each file should be <b>under 350MB in size</b>.</li> <li><b>Flatten the drawing layers</b> in your CAD program before creating the PDF. This will also resolve PDF errors in the documents that may result in a return.</li> <li>Pages must be straight, and clear with no streaks; sheets must be contrasting with the background and not be too light or dark.</li> <li>Document file names must match the "<a href="#">File Naming Convention</a>" requirements. Please refer to "<b>Appendix A</b>" and "<b>Appendix B</b>" in the "<a href="#">Electronic Plan Review Submittal Guide</a>" on the <a href="#">Building Permit Website</a>.</li> <li>Plan sets must have bookmarks that list sheet numbers and sheet titles.</li> <li>Supplemental review documents (calculations, specifications, manufacturer cut sheets, etc.) must all have bookmarks.</li> <li>Sheet numbers are required on all plan (drawings) sheets, they must be in the lower right-hand corner of every sheet.</li> <li>For a comprehensive list please refer to the "<a href="#">Electronic Plan Review Submittal Guide</a>" on the <a href="#">Building Permit Website</a></li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Plans Cover Sheet Requirements:</b></p> <ul style="list-style-type: none"> <li>UCDH Project Title</li> <li>UCDH Project Number</li> <li>Name of Facility</li> <li>Must have a Sheet Number</li> <li>Cover Sheet including Address of subject property.</li> <li>Complete Index of Drawings with Matching Sheet Titles &amp; Numbers <i>Note:</i> Exception for a larger project to move the index to the second sheet</li> <li>Project Scope of Work Description               <ul style="list-style-type: none"> <li>Detailed description of work to be covered by the building permit.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>• Project Information:             <ul style="list-style-type: none"> <li>• Building Type</li> <li>• Occupancy Type</li> <li>• Fire Sprinkler / Fire Alarm</li> <li>• Square Footage</li> <li>• Project Address</li> </ul> </li> <li>• Project Directory to include all contact information for:             <ul style="list-style-type: none"> <li>• Design Professionals</li> <li>• UCDMC Project Manager/Owners Representative</li> <li>• Construction Manager (if applicable)</li> </ul> </li> <li>• Limits of Construction Shown</li> <li>• Appropriate Code References             <ul style="list-style-type: none"> <li>• Note: Refer to <a href="#">HCAI CAN 1-0 regarding appropriate codes</a></li> </ul> </li> <li>• Abbreviations List</li> <li>• General Notes</li> <li>• Design Professional Stamps with Signature &amp; Expiration Date on every page.</li> <li>• Construction Documents Deliverable Percentage Complete Information</li> <li>• Schedule of Deferred Approval Items / Submittals</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Title Block Information should be included on each sheet:</b></p> <ul style="list-style-type: none"> <li>• Project Name</li> <li>• Address</li> <li>• Licensed professional’s signed Stamp</li> <li>• UC Davis Health Logo</li> <li>• FD&amp;C Project Number</li> <li>• Space requirements for the Building Department and Fire Marshals office must meet stamping requirements.             <ul style="list-style-type: none"> <li>○ <b>Link:</b> <a href="https://health.ucdavis.edu/facilities/work-with-us/permitting">https://health.ucdavis.edu/facilities/work-with-us/permitting</a></li> <li>○ Refer to <b>Appendix G and Appendix H</b> – Electronic Plan Review Submittal Guide</li> </ul> </li> </ul> <p>(Additional information to be included on each plan sheet for each discipline is identified below)</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Additional Required Basic Construction Plan Features:</b></p> <ul style="list-style-type: none"> <li>• Vicinity Map</li> <li>• North Arrow</li> <li>• Cross-Streets</li> <li>• UC Davis Building Number</li> <li>• UC Davis Building Name</li> <li>• Complete Code Analysis including an Area Analysis, breakdown of sq. ft. per occupancy group/Use(s), and construction type and separated/non-separated designation (mixed use).</li> <li>• Accessible Path of Travel Information</li> </ul>

<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Supplemental Documents when required by the Scope of Project:</b></p> <ul style="list-style-type: none"> <li>• Structural Calculations</li> <li>• UC Davis Project Specifications</li> <li>• Soils Report and foundation review letter from a geotechnical engineer</li> <li>• T-24, part 6 energy code requirements</li> <li>• Fire alarm Calculations and Material Data Sheet</li> <li>• Fire Sprinkler Calculations and Material Data Sheet</li> <li>• Water Supply Test</li> </ul>
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## 2. Building Plan Checklist

Y	N	Building Plan
<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Site or Plot – Plan Set Requirements</b></p> <ul style="list-style-type: none"> <li>• Lot dimension showing whole parcel and property lines Building footprint with dimension to property lines and unloading zones (detail)</li> <li>• Utility lines and connection points (water, sewer, electrical, gas, fire hydrants, easements, and rights-of-way)</li> <li>• Provide dimensions for all new and/or existing improvements:               <ul style="list-style-type: none"> <li>• Planters</li> <li>• Sidewalks</li> <li>• Parking</li> <li>• Maneuvering</li> </ul> </li> <li>• Parking analysis</li> <li>• Parking layout showing accessible parking spaces, the disabled path of travel, electrical vehicle parking, and carpool/vanpool parking from the public right-of-way to the main building.</li> <li>• Provide signage details for disabled access.</li> <li>• Location of driveways, off-street parking, and loading facilities (show dimensions of parking spaces)</li> <li>• Details -Trash/Recycling Enclosure details if applicable (location, size, type of dumpsters/receptacles and access), bike lockers, curbs, and signage</li> <li>• Location of walls/fences, footing details, and elevation details (height, materials, color)</li> <li>• Photo Metrics of all exterior lighting</li> <li>• Lightning location on the site plan and building elevation.</li> <li>• Monument signage typically is under a separate permit.</li> </ul>

**3. Building and Life Safety Plan Checklist**

Y	N	<b>Building and Fire Life Safety Plan</b>
<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• Civil Drawings</li> <li>• Detailed code analysis demonstrating code compliance with accessibility requirements.</li> <li>• Architectural Drawings (i.e., site plan, floor plan, seating plan, roof plans, elevations, details, and/or sections).</li> <li>• Detailed means of egress plan</li> <li>• Existing and proposed property lines and all applicable easements shall be depicted on the drawings.</li> <li>• Structural Drawings (i.e., foundation plan, floor framing plan, roof framing plan, sections, and/or details)</li> <li>• Two (2) sets of Structural Calculations stamped and wet-signed by the design professional.</li> <li>• Title 24 Energy Calculations, Forms, and Mandatory measures (Note: forms ENV-1, Mech-1, and LTG-1 shall be signed by the design engineer and shall be a part of the approved plans)</li> <li>• Two copies of the soil report and foundation review letter from the Geotechnical Engineer</li> <li>• Hazardous Material Declaration (list type &amp; quantities of chemicals stored on site)</li> <li>• Temporary construction barriers, dust prevention measures, and applicable ICRA requirements.</li> <li>• Construction details are to be incorporated into the plan set and coordinated to where they occur on the plans.</li> <li>• Rated Fire Walls Shown &amp; Identified on Drawings</li> </ul>

**4. Plumbing Plan Checklist**

Y	N	Plumbing Plan
<input type="checkbox"/>	<input type="checkbox"/>	<p>1. Floor Plan</p> <ul style="list-style-type: none"> <li>• Required number of plumbing fixtures per California Plumbing and Building Codes</li> <li>• Plumbing fixture count schedule</li> <li>• Fixture layout and required clearances.</li> </ul> <p><b>Note:</b> Coordinate with Architectural Drawings.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>2. Single line and/or isometric drawings showing location, material, size, fixture units, and lengths of:</p> <ul style="list-style-type: none"> <li>• Drains and sewer pipes including size and slopes.</li> <li>• Vents</li> <li>• Roof drains, rainwater, and overflow piping sized for rainfall per hour California Building Code and Plumbing Code.</li> <li>• Water lines, floor sinks, condensate lines</li> <li>• Water and waste sizing calculations</li> <li>• Gas line pipe size and calculation</li> <li>• Medical gas piping including zone valves and required alarms.</li> <li>• Condensate piping and overflow pans where applicable.</li> <li>• Steam and steam condensate piping when required.</li> <li>• Plumbing schedules</li> <li>• Appropriate details</li> </ul>

**5. Mechanical Plan Checklist**

Y	N	Mechanical Plan
<input type="checkbox"/>	<input type="checkbox"/>	<p>1. Floor Plan</p> <ul style="list-style-type: none"> <li>• Size and location of all duct work, plenums, registers, fire and fire/smoke dampers, fresh air intakes, and airflow requirements</li> <li>• All thermostats and humidistat’s locations</li> <li>• Size and location of all combustion air openings (when gas appliances are used)</li> <li>• Size, type, and termination of any gas vents, grease ducts, etc.</li> <li>• Details of any fire-rated shafts</li> <li>• Equipment – show size, weight, attachment details, location, access, make, and model numbers, and OPR numbers when required. Structural calculations are required unless the equipment meets exceptions per ASCE 7-16.</li> <li>• Table 4A for OSHPD 1 and 3 required.</li> <li>• Provide minimum required ventilation and outside air (per current CMC and Title 24, Part 6 Energy Code)</li> <li>• Provide full Title 24 Mechanical worksheets included in the plan set.</li> <li>• Equipment schedules</li> <li>• Control drawings including the Sequence of Operation</li> <li>• Appropriate details.</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p>2. Type I or Type II Hoods (Commercial Kitchen, Lab, etc.)</p> <ul style="list-style-type: none"> <li>• Provide construction details of fire-rated shafts.</li> <li>• Provide CFM calculations, locations, type, and size of hood, duct, and equipment.</li> <li>• Provide CFM of exhaust and makeup air</li> <li>• Location of exhaust termination, provide equipment installation instructions and listings.</li> </ul> <p><b>Note:</b> Food Service Handling Facilities, other than wholesale, require proof of submittal to the County Environmental Health Department.</p>

**6. Electrical Plan Checklist**

Y	N	Electrical Plan:
<input type="checkbox"/>	<input type="checkbox"/>	<p>1. <b>Electrical Plans:</b></p> <ul style="list-style-type: none"> <li>• Cover sheet with the following information:               <ol style="list-style-type: none"> <li>1) Sheet Index</li> <li>2) Legends</li> <li>3) Abbreviation List</li> </ol> </li> <li>• Lighting Fixture schedule, including description type and fixture loads.</li> <li>• Title 24 calculations, included in the plan set.</li> <li>• Site Plan (if applicable)</li> <li>• Lighting Floor Plan(s) including switching, and circuitry identification.</li> <li>• Lighting Photometric Plan(s)</li> <li>• Power Floor Plan(s), including receptacle equipment layout and circuitry.</li> <li>• Low Voltage Floor Plan(s)</li> <li>• Fire Alarm Plans</li> <li>• Enlarged Imaging Room Plans (if applicable)</li> <li>• Enlarged Electrical Room Plans</li> <li>• Feeder Schedules</li> <li>• Grounding Riser Diagram</li> <li>• Electrical Details</li> <li>• Equipment schedule</li> <li>• HVAC equipment location, supply voltage, demand, their disconnects, and circuitry.</li> <li>• Misc. Electrical equipment and circuitry</li> <li>• Location of SMUD transformer, service equipment, panels, and controllers as required.</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p>2. <b>Single Line Drawing</b></p> <ul style="list-style-type: none"> <li>• Main service size</li> <li>• Size of any wireways or busways</li> <li>• Size and type of all overcurrent protective devices</li> <li>• Feeders, including size and type of conduit and conductors</li> <li>• AIC ratings (service, panel boards, etc.)</li> <li>• All ground conductors' sizes: Ufer, supplemental ground, water, and gas bonding</li> <li>• Transformers, their size, and type: transformer grounds</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p>3. <b>Load Calculations</b></p> <ul style="list-style-type: none"> <li>• Complete CEC (NEC) calculations based on actual load requirements, including 125% for continuous loads and adding 25% of the largest motor.</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<p>4. <b>Complete Panel Schedules</b></p> <ul style="list-style-type: none"> <li>• Voltage and ampere ratings</li> <li>• Phase and wire number (3 or 4 wires)</li> <li>• Breaker or fuse sizes</li> <li>• Main Circuit Breaker (M.C.B) or Main Lugs Only (M.L.O.)</li> </ul>

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		<ul style="list-style-type: none"><li>• AIC rating (service, panel boards, etc.)</li><li>• Loads of each circuit</li><li>• Panel total load</li></ul> <p><b>Note:</b> All new or upgraded services require a commitment letter from SMUD</p>
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### 7. Food Equipment Plan Checklist

Y	N	Food Equipment Plan:
<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• Make, manufacturer, and model number of all food equipment (must be NSF or equivalent)</li> <li>• Storage areas for food, employee garments, and cleaning supplies</li> <li>• Interior room finishes.</li> <li>• Equipment Rough-in Connection Requirements including Plumbing, Mechanical and Electrical Requirements</li> <li>• Equipment Seismic Anchoring Schedule and Equipment Details</li> <li>• Equipment Plans</li> <li>• Equipment Composite Schedule</li> </ul>

### 8. Fire Department Checklist

Y	N/A	Fire Department
<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• See the UC Davis Health Fire Marshal’s Office for their requirements.</li> <li>• <a href="https://health.ucdavis.edu/fire/">https://health.ucdavis.edu/fire/</a></li> <li>• <a href="https://osfm.fire.ca.gov/media/nqkdw5mo/osfm-plan-review-submittal-instructions.pdf">https://osfm.fire.ca.gov/media/nqkdw5mo/osfm-plan-review-submittal-instructions.pdf</a></li> </ul>

### 9. Landscape & Irrigation Plan Checklist

Y	N	Landscape & Irrigation Plan
<input type="checkbox"/>	<input type="checkbox"/>	<p>New commercial construction projects with landscaping shall comply with <a href="#">2022 Green Code section 5.304 Outdoor Water Use</a> and <a href="#">Department of Water Resources Model Water Efficient Landscape Ordinance</a> (MWELO).</p>

**10. CALGreen Checklist**

Y	N	CALGreen
<input type="checkbox"/>	<input type="checkbox"/>	<p>This checklist applies to newly constructed buildings, building additions 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above. The following checklist is not a complete list of mandatory requirements.</p> <p>Please visit <a href="#">CALGreen Design Requirements</a></p>

**11. HCAI Plan Checklist**

Y	N	HCAI Plan Requirements – HCAI Project
<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• UCDMC Facility Number 10619 Indicated on Plans (Cover/Title Sheet)</li> <li>• Name of Facility - “The <b>University of California Davis Medical Center</b>”</li> <li>• UC Davis Health logo</li> <li>• HCAI Building Number(s) are indicated on Plans.</li> </ul> <p><b>Note:</b> Refer to <a href="#">HCAI Site Plans</a> for this information</p> <ul style="list-style-type: none"> <li>• HCAI Testing, Inspection &amp; Observation Form (Completed &amp; Signed by Design Professional)</li> <li>• Please refer to “<b>Appendix E and Appendix F</b>” on the “<i>Electronic Plan Review Submittal Guide</i>” on the Building Department website for HCAI stamping requirements. Additionally, the HCAI project title block example can be found on <b>the <a href="#">Building Department Website</a></b></li> </ul>

**Appendix A: Resources**

Visit the following sites for more information on codes and regulations:

1. [HCAI Codes & Regulations](#)
2. [Building Department Website](#)
3. [CBSC Triennial Codes](#)
4. [CA Energy Code](#)
5. **For Internal** (Login for ICC, NFPA, and IAPMO)
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