

Project Name:

Date:

Checklist		
ELECTRICAL (ELEC)		
Schematic Design (SD)		Notes
<i>By the end of Schematic Design, electrical layouts should be developed enough to convey system concepts, identify major equipment locations, and illustrate preliminary riser zones. Drawings should support early coordination with architectural and structural documents, and highlight any significant spatial or code-related constraints. At this stage, a preliminary load letter should also be prepared and submitted to the utility provider to initiate service coordination.</i>		
1. Title Block - Confirm that electrical drawings use the correct title block and match the architectural sheet numbering format. Ensure drawing scale and orientation are consistent with architectural backgrounds.	<input type="checkbox"/>	
2. Code & General Notes - Review code references and confirm the applicable electrical codes and standards are listed. Verify general notes include basic design criteria for power, lighting, heat trace, and if applicable lightning protection	<input type="checkbox"/>	
3. Floor Plans - Confirm that floor plan backgrounds align with the architectural drawings, including column grid references. Ensure plans are graphically clean, with unnecessary worksets, duplicate grids, or reference layers turned off to maintain clarity and consistency.	<input type="checkbox"/>	
4. Risers - Confirm preliminary electrical risers are shown, located within appropriate shafts or chases, and align with architectural and structural plans. Identify any potential structural conflicts and verify vertical alignment with the riser diagram.	<input type="checkbox"/>	
5. Plan Layouts - Ensure overall electrical plans include preliminary layouts for electrical rooms or reference enlarged plans where more detail is needed. Enlarged plans (typically at 1/4" scale) should show panel and equipment arrangements with identification and notes. Overall plans may also indicate grounding plates, receptacles, and major equipment power needs depending on the project. Review for clarity, system continuity, and coordination with architectural room layouts.	<input type="checkbox"/>	
6. Incoming Services – At the schematic level, incoming electrical service information is typically limited to narratives or outline specifications. Confirm that key assumptions—such as utility coordination, service voltage, and preliminary service size—are clearly stated. Verify that the utility load letter has been requested or received, and that it reflects the owner’s anticipated future needs as communicated to the design team.	<input type="checkbox"/>	
7. Electrical Rooms - Preliminary layouts should be provided for key spaces including generators, substations, paralleling switchgear rooms, and typical electrical rooms housing floor-level panels. These layouts help establish basic space planning, equipment access, and coordination with architectural, structural, and mechanical systems.	<input type="checkbox"/>	
8. BOH Lighting Plans - Confirm that preliminary lighting layouts for back-of-house spaces, such as service corridors, mechanical rooms, and support areas, are provided. Lighting fixtures may be tagged with IDs referencing a corresponding schedule with general fixture type and description.	<input type="checkbox"/>	
9. Riser Diagrams - Confirm riser diagrams are included and graphically clear. While their technical content is the responsibility of the electrical engineer, architects should verify legibility and that the number of floors and major systems align with the architectural documents.	<input type="checkbox"/>	
10. Details – Confirm that key electrical details are included where applicable. While few are typically shown at SD, lightning protection details should be reviewed if included. Verify that grounding methods, such as down conductors or connections to coping and railings, are coordinated with the architectural design.	<input type="checkbox"/>	
11. Review Outline Specs – Confirm that outline specifications or narrative descriptions are included for all major electrical systems. Content should summarize the overall project scope and include descriptions of incoming services, power distribution, electrical closets, emergency power systems, life safety systems, lighting controls, lightning protection, and grounding.	<input type="checkbox"/>	

ELECTRICAL (ELEC)		
Design Development (DD)		Notes
<i>At the completion of Design Development, the full scope of electrical systems must be clearly defined in the documents. While full coordination and construction-level detailing are not required at this stage, all major components, equipment, and routing, including power and lighting, that influence scope must be shown and coordinated. The drawings should reflect system intent, layout, and constraints necessary to support downstream development and pricing. All items from Schematic Design are expected to be further developed and advanced in alignment with Design Development scope.</i>		
1. Clash Detection and Model Coordination – Confirm that conduit routing, electrical panels, switchgear, generators, substations, and back-of-house (BOH) lighting layouts are fully coordinated in the BIM/Revit model. Use clash detection tools or detailed visual checks to verify that all electrical components avoid structural conflicts and maintain required clearances. Confirm adequate space within shafts, electrical closets, and equipment rooms, especially where shared with mechanical systems.	<input type="checkbox"/>	
2. Plan Readability and Graphic Clarity – Confirm all electrical plans are legible, properly scaled, and clearly annotated. Plans should use a typical grey-tone architectural background to enhance the visibility of receptacles, panels, switches, lighting fixtures, and equipment. Ensure all electrical elements are accurately drawn and labeled. Views should be free of duplicate grids, unnecessary worksets, or visual clutter.	<input type="checkbox"/>	
3. Floor Plans and Power Layout – Confirm electrical power plans show all devices and circuiting as coordinated with the architect, including receptacles, equipment connections, panels, and any specialty systems requiring power such as food service equipment and bottle fillers. Layouts must reflect all necessary electrical connections, including power for automatic doors, in-floor power boxes, J-boxes for equipment hook-up, and, if provided, automated shades. All circuiting must be diagrammed, and plans should coordinate with architectural, structural, and MEP backgrounds to ensure clear routing and placement.	<input type="checkbox"/>	
4. Incoming Electrical Service – Confirm the incoming electrical service from the utility provider is shown from the point of entry (POE) to the main switchgear or service equipment. Routing must be coordinated with foundations and civil drawings. Verify service size and connection location, and confirm required sleeves and penetrations are identified.	<input type="checkbox"/>	
5. Grounding Plan – If required, confirm that a cellar or foundation-level plan is provided to show the location of below-grade grounding plates. Coordinate the cabling path with the electrical and structural engineers, especially for concrete-framed buildings where routing and connections may be more limited, particularly when cabling is located within or on structural columns.	<input type="checkbox"/>	
6. Lightning Protection Plan and Details – Confirm that roof-level plans include the layout of lightning protection conductors at roof high points, along the perimeter, and across the field of the roof. Cabling connections between air terminals and grounding locations should be shown by the engineer. The architect should review to ensure this scope is provided, confirm previously coordinated items are included, and verify integration with roof and curtain wall assemblies.	<input type="checkbox"/>	
7. Enlarged Room Plans – Confirm enlarged power plans are provided for specialty areas such as lab benches, patient rooms, cafeterias, serveries, conference rooms, and dedicated electrical closets. These areas typically have concentrated electrical needs and depend on close coordination with the architect and other consultants. Power requirements and device layouts should reflect previously coordinated input. The architect should confirm that all relevant equipment cut sheets have been shared and that plans respond accordingly. Equipment schedules, incorporating consultant input, should be included on either the enlarged plans or full-size drawings, depending on the scope and location.	<input type="checkbox"/>	
8. Lighting Plans – Confirm lighting plans include all required fixtures for both front-of-house and back-of-house areas, including those on emergency power. Ensure EM lighting location and levels comply with life safety codes. Plans typically show light switches, occupancy sensors, stairwell lighting, exit signs, and exterior lighting. Ceiling types and graphics should match the architectural RCP for reference and coordination. Room and fixture tags must be shown. Confirm fixture placement aligns with the BIM/Revit model and the lighting consultant's layouts.	<input type="checkbox"/>	
9. Noise and Vibration – Confirm electrical general notes or plan annotations address acoustic isolation and vibration control requirements for electrical equipment, particularly transformers and generators. Review for any specified measures such as resilient mounts, isolation pads, or special room treatments, and verify that these have been coordinated with the architect and acoustical consultant.	<input type="checkbox"/>	
10. Riser Diagrams – Confirm riser diagrams are graphically clear, complete, and the number of floors shown match the architectural drawings.	<input type="checkbox"/>	

11. Generators - Generators – If provided, confirm that the generator's size, weight, placement, and method of support have been coordinated with the structural engineer. Verify that vibration isolation measures are included and that the acoustician has reviewed the design. Confirm the exhaust routing—whether to the roof or through an exterior wall—has been coordinated, and that an air entrainment study is planned or underway if required. If the generator is located indoors, confirm that containment methods are indicated.	<input type="checkbox"/>	
12. Elevators & Escalators – Confirm that elevator and escalator equipment cut sheets have been provided and reviewed. Verify that electrical panel layouts, service disconnects, and working clearances within elevator machine rooms (EMRs) are shown and coordinated with elevator machine requirements. Confirm that hoistway and pit lighting is included as required. Where applicable, review special fire service access requirements, including emergency power and recall functions.	<input type="checkbox"/>	
13. Renewable Solar Generation – If rooftop solar panels are planned, confirm that layout drawings are provided and coordinated with the architectural roof plan. Verify that mounting details, clearances for maintenance access, setbacks from parapets, and required fire access zones are shown. Confirm the location and coordination of inverters, combiner boxes, and conduit routing.	<input type="checkbox"/>	
14. Façade Maintenance – Confirm that electrical power has been provided for permanent façade maintenance equipment, such as monorails or powered platforms. Verify that power connections are coordinated with architectural and structural layouts, and that required clearances and access pathways are maintained.	<input type="checkbox"/>	
15. Energy Modeling / Code Compliance – Energy Modeling / Code Compliance – Confirm that electrical inputs, such as lighting power, electric motors, and elevators, are coordinated with the energy model to support compliance with the energy code and overall performance goals.	<input type="checkbox"/>	
16. Outline Specifications – Confirm that the outline specifications include all major electrical system types and reference key installation and performance criteria. Review sections requiring coordination with lighting, acoustic, and vibration consultants—including hangers and supports, and vibration and seismic controls. Lightning protection and access panels should also be reviewed to ensure proper integration with the architecture and building envelope.	<input type="checkbox"/>	

ELECTRICAL (ELEC)		
Construction Documents (CD)		Notes
<i>At the Construction Documents (CD) phase, the electrical system must be fully documented, coordinated, and code-compliant. All device locations, risers, panels, conduit paths must be clearly shown and integrated with architectural and consultant drawings. The documents must support regulatory approvals and reflect accepted value engineering, code requirements, and stakeholder input.</i>		
1. Title Block and Formatting – Confirm that electrical drawings use the correct title block and follow the architectural sheet numbering format, typically mirroring floor-based sheets (e.g., A-101 corresponds to E-101). Drawing scale, orientation, and backgrounds must match the architectural set. Include the submission name and date.	<input type="checkbox"/>	
2. Contractual Requirements - Confirm that the electrical system scope and performance requirements from the Owner/Architect and Architect/Consultant agreements are fully incorporated. Scope, deliverables, and performance criteria must align with the contract.	<input type="checkbox"/>	
3. Documentation Completeness - Confirm that all electrical drawings and specifications are complete, legible, and coordinated. Verify inclusion of layouts, schedules, legends, and system details. Confirm final coordination with all relevant consultants, including structural, acoustic, food service, lab planning, theater, exhibit designers, and others. Ensure QA/QC procedures have validated consistency across disciplines.	<input type="checkbox"/>	
4. Clash Detection and Model Coordination - Perform final clash detection in the BIM/Revit model. Resolve any remaining conflicts that cannot be deferred to contractor coordination. Address any layout shifts or system adjustments resulting from late-phase consultant input.	<input type="checkbox"/>	
5. Review Comment Incorporation - Confirm that all electrical-related comments from prior reviews, client, construction manager, peer reviewers, or internal QA/QC, have been addressed and incorporated into the final documentation.	<input type="checkbox"/>	
6. Floor Plans and Power Layout – Confirm power is shown for all devices, equipment, and systems. Receptacle locations and types, whether wall- or floor-mounted, must be coordinated with architectural and furniture drawings. Verify J-boxes are included for fixed equipment such as automated doors, AV systems, turnstiles, automated shades, or similar concealed power needs.	<input type="checkbox"/>	
7. Heat Trace & In-Slab Conduit – Confirm locations requiring heat trace, such as exterior piping, ramps, or roofs, are identified and coordinated. Verify that in-slab conduit is shown where required and aligns with floor finishes, structure, and architectural details.	<input type="checkbox"/>	
8. Incoming Electrical Service – Confirm routing from utility point of entry to main switchgear is shown. If feeders are concrete-encased, verify pull box access is provided. Where utility vaults are required (e.g., in NYC), anticipate significant coordination with the utility provider.	<input type="checkbox"/>	
9. Grounding Systems – Confirm grounding plates, conductors, and paths are shown in coordination with structural drawings. Verify that columns or embedded steel used for grounding are properly identified.	<input type="checkbox"/>	
10. Lightning Protection – Confirm air terminals and conductors are shown on roof plans. Verify that attachment details are included and coordinated with parapets, curtain walls, and roof access paths.	<input type="checkbox"/>	
11. Lighting Plans – Confirm that lighting fixture types, counts, emergency lighting, and controls are complete and match the lighting consultant's intent. Ensure fixture placement aligns with RCPs and that switches are coordinated with room layouts. Confirm sufficient illuminance is provided for egress paths, stairs, and elevator entries per code.	<input type="checkbox"/>	
12. Enlarged Plans – Confirm that enlarged plans (e.g., patient rooms, serveries, labs, electrical closets) are provided and reflect final layouts for receptacles and equipment, including rough-ins.	<input type="checkbox"/>	
13. Landscape Power – Confirm all power and lighting needs for exterior and landscape areas are documented. Verify coordination of power for site lighting, signage, receptacles, irrigation systems, and other specialty systems with civil and landscape drawings.	<input type="checkbox"/>	

14. Generator Systems – Confirm generator layout, support requirements, containment measures, and electrical connections are documented. Include routing for fuel, exhaust, and conduit paths. Reflect any adjustments required by the air entrainment study.	<input type="checkbox"/>	
15. Elevator Systems – Confirm required elevator power is shown and that working clearances in machine rooms (EMRs) are coordinated with elevator machine requirements. If Fire Service Access Elevators (FSEAs) are provided, confirm hoistway lighting is shown.	<input type="checkbox"/>	
16. Façade Maintenance Power – Confirm dedicated power connections are shown for permanent façade maintenance systems.	<input type="checkbox"/>	
17. Renewable Energy – If applicable, confirm final layout, location, and connection of rooftop solar panels. Verify coordination with the structural engineer and roofing consultant.	<input type="checkbox"/>	
18. Code Compliance / Energy Modeling – Confirm that final electrical inputs, such as lighting power, motors, and elevators, have been provided for energy modeling and code compliance.	<input type="checkbox"/>	
19. Signage Power – Confirm power connections for interior and exterior signage are shown and coordinated with the signage consultant.	<input type="checkbox"/>	
20. Specifications – Confirm that Division 26 specifications are complete and reflect final system types, materials, mounting, seismic restraints, insulation, and controls. Review coordination-sensitive sections, such as vibration isolation, lightning protection, and access panels, for alignment with architectural requirements.	<input type="checkbox"/>	