ChecklistGuro

Design Review and Validation Checklist

General Information & Scope

Initial review to ensure the design aligns with project goals and scope of work.

Project Name

Write something...

Design Revision Number

Write something...

Date of Design Submission

Enter date...

Total Project Area (sq ft/m2)

Enter a number...

Brief Project Description

Write something...

Design Phase

- [ ] Schematic Design
- [ ] Design Development
- [ ] Construction Documents
- [ ] Other

Attached Design Documents (PDFs, CAD files)

Upload File

Regulatory Compliance & Permits

Verification that the design adheres to all applicable codes, standards, and permit requirements.

Applicable Building Code Version

- [ ] IBC 2018
- [ ] IBC 2021
- [ ] Local Code (Specify Below)

Specify Local Code (if applicable)

Write something...

Required Permits

- [ ] Building Permit
- [ ] Electrical Permit
- [ ] Plumbing Permit
- [ ] Mechanical Permit
- [ ] Grading Permit
- [ ] Environmental Permits (e.g., stormwater)
- [ ] Other (Specify)

Other Permits Required (if applicable)

Write something...

Permit Application Forms

Upload File

Permit Application Submission Date

Enter date...

Permit Number(s)

Enter a number...

Zoning Compliance

- [ ] Compliant
- [ ] Non-Compliant (Requires Variance)

Variance Details (if applicable)

Write something...

Structural Integrity & Stability

Assessment of structural design calculations, detailing, and overall stability of the construction.

Live Load Capacity (psf)

Enter a number...

Dead Load Capacity (psf)

Enter a number...

Wind Load Calculation Factor

Enter a number...

Summary of Structural Calculations

Write something...

Structural Analysis Reports (e.g., ETABS, SAP2000)

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Soil Type Considered in Design?

- [ ] Clay
- [ ] Sand
- [ ] Gravel
- [ ] Silt
- [ ] Rock
- [ ] Other

Seismic Zone?

- [ ] A
- [ ] B
- [ ] C
- [ ] D
- [ ] E
- [ ] F

Description of any deviations from standard design practices, and justification.

Write something...

Geotechnical Considerations

Review of geotechnical reports and their impact on the design, including foundation design and soil stability.

Summary of Geotechnical Report Findings

Write something...

Design Soil Bearing Capacity (psf)

Enter a number...

Design Soil Unit Weight (pcf)

Enter a number...

Foundation Type (as per Geotechnical Report)

- [ ] Shallow Foundations (e.g., Spread Footings)
- [ ] Deep Foundations (e.g., Piles, Caissons)
- [ ] Mat Foundation
- [ ] Other (Specify)

Geotechnical Report (Complete)

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Groundwater Table Location (as per Geotechnical Report)

- [ ] Above Ground
- [ ] At Ground
- [ ] Below Ground
- [ ] Not Encountered

Notes/Assumptions Made Regarding Geotechnical Data

Write something...

Architectural Design & Aesthetics

Evaluation of the architectural design for functionality, aesthetics, and consistency with project requirements.

Overall Design Concept Description

Write something...

Compliance with Architectural Style Guidelines?

- [ ] Fully Compliant
- [ ] Partially Compliant - Requires Modification
- [ ] Not Compliant - Requires Significant Revision

Exterior Renderings/Visualizations

Upload File

Facade Material Palette Consistency Score (1-10)

Enter a number...

Description of Interior Layout and Functionality

Write something...

Adherence to Accessibility Standards (ADA)?

- [ ] Yes
- [ ] No
- [ ] Requires Further Review

Notes on Material Selection and Justification

Write something...

MEP (Mechanical, Electrical, Plumbing) Systems

Detailed review of MEP system designs for efficiency, safety, and coordination with architectural and structural elements.

HVAC System Capacity (BTU/hr)

Enter a number...

Electrical Panel Size (Amps)

Enter a number...

Plumbing Material Type (Domestic Water)

- [ ] Copper
- [ ] PEX
- [ ] CPVC
- [ ] Other

Description of Emergency Power System

Write something...

MEP Shop Drawings - HVAC

Upload File

Energy Efficiency Features (MEP)

- [ ] High-Efficiency Pumps
- [ ] Variable Frequency Drives (VFDs)
- [ ] LED Lighting
- [ ] Smart Controls
- [ ] Solar Panels

Coordination Issues Identified & Resolution Plan

Write something...

Sustainability & Energy Efficiency

Assessment of sustainable design principles and energy-efficient measures incorporated into the design.

Target U-Value for Building Envelope (W/m²·K)

Enter a number...

Estimated EUI (Energy Use Intensity) (kWh/m²/year)

Enter a number...

Sustainable Materials Used (e.g., Recycled Content, Locally Sourced)

- [ ] Recycled Content
- [ ] Locally Sourced
- [ ] Rapidly Renewable Resources
- [ ] Certified Wood (e.g., FSC)
- [ ] Other (Specify in LONG_TEXT)

Describe any Passive Design Strategies (e.g., Orientation, Shading)

Write something...

HVAC System Type (Select one)

- [ ] VRF
- [ ] Chilled Beams
- [ ] Packaged Rooftop Units
- [ ] Other (Specify in LONG_TEXT)

Energy Modeling Report (if available)

Upload File

Water Conservation Measures (Select all that apply)

- [ ] Low-flow fixtures
- [ ] Rainwater harvesting
- [ ] Greywater recycling
- [ ] Drought-tolerant landscaping

Describe any LEED or other Sustainability Certifications being targeted

Write something...

Constructability & Sequencing

Review of the design from a construction perspective, assessing feasibility, potential challenges, and sequencing of work.

Describe any potential constructability challenges anticipated with this design.

Write something...

Which of the following construction methods are deemed most appropriate for this design? (Select all that apply)

- [ ] Cast-in-place Concrete
- [ ] Precast Concrete
- [ ] Steel Frame
- [ ] Timber Frame
- [ ] Modular Construction
- [ ] Other (Specify in LONG_TEXT)

Estimated number of construction crews required for peak activity.

Enter a number...

Target start date for critical construction activities.

Enter date...

Describe any sequencing dependencies that need to be carefully managed during construction.

Write something...

What is the anticipated level of complexity regarding material delivery and staging?

- [ ] Low
- [ ] Medium
- [ ] High

Upload any 3D models or BIM files used for constructability review.

Upload File

Cost Estimation & Value Engineering

Evaluation of the design's impact on project costs and identification of potential value engineering opportunities.

Estimated Material Cost Deviation (%)

Enter a number...

Estimated Labor Cost Deviation (%)

Enter a number...

Estimated Total Project Cost Deviation (%)

Enter a number...

Value Engineering Ideas Considered (and rationale)

Write something...

Recommended Value Engineering Change?

- [ ] Yes
- [ ] No
- [ ] Needs Further Investigation

Supporting Documentation (e.g., revised cost estimates, vendor quotes)

Upload File

Explanation of any significant cost discrepancies.

Write something...

Cost Estimate Source?

- [ ] Internal Estimation
- [ ] Subcontractor Quote
- [ ] Vendor Quote
- [ ] Software Estimate

Risk Assessment & Mitigation

Identification of potential risks associated with the design and proposed mitigation strategies.

Identify Potential Risks

Write something...

Risk Severity (1-10)

Enter a number...

Risk Probability (1-10)

Enter a number...

Describe Proposed Mitigation Strategies

Write something...

Risk Category (e.g., Design, Geotechnical, Regulatory)

- [ ] Design
- [ ] Geotechnical
- [ ] Regulatory
- [ ] Material Supply
- [ ] Labor Availability
- [ ] Environmental
- [ ] Other

Potential Impact Areas

- [ ] Schedule
- [ ] Budget
- [ ] Quality
- [ ] Safety
- [ ] Environmental

Date of Risk Identification

Enter date...

Contingency Plans (if mitigation fails)

Write something...