Choosing Structural Materials and Reviewing Substitutions

Describe the result the framing must achieve before comparing materials. If a contractor proposes a substitution, give the design team enough information to compare the proposed assembly with the one shown in the drawings.

Rank the project priorities

Separate essentials from preferences and open choices. A clear walking route may be essential, an exposed finish preferred, and the member material open to advice. Record headroom, ceiling depth, transport and lifting access, and other features the solution must fit. Ask the design team which competing priorities need an early decision.

Compare complete installed systems

Ask what the whole option includes. Compare the member, supports, connections, installation access, temporary work where applicable, and finish work. Identify affected trades and whether a price assumes work by someone else. A lower quoted price for a member may still need additional scope for delivery, installation, or finishing.

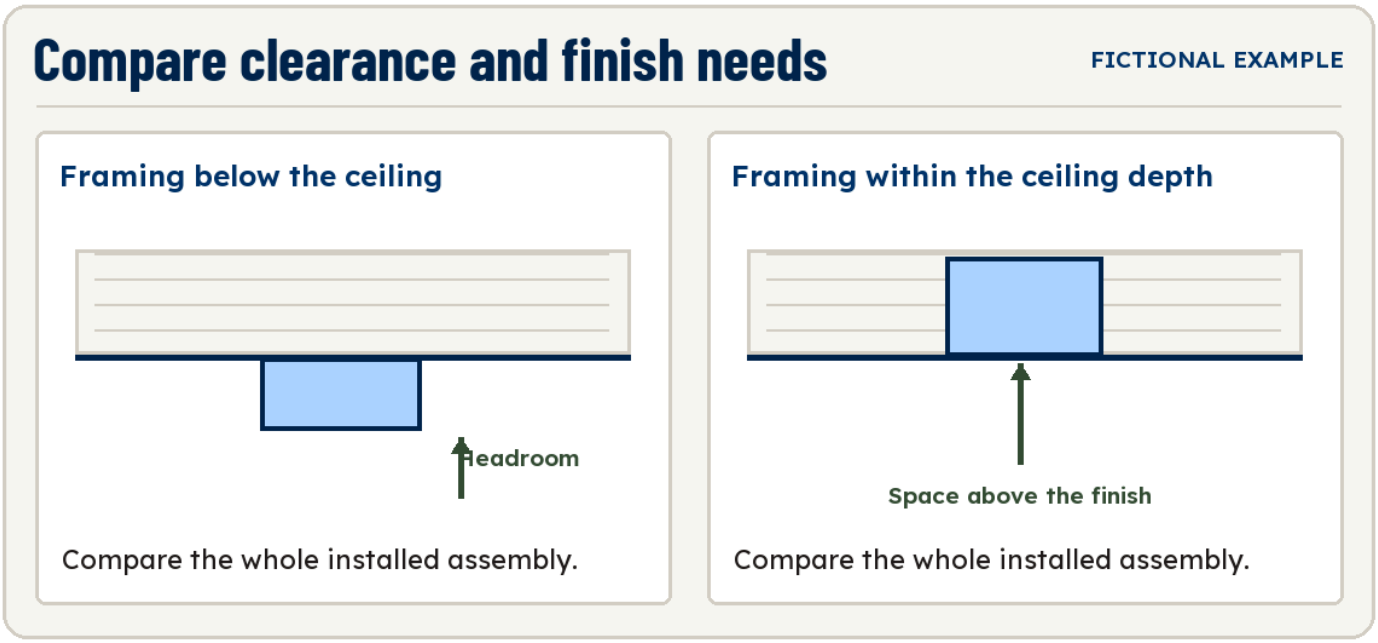

Figure 1. Fictional clearance sketches. Appearance, ceiling space, connections, and adjacent work belong in the comparison. Neither sketch represents a selected design. RES illustration.

Document the proposed substitution

Record the specified and proposed products, exact model or grade, current technical sheets, installation instructions, and the reason for requesting the change. Identify the affected sheet and detail. Include any approval or evaluation record required for the intended use. For Florida projects where product approval applies, the state search can help locate the record for an exact model. Florida Building Commission product approval search

Fictional substitution request

Field	Example entry
Drawing and specified item	S2.1, detail 4, issued October 14. Connector Model A.
Proposed item and reason	Connector Model B. Supplier reports earlier availability.
Attachments and questions	Both data sheets and installation instructions. Confirm the supporting material, specified fasteners, and connection requirements.
Status	Submitted for a decision. Purchasing and installation are pending.

Agree who reviews and records the change

Ask who must accept the structural change and who handles cost, finishes, trades, and agency coordination. Keep the written decision with any revised drawings and permit records. Ask the responsible party whether a revised submittal is needed before ordering or installing the alternative.

What to do next

Preparing to discuss what matters most? Read Preparing for Your First Engineering Consultation.

Asked for revised documents? Use How to Respond to a Permit Comment Asking for Engineering.