When a Roof Change Raises Structural Questions

Tell the design team what is changing at the roof and ceiling, where it is changing, and what existing information you have. A skylight, a raised ceiling, a different covering, and new equipment bring different questions to the same roof.

Describe the change

Mark the area on a plan or a photo taken from a safe location. Give approximate opening sizes and identify any new openings, a changed ceiling shape, or a replacement covering. For equipment, provide the proposed location, approximate dimensions, and intended support locations if shown by the supplier. Record what stays in place and what the project would remove.

Gather framing and product information

Look for roof plans, truss layout and design sheets, records of past changes, and current product information. For new equipment, send the supplier's weight, support or mounting information, and any service clearance details. Include roof covering data if the assembly is changing. Photograph framing only from accessible places where it is already visible.

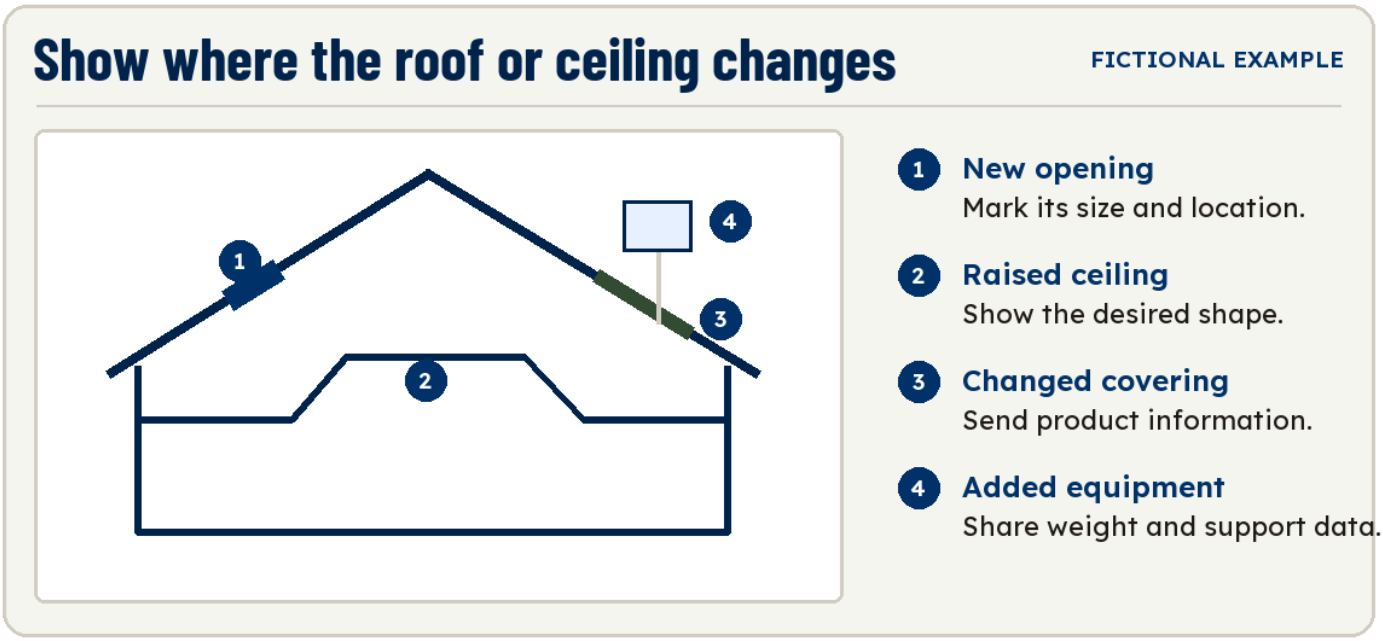

Figure 1. Fictional house section. The four markers show different questions an engineer can investigate. RES illustration.

How existing roof and ceiling supports enter the review

The engineer may review roof and ceiling framing, where it bears, how it connects to the house, and what is known about prior alterations. Tell the team whether the roof framing type is confirmed or still unknown. If trusses are present, get a project-specific decision before altering them or imposing new loads. Confirm the applicable code with the local authority. Structural Building Components Association, Design of Truss Repairs



Figure 2. Separate gallery example. The partitions and doorway help locate visible framing overhead. RES Media gallery, RES-M0216.

Coordinate the next design decisions

Ask who confirms framing, product loads, and placement before openings, finishes, or equipment are ordered. Discuss structural drawings, roof and ceiling details, and coordination with the contractor and other trades. Check who handles permit questions and what needs to remain visible for construction checks. Denver's home project permit guidance

Field notes

Roof or ceiling change and location

Framing records, product information, and open questions

What to do next

Planning a second story or other major change? Read Planning a Home Addition or Second Story.

Coordinating inspections before covering work? Read Planning Inspections and Responding to a Missed Inspection.