



IS DESIGN-BUILD THE RIGHT CHOICE FOR YOUR RETROFIT PROJECT?

Design-build can be a convenient project delivery method for many types of construction. But when it comes to voluntary seismic retrofitting, it often falls short.

This guide outlines key risks to consider before selecting a design-build approach and offers guidance if you choose to proceed. We aim to help building owners protect their long-term interests by avoiding common pitfalls.

WHAT IS DESIGN-BUILD?

In a design-build project, the same company handles both the engineering and the construction. While this can simplify communication and scheduling, it may not provide enough checks and balances for complex structural upgrades—especially seismic retrofits.

Voluntary retrofits vary in scope and approach. Without clearly defined performance goals and third-party oversight, the design-build process can lead to inconsistent outcomes, unclear pricing, and future risk exposure.

WHY DESIGN-BUILD ISN'T IDEAL FOR SEISMIC RETROFITTING

Seismic retrofits are not typical construction projects. They involve structural upgrades that must meet specific performance targets—especially if the goal is to satisfy lender requirements, reduce insurance premiums, or improve marketability.

Design-build limits your ability to:

- **Control the design criteria** – The contractor often determines the level of seismic strengthening without external review.
- **Compare costs accurately** – Without a standardized design, getting apples-to-apples bids from multiple providers is nearly impossible.
- **Confirm performance goals are met** – Lenders and future buyers may question whether your retrofit truly meets the seismic loss estimate thresholds.

In short, what you gain in convenience, you risk losing in precision, transparency, and long-term value.



WHAT HAPPENS IF THE RETROFIT ISN'T ACCEPTED LATER?

Many property owners don't realize that a buyer's engineer may not agree with the retrofit design used in a design-build project. If the building doesn't meet a Scenario Upper Loss (SUL) of 20% or less:

- **Lenders may not approve financing**
- **Buyers may request a discount** to cover additional retrofit work
- **Insurance costs may remain high or increase**

These issues can drastically reduce your property's resale value and marketability—undermining the goal of retrofitting in the first place.

IF YOU PROCEED WITH DESIGN-BUILD, FOLLOW THESE STEPS

If you choose to use a design-build model despite the risks, follow these best practices to reduce uncertainty and protect your investment:

1. DEFINE RETROFIT GOALS AND RFP REQUIREMENTS IN ADVANCE

Clearly defining the goals of your seismic retrofit project is one of the most important steps—especially when using a design-build approach. These goals will guide both the engineering design and construction work and impact financing, insurance, and future resale value.

Include the following information in your RFP (Request for Proposal):

- **The required seismic performance target** (e.g., $SUL \leq 20\%$)
- **Whether the goal is based on:**
 - **SUL (Scenario Upper Loss):** The upper-bound loss with 90% confidence (PML90)
 - **SEL (Scenario Expected Loss):** The expected average loss (PML50)
- **Any lender or insurance requirements** the retrofit must meet
- **Acceptable design methodologies or retrofit options**, if any are preferred or prohibited

By clearly outlining your expectations in the RFP, you allow bidders to submit comparable proposals—and ensure that the final design meets your risk, financial, and structural goals.

2. USE A PEER REVIEW ENGINEER

A third-party engineer can validate and confirm that the retrofit design meets the target loss estimates. This is especially critical when working with a design-build contractor.



3. ESTABLISH A BUDGET BEFORE STARTING DESIGN WORK

Expect a range, not a final price.

When using a design-build model, pricing is typically based on preliminary concepts—not final engineering drawings. At Saunders Seismic, we provide a conceptual budget early in the process, with a construction cost range of approximately $\pm 15\%$.

This approach gives building owners a realistic understanding of potential costs before committing to a design. Once structural drawings are complete, we then provide a detailed, final construction price based on the full scope of work.

This two-step process ensures greater transparency, reduces surprises, and gives the owner more control over the outcome. Without final drawings, even the best contractors are estimating—making it difficult to provide a fully accurate or competitive bid.

OUR RECOMMENDATION: USE A SEPARATE DESIGN AND BID PROCESS

When seismic performance impacts financing, insurance, and resale value (as it often does), a separate design and bid process provides more control, transparency, and long-term protection. Here's why it's the stronger choice:

- **You set the performance criteria upfront.** The retrofit is designed around your goals, not the contractor's assumptions.
- **You get accurate, competitive bids.** With a clear scope of work, pricing becomes more predictable and easier to compare.
- **You benefit from third-party engineering review.** Independent verification helps ensure the retrofit meets your target SEL/SUL and avoids unnecessary work.
- **You reduce long-term risk.** A well-defined design improves lender acceptance, insurance outcomes, and resale value.

Design-build may offer speed—but when structural performance matters, **clarity and accountability matter more.**



PARTNER WITH A RETROFIT CONTRACTOR WHO KNOWS WHAT MATTERS

[Saunders Seismic](#) is a **solutions company**. We help property owners make smart, informed decisions about seismic retrofits. We work alongside engineers, lenders, and building owners to deliver retrofits that meet risk thresholds—without shortcuts or surprises.

[Contact us](#) to learn more about how we support businesses in making the right seismic retrofit decisions.