

ConsumerWatch Uncovers Flawed Bay Area Earthquake Retrofits

CBS NEWS
BAY AREA

November 19, 2012 / 12:31 PM PST / CBS San Francisco



<https://www.cbsnews.com/sanfrancisco/news/cbs-5-uncovers-flawed-bay-area-earthquake-retrofits>

SAN FRANCISCO (CBS 5) - A lot of Bay Area homeowners who've paid handsomely to retrofit their homes are living with a false sense of security, according to seismic engineers and state and local agencies that study earthquake safety.

Some blame the poor retrofit work on a lack of codes that can be applied to a majority of the homes here in the Bay Area.

How bad is the problem? Danielle Hutchings of the Association of Bay Area Governments (ABAG) estimates that one-third to two-thirds of home retrofits in the Bay Area are inadequate to prevent structural damage in the event of a major earthquake.

East Bay resident Lois Silverstein is among those whose good intentions failed. Silverstein and her husband retrofitted their home after the Loma Prieta earthquake.

"We wanted to get it done. We felt that it was needed," Silverstein said.

And she didn't cut corners. The job cost several thousand dollars and "we got someone reliable. We had several references," Silverstein recalled.

But a recent inspection by John Fryer, the President of Golden Gate American Society of Home Inspectors, revealed numerous problems at Silverstein's home. From undersized washers to the wrong size plywood panels used for shear walls, Fryer said the house won't do well in a major quake.

His conclusion: "There's no value in this current retrofit."

In fact, Fryer said he and his fellow inspectors see more things done wrong than right when it comes to retrofitting.

"It's rare if our member inspectors see properly installed retrofitting in a home," he told ConsumerWatch. He said often the jobs are either done wrong or there's not enough retrofitting to prevent major damage.

Structural engineer Thor Matteson, who's written about the problem, and is often called on to fix inadequate retrofits, said many contractors who do the actual retrofit work are in the dark.

"I think it's a lack of training that's available, as well as a lack of realistic details for contractors to follow," said Matteson.

Another issue is that California currently does not offer specific licenses for retrofit contractors.

Two years ago, California adopted a seismic retrofit code known as Plan Set A. It is a detailed set of instructions on how to properly strengthen a home. But contractors aren't required to follow the plans, and according to Danielle Hutchings at ABAG, they only apply to certain homes. Generally speaking, Plan Set A best applies to a small, bungalow-type house on flat land with a crawlspace.

Matteson called the lack of guidelines for other homes "frustrating. Especially after Loma Prieta...We still don't have a good set of guidelines that really applies to a lot of the housing stock we have in the Bay Area."

Janiele Maffei, Chief Mitigation Officer with the California Earthquake Authority, the state agency that sells earthquake insurance, admits the process to develop more retrofit codes has been slow-going.

"Mostly because it's been done on a voluntary basis," she said. And while many groups study the problem, no one agency – federal, state or local – has been tasked to come up with guidelines.

"Frankly, there's been a lot of different priorities, and single family dwellings have not always been high on the list," Maffei told ConsumerWatch.

Maffei says the C.E.A. is finally moving forward, with FEMA, to create retrofit guidelines for all types of homes, but the finishing the process will still take several more years.

"We're at a point where we're getting ready to move on that, and we're going to move as quickly as we can," she said.

Maffei and other engineers recommend that if your home does not fit the Plan A guidelines, you hire a structural engineer to oversee the project. Maffei also said it may be possible to do some fixes on homes that were inadequately retrofitted, instead of starting all over again from scratch.

For more information on Earthquake Retrofits, visit: <http://www.quakecheck.org/>