



Residential Earthquake Retrofit

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*This handout includes the
Seismic Strengthening Plan
attached separately.*

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Residential Earthquake Retrofits - “Brace and Bolt”

The risk of a major earthquake is always present in Hayward, just as it is in much of California. The City of Hayward is committed to protecting its residences and limiting damage to the homes. By working together with other cities and counties and several committees, the East Bay chapter of International Code Council (ICC), along with the Association of Bay Area Government (ABAG) and other agencies, Plan Set A was developed to improve the likelihood that homes will be habitable following future earthquakes. The City has adopted Plan Set A as the City of Hayward Residential Seismic Strengthening Plan. This plan is a standard for strengthening homes to better withstand earthquake shaking. When approved by the Building Division, the plan set may be used to strengthen older homes without the need for an engineer to develop costly site-specific plans and design calculations. This plan set provides a low-cost method to help improve an older home’s chances of surviving an earthquake. Ultimately, this plan set is a tool to help homeowners know what needs to be done. They can use the plan set to get bids from contractors, or, if experienced, can do the work themselves.

Who can use this residential seismic strengthening plan set?

If your home meets **ALL** of the following criteria, your house qualifies to use this plan set. If your home does not meet one of these criteria, you should [contact an engineer](#).

- One or two family residential structure
- Single story structure less than or equal to 2,000 square feet.
- Two story structure less than or equal to 3,000 square feet.
- Wood-framed construction
- Has a continuous perimeter foundation -- ignoring the immediate areas surrounding the fireplace and porches
- House has a crawl space
- All of the cripple walls are less than four feet in height**
- House has brick or stone veneer along the exterior walls that is less than four feet in height above the foundation
- Roofing is a material other than clay tile or clay tile without mortar edges

What if my building does not meet the requirements for using the seismic strengthening plan set?

You will still be able to retrofit your home, but the process will be different. Instead of using the standardized seismic strengthening plan, you will need to hire an engineer to design a specific retrofit for your home. Many of the same techniques will be used, but additional care will need to be taken when the structure has a taller crawlspace and other factors that make retrofit process more technically involved.

Earthquake Retrofit Grant Programs

To help homeowners in covering the cost of seismically strengthening their homes, there are two programs in Hayward that offer grants for residents toward the cost of earthquake retrofits on single family homes:

- The City of Hayward Brace & Bolt program serves Hayward residents and is administered by the City. Using federal funds, the program covers the full cost of residential seismic strengthening for homeowners who are seniors, have disabilities, or are low-income earners. For more information and to apply, please call the Housing Rehabilitation Voicemail Line (510) 583-4225, or visit the Community Services Division on the 2nd floor of Hayward City Hall. You can also get more information and view the application for this program on the City of Hayward website by entering “brace and bolt” in the search bar.
- The California Earthquake Authority’s Brace & Bolt program serves selected zip codes throughout the State of California, and is administered by the CEA. The program provides homeowners with up to \$3,000 toward the cost of a brace-and-bolt retrofit/seismic strengthening awarded via a lottery of eligible homeowners. For more information and to apply, visit <http://www.earthquakebracebolt.com>. For 2017, registration is open from January 25 through February 27.