

Today

Dear Ms. Jones,

This retrofit has been custom designed to provide maximum protection for the least cost.

At the front you have what is known as a "soft story". This means the front of your house has a very minimal, if not completely absent, connection to a foundation. This happens because the floor at the front is suspended over the garage door opening and air, obviously, has no ability to resist side to side forces.

The narrow walls on either side of the garage door opening will tip over like posts.

.In summary, the front of this house has no lateral.

. There are three ways to address this:

1. A StrongWall
2. A moment column
3. Or a moment frame.

These are all described on [this webpage](#).

Strong walls are used when the narrow existing walls to the left or right sides of the garage have enough space to fit one of the special walls. In our case the width of the wall on the left side of the garage permits the construction of a 2' wide strong wall (in your case two 2' wide strong walls) that will attach the house floor to a new foundation. This is the best option for your house.

Moment columns are used when the width of the walls on either side of the garage are very narrow and a StrongWall would inhibit parking in the garage. Two StrongWalls are the best option for you.

Moment frames are suitable for very large buildings such as apartment buildings and are inappropriate for houses

I am therefore recommending two strong walls at the front of your house.

*Howard Cook*



## Terms and Signature Page

\* If you would like to proceed, please fill out this Terms and Signature Page and input the dollar amount of the contract and return it to [howard@bayarearetrofit.com](mailto:howard@bayarearetrofit.com),

This proposal is not intended to follow or meet requirements for any state of City programs.

I am aware the building permit does not mean the City will evaluate the retrofit for its ability to resist earthquakes. Please review [this webpage](#) before initialing.

### Initial

\* To complete the permit process, I may need to meet the inspector for the final inspection so he/she can look at the required smoke detectors. You will be given a 4 hour window from either 8-12 or 12-4.

### Initial

If I get a permit I will need to have these detectors to meet City building department requirements

\*I would like for Bay Area Retrofit to install \_\_\_\_\_ Smoke Detectors and \_\_\_\_\_ Carbon Monoxide Detectors for \$75 each. Combination Smoke Carbon Monoxide detectors will cost \$85 each.

### Initial

\* If unexpected problems arise such as dry rot, termite damage, etc I understand such repair work will need to be done before we can complete our job. This work can be done by us or others. Our rate is \$140 an hour.

### Initial

\* I will remove personal property, shelving, and furniture from work areas. **If contractor must move anything I understand contractor is not responsible for what happens to it.**

### Initial

\* Contractor hereby disclaims any express or implied warranties that the seismically strengthened building will be able to withstand an earthquake without damage to its structure or contents.

### Initial

**Payment:**

Full payment is due upon completion of work, regardless of rebate funds status **or receipt of photos (this can take a few weeks)**. Payable by: cash, check, or credit card plus 3% service charge. Unless arrangements are made, invoices not paid within 7 days of receipt of invoice are deemed past due and will accrue fees at rate of 2% per month.

**Acceptance:**

**With permit:** The specifications, prices, and conditions outlined in this proposal are satisfactory. I desire a permit. I have read and understand the information above, initialed where listed, and hereby accept this proposal. I understand I may need to pay as much as \$1,500 for special inspections. In addition I agree to pay \$350 for permit processing, \$650 for structural plans **plus all associated building permit costs** . These costs will be reflected in my final invoice I accept this proposal with a permit for:

\$ 29,000 construction + \$650 for plans and \$350 for permit processing

= **\$30,000**                      Circle this number if this is the option you want

I do not need/want a permit and instead desire a photographic record, which, along with the narrative proposal and plan in my possession, will be my documentation. I accept this proposal without a permit for

**\$ 29,000**                      Circle this number if this is the option you want

This proposal is not intended to follow or meet requirements for any State or City retrofit program, unless otherwise specifically noted.

**Initial**

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_ E-mail \_\_\_\_\_

JOBSITE \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_



## Professional Highlights

[Vice Chair](#) of a seismic retrofit building code committee.

Co-author of [Standard Plan A](#) used by the California Earthquake Authority as well as building departments all over the Bay Area.

**Course Instructor:** [“Principles and Practice of Earthquake Retrofitting”](#) 2014 presented by the Association of Bay Area Governments.

Author of article [“Seismic Retrofit for Cripple Walls”](#); The Journal of Light Construction. April 2006.

Featured expert [“The Hayward Fault. Predictable Peril.”](#) KQED, Channel 9.

Contributing Contractor [“California Works to Prepare for the Big One”](#), PBS News Hour. This is a compilation of both the "The Hayward Fault. Predictable Peril" and the NewsHour documentaries.

Featured Expert in the ["S.F. Homeowners Need To Be Ready"](#) in the S.F. Chronicle

Source for this article in the [New York Times](#)

Guest Lecturer [“Retrofit Principles and Practice for the Home Inspection Industry”](#) Sponsored by the Golden Gate Chapter of the American Society of Home Inspectors.

Keynote speaker [“The Preservation of Historical Wood-Framed Buildings”](#) Sponsored by The City of Victoria Heritage Foundation in British Columbia.

Mayoral Appointee to the Berkeley Disaster Commission as a [seismic retrofit expert](#).

Guest Lecturer: [“Retrofit Principles and Practice for the Canadian Home Inspection Industry,”](#) sponsored by the Canadian Association of Home and Property Inspectors.

Primary source for an article in the [The Mercury News](#) on Soft Story Retrofitting.

Featured contractor in ["The Danger Beneath"](#) in the East Bay Express

Residential Damage Inspector, FEMA. 1989-1994.

## Member Associations

- [Earthquake Engineering Research Institute](#)
- [Structural Engineers Association of Northern California](#)

## Publications by Bay Area Retrofit

- Co-Author with Wendy Allen, Engineer for Simpson Strong Tie, [“Mudsill Anchorage Systems in Cripple Wall Retrofits”](#), 2007.
- Co-Author and currently updating Bay Area's Retrofit Guidelines: [“Standard Plan A, Residential Seismic Strengthening Plan”](#), The International Code Council, 2005.
- [“Homeowner’s Guide to Seismic Retrofitting.”](#)
- Many other publications are available in the [PDF Library](#) at BayAreaRetrofit.com.

## References

Previous customers will tell you we were pleasant, cleaned up, and were easy to deal with. But the references we are especially proud of are from industry professionals who know our work and expertise. Feel free to contact them.

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American Society of Home Inspectors  
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