

Over a Fault Line, Tying the Furniture to the Walls



Peter DaSilva for the New York Times

Spooked by photographs taken after the 1906 earthquake, the reporter used Velcro to secure a china cabinet.

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Hulton Archive/Getty Images
San Francisco, after the 1906 earthquake.

WHEN Dean Reese, a founder of a company that safeguards houses against earthquakes, arrived at my house here in Marin County one day in late March, he took one look at the ceramic planters in the tiled foyer and said, "Those'll be the first to go."

He also said that because my husband and I live on a narrow road on a steep hill, we could be on our own without services, or even a road, for days following a big quake. We had already begun assembling canned foods, water and medical supplies with just that worry in mind, I told Mr. Reese — but what if those, too, were destroyed? "It's just a matter of luck," he said lightly.

When it comes to seismic consciousness, Californians tend to fall into two camps: the scoffers, many native to the state, who pay little attention to the constant barrage of official warnings, and those like this reporter (born in New York but raised in California) who know that the warnings should not be ignored.

When the topic of earthquakes comes up at dinner parties, the worriers feel their palms grow clammy and think vaguely about the places they do not want to be when the next big one hits: above the water on the eastern span of the San Francisco-Oakland Bay Bridge, for instance, or 135 feet under water on a Bay Area Rapid Transit train.

Scoffers like my native-born husband, on the other hand, take pleasure in telling stories like the one about the 6.9-magnitude Loma Prieta quake in 1989, when he steadied a sloshing fish tank with one arm while holding a confused toddler in the other.

In 2005, when we sold our house on one major earthquake fault and bought one on another, I was so transfixed by the beauty of the new place that I briefly joined the ranks of those who prefer to live in a fog of denial. I put china on high shelves and pooh-poohed the notion of earthquake insurance.

Then came the drumroll leading up to the centennial of the San Francisco earthquake of April 18, 1906, which, with a magnitude of 7.9, unleashed firestorms and killed 3,000 people along a 290-mile fissure. The relentless parade of anniversary events, exhibitions and articles — at once commemorative and anticipatory — succeeded in making me anxious again. Very anxious.

So when I got a call from Mr. Reese's company, Trevco — which sells a variety of adhesive putties and gels, Velcro straps, gas-valve shutoff wrenches and disaster preparedness kits, all under the reassuring name QuakeHold — I was eager to hear what he had to say.

According to Mr. Reese, his company, in Escondido, Calif., is something of a pioneer in the earthquake-protection industry, having patented an adhesive putty in 1990 and developed the straps in 1994; the products are now widely available through national home improvement stores like Home Depot and Lowe's. (He has plenty of competitors who offer similar products and services to earthquake-

sensitive Californians, including Secure-It Consultants in Sherman Oaks, Fastening Solutions in Tarzana and Quake Kare in Moorpark.)

Mr. Reese, who credited the 1906 anniversary with a recent increase in business, was in Northern California for a few centennial-related events and stopped by my house to demonstrate his products. I showed him our two fish tanks, and one of them — an unusual cylinder resembling a drinking glass in my stepdaughter's room — immediately got his attention.

Filled with 15 gallons of water, it sits atop a small bedside table. Its abundant aquatic life brings us great pleasure, but whenever I think about it, all I can envision is post-temblor chaos — broken glass, water everywhere and dozens of guppies in death throes on the floor.

My brief exchanges with my husband about the tank reflect the chasm that separates us. Should the tank topple, he once said, "it will be the least of your problems." I know this, I think to myself, but at least it represents something I can control. Staring at the tank, Mr. Reese shook his head with disapproval. I felt vindicated.

I confessed, rather meekly, that I do not always keep a pair of sturdy shoes next to the bed to avoid treading on broken glass in the dark. I'm not sure where the nearest flashlight is, and although I did once buy a transistor radio against the protracted power outage that would probably accompany a bad earthquake, the batteries have long since died.

Mr. Reese was understanding. He pulled out sample packets of putty, a small plastic jar of gel and several packages of reinforcement straps, and got to work. The QuakeHold putty is a proprietary synthetic compound, and the gel is a viscous silicon-based substance. Both can be used to secure large, heavy objects, but the gel is less conspicuous.



Peter DaSilva for the New York Times

The reporter secured breakables with special gel. Her family's house sits on a fault line north of San Francisco

First we anchored bowls, planters and vases that are seldom moved, along with a few that are shifted from time to time. Better to pry a beloved ceramic bowl off its adhesive mooring once in a while, I thought, than see it in a thousand shards on the tile floor.

While I puttied and gelled my way through my more prized pieces of china, Mr. Reese and a colleague drilled holes in our walls and attached woven nylon straps to free-standing furniture. One end of each strap was attached with a screw to a stud in the wall, and the other end, which was finished with heavy-duty Velcro, was attached to a corresponding piece of Velcro stuck to a cupboard, armoire or bookcase (using an adhesive that Mr. Reese assured me could be peeled off without too much damage). Usually, two straps are used for each piece of furniture.

The straps, designed to hold up to 400 pounds, come in a variety of colors to blend in with different finishes. One set was enough to secure the conventional rectangular fish tank, and for the precarious cylinder, Mr. Reese devised a sort of belt formed by two straps going around it. (I suspected, however, that in any serious earthquake the tank's high center of gravity would still doom it.)

Later that day, still in the grip of seismic fear, I called my insurance company and sent off a large check for earthquake insurance, for the first time since we had moved. With a 15 percent deductible and a certain ambiguity about what exactly would be covered, it was hardly a perfect safeguard.

And there I sat, knowing only this: If we are hit with a small or even moderate earthquake, my \$102 investment in putty, gel, straps and labor means that our china is probably safe and our furniture will stay in place. Yet whatever waits in

the recesses of the San Andreas fault, and how exactly the earth will shift and undulate under our property, are anybody's guess.

Still, a wise friend reassured me during a recent phone conversation that not unlike the fault itself, I am relieving a little of my own built-up internal pressure by doing what I can. She offered her solace from her apartment in the Marina, a San Francisco neighborhood considered a liquefaction zone. "I've got to move," she said.