



EASY WAYS TO QUAKE SAFE YOUR HOME

FIX · FASTEN · FORGET

Simple instructions on how to prevent earthquake damage
and protect you and your family from earthquakes

CONTENTS

Ornaments

Pictures and mirrors

Tall furniture

Hot water cylinders

Appliances

Other things to do

Emergency water supply

How to get help

After an earthquake, your home may be a mess, you could be without a water supply, and someone in your household could be injured. Fortunately there are things you can do to help prevent damage and injury from earthquakes.

***THIS GUIDE SHOWS YOU EASY WAYS
TO QUAKE SAFE YOUR HOME***

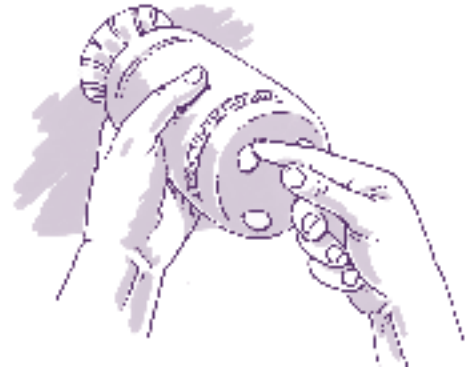
ORNAMENTS

Even small shakes can damage or break ornaments and other objects. They can become flying weapons in bigger jolts, and leave a mess of dangerous glass and broken crockery. Making them more secure is easy.

PLASTIC PUTTY

Plastic putties such as Blu Tack and special quake putties can be effective in holding down ornaments, glassware and similar.

Plastic putty is available from many supermarkets, stationery and hardware stores. Some art and antique galleries may have special quake putties, gels or waxes.



Ensure the bottom surface of the object and the surface it is to sit on are clean. Roll pieces of putty into balls of equal size (the amount used depends on the size, shape and weight of the object). One piece may be enough for small objects; others may require three or four. Push on to bottom of object.

Press the item firmly down and slightly twist back and forth a few times to get it to grip. To remove the object, hold at the base and top and twist slightly while pulling gently from its position.

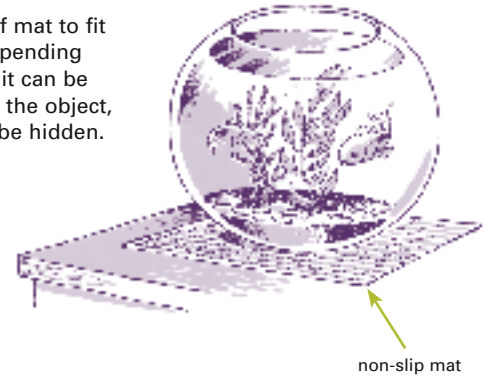
3

NON-SLIP MATS

Non-slip mats are good for preventing small but heavy or low centre of gravity objects from sliding.

Non-slip mats, e.g. Magic Grip, are available in some homeware stores and come in a variety of colours to match many decors.

Simply cut a piece of mat to fit under the object. Depending on the type of base, it can be slightly smaller than the object, allowing the mat to be hidden.



NYLON CORD

Nylon cord, such as fishing line, can be used to secure tall, top-heavy items that could topple – for example, flower-laden vases.

If you often need to remove the items consider using snap links at the end of the cord.

Nylon cord is available from many sporting goods and hardware stores. Eye screws are available from hardware stores.

how to tie nylon onto a snap link; pull the end until tight



Tie one end of the nylon to something strong and stable like an eye screw screwed into a wall stud or into the back of secured wall units etc.

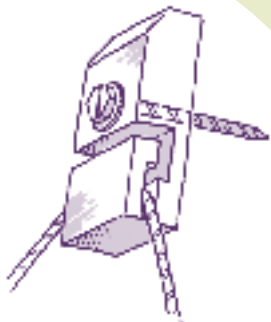
Wrap the cord around the object or through any handles. Make sure it can't unravel. Tie or snap link the other end to the eye screw or similar.



4

PICTURES AND MIRRORS

Anything hanging on a conventional picture hook or nail is likely to come off in even a moderate earthquake. Securing these is one of the easiest things you can do. The glass on pictures and mirrors can shatter, creating a hazard.



Alternative: You may be able to get special closed picture hooks from art stores or overseas suppliers (see inside back cover).

CLOSE HOOKS

Push hooks closed after hanging pictures or mirrors. Single-nail conventional picture hooks are fine for light pictures as long as the nail has been hammered into something solid like a wall stud.

Anything a little heavier will need a two- or three-nail picture hook, and very heavy pictures or mirrors may need something even stronger. Also, don't forget to use strong cord, not light string.



Once you have nailed the hook into place, hang the picture and then pull it out so you can get your hand behind it and push the hook closed.

Alternative: If hook is hard to close, then filler material squeezed into the gap may work.

TALL FURNITURE

The taller something is the more easily it will start rocking and topple, particularly if it is top-heavy. Falling furniture can be dangerous and destructive. Securing it to the wall is usually straightforward.

BRACKETS

Wall units, bookcases and other tall furniture should be secured to wall studs. The easiest way is to use metal brackets found in most hardware stores.

Standard steel brackets (65mm) should be more than adequate.



Alternative:
Reversed
brackets.



If you would like the brackets hidden as much as possible, attach them as two upside down "Ls". Start by marking on the wall where the top of the furniture comes to and then move it away from the wall. Find where the studs are in the wall (by tapping lightly) and then use 10 gauge screws about 63mm long to screw the brackets into place before moving the furniture back. Screw the other arm of the brackets down onto the furniture with eight gauge screws of 15-25mm length.

5

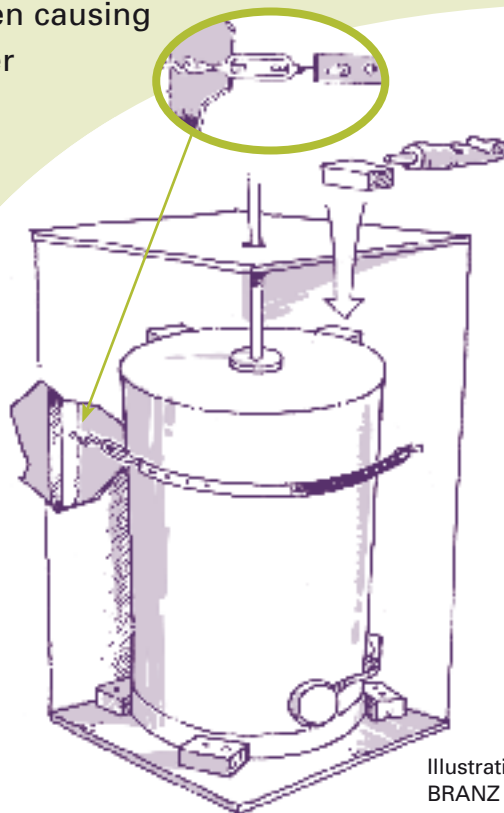
6

HOT WATER CYLINDERS

Even small shakes can cause hot water cylinders to rock enough to crack pipes, often causing expensive and messy water damage. In larger quakes the cylinder can tip over completely, with hot water becoming a hazard. Both can deprive you of your largest source of drinking water after a disaster. Securing a hot water cylinder is surprisingly easy.

THE STRAP METHOD

The best method of securing the cylinder is to use wooden blocks and a metal strap. The straps can be bought as part of a special kit from plumbing supply or hardware stores or you can buy a length of perforated strapping (approximately 25mm wide x 1mm thick).



Screw or nail timber blocks to the floor or shelving (make sure shelf is fastened).

Cut timber blocks to size so they fit snugly between the top of the cylinder and walls and glue them into place. Ensure blocks are against wall framing.

Screw two 8mm screw hooks into studs on either side and near the top of the cylinder.

Attach a 6mm turnbuckle to one hook and the end of the strap.

Cut the strap to the length required, connect it to the other hook and use turnbuckle to make it tight.

Illustration based on use of BRANZ kit (see inside back cover).

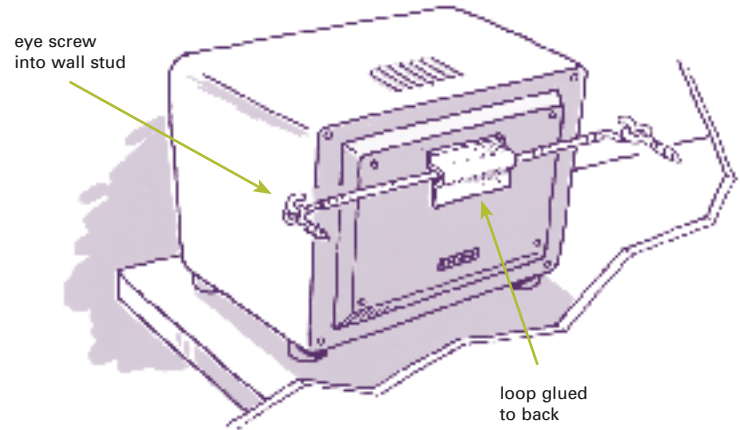
APPLIANCES

Most homes have a wide range of appliances - from microwave ovens to television sets. These can slide off benches and topple from cabinets, becoming hazards both during and after an earthquake.

SMALL APPLIANCES

Non-slip mats are good under smaller appliances like microwaves, videos and others where most of the weight is low down (see page 3). Rubber "cups" that sit under the feet of an appliance or self-adhesive Velcro pads can be effective. Both are available from many appliance and hardware stores.

Built-in appliances and items in wall units can be secured with wood battens or aluminium moulding or trim screwed to the edge of shelves to create a lip of at least 15mm in height.



Many appliances such as microwave ovens can be fastened with curtain wire passed through strong loops cut from leather or similar, and fixed with curtain wire hooks to eye screws in the wall studs. This will hold in strong shakes.

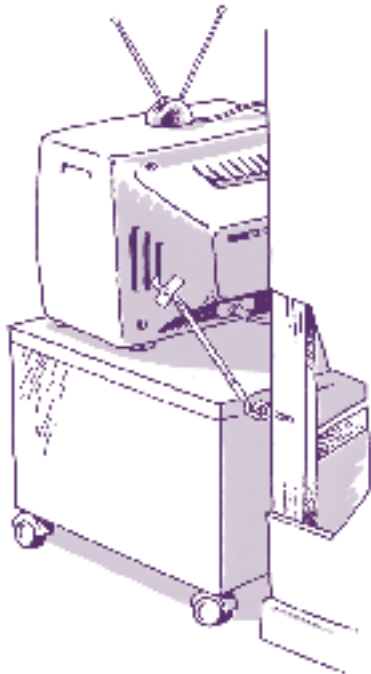
7

WARNING: Do not drill or otherwise make holes in appliances.

8

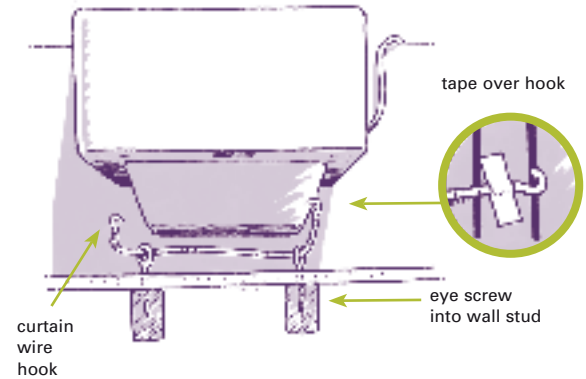
TELEVISIONS

Television sets are front-heavy, and are prone to toppling forward. Curtain wire provides a quick and easy way of preventing this.



If your TV is very large you should use a separate length of curtain wire on each side attached back to eye screws in the wall studs.

If the TV is on a trolley, angle the curtain wire downwards as much as you can to hold both in place.



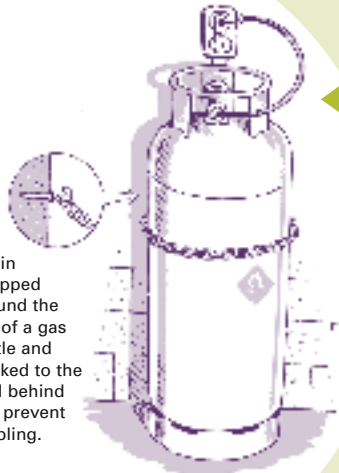
Screw one or two eye screws into a wall stud or other solid wood behind the TV. Screw a curtain wire hook into one end of a length of curtain wire and hook it into a vent.

Thread the other end of the curtain wire through the eye screws. Push the TV back against the wall and pull the wire tight. Cut to length, attach other curtain wire hook, and hook to vent. Tape hooks to TV to keep in place.

WARNING: Do not drill or otherwise make holes in appliances to attach hooks. You may need to slightly enlarge a vent with a hobby knife or small file to take the hook. If so, **UNPLUG TELEVISION FROM WALL.**

OTHER ACTIONS

There are other actions you can take to make your home quake safe.

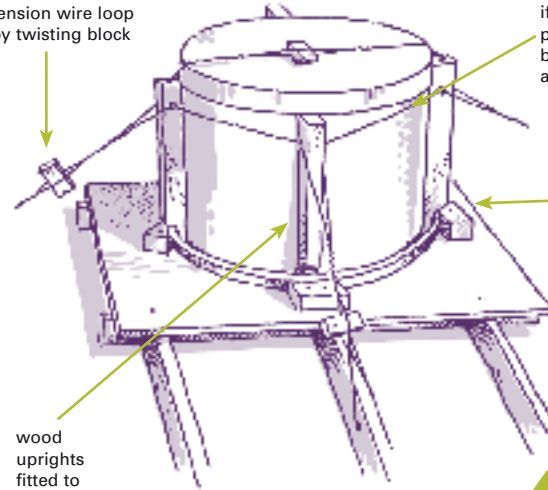


Chain wrapped around the top of a gas bottle and hooked to the wall behind will prevent toppling.

GAS BOTTLES

Remember where your emergency cut off switches are for gas, power, and water.

tension wire loop by twisting block



if copper tank put plastic tape between wire and tank

3 or 4 75mm x 50mm cleats with 2 100mm nails

wood uprights fitted to tank tray

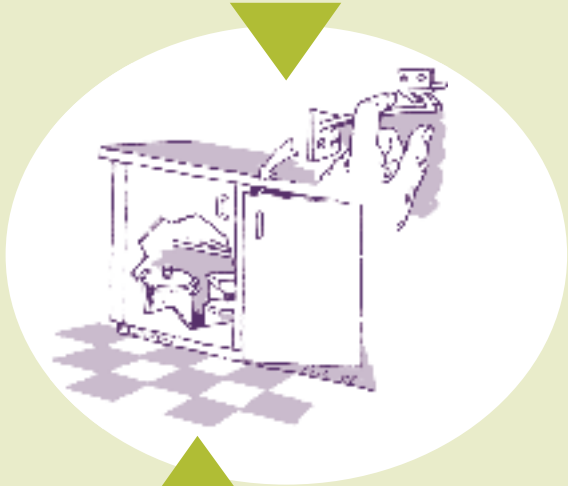
HEADER TANKS

Some homes have header tanks in the roof space or on the roof. These should be secured. The diagram above shows you what should be done.

9

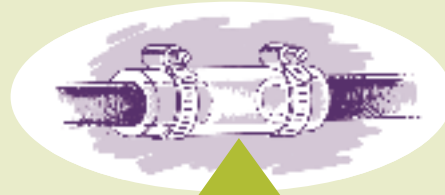
POSITIVE-CATCHING LATCHES

Use positive-catching (such as child-proof) latches on cupboard doors and drawers (magnetic catches don't hold during shaking).



STORING HEAVY OBJECTS

Store large, heavy and/or fragile objects on lower shelves or in low closed cabinets.



FLEXIBLE FITTINGS

Have flexible gas and plumbing fittings installed (by a tradesperson).

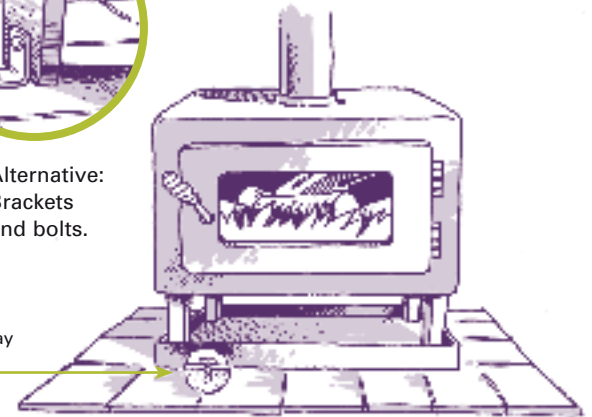
FREE-STANDING BURNERS

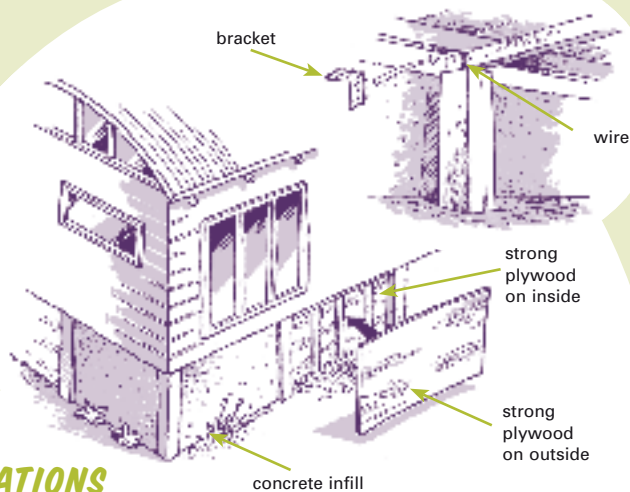
Secure wood burners, standing stoves and gas appliances, with a 12mm or greater lip around the bottom, e.g metal tray with lip (shown below), or with bolts and/or angle brackets.



Alternative:
Brackets
and bolts.

metal tray
with lip
bolted
to floor





FOUNDATIONS

Check that your house is bolted to its foundations and that it is properly braced; if not:

Wire, bolt or bracket bearers to piles.

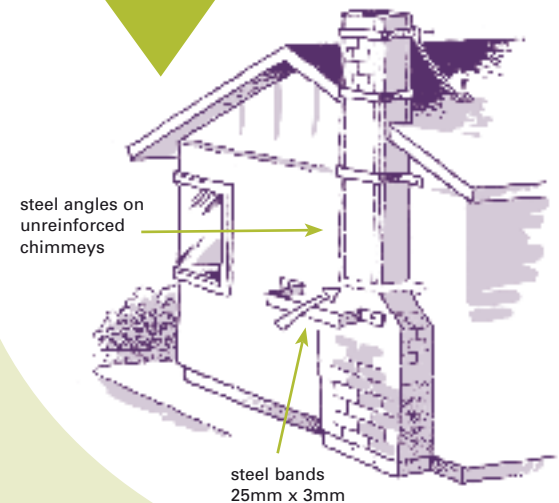
Nail strong plywood sheets to the inside of the framing in the sub-floor space.

Nail strong plywood sheets to brace and clad outside piles.

Infill with concrete (preferably) or nail panels between outside piles on all corners to help reduce twisting motions.

CHIMNEYS

Secure your chimney with galvanised metal angles and bands at top, ceiling line and bottom. Bolt these through the cladding to rafters or ceiling joists. Brace part above roofline.

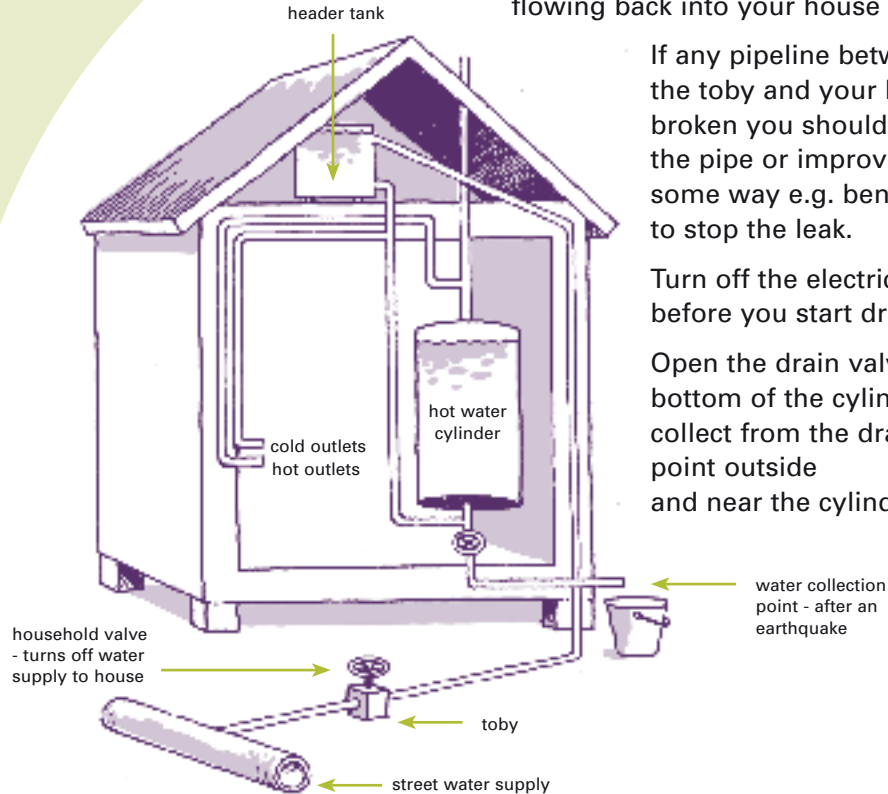


11

EMERGENCY WATER SUPPLY

How to get water out of the hot water cylinder in an emergency.

12



Shut water supply off at the "toby" i.e. the tap or valve on the water supply pipe to the house, to stop dirty water (from any broken street pipes) flowing back into your house pipes.

If any pipeline between the toby and your house is broken you should clamp the pipe or improvise in some way e.g. bending it to stop the leak.

Turn off the electricity before you start draining.

Open the drain valve at the bottom of the cylinder and collect from the drainage point outside and near the cylinder.

HOW TO GET HELP TO QUAKE SAFE YOUR HOME

GETTING THE MATERIALS

- brackets, screws, Blu Tack, picture hooks, cord, etc – hardware stores
- various picture hooks, quake putties etc – art supply and antique stores
- non-slip matting, curtain wire, etc – homeware stores
- water cylinder kits – plumbing supply and hardware stores and from BRANZ (04 235 7600, branzcac@branz.org.nz)
- specialist supplies – search the internet for “earthquake safety products”

PLEASE NOTE THAT SOME STORES MAY NOT STOCK THE PRODUCTS AS INDICATED.

GETTING SOMEONE TO HELP

- Hire A Hubby provides professional handymen who can Quake Safe your home for you. Hire A Hubby is actively supporting the Quake Safe programme. Phone: 0800 248 229 for help from a “Hubby” in your area.
- Other home handypeople and tradespeople, e.g. carpenters, may be able to help.
- Plumbers can secure your hot water cylinder, put in flexible fittings, etc.

WHEN DISASTER STRIKES, YOU COULD BE ON YOUR OWN FOR SEVERAL DAYS. CHECK THE BACK OF THE YELLOW PAGES TO MAKE SURE YOU KNOW WHAT TO DO BEFORE, DURING, AND AFTER.



This information comes to you from the Earthquake Commission (EQC). EQC is the Government agency that automatically insures your property against damage from certain natural disasters (earthquake, volcanic eruption, landslip, hydrothermal eruption and tsunami) when you insure your home and/or contents. The Commission provides cover of \$100,000 + GST for homes and \$20,000 + GST for contents. If you would like to know more about EQC visit our website at www.eqc.govt.nz or call 0800 652 333.

