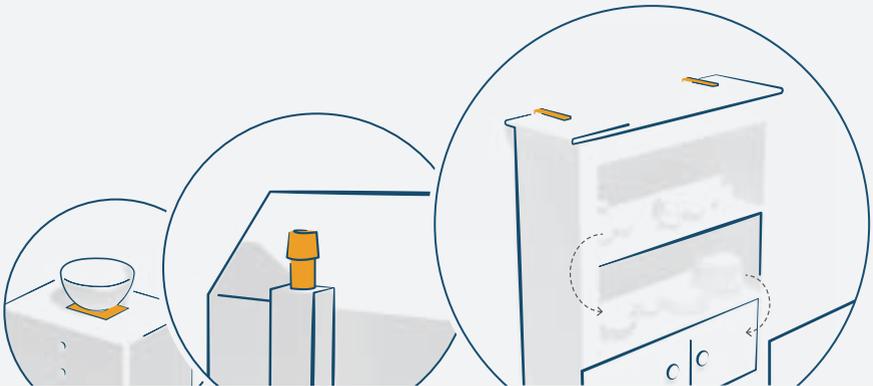


New Zealand Government



Protect what's most important to you.

Easy ways to quake
safe your home.



**FIX. FASTEN.
DON'T FORGET.**

EQC
EARTHQUAKE COMMISSION

Kōwhiriā Rūwhenua

After an earthquake your home could be a mess and have no water supply. Someone might be injured. However, there are simple things you can do around your home to help prevent damage and injury from earthquakes.

This guide shows you easy ways to quake safe your home.

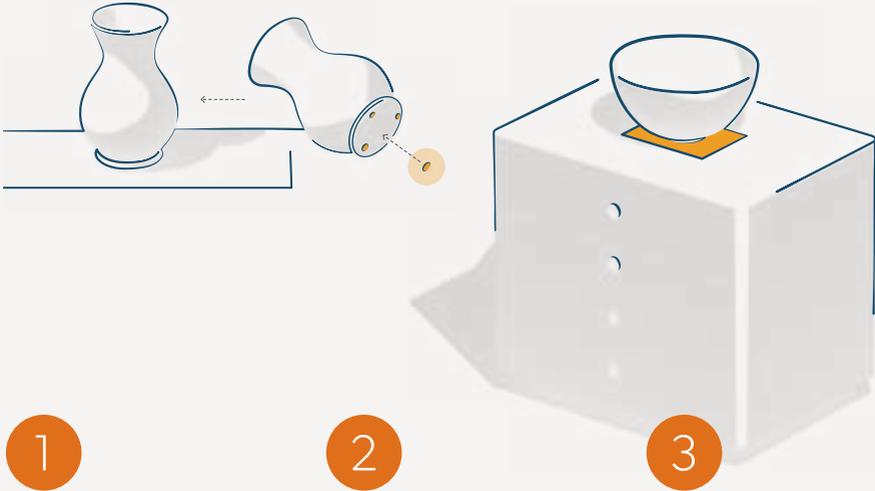
Fix. Fasten. Don't Forget.

Ornaments and small objects

What you'll need

- + Plastic putties, eg. Blu Tack or quake wax
- + Non-slip mats

All are available at hardware or homeware stores.



1

Ensure both the bottom of the object and the surface it sits on are clean.

2

Roll pieces of putty into balls of equal size – the amount you need to use depends on the size, shape and weight of the object.

One bigger piece may be enough for small objects; others may require three or four smaller pieces. Push on to bottom of object.

3

Press the item down firmly, and gently 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 gently pulling from its position.

For squat, heavy objects

Use non-slip mats.

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

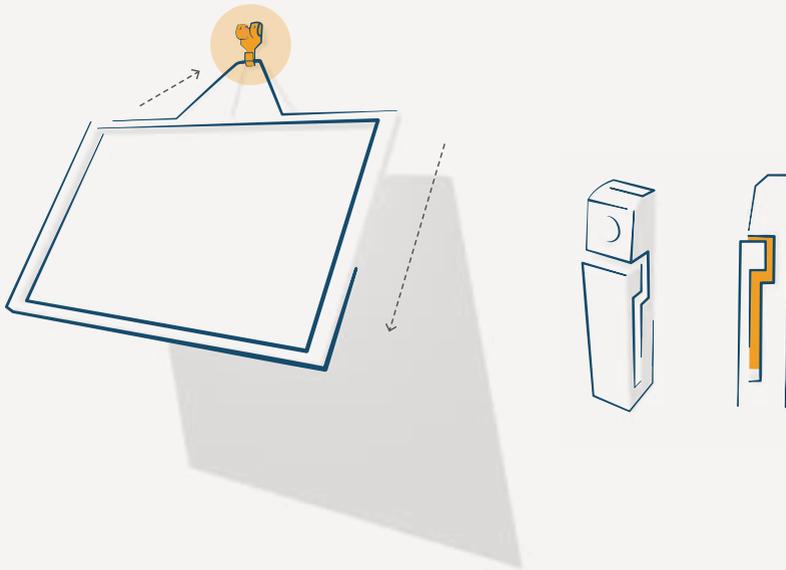
Store heavy and/or fragile objects on lower shelves or in low, closed cabinets.

Pictures and mirrors

What you'll need

- + Picture hooks
- + Hammer and nails

Available at your local hardware store.



For light pictures

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.

For heavier pictures and mirrors

Anything a little heavier will need a two or three-nail picture hook, or possibly several hooks, 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.

If the hook is hard to close, squeezing filler material into the gap will help to retain the cord in place.

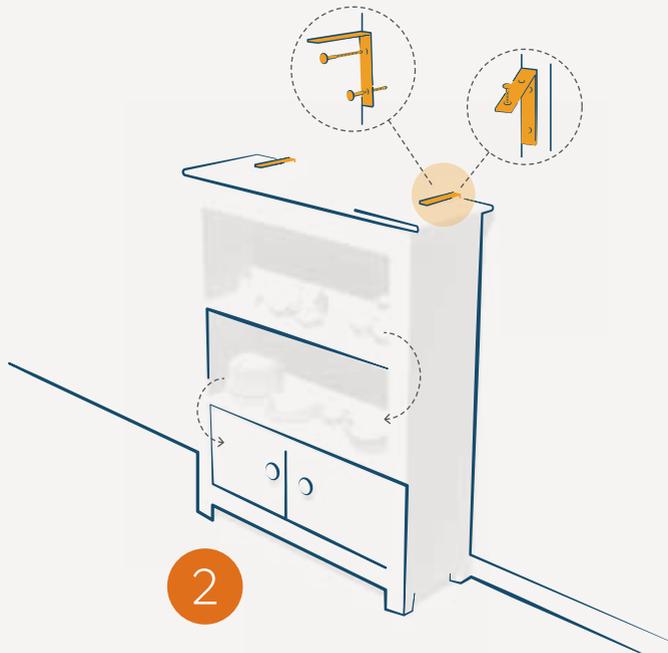
Alternative: The hook shown above has a zig-zag to prevent the cord from jumping out of the hook.

Tall furniture

What you'll need

- + Standard 65mm steel brackets
- + 63mm 12 gauge screws and 15-25mm 8 gauge screws
- + A drill

Available at your local hardware store.



1

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 63mm 12 gauge screws to screw the brackets into place before moving the furniture back.

If you would like the brackets hidden as much as possible, attach them as two upside down "L" shapes.

2

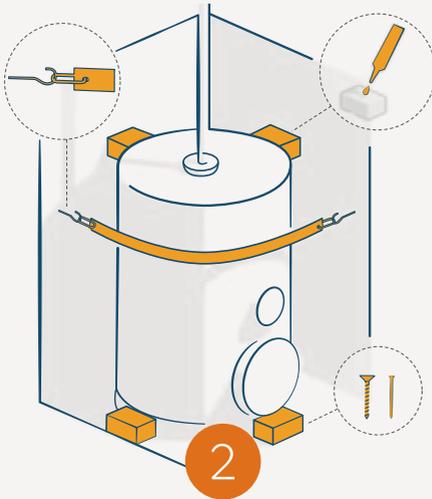
Screw the other arm of the brackets down onto the furniture with 8 gauge screws of 15-25mm length.

Hot water cylinders

What you'll need

- + Hot water cylinder restraint kit
- + Wooden blocks
- + Hammer, nails and glue
- + A drill

Alternative: Perforated strapping (25mm x 1mm thick), screw hooks and turnbuckle.
Available at your local hardware store.



1

Screw or nail the 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.

2

Follow manufacturer's instructions if you have bought a restraint kit.

Otherwise screw two 8mm screw hooks into studs on either side at the same level as the blocks.

3

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.

Emergency water supply

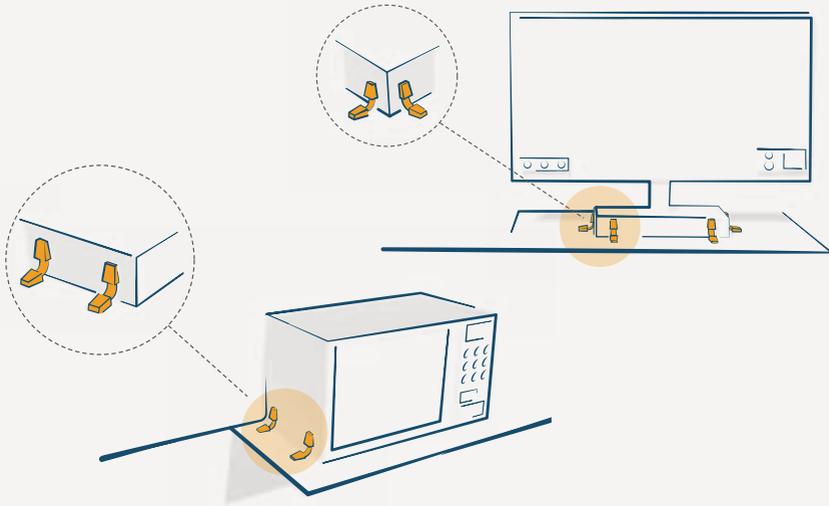
1. Shut water supply off at the "toby" i.e. the tap or valve on the water supply pipe to the house, to stop dirty water (from any broken street pipes) flowing back into your house.
2. If any pipeline between the toby and your house is broken you should clamp the pipe or improvise in some way.
3. Turn 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.

Appliances

What you'll need

- + Restraint straps
- + Rubber caps
- + Non-slip mats
- + Velcro pads

Available from your local hardware store or specialist safety stores.



Small appliances

For smaller, squat appliances like microwaves where most of the weight is low down – secure with non-slip mats.

Rubber “cups” that sit under the feet of an appliance or self-adhesive Velcro pads can also be effective. Both are available from many appliance and hardware stores.

Built-in appliances

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 microwaves can be fastened with proprietary restraint straps available from specialist safety or hardware stores.

Televisions

Modern TVs are often tall and narrow, and can be prone to toppling forward. If the TV is on a base or stand, it can be fastened using any number of strap restraints or similar products, which are available from specialist safety or hardware stores.

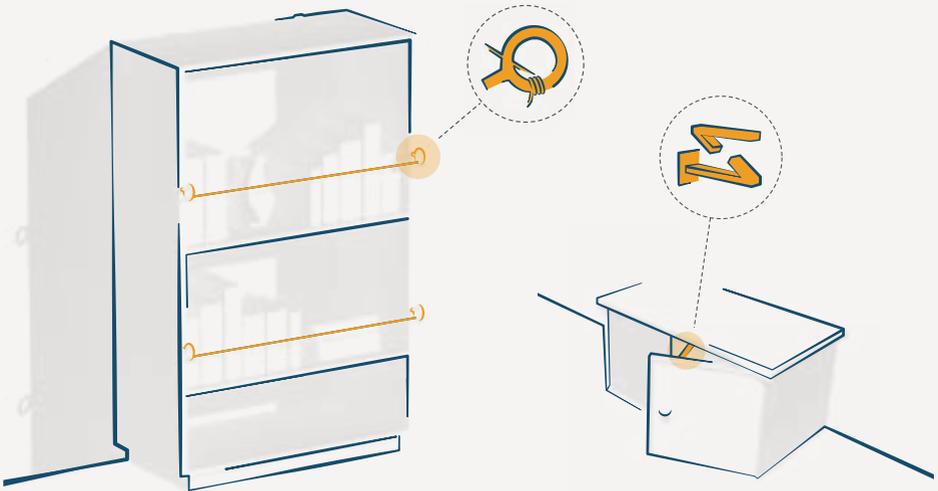
Using a non-slip rubber mat or rubber feet can also prevent movement but these should be used in conjunction with strap restraints.

Bookshelves and latches

What you'll need

- + Cord, nylon or curtain wire
- + Child-proof latches

All items are available at your local hardware store.



Bookshelves

Cord, nylon or curtain wire can be strung in front of books and other items on a shelf to lessen the chances of them falling or flying off in a shake.

Cupboard doors and drawers

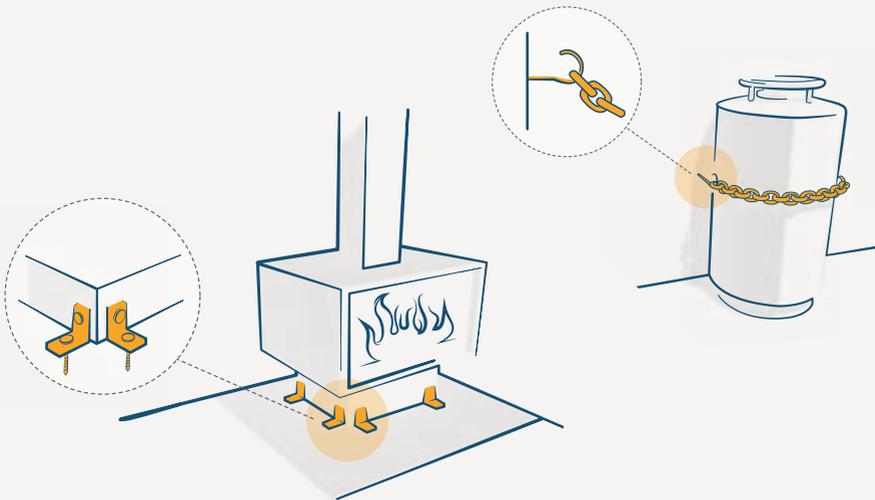
Use positive-catching latches on cupboard doors and drawers. Make sure these latches aren't magnetic, as they will not hold during a quake. Child-proof latches with a mechanical action are best.

Log burners, gas bottles and flexible fittings

What you'll need

- + Angle brackets or anchored metal tray
- + Bolts
- + A drill

Available from your local hardware store.



Free standing burners

Secure your wood burners, standing stoves and gas appliances with bolts and/or angle brackets, or an anchored metal tray with a 12mm or greater lip.

Installing flexible fittings

Have flexible gas and plumbing fittings installed by a tradesperson. Flexible fittings between your house and the ground are particularly beneficial in an earthquake, as they allow for the extra movement and prevent breaks and leakages.

Gas bottles

Make sure you know where your emergency cut-off switch and taps for gas, power and water are.

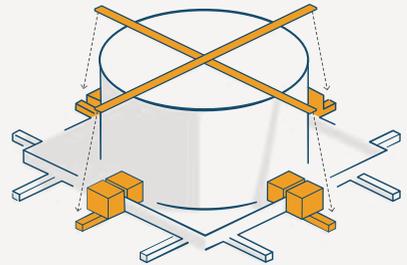
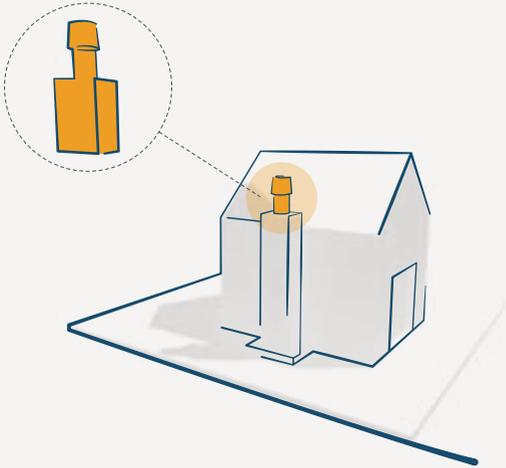
The chain should be near the top if the bottom of the bottle is restrained from sliding on the ground, otherwise it should sit at about mid-height.

Chimneys and header tanks

What you'll need

- + Wooden blocks
- + Nails

Available at your local hardware store.



Chimneys

The portion of the chimney that sits above the roofline can be particularly hazardous. This can be braced, or even removed and replaced with a lighter metal flue in conjunction with the installation of a solid fuel heater.

The first thing you should do is contact a licensed builder.

Header tanks

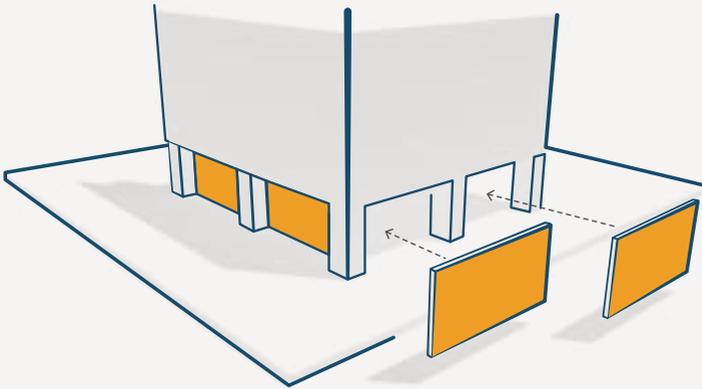
Strap your header tank to the ceiling framing. Securely nail wooden blocks at four locations around the perimeter of the tray and fit wooden blocks between the perimeter of the tray and the tank.

Foundations

What you'll need

- + Brackets
- + Nails (Z or gang are the most appropriate)
- + Plywood sheets

Available at your local hardware store.



Check that your house is well-fixed to its foundations and that it is properly braced. If not, you can:

- + Wire, bolt or bracket bearers to piles – a wide range of bracket options are available from most hardware stores;
- + 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.

If extensions have been made to the property, it pays to ensure the foundations are well-tied together to avoid the potential for the two parts to separate or grind together during a strong quake.

Advice from a licensed building practitioner is recommended before starting the work.

For more information go to:

www.eqc.govt.nz

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