**Earthquake Resistant Building Materials for Your Home**

An **earthquake** can devastate your life and your home. If you live in an area which is prone to earthquakes, it may be worthwhile utilizing some earthquake resistant building materials for your home.

If you are relocating to a house in an earthquake prone area, research when the last earthquake was and how frequent they have been in that area. This will give you the opportunity and timescale required to ensure that your new home is made from as much earthquake resistant material as possible.

**Base isolation Pads**

If possible, try to have any new constructions built on base isolation pads as these will absorb most of the vibrations and limit the damage caused to your home.

Base isolation pads are most commonly made from lead and rubber which is sandwiched together with layers of steel and attached between the base and foundations of your house. In the event of an earthquake, the base isolation pads will move because of the shaking beneath them but because they will absorb most of the vibrations, your home should remain relatively still.

Base isolation pads are more commonly found in high rise or multi-level buildings.

**Materials**

There are certain building materials that will withstand earthquake vibrations better than others. Concrete is very good at resisting damage from earthquakes while wood is also a preferred material for construction in earthquake prone areas.

If your home is built out of wood, you will need to ensure that it is bolted down at the foundations because if it is not, the force from an earthquake will cause it to move and create structural damage.

If your home is built out of concrete, you should try to have the concrete reinforced with either additional concrete slabs or steel. If you have any brickwork buildings or structures such as garages or garden walls, ensure that they are reinforced with concrete slabs as this will offer some protection in an earthquake.

**The Roof**

The roof of your property will be the first part of the house that is damaged. However, if your roof is made from concrete or clay tiles they will respond better in the event of an earthquake. If your roof has been damaged in an earthquake, hire a contractor and specifically request that the roof is repaired or reconstructed out of one of these materials.

**House Height**

Earthquake research has found that houses with a single storey cope better with the forced shaking which an earthquake will subject your home to. Multi-levels houses can be built to resist earthquakes but they need to be built with reinforced concrete or built on base isolation pads.

**Securing furniture**

Regardless of whether your home is made from a wooden frame or reinforced concrete, the furniture within it will still need to be secured. Place all valuables in a safe, sturdy box with rubber matting between them to prevent damage. Strap heavy furniture such as book cases and wardrobes to the wall as this will prevent them from falling.

**Flexible Hose**

Replace solid pipe work with flexible hosing wherever possible. This is more resistant to earthquake movement and if installed slightly oversized, there should rarely be any ruptures of leaks in the aftermath of ground tremors.