You **CAN** Keep Your Family Safe In Future Earthquakes and Typhoons

For masonry construction, follow these 7 tips to make your house safer in earthquakes and more resistant to typhoons.



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Build a **hipped roof** or a **lightweight** gable. Masonry gables are heavy and can collapse in an earthquake.





2.

Connect the roof strongly to the ring beam with **straps** or **brackets**, or else it could blow away in a typhoon!





3.

Connect the building using a **ring beam** on top of walls, a **plinth beam** at the foundation, and **tie columns** between them.





4.

Overlap rebar by at least **40 rebar diameters**; short overlaps and hooks are not strong!





5.

Connect beams and columns together by **continuing rebar through the joints.** Use rebar stirrups with rotated hooks around column and beam rebar.













Use **strong blocks**. If the blocks break when dropped, find another seller that makes stronger blocks. Wet the blocks before adding to the wall and add plaster to the walls.





Connect the walls to the columns with **rebar dowels** or masonry toothing. Build the walls **before** pouring the columns and ring beam.



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You **CAN** Keep Your Family Safe In Future Earthquakes and Typhoons





For wood construction, follow these 7 tips to make your house safer in earthquakes and more resistant to typhoons.

1

Connect all wood framing members **strongly** to each other to improve typhoon resistance. Nails are cheap!



2.

Use diagonal wind bracing between trusses.





3.

Truss members should be connected with **straps** or **gusset plates** to have strength in strong winds.





4.

Connect the roof strongly to the walls with **straps** or **brackets**.







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Use **diagonal bracing** to strengthen column-beam connections.





Anchor the posts to foundations with **post brackets**.

Foundations must be deep and/or heavy to counteract the uplift force of the wind.



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You CAN keep your family safe from earthquakes.

And you should **build back better**, because more earthquakes are coming. Consider building a **timber house**. In earthquakes, it's safer than a masonry house. Whichever type of house you choose, remember to **make connections strong**, from the roof to the foundation. Also, use only **good quality materials**. Don't use limestone or coral or beach sand as aggregates to make concrete or concrete blocks. The decisions you make now in the reconstruction of your home will affect the safety of your family in the future.



If you decide to build with masonry, follow these 7 tips to make your house safer in earthquakes and more resistant to typhoons.



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You **CAN** Keep Your Family Safe In Future Earthquakes and Typhoons



TIPS ON MAKING YOUR HOME STRONGER AND SAFER

with information on: MASONRY CONSTRUCTION



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When building with wood, follow these 7 tips to make your house safer in earthquakes and more resistant to typhoons.



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10,423

Empowered

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Homes

You **CAN** Keep Your Family Safe In Future Earthquakes and Typhoons



TIPS ON MAKING YOUR HOME STRONGER AND SAFER

with information on: **WOOD CONSTRUCTION**



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1

Connect all wood framing members strongly to each other to improve typhoon resistance. Nails are cheap!







bracing between trusses.





Truss members should be connected with 3. straps or gusset plates to have strength in strong winds.





Connect the roof strongly to the walls with **straps** or brackets.







6. Anchor the posts to foundations with **post**

brackets.





Foundations must be **deep** and/or **heavy** to counteract the uplift force of the wind.

5.

Use diagonal bracing to strengthen columnbeam connections.









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