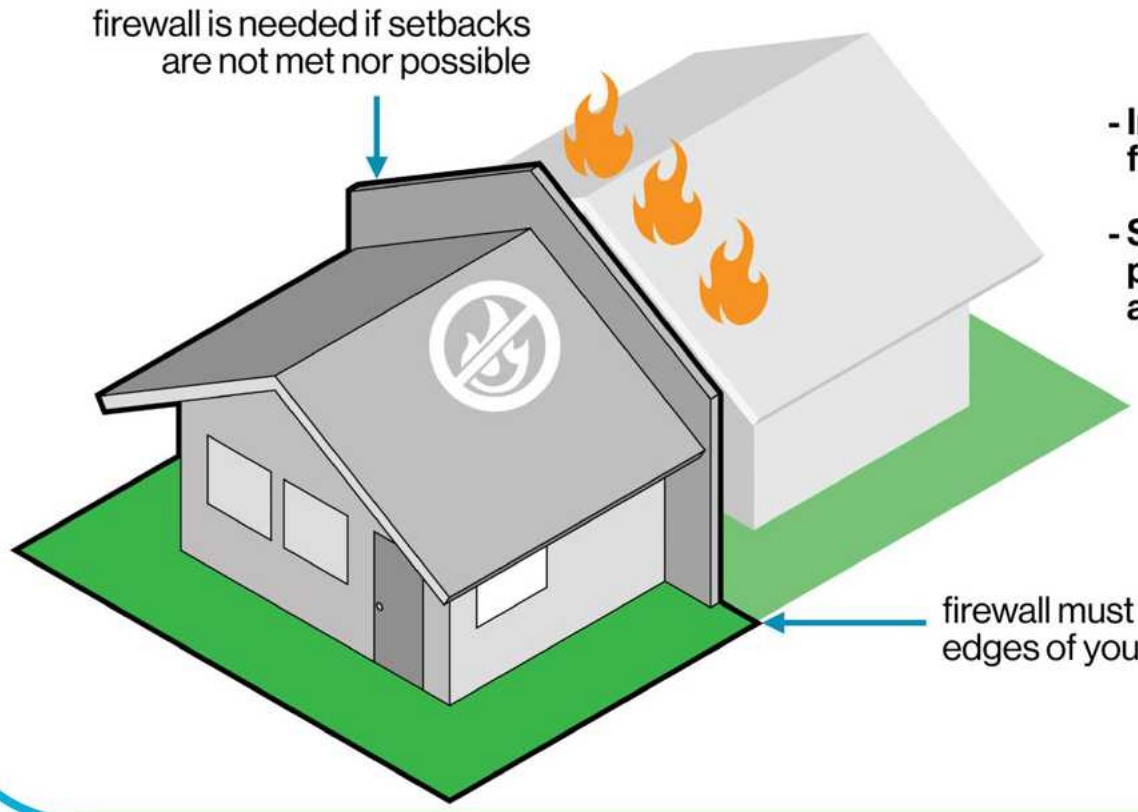
Balay Sakto

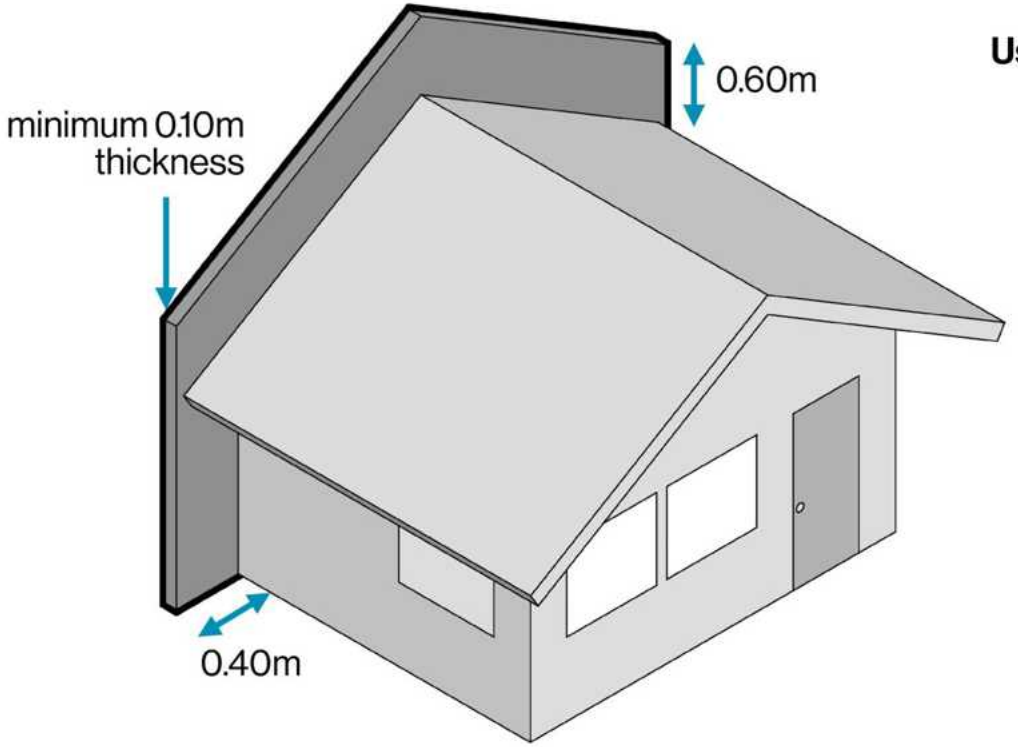
2024 BUILD RIGHT GUIDE

A **FIREWALL** WILL PROTECT YOUR HOUSE FROM FIRE.

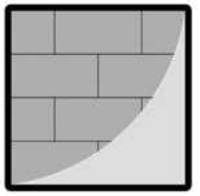


- **Inspect and maintain your firewall regularly.**
- **Seek advice on fire safety from professionals or local authorities.**

AN **EFFECTIVE FIREWALL** IS BUILT WITH PROPER MATERIALS AND MEASUREMENTS.



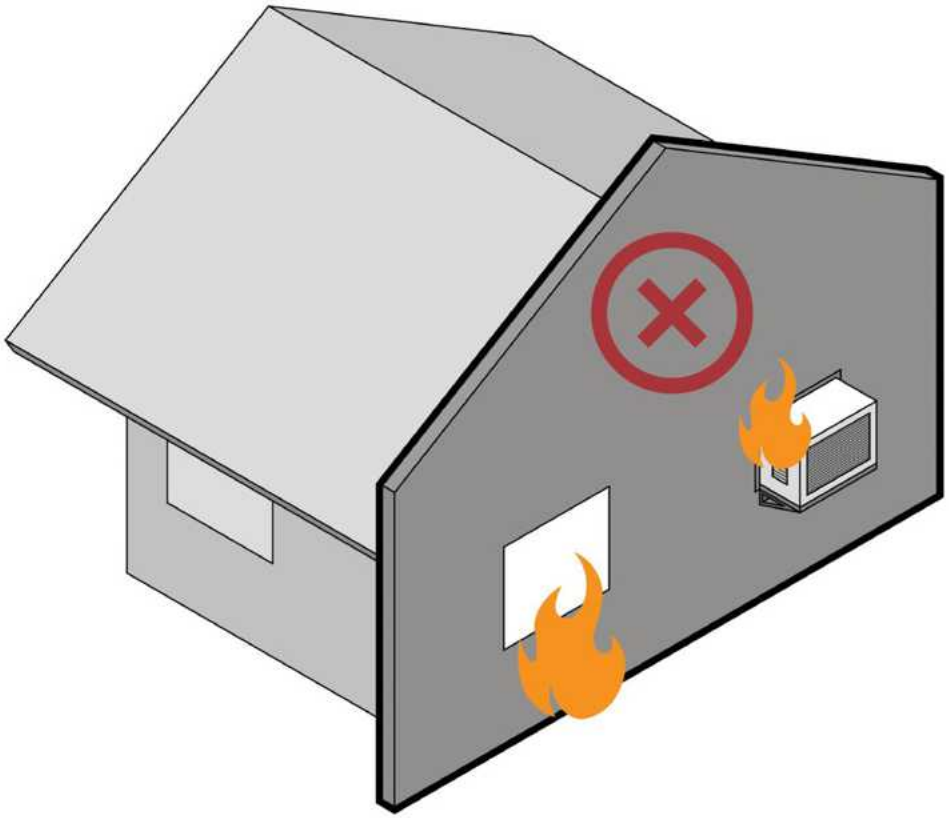
Use fire-resistant materials like:



concrete hollow blocks (CHB)

bricks

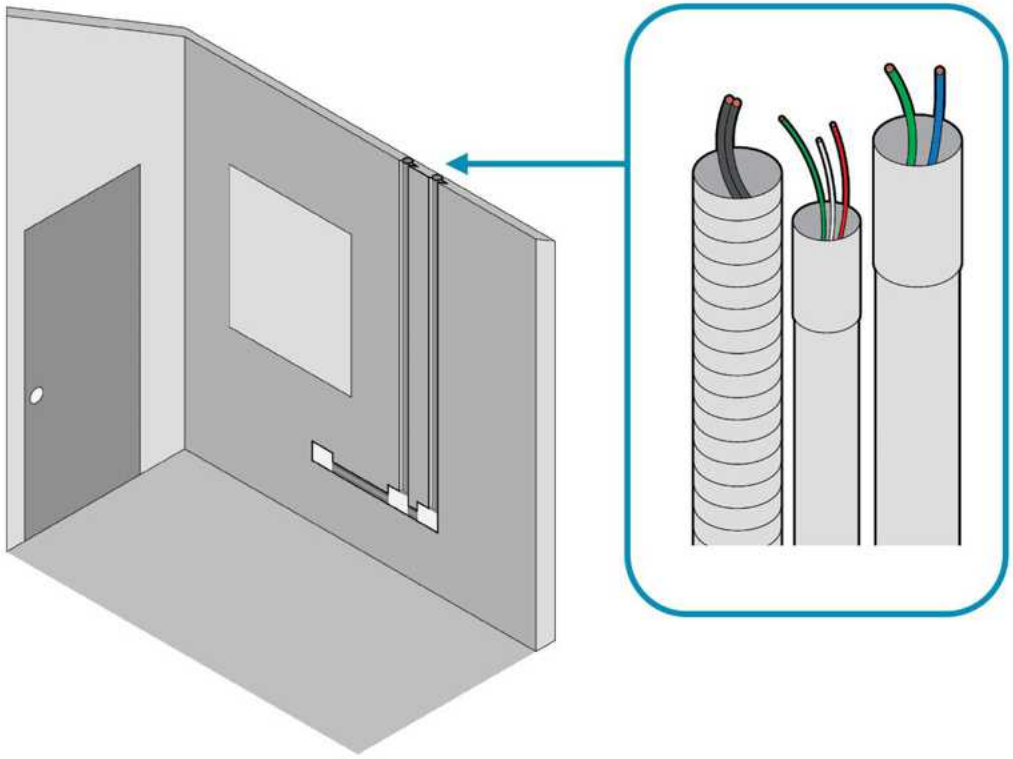
A FIREWALL HAS **NO OPENING.**



- Fire can penetrate and spread into your house through any opening in the firewall.

- Seal your firewall with mortar and plaster to prevent fire from spreading.

FIRE-RESISTANT CONDUITS ARE USED FOR ELECTRICAL WIRES IN WALLS.



- **Verify if the material can resist fire.**
- **Choose recommended or trusted brands over cheaper alternatives.**

HIRING A QUALIFIED **ELECTRICIAN** WILL AVOID ELECTRICAL-RELATED FIRES.

The electrician must be:

- a registered master electrician (RME) with official license
- experienced in electrical works for at least three years

An electrician who is accredited by your local electric company is a better choice.

HIRING A SKILLED **MASON** CAN BUILD STABLE WALLS.

The mason must be:

- literate in construction drawings and specifications
- experienced in masonry works for at least two years

A mason who has a training certification, such as from TESDA, is a better choice.

BUDGETING BEFORE BUILDING

THE WALLS HELPS YOU SPEND LESS.

Materials for: Room Extension Prices from: Hermione Hardware

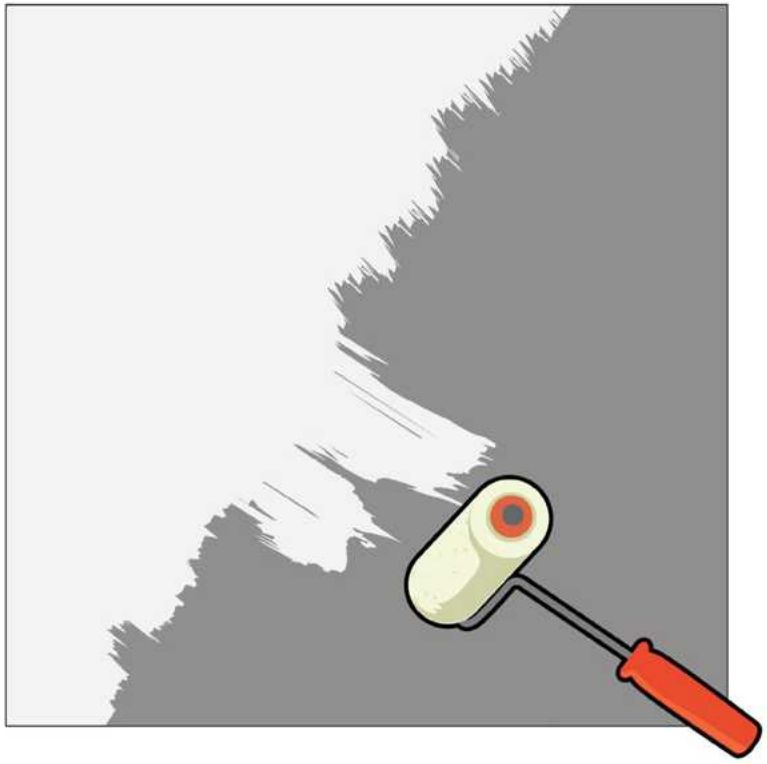
Description	Quantity	Unit	Price (₱)	Total (₱)
4" Concrete Hollow Blocks	547	Piece	14.00	4,858.00
Portland Cement	15	bag	285.00	4,275.00
Sand	1.25	cu.m.	1,800.00	2,250.00
Gravel	1.75	cu.m.	1,800.00	3,150.00
10mm Rebar - gm. 640	4	length	190.00	760.00
Tiewire	2	kg.	78.00	156.00
			Grand Total (₱)	15,449.00

- **Determine the works of workers and evaluate their fees.**
- **Let skilled workers assist you in predetermining the materials and tools needed.**
- **Request for material quotations from hardware stores.**

YOUR WALLS MUST HAVE **NO SURFACE DEFECTS.**

- Inspect thoroughly every wall surface for blisters, stains, holes and cracks before any finishing works.
- Identify the cause of a defect before repairing it.
- Fix the defect with the appropriate filler or sealant.

ELASTOMERIC PAINT CAN WATERPROOF YOUR WALLS.



- **Remove dirt, dust, grease and other contaminants from the wall surface before any paint application.**

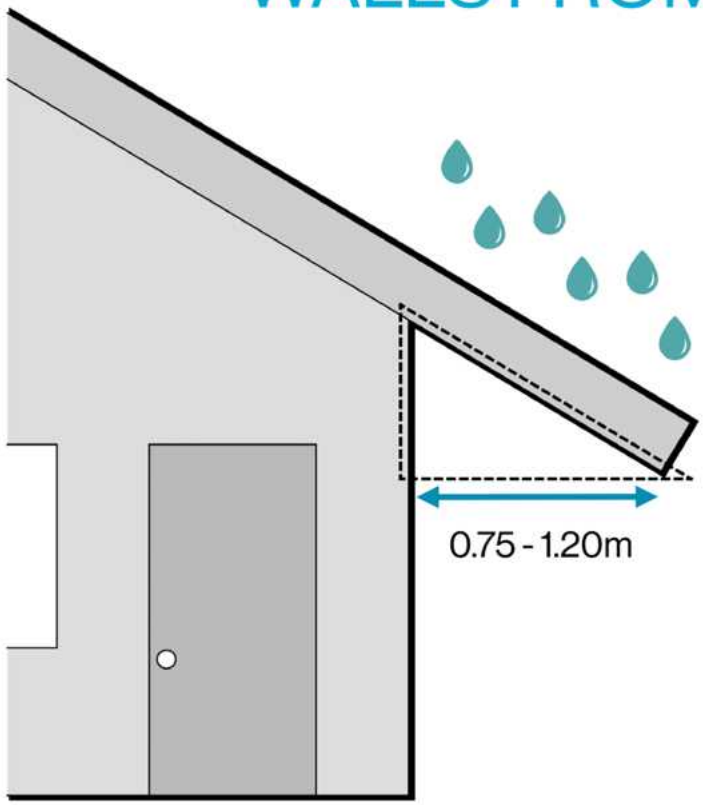
- **Apply paint primer afterwards for best results.**

- **Make sure that all paints are compatible since different brands sometimes have chemical reactions.**

PROPER **FIBER CEMENT WALLS** ARE WATERPROOF.

- **Consult an expert fiber cement board installer for the correct construction method.**
- **Seal gaps and edges carefully for best results.**
- **Choose recommended or trusted brands over cheaper alternatives.**

ROOF EAVES CAN SHIELD YOUR WALLS FROM WATER.



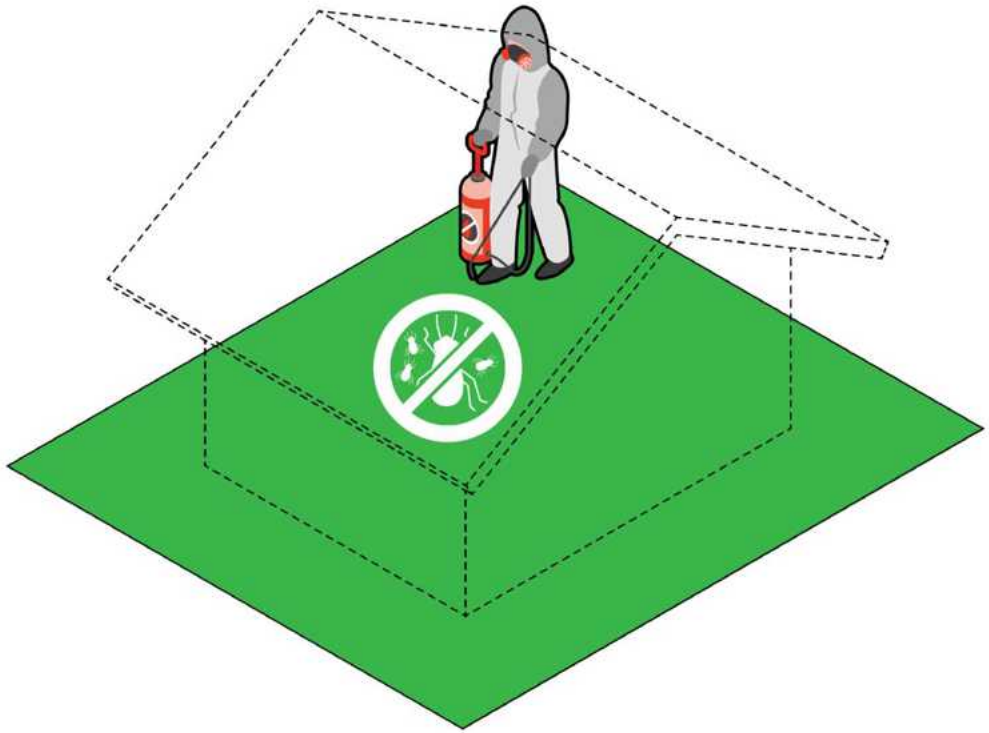
- **Use proper materials and methods in constructing your eaves.**
- **Inspect eaves regularly for any damage.**

FLASHINGS CAN DIVERT WATER AWAY FROM YOUR WALLS.

- **Ensure flashing pieces overlap correctly to form a continuous barrier on gaps and edges.**

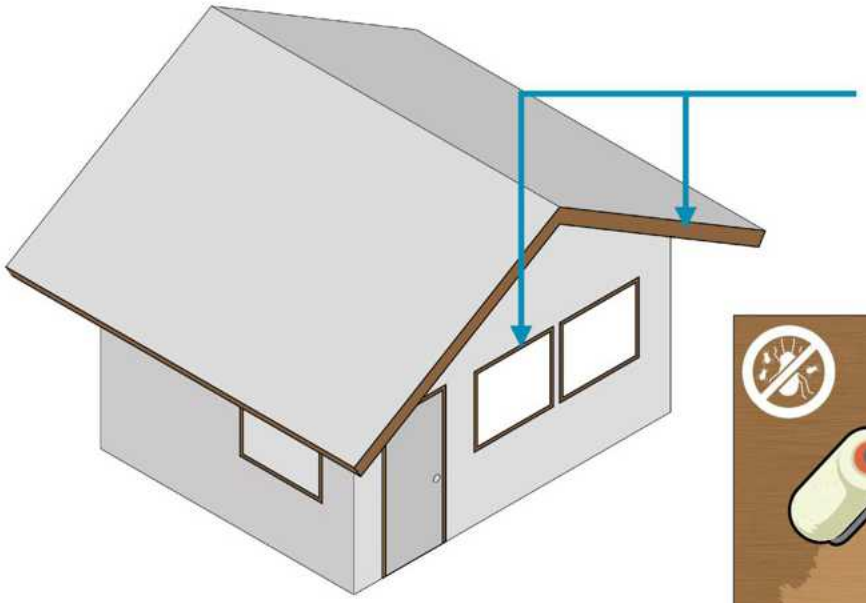
- **The material must be prepainted steel.**

SOIL TREATMENT IS DONE BEFORE ANY CONSTRUCTION.



- **Hire a pest exterminator to effectively poison your soil.**
- **Remove any wood debris or trees from construction area.**

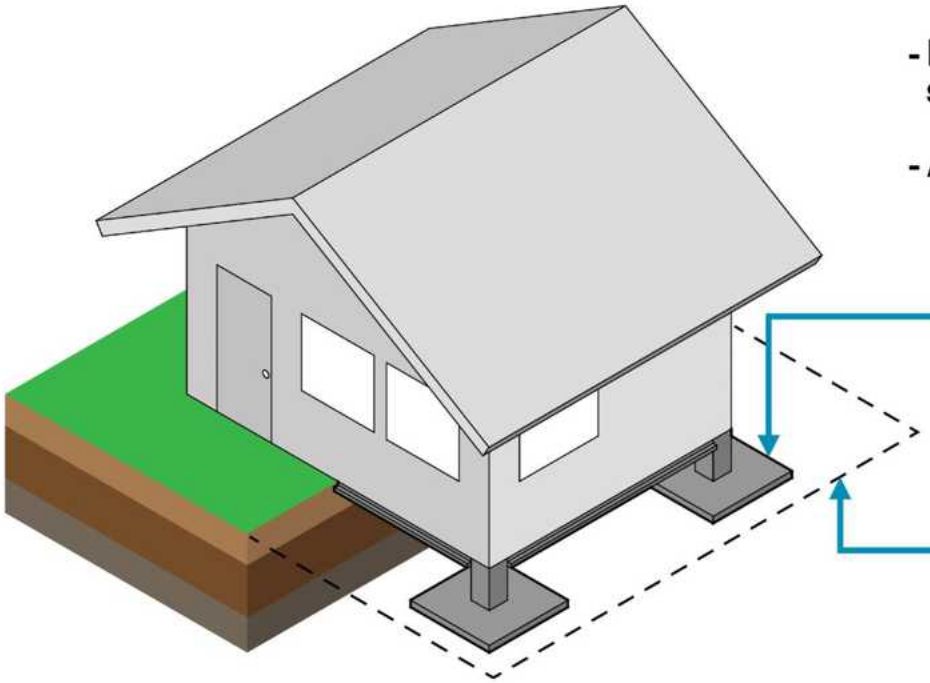
TREATED WOOD MATERIALS
LAST LONGER.



Some commonly used wood materials are pre-treated by their manufacturer.

Use wood preservatives to avoid fungal rot, molds and any infestation when using plywoods and lumbers.

PROPER FOUNDATION SUPPORTS YOUR HOUSE AND KEEPS IT STABLE.



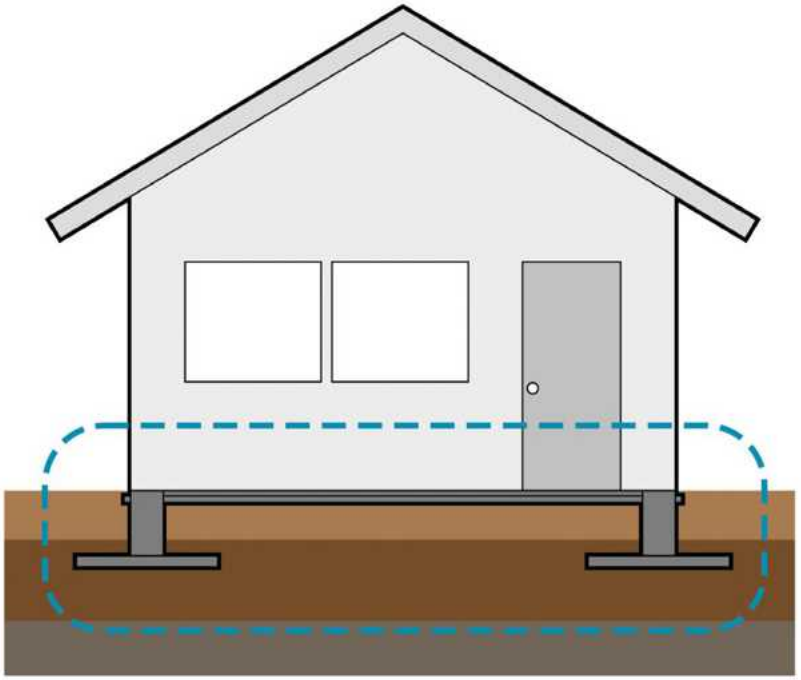
- Foundation acts as barrier to water and soil vapor.

- Add rock beddings if soil is loose.

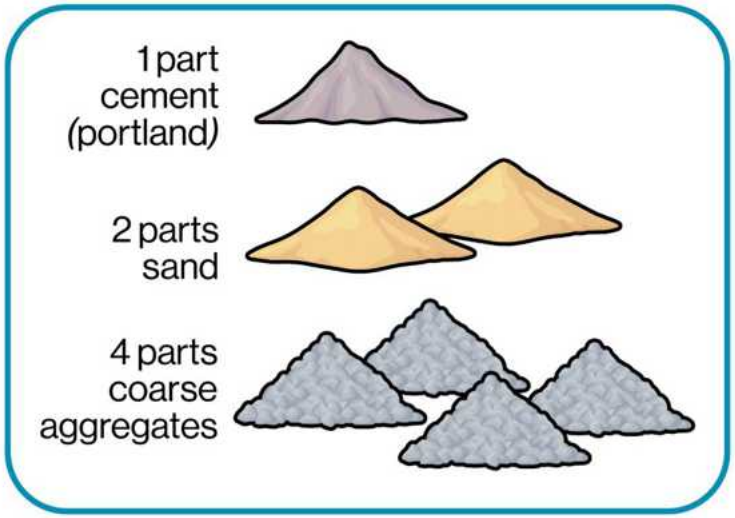
Depth of column footings is at least 0.60m from the ground. More floors means greater depth.

Foundation must be within the edges of your property.

CONCRETE IS BEST FOR THE FOUNDATION OF YOUR HOUSE.

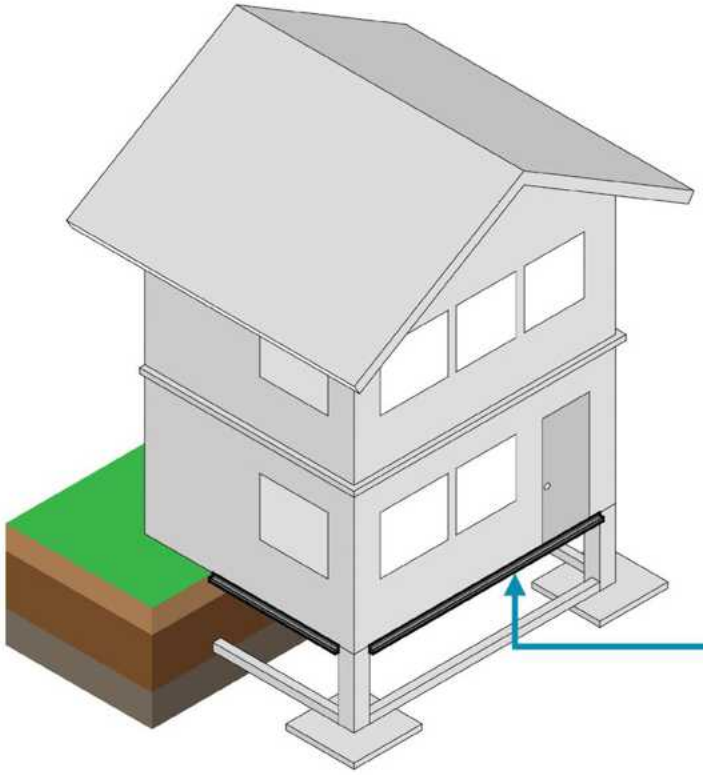


Use this mix for strong foundation:

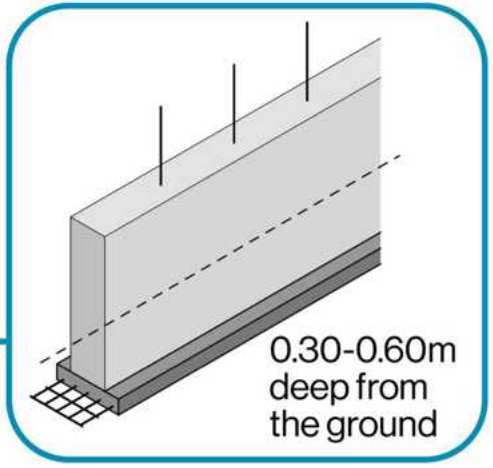


Minimize water during mixing to keep concrete strength.

ADDITIONAL SUPPORTS IMPROVE YOUR STRUCTURE.



Wall footings make your walls more stable.



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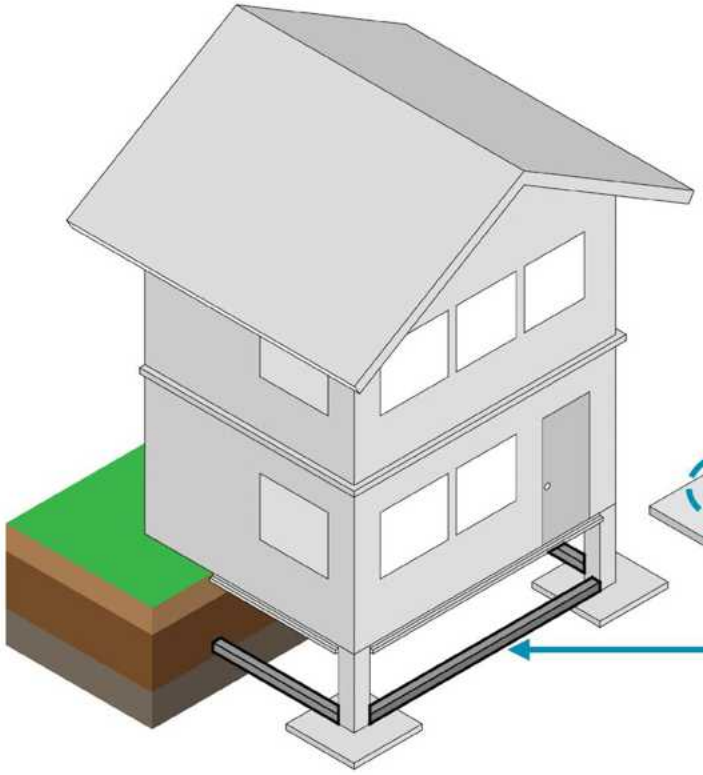
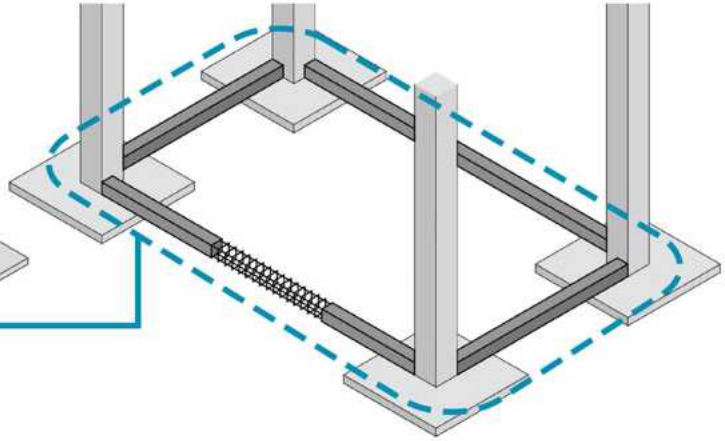
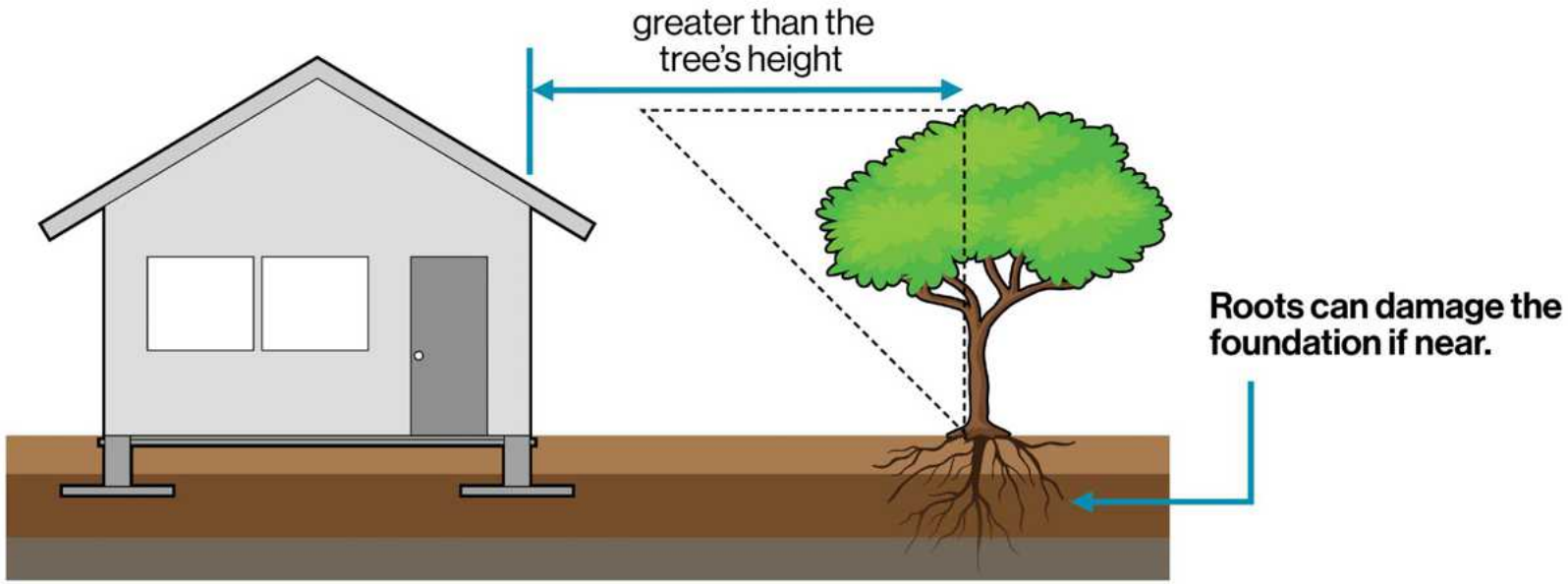


- **Add tie beams if your house has at least two floors and soil is loose.**

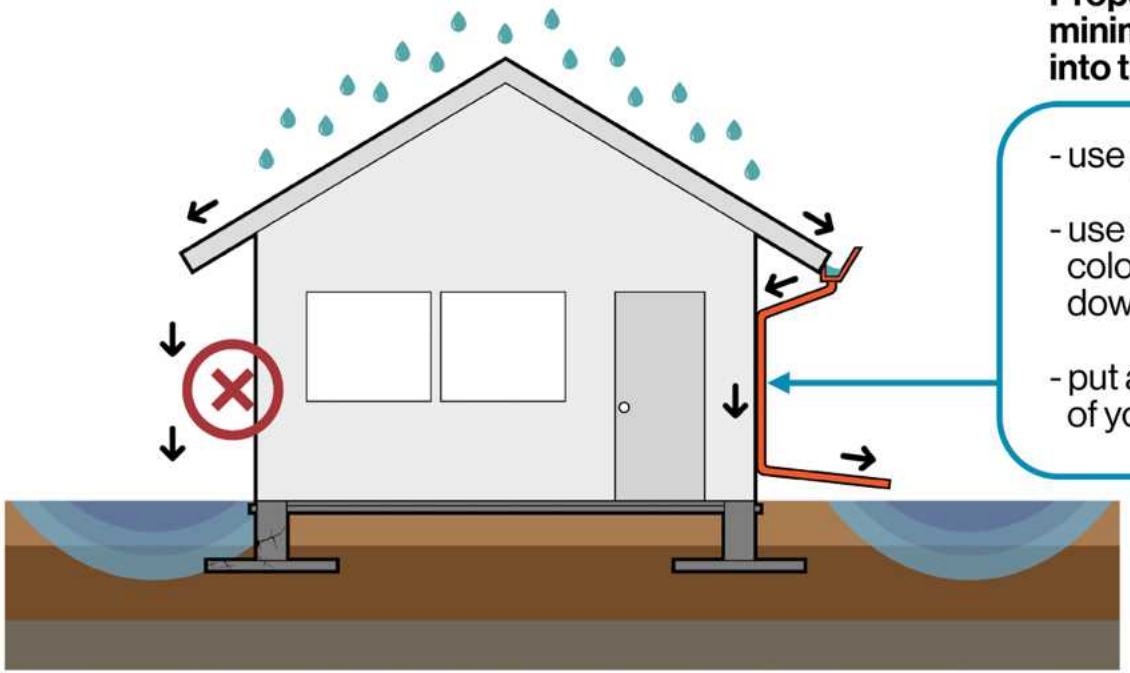
- **Tie beams make your columns more stable.**



DISTANCING FROM TREES HELPS PROTECT THE FOUNDATION.



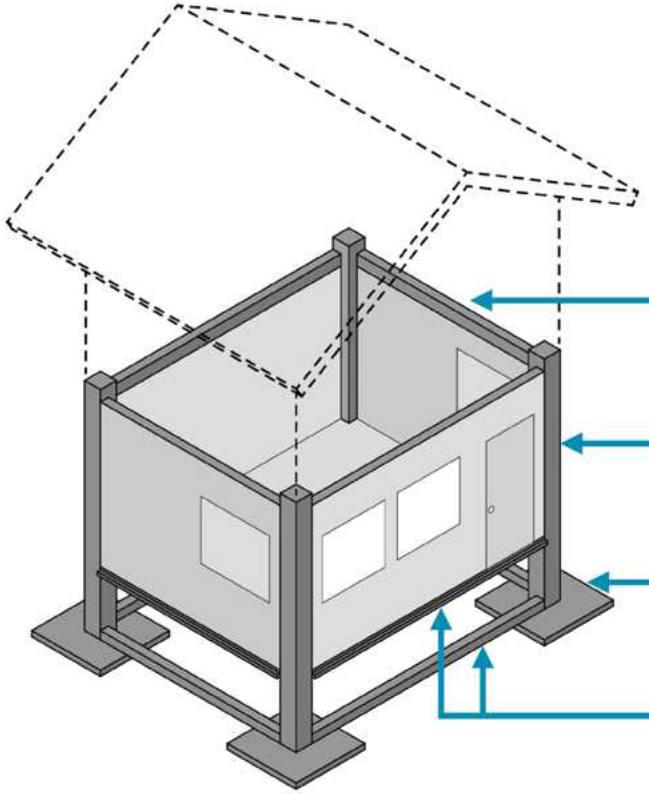
GUTTER AND DOWNSPOUT
PREVENT ANY WATER DAMAGE.



Proper drainage system minimizes water penetration into the foundation.

- use prepainted steel gutters
- use 3-inch PVC pipes (orange color, series 1000) as downspouts
- put a downspout in every 4.50m of your gutter

A HOUSE WITH **STRONG STRUCTURE** CAN EXTEND IN THE FUTURE.



NOTE:
Descriptions may only be applicable to a house with up to two floors.

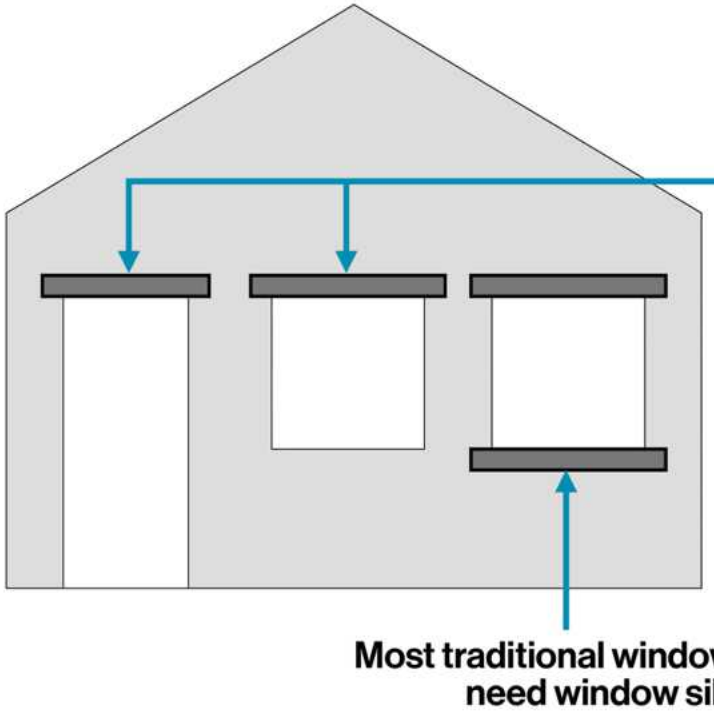
beam size:
0.25m (width) x 0.40m (depth)

column size:
0.30m x 0.30m

column footing depth:
1.20m from the ground

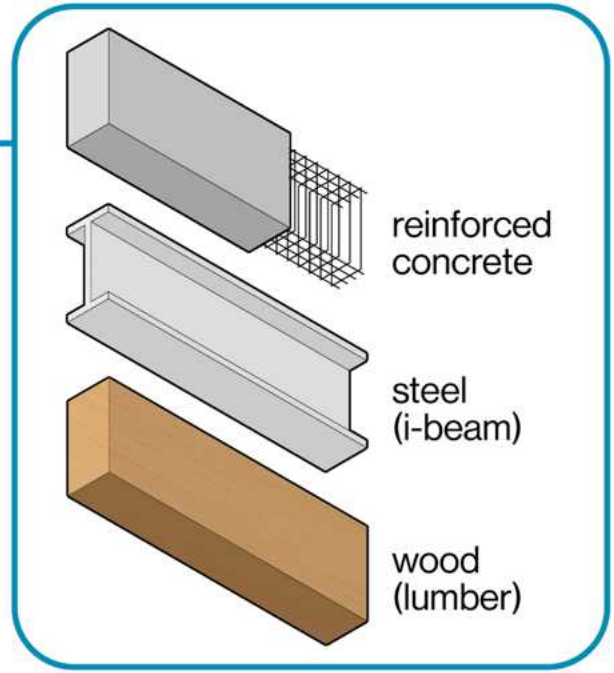
presence of wall footings and tie beams

LINTEL BEAMS CAN PREVENT WALL CRACKS DURING EARTHQUAKES.

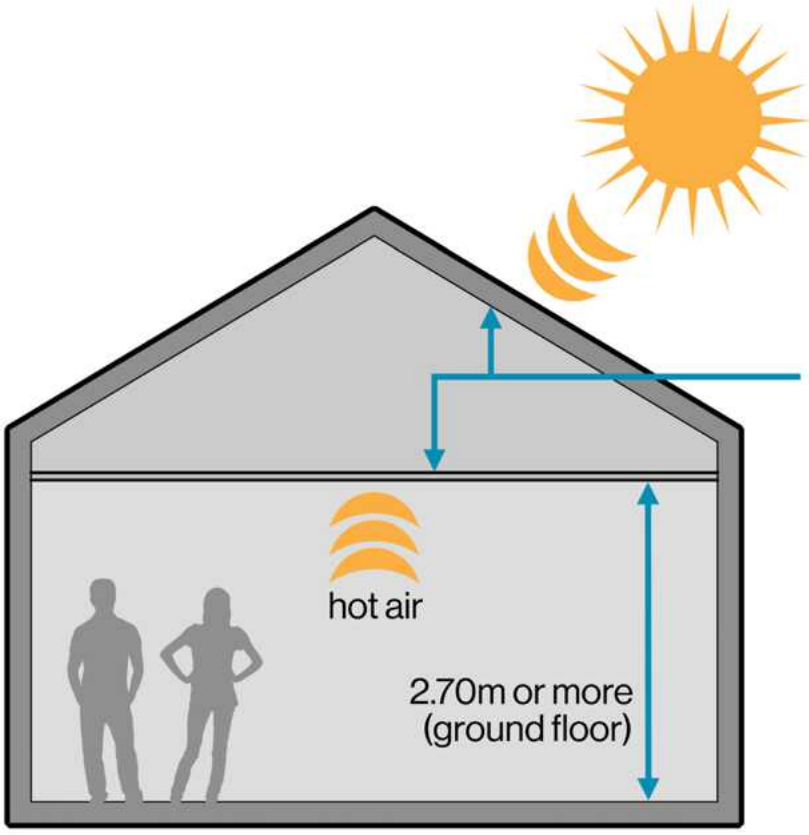


Most traditional windows need window sills.

Lintel beams on top of your doors and windows can be any material:

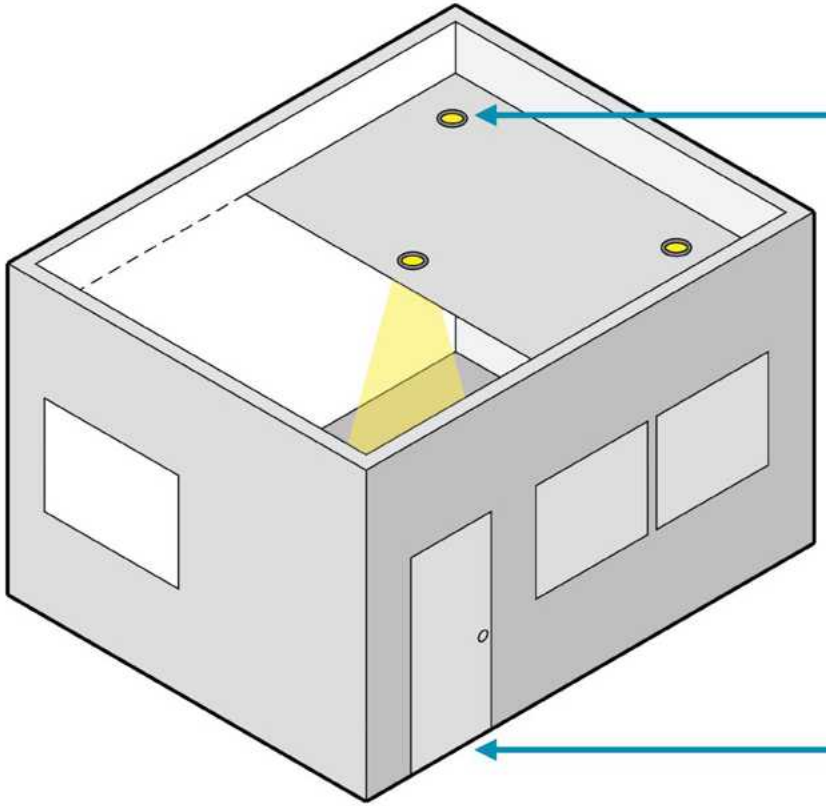


A DECENT **CEILING** MAKES A COMFORTABLE ROOM.



- **Use fiber cement board as your ceiling surface.**
- **Paint your ceiling in light color because lighter colors absorb less heat.**

A ROOM NEEDS GOOD **LIGHTING AND OPENINGS.**

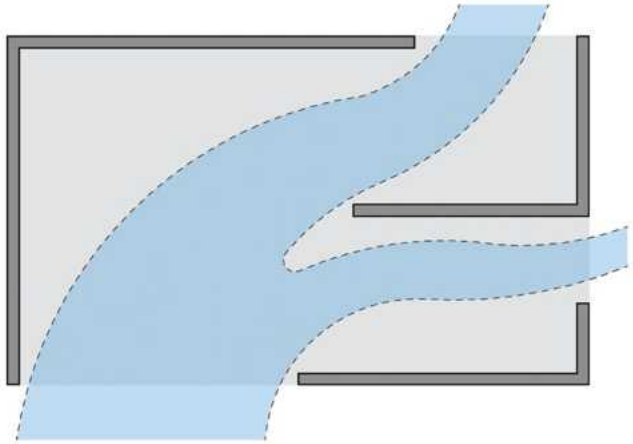


use LED bulbs as your ceiling lights

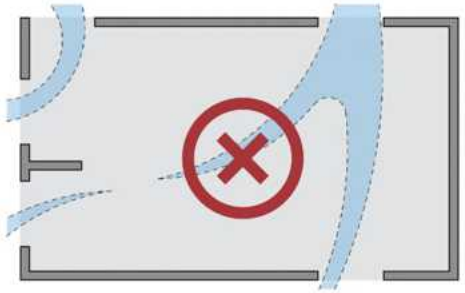
- **Install glass blocks to some walls where windows are absent.**
- **Paint your walls in semi-gloss light color.**
- **Window opening is at least 10% of the floor area.**

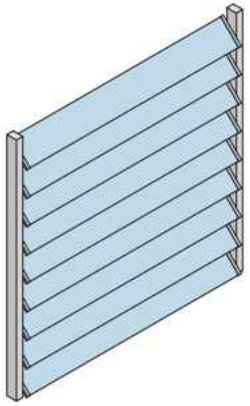
main door is at least 0.90m wide

PASSIVE COOLING REDUCES YOUR ELECTRICITY COST.



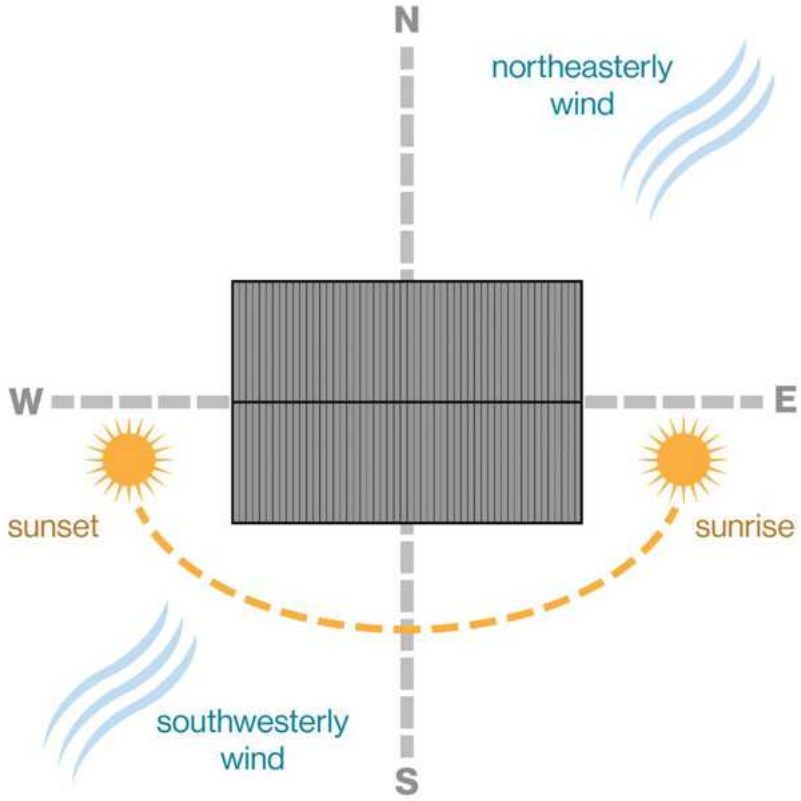
- Let natural air move through your house by placing your windows appropriately.
- Avoid placing windows directly facing nor too near to each other.





Use jalousie windows to maximize ventilation and control airflow.

A HOUSE NEEDS **PROPER ORIENTATION.**



Position your house by determining sun path and wind direction:

- Longer side of your house with more windows should ideally face north or south.
- Bedrooms are better if located in the northeast of your house.
- Kitchen and bathrooms are more suitable in the southwest of your house.