

Dhajji construction



Dhajji means 'patchwork quilt'.



Notice

'Hand-arounds' are plastified A4 pages to hand around in lessons where there is no PowerPoint presentation possible. That is, they are for the use of mobile teams in the villages.

Ground beam (Dasa)



- Prepare a good foundation.
- Place the Dasa and anchor it with bolts.



Tenon and mortise joint



- For a good connection between posts and dasa, use a tenon and mortise joint.



Bad connections



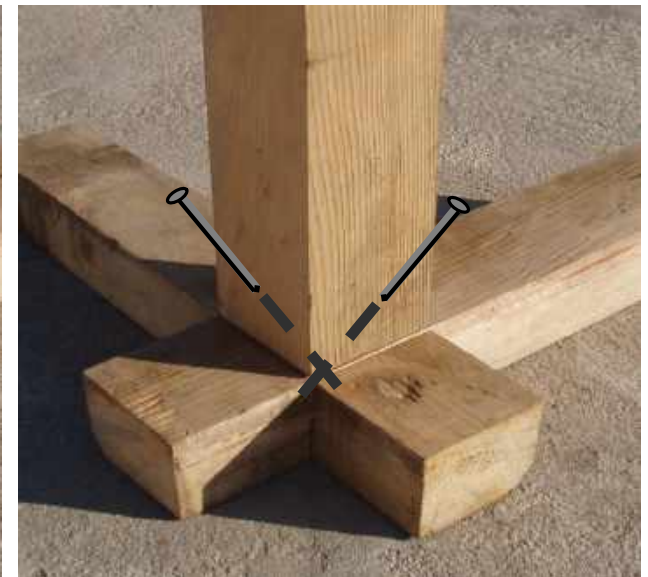
- Don't put the post directly on the foundation.
- Straps are not enough to hold the posts.



Corner joint



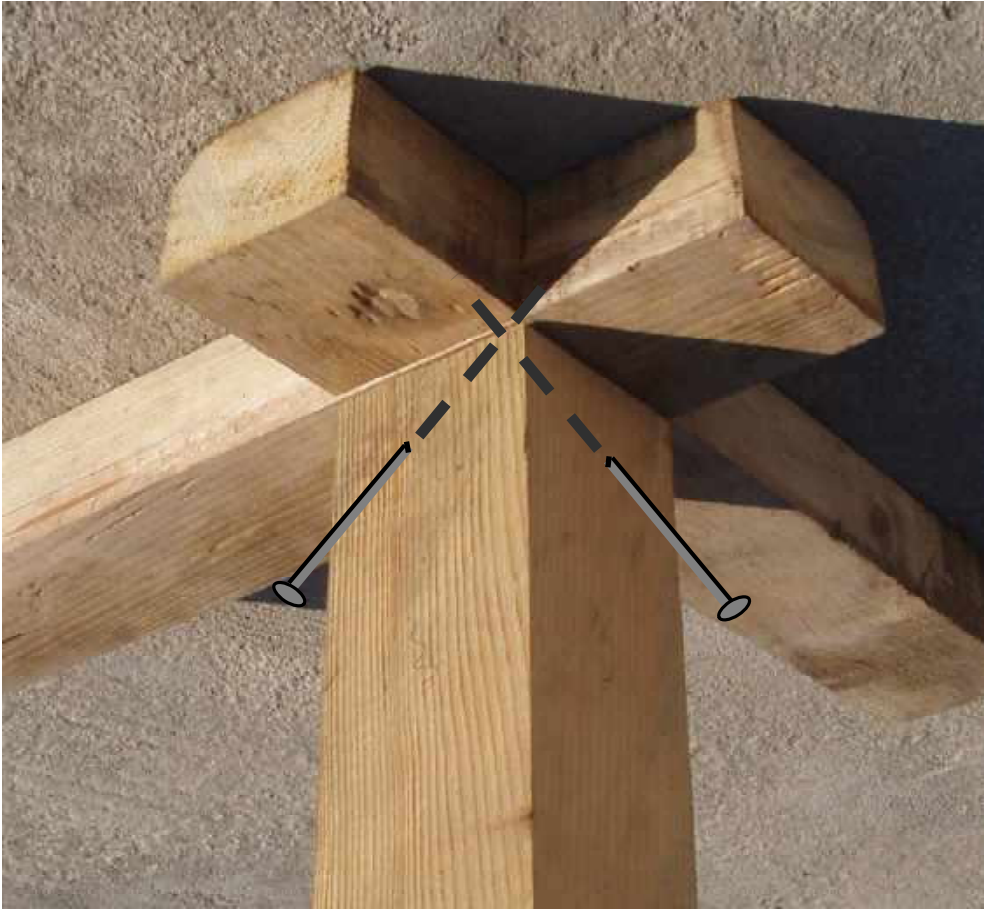
- Cut out the dasa and the post and join the dasa pieces.
- Add the post and two 5" nails to secure the joint.



Good connections



- Good strap with several nails in each piece of wood.
- It's simpler to use the same connection as with the dasa.



Bad connections



1. Nails alone without tenon and mortise are not enough.
2. Strap too long.
- 3.+4. Only one nail per piece of wood.



Horizontal joints



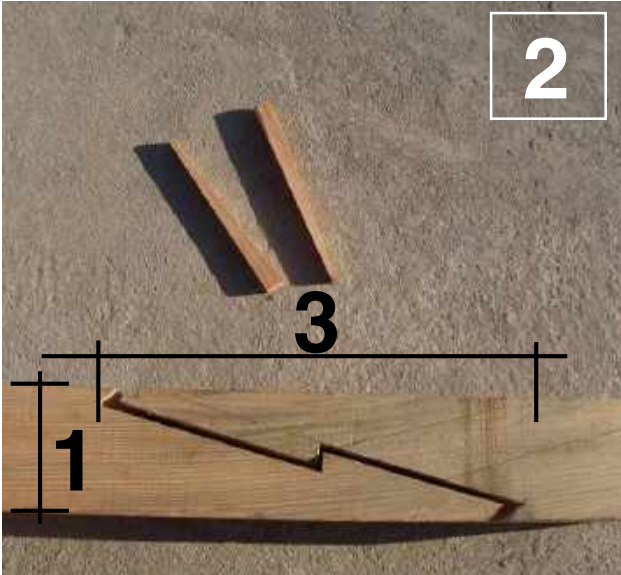
1. Don't place joints on top of columns.
2. These joints are weak. Only the nails hold them together.
3. Use strong 'scarf joints' (Kashmiri joints) which resist during an earthquake.



Scarf joint



- A scarf joint is 3 times as long as high.
- Use a hardwood peg to block the joint.



Roof trusses



- Roof trusses must be placed on top of the columns.

- Tie beams must be double and nailed against rafter.

NO !



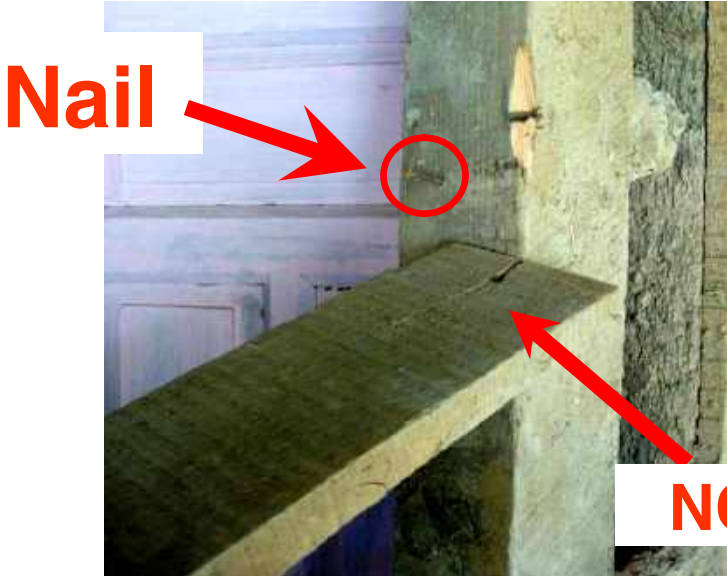
YES !



Diagonal boards



- Fill the walls with diagonal boards (1" to 2" thick).
- Nail them well against the posts to resist earthquakes.



Several types of infills



Dhajji in other places



1. England
2. Turkey
3. Abbottabad
4. Switzerland
5. Germany

