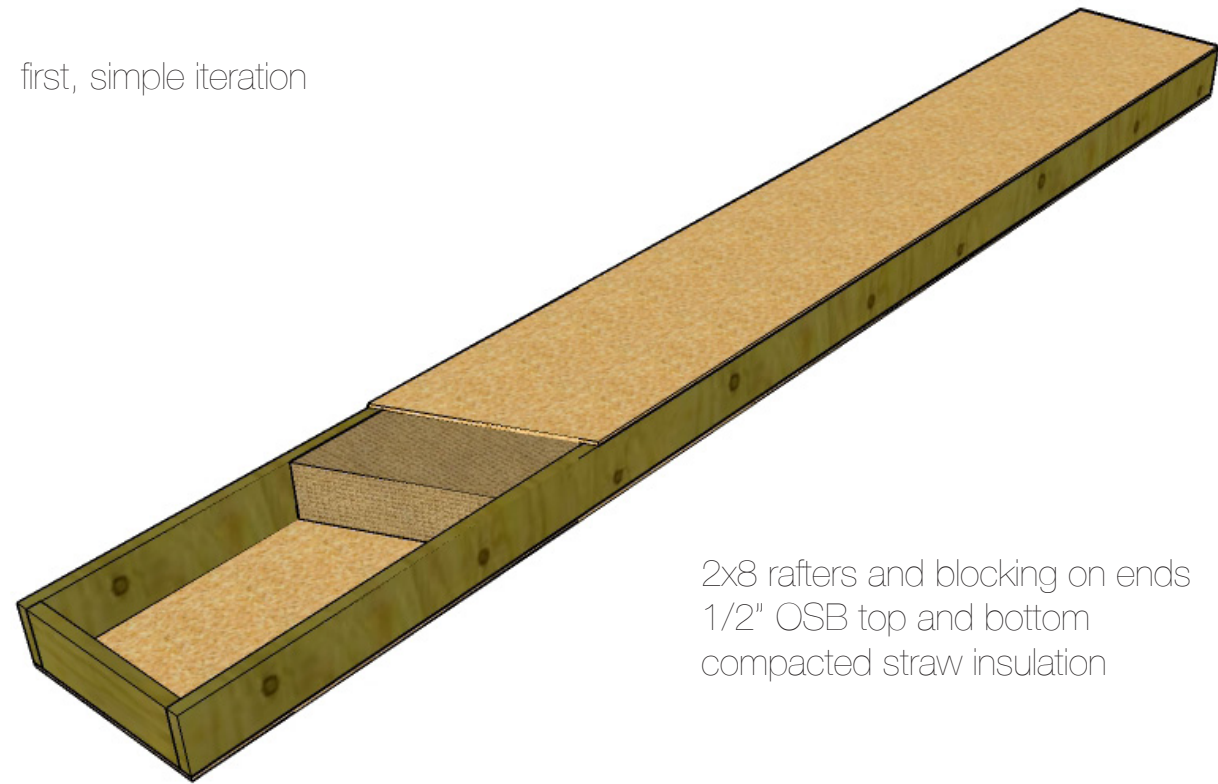


Modular Roof System page 1

first, simple iteration

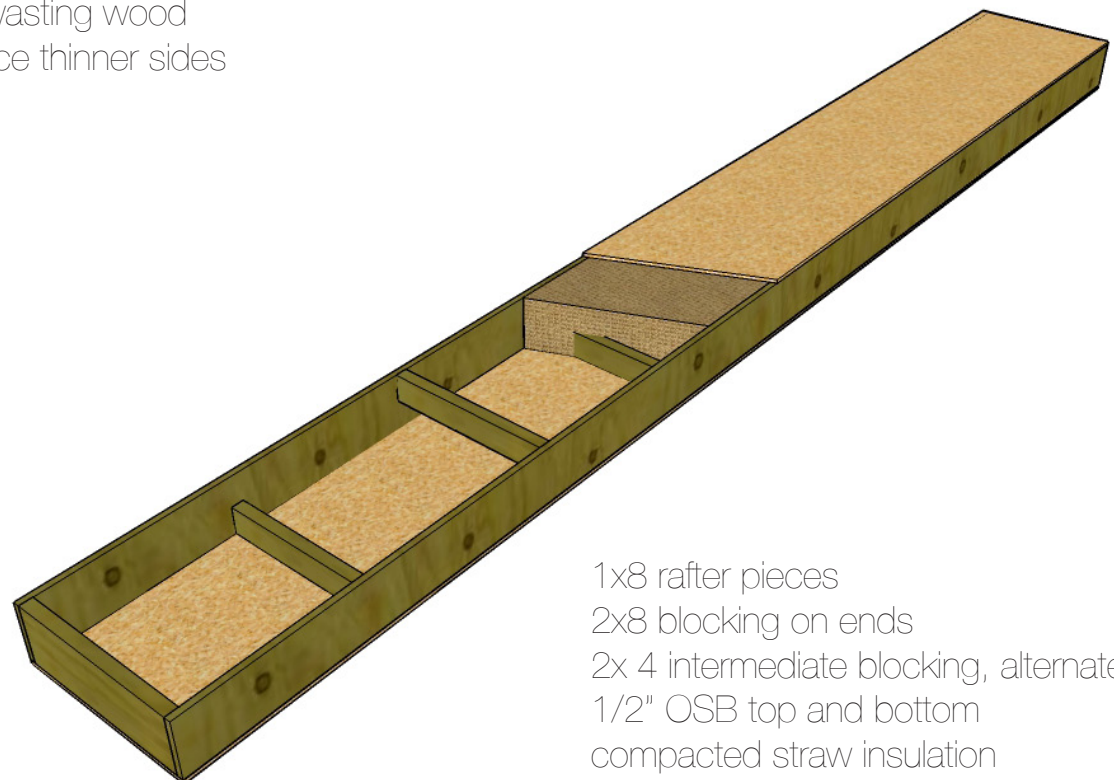


2x8 rafters and blocking on ends
1/2" OSB top and bottom
compacted straw insulation

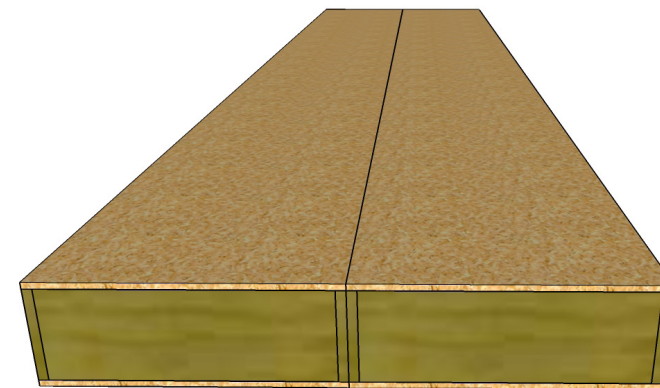


doubling 2x8s when coupled wastes wood
nearly twice as many rafters as required

stop wasting wood
reinforce thinner sides



1x8 rafter pieces
2x8 blocking on ends
2x4 intermediate blocking, alternated
1/2" OSB top and bottom
compacted straw insulation

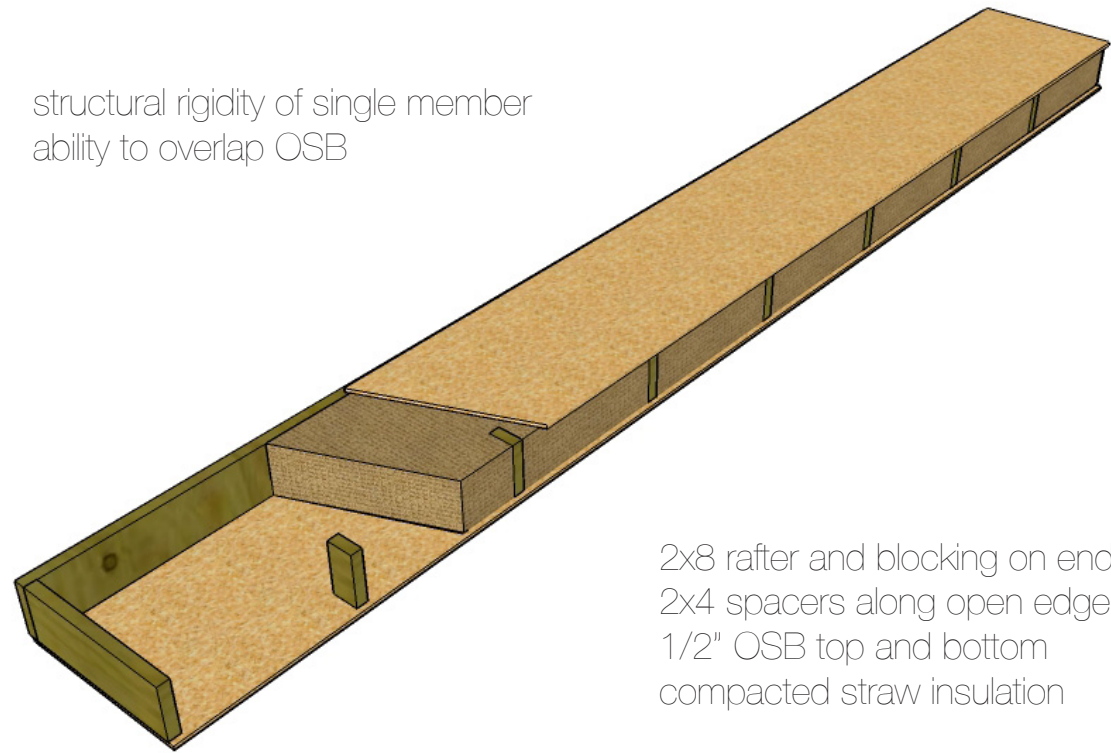


no way to effectively nail 1x8s together
will 1x8s be sufficient if not attached?
(maybe, 2x4 blocking stiffens)

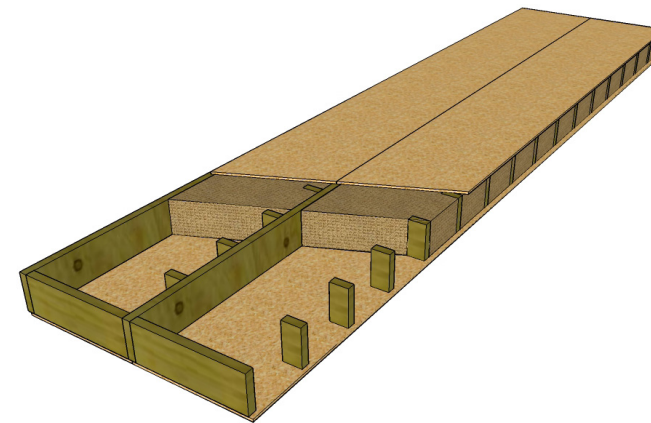
no way to overlap OSB
unrealistic to ask volunteer carpenters to
overlap something 3/8" along 16'

Modular Roof System page 2

structural rigidity of single member
ability to overlap OSB



2x8 rafter and blocking on ends
2x4 spacers along open edge
1/2" OSB top and bottom
compacted straw insulation



can be toe-nailed through end blocks
edge nailed along OSB

spacing of 2x4 blocks to be determined
during mock-up build

straw may impede proper coupling of panels

increased thermal bridging