

Conclusion

Wood Frame System

- Which part of wood frame construction do you think will change the most in the near future? Explain the change and why you believe it will occur soon.

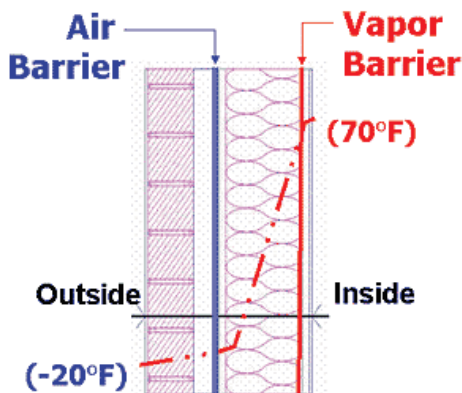
Answer: In the near future, we're going to have materials other than wood for our frames. Wood has been a vital material for our survival, by producing us oxygen, shelter for our animals and shade. Now nearly 4 billion trees or 35 percent of the total trees cut around the world are used in paper industries on every continent. A typical tropical tree takes 30 years to grow back. If we are using these trees up, before they are replenished, we will have a deficit. It is important to find alternate materials to build our homes, that are easily replenishable materials.

- List, describe, and explain the purpose of two components of a residential building that you are familiar with, such as your home.

Answer:

1. Moisture Barrier:

Moisture Barriers, also known as vapor barriers, can be any material that is used for damp proofing. Usually, this barrier is consisted of plastic or foil sheet which prevents moisture from being absorbed into walls and ceilings. Buildings in America have codes that are labeled as vapor retarders that are permeable, semi-permeable, or impermeable. These barriers are commonly confused as air barriers, however there is a difference. Air barriers are used to retard the migration of air.



2. Rebar:

Rebars are bars that reinforce concrete and masonry structures. Rebars consist of carbon steel. Ridges on the bar are used for frictional adhesion when made contact with concrete. Concrete rebars are typically used to absorb tension that is caused by the fact that concrete has high compressive strength in terms of tension material.



Shed Cost Estimate

- In what category do you find the most waste?

Answer: I think we would have the most waste in our roofing materials and our wood frame pieces. Due to standard sizes, we cannot put the exact amount we need, and end up buying more than we need and spend more money as a result.

- What category costs the most to build – the walls, floor, roof, or door/windows?

Answer: The walls would most likely cost the most to build. The exterior materials, such as clapboard siding are the most expensive, and need many sheets, 6 approximately. The amount added up come to around \$200.00. Also, walls

- How could you lower the cost of building this structure without sacrificing quality?

Answer: Without sacrificing quality, a possible solution, would be to go to a scrap yard, and salvage older materials, that might have gone unused and use it for our shed. Many times, if a building is being demolished, many materials can be saved, and recycled. You can get these materials for free most times. Usually, older building materials are better in quality because more craftsmanship went into them. In addition, I would buy many materials altogether instead of individually which causes the amount to be more expensive.