

JOS Contractors

Insulation Work Order

Type(s) of Insulation

- ☐ spray polyurethane foam
☐ glass wool blanket
☐ insulating concrete form
☒ natural fiber
☒ rigid panel
☒ loose fill

Structure: This insulation order is for a two-floor wood frame house. It has a crawl space and an attic.

Order Summary

This project involves the complete replacement of insulation in an older house. First, any **asbestos** insulation that is found must be carefully removed. Then we can begin to install the new insulation. The owner would like to use natural fiber insulation. We have ordered rigid panels made of wool and bound with polyester for this job. Wool has the highest **R-value** of any natural fiber. It is also an effective **vapor retarder**, so it is appropriate for the exterior walls. It has been treated with fire and insect retardants. There should be sufficient **batts** on site already to cover the entire **building envelope**. Should there be a shortage, contact the office and we'll deliver more.

The batts of wool panels will not fit into small spaces, especially in the attic and crawl space. For these areas, there is a supply of loose fill made from granulated cork at the job site.



spray polyurethane foam



natural fiber



batt

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

- | | |
|------------------------|-----------------|
| 1 — vapor retarder | 4 — loose fill |
| 2 — building envelope | 5 — rigid panel |
| 3 — glass wool blanket | 6 — R-value |

- A a kind of building insulation made from fibrous materials or plastic foam, often sold in sections
 B a rating of an insulation material's effectiveness
 C a type of insulation that does not have a solid form and therefore can be blown or sprayed into small spaces
 D a piece of fiberglass insulation that is sold in a continuous roll
 E a material that resists penetration by moisture, placed in building walls, floors, and ceilings
 F the part of the building that separates the inside from the outside, including walls, doors, and windows

4 Fill in the blanks with the correct words and phrases from the word bank.

Word Bank

spray polyurethane foam batt
 natural fiber insulation asbestos
 insulating concrete form

- This house uses cotton as a(n) _____ insulator.
- We put in a(n) _____ that remained after construction to serve as insulation.
- Any _____ that you find in this old house will have to be removed.
- A(n) _____ of rigid panel insulation will fit well in this wall cavity.
- What kind of _____ will you use to keep heat inside the building?
- _____ expands to fill all the spaces in a wall.

Get ready!

1 Before you read the passage, talk about these questions.

- What is one natural material that can be used for insulation?
- What is the name for a section of panel insulation?

Reading

2 Read the work order for insulation installation. Then, mark the following statements as true (T) or false (F).

- _____ Polyester has the highest R-value of any natural fiber.
- _____ The wool panels have already been delivered to the house.
- _____ The company will use insulating concrete foam where batts will not fit.