How to make a cold closet

A cold closet is an energy-efficient method for keeping food products cool. The cold closet is based on the airflow of hot and cold air. The design process and style is left up to the builder and can be built in many different ways depending on the builders' preference and need.

List of Tools and Materials:

Materials can be bought at any local hardware store.

- Hammer
- Power saw
- Electric drill
- Staple gun
- Black ventilating system
- Wood for cabinet (2 ft. x 4-1/2 ft) and (2 ft. x 4 1/2 ft. cabinet frame with door)
- 4 slotted shelves (2 ft. x 1 ft.)
- Downward slanted vents (2 ft. x 4-1/2 ft.)
- 1 screen mesh (2 ft. x 4-1/2 ft.)
- 1 chicken wire (2-ft. x4-1/2 ft.)
- 1 handles
- Reflective insulation (2ft. x 20 ft.)
- Wood lining (4) 3/4in. X 4 1/2 ft., (12) 3/4 in. x 1 ft., (4) 3/4 in. x 2 ft.

Building Instructions

The cold closet can be built as a solid box form or as being demonstrated in this particular design, half box and half wall. The half box structure will be connected into a corner of the room. Thus, giving a full box structure as your cold closet.

- 1. The cold closet is going to be built in the North corner of the house.
- 2. The North wall of the house is a hole cut out (2 ft. x 4 1/2 ft.) by a power saw.
- 3. The downward vented slot (2 ft. x 4-1/2 ft) need to be installed in the cut area.
- 4. The mesh screen (2-ft. x4-1/2 ft.) is placed over entire cut out with a staple gun and then the chicken wire on top of, using the same method. Trim can be added around cut area if desired.
- 5. Inside of the house, take the front section (2 ft. x 1/2 in.) and the side section (4 1/2-x 1-ft.), line the wood lining (3/4-in.) on the outer edges of both sections.
- 6. Connect the side and front sections together with screws and a drill, forming an "L" shape structure.
- 7. The top section (2 ft. x 1 ft.) needs a circle cutout to be able to put the ventilating system through.
- 8. The top section is lined on all edges by the wood lining.

- 9. Mount the top section to the "L" shape (of the side and front section) with screws and drill.
- 10. Mount the structure into the corner with screws.
- 11. The ventilating system can then be installed, following the kit's instructions.
- 12. Line the complete inside of the closet, except for the cut area on the North wall, with reflective insulation with a staple gun.
- 13. The wood lining (3/4 in. x 1 ft.) for the 4 slotted shelves Needs to be installed by mounting the lining on the inside of the two walls with screws and drill.
- 14. Put a handle on the door, if not provided, with a screwdriver.

Sources

1. Johnny Gary, Co-Director for CCAT.