

Cold Closet

A cold closet is an easy to build, energy efficient storage for fruits and vegetables. The cold closet will keep the food products cool but not frozen. By building a cold closet in a home you will use less energy than a home with a refrigerator. The cold closet is not difficult to make. There are different designs for building a cold closet depending on the location of the cold closet. In this design the cold closet will be placed on top of a counter on the north wall. The cold closet will be 2 ft wide, 2 ft deep and extend four ft to the roof.

Materials for Building:

- Wood for closet walls 2-ft wide by 4 ft tall
- Wood for base and roof of closet 2-ft squared
- Wood for closet door 1-ft 9in by 3-ft 9 in
- Slated shelves of wood
- Hinges and knob for door
- Roof ventilation system
- Downward slanted vents
- Mesh screen
- Chicken wire
- Reflective insulation

These materials can be found at a local hardware store. The roof ventilation system can be bought already put together with separate instructions on how to install. Most stores will cut your wood to desired sizes.

How to Build:

- 1) Start by nailing your walls to a base structure.
 - a) Two walls should be 2 ft by 4 ft
 - b) The base is 2 ft squared.
- 2) Next the walls and base of the cold closet are lined with reflective insulator.
- 3) Then nail the slated wood shelves to the walls of the cold closet.
 - a) The first shelf should be $\frac{1}{2}$ ft from the bottom of the structure. The shelves should have plenty of spacing between one another. Airflow is a key to this design.
 - b) The slated shelves should be sturdy, and the slates on the shelf itself should be positioned close together so food will not fall through.
- 4) Then nail the roof onto the cold closet
 - a) Cut room for a ventilation system to enter through
 - b) Line the roof with reflective insulation
- 5) Now we put in a door

- a) First make a frame for the door with 1 _ inch boarder
 - b) The door should be 1ft 9in by 3ft 9 in
 - c) Line the door with insulator that is cut to 1ft 9 _ in by 3ft 9 _
 - i) The over lap of insulator will help with insulation
 - d) Then just hinge the door and handle
- 6) Now we will create the vent on the wall of the house.
- a) The wall of the north side of the house should actually be a hole 2ft wide by 4 ft tall
 - b) From the outside of the house screw onto the walls of the house the vents slanted downward. These vents keep the rain from entering the closet.
 - c) From the inside of the house screw on a sheet of chicken wire 2ft by 4ft
 - d) Then a layer of mesh material 2ft by 4ft
- 7) Now its time to mount the closet to the vent and create a cold closet
- a) Nail the base and walls to the vent
- 8) To finish the cold closet system you will need to install the ventilation pipe system from the roof of your house to the roof of your box
- a) If you paint the pipe black this will draw heat towards the pipe and out of the cold closet.