

CNBT 2417 GREEN BUILDING

Structure

- Built on a scale of 1" = 1'
- Built on a stained concrete slab
- Standard rebar enforced slab 16" on center mat
- 2" x 4" footer on the outer and inner edge before laying the first row of material
 - Between the 2" x 4" footer pea gravel is used as a filter
 - The 2"x4" provides a nailer

Wall Structure

- Built on a scale of 1" = 1'
- Foam represents a bale of straw
- Standard bales are held together by 2 or 3 wires (strings)
- These replicas represent a two wire bale which would weight about 50 lbs, are 32" – 40" long, 18" – 22" wide and 14" high.

Wheat straw is normally used for this area

Windows and door bucks are placed to the outer edge to reduce water collection.

Roof Structure

Standard other than a 3' overhang

7/16" tech shield decking

Procedure

Each piece of foam has two toothpicks in them

- These toothpicks represent a ¾"x2" wooden stake which goes through one bale of straw into the second bale of straw.

The 2" wide board on top of the foam represents a 4" thick concrete bond beam which provides a level surface for the roof truss. The bond beam is constructed by:

- Attaching two 2"x4"s on either edge with a 15" piece of 2"x4"
- Drilling a hole through the 15" piece of 2"x4" (which is laid flat), insert a 2' piece of rebar into the hole through the straw.
- Repeat this process every 3 feet

Another piece of rebar is placed lengthwise and is tied to each of the rebar that goes down through the straw.