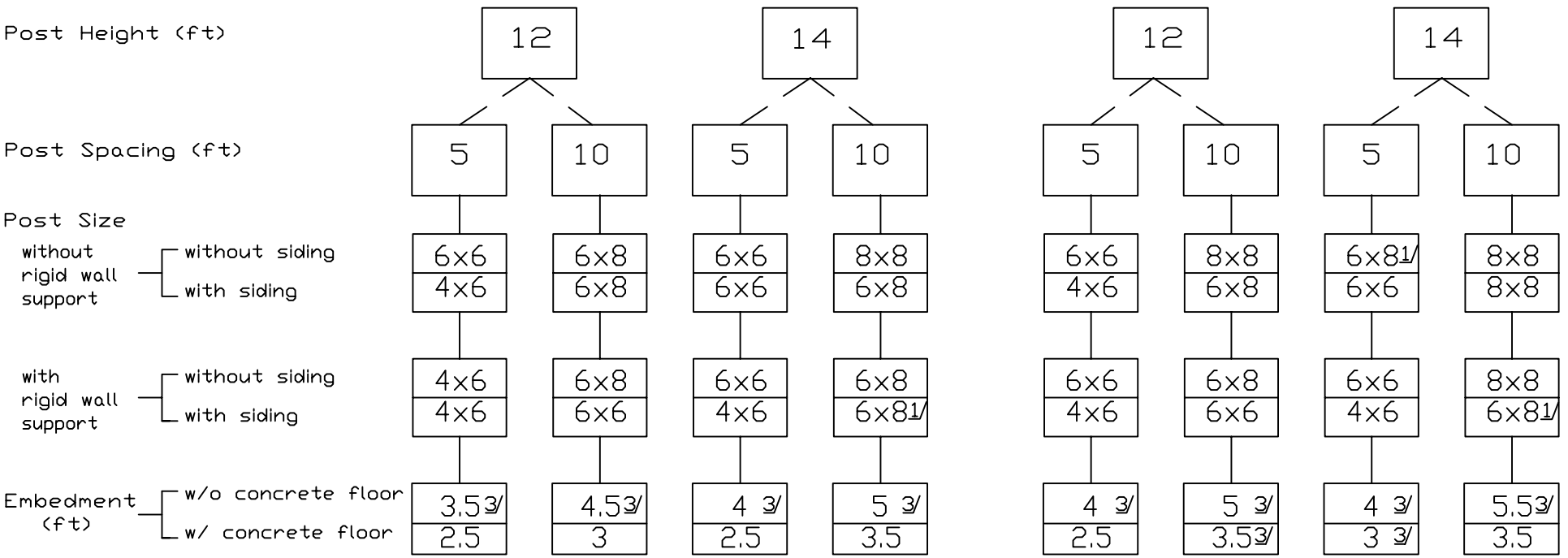
POST SIZE



GIRDER SIZE 2/

Load on Girder	Braced Girder			Unbraced Girder		
	Truss Only	Truss and Side shed	Shed Only	Truss Only	Truss and Side shed	Shed Only
	1-2x12 2-2x10	2-2x10	1-2x8	2-2x12	Not Recommended	1-2x10

MAXIMUM UNSUPPORTED SPANS FOR PURLINS

	Purlin Size	Purlin Spacing	Maximum Span
Members Flat	2x4	24 in.	7.2 ft.
		32	6.2
		36	5.9
		48	5.1
Members on Edge	2x4	24	11.8
		32	9.5
		36	9.0
		48	7.8
	2x6	24	17.0
		32	13.7
		36	12.9
		48	11.2

1/ A full size 6"x6" post may be used instead of a 6"x8" nominal size post for these cases.

2/ Girder sizes are based on 10 ft. post spacing. For 5 ft. post spacing use 1- 2x8 if side shed roof rafters only are supported by girders. Use 1-2x6 with wooden trusses where girder is not supporting trusses or side shed rafters. Braced girders are those having a knee brace supporting the girder at least 30 inches from post. For other girder situations and for rafter sizes contact the Resource Engineer.

3/ Embedment depths may be reduced by 6 inches if post hole diameters are increased to 16 inches.

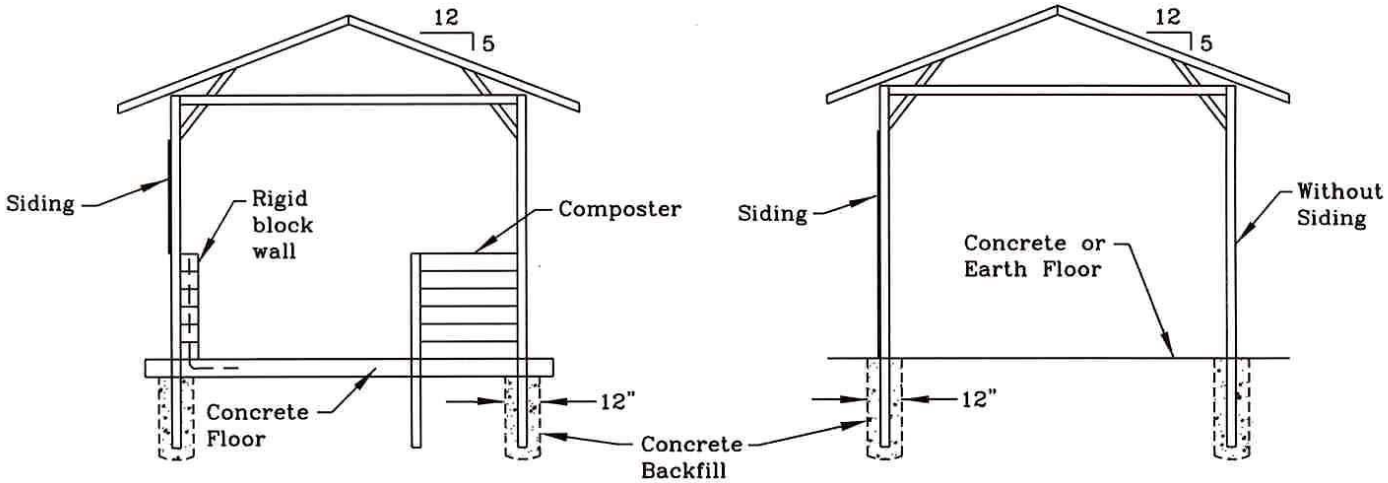
Table 2a- Design chart for dry manure storage and dead bird composting barn for south Alabama (roof slope 5:12)

CAUTION : SEE CAUTION RELATED TO DESIGN PROCEDURES ON NEXT SHEET (October 2004)

The dimensions in Table 2a are based on the following conditions:

(1) 50-year wind speed = 80 mph. This chart may be used for counties in north Alabama. This includes those counties south of a line drawn between Phenix City in Russell County and Livingston in Sumter County.
(2) Roof slope 5:12 or flatter.
(3) All post and girder dimensions are nominal unless otherwise noted.
(4) The use of knee braces is required for all post-to-truss connections.
(5) All lumber and post sizes are based on #2 Southern pine lumber.
(6) Truss span is considered to be from inside of post to inside of post.
(7) Soils are assumed to be average or better. This includes well drained, compact, sandy or gravelly clays or silts with firm to very stiff consistency (SW, SP, GM, GC, SM, SC). Sites having soft clay, silt or fine sand, poorly drained conditions, or highly plastic clays should be designed individually by an engineer.
(8) Concrete or earth floors are adequate with due consideration of post embedment depth.
(9) The roof is assumed to have a 2-foot eave overhand.
(10) Posts are assumed to be totally encased in concrete for the full embedment depth. A minimum post hole 12 inches in diameter is required. The post must be standing on a concrete pad having a minimum diameter of 12 inches and a minimum thickness of 6 inches.
(11) Rigid wall support is considered to be that provided by a reinforced concrete wall or reinforced concrete block wall attached to or bearing against the building posts or a wooden composter wall attached to the posts and oriented perpendicular to the building.

NOTE: Where these conditions cannot be met, contact the resource engineer for guidance.



Building With Composter Or Rigid Wall Support

Building Without Composter Or Rigid Wall Support