



MAP SHOWING TEMPERATURE ZONES



TABLE DESCRIBING SUGGESTED WALL & CEILING CONSTRUCTION FOR VARIOUS TEMP ZONES

WALL UNITS	WALL CONSTRUCTION			CEILING CONSTRUCTION			VAPOR BARRIER	ZONE
	INSULATION	INSIDE FINISH	R-VALUE	INSULATION	INSIDE FINISH	R-VALUE		
I 5/8" concrete masonry or structural clay tile	none	3/4" D & M boards	4.48	1/2" insul board	none	6.74	Ceiling	2 (average)
II 8" concrete masonry or structural clay tile	1/2" insul board	1/2" concrete cement hard board or plywood	5.93	1/2" insul board	3/4" D & M boards	7.87	Walls & Ceiling	1 (average)
III 8" concrete masonry or structural clay tile	Walls filled with granular insul.	none	5.00	5" dry shavings	1/2" concrete cement hard board or plywood	12.10	Walls & Ceiling	1 (cold part)
IV 8" concrete masonry or structural clay tile	none	1/2" cement plaster	3.75	none	3/4" D & M boards	5.68	Walls & Ceiling	2 (warm part)
V 8" concrete masonry or structural clay tile	Cavity filled with granular insul.	none	6.94	2" plaster, part or all insul.	1/2" concrete cement hard board or plywood	12.10	Walls & Ceiling	1 (cold part)
VI 4" concrete masonry or structural clay tile	1/2" insul board	1/2" concrete cement hard board or plywood	7.18	1/2" insul board	3/4" D & M boards	9.00	Ceiling	1 (warm part) 2 (cold part)

NOTES:  
 (1) Vapor barrier to be building paper regulated one-ply or lead or polyethylene or 2 mils of aluminum-flake paint applied to inside surface.  
 (2) Plywood to be exterior type.  
 (3) Plywood to be exterior type.  
 (4) In hurricane areas top masonry walls with 8" concrete beam reinforced over openings.  
 (5) 8" to be used with Manger (A) or (B) or (C).  
 See Div. 5661 for details.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

UNITED STATES DEPARTMENT OF AGRICULTURE  
 BARN WALL & CEILING CONSTRUCTION  
 2-STORY MASONRY BARN

U.S.D.A. 48 EX. 8671 SHEET 1 OF 1