



# ANCHORPANEL INSTALLATION SPECIFICATIONS FOR MEMA PROJECTS

### General:

This foundation is suitable for cottages that retain the steel frame and for those that do not. Foundation materials and construction shall meet MEMA requirements. Building site must be suitable for conventional foundation construction, and shall be prepared according to MEMA and local requirements. Foundations located in flood zones shall meet those requirements.

This foundation will support any version of the Mississippi Cottage and anchor it for MEMA-prescribed wind design loads, avoiding escarpments over 15' in height. The foundation will provide support for flood loads per FEMA-85 and ASCE/SEI-24, within limitations, and according to site-specific evaluation and requirements (Base Flood Elevation, velocity, etc). It is not suitable for Zone V or coastal flooding.

## Foundation Panel Material:

Foundation wall panels shall be of an 18 gage galvanized steel profile, tested per the report attached. Material must meet ASTM-A-653, Grade 40 (40 ksi yield) minimum, galvanizing at G-140 minimum. The uncoated steel thickness shall be at least 0.0430". These panels embed into a continuous concrete footing according to construction details provided.

Panel top-channel steel material must meet ASTM-A-653, Grade 33 (33 ksi yield) minimum, galvanizing at G-90 minimum. The uncoated steel thickness shall be at least 0.0560". Top channels are formed to fit over the panels, and are with 1 1/8" wide legs each side. Screws fastening to the panel ribs are #10-16 x 3/4@ hex-washer head, with a #2 drill tip, meeting criteria of AISI-C1022 or ASTM-A449, with a corrosion-resistant treatment passing ASTM test B117. Seventeen screws attach each top channel to a panel.

### Panel Joint Caulking:

Panel male-female joints require urethane caulking for waterproofing. The interior section of the joints can be caulked with any exterior-grade construction adhesive, but the outer portion of each joint requires a continuous bead of urethane caulking. Acceptable urethane caulkings are those sold as the following brand names: PL, Sika, and Vulkem.

## Concrete and Reinforcing:

All concrete batching and construction shall be according to UBC and ACI practices, of type I-II Portland cement and of approved, non-reactive aggregates.

All concrete shall be 2500 psi min. 5" slump maximum unless chemically plasticized. Concrete receiving foundation-wall panels shall be of 5 ½ sacks cement minimum per cubic yard.

Mixture and water shall be free of sulfides. Calcium chloride shall not be used.

All rebar shall be ASTM A 615, Grade 40 min, and shall be placed securely before concrete placement.

#### Foundation Panel Finish:

All exterior-exposed and soil-backfilled surfaces of the galvanized panels shall be clad or coated with one of the following (Other materials can be approved for panel finish):

1. Continuous cementitious cladding panels free of organic materials, such as National Gypsum "Permabase", of ½" minimum thickness, with all joints taped with polypropylene mesh set in waterproof compound approved by panel manufacturer. Panels must attach with galvanized fasteners that are then covered with same waterproof compound, and panels must continue down to the concrete footing or to mortar compound placed against the footing, otherwise one of the other finishes herein must apply to exposed foundation panel and overlap the cement panel 6" minimum.

2. Henry brand #132 or #532 (coal tar emulsion), or other emulsified coating determined to be suitable, applied by spray (texture gun) per manufacturer's specifications, placed in 2 separate coats of 10 mils minimum thickness each.

3. A cementitous coating of no less than 1/3 portland type I-II cement (not plastic cement) in proportion to sand, which must be approximately half size 60 and half size 30. Mixture must include at least one gallon of adhesive bonder (Borden, Thoro, brand or equal) per sack of cement. Cement coating thickness varies, but must be at least 40 mils. Panels must first be prepared with an alkaline etch/cleaner compound such as diluted phosphoric acid or sodium hydroxide solution.

150 MPH EXP B WIND LOAD DESIGN VERSION A, MAY 8	2007		ANCHORPANEL PERMANENT PERIMETER FOUNDATION	MISSISSIPPI COTTAGE MODEL 1C FOUNDATION DESIGN		
DESIGN CRITERIA PER MISSISSIPPI EMERGENCY MANAGEMENT A	ENCY		FAST TRACK FOUNDATION SYSTEMS 800 789-9694	FILE: AP-MEMA2.DWG	BY: MB	SHEET 2 OF 2