

CONSTRUCTION REQUIREMENTS	
CR2 SITE	
1. <u>General</u>	Site work shall be accomplished in accordance with generally accepted good construction practices. Work shall reflect use of methods, materials and equip-ment which are safe and suitable for the intended purpose.
2. <u>Excavation and Backfill</u>	
a. Excavation for footings or foundation walls shall extend at least 6 inches into natural undisturbed soil which will provide adequate bearing or to stable rock foundation.	
b. Bearing for footings or foundations is permitted on controlled fills in certain localities. Land development for buildings on such controlled fills shall be engineered by a qualified engineer.	
c. Soil analysis and bearing tests, if available, will be provided by the Owner.	
d. Exterior wall footings of foundation walls including accessory buildings shall extend a minimum of 6 inches below the finish grade and below the prevailing frost line.	
e. Material used for backfill shall be clean and free of wood scraps or other deleterious substances and shall be well compacted.	
3. <u>Soil Treatment</u>	Wood and other vulnerable materials shall be protected from termites in those areas where damage has been experienced or may reasonably be anticipated. When soil treatment is used, the rate of application of the approved chemicals shall be not less than that recommended by the U.S. Department of Agriculture publication entitled "Subterranean Termites", Home and Garden Bulletin No. 64. Chemical soil treatment shall not be used where there is a possibility of contamination of a water source or supply.
4. <u>Site Utilities – Underground Utilities</u>	Underground piping and related items shall be protected from corrosion.
5. <u>Paved Areas</u>	
a. Surface and base courses for driveways, parking areas and walks shall be of durable materials and construction shall conform to generally accepted local design practices.	
b. Adequate surface drainage shall be required to serve all paving and the improvements as necessary to insure continuing stable soil support for these improvements.	
c. All vehicular pavement shall be protected at the edges by concrete curbs, unless indicated otherwise.	
6. <u>Landscaping</u>	
a. Topsoil shall be stockpiled on the site for reuse in landscape work. If quantity is insufficient, Owner will furnish additional top soil.	
b. Become familiar with scope of landscape work being done under separate contract prior to starting the sub-grade work. Provide subgrades as required by landscape contractor.	
CR3 CONCRETE	
1. <u>General</u>	
a. Concrete construction shall be such as to provide safe and durable support of all design loads, and of a quality to resist deterioration due to weather or other deleterious exposure.	
b. The design and construction shall be in accordance with ACI-318, Building Code Requirements for Reinforced Concrete, and ACI-301 Specification for Structural Concrete for Buildings, except as modified by the drawings.	
c. See Structural Drawings.	
2. <u>Formwork</u>	Formwork shall be in accordance with ACI 347, Recommended Practice for Concrete Formwork.
3. <u>Concrete Slabs-On-Grade</u>	Slabs shall be designed and constructed in accordance with ACI 302, Recommended Practice for Concrete Floor and Slab Construction, unless shown otherwise on the Drawings.
CR4 MASONRY	
1. <u>Masonry construction</u> shall be such as to assure safe and adequate support of all design loads to prevent the passage of water or moisture, and to resist deterioration due to weather or other deleterious exposure. Unless indicated otherwise comply with the following:	
a. Lay units in running bond.	
b. Provide standard anchoring devices.	
c. Provide standard joint design.	
2. See Structural Drawings for loadbearing walls.	
CR5 METALS	
1. <u>Structural Steel</u>	
a. See Structural Drawings	

- b. Corrosion Protection  
All structural steel shall be given a shop coat of rust-inhibitive paint and a field coat of protective paint, or equivalent, except for steel encased in concrete or concealed by interior finish materials, stainless steel, corrosion resistant steel, or steel treated with coatings to provide corrosion resistance. Tubular steel columns shall be protected on the inside and the outside.

2. Welding  
  
Welding shall be in accordance with D1-1, Structural Welding Code and D12.1, Reinforcing Steel Welding Code, by AWS.

CR6 CARPENTRY

1. General
- a. Wood construction shall be such as to assure safe and adequate support of all design loads and to provide a suitable base for the attachment of finish materials.
- b. Wood products, except under special design conditions concerning material treated for use below grade, shall be at least 6 inches above adjacent grade, unless otherwise approved.
- c. Fasteners  
Application and fastening schedule of all fasteners, power, mechanically or manually driven shall conform to Code.
2. Decay Protection
- a. Certain members are required to be protected in all geographic areas. These members and the accepted means of protection are shown in TABLE B.
- b. TABLE B – DECAY PROTECTION

Wood members to be treated	*****Means of Protection (2)*****		
	Pressure Treat	Non-pressure Treat NWMA	Resistant Species
	AWPA Label	Seal	HUD MPS

Exposed structural members unless protected from direct exposure to rain by overhangs, porch roofs or carport roofs	X	—	X
Exterior door and window frames (1)	—	X	X
Exterior window sash and louvers (1)	—	X	X
Fence posts	X	—	X
Sills, plates or sleepers embedded in concrete slabs	X	—	X
Exterior wood balconies	X	—	X

- Notes: (1) Treatment shall be paintable type
- (2) When treated material is cut after treatment, dip or brush-treat exposed ends in 5% pentachlorophenol solution or other acceptable wood preservative.

CR8 DOORS, WINDOWS AND GLAZING

1. Door Performance – General  
  
Doors shall be durable and installed in good operating condition, free of defects, latching readily and locking securely.
2. Exterior Doors:
- a. Installation  
Doors shall be installed to assure adequate structural strength, weather tightness and shall be capable of resisting extremes of moisture, wind and temperature. Doors shall be safe and assure reasonable economy with ease of maintenance.
- b. Weatherstripping  
All exterior doors to conditioned space, except louvered doors, shall be provided with a tight threshold and weatherstripping to prevent infiltration of dust, snow or rain.
- c. Miscellaneous  
Provide a safety door check on all doors, including storm and screen doors, opening outward.
3. Windows
- a. Installation  
Windows shall be installed in accordance with the recommendations of the manufacturer. Operating hardware shall be installed.
- b. Weather Resistance  
Provide windows at exterior locations that weep accumulated moisture to the exterior, and weatherstrip windows to prevent infiltration of dust, snow or rain.

4. Metal Storefront
- a. Manufacturer's responsibility includes analysis of building size, shape and location, and determination of design pressure loading for wind resistance, inward and out.
- b. Water Penetration Tolerance  
No significant leakage for heavy rainfall with 25 MPH wind.
- c. Panels  
Panels shall be capable of carrying the design load and deflections without suffering damage as permanent deformation.
- Surfaces exposed as finish shall be protected against damage from scratches, stains, discolorations, or other causes. Marred metal or glass shall be refinished or replaced.
- d. Joints  
Thermal movements caused by an ambient temperature range of 120 deg. F shall be compensated for in design and fabrication of joints that will permit expansion and contraction of component materials.
- e. Fasteners  
Metals used for fasteners and anchorage devices shall be chemically compatible with contiguous metals.
- f. Aluminum Storefront and Windows
- (1) Standards: NAAMM, AAMA & AA  
(2) Manufacturer: Products as manufactured by Warrior Glass, or equal; (901) 775-0268, Attn: Ed Crenshaw.  
(3) Frame: Extruded aluminum, tubular; exterior units exposed to weather designed to weep accumulated moisture to the exterior.  
(4) Aluminum Finish: Baked-on enamel (NAAMM Specification), color as noted on the drawings.

5. Aluminum Entrance Doors  
  
Glazed aluminum doors as manufactured by Kawneer Co., or PPG Industries, or equal. Provide manufacturer's standard narrow-stile units, unless noted otherwise, as required for operation of each door.

6. Aluminum Sliding Glass Doors
- a. Type SGD-SI (Residential), unless indicated otherwise.
- b. Hardware: Manufacturer's standard. Provide pulls and keyless locking device, lockable from inside only on each sliding panel.
- c. Aluminum Finish: Same as for aluminum storefront, unless indicated otherwise on the drawings.

7. Glazing
- a. Installation Standards: Glazing shall comply with the latest Flat Glass Marketing Association's manuals, Glazing Manual and Glazing Sealing Systems Manual.
- b. Glass shall be tempered where required by governing ordinance.
- c. Insulating Glass: Glass shall carry as a minimum 5-year warranty against failure of seal (1-yr. warranty to cover materials and labor, remaining 4-yr. warranty to cover materials only).

CR9 FINISH MATERIALS

1. General
- a. Application of finish materials shall be such as to prevent entrance or penetration of moisture or weather, provide adequate protection from damage by decay, corrosion, insects and other undesirable elements, and provide reasonable durability, economy of maintenance and an attractive appearance.
- b. All materials shall be installed in accordance with the recommen-dations of the manufacturer.
2. Exterior Wall Finishes  
  
Attachment and/or anchorage of finish to backing or structure shall be adequate to resist design wind forces.
3. Roof Coverings  
  
Attachment and/or anchorage of covering to roof deck shall be adequate to resist design wind forces.
4. Interior Wall and Ceiling Finishes
- a. General  
Wall and ceiling finishes shall be suitably secured to a subbase or framing members.
- b. Gypsum Drywall  
Application shall conform to ANSI A97.1 Specification for Application and Finishing Wallboard.

When gypsum backing board is used behind ceramic tile or cultured marble at bathtubs and showers, provide water resistant type conforming with ASTM C630. Foil-backed wallboard shall not be used for backing material.

- c. Ceramic Tile  
  
Thin-Setting Method  
Ceramic tile installed with adhesives shall comply with ANSI A108.4, or when installed with dry-set portland cement mortar with ANSI A 108.5 and with TCA Handbook for Ceramic Tile Installation.
5. Resilient Flooring shall be applied over a suitable underlayment.
6. Painting
- a. Application  
  
Ready-mixed paint shall bot be thinned, except as permitted in the application instructions.
- Exterior painting shall be done only in favorable weather. All surfaces shall be free of dew or frost and must be free of moisture.
- Paint shall not be applied when the temperature is at or expected to be below 40 deg. F.
- All surfaces to be finished shall be clean and free of foreign material (dirt, grease, asphalt, rust, etc.).
- Application shall be in workmanlike manner providing an even film and at a rate recommended by the manufacturer.
- b. Exterior Wood Siding, Millwork and Trim  
  
Knots, resinous wood, and nail holes shall be sealed with a prepared sealer or aluminum paint prior to puttying and priming. Any nail holes or cracks in surfaces to be painted shall be filled with putty.
- Apply a prime coat to all surfaces to be painted before or immediately after installation. Primer shall be formulated specifically for application to unfinished wood. Finish coats formulated to serve as primers may be used.
- Apply one of the following finish systems as indicated by the drawings. Coverage shall be that which will provide at least the minimum thickness recommended by the manufacturer.
- (1) Oil paint system.  
(2) Latex paint system.  
(3) Pigmented stains.  
(4) Clear penetrating preservative or water repellent finishing system.

Top and bottom of exterior wood doors, casement sash, awning sash and bottom of double hung sash shall receive two coats of paint or sealer.

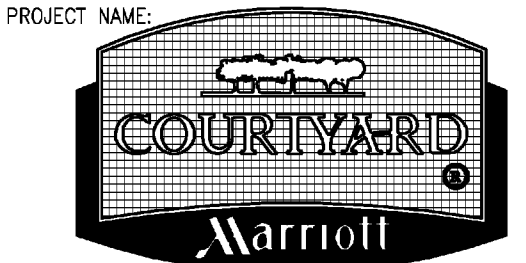
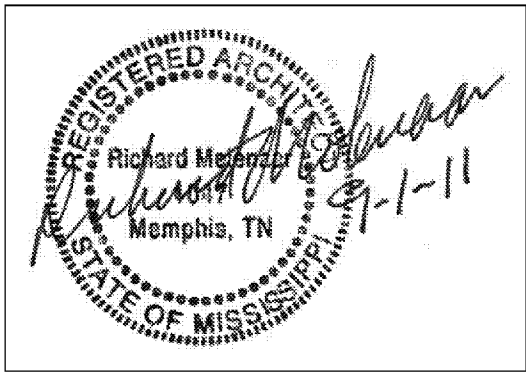
Prior to erection, seal all edges of vertical siding with a heavy coat of house paint primer, water repellent stain, exterior aluminum house paint or sealer. Wood batten strips shall be back-primed or sealed.

Hardwood and Softwood Plywood Siding. Finish in accordance with man-ufacturer's directions.

Wood Porch Floors and Decks. Apply one coat of primer and two coats of floor and deck enamel designed for exterior use. Caulk joints between floor and wall.

- c. Exterior Concrete Masonry Units or Concrete Brick  
  
Provide at least two coats of masonry paint. Concrete masonry units or concrete brick, except small areas of foundation walls shall be painted to provide a water resistant finish. High density concrete brick or solid split block forming the outer face of double unit walls (veneer, cavity walls, etc.) may be left unpainted, unless indicated otherwise on the drawings.

- d. Exterior Metal  
  
Galvanized Steel or Iron
- If field painting is required, all surfaces shall be free of grease, dirt, or other impurities which may affect the finish.
- Field painting shall consist of a primer formulated specifically for galvanized surfaces and a finish coat. Finish coat formulated to serve as a primer may be used.



SHEET TITLE:  
**Specifications**

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