SECTION 06150C WOOD DECKING

PART 1 - GENERAL

1.1 GENERAL CRITERIA

A. For new construction, avoid placing wood decks outdoors without roof cover. Consider other materials (such as paving materials for decks at or near grade) or other geometries.

B. Design decks to withstand gravity, wind, and impact (railing) loads. Minimum design loads shall be per state and local building codes.

C. As a minimum, conform with the applicable recommendations of the following:

D. Slope all deck components to shed water. Provide a minimum slope of 1/4 inch per foot for exterior decking. Avoid details that create moisture collection points.

E. Provide separation of wood elements from sources of moisture (ground, roof, concrete, etc.) All hardware and hangars shall be hot dip galvanized or stainless.

F. Use naturally durable (decay and insect resistant) species or preservative treated wood for all exterior wood deck construction. For preservative treated wood, use species that are easily treated (e.g., southern yellow pine) and avoid difficult to treat woods, which have to be incised to accept the chemical preservative. Avoid the use of preservatives containing arsenic (CCA, ACZA).

G. Where exterior deck components interrupt the wall cladding, provide flashings to drain water out of the wall system. For decks exposed to direct precipitation (i.e., not covered with a roof) cover the tops of each joist with aluminum or other non-corroding sheet metal flashing. Cap the exposed tops (i.e. end-grain) of all posts with flashings, post caps, single-piece wood finials, or other appropriate elements to shed water.

H. Avoid the use of wide (greater than 6 in. nominal) decking, to minimize cupping.

I. When considering field applied coatings, use penetrating stains and sealers rather than paints, which deteriorate quickly on exposed decks.

J. The Architect shall provide detailed drawings showing framing and decking layout, elevations and slopes, connection details, details with adjacent construction including waterproofing and flashing, and all other details required for the work.

PART 2 - PRODUCTS
2.1 Materials

A. Preservative Treated Decking and Framing Lumber: Southern Pine, No. 2 grade or better per SPIB grading rules.

B. Preservative treatment: ACQ (Alkaline Copper Quat) in accordance with AWPA C2. Wood is to be preservative treated under pressure in a closed chamber. The treatment used is to be stamped on each piece by the processor and in accordance with AWPA C2. The minimum net retention of preservative shall be as called for by ASTM D1760 for ground contact (0.40 lb/cu ft of wood). Brush all cuts of lumber thoroughly with two coats of preservative approved by the processor.

C. Naturally durable wood: Redwood (heartwood), cedar (heartwood), black locust, cypress (heartwood), ipe.

D. Kiln dry wood to a moisture content of not more than 19%. Kiln dry preservative treated wood both before and after treatment to a moisture content of not more than 19%.

E. Fasteners: Hot dip galvanized or stainless steel screws. Deck fasteners shall be screws or ring shanked nails to prevent back-out.

F. Connection hardware: Galvanized steel connection hardware by Simpson Strong-Tie or approved equal.

PART 3 – EXECUTION

A. Store all wood by neatly stacking on dunnage to avoid distortion of wood. Cover with breathable tarpaulins (not polyethylene) arranged to allow air movement beneath. Do not use any stock with excessive twist or bow.

B. Mill lumber as detailed, to match adjoining elements and provide smooth transitions to adjacent surfaces.

C. Countersink fasteners flush; do not overdrive fasteners.

D. Deck Framing: Tops of joists shall form a true plane. Slope the deck away from building walls and foundations.

E. Decking: Provide decking in maximum practical lengths to minimize end joints. Stagger end joints 4 ft minimum. Fasten decking to each joist with a minimum of two fasteners per joist.
END OF SECTION