

# Bid#1617-18 Jackson County SHIP Rehabilitation Work Write-Up #1, Pg. 1 of 4

Item #	Work: Additional Specification/Description Attached, _____ Yes; ___ x ___ No	Material	Labor	Total
1	<p><b>Roof</b></p> <p>a) Remove all metal roofing and built-up roofing to original roof decking.</p> <p>b) Remove chimney to a point below roof deck and cap chimney, cover over hole in roof decking.</p> <p>c) Install 2"x4"x8' rigid insulation.</p> <p>d) Install G2 FG Base sheet fasten insulation and base sheet using 2 7/8" screw and caps according to mfg. recommendations.</p> <p>e) Install BITEC granular cap sheet using modified adhesive</p> <p>f) Include 3 1/2" galvanized eave metal continuous around roof edge.</p> <p>g) Contractor to provide 10 year warranty.</p>			
2	<p><b>Carport</b></p> <p>a) Retainer Wall: at N.E. Corner of BR#1 pour a concrete footer from corner of BR #1 to N.E. Corner of carport then to 1<sup>st</sup> 4x4 going west from N.E. Corner of carport. Concrete footing to be 16" w x 8" d with two #4 rebar layed horizontal in footer and one #4 rebar vertical every 4 ft.. Lay 2 courses of 8"x8"x 16" concrete block 1 1/2" below floor level of BR #1. Fill block cells with concrete.</p> <p>b) Secure existing 4x4 post to top of retainer wall with 4x4 post anchors using 1/2" x 6" drill in anchor bolts.</p> <p>c) Fill under carport and next to house at BR #1 and kitchen foundation. Place fill to a finish grade 4" above existing footer at south wall of BR #1. Continue fill along west wall of BR#1 and N. kitchen wall. Taper to an elevation 12" below top of front porch floor. Slope dirt into carport @ 10'2" below top of 1<sup>st</sup> 4x4 past N. W. corner of BR#1. Slope fill along retainer wall to elevation 8'6" below top of 2x6 rafter attached to 4x4 @ NE corner of carport. Continue fill to 3<sup>rd</sup> 4x4 post west of NE corner of carport to an elevation of 10'2" below top of 4x4 post. . Grade new fill into existing fill @ this location.</p> <p>d) Remove 8" concrete block @ rear door. Pour 4'x4'x4" concrete pad with 4" step down from floor slab.</p>			
3	<p>Replace the following windows with RETROFIT white vinyl single hung divided lite windows with Low E/Argon treated glass, with screens.</p> <p>a) BR#1 3'0"x3'0" @ N. Wall  BR#2 2 ea. 3'0"x3'0" windows  Bath 1'6"x3'2"  BR#3 2 ea. 3'0"x3'2"  BR #4 1 ea 3'0"x3'2" 1 ea 3'0"x4'2"  LR 1ea 4'4"x4'2"  Kitchen 1ea 3'0"x3'0"</p> <p>b) Remove all wood used for installation of existing windows in block walls</p> <p>c) Set replacement windows in 1" from exterior face of block wall</p> <p>d) Caulk interior and exterior of window from to block and wood framing with GE silicone #LW112A window and door caulk</p> <p>e) Fasten PT 1x2 into block against interior of window frame, paint 1x2 exposed block white to match window.</p>			

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Item #	Work: Additional Specification/Description Attached. _____ Yes: <input checked="" type="checkbox"/> No	Material	Labor	Total
4	<p>Electrical</p> <p>a) BR #3&amp;4 install AC hardwired 120 volt smoke detectors. Outside sleeping area, install hardwired smoke and carbon monoxide detector with battery backup. Interconnect with BR #3&amp;4 smoke detectors.</p> <p>b) Have FPU upgrade electrical service to 150 AMP.</p> <p>c) Install new 150 amp main electrical panel.</p> <p>d) Test all original wiring to assure it is safe.</p> <p>e) Repair or replace any original circuit wiring that is not working or is unsafe.</p> <p>f) Protect all 120 volt electrical circuits with dual function AFC/GFCI breakers.</p> <p>g) Add the following circuits and outlets                      In Kitchen: Above the sink remove existing PVC pipe and wire. Replace with approved conduit and wire method. Run wiring for 2 circuits in new conduit. Install one outlet to right and left of kitchen sink run one circuit to a point of 60" from inside corner left of kitchen sink. Install outlet for microwave at this location. Locate switch above microwave outlet to supply kitchen light . Install ceiling box and mount existing light.                      In BR #1: Run 20 amp 120volt circuit to end of closet wall facing kitchen.                      Install wall outlet and cover.                      In LR: Install light switch to right of opening going into kitchen for ceiling fan. Install ceiling box and connect ceiling fan.                      Run 20 amp 120 volt circuit to closet in BR#3 to new location for washing machine.                      Run 30 amp 240 volt circuit to closet in BR#3 to new location for water heater.</p> <p>h) In bathroom, remove existing switch, light fixture, and medicine cabinet. Install new lighted medicine cabinet Lowes item #517570. Install new switch and cover. Install 4 ea. 13W CFB.</p> <p>i) Replace wall hung light, switch, and cover in the following rooms with Lowes item #649313 light fixture and install one 23 watt self-ballasted lamp CFB.                      1)kitchen                      2)BR #4                      3)BR#3                      4) Front porch use Lowes item #156459 light fixture same bulb.</p> <p>j) BR #1&amp;2 install AC hardwired 120 volt smoke detector. Outside sleeping area, install same SD and interconnect all 3.</p>			
5	<p>Plumbing</p> <p>a) Seal hole in existing 4" cast iron vent pipe where washer drain is. Plaster over repair.</p> <p>b) Remove existing vanity. Replace with Lowes item #573274 and faucet #749787.</p> <p>c) Remove existing steel tub. Replace with bathcraft #BC 3060 TS4PL LH 4 pc T&amp;S unit. Install new waste and drain.</p> <p>d) Replace tub faucet with Lowes #244529.</p> <p>e) Remove existing commode and replace with Lowes item #331676.</p>			

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Item #	Work: Additional Specification/Description Attached, _____ Yes; ___ x ___ No	Material	Labor	Total
5 cont'd	<p>f) Relocate water heater to BR#3 closet. Install new 40 gal. electric water heater. Run pop-off drain through exterior wall. Mechanically fasten insect screen over end of pipe.</p> <p>g) Relocate washer plumbing to BR#3 closet. Run drain through exterior wall. Connect to sewer drain at front of house. Run vent on exterior wall to a point 4" below eave.</p> <p>h) Remove existing sewer line connected to city sewer. Install new sewer line to meet City of Marianna code.</p> <p>i) Prior to connecting new plumbing fixture, clean and inspect all drain lines including kitchen sink to remove any obstructions.</p>			
6	<p>HV/AC</p> <p>a) Install new natural gas heat with electric cool central unit.</p> <p>b) Vents to be run into following rooms:</p> <ol style="list-style-type: none"> <li>1) bath</li> <li>2) BR #3</li> <li>3) BR #4</li> <li>4) LR</li> <li>5) Kitchen</li> </ol> <p>c) Remove wall heater and flex gasline in L. R.</p> <p>d) BR #1: Remove cut off valve from gas line &amp; cap w/ 3/4" galv. cap.</p>			
7	<p>Carpentry</p> <p>a) Replace rear door to BR#1 with 9 lite fiber glass RH outswing unit with composite jamb and trim DBB. Install new dead bolt and key lock set. Install new 2 1/4" casing.</p> <p>b) Remove A/C unit from window in BR#1. Remove window and frame opening to allow A/C unit to be installed through the wall. Trim exterior with matching vinyl siding. Insulate open area in framing and trim inside same as existing trim work.</p> <p>c) BR#3: Replace 2'0" door unit with new 2'0" two panel H/C door unit. Install new AB passage lock and door stop. Remove paneling from east and south wall. Install 3/4" Dow R5 foam insulation between existing furring strips. Cover with 6 mil poly. Install 4'x8' paneling (customer to choose from patterns furnished by contractor).</p> <p>d) Install new base, inside corner, and top cap mould. (Customer to choose from stain colors furnished by contractor.)</p> <p>e) BR#4 replace 2'8" bedroom door w/2'8"x6'8" 2 panel smooth H/C door only, new butt hinges, and new AB privacy lock and doorstep. Replace closet door with 2'0" 2 panel smooth H/C door unit and new AB passage lock and step.</p> <p>f) Install new ceiling panels in bathroom using existing grid work.</p> <p>g) BR#2 remove sheetrock on east wall. Repair any structural damage. Install new 3 1/2" FG insulation. Install new 1/2" sheetrock. Paint to match existing. Install new baseboard. Paint same as existing base.</p> <p>h) At hallway between BR#4 and LR, build soffit to cover duct going into BR and livingroom. Cover with wood paneling and trim.</p>			
8	<p>Contractor is responsible for the protection of owners furnishings and personal items. During construction, the owners home is not to be used for storing construction materials.</p>			

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Item #	Work: Additional Specification/Description Attached, _____ Yes; ___ x ___ No	Material	Labor	Total
9	Prior to installing commode and bath vanity. Install vinyl floor covering on bath floor (sq. tile or roll glue down). Customer to select from patterns furnished by contractor. Seal edges to wall and tub with tub and tile caulk.			
10	Contractor is responsible for all permitting requirements for the City of Marianna. All permit fees are waived by City of Marianna for all ship projects.			
11	Landscaping to correct drainage problem On East side (including carport area) and South side of house remove dirt at a distance of about 8'. Provide a min. of 6" clearance from finish grade ( including sod ) to floor level of living area of house. From a distance of 4' from foundation of house on a straight line gradually slope back into original grade. Lay centipede sod on all newly excavated areas approximately 750 sq. ft.			
12	Install 4" Gutters on eave overhang at East side of house. At carport install down spout at NE corner. Install 4" S&D pipe from 4x4 at NE corner to 4x4 at NW corner, lay fill dirt to set proper slope for drain, fasten 4" pipe with plumbing strap material to 4x4 post, cover drain pipe with min. coverage of 3" fill dirt. Connect down spout to 4" drain. At remainder of gutter run down spouts at each corner of house. Install leaf guard on all gutters.			

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Item #	Work: Additional Specification/Description Attached, ____ Yes; ___ x ___ No	Material	Labor	Total
1	<p>A) Remove all roofing shingles and underlayment. Remove all rot damaged CDX plywood &amp; replace w/ new CDX plywood. Nail all roof decking to meet code fastening schedule. Repair &amp; replace all rot damaged roof framing members.</p> <p>B) At carport roof, install two layers of BITEC FS-40 base sheet using PMA-186 mop applied adhesive using no mechanical fasteners. Apply BITEC cap sheet using PMA 186 mop applied adhesive using no mechanical fasteners.</p> <p>C) At sloped part of roof, install new synthetic roof underlayment. Install new laminated fiberglass asphalt roofing shingles.</p> <p>D) Remove all eave metal, install new galvanized eave metal.</p> <p>E) Install new vent cap for range hood. Install new flashing for plumbing vent pipes and conduit for electrical service.</p> <p>F) Cut out for ridge vent, install shingle over ridge vent.</p>			
2	<p>A) Replace rot damaged carport beam. Splice can be made @center post. Cover repaired beam w/ 3/8" BC plywood paint to match existing.</p> <p>B) Repair &amp; replace all rot damage to soffit, fascia, sub-fascia, &amp; rafter tails: Paint new soffit plywood &amp; fascia to match existing.</p>			
3	<p>A) Replace all windows with retrofit white vinyl single hung divided lite windows w/ Low E glass treatment:</p> <p>B) In bedroom #1, replace 3'0"x3'0" window w/ 3'0"x5'0" widow:</p> <p>C) In bedroom #2, replace one 3'0"x3'0" window w/ 3'0"x5'0" window.</p> <p>D) In bedroom #3, replace twin 3'0"x3'0" window w/ twin 3'0"x5'0" window</p> <p>E) Option: To finish inside of window with sheetrock return or wood jamb and trim. Paint to match existing colors.</p> <p>F) At exterior; tooth cut brick where lower part is enlarge to accommodate taller window. Lay brick sill under window. Note: Use brick that are close match to existing in color and size.</p> <p>G) Window size needed:              1 ea. 3'0"x4'4"; 1 ea twin 3'0"x 4'4"; 4 ea. 3'0"x3'0";              1 ea 3'0"x4'4"; 1 ea twin 3'0"x5'0"; 2 ea. 3'0"x5'0"</p> <p>H) Caulk interior and exterior of window frame:</p>			
4	<p>A) Replace exterior door at carport exit with 3'0"x6'8" 6 panel steel door unit with DBB. Trim interior jamb with 2 1/4" casing. Paint door to match existing color or owner choice. Install new single cylinder dead bolt and key lock set.</p> <p>B) Paint utility room door w/ one coat oil primer and 2 coats exterior acrylic paint.</p>			
5	<p>A) Add blown FG insulation to attic to bring total R-value to R-38. Furnish certification from insulation contractor for R-38 attic insulation.</p>			
6	<p>A) Install GFCI protection in kitchen over countertop.              Install GFCI protected outlet over counter top left of electric range, and over bathroom vanity.</p> <p>B) Install new ceiling fan w/ light in bedroom #1 (match to existing color).</p>			

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Item #	Work: Additional Specification/Description Attached, ____ Yes; ___ x ___ No	Material	Labor	Total
6	<p>C) Install new cover on light fixture in BR #3.</p> <p>D) Install s-gang cover on hall light switch</p> <p>E) Install new ceiling fan w/light in living room (owner choice of color)</p> <p>G) Restore power to outlets in living room and kitchen rangehood. (Owner states power was lost when LR ceiling fan shorted and was removed.)</p> <p>H) Run Romex to disconnect for A/C condensing unit in conduit, only the part which is exposed on exterior of house.</p> <p>I) Run Romex that is exposed on exterior of utility room in roof enclosure of carport and utility room.</p>			
7	<p>A) Replace rusted steel kitchen sink with new 7" deep SS double bowl self rimming sink. Use existing sink faucet and drain.</p> <p>B) Install new 40 gallon double element water heater, set water heater in drain pan.</p> <p>C) Run pop-off drain to exterior of building. Cover end of pipe with insect screen.</p> <p>D) Insulate water lines to water heater to point of connection at floor slab.</p>			
8	<p>A) Replace kitchen and hallway vinyl flooring with new FHA vinyl flooring; pattern selected by owner from samples furnished by contractor. Trim edges with shoe mould. Match existing trim paint color. Seam vinyl @ doorways size of floor area approx. 12' x22' plus hall.</p> <p>B) Scrape smooth LR ceiling fill, tape, and sand existing ceiling patch. Refinish entire LR ceiling, texture painted or smooth painted.</p>			
9	<p>A) Install new interior air handler and outside condensing unit for HV/AC system using existing duct system.</p> <p>B) Install system with SEER to meet state building code requirements. Furnish certification from A/C contractor or equipment supply co.</p> <p>C) Seal opening @ ceiling around duct plenum.</p> <p>D) Install air handler where filter can be placed in unit (not in wall filter grill).</p> <p>E) Relocate outside condensing unit to give 3' clearance between new carport steps and new unit.</p> <p>F) Build new set of steps at rear of carport using 2x12 PT stringers and 2x6 PT treads.</p> <p>G) Trim attic access in hall to cover raw edges. Use existing plywood cover. Paint trim and plywood white. Cover plywood with R-38 Batt insulation.</p>			
	<p>Note: Contractor is responsible for obtaining all permits, furnish all material and labor for completion of job description in work write-up.</p>			

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Item #	Work: Additional Specification/Description Attached, ___ Yes; ___ x ___ No	Material	Labor	Total
1	<b>Windows:</b> a) Leaving existing window framing intact, remove all window sashes, and replace with retrofit white vinyl single hung, divided lite Low E coated glass with Argon Gas treatment. b) Provide screens for all windows. c) Replace any 1x4 trim that has rot damage (replace full length no splices). d) Remove all loose and peeling paint from window framing, fill any wood deterioration with exterior wood filler. e) Paint all exterior window framing with 2 coats Sherwin Williams Duration White Satin Paint (or equal). Prime all areas that have been repaired with exterior primer prior to finish paint. f) Seal exterior vinyl window frames to existing wood frames with DAP 35yr. ACRILIC LATEX CAULK PLUS SILICONE (or equal)			
2	<b>Front Screen Porch:</b> a) Remove screen cloth and 2x2 stud framing. Replace with new 2x4 PT stud framing, install new screen & lattice mold paint to match existing. b) Install new white screen door. c) Build handrail on left side of screen door using PT 2x4. d) Secure any loose boards on porch decking using deck screws.			
3	<b>Roof:</b> a) Remove all roofing shingles from main roof. Replace any rot damaged decking boards, and nail all decking as needed. b) Straighten sagging rafters where needed. c) Install new min. 29ga. Metal roofing (match panels & trim on rear addition). d) Cut opening in roof decking @ ridge to min. of 1 1/2" from peak down both sides. e) Install ridge trim which allows for attic ventilation. f) Remove turbine vent from roof. Close hole. g) Install new pipe flashing around all pipes penetrating roof deck. h) Follow installation instructions provided or those provided by company supplying metal roofing which meet Florida Building Code. i) Install correct transition strip at roof break with closure and sealant. j) Install rake trim on existing roofing. k) Install closure at eave overhang on existing roof overhang. l) Cut overhang at south side of existing roof to 1 1/2" max..			
4	<b>Siding:</b> a) Replace all broken asbestos siding panels. Paint to match existing to include all unpainted existing panels. b) Repair roof overhang and soffit where needed to allow installation of new aluminum coil fascia trim and vinyl soffit panels around entire perimeter of roof overhang (excluding rear porch). c) Reset all soffit flood lights to surface mount on soffit panels.			
5	<b>Rear Porch:</b> a) Remove existing roof metal and 1x4 lathing b) Install new metal roof panels to match existing. c) Cut metal overhang to 1 1/2" max.. d) Install trim metal same as main roof.			

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Item #	Work: Additional Specification/Description Attached, ____ Yes; ____ x ____ No	Material	Labor	Total
5	Rear Porch (cont'd) f) Replace existing porch steps using PT 2x12 stringers, 2x6 treads and 2x4 handrail (fasten with corrosion resistant deck screws and glue treads).			
6	Electrical: a) Run exposed wiring @ exterior electrical power pack in conduit and terminate conduit once it enters crawl space. b) Provide GFCI protection for all 120 volt circuits that have a two wire system showing an open ground. c) Provide GFCI protection for outlets required by code. 1) over kitchen counter tops. a- add one convenience outlet to left of Range. 2) at both bath vanities. 3) any existing exterior outlets. d) Install 20amp dedicated circuit for refrigerator & washing machine. e) Replace all 2 hole wall receptacles with 3 hole grounded type.			
7	M. Bath and Bedroom a) Remove commode, Install new FHA vinyl flooring APX 4'x7' in M. Bath (Pattern selected by owner from samples provided by contractor). Install shoemould around edges of vinyl flooring paint to match existing trim. Install existing commode using new wax seal and closet bolts. b) Replace M. Bedroom door with 2'4" x 6'8" 6 panel H/C hardboard door with new privacy lock. Paint door same as door being replaced.			
8	Kitchen: a) Install new dead bolt lock and key set on rear kitchen door. Trim lock side edge of door allowing door to clear jamb when closed. Install thicker door stop at top of jamb to seal top of door. Add nail on weather stripping to doorstop to seal door.			
9	Livingroom Ceiling: a) Prime areas where there is water stains with stain block primer. Paint livingroom ceiling with white ceiling paint.			
10	Hall Bathroom: a) Remove commode and vanity. b) Remove all of floor tile and first layer of wood underlayment. c) Install one layer of 1/2" BC plywood. d) Install new FHA vinyl flooring approx. 5'x6' (owner to select pattern from samples supplied by contractor). Install new shoe mould around edges of vinyl flooring paint to match existing trim. Install existing commode using new wax seal and closet bolts. e) Install new <u>ALL WOOD</u> vanity base. Re-install original vanity top and faucet. f) Refinish cast iron tub: (one source for cost: Re-New It Tub & Tile): Owner: David Banister Phone: 334-671 9770 Address: 212 Wicklow Dr. Dothan, Al. 36303			
11	Bedroom #2: a) Secure loose recepticle on west bedroom wall. b) Replace any 2 hole electrical outlets w/ three hole grounded type.			



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Item #	Work: Additional Specification/Description Attached, ____ Yes: ___ x ___ No	Material	Labor	Total
12	<b>Bedroom #3:</b> a) Replace any two hole electrical outlets with three hole grounded type.			
13	<b>Office:</b> a) Replace any two hole electrical outlets with three hole grounded type.			
14	<b>Smoke &amp; CO2 detectors:</b> a) Install smoke/fire detectors in entire house per. code (120 volt w/battery back up) using dedicated circuit. b) Install CO2 detectors per. code (120 volt w/battery backup) using dedicated circuit.			
15	<b>HV/AC:</b> a) Install new natural gas central heat and air conditioning system. b) Install horizontal gas furnace in attic space, using attic access in hall. c) Install ceiling return in hallway. d) Consult with owner on thermostat location. e) Run condensate and drain lines in crawl space using one corner of hall closet to access attic. Cover lines with 3/4" trim boards. Insulate drain line from drain pan to exterior of house. f) Install cut off switch on main condensate drain line & in drain pan. g) Locate unit within 6 ft. of attic access. h) Set unit on foam blocking designed for such use, check with HV/AC supply company. No concrete or wood. i) Install attic light in equipment area j) Raise unit high enough above ceiling to allow 12" attic insulation to go under drain pan.			
16	<b>Insulation:</b> a) Blow R-38 FG Insulation in main house attic. b) Blow R-19 into rear addition attic.			
17	<b>Close outside edge of crawl space:</b> a) Install vinyl skirting material between brick foundation piers, leaving face of piers exposed. Apprx. 100' linear ft. x 18" wide.			
18	<b>Waterheater:</b> a) Relocate existing waterheater using M. Bedroom closet, on wall next to kitchen. b) Provide pan and 1" drain to exterior of house. c) Run separate 3/4" drain for pop-off to exterior of house. d) Cover both ends of drain pipes with insect screen secured mechanically (not tape only).			

**ARCHITECTURAL METAL ROOFING PROJECTS**

To be in compliance with the code when providing a metal roofing covering, the factors applicable to meet code requirements include the requirement (by code) to install according to the manufacturers recommendations. In addition, the Florida approval number(s) are obtained based on the submission parameters to obtain the approval number(s), and so the roofing must be installed in compliance with the submission that resulted in the approval number(s). When considering the foregoing, certain requirements appear to be universal to metal roofing installations. The below list is/are the most recurring problems that keep a job from being code compliant, and are listed to assist in getting a project that meets code, hopefully without anyone being in a situation where it is required to make changes, corrections, or additions to their work as a result of the code inspection. (NOTE: BC refers to Florida Building Code; EB refers to Florida Existing Building Code; R refers to Florida Residential Code)

- 1) When installing over over solid decking or over existing shingles, apply synthetic underlayment or other vapor barrier protection. R903.1; R903.2.3; R905.2.3; BC1503.1; BC1503.2; BC1506.1; BC1507.1
- 2) At eave: Provide inside closures & butyl sealant tape top and bottom of closures. Provide 1 to 2 inches maximum overhang. Provide a screw on each side of each rib. BC1506.1; BC1507.1; BC1503.2; R903.1; R905.1; R905.10.4
- 3) At valleys: Provide expanding closure(s), up from the panel ends about 1 inch. Or, provide inside closures & butyl sealant tape top and bottom of closures. Provide a screw on each side of each rib. Laps in valley metal 12" minimum, and provide butyl sealant at laps. BC1506.1; BC1507.1; R903.1; R903.2.3; R905.1
- 4) At ridge & hip: Fasten ridge metal to roof panels with screws at every main rib. Provide inside closures and butyl sealant tape top and bottom of closures. Provide a screw on each side of each rib. BC1503.2; BC1506.1; BC1507.1; R903.1; R903.2.3; R905.1; R905.10.4
- 5) Roof panel laps: Provide 12" lap minimum. Provide a screw on each side of each rib. Provide inside closures & butyl sealant tape top and bottom of closures. BC1503.2; BC1506.1; BC1507.1; R903.1; R903.2.3; R905.1
- 6) Transition (change in roof slope: Provide preformed transition metal with hemmed lower edge. On upper roof panels, provide a screw on each side of each rib. On upper roof panels, provide inside closures & butyl tape top and bottom of closures. On lower roof panels, provide outside closures & butyl tape top and bottom of closures. At lower edge of transition, screw transition to roof panels at every main rib. Do not "bend" roof panels in attempt to omit transition metal. BC1503.2; BC1506.1; BC1507.1; R903.1; R903.2.3; R905.1; R905.10.4
- 7) Sidewall flashing: Provide preformed angle flashing (on top of roof panels), with hemmed lower edge, and preformed counter flashing (apply approved sealant at top edge of counter flashing). Provide butyl sealant tape between flashing and roof panel. Screw flashing to roof panel at 24" o.c. maximum. Screw flashing to sidewall at 24" o.c. maximum. Metal flashing to have minimum thickness as required by Building Code Table 1503.2 (Galv. steel, 26 gage; Alumn. Zinc coated steel, 26 gage). BC1503.2; BC1506.1; BC1507.1; R903.1; R903.2.1; R905.1; R905.10.4; R907.6; EB708.6
- 8) Rakes: Provide preformed rake trim at gable eaves. On roof side of rake trim, provide butyl tape between rake metal and roof panel. Fasten rake metal to roof panel with screws at 24" o.c. maximum. On fascia side of rake trim, fasten rake trim to fascia with screws at 24" o.c. maximum. BC1503.2; BC1506.1; BC1507.1; R903.1; R905.1; R905.10.4

- 9) Pipe boots: Provide butyl sealant tape under base of pipe boot. Fasten boot with screws 2" to 3" maximum around base of boot. BC1503.2; BC1506.1; BC1507.1; R903.1; R905.1; R905.10.4; EB708.6
- 10) All screws fastening roof panels and/or trim to roof to be long enough to penetrate the roof decking material. (When stripping is used, must go through stripping and penetrate the roof decking material.) BC1506.1; BC1507.1; R905.1; R905.10.4
- 11) When using 2 x 4 or 1 x 4 purlins (stripping), fasten with screws through the decking and into the rafters with 2 screws at each rafter or truss top chord (screws to be long enough to penetrate a min. of one inch into top chord). At valleys, fill in solid 12" from the center of the valley on both sides, securely fastened to roof deck and framing (valley flashing must have solid support).  
BC1506.1; BC1507.1; R905.1; R905.10.4
- At ridge: upper edge of roof panels, provide purlins.
  - At transition; provide purlins under edges of upper and lower edges of transition metal.
  - At roof panel laps; provide purlins under edge of lower panel, and purlins under edge of upper panel.
  - At pipe boots; provide purlins (all areas) under base of boot.
  - At chimneys and other similar locations; provide purlins "surround".
- 12) - Minimum slope for metal roof panels without applied lap sealant shall be 3 units vertical in 12 units horizontal. BC1506.1; BC1507.1; BC1507.4.2; R903.1; R905.1
- Minimum slope for metal roof panels with applied lap sealant shall be one-quarter unit vertical in 12 units horizontal. Lap sealant shall be applied in accordance with the approved manufacturer's installation instructions. (For this type application, submit manufacturer's installation instructions to B.O. for approval prior to installation.)
  - Do not install architectural metal roofing panels where the slope is less than one-quarter unit vertical in 12 units horizontal.
- 13) A cricket or saddle shall be installed on the ridge side of any chimney or penetration more than 30" wide as measured perpendicular to the slope. BC1503.6; R9003.2; R903.2.2
- 14) Metal flashing to have minimum thickness as required by Building Code Table 150-3.2. (Galv. steel, 26 gage; Alumn. Zinc coated steel, 26 gage).