STRUCTURAL SPECIFICATIONS

GENERAL:

-ALL INSTALLATIONS SHALL COMPLY WITH LOCAL VIRGIN ISLANDS BUILDING CODES AND THE INTERNATIONAL CODE COUNCIL (I.C.C.), INTERNATIONAL RESIDENTIAL CODE AND OR INTERNATIONAL BUILDING CODES, AND THE UNIFORM PLUMBING CODE (U.P.C.).
-STRUCTURAL DRAWINGS SHALL BE WORKED TOGETHER WITH ARCHITECTURAL, AIR CONDITIONING, MECHANICAL AND ELECTRICAL OUTLETS, RECESSES, OPENINGS, RIGLETS, BOLT SETTINGS,AND SLEEVES, ETC. DISCREPANCIES SHALL BE CONSULTED WITH THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

SOIL COMPACTION:

-FILL AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE AS DETERMINED BY THE STANDARD PROCTOR TEST.
-FOOTINGS HAVE BEEN DESIGNED FOR A BEARING CAPACITY OF 2,500 P.S.F. THE FOOTING SHALL BEAR ON UNDISTURBED SOIL, LIMEROCK OR SAND.

SLAB ON FILL:

-CONCRETE SHALL BE POURED ON SOIL THOROUGHLY MOISTENED IMMEDIATELY BEFORE CONCRETE IS POURED.
-CONCRETE SHALL BE POURED ON 6 MIL. VISQUEEN VAPOR BARRIER AND REINFORCED WITH STEEL OR WELDED WIRE MESH PER DESIGN DRAWINGS.
-CONCRETE SHALL BE PLACED IN CHECKERED BOARD SEQUENCE WITH
EACH SEGMENT TO BE PLACED IN A MAXIMUM AREA OF 625 SQ. FT. OR 30 LINEAR FEET IN ANY ONE DIRECTION.
STRUCTURAL MEMBERS PENETRATING SLABS ON FILL SHALL BE ISOLATED WITH $\frac{1}{2}$" THICK PRE-MOLDED JOINT FILLER COMPLYING WITH ASTM D-1752, TYPE I.
-SLABS SHALL BE FREE OF GROVES AND DEPRESSIONS. EXTERIOR SLABS SHALL BE LIGHT BROOM FINISH AND INTERIOR SLABS SHALL BE STEEL TROWEL FINISH.

CONCRETE:

-ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH A.C.I. 318-89, UNLESS OTHERWISE NOTED.
-ALL POURED IN PLACE CONCRETE SHALL BE RATED 3,000 PSI MIN. AT 28 DAYS, MAXIMUM SIZE OF AGGREGATE SHALL BE $\frac{3}{4}$" WITH A PERMISSIBLE SLUMP OF 5".
-ADDMIXTURES SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
-FORM WORK SHALL BE CLEAN AND FREE OF DEFECTS.
-MINIMUM CONCRETE COVER SHALL BE AS FOLLOWS: POURED ON GROUND = 3", FORMED IN CONTACT WITH GROUND = 2", AT COLUMNS AND BEAMS = 1 $\frac{1}{2}$", AND AT SLABS AND WALLS 1".

MASONRY WALLS:

-THE CONTRACTOR SHALL BE RESPONSIBLE FOR QUALITY CONTROL OF MASONRY CONSTRUCTION AND SHALL MAINTAIN FULL TIME CONTINUOUS SUPERVISION OF MASONRY WORK, INCLUDING BUT NOT LIMITED TO DOWEL SETTING, BLOCK LAYING, BAR SETTING, GROUTING, AND TEST.
-CONCRETE MASONRY UNITS FOR LOAD BEARING WALLS SHALL CONFORM TO ASTM C-90. ALL OTHER MASONRY UNITS SHALL CONFORM TO ASTM C-129. BEARING MASONRY SHALL BE ERECTED PRIOR TO THE CONCRETE STRUCTURE ABOVE BEING POURED.
-MORTAR SHALL CONFORM TO ASTM C-270, TYPE M (2,500 PSI).
-UNLESS OTHERWISE SPECIFIED, CONCRETE LINTELS SHALL BE FOR OPENINGS UP TO 4'-8" x 4" WITH (2) #4 BARS AND FOR OPENINGS UP TO 8'-8" x 8" (2) #4 BARS TOP AND BOTTOM.
-CONCRETE FILLED CELLS SHALL BE AS MARKED IN DRAWINGS AND ON BOTH SIDES OF EACH OPENING. FILLED CELLS SHALL HAVE INSPECTION OPENINGS AT THE BASE OF MASONRY UNITS.
-HORIZONTAL REINFORCING: DUR-O-WALLREINFORCEMENT EVERY THIRD COURSE UNLESS OTHERWISE NOTED.

REINFORCING STEEL:

-REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60, FABRICATED IN ACCORDANCE WITH THE C.R.S.I. MANUAL AND PLACED IN ACCORDANCE WITH THE A.C.I. MANUAL.
-WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185
-BAR SPLICES SHALL BEND 18" AROUND CORNERS.
-REINFORCEMENT SHOWN ON DRAWINGS IS BOTTOM UNLESS MARKED.
-CONTRACTOR SHALL SUBMIT ONE SEPIA AND ONE PRINT OF SHOP DRAWING FOR ENGINEERS APPROVAL BEFORE FABRICATION

STRUCTURAL WOOD:

-ALL WOOD FRAMING SHALL BE FABRICATED AND INSTALLED PER AITC AND TPI AND NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
-ALL STRUCTURAL WOOD MEMBERS SHALL BE No. 2 SOUTHERN PINE AND HAVE A MINIMUM EXTREME FIBER STRESS IN BENDING (FB) = 1,200 PSI AND MODULUS OF ELASTICITY OF 1,600,000.
-UNLESS NOTED OTHERWISE, THE FOLLOWING MINIMUM LUMBER GRADES SHALL BE USED:
A. STRUCTURAL LIGHT FRAMING SIZE 2" TO 4" THICK x 2" TO 4" WIDE-No. 2 OR BETTER.
B. STUDS SIZE 2" TO 4" THICK x 2" TO 6" WIDE-STUD GRADE
C. STRUCTURAL JOISTS AND PLANKS SIZE 2" TO 4" x 4" x 5" AND WIDER - No. 2 OF BETTER.
D. LIGHT FRAMING SIZE 2" TO 4" THICK x 2" TO 4" WIDE - STANDARD OR BETTER.
-PLYWOOD SHEATHING SHALL BE APA STRUCTURAL 1, GROUP 1 SIZE AND SPAN RATED AS SHOWN ON THE DRAWINGS. NAIL WITH 8D NAILS @ 6" O.C. ALONG EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
-ALL WOOD MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY CONCRETE OR SOIL SHALL BE PRESSURE-TREATED.
-THE CONTRACTOR SHALL PROVIDE ALL FASTENING DEVICES NECESSARY AND SUITED FOR EACH APPLICATION. FASTENING SUBJECT TO MOISTURE HOT-DIPPED GALVANIZED TO ASTM A-153-80.
-ALL METAL CONNECTIONS AND FABRICATIONS SHALL COMPLY WITH A.I.S.C. SPECIFICATIONS.
-SOLID BLOCK ALL JOISTS AND RAFTERS AT POINT OF SUPPORT.
PRE-FABRICATED STRUCTURAL TRUSSES SHALL COMPLY WITH NFPA NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION TPI DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES AND AITC 100.
-ALL TRUSSES SHALL BE DESIGNED AND CERTIFIED BY TRUSS MANUFACTURER'S REGISTERED ENGINEER.
-CONTRACTOR SHALL CORRELATE WITH TRUSS MANUFACTURER TO ENSURE ADEQUATE BEARING IS PROVIDED AT END REACTIONS OF ALL GIRDER TRUSSES.
-TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND DESIGN NOTES WITH AN ENGINEER'S SEAL FOR APPROVAL. DESIGN NOTES TO INCLUDE THE RATED LOAD CAPACITY OF THE CONNECTORS USED TO SECURE THE MEMBERS. CERTIFICATION OF THE CONNECTOR'S CAPACITIES AND MANUFACTURER'S LICENSE TO FABRICATE TRUSSES UTILIZING THE CONNECTOR SYSTEM PROPOSED. THE CONTRACTOR SHALL APPROVE FABRICATION AND INSTALLATION DRAWINGS SHOWING SIZE, SHAPE, AND LAYOUT.
-BRACE TRUSSES DURING ERECTION AND PERMANENT INSTALLATION TO COMPLY WITH TPI BWT-76.
-ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS ON BEAMS WITH HURRICANE CLIPS OR ANCHORS. CLIPS OR ANCHORS TO BE APPROVED BY CONTRACTOR.
-AT VOLUME CEILING CONDITIONS, ALIGN TRUSSES TO PROVIDE A SMOOTH, UNBROKEN INTERIOR WALL SURFACE FROM FLOOR TO CEILING.

STRUCTURAL STEEL:

STRUCTURAL STEEL DESIGN, FABRICATED AND ERECTION SHALL CONFORM TO ASTM A-36 AND ASC SPECIFICATIONS.
-BOLTS SHALL CONFORM TO ASTM A-325.
-WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
-STEEL SHALL BE DELIVERED WITH SHOP COAT OF RUST INHIBITING.

WALLS & FLOOR FINISHES:

-CEMENT BOARD MATERIAL SHALL BE $\frac{5}{8}$" FOR WALLS AND $\frac{1}{2}$" FOR CEILINGS.
CEMENT BOARD FOR BATHROOMS SHALL BE MOISTURE RESISTANT.
DRYWALL SHALL BE FIRE RATED AS SPECIFIED IN THE APPLICABLE CODES.
-FLOOR FINISHES SHALL BE SELECTED BY ARCHITECT OR OWNER. CLEARANCES SHALL ALLOW FOR VARIOUS MATERIAL THICKNESS.
-EXTERIOR STUCCO FINISH SHALL CONSIST OF SCRATCH COAT AND SMOOTH FINISH COAT WITH 12 HOURS DRYING. SAMPLES SHALL BE MADE FOR APPROVAL BY THE ARCHITECT PRIOR TO THE EXECUTION OF WORK.

PAINT:

-SURFACES TO BE PAINTED SHALL BE FILLED, SEALED AND SANDED AS REQUIRED TO REMOVE VISIBLE BLEMISHES.
-PAINT COLORS SHALL BE SELECTED BY THE ARCHITECT FOR TESTING OF SAMPLES PRIOR TO THE EXECUTION OF THE WORK.
-PRIMER AND PAINT SHALL BE APPLIED WITH NO THINNING.
-EXTERIOR AND BATHROOM PAINT SHALL HAVE M-L MILDEW ADDITIVE, 3 OUNCES TO THE GALLON.
-INTERIOR DRYWALL: 1 COAT PRIMER, 2 COATS PAINT.
- KITCHENS & BATH: 1 COAT PRIMER, 2 COATS PAINT.
-STUCCO WALLS: 1 COAT PRIMER, 2 COATS PAINT.
-INTERIOR WOOD TRIM: 1 COAT PRIMER, 2 COATS PAINT.
-METAL: 1 COAT PRIMER, COAT INDUSTRIAL ENAMEL.
-GALVANIZED METAL: 1 COAT PRIMER, COAT INDUSTRIAL ENAMEL.

SPECIALTIES:

-REASONABLE ALLOWANCES SHALL BE PROVIDED FOR HARDWARE, CABINETS, LIGHT FIXTURES AND FLOOR FINISHES NOT SPECIFIED IN THE DRAWINGS.
-CABINET HINGES SHALL BE CONCEALED HINGES STYLE. SAMPLES SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION.
-ROOF FLASHING SHALL BE GALVANIZED METAL.

WOOD:

-LUMBER SHALL BE THOROUGHLY SEASONED AND FREE OF WARP THAT CANNOT BE CORRECTED BY BRIDGING AND NAILING.
-ALL WOOD SHALL BE PRESSURE TREATED UNLESS OTHERWISE NOTED.
-WOODWORK WHICH IS TO BE PAINTED SHALL HAVE EXPOSED SURFACES FREE OF DEFECTS. PLYWOOD SHALL BE GRADE A AT PAINTED SURFACES.
-BASEBOARDS AND DOOR FRAMES SHALL BE 1" x 4" HARDWOOD TO MATCH DOORS AND WINDOWS.