SPECIFICATIONS:

SECTION 05 58 00 / METAL FABRICATIONS

1. SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
a. SUBMIT SHOP DRAWINGS FOR THE FABRICATION AND ERECTION OF ASSEMBLIES OF METALWORK, WHICH ARE NOT COMPLETELY SHOWN BY THE MANUFACTURER'S DATA SHEETS.
b. INCLUDE PLANS, ELEVATIONS, AND DETAILS OF SECTIONS AND CONNECTIONS.
c. SHOW ANCHORAGE AND ACCESSORY ITEMS.

2. THE EXTENT OF MISCELLANEOUS METALWORK IS SHOWN ON THE DRAWINGS AND INCLUDES ITEMS FABRICATED FROM IRON AND STEEL SHAPES, PLATES, BARS, STRIPS, TUBES, PIPES AND CASTINGS WHICH ARE NOT A PART OF THE STRUCTURAL STEEL OR OTHER METAL SYSTEMS.

3. COMPLY WITH THE PROVISIONS OF THE FOLLOWING:
a. AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, INCLUDING COMMENTARY OF THE AISC SPECIFICATIONS
b. AISC SPECIFICATIONS FOR THE DESIGN OF COLD_FORMED STEEL STRUCTURAL MEMBERS
c. AWS STRUCTURAL WELDING CODE - STEEL
d. ASTM A_6 GENERAL REQUIREMENTS FOR DELIVERY OF ROLLED STEEL PLATES, SHAPES, SHEET PIPING AND BARS FOR STRUCTURAL USE
e. WELDING PROCESSES AND WELDING OPERATORS IN ACCORDANCE WITH AWS STANDARD QUALIFICATION PROCEDURE

4. THE TYPES OF ITEMS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
a. CARPENTER'S IRONWORK
b. PIPE GUARDS
c. LADDERS
d. LOOSE BEARING PLATES
e. MISCELLANEOUS FRAMING AND SUPPORTS
f. MISCELLANEOUS TRIM
g. ANGLE CORNER GUARDS
h. CHANNEL DOORFRAMES
i. DOCK ANGLES
j. ANGLE JAMBS
k. PLATES FOR DOORS
l. OVERHEAD TOILET COMPARTMENT SUPPORT
m. OVERHEAD FOLDING PARTITION SUPPORT
n. TRELLIS
o. FENCING AND GATES
p. ELEVATOR SILL ANGLES AND GUIDE RAIL SUPPORTS

5. FURNISH INSERTS AND ANCHORING DEVICES WHICH MUST BE SET IN CONCRETE OR BUILT INTO MASONRY FOR THE INSTALLATION OF THE WORK. PROVIDE SETTING DRAWINGS, TEMPLATES, INSTRUCTIONS AND DIRECTIONS FOR INSTALLATION OF ANCHORAGE DEVICES.

6. PREASSEMBLE ITEMS IN THE SHOP TO THE GREATEST EXTENT POSSIBLE, SO AS TO MINIMIZE FIELD SPLICING AND ASSEMBLY OF UNITS AT THE PROJECT SITE. DISASSEMBLE UNITS ONLY TO THE EXTENT NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. CLEARLY MARK UNITS FOR REASSEMBLY.

MATERIALS
7. STEEL PLATES, SHAPES, BARS AND BAR-SIZE SHAPES: ASTM A_36.

8. STEEL TUBING: (HOT FORMED, WELDED OR SEAMLESS): ASTM A_501.

9. HOT ROLLED CARBON STEEL BARS: ASTM A_575, GRADE AS SELECTED BY FABRICATOR.

10. COLD FINISHED STEEL BARS: ASTM A_108, GRADE AS SELECTED BY FABRICATOR.

11. HOT ROLLED CARBON STEEL SHEETS AND STRIPS: ASTM A_568 AND ASTM A_569; PICKLED AND OILED.

12. COLD ROLLED CARBON STEEL SHEETS: ASTM A_336.

13. GALVANIZED CARBON STEEL SHEETS: ASTM A_526, WITH ASTM A_525, G90 ZINC COATING.

14. COLD DRAWN STEEL TUBING: ASTM A_512 SUNK DRAWN, BUTT-WELDED, COLD FINISHED AND STRESS RELIEVED.

15. STEEL PIPE: ASTM A_53, TYPE AS SELECTED; GRADE A. BLACK FINISH UNLESS GALVANIZING IS REQUIRED. STANDARD WEIGHT, SCHEDULE 40, UNLESS OTHERWISE SHOWN OR SPECIFIED.

ANCHORS
16. THREADED TYPE CONCRETE INSERTS: GALVANIZED FERROUS CASTINGS, INTERNALLY THREADED TO RECEIVE 3/4" DIAMETER MACHINE BOLTS; EITHER MALLEABLE IRON COMPLYING WITH ASTM A_47 OR CAST STEEL COMPLYING WITH ASTM A_27; HOT DIP GALVANIZED IN COMPLIANCE WITH ASTM A_153.

17. WEDGE TYPE CONCRETE INSERTS: GALVANIZED BOX TYPE FERROUS CASTINGS, DESIGNED TO ACCEPT 3/4" DIAMETER BOLTS HAVING SPECIAL WEDGE_SHAPED HEADS, EITHER MALEABLE IRON COMPLYING WITH ASTM A_47 OR CAST STEEL COMPLYING WITH ASTM A_27; HOT DIPPED GALVANIZED IN COMPLIANCE WITH ASTM A153.

18. PROVIDE CARBON STEEL BOLTS HAVING SPECIAL WEDGE_SHAPED HEADS, NUTS, WASHERS AND SHIMS; GALVANIZED IN COMPLIANCE WITH ASTM A_153.

19. SLOTTED TYPE CONCRETE INSERTS: GALVANIZED 1/8" THICK PRESSED STEEL PLATE COMPLYING WITH ASTM A_283. BOX TYPE WELDED CONSTRUCTION WITH SLOT DESIGNED TO RECEIVE 3/4" DIAMETER SQUARE HEAD BOLT AND WITH KNOCKOUT COVER. HOT DIP GALVANIZED IN COMPLIANCE WITH ASTM A_386.

20. MASONRY ANCHORAGE DEVICES: EXPANSION SHIELD; FS FF_S_325.

21. TOGGLE BOLTS: TUMBLE WING TYPE; FS FF_B_588, TYPE, CLASS AND STYLE AS REQUIRED.

FASTENERS
22. PROVIDE ZINC COATED FASTENERS WITH GALVANIZING COMPLYING WITH ASTM A_153 FOR EXTERIOR USE OR WHERE BUILT INTO EXTERIOR WALLS. SELECT FASTENERS FOR THE TYPE, GRADE AND CLASS REQUIRED FOR THE INSTALLATION OF MISCELLANEOUS ITEMS.

23. STANDARD BOLTS AND NUTS: ASTM A_307, GRADE A, REGULAR HEXAGON HEAD.

24. LAG BOLTS: FS FF_B_561, SQUARE HEAD TYPE.

25. WOOD SCREWS: ANSI B_18.6.1 FLAT HEAD CARBON STEEL.

26. PLAIN WASHERS: FS FF_W_84, HELICAL SPRING TYPE CARBON STEEL.

27. METAL PRIMER PAINT: PRIMER SHALL BE TNEMEC SERIES 10 GRAY.

28. GALVANIZING REPAIR PAINT: HIGH ZINC DUST CONTENT PAINT FOR WELDS IN GALVANIZED STEEL, COMPLYING WITH MILITARY SPECIFICATIONS MIL_P_21035

FABRICATION
29. USE MATERIALS OF THE SIZE AND THICKNESS SHOWN, OR IF NOT SHOWN, OF THE REQUIRED SIZE AND THICKNESS TO PRODUCE ADEQUATE STRENGTH AND DURABILITY OF THE FINISHED PRODUCT FOR THE INTENDED USE.

30. FOR THE FABRICATION OF METALWORK WHICH WILL BE EXPOSED TO VIEW, USE ONLY MATERIALS WHICH ARE SMOOTH AND FREE OF SURFACE BLEMISHES, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES AND ROUGHNESS. REMOVE SUCH BLEMISHES BY GRINDING OR BY WELDING AND GRINDING, PRIOR TO CLEANING, TREATING AND APPLICATION OF SURFACE FINISHES INCLUDING ZINC COATINGS.

31. FORM EXPOSED WORK TRUE TO LINE AND LEVEL WITH ACCURATE ANGLES AND SURFACES AND STRAIGHT SHARP EDGES. EASE EXPOSED EDGES TO A RADIUS OF APPROXIMATELY 1/32" UNLESS OTHERWISE SHOWN. FORM BENT METAL CORNERS TO THE SMALLEST RADIUS POSSIBLE WITHOUT CAUSING GRAIN SEPARATION.

32. WELD CORNERS AND SEAMS CONTINUOUSLY AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF AWS. GRIND EXPOSED WELDS SMOOTH AND FLUSH, TO MATCH AND BLEND WITH ADJOINING SURFACES. FORM EXPOSED CONNECTIONS WITH HAIRLINE JOINTS WHICH ARE FLUSH AND SMOOTH, USING CONCEALED FASTENERS WHEREVER POSSIBLE. USE EXPOSED FASTENERS OF THE TYPE SHOWN, OR IF NOT SHOWN, USE COUNTERSUNK SCREWS OR BOLTS.

33. CUT, REINFORCE AND DRILL METALWORK AS MAY BE REQUIRED TO RECEIVE FINISH HARDWARE AND SIMILAR ITEMS OF WORK.

GALVANIZING
34. PROVIDE A ZINC COATING FOR THOSE ITEMS SHOWN OR SPECIFIED TO BE GALVANIZED, USING ONE OF THE FOLLOWING HOT DIP PROCESSES AFTER FABRICATION:
35. ASTM A_153 FOR GALVANIZING OF IRON AND STEEL HARDWARE
36. ASTM A_123 FOR GALVANIZING OF ROLLED, PRESSED AND FORGED STEEL SHAPES, PLATES, BARS, AND STRIP 1/8" THICK AND HEAVIER, AND FOR GALVANIZING OF ASSEMBLED STEEL PRODUCTS

SHOP PAINTING
37. SHOP PAINT METALWORK, EXCEPT THOSE MEMBERS OR PORTIONS OF MEMBERS TO BE EMBEDDED IN CONCRETE OR MASONRY, SURFACES AND EDGES TO BE FIELD WELDED, AND GALVANIZED SURFACES.

38. REMOVE SCALE, RUST AND OTHER DELETERIOUS MATERIALS BEFORE THE SHOP COAT OF PAINT IS APPLIED. CLEAN HEAVY RUST AND LOOSE MILL SCALE IN ACCORDANCE WITH SSPC SP_2 HAND TOOL CLEANING, OR SSPC SP_3 POWER TOOL CLEANING OR SSPC SP_7 BRUSH_OFF BLAST CLEANING. REMOVE OIL, GREASE AND SIMILAR CONTAMINANTS IN ACCORDANCE WITH SSPC SP_1 SOLVENT CLEANING.

39. APPLY ONE SHOP COAT OF METAL PRIMER PAINT TO FABRICATED METAL ITEMS; APPLY TWO COATS OF PAINT TO SURFACES WHICH ARE INACCESSIBLE AFTER ASSEMBLY. IMMEDIATELY AFTER SURFACE PREPARATION, BRUSH OR SPRAY ON METAL PRIMER PAINT, APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, AND AT A RATE TO PROVIDE A UNIFORM DRY FILM THICKNESS OF 2 MILS FOR EACH COAT.

CARPENTER'S IRON WORK
40. FURNISH BENT OR OTHERWISE CUSTOM FABRICATED BOLTS, PLATES, ANCHORS, HANGERS, DOWELS AND OTHER SHAPES AS REQUIRED FOR FRAMING AND SUPPORTING OF WOODWORK, AND FOR ANCHORING OR SECURING WOODWORK TO CONCRETE OR OTHER STRUCTURES.

41. MANUFACTURE OR FABRICATE ITEMS OF SIZES, SHAPES AND DIMENSIONS REQUIRED. FURNISH MALLEABLE IRON WASHERS FOR HEADS AND NUTS WHICH BEAR ON WOOD STRUCTURAL CONNECTIONS; ELSEWHERE FURNISH STEEL WASHERS.

LADDERS
42. FABRICATE LADDERS WITH DIMENSIONS, SPACINGS, DETAILS AND ANCHORAGES AS REQUIRED. COMPLY WITH THE REQUIREMENTS OF ANSI A14.3, EXCEPT AS OTHERWISE SHOWN. PROVIDE 1/2" X 2_1/2" CONTINUOUS STRUCTURAL STEEL FLAT BAR SIDE RAILS WITH EASED EDGES, SPACED 18" APART. PROVIDE 3/4" DIAMETER SOLID STRUCTURAL STEEL BAR RUNGS, SPACED 12" OC.

43. FIT RUNGS INTO PUNCHED HOLES IN CENTERLINE OF SIDE RAILS, PLUG WELD AND GRIND SMOOTH ON OUTER RAIL FACES.

44. SUPPORT EACH LADDER AT TOP AND BOTTOM AND AT INTERMEDIATE POINTS SPACED NOT MORE THAN 5' OC. USE WELDED OR BOLTED STEEL BRACKETS, DESIGNED FOR ADEQUATE SUPPORT AND ANCHORAGE, AND TO HOLD THE LADDER 6" CLEAR OF THE WALL SURFACE AND OTHER OBSTRUCTING CONSTRUCTION. EXTEND RAILS 42" ABOVE TOP RUNG, AND RETURN RAILS TO WALL OR STRUCTURE UNLESS OTHER SECURE HANDHOLDS ARE PROVIDED. IF THE ADJACENT STRUCTURE DOES NOT EXTEND ABOVE THE TOP RUNG, GOOSENECK THE EXTENDED RAILS BACK TO THE STRUCTURE TO PROVIDE SECURE LADDER ACCESS.

45. PROVIDE NONSLIP SURFACE ON THE TOP OF EACH RUNG, EITHER BY COATING THE RUNG WITH ALUMINUM OXIDE GRANULES SET IN EPOXY RESIN ADHESIVE, OR BY USING A TYPE OF MANUFACTURED RUNG WHICH IS FILLED WITH ALUMINUM OXIDE GROUT.

LOOSE BEARING PLATES
46. PROVIDE LOOSE BEARING PLATES FOR STEEL ITEMS BEARING ON MASONRY OR CONCRETE CONSTRUCTION, MADE FLAT, FREE FROM WARPS OR TWISTS, AND OF REQUIRED THICKNESS AND BEARING AREA. DRILL PLATES TO RECEIVE ANCHOR BOLTS AND FOR GROUTING AS REQUIRED.

LOOSE STEEL LINTELS
47. PROVIDE LOOSE STRUCTURAL STEEL SHAPE LINTELS FOR OPENINGS AND RECESSES IN MASONRY WALLS AND PARTITIONS, AS SHOWN. WELD ADJOINING MEMBERS TOGETHER TO FORM A SINGLE UNIT. PROVIDE NOT LESS THAN 6" BEARING AT EACH SIDE OF OPENINGS.

MISCELLANEOUS FRAMING AND SUPPORTS
48. PROVIDE STEEL FRAMING AND SUPPORTS WHICH ARE NOT A PART OF THE STRUCTURAL STEEL FRAMEWORK, AS REQUIRED TO COMPLETE THE WORK.

49. FABRICATE MISCELLANEOUS UNITS TO THE SIZES, SHAPES AND PROFILES SHOWN OR OF THE REQUIRED DIMENSIONS TO RECEIVE ADJACENT GRATING, PLATES, DOORS OR OTHER WORK TO BE RETAINED BY THE FRAMING. FABRICATE FROM STRUCTURAL STEEL SHAPES AND PLATES AND STEEL BARS OF WELDED CONSTRUCTION USING MITERED CORNERS, WELDED BRACKETS AND SPLICE PLATES AND A MINIMUM NUMBER OF JOINTS FOR FIELD CONNECTION. CUT, DRILL AND TAP UNITS TO RECEIVE HARDWARE AND SIMILAR ITEMS TO BE ANCHORED TO THE WORK.

MISCELLANEOUS STEEL TRIM
50. PROVIDE SHAPES AND SIZES AS REQUIRED FOR THE PROFILES SHOWN. FABRICATE UNITS FROM STRUCTURAL STEEL SHAPES AND PLATES AND STEEL BARS, WITH CONTINUOUSLY WELDED JOINTS AND SMOOTH EXPOSED EDGES. USE CONCEALED FIELD SPLICES WHEREVER POSSIBLE. PROVIDE CUTOUTS, FITTINGS AND ANCHORAGES AS REQUIRED FOR COORDINATION OF ASSEMBLY AND INSTALLATION WITH OTHER WORK.

SHELF ANGLES
51. PROVIDE STRUCTURAL STEEL SHELF ANGLES OF SIZES SHOWN FOR ATTACHMENT TO CONCRETE FRAMING. PROVIDE SLOTTED HOLES TO RECEIVE 3/4" BOLTS, SPACES NOT MORE THAN 6" FROM ENDS AND NOT MORE THAN 24" OC.

52. FURNISH WEDGE TYPE CONCRETE INSERTS, COMPLETE WITH FASTENERS, FOR ATTACHMENT OF SHELF ANGLES TO CAST_IN_PLACE CONCRETE.

SECTION 06 11 00 / WOOD FRAMING

WOOD PRESERVATIVE TREATMENT
1. PRESSURE-TREAT THE FOLLOWING ITEMS WITH WATER BORNE PRESERVATIONS FOR ABOVE_GROUND USE, COMPLYING WITH AWPB LP_2:
a. WOOD CANTS, NAILERS, BLOCKING STRIPPING AND SIMILAR MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS AND WATERPROOFING (EXCEPT PLYWOOD SHEATHING.)
b. WOOD SILLS, BLOCKING, FURRING, STRIPPING, AND SIMILAR CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE OR BELOW GRADE FOUNDATION GRADE REDWOOD, GRADE MARKED, IS ACCEPTABLE FOR WOOD SILLS IN LIEU OF TREATED LUMBER.

FIRE RETARDANT TREATMENT
2. FOR WOOD MEMBERS REQUIRED BY CODE TO BE FIRE RETARDANT TREATED, PROVIDE PRESSURE IMPREGNATION WITH DRICON FIRE RETARDANT CHEMICALS IN ACCORDANCE WITH THE RECOMMENDATIONS AND QUALITY CONTROL OF KOPPERS CO., INC., TO PROVIDE A UL FRS FIRE HAZARD CLASSIFICATION. WOOD SHALL BE IDENTIFIED WITH A UL LABEL CERTIFYING THIS CLASSIFICATION AND THE FM DIAMOND.

FIRE-BLOCKING IN COMBUSTIBLE CONCEALED SPACES
3. PROVIDE FIRE BLOCKING IN ACCORDANCE WITH THE IBC OR CBC DEPENDING ON THE JURISDICTION.

4. DOUBLE STUD WALLS: BATTS OR BLANKETS OF MINERAL OR GLASS FIBER, OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE ALLOWED AS FIRE-BLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS.

5. CONCEALED WALL SPACES: FIRE-BLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS: VERTICALLY AT CEILING AND FLOOR LEVELS. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10'.

SECTION 06 20 00 / FINISH CARPENTRY

1. HANDLE AND STORE ARCHITECTURAL WOODWORK AND TRIM CAREFULLY, ACCEPTING DELIVERY ONLY AFTER STORAGE AREA TEMPERATURE IS BEING PERMANENTLY MAINTAINED ABOVE 62ºF AND AREA IS SUFFICIENTLY DRY SO WOODWORK WILL NOT BE DAMAGED BY EXCESSIVE CHANGE IN MOISTURE CONTENT.

FASTENINGS
2. ATTACH WORK TO SECURE SUPPORT, WITH FASTENINGS CONCEALED. BLIND NAIL WHERE POSSIBLE; WHERE NOT POSSIBLE, LOCATE, DRIVE AND SET SURFACE NAILS FOR PUTTY STOPPING SO AS NOT TO BE CONSPICUOUS IN THE FINISH. SURFACE NAIL PLAIN CASINGS AND BASE IN PAIRS AT 24" CENTERS. DRILL LEAD HOLES FOR SCREWS. APPLY ADHESIVES IN STRICT ACCORDANCE WITH MANUFACTURER'S DIRECTIONS, SUPPLEMENTING ADHESIVES WITH NAILING AS REQUIRED.

DOORS
3. PROVIDE UNIFORM 1/16" TO 1/8" EDGE CLEARANCE AT JAMBS AND HEADS AND BOTTOM CLEARANCE OF 1/8" ABOVE FINISH FLOORING EXCEPT AT UNDERCUT DOORS. BEVEL LOCK STILES AS REQUIRED TO MATCH HARDWARE AND ALLOW FOR PROPER CLEARANCE IN OPENING AND CLOSING DOORS. INSTALL SPECIFIED HARDWARE TO PROVIDE FREE SWINGING OR SLIDING DOORS THAT CLOSE EASILY AND LATCH SECURELY, FREE FROM RATTLING. REMOVE DOORS AFTER FITTING FOR FINISHING. RE-HANG DOORS AFTER FINISHING.

4. MAKE LOCK CUTOUTS WITH TEMPLATES USING MANUFACTURER'S RECOMMENDED METHODS. CUT MORTISES ACCURATELY TO SIZE AND DEPTH, WITH MINIMUM CLEARANCE. PATCHING WILL NOT BE PERMITTED, AND DOORS AND FRAMES INCORRECTLY PREPARED FOR HARDWARE SHALL BE REPLACED.

TRIM
5. INSTALL STANDING TRIM IN SINGLE LENGTHS WITHOUT SPLICES, RUNNING TRIM IN LENGTHS AS LONG AS POSSIBLE, JOINED ONLY WHERE SOLID FASTENINGS CAN BE MADE. END JOINTS IN BUILT_UP MEMBERS SHALL BE WELL DISTRIBUTED. MITER EXTERNAL CORNERS, COPE INTERNAL CORNERS.

SECTION 06 40 00 / ARCHITECTURAL WOODWORK

1. SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
a. SUBMIT DRAWINGS ON ITEMS OF ARCHITECTURAL WOODWORK.
b. SUBMIT MANUFACTURER'S DESCRIPTIVE LITERATURE OF SPECIALTY ITEMS NOT MANUFACTURED BY THE ARCHITECTURAL WOODWORK MANUFACTURER.
c. SUBMIT SAMPLES OF EACH WOOD SPECIES THAT IS TO RECEIVE TRANSPARENT FINISH AT JOB SITE.
d. SUBMIT FINISHED SAMPLES OF EACH FINISH TO BE APPLIED AT FACTORY.

QUALITY ASSURANCE
2. THE QUALITY STANDARDS OF THE AWI SHALL APPLY AND BY REFERENCE ARE HEREBY MADE A PART OF THIS SPECIFICATION. REFERENCE TO CUSTOM GRADE IN THIS SPECIFICATION SHALL BE AS DEFINED IN THE LATEST EDITION OF THE AWI QUALITY STANDARDS. ITEMS NOT GIVEN A SPECIFIC QUALITY GRADE SHALL BE CUSTOM GRADE.

3. THE ARCHITECTURAL WOODWORK MANUFACTURER IS RESPONSIBLE FOR DETAILS AND DIMENSIONS NOT CONTROLLED BY JOB CONDITIONS AND SHALL SHOW ON HIS SHOP DRAWINGS REQUIRED FIELD MEASUREMENTS BEYOND HIS CONTROL.

MATERIALS
4. PANELING AND TRIM
a. STANDING AND RUNNING TRIM: AWI CUSTOM GRADE, SOLID WOOD, RED OAK
b. PANELING: SOLID WOOD, RED OAK. PLYWOOD, 3/4" WITH RED OAK VENEER
5. CASEWORK FOR OPAQUE FINISH
a. AWI CUSTOM GRADE, DETAILS SHALL CONFORM TO FULL OVERLAD DESIGN
b. EXPOSED PARTS: HARDWOOD
c. SEMI EXPOSED PARTS: AS GOVERNED BY SELECTED AWI QUALITY GRADE
6. CASEWORK FOR TRANSPARENT FINISH
a. AWI CUSTOM GRADE, DETAILS SHALL CONFORM TO FULL OVERLAY DESIGN
b. EXPOSED PARTS: RED OAK
c. SEMI EXPOSED PARTS: AS GOVERNED BY SELECTED AWI QUALITY GRADE
7. CASEWORK WITH LAMINATE FINISH
a. AWI CUSTOM GRADE, DETAILS SHALL CONFORM TO FULL OVERLAY DESIGN
b. EXPOSED SURFACES: NEMA LD_3, GRADE GP_28 AS SCHEDULED
c. BACKING SHEET: NEMA LD_3, GRADE BK_20
d. SEMI EXPOSED SURFACES: AS GOVERNED BY SELECTED AWI QUALITY GRADE
8. LAMINATE COUNTER TOPS
a. AWI CUSTOM GRADE
b. LAMINATE SELECTION: NEMA LD_3, GRADE GP_50, COLOR PATTERNS AS SCHEDULED
9. HARDWARE
a. CASEWORK MANUFACTURER SHALL FURNISH AND INSTALL ITEMS OF CASEWORK HARDWARE AS FOLLOWS:
b. PULLS: SCHAUB AND COMPANY SHC 721 3" (FINISH SHALL MATCH ROOM DOOR HARDWARE)
c. DRAWER GUIDES: K_V 1260
d. HINGES: MEPLA 95º FULL OVERLAY, SELF-CLOSING
e. SHELF STANDARDS: K_V STANDARD 85 WHITE, BRACKETS 185 WHITE

SECTION 06 52 13 / FIBERGLASS-REINFORCED PLASTIC (FRP)

PART 1 - GENERAL
1.1 SUMMARY
A. RELATED DOCUMENTS:
1. DRAWINGS AND GENERAL PROVISIONS OF THE SUBCONTRACT APPLY TO THIS SECTION.
2. REVIEW THESE DOCUMENTS FOR COORDINATION WITH ADDITIONAL REQUIREMENTS AND INFORMATION THAT APPLY TO WORK UNDER THIS SECTION.

B. SECTION INCLUDES:
1. FURNISHING AND INSTALLING FRAMING PIECES, FITTINGS, FIBERGLAS® GRATING DEVICES, BEARING PLATES, BOLTS, AND PROVIDING SPECIAL INSTRUCTIONS, TEMPLATES AND SETTING PLANS FOR THEIR INSTALLATION.
2. INSTALLING FIBERGLAS® GRATING SHOWN ON THE DRAWINGS.
3. SUPPLYING COMPLETE ERECTION DRAWINGS AND INSTRUCTIONS.

C. RELATED SECTIONS:
1. DIVISION 01 SECTION "GENERAL REQUIREMENTS."
2. DIVISION 01 SECTION "SPECIAL PROCEDURES."

1.2 REFERENCES

A. GENERAL:
1. THE FOLLOWING DOCUMENTS FORM PART OF THE SPECIFICATIONS TO THE EXTENT STATED. WHERE DIFFERENCES EXIST BETWEEN CODES AND STANDARDS, THE ONE AFFORDING THE GREATEST PROTECTION SHALL APPLY.
2. UNLESS OTHERWISE NOTED, THE REFERENCED STANDARD EDITION IS THE CURRENT ONE AT THE TIME OF COMMENCEMENT OF THE WORK.
3. REFER TO DIVISION 01 SECTION "GENERAL REQUIREMENTS" FOR THE LIST OF APPLICABLE REGULATORY REQUIREMENTS.

B. MANUAL OF STEEL CONSTRUCTION OF THE AISC, 9TH EDITION.

C. ASTM INTERNATIONAL APPLICABLE STANDARDS.

D. U.S. DEPARTMENT OF ENERGY GENERAL DESIGN CRITERIA MANUAL, DOE 6430.1A.

1.3 SUBMITTALS

A. SUBMIT UNDER PROVISIONS OF DIVISION 01 SECTION "GENERAL REQUIREMENTS."

B. SUBMIT SHOP DETAIL DRAWINGS INCLUDING BRACING.

C. SUBMIT MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.

D. PRIOR TO FABRICATION, PROVIDE COMPLETE SHOP, ERECTION, INSTALLATION AND ASSEMBLY DRAWINGS FOR THE WORK, INCLUDING ANCHOR BOLT SETTINGS PLAN, AS REQUIRED TO ASSEMBLE ALL PARTS, COMPONENTS AND ACCESSORIES. DRAWINGS SHALL INDICATE THE PIECE MARKS OF ALL PARTS TO BE ERECTED OR ASSEMBLED AND CLEARLY DEPICT THE METHODS AND SEQUENCE OF ASSEMBLY AND ERECTION.

E. COPIES OF SHOP DRAWINGS, INCLUDING ERECTION DRAWINGS, SHALL BE SUBMITTED TO THE UNIVERSITY FOR REVIEW BEFORE THE START OF FABRICATION. THE UNIVERSITY REVIEW IS OF A GENERAL NATURE ONLY, AND ALL RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS, SPECIFICATIONS AND DIMENSIONS SHALL REMAIN WITH THE SUBCONTRACTOR. THE SUBCONTRACTOR SHALL VERIFY ALL LAYOUT DIMENSIONS WITH THE WINGS, AND WILL NOTIFY THE UNIVERSITY OF ANY DISCREPANCY AND/OR OMISSION. DO NOT FABRICATE ANY MEMBERS UNTIL ALL DIMENSIONS HAVE BEEN VERIFIED AND RESOLVED.

F. FOLLOWING THE MANUFACTURER'S FINAL INSPECTION SUBMIT THE MANUFACTURER'S CERTIFICATION IN ACCORDANCE WITH PARAGRAPH 3.3A.

1.4 QUALITY ASSURANCE

A. MANUFACTURER'S QUALIFICATIONS:

1. THE MANUFACTURER SHALL BE EXPERIENCED IN THE MANUFACTURE OF FIBERGLAS® REINFORCED PLASTIC STRUCTURES OF EQUIVALENT TYPE, SIZE, AND COMPLEXITY REQUIRED BY THESE SUBCONTRACT DOCUMENTS. MANUFACTURER SHALL HAVE A MINIMUM OF 5 YEARS EXPERIENCE IN FABRICATION OF FRP STRUCTURES.

2. THE SUBCONTRACTOR WILL CERTIFY IN WRITING THAT MATERIALS HAVE BEEN TESTED IN ACCORDANCE WITH A CERTIFIED QUALITY ASSURANCE PROGRAM, AND HAVE BEEN PROVEN TO BE SATISFACTORY FOR THE USE INTENDED BY THESE SUBCONTRACT DOCUMENTS.

B. DESIGN LOADS:
1. LIVE LOAD: 125 POUNDS PER SQUARE FOOT (MINIMUM), 2000 POUNDS CONCENTRATED LOAD WITH 1/4 INCH OR LESS DEFLECTION.

1.5 DELIVERY, STORAGE, AND HANDLING

A. DELIVER TO THE SITE ALL MATERIALS REQUIRED FOR ERECTION. PLACE MEMBERS AND COMPONENTS OFF THE GROUND USING PALLETS, PLATFORMS, OR OTHER SUPPORTS. PROVIDE COVERS, AND PROTECT MEMBERS AND PACKAGED MATERIALS FROM THE WEATHER.

PART 2 - PRODUCTS

2.1 MATERIALS

A. PRIMARY FRAMING:
1. STRUCTURAL SHAPES SHALL BE PULTRUDED FROM VINYLESTER RESIN SERIES 1625 BY CREATIVE PULTRUSIONS, ISOPHTHALIC POLYESTER SERIES 525 BY EXTREN, OR EQUAL, HAVING AS CLASS I FIRE RATING PER ASTM E 84 WITH THE FOLLOWING MINIMUM STRENGTH CHARACTERISTICS: PROPERTY TEST METHOD VALUE FLEXURAL STRENGTH ASTM-D-790
LONGITUDINAL 37,000 PSI
TRANSVERSE 10,000 PSI
FLEXURAL MODULUS ASTM-D-790
LONGITUDINAL 2.0 X 106 PSI
TRANSVERSE 1.0 X 106 PSI
COMPRESSIVE STRENGTH ASTM-D-695
LONGITUDINAL 37,500 PSI
TRANSVERSE 20,000 PSI
TENSILE STRENGTH ASTM-0-638 37,500 PSI
SHEAR STRENGTH ASTM-D-732 7,000 PSI
MODULUS OF ELASTICITY 2.8X106 PSI

B. THE FIBERGLAS® REINFORCED PLASTIC (FRP) GRATING FOR THE WORK WILL BE IFR MANUFACTURED FIBERGRATE CORPORATION AND WILL BE FURNISHED TO THE SUBCONTRACTOR BY THE UNIVERSITY. THE GRATING PANELS SHALL BE TRANSPORTED FROM THEIR STORAGE LOCATION, CUT TO SIZE AND INSTALLED BY THE SUBCONTRACTOR.

C. FASTENERS AND SADDLE CLIPS: 316 STAINLESS STEEL (S.S.)

2.2 FABRICATION

A. STRUCTURAL MEMBERS, FASTENERS, AND ACCESSORIES SHALL BE SHOP FABRICATED IN ACCORDANCE WITH APPLICABLE ASTM STANDARDS.

B. MATERIALS FURNISHED SHALL BE WITHIN THE STANDARD INDUSTRY TOLERANCES FOR THAT MATERIAL AS SPECIFIED BY THE MANUFACTURER.

C. MANUFACTURER'S WORKMANSHIP SHALL BE SUCH THAT THE PARTS ARE ACCURATELY MADE AND TRUE TO DIMENSION SO THAT IN ERECTION OF SAME, ALL PARTS WILL PROPERLY FIT TOGETHER.

D. THE DIMENSIONAL TOLERANCES OF PULTRUDED SHAPES SHALL BE AS SPECIFIED IN ASTM 3917-80 "STANDARD SPECIFICATIONS FOR DIMENSIONAL TOLERANCES OF THERMOSETTING GLASS REINFORCED PLASTIC PULTRUDED SHAPES".

E. ALL FRP GRATING AND STRUCTURAL MEMBERS THAT ARE CUT OR DRILLED SHALL HAVE THOSE AFFECTED SURFACES SEALED WITH CATALYZED RESIN SEALANT PRIOR TO INSTALLATION. THE RESIN AND OTHER MATERIALS USED SHALL BE COMPATIBLE WITH THE ENVIRONMENT AND AS A MINIMUM SHALL BE SIMILAR TO, IF NOT THE SAME, AS THE BASE RESIN USED.

F. FABRICATION AND INSTALLATION OF ALL PULTRUDED SHAPES SHALL BE DONE IN SUCH A WAY AS TO PREVENT ATTACK FROM CORROSIVE AGENTS. EXTRA CARE SHOULD BE TAKEN TO PREVENT ANY DAMAGE TO THE PULTRUDED SECTIONS. SCRATCHES AND GOUGES, AS WELL AS ALL CUT EDGES AND DRILLED HOLES, SHALL BE RESIN SEALED TO PREVENT EXCESSIVE ATTACK OF THE LAMINATE. THE RESIN AND OTHER MATERIALS USED SHALL BE COMPATIBLE WITH THE ENVIRONMENT AND AS A MINIMUM SHALL BE SIMILAR TO, IF NOT THE SAME, AS THE BASE RESIN USED. DRILLED HOLES MAY BE OVERSIZED A MAXIMUM OF 1/16 INCH.

PART 3 - EXECUTION
3.1 ERECTION

A. THE SUBCONTRACTOR SHALL EXAMINE THE AREAS AND CONDITIONS UNDER WHICH THE WORK IS TO BE INSTALLED. DO NOT PROCEED WITH THE WORK

UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. BEGINNING OF INSTALLATION MEANS THE ERECTOR ACCEPTS EXISTING CONDITIONS.

B. ERECT FRAMING, GRATING AND ACCESSORY ITEMS IN ACCORDANCE WITH MANUFACTURER'S ERECTION DRAWINGS AND AS DIRECTED BY MANUFACTURER'S WRITTEN RECOMMENDATIONS.

C. ALL FRAMING WORK SHALL BE TRUE TO LINE, LEVEL, AND PLUMB.

D. IN ORDER TO PREVENT SECONDARY STRESSES, DO NOT FORCE MEMBERS INTO POSITION. PLAN ERECTION SEQUENCES ACCORDINGLY.

E. PROVIDE TEMPORARY BRACING AND SUPPORTS AS REQUIRED TO ENSURE FRAME STABILITY DURING ERECTION.

F. COMPLETED FRAME AND GRATING SHALL COMPLY WITH APPROVED ERECTION TOLERANCES AND SHOP DRAWING REQUIREMENTS.

G. GRATING IS TO BE FASTENED TO SUPPORT MEMBERS WITH 1/4 INCH DIAMETER FASTENERS IN THE FOLLOWING PATTERN: TWO FASTENERS LOCATED BETWEEN THE THIRD AND FOURTH VERTICAL ON EACH END OF A PANEL AND ONE FASTENER IN THE MIDDLE ON INTERMEDIATE SUPPORTS.

H. SEE PARAGRAPH 2.2F FOR PROTECTION AND REPAIR OF MEMBERS AND ASSEMBLY.

3.2 CLEANING

A. UPON COMPLETION OF WORK CONTAINED IN THESE SPECIFICATIONS, LEAVE ALL WORK AND PREMISES CLEAN AND IN SATISFACTORY CONDITION.

3.3 INSPECTION

A. THE COMPLETED ASSEMBLY SHALL UNDERGO A FINAL INSPECTION BY MANUFACTURER'S REPRESENTATIVE TO CERTIFY THAT THE FINISHED PRODUCT HAS BEEN ERECTED IN ACCORDANCE WITH THE MANUFACTURER'S SHOP DRAWINGS AND THESE SPECIFICATIONS.

SECTION 07 13 00 / MEMBRANE WATERPROOFING

1. ISSUE A WRITTEN GUARANTEE TO OWNER TO MAINTAIN WATERPROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO YEARS AND A MANUFACTURER'S WARRANTY FOR PRODUCT USED FOR A PERIOD OF FOUR YEARS.

2. ON AREAS INDICATED, APPLY A WATERPROOF MEMBRANE WITH A MINIMUM .060" SELF-ADHERING MEMBRANE OF RUBBERIZED ASPHALT INTEGRALLY BONDED TO POLYETHYLENE SHEETING.

3. MATERIALS SHALL BE DELIVERED IN ORIGINAL PACKAGES. STORE MEMBRANE WHERE IT WILL NOT EXCEED 90° F. FOR EXTENDED PERIODS.

MATERIALS
4. MATERIALS SHALL BE AS MANUFACTURED BY W. R. GRACE COMPANY.
a. WATERPROOF MEMBRANE: BITUTHENE 3000.
b. LIQUID MEMBRANE: BITUTHENE LM-3000.
c. PRIMER: BITUTHENE WP-3000.
d. ELASTOMERIC MASTIC : BITUTHENE EM-3000.

5. PROTECTION MATERIAL: MINERAL SURFACED FIBERGLASS CAP SHEET APPROVED BY MEMBRANE WATERPROOFING MANUFACTURER AT HORIZONTAL APPLICATIONS, HYDRODUCT COIL 600 AT VERTICAL APPLICATIONS.

INSTALLATION
6. SURFACES TO RECEIVE WATERPROOFING SHALL BE DRY, SMOOTH, RIGID, CLEAN, FROST-FREE, AND FREE OF VOIDS, DIRT, DEBRIS, SHARP PROJECTIONS, GREASE, OIL OR OTHER CONTAMINANTS. DUST SHALL BE REMOVED FROM THE SURFACE IMMEDIATELY BEFORE APPLICATION OF PRIMER.

7. AT THE END OF EACH WORKING DAY, WATER CUT-OFFS MUST BE INSTALLED TO PROTECT AGAINST WATER PENETRATION UNDER INSTALLED MEMBRANE. THESE TEMPORARY WATER CUT-OFFS MUST BE CLEARLY REMOVED BEFORE WORK IS RESUMED.

8. APPLY PRIMER TO SURFACE WITH LAMB'S WOOL ROLLER AT A RATE OF 250 TO 350 SF PER GALLON. ALLOW PRIMER TO DRY UNTIL TACK FREE. PRIME ONLY THE AREA WHICH WILL COVER WITH MEMBRANE IN A WORKING DAY. AREAS NOT COVERED WITH MEMBRANE IN 4 HOURS MUST BE RE-PRIMED. DRY PRIMED SURFACES SHALL BE COVERED IMMEDIATELY WHERE CONTAMINANTS FROM THE AIR ARE ACCUMULATING ON THE SURFACE. METAL OR OTHER DENSE SURFACES SHALL NOT REQUIRE PRIMING BUT SHALL BE CLEAN, DRY, FREE OF LOOSE PAINT, RUST OR OTHER CONTAMINANTS.

9. APPLY MEMBRANES FROM THE LOW POINT TO THE HIGH POINT SO THAT LAPS SHED WATER. SIDE LAPS MUST BE OVERLAPPED A MINIMUM OF 2" ON NON-NAILED SYSTEMS. IF THE USE OF NAILS IS REQUIRED, LARGE HEAD NAILS AT 12" INTERVALS MUST BE COVERED WITH AN 8" STRIP OF BITUTHENE MEMBRANE.

10. APPLY A TROWELED BEAD OF ELASTOMERIC MASTIC TO VERTICAL AND HORIZONTAL TERMINATIONS. LIQUID MEMBRANE CAN BE USED AS AN ALTERNATE METHOD.

11. HORIZONTAL APPLICATIONS SHALL BE FLOOD TESTED WITH A MINIMUM 2" HEAD OF WATER FOR 24 HOURS. MARK LEAKS AND REPAIR WHEN THE MEMBRANE IS DRY. BEFORE FLOOD TESTING, VERIFY THAT THE STRUCTURE WILL WITHSTAND THE DEAD LOAD OF THE WATER.

12. SEAL DAILY TERMINATIONS WITH A TROWELED BEAD OF ELASTOMERIC MEMBRANE. MEMBRANE WATERPROOFING SHALL NOT BE APPLIED TO AREAS WHERE PERMANENTLY EXPOSED TO SUNLIGHT.

13. THE SPECIFIED PRODUCTS ARE INCOMPATIBLE WITH FRESH TARS, PITCHES AND CERTAIN LIQUID WATERPROOFING PRODUCTS AND SEALANTS CONTAINING TAR OR POLYSULFIDE POLYMER. AVOID DIRECT CONTACT OF THE ADHESIVE LAYER OF MEMBRANE OR ELASTOMERIC MASTIC WITH SUCH PRODUCTS. DO NOT APPLY ELASTOMERIC MASTIC WHERE IT WILL BE COVERED WITH MEMBRANE.

BALCONIES
14. WHERE THE METAL EDGE AT THE BALCONY OCCURS, THE FLANGES ARE TO BE SET IN A TROWELING OF ELASTOMERIC MASTIC ON UNDER THE MEMBRANE WATERPROOFING, NAILED IN PLACE AND STRIPED IN WITH MEMBRANE EXTENDING AT LEAST 6" BEYOND THE FLANGE. METAL FLANGES SHALL BE 4" WIDE MINIMUM. THE FLANGES SHALL BE STAGGER-NAILED 3" OC IN LINES 3/4" AND 2-1/4" IN FROM THE GUTTER EDGE OF THE FLANGE.

15. THE MATERIALS SHALL BE INSTALLED THE SAME DAY THE MEMBRANE IS APPLIED OR IMMEDIATELY AFTER 24-HOUR TESTING AT HORIZONTAL APPLICATIONS. PROTECTIONS MATERIAL SHALL BE SECURED IN PLACE BY AN APPROVED METHOD UNTIL THE BALCONY CONCRETE OR BACKFILL IS PLACED. NAILS OR OTHER FASTENERS SHALL NOT PENETRATE THROUGH THE MEMBRANE.

SECTION 07 14 00 / FLUID APPLIED WATERPROOFING

1. ISSUE A WRITTEN GUARANTEE TO OWNER TO MAINTAIN WATERPROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO YEARS AND A MANUFACTURER'S WARRANTY FOR PRODUCT USED FOR A PERIOD OF FOUR YEARS.

MATERIALS
2. SINGLE-COMPONENT MOISTURE CURED, MODIFIED POLYURETHANE COATING, CAPABLE OF FORMING A CONTINUOUS, FLEXIBLE, SEAMLESS MEMBRANE ON VERTICAL OR HORIZONTAL SURFACES.

3. MATERIALS SHALL BE AS MANUFACTURED BY URETHANE POLYMERS INTERNATIONAL SYSTEM BG 7011R-60 MIL

INSTALLATION
4. VERIFY THAT ADJACENT FLASHINGS, REGLETS, SUMPS AND PENETRATIONS THROUGH WATERPROOFING, SUCH AS VENTS AND DRAINS ARE IN PLACE PRIOR TO COMMENCEMENT OF INSTALLATION.

5. SURFACES SHALL BE STRUCTURALLY SOUND, CLEAN, AND FREE OF VISIBLE MOISTURE, GREASE, DIRT CONTAMINATES, CLEANING RESIDUE AND CORROSION. REMOVE FRESH ASPHALT, RESIN-BASED CURING COMPOUNDS OR LOOSE PAINT. WHEN APPLYING ONTO WOOD FLOAT CONCRETE SURFACES, USE COMPRESSED AIR TO REMOVE DUST AND DIRT JUST PRIOR TO APPLYING THE WATERPROOFING MEMBRANE.

6. SURFACES SHALL BE PRIMED AROUND THE PERIPHERY (OUTER 6") OF THE AREA TO BE COATED AND AROUND VENTS, PIPING, DRAINS, CHANGES IN PLANE AND OTHER AREAS WHERE CONTINUITY OF THE MEMBRANE WILL BE BROKEN.

7. EXPANSION AND CONTRACTION JOINTS SHOULD BE CLEANED, PRIMED, FITTED WITH A BACKING ROD AND CAULKED WITH POLYURETHANE SEALANTS. JOINTS SHOULD BE STRIPE-COATED WITH A PREPARATORY COAT OF UPI-BG-701R-60 MIL. PRESS INTO THE WET COATING A MESH APPROVED BY THE MANUFACTURER.

8. MOVING CRACKS IN THE STRUCTURAL SLAB WHICH ARE 1/16" WIDE OR GREATER SHOULD BE ROUTED TO FORM A JOINT AND SEALED AS AN EXPANSION OR CONTRACTION JOINT. NON-MOVING CRACKS SHOULD BE STRIPE COATED WITH UPI-BG-701R-60 MIL FOR A DISTANCE OF 3" ON EITHER SIDE OF THE CRACK.

9. PRIOR TO APPLICATION, CONCRETE SURFACES SHOULD BE SOUND AND HAVE CURVED A MINIMUM OF 28 DAYS WITHOUT THE USE OF CURING COMPOUNDS.

SHOWER PAN AND CERAMIC TILE:
10. INSTALL WATERPROOFING AROUND DRAIN, UP WALL A MINIMUM OF 24" ON SHEET METAL BACKING AND ON FLOOR OF SHOWER. INSTALL WATERPROOFING UNDER CERAMIC TILE FLOORING AND UP WALL A MINIMUM OF 6" ON SHEET METAL BACKING.

11. WATERPROOFING SHALL BE APPLIED ON THE BUILDING WALLS AT LANDSCAPED AREAS AND AS A LINING FOR FOUNTAINS.

FINAL INSPECTION
12. WHEN THE WATERPROOFING APPLICATION IS COMPLETE AND CURED, CALL FOR AN INSPECTION BY A REPRESENTATIVE OF THE WATERPROOFING MANUFACTURER. THE RECOMMENDATIONS OF THE REPRESENTATIVE SHALL BE COMPLETED PRIOR TO FURTHER WORK BEING PERFORMED ON OR OVER THE WATERPROOFING MEMBRANE.

SECTION 07 21 00 / THERMAL INSULATION

1. INSULATION MATERIALS SHALL BE REINFORCED FOIL LAMINATE FACED FLEXIBLE FIBERGLASS BATTS OR BLANKETS CONFORMING TO ASTM C665, TYPE III, CLASS A. REFER TO PLANS FOR R VALUE. INSULATION MATERIALS SHALL BE LABELED WITH R VALUE AND MANUFACTURER'S NAME.

2. INSULATION MATERIAL FOR INSIDE FACE OF MASONRY WALLS SHALL BE FIBERGLASS MASONRY WALL INSULATION, 1_1/2" NOMINAL THICKNESS, R = 6, CONFORMING TO ASTM C_665 TYPE I.

3. ADHESIVES SHALL BE OF THE TYPE RECOMMENDED BY THE INSULATION MANUFACTURER, AND COMPLYING WITH FIRE_RESISTANCE REQUIREMENTS.

INSTALLATION
4. MAINTAIN VAPOR BARRIER CONTINUOUS OVER INSULATED SURFACE. PATCH TEARS IN VAPOR BARRIER IN AN APPROVED MANNER.

5. CUT AND FIT INSULATION MATERIALS AROUND PIPES, CONDUITS, OUTLET BOXES, ETC., AS NECESSARY TO MAINTAIN THE INTEGRITY OF THE INSULATION. WHERE PIPES ARE INSTALLED IN SPACES TO RECEIVE INSULATION, PLACE INSULATION BETWEEN EXTERIOR WALL AND THE PIPE, COMPRESSING INSULATION AS NECESSARY. FULLY INSULATE SMALL AREAS BETWEEN CLOSELY SPACED FRAMING MEMBERS.

6. AT ROOF AND WALL AREAS INSTALL INSULATION BETWEEN FRAMING MEMBERS WITH VAPOR BARRIER TOWARD BUILDING INTERIOR AND FLANGES CONTINUOUSLY TIGHT AGAINST INSIDE OF FRAMING MEMBERS. SECURE INSULATION FLANGE TO FRAMING MEMBERS TO RETAIN IT IN POSITION USING STAPLES OR NAILS OR OTHER APPROVED METHODS.

7. AT WALL AREAS INSTALL INSULATION BETWEEN FURRING STRIPS WITH FLANGES.

8. AT JOIST AREAS PROVIDE WIRES AT BOTTOM CHORD TO SUPPORT INSULATION. PLACE WIRES NOT TO EXCEED 16" OC. STAPLE WIRES TO WOOD CHORD.

9. METHODS OF SECURING INSULATION IN POSITION SHALL BE THE RESPONSIBILITY OF CONTRACTOR. INSTALLATION SHALL BE PERFORMED SO THAT INSULATION WILL NOT BE DISPLACED.

SECTION 07 25 00 / SOUND ATTENUATION BATTS

1. PRODUCTS AS MANUFACTURED BY OWENS CORNING OR JOHNS MANVILLE, BUILDING INSULATION.

2. SOUND ATTENUATION BATTS: NOISE BARRIER BATTS, TYPE 1, UN-FACED 3-1/2" THICK, 4" THICK OR 6" THICK TO MATCH WALL STUD WIDTH.

3. ACOUSTICAL SEALANT: EQUAL TO USG ACOUSTICAL SEALANT

INSTALLATION
4. PLACE SEALANT UNDER STUD TRACKS. INSTALL ACOUSTICAL INSULATION IN BETWEEN STUDS. WHERE INDICATED ON THE DRAWINGS, PROVIDE LOOSE-LAID SOUND BATTS ABOVE CEILING TILES. LAY BATTS HORIZONTALLY WITH A SNUG FIT.

5. SOUND BATTS SHALL BE PRESSED FIRMLY IN PLACE AGAINST BACK OF GYPSUM BOARD AND STAPLED. STAPLES AND METHOD OF INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. AN AIR SPACE SHALL BE MAINTAINED BETWEEN BATTS AND BACK SURFACE OF ONE PARTITION FACE. CONTINUITY OF BATTS SHALL BE MAINTAINED. USE FULL-LENGTH STRIPS WHERE POSSIBLE.

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REGISTERED ARCHITECT
CERTIFICATE NO.
No. 9452
ROBERT W. KUBICEK
Date Signed 11/18/2[illegible]
ARIZONA, U.S.A.
EXPIRES 06/30/2027

DATE : 05-08-26

SPECIFICATIONS

NOTICE OF ALTERNATE BILLING OR PAYMENT CYCLE: THIS CONTRACT MAY ALLOW THE OWNER TO REQUIRE THE SUBMISSION OF BILLINGS OR ESTIMATES IN BILLING CYCLES OTHER THAN THIRTY DAYS. THIS CONTRACT MAY ALLOW OWNER TO MAKE PAYMENT ON SOME ALTERNATIVE SCHEDULE AFTER CERTIFICATION AND APPROVAL OF BILLING AND ESTIMATES. A WRITTEN DESCRIPTION OF SUCH OTHER BILLING CYCLE APPLICABLE TO THE PROJECT IS AVAILABLE FROM OWNER OR DESIGNATED AGENT.
NAME
ADDRESS
ADDRESS
CONTACT: Name
PHONE:

BROOKLYN BEDDING
PAD 5B - SUITES 101 AND 102 AT PASEO LINDO SHOPPING CENTER
NEC OF ARIZONA AVE AND OCOTILLO RD.
CHANDLER, AZ

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A9.1
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