

GENERAL CONDITIONS		CONCRETE SPECIFICATIONS	MASONRY	LOCATION: EXTERIOR PERIMETER FINISH, PATTERN AND COLOR: SATIN FINISH, CONTINUOUS MOLDED SOFFIT, WHITE SPECIFY: MANUFACTURER, STYLE AND ITEM NUMBER	1. ALL GLUE LAMINATED MEMBERS SHALL BE MADE OF 1 1/2" DOUGLAS FIR LAMINATIONS, COMBINATION 24F--PER AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. 2. INDUSTRIAL APPEARANCES GRADE SHALL BE USED , WITH MOISTURE CONTENT BETWEEN 7% AND 14 % UNLESS NOTED OTHERWISE. 3. FABRICATOR SHALL BE A MEMBER OF A.I.T.C. AND ALL FABRICATION SHALL BE PERFORMED IN ACCORDANCE WHIT THE LATES EDITION OF TIMBER CONSTRUCTION STANDARS, BY A.I.T.C. LUMBER SHAL BE MARKED WITH AN A.I.T.C. QUALITY MARK INDICATING CONFORMANCE WITH THE COMMERCIAL STANDARDS STRUCTURAL GLUED LAMINATED LUMBER. 4. GLUE LAMINATED MEMBERS SHALL BE ACCOMPANIED BY A CERTIFICATE OF 1. LATERAL SUPPORTS IS REQUIRED AT ALL BEARING POINTS AND ALONG COMPRESSION EDGE AT INTERVALS OF 24" O.C. OR CLOSER. 2. ALLOWABLE DESIGN STRESSES: Fb= 2900 PSI Fv= 290 PSI E= 2,000,000 PSI 3. BEARING LENGTH SHOULD NEVER BE LESS THAN 1 1/2" AT THE ENDS, 3 1/2" AT INTERMEDIATE SUPPORTS. BEARING ACROSS THE FULL WIDTH OF THE BEAM IS REQUIRED. 4. DO NOT OVERHANG DEAT CUTS ON PARALLAM PSL BEAMS BEYOND INSIDE FACE OF SUPPORT MEMBERS. 5. NOTCHING FOR UNIFORMLY LOADED BEAMS ONLY: 2" DIAMETER HOLES MAXIMUM DEPTH 1/3 OF THE DEPTH. THE DEPTH OF THE ADDITIONAL HOLES WITHIN THE SAME REGION MUST BE A MINIMUM DISTANCE OF TWICE THE LATEST HOLE DIAMETER. RECTANGULAR HOLES ARE NOT ALLOWED. NO NOTCHING IS ALLOWED IN CANTILEVER MEMBERS WITHOUT PRIOR APPROVAL BY THE ENGINEER. 6. APPROVED BY NATIONAL EVALUATION REPORT NER-292 7. WHERE MEMBERS QUALIFY AS REPETITIVE MEMBERS AN ALLOWABLE BENDING STRESS INCREASE OF 4 % IS PERMITTED. 8. PARALLAM PSL SHALL HAVE A LABEL STATING THE MANUFACTURE'S NAME AND PLANT NUMBER, THE NATIONAL EVALUATION SERVICE REPORT NUMBER, AND THE LABEL OF THE PFS CORPORATION (NER--QA251). 9. WHEN REQUESTED A COMPLETE SET OF CALCULATIONS SHALL BE PREPARED BY THE MANUFACTURER UNDER THE SUPERVISION OF A CIVIL OR STRUCTURAL ENGINEER. 10. SHOP DRAWINGS WHEN REQUESTED SHALL BE PROVIDED BY THE MANUFACTURER. THE MANUFACTURER SHALL NOT PROCEED WITH THE FABRICATION AND/OR CUTTING UNTIL THE SHOP DRAWING AND DESIGN CALCALATIONS HAVE BEEN REVISED BY THE ARCHITECT / OR ENGINEER. 11. ADHESIVES USED IN THE MANUFACTURING OF THE PSL SHALL BE OF THE WATERPROOF TYPE CONFORMING TO THE REQUIREMENTS OF ASM D-2559. 12. THE CONTRACTOR SHALL GIVE NOTIFICATION TO THE TRUS JOIST REPRESENTATIVE PRIOR T ENCLOSING THE PARALLAM PSI TO PROVIDE OPPORTUNITY FOR INSPECTION OF THE INSTALLATION.	
1. GENERAL CONTRACTOR SHALL VISIT THE BUILDING SITE AND SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING ANY WORK AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK AND MATERIALS, INCLUDING THOSE FURNISHED BY SUB-CONTRACTORS. ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES. 2. ALL ASTM, AICI AND AITC DESIGNATIONS SHALL BE AMENDED TO MOST RECENT DATE, UNLESS NOTED OTHERWISE. 3. GENERAL DETAILS ON THIS SHEET SHALL BE USED WHERE APPLICABLE, UNLESS NOTED OTHERWISE. 4. ALL OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND / OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK IN QUESTION. 5. CONTRACTOR SHALL PROVIDE SAFE AND ADEQUATE TEMPORARY ERECTION BRACING ON ALL BEAMS, WALLS, ETC. TO BE PROVIDED FULL STRUCTURAL STABILITY. BRACING SHALL NOT BE REMOVED UNTIL THE ELEMENT SUPPORTED IS CAPABLE OF SUPPORTING ITS DESIGN LOADING. 6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT UNIFORM BUILDING CODE AND ALL LOCAL CODE REQUIREMENTS. 7. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THE STRUCTURAL DRAWINGS. 8. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR MOUNDS, ORNAMENTS, GROOVES, CLIPS , GROUNDS, DROPPED SLABS, CURBS, ECT., NOT SHOWN ON STRUCTURAL DRAWINGS. 9. DESIGN CRITERIA: SEE DESIGN CALCULATIONS CODES: 2007 UNIFORM BUILDING CODE LATERAL LOADS: WIND EXPOSURE C AND BASIC WIND SPEED OF 70 MPH SEISMIC ZONE ? TEMPORARY FACILITIES AND CONTROLS - THIS WORK SHALL CONSIST OF THE APPLICATION OF TEMPORARY MEASURES THROUGHOUT THE LIFE OF THE PROJECT. TEMPORARY UTILITIES - ALL CONNECTIONS AND EXTENSIONS REQUIRED TO PROVIDE TEMPORARY UTILITIES SHALL BE MADE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. TEMPORARY ELECTRICITY - CONTRACTOR TO PROVIDE AND INSTALL TEMPORARY POWER FOR CONSTRUCTION SITE. CONNECT TO EXISTING POWER SERVICE WITHOUT DISRUPTING LOCAL SERVICE REQUIREMENTS. POWER FEEDER SERVICE CHARACTERISTICS SHALL BE COMPATIBLE WITH THE SERVICE FROM WHICH IT IS TAKEN. SIZE, TYPE AND LOADING SHALL BE REQUIREMENTS AS ESTABLISHED BY THE NATIONAL ELECTRIC CODE (NEC). THE CONTRACTOR SHALL PROVIDE MAIN SERVICE DISCONNECT AND OVER-CURRENT PROTECTION AT A CONVENIENT LOCATION IN ACCORDANCE WITH THE NEC. THE CONTRACTOR SHALL PROVIDE POWER OUTLETS FOR CONSTRUCTION OPERATIONS, WITH BRANCH WIRING AND DISTRIBUTION BOXES LOCATED AS NECESSARY AND SHALL PROVIDE FLEXIBLE POWER CORDS AND USE. PROVIDE AND INSTALL DISTRIBUTION EQUIPMENT, WIRING AND OUTLETS TO PROVIDE SINGLE PHASE BRANCH CIRCUITS FOR POWER AND LIGHTING. CONSTRUCTION SCAFFOLDING AND PLATFORMS - THE CONTRACTOR SHALL PROVIDE AND MAINTAIN FOR DURATION OF WORK ALL REQUIRED TEMPORARY STANDING SCAFFOLDING, 'INDEPENDENT TIED' SCAFFOLDS WILL NORMALLY BE PROVIDED FOR PAINTING, POINTING OR OTHER MAINTENANCE WORK. 'PUTLOG SCAFFOLDS', USED FOR THE CONSTRUCTION OF BRICK WALLS, HAVE ONLY ONE ROW OF STANDARDS WHICH ARE USUALLY ERECTED SOME 900MM FROM THE FACE OF THE WALL, WITH THE BOARDS CARRIED ON HORIZONTAL MEMBERS KNOWN AS 'PUTLOGS', WHEN USED IN NEW CONSTRUCTION, THE FLATTENED ENDS OF THE PUTLOGS ARE BUILT INTO THE BED JOINTS AS WORK PROCEEDS AND THEN WITHDRAWN ON COMPLETION, THE RESULTING HOLE BEING POINTED UP. VEHICULAR ACCESS AND PARKING - CONSTRUCT AND MAINTAIN TEMPORARY ROADS ACCESSING PUBLIC THOROUGHFARES TO SERVE CONSTRUCTION AREA. ARRANGE PARKING AREAS TO ACCOMMODATE CONSTRUCTION PERSONNEL. DO NOT ALLOW VEHICLE PARKING ON EXISTING PAVEMENT. WHEN SITE SPACE IS NOT ADEQUATE PROVIDE ADDITIONAL OFF-SITE PARKING. EXECUTION REQUIREMENTS - THE EXECUTION OF ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS AND MANUFACTURER'S WRITTEN SPECIFICATIONS OR MATERIAL'S INSTITUTE STANDARDS. WHERE THE MANUFACTURER'S RECOMMENDED DETAILS ARE USED, THE MANUFACTURER SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF THEIR PRODUCT. ALL WORK NOT SPECIFICALLY MENTIONED THAT IS REQUIRED TO MAKE THE WORK COMPLETE AND OPERATIONAL SHALL BE INCLUDED. CODES - CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL BUILDING CODES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND OWNER TO INSURE COMPLIANCE WITH SAID CODES AND MODIFY THE SPECIFICATIONS AS NEEDED TO COMPLY WITH SUCH CODES. MEASUREMENTS - THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWINGS. NOTED DIMENSIONS TAKE PRECEDENCE. WORKMANSHIP - WORKMANSHIP SHALL CONFORM TO THE BEST AND HIGHEST STANDARDS OF QUALITY IN EACH TRADE AND SHALL INCLUDE ALL ITEMS OF FABRICATION, CONSTRUCTION AND INSTALLATION. ALL WORK SHALL BE COMPLETED BY SKILLED TRADESMEN AND MECHANICS. INSTALLATION OF ALL EQUIPMENT AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. INSURANCE - BUILDERS RISK INSURANCE SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION UNTIL FINAL ACCEPTANCE BY THE OWNER. ALL BONDING AND INSURANCE REQUIREMENTS SHALL BE COORDINATED WITH THE OWNER PRIOR TO BEGINNING CONSTRUCTION. ALL CONTRACTORS SHALL PROVIDE AND BE SOLELY RESPONSIBLE FOR NECESSARY BARRICADES AND SAFETY PRECAUTIONS, AND STRICTLY ADHERE TO ALL GOVERNING CODES AND SAFETY, INCLUDING THE OSHA ACT. SQUARE FOOTAGE - INTERIOR FINISHED SQUARE FOOTAGE FIGURES REPRESENT HEATED AND COOLED FLOOR AREA ONLY AND DO NOT INCLUDE ADDITIONAL AREA FOR TWO-STORY OR VAULTED SPACES, GARAGES, DECKS, PORCHES OR ANY OTHER UNFINISHED AREAS. THESE DIMENSIONS ARE GENERALLY MEASURED FROM THE OUTSIDE FACE OF THE STUD. FILL IN THE APPROPRIATE SQUARE FOOTAGE NUMBERS FOR THE PROJECT YOU ARE SPECIFYING. 0,000 SF FINISHED INTERIOR 000 SF PARKING 000 SF UNFINISHED STORAGE 000 SF EXTERIOR PATIOS 000 SF EXTERIOR PORCHES 0,000 SF TOTAL		CONCRETE FORMWORK, REINFORCEMENT AND MATERIALS - PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THE PLAIN AND REINFORCED CONCRETE CALLED FOR ON THE PLANS. CONCRETE WHEN DEPOSITED SHALL HAVE A TEMPERATURE RANGING BETWEEN A MINIMUM OF 50 DEGREES FAHRENHEIT AND A MAXIMUM OF 90 DEGREES FAHRENHEIT. CONSTRUCTION OF FORMS - CONSTRUCT WOOD FORMS OF SOUND MATERIAL, AND OF THE CORRECT SHAPE AND DIMENSIONS, CONSTRUCTED TIGHTLY AND OF SUFFICIENT STRENGTH. BRACE AND TIE THE FORMS TOGETHER. MAKE JOINTS AND SEAMS MORTAR TIGHT. INSTALL LEAKAGE CONTROL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.IOR CHAMFERED CORNERS - UNLESS OTHERWISE NOTED, PROVIDE CHAMFERED CORNERS ON ALL EXPOSED CORNERS. PROVIDE 3/4 INCH MOLDINGS IN FORMS FOR ALL CHAMFERING REQUIRED. EMBEDDED ITEMS - MAKE PROVISIONS FOR SLEEVES, ANCHORS, INSERTS,???? WATER-STOPS AND OTHER FEATURES. FORM TIES - USE FORM TIES OF SUFFICIENT STRENGTH AND IN SUFFICIENT QUANTITIES TO PREVENT SPREADING OF THE FORMS. PLACE TIES AT LEAST 1 INCH AWAY FROM THE FINISHED SURFACE OF THE CONCRETE. DO NOT USE TIES CONSISTING OF TWISTED WIRE LOOPS. LEAVE INNER RODS IN CONCRETE WHEN FORMS ARE STRIPPED. SPACE ALL FORM TIES EQUIDISTANT AND SYMMETRICAL AND LINE UP BOTH VERTICALLY AND HORIZONTALLY. CLEANOUTS AND ACCESS PANELS - PROVIDE REMOVABLE CLEANOUT SECTIONS OR ACCESS PANELS AT THE BOTTOM OF ALL FORMS TO PERMIT INSPECTION AND EFFECTIVE CLEANING OF LOOSE DIRT, DEBRIS AND WATER MATERIAL. CLEAN ALL FORMS AND SURFACES TO RECEIVE CONCRETE OF ALL CHIPS, SAWDUST, AND OTHER DEBRIS AND THOROUGHLY BLOW OUT WITH COMPRESSED AIR JUST BEFORE CONCRETE IS PLACED. REINFORCING STEEL - REINFORCING STEEL (REBAR) SHALL BE MINIMUM ASTM A615, GRADE 40. ALL REINFORCEMENT SPLICES SHALL BE AS FOLLOWS: #5 BARS 25" MINIMUM, #7 BARS 35" MINIMUM. ALL REBAR (REINFORCING STEEL) SHALL BE LOCATED 3" CLEAR FROM BOTTOM AND SIDE OF FOOTING AND 2" CLEAR FROM TOP. LOCATE VERTICAL REBAR (REINFORCING STEEL) 4"-0" ON CENTER (OC). ALL REINFORCEMENT SPLICES SHALL BE IN ACCORDANCE WITH ACI 318 FOR "STRENGTH DESIGN." ALL REINFORCEMENT STEEL SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED, AND FIRMLY TIED IN PLACE WITH BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH ACI 301 AND ACI 318. WELED WIRE MESH.- WELED WIRE FABRIC SHALL CONFORM TO ASTM A105 AND BE LOCATED IN THE CENTER OF THE DEPTH. INSTALL AT SLAB ON GRADE CONDITIONS. NG OC ANCHOR BOLTS - PROVIDE 1/2" DIAMETER X 10" LONG ANCHOR BOLTS IN FILLED CELLS AND POURED CONCRETE WALLS AT 48" ON CENTER (OC) MAXIMUM AT ALL WINDOW LOCATIONS AND ON EACH SIDE OF EXTERIOR DOORS. FOR SLABS, INSTALL APPROPRIATE TIE DOWNS OR STRAPS AS REQUIRED BY APPLICABLE BUILDING CODES. FOOTINGS - CENTER ALL FOOTINGS ON WALLS, PIERS, OR COLUMNS ABOVE UNLESS OTHERWISE NOTED. ALL FOOTINGS SHALL REST ON UNDISTURBED VIRGIN SOIL WITH MINIMUM SOIL BEARING ALLOWABLE OF 2500 PSF, TESTED FOR 95 PERCENT COMPACTION, OR 3/4" STONE COMPACTED IN 12" LIFTS TO 95 PERCENT DENSITY IF FILL IS REQUIRED. FOOTINGS AT BUILDING PERIMETER SHALL BE A MINIMUM OF 12" BELOW FROST LINE AND 20" WIDE. (CHECK WITH LOCAL BUILDING OFFICIALS FOR FROST LINE LEVEL) CONSTRUCTED OF 3000 PSI CONCRETE. PROVIDE 3 #5 REBAR (REINFORCING STEEL) CONTINUOUS THROUGH FOOTERS. PROVIDE #5 REBAR (REINFORCING STEEL) BARS AT ALL CORNERS AND INTERSECTIONS OF FOOTERS, BEAMS AND WALLS. EACH SIDE SHOULD OVERLAP 2'-0", WITH A 90 DEGREE BEND. FOOTERS SHALL BEAR ON UNDISTURBED SOIL AND KEPT FREE FROM GROUND WATER. UNDERNEATH LOAD-BEARING WALLS AND INTERIOR OR EXTERIOR COLUMN FOOTINGS, THICKEN SLABS WITHIN A 1' RADIUS TO 12" THICK. 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CARPENTRY GENERAL - CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND PROVIDE LABOR AND MATERIALS PERTAINING TO CARPENTRY WORK AS REQUIRED IN SAID DOCUMENTS AND AS SPECIFIED HEREIN, WHILE COMPLYING WITH ALL APPLICABLE BUILDING CODES. ROUGH CARPENTRY - LUMBER SHALL BE OF LIVE, SOUND STOCK AND PROPERLY DRIED. PRESSURE TREATED LUMBER SHALL BE USED WHERE ANY LUMBER SHALL COME INTO CONTACT WITH CONCRETE, MASONRY BLOCK OR SOIL AND WHEN USING AS SUPPORT MEMBERS FOR DECKS, PORCHES OR BALCONIES. LUMBER FOR USE AT EXTERIOR SHALL HAVE A MAXIMUM 12 PERCENT MOISTURE CONTENT. FOR DRY CLIMATES 9 PERCENT IS RECOMMENDED. PROVIDE ADEQUATE BRACING AND SHORING DURING THE CONSTRUCTION PROCESS. STUDS AND JOISTS CUT TO INSTALL PLUMBING AND/OR WIRING SHALL BE REINFORCED BY ADDING METAL OR WOOD STRUCTURAL REINFORCING TO STRENGTHEN MEMBER BACK TO ORIGINAL CAPACITY AND MAINTAIN STRUCTURAL INTEGRITY. HOLES BORED SHALL NOT BE LARGER THAN 1/3 THE DEPTH AND NOT CLOSER THAN 2" TO THE TOP OR BOTTOM OF THE JOIST. WOOD SPECIES: #2 SOUTHERN YELLOW PINE, DOUGLAS FIR, ETC. DE WOOD FRAMING FLOOR FRAMING - INFORMATION BELOW PERTAINS TO CONVENTIONAL STICK FRAMING. IF PRE-ENGINEERED TRUSSES ARE USED FOLLOW MANUFACTURES GUIDELINES FOR INSTALLATION. PRESSURE TREATED LUMBER SHALL BE USED WHERE ANY LUMBER SHALL COME INTO CONTACT WITH CONCRETE, MASONRY BLOCK, ROOF CURBING OR ROOF BLOCKING. GIRDERS: INSTALL GIRDERS IN POCKETS FORMED IN THE FOUNDATION OR ON TOP OF THE SILL PLATE. THE POCKET SHOULD ALLOW A MINIMUM OF 1/2" ON BOTH SID????ES FOR CIRCULATION. GIRDERS: SOLID WOOD, TWO OR MORE 2" PLANKS, LAMINATED VENEER LUMBER, GLUE-LAM BEAMS, STEEL BEAMS SILLS: INSTALL SINGLE 2"x 6", 4"x 6" OR DOUBLE 2"x 6" SOLID PRESSURE TREATED LUMBER HORIZONTALLY ON FOUNDATION. BORE HOLES IN SILLS FOR ANCHOR BOLTS. FLOOR JOISTS: SPACE FLOOR JOISTS 12" TO 16" ON CENTER (OC) DEPENDING ON TYPE OF CONSTRUCTION, LOAD BEARING AND SPANNING CAPABILITIES OF WOOD SPECIES. JOISTS SHALL REST ON A MINIMUM 1 1/2" OF BEARING WOOD OR 3" OF MASONRY. CUT JOISTS FLUSH WITH THE OUTSIDE EDGE OF SILL. IF JOISTS ARE LAPED OVER GIRDER, THE MINIMUM AMOUNT OF LAP IS 4" AND MAXIMUM OVERHANG IS 12". DO NOT LAP AT WOOD I-BEAMS. JOISTS SHALL BE INSTALLED SO THAT THE END OF THE SUB-FLOOR SHEETS FALL DIRECTLY ON THE CENTER OF THE FLOOR JOISTS. NAIL JOISTS AT EACH BEARING POINT USING ONE 8D OR 10D NAIL ON EACH SIDE. NAILS SHALL BE AT LEAST 1 1/2" FROM ENDS. WOOD CROSS BRIDGING SHALL BE AT LEAST NOMINAL 1" X 3" LUMBER WITH TWO 6D NAILS AT EACH END. INSTALL ONE ROW OF BRIDGING FOR 12'-0" SPANS AND LESS, OVER 12'-0" SPANS INSTALL TWO ROWS OF BRIDGING. FLOOR JOISTS: 2"x 10"s, 2"x 12"s, WOOD I-BEAMS, WOOD OR STEEL TRUSSES, AT 16"ON CENTER (OC). EXTERIOR WALLS - ALL EXTERIOR WALLS SHALL BE CONSTRUCTED WITH 2"x 4", 2"x 6" WOOD STUDS AT 16"ON CENTER (OC), WITH SINGLE BOTTOM PLATES AND DOUBLE TOP PLATES THROUGHOUT. PROVIDE SOLID BLOCKING AT MID-HEIGHT OF ALL WALLS. FOR EXTERIOR CORNER JOINTS, INSTALL (3) 2"x 4"s, 2"x 6"s NAILED TOGETHER, WHERE INTERIOR PARTITIONS MEET EXTERIOR WALLS, INSTALL 2 STUDS FASTENED TOGETHER WITH 2"x 4", 2"x 6" BLOCKS APPROXIMATELY ONE FOOT LONG. ONE BLOCK IS PLACED AT THE BOTTOM, ONE AT THE TOP AND ONE ABOUT CENTER OF THE STUDS. 2"x 4" STUDS PLACED 16"ON CENTER (OC) - TYPICAL 2"x 6" STUDS PLACED 16"ON CENTER (OC) - FOR HIGHER CEILINGS AND HIGHER INSULATION VALUES WHERE EXTERIOR OPENINGS OCCUR ON 2"x 4" EXTERIOR WALLS, PROVIDE STRUCTURAL HEADERS DESIGNED WITH (2) 2" X 10" S WITH A 1/2" CONTINUOUS PLYWOOD FLUTCH PLATE GLUED AND NAILED BETWEEN THE 2"x10"s. (FOR 2"x 6" EXTERIOR WALLS PROVIDE (3) PIECES OF 2" X 10" LUMBER FASTENED SECURELY TOGETHER.) AT WINDOW SILLS, PROVIDE A SINGLE PIECE OF 2"x 4", 2"x 6" LUMBER. PROVIDE DOUBLE JACKS OR LINERS FOR OPENINGS 6'-0" WIDE OR GREATER, UNLESS OTHERWISE NOTED. PROVIDE 1/2" PLYWOOD SHEATHING AND 1"x 4" DIAGONAL BRACING AT EXTERIOR WALL CORNERS FOR SHEAR WALL STRENGTH AND STIFFNESS. FASCIA AND SOFFIT - PROVIDE AND INSTALL WOOD, ALUMINUM OR VINYL FASCIA AND SOFFIT. SEE CONSTRUCTION DOCUMENTS FOR COMPLETE ARCHITECTURAL DETAILS. WOOD FASCIA BOARD SHALL BE A 1"x 6" FINGER-JOINT CEDAR OR FIR SET ON 2"x 4" SUB-FASCIA STRUCTURE. FOR WOOD SOFFIT INSTALL 3/8"THICK A-C FINISH PLYWOOD, 2 5/8" CROWN MOULDING ON 2"x 4" FRIEZE BOARD, AND COVERED OR CONTINUOUS SCREEN SOFFIT VENTS AS REQUIRED BY APPLICABLE BUILDING CODES AND ROOFING MANUFACTURES GUIDELINES FOR VENTILATION. FOR ALUMINUM AND VINYL SOFFIT AND FASCIA, WRAP ALL EXPOSED EDGES TO FULLY ENCLOSE SUB-FASCIA STRUCTURE. SEE MANUFACTURERS RECOMMENDATIONS FOR COMPLETE INSTALLATION GUIDELINES.	CEILING JOISTS: THE SIZE OF CEILING JOISTS ARE DETERMINED BY SPAN, LOAD AND THE KIND AND GRADE OF LUMBER. CHECK APPROPRIATE SPANNING CHARTS WITH LOCAL BUILDING OFFICIALS. AT OPENINGS IN CEILINGS, DOUBLE JOISTS FOR STRUCTURAL RIGIDITY. 2"x 6" SPACED AT 24"ON CENTER (OC) 2"x 8" SPACED AT 24"ON CENTER (OC) 2"x 10" SPACED AT 18"-24"ON CENTER (OC), ATTIC AREAS USED FOR STORAGE ROOF FRAMING: CONSTRUCTION COMPONENTS VARY ACCORDING TO GEOGRAPHICAL LOCATION AND THE SIZE OF THE OVERALL STRUCTURE. THE SIZE OF JOISTS ARE DETERMINED BY SPAN, LOAD AND THE KIND AND GRADE OF LUMBER. CHECK APPROPRIATE SPANNING CHARTS WITH LOCAL BUILDING OFFICIALS. AT OPENINGS IN ROOF, DOUBLE JOISTS FOR STRUCTURAL RIGIDITY. FOR RIDGES AND VALLEYS, INSTALL 2"x 6"s, 2"x 10"s. USE LAMINATED VENEER LUMBER WHEN RIDGE, HIP OR VALLEY SPANS ARE GREATER THAN 28'-0". PROVIDE SIMPSON H2.5 ANCHORS AT ALL RAFTERS OR TRUSSES TO PLATES AND AT ALTERNATE STUDS. 2"x 6", 2"x 8" MEMBERS AT 24"ON CENTER (OC) 2"x 6", 2"x 8" MEMBERS AT 16"ON CENTER (OC) ROOF DECKING - PROVIDE AND INSTALL EXTERIOR SHEATHING OF APA RATED AND CODE CERTIFIED CDX PLYWOOD PANELS OR OSB. SHEATHING SHALL BE INSTALLED WITH THE FACE GRAIN RUNNING ACROSS THE RAFTERS, VERTICAL JOINTS STAGGERED. NAILS SHALL BE 6D OR 8D COMMON SMOOTH. RING-SHANK OR SPIRAL THREAD NAILS SPACED 6" APART ON THE ENDS AND 12" APART INSIDE. INSTALL WITH PLYWOOD "H" CLIPS BETWEEN EACH PIECE OF DECKING, EVERY 48". INSTALL ONE LAYER OF MOISTURE BARRIER 15# OR 30# FELT, OVERLAPPED A MINIMUM OF 6". SPECIFY CEILING DESIGNS AND LOCATIONS. VAULTED CEILING: ROOM NAMES TRAY CEILING: ROOM NAMES PAN CEILING: ROOM NAMES DECKS, PORCHES, BALCONIES- EXTERIOR GRADE LUMBER SHZ E ALL BE USED FOR EXTERIOR DECKS, PORCHES OR BALCONIES. PROVIDE AND INSTALL GALVANIZED JOIST HANGERS TO CONNECT 2"x 10" FLOOR JOISTS TO THE MAIN STRUCTURE EVERY 12"-16"ON CENTER (OC). ALL HANDRAILS SHALL BE CONSTRUCTED SO AS TO PREVENT PASSAGE OF A 4" SPHERE. PROVIDE HANDRAIL AND DETAILING AS SHOWN IN CONSTRUCTION DOCUMENTS. STAIN AND SEAL WOOD A MINIMUM OF 6 MONTHS AFTER INSTALLATION TO ALLOW FOR PROPER CURING. WOOD TYPE SHALL BE: REDWOOD, CEDAR, TREATED PINE, ETC. HEAVY TIMBER CONSTRUCTION - INSTALL PRE-ENGINEERED WOOD FRAME, EXTERIOR WALL AND ROOF PACKAGES PER CONSTRUCTION INSTRUCTIONS. STRUCTURAL TIMBER AND LUMBER SHALL BE STRUCTURAL GRADE OR BETTER. LUMBER SHALL BE OF LIVE, SOUND STOCK AND PROPERLY DRIED. PRESSURE TREATED LUMBER SHALL BE USED WHERE ANY LUMBER SHALL COME INTO CONTACT WITH CONCRETE, MASONRY BLOCK OR SOIL AND WHEN USING AS SUPPORT MEMBERS FOR DECKS, PORCHES OR BALCONIES. LUMBER FOR USE AT EXTERIOR SHALL HAVE A MAXIMUM 12 PERCENT MOISTURE CONTENT. FOR DRY CLIMATES 9 PERCENT IS RECOMMENDED. PROVIDE ADEQUATE BRACING AND SHORING DURING THE CONSTRUCTION PROCESS. HOLES BORED SHALL NOT BE LARGER THAN 1/3 THE DEPTH AND NOT CLOSER THAN 2" TO THE TOP OR BOTTOM OF THE JOIST. INSTALL PRE-ENGINEERED PER MANUFACTURER'S RECOMMENDATIONS SURFACING: CIRCLE-SAWN, BAND-SAWN, SMOOTH FACED OR PLANED WOOD SPECIES: PINE, RED OAK, DOUGLAS FIR, CHERRY, WHITE OAK, RECYCLED TIMBERS, GLUE LAMINATED STAINED: COLOR OF STAIN SEALED: SPECIFICATION OF SEAL TO BE APPLIED SHEATHING - BETWEEN STUDS AND SHEATHING, INSTALL ONE LAYER OF APPROVED MOISTURE BARRIER OVERLAPPED A MINIMUM OF 6". PROVIDE AND INSTALL EXTERIOR SHEATHING OF 1/2" RATED PLYWOOD PANELS, FIBERBOARD, GYPSUM BOARD OR RIGID FOAM BOARD. FOR PLYWOOD PANELS, USE 6D NAILS SPACED 6" APART ON THE EDGES AND 12" APART ON THE STUDS. FOR FIBERBOARD SHEATHING, FASTEN WITH ROOFING NAILS OR BUTTON CAPS SPACED 3" APART AT EDGES AND 6" APART IN THE CENTER, A MINIMUM OF 3/8" FROM EDGES. FOR GYPSUM SHEATHING USE ROOFING NAILS OR BUTTON CAPS, SPACED 4" APART AROUND THE EDGES AND 8" APART?????YNT ON THE STUDS. INSIDE. FOR RIGID FOAM BOARD CONSULT EIFS SYSTEM FOR SPECIFIC MANUFACTURERS RECOMMENDATIONS. WOOD SUB-FLOORS - 3/4" TONGUE AND GROOVE PLYWOOD SUB-FLOOR SHALL BE INSTALLED WITH BOTH NAILS AND APPROVED SUB-FLOOR ADHESIVE. STAGGER JOINTS A MINIMUM 2 STUD SPACES. FOR ATTIC ACCESS, INSTALL NECESSARY PLYWOOD WALKWAYS TO MEET APPLICABLE BUILDING CODES. STRUCTURAL LAMINATED BEAMS - FOR LARGE SPANS, STRUCTURAL LAMINATED BEAMS WILL BE REQUIRED AS SET FORTH IN THE CONSTRUCTION DOCUMENTS OR BY APPLICABLE BUILDING CODES. LAMINATED TIMBER IS HEREBY DEFINED TO INCLUDE ENGINEERED STRESS-RATED PRODUCTS OF WOOD MEMBERS FABRICATED FROM 1" TO 2" NOMINAL THICKNESS LUMBER GLUED FACE TO FACE TO A DEPTH OF FOUR LAMINATIONS OR MORE. GLUE-LAM BEAMS SHALL HAVE A MINIMUM BENDING DESIGN VALUES (FB) OF 2400 PSI AND A MODULUS OF ELASTICITY OF 1,800,000. INSTALL WITH CROWN UP. 1. ALL GLUE LAMINATED MEMBERS SHALL BE MADE OF 1 1/2" DOUGLAS FIR LAMINATIONS, COMBINATION 24F--PER AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. 2. INDUSTRIAL APPEARANCES GRADE SHALL BE USED , WITH MOISTURE CONTENT BETWEEN 7% AND 14 % UNLESS NOTED OTHERWISE. 3. FABRICATOR SHALL BE A MEMBER OF A.I.T.C. AND ALL FABRICATION SHALL BE PERFORMED IN ACCORDANCE WHIT THE LATES EDITION OF TIMBER CONSTRUCTION STANDARS, BY A.I.T.C. LUMBER SHAL BE MARKED WITH AN A.I.T.C. QUALITY MARK INDICATING CONFORMANCE WITH THE COMMERCIAL STANDARDS STRUCTURAL GLUED LAMINATED LUMBER. 4. GLUE LAMINATED MEMBERS SHAL BE ACCOMPANIED BY A CERTIFICATE OF INSPECTION. CONTRACTOR SHALL BEAR EXPENSES OF INSPECTION AND TESTS. A CERTIFICATE OF INSPECTION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT. 5. THE FABRICATOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO BUILDING DEPARTMENTS AND TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION. 6. ALL GLUED LAMINATED BEAMS MUST HAVE A STANDARD CAMBER OF RADIUS-1800, UNLESS NOTED OTHERWISE. MICRO-LAM LUMBER SHALL HAVE A MINIMUM BENDING DESIGN VALUES (FB) OF 2,800 PSI AND A MODULUS OF ELASTICITY OF 2,000,000 PSI. PARALLAM BEAMS SHALL HAVE A MINIMUM BENDING DESIGN VALUES (FB) OF 2900 PSI AND A MODULUS OF ELASTICITY OF 2,000,000 PSI	1. ALL GLUE LAMINATED MEMBERS SHALL BE MADE OF 1 1/2" DOUGLAS FIR LAMINATIONS, COMBINATION 24F--PER AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. 2. INDUSTRIAL APPEARANCES GRADE SHALL BE USED , WITH MOISTURE CONTENT BETWEEN 7% AND 14 % UNLESS NOTED OTHERWISE. 3. FABRICATOR SHALL BE A MEMBER OF A.I.T.C. AND ALL FABRICATION SHALL BE PERFORMED IN ACCORDANCE WHIT THE LATES EDITION OF TIMBER CONSTRUCTION STANDARS, BY A.I.T.C. LUMBER SHAL BE MARKED WITH AN A.I.T.C. QUALITY MARK INDICATING CONFORMANCE WITH THE COMMERCIAL STANDARDS STRUCTURAL GLUED LAMINATED LUMBER. 4. GLUE LAMINATED MEMBERS SHALL BE ACCOMPANIED BY A CERTIFICATE OF 1. LATERAL SUPPORTS IS REQUIRED AT ALL BEARING POINTS AND ALONG COMPRESSION EDGE AT INTERVALS OF 24" O.C. OR CLOSER. 2. ALLOWABLE DESIGN STRESSES: Fb= 2900 PSI Fv= 290 PSI E= 2,000,000 PSI 3. BEARING LENGTH SHOULD NEVER BE LESS THAN 1 1/2" AT THE ENDS, 3 1/2" AT INTERMEDIATE SUPPORTS. BEARING ACROSS THE FULL WIDTH OF THE BEAM IS REQUIRED. 4. DO NOT OVERHANG DEAT CUTS ON PARALLAM PSL BEAMS BEYOND INSIDE FACE OF SUPPORT MEMBERS. 5. NOTCHING FOR UNIFORMLY LOADED BEAMS ONLY: 2" DIAMETER HOLES MAXIMUM DEPTH 1/3 OF THE DEPTH. THE DEPTH OF THE ADDITIONAL HOLES WITHIN THE SAME REGION MUST BE A MINIMUM DISTANCE OF TWICE THE LATEST HOLE DIAMETER. RECTANGULAR HOLES ARE NOT ALLOWED. NO NOTCHING IS ALLOWED IN CANTILEVER MEMBERS WITHOUT PRIOR APPROVAL BY THE ENGINEER. 6. APPROVED BY NATIONAL EVALUATION REPORT NER-292 7. WHERE MEMBERS QUALIFY AS REPETITIVE MEMBERS AN ALLOWABLE BENDING STRESS INCREASE OF 4 % IS PERMITTED. 8. PARALLAM PSL SHALL HAVE A LABEL STATING THE MANUFACTURE'S NAME AND PLANT NUMBER, THE NATIONAL EVALUATION SERVICE REPORT NUMBER, AND THE LABEL OF THE PFS CORPORATION (NER--QA251). 9. WHEN REQUESTED A COMPLETE SET OF CALCULATIONS SHALL BE PREPARED BY THE MANUFACTURER UNDER THE SUPERVISION OF A CIVIL OR STRUCTURAL ENGINEER. 10. SHOP DRAWINGS WHEN REQUESTED SHALL BE PROVIDED BY THE MANUFACTURER. THE MANUFACTURER SHALL NOT PROCEED WITH THE FABRICATION AND/OR CUTTING UNTIL THE SHOP DRAWING AND DESIGN CALCALATIONS HAVE BEEN REVISED BY THE ARCHITECT / OR ENGINEER. 11. ADHESIVES USED IN THE MANUFACTURING OF THE PSL SHALL BE OF THE WATERPROOF TYPE CONFORMING TO THE REQUIREMENTS OF ASM D-2559. 12. THE CONTRACTOR SHALL GIVE NOTIFICATION TO THE TRUS JOIST REPRESENTATIVE PRIOR T ENCLOSING THE PARALLAM PSI TO PROVIDE OPPORTUNITY FOR INSPECTION OF THE INSTALLATION. NAIL SCHEDULE ALL NAILING SHALL BE COMMON WIRE NAILS CONFORMING TO THE LATEST U.B.C. WERE AUTOMATIC NAILIG IS USED, NAILS HEADS SHALL NOT PENETRATE SHEATHING. CONNECTIONS LISTED ARE MINIMUM PERMISSIBLE. DETAILS GOVERN OVER SCHEDULE. A. JOIST TO SILL GIRDERS, TOE NAIL EACH SIDE 3-8d B. BRIDGING TO JOIST RAFTER, TOE NAIL EACH END 2-8d C. SUBFLOOR SHEATHING AT ALL BEARING 1x6 OR LESS FACE NAIL 2-8d 1x8 OR WIDER, FACE NAIL 3-8d 2x BLIND AND FACE NAIL 2-16d D. SOLE PLATE TO JOIST OR BLOCKING FACE NAIL 16d @ 16" O.C. AT BRACE WALL 3-16d @ 16" O.C. F. STUD TO SOLE PLATE, TOE NAIL 4-16d G. DOUBLE STUDS, FACE NAIL 16d @ 24" O.C. H. TOP PLATE TO STUD, END NAIL 2-16d I. TOP PLATES, EACH END OF LAP--SPLICE 8-16d AT CORNER INTERSECTION 2-16d J RIM JOIST TO TOP PLATE, TOE NAIL 8d @ 6" O.C. K. CONTINUOUS HEADER, TWO PIECES, AONG EAC EDGE 16d @16" O.C. L. CONTINUOUS HEADER TO STUDS, TOE NAIL 3-16d M. CEILING JOIST TO PARALLEL RAFTER, FACE NAIL 3-16d N. CEILING JOIST LAPS OVER PARTITIONS, FACE NAIL 3-16d O. CEILING JOIST OR RAFTERS TO ALL BEARINGS, TOE NAIL 3-8d P. BOCKING BETWEEN JOISTS OR RFTERS TO TOP PLATE, TOE NAIL 3-8d Q. 1" BRACE TO EACH STUD AND PLATE, FACE NAIL 2-8d R. BUILT-UP CORNER STUDS 16d @ 24" O.C. S. JOIST OR RAFTERS T SIDES OF STUDS UP TO AND INCLUDING 8" DEPTH 3-16d T. CEILING STRIPS 1x4 TO UNDERSIDE OF JOIST -EACH BEARING ONE SLANT AND STRAIGHT 2-8d -2x3 TO UNDERSIDE OF JOIST EACH BEARING ON SLANT AND STRAIGHT 2-16d U. BUILT UP BEAMS: 2-2x5 16d @ 12" O.C. EACH EDGE 3 (OR MORE) 2x5 1/2" DIA. M.B. @ 24" O.C. STAGGERED & 16d @ 12" O.C. PROGRESSIVE SHEAR WALL A. ALL EXTERIOR WALLS TO BE SECURED WITH 5/8 INCH DIA. x 12" LONG A.B.'S AT 72" O.C. WITH 7" OF EMBEDMENT, U.N.O. AND EACH ANCHOR BOLT SHALL HAVE MINIMUM 3"x3"x1/4" THICK PLATE WASHER. B. ALL INTERIOR WALLS WITH SHOT PINS: RAMSET #3348 OR EQUIVALENT AT 24" ON CENTER OF WALLS AND 48" O.C. AT NON-BEARING WALLS U.N.O. NO SHOT PIN IS ALLOWED AT SHEAR WALLS. C. CODE MINIMUM (2) ANCHOR BOLTS PER PANEL. D. CODE MINIMUM 16d SOLE PLATE NAILS AT 16" O.C. TYPICAL AT ALL SECOND FLOOR WALLS (U.N.O.) E. WHERE DOUBLE 2x SOLE PLATES ARE USED, PROVIDE PROGRESSIVE NAILING. F. ALL NAILS ARE COMMON NAILS. G. TABLE FOR SE WB STUDS AT 16" O.C. MAXIMUM H. ALL LAG BOLTS (LB) TO BE 8" LLING INSTALLED WITH PILOT HOLE AND WRENCH. J. 5/8" DIAMETER A.B. MAY BE REPLACED BY 5/8" DIAMETER THREADED RODS AND EPOXY, WITH SPECIAL INSPECTION. EACH BOLT SHALL HAVE MIN. 2.5"x2.5"x1/4" THICK SQUARE WASHER. PROVIDE AND HAVE AT SITE DURING SPECIAL INSPECTION EPOXY SPECIFICATIONS AND EMBEDMENT TABLES FROM MANUFACTURE. K. FRAMING MEMBER OR BLOCKING SHALL BE PROVIDED AT ALL EDGES OF ALL PLYWOOD SHEETS IN SHEAR WALL. L. ALL PLYWOOD PANELS SHALL BE MANUFACTURED USING EXTERIOR GLUE. M. USE 3x STUDS AND 3x BOTTOM PLATE WITH STAGGERED NAILING WHERE THE ALLOWABLE SHEAR VALUE EXCEEDS 350 PLF. N. WHERE SHEAR MATERIAL IS INSTALLED ON BOTH SIDES, THE SPACING OF THE ABOVE OR BELOW SHEAR MATERIAL SHALL BE HALF SHOWN. UNLESS OTHERWISE NOTED ON PLANS. O. SOME ANCHORS FOR HOLD DOWNS HAVE EXTENDED FOOTING DEPTH REQUIREMENTS. CONFIRM DEPTHS WITH SIMPSON MANUFACTURE'S SPECIFICATIONS. WASHER SCHEDULE A. WASHER SHALL BE USED UNDER HEADS AND NUTS OF ALL BOLTS BEARING ON WOOD. THE WASHERS LISTED BELOW SHALL BE USED IN THE FOLLOWING LOCATIONS: A. SOLE PLATES TO FOUNDATIONS. B. WOOD LEDGERS AND CAPS TO CONCRETE AND MASONRY WALLS. C. AGAINST THE 2x MEMBER WHEN 2x MEMBERS IS BOLTED AGAINST A HEAVIER MEMBER. D. STANDARD CUT WASHERS MAY BE USED ELSEWHERE, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
BOLT SIZE STEEL PLATE WASHER SIZE (SQUARE) 1/2" 2"x2"x3/16" THICK 5/8" 3"x3"x1/4" THICK 3/4" 2.75"x						