1. GENERAL:
   A. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL - LATEST EDITION, AND THE AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) LATEST EDITION.
   B. EACH PIECE OF LUMBER SHALL BE "S-DRY" AND BEAR THE GRADE STAMP OF A GRADING RULES AGENCY APPROVED BY THE AMERICAN LUMBER STANDARDS COMMITTEE.
   C. DO NOT NOTCH OR DRILL JOISTS, BEAMS OR LOAD BEARING STUDS WITHOUT APPROVAL.

2. CONNECTIONS:
   A. FOLLOW TABLE 2304.9.1 OF THE 2009 INTERNATIONAL BUILDING CODE FOR NAILING REQUIREMENTS NOT INDICATED ON THESE DRAWINGS.
   B. NAIL ROOF PLYWOOD WITH 10D COMMON NAILS AT 6" O.C. AT ALL EDGES AND BOUNDARY MEMBERS AND 12" O.C. AT INTERMEDIATE SUPPORTS.

3. STRUCTURAL SAWN LUMBER:
   A. 2 X 4 THRU 2 X 6 STUDS: SPRUCE PINE FIR NO. 1 WITH Fb = 875 P.S.I.

4. PLYWOOD:
   A. ROOF SHEATHING: C-D INT-APA (PS 1-95) WITH EXTERIOR GLUE; 5/8" WITH IDENTIFICATION INDEX 24/0. LAY UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER JOINTS.
   B. EACH PLYWOOD PIECE TO BE CONTINUOUS OVER A MINIMUM OF TWO SPANS WITH A MINIMUM WIDTH OF 1'-0" UNLESS BLOCKING IS PROVIDED AT ALL JOINTS.

G4 WOOD NOTES

1. WOOD TRUSS MANUFACTURER SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL DESIGN CALCULATIONS OF ALL TRUSSES SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE. SUBMISSION WILL INCLUDE CALCULATIONS FOR EACH LOADING COMBINATION AND FOR UNBALANCED SNOW LOADING (INCLUDING WIND LOADS FROM ALL DIRECTIONS) PER 2009 IBC BUILDING CODE AND AS INDICATED IN THE STRUCTURAL NOTES.

2. THE BEARING HEIGHTS, CHORD SIZES, WEB SIZES AND MATERIAL SELECTION SHALL BE AT THE TRUSS MANUFACTURES OPTION AS REQUIRED BY DESIGN CALCULATIONS.

3. SHOP DRAWINGS SHALL INDICATE PLAN VIEW OF TRUSS LOCATIONS, REQUIRED PERMANENT AND TEMPORARY BRIDGING AND BRACING, MEMBER SIZES AND MATERIAL SPECIFICATIONS.

4. ALL CONNECTIONS SHALL BE DETAILED ON SUPPLIERS SHOP DRAWINGS.

5. TRUSS MANUFACTURER SHALL PROVIDE ALL TEMPORARY AND PERMANENT LATERAL AND DIAGONAL TRUSS BRACING. TRUSS MANUFACTURER SHALL ALSO PROVIDE CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE, FOR THE DESIGN OF ALL TEMPORARY AND PERMANENT LATERAL AND DIAGONAL BRACING REQUIRED.

6. CONTRACTOR SHALL PROVIDE AND INSTALL ALL TEMPORARY AND PERMANENT TRUSS BRACING TO WEB AND CHORD MEMBERS AND AS REQUIRED BY TRUSS MANUFACTURER.

7. COORDINATE ALL TRUSS DIMENSIONS WITH CONTRACT DRAWINGS.

E4 METAL PLATED WOOD TRUSS NOTES

1. MINIMUM LOADING REQUIREMENTS:

A.	ROOF SNOW LOADS: LOADS:	
	a. GROUND SNOW LOAD:	P_g = 60.0 PSF
	i. IMPORTANCE FACTOR:	I = 1.0
	ii. COLD ROOF SLOPE FACTOR:	C_s = 1.0
	iii. THERMAL FACTOR:	C_t = 1.1
	iv. EXPOSURE FACTOR:	C_e = 1.0
	v. TERRAIN CATEGORY:	C
	b. FLAT ROOF SNOW LOAD:	P_f = 46.2 PSF
	c. DRIFT	NONE
B.	ROOF DEAD LOAD:	25.0 PSF.
C.	ROOF LIVE LOAD:	
	a. STANDARD ROOF LIVE LOAD:	20 PSF

D. FLOOR LIVE LOADS:

	UNIFORM	CONCENTRATED	PARTITION
a. STORAGE AREAS ABOVE CEILINGS	20 PSF		

E. WIND:

a.	FACTORS:	
	i. BASIC WIND SPEED: 100 MPH	
	ii. EXPOSURE CATEGORY: "C"	
	iii. IMPORTANCE FACTOR: 1.0	
	iv. BUILDING HEIGHT: <30'	
b.	WIND DESIGN PRESSURE	
	i. MWFRS	
	1. END ZONE WIDTH:	5 FEET
	2. TRANSVERSE	
	a. INTERIOR ZONE	15 PSF
	b. END ZONE	22 PSF
	3. LONGITUDINAL	
	a. INTERIOR ZONE	15 PSF
	b. END ZONE	22 PSF
	ii. ROOF UPLIFT (IBC 2009)	
	1. FIELD	19 PSF
	2. PERIMETER	27 PSF
	3. CORNERS	43 PSF
	4. STRIP WIDTH	5 FEET

2. STRUCTURAL WOOD TO CONFORM TO THE LATEST NDS STANDARDS.

3. SPECIAL INSPECTIONS: AN INDEPENDENT INSPECTIONS PROGRAM AND SCHEDULE SHALL BE ARRANGED BY THE BUILDING OWNER AND THE STRUCTURAL ENGINEER OF RECORD.

4. A QUALIFIED PERSON APPROVED BY THE BUILDING CFFICIALS SHALL MAKE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC2006 AND AS DEFINED. SPECIAL INSPECTOR SHALL OBSERVE WORK FOR CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS.

5. THE FOLLOWING TYPES OF WORK SHALL RECEIVE SPECIAL INSPECTION OVERSIGHT: INSTALLATION OF WOOD TRUSSES AND ANCHORAGE TO STRUCTURE.

6. INSPECTION REPORTS SHALL BE FURNISHED TO THE OWNER, BUILDING OFFICIAL, ARCHITECT AND SER. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR AND IF NOT CORRECTED, SHALL BE REPORTED TO THE OWNER, BUILDING OFFICIAL, ARCHITECT AND SER.

A4 STRUCTURAL NOTES

1. ALL CONTRACTORS SHALL CONFORM TO SAFETY REQUIREMENTS OF THE OWNER, OSHA SAFETY AND HEALTH STANDARDS, AND OTHER LOCAL AUTHORITIES IN CONNECTION WITH THE PERFORMANCE OF THIS PROJECT.

2. ALL REFERENCED STANDARDS OR PUBLICATIONS SHALL PERTAIN TO THE MOST CURRENT DATA, STANDARD OR PUBLICATION, UNLESS NOTED OTHERWISE.

3. IF DIFFERENCES OCCUR WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS REGARDING MATERIALS, STRENGTHS OR QUANTITIES, THE BETTER, HIGHER STRENGTH, AND GREATER QUANTITY INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.

4. THE CONTRACTOR SHALL VISIT THE SITE AT A DESIGNATED TIME APPROVED BY THE OWNER, TO VERIFY EXISTING CONDITIONS, DIMENSIONS, LOCATION OF EXISTING UTILITIES, ETC. THE CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITHOUT EXCEPTION.

5. THE STRUCTURE HAS BEEN DESIGNED AS A SELF-SUPPORTING SYSTEM ONCE ALL WORK CONTAINED ON THESE DRAWINGS HAS BEEN COMPLETED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION PROCEDURES AND SEQUENCE OF INSTALLATION TO ENSURE SAFETY OF THE BUILDING AND ITS OCCUPANTS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS AND TEMPORARY SHORING, PRECAUTIONS DURING BUILDING OPERATIONS, PROTECTION OF PUBLIC AND WORKERS, REMOVAL OF WASTE MATERIAL, PROTECTION OF ADJACENT PROPERTY, PROTECTION OF HAZARDOUS OPENINGS, SAFETY PRECAUTIONS, AND SANITARY PROVISIONS OF EMPLOYEES AND SUBCONTRACTORS AS REQUIRED FOR THE DURATION OF THE CONTRACT.

6. WORK SHALL BE DONE IN AN ORDERLY AND PROFESSIONAL MANNER. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK TO BE DONE BY SUBCONTRACTORS, LOCAL AUTHORITIES, STATE AGENCIES AND/OR UTILITY COMPANIES WHICH MAY HAVE JURISDICTION OVER THIS PROJECT.

7. UTILITY EXTENSIONS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL CODES OR AS INDICATED BY THE SPECIFICATIONS.

8. CONTRACTOR SHALL REVIEW AND SUBMIT COMPLETE SHOP DRAWINGS FOR ALL SPECIFIED PARTS OF THE WORK, INCLUDING SHORING AND CONSTRUCTION METHODS/SEQUENCING WHERE APPLICABLE. NO PORTION OF THE WORK COVERED BY THESE SHOP DRAWINGS SHALL COMMENCE UNTIL RETURNED APPROVED SHOPS ARE RECEIVED BY THE CONTRACTOR. SEE SPECIFICATIONS FOR SPECIFIC SHOP SUBMITTAL REQUIREMENTS.

9. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY EXISTING ITEMS DAMAGED BY NEW CONSTRUCTION, AND FOR ANY INCIDENTAL REPAIRS OF EXISTING FINISHED SURFACES DISTURBED BY NEW CONSTRUCTION; SUCH REPAIRS SHALL MATCH EXISTING TO THE OWNER'S SATISFACTION.

10. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING, HANDLING, AND STORAGE OF ITEMS/MATERIALS TO REMAIN THE PROPERTY OF THE OWNER WITH THE OWNER'S REPRESENTATIVE.

11. SPECIAL INSPECTIONS AS REQUIRED BY IBC 2009 SECTION 1704 SHALL BE PERFORMED BY AN INSPECTION AGENCY CONTRACTED BY THE OWNER FOR ALL WOOD TRUSS INSTALLATION ACTIVITIES.

F7 GENERAL NOTES

EPDM MEMBRANE ROOFING

GLASS- FIBER-REINFORCED ASPHALT FIBERGLASS SHINGLES

A. LAMINATED-STRIP ASPHALT SHINGLES: ASTM D 3462/D 3462M, LAMINATED, MULTI-PLY OVERLAY CONSTRUCTION, GLASS-FIBER REINFORCED, MINERAL-GRANULE SURFACED, AND SELF-SEALING.

   1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS
      a. CERTAINTEED CORPORATION.
      b. GAF MATERIALS CORPORATION.
      c. IKO.

   2. STYLE AND COLOR TO MATCH EXISTING IN SHAPE, COLOR, TEXTURE ON ADJACENT ROOF SURFACE.

B. MANUFACTURER'S WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE ASPHALT SHINGLES THAT FAIL WITHIN SPECIFIED WARRANTY PERIOD.

   1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
      a. MANUFACTURING DEFECTS

   2. MATERIAL WARRANTY PERIOD: 30 YEARS FROM DATE OF SUBSTANTIAL COMPLETION, PRORATED, WITH FIRST 15 YEARS NONPRORATED.

   3. WIND-SPEED WARRANTY PERIOD: ASPHALT SHINGLES WILL RESIST BLOW-OFF OR DAMAGE CAUSED BY WIND SPEEDS OF UP TO 100 MPH YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

   4. ALGAE-RESISTANCE WARRANTY PERIOD: ASPHALT SHINGLES WILL NOT DISCOLOR FOR 15 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

   5. WORKMANSHIP WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

C. SELF-ADHERING SHEET UNDERLAYMENT, HIGH TEMPERATURE: MINIMUM OF 40-MIL- THICK; WITH SLIP-RESISTING, POLYMER-FILM-REINFORCED OR GLASS-REINFORCED TOP SURFACE LAMINATED TO LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE; WITH RELEASE BACKING; COLD APPLIED; AND EVALUATED AND DOCUMENTED TO BE SUITABLE FOR USE FOR INTENDED PURPOSE UNDER APPLICABLE CODES BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION

   1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
      a. GAF MATERIALS CORPORATION.
      b. GRACE, W. R. & CO. - CONN.
      c. HENRY COMPANY.

   2. THERMAL STABILITY: STABLE AFTER TESTING AT 240 DEG F (116 DEG C) ACCORDING TO ASTM D 1970/D 1970M.

   3. LOW-TEMPERATURE FLEXIBILITY: PASSES AFTER TESTING AT MINUS 20 DEG F (29 DEG C) ACCORDING TO ASTM D 1970/D 1970M.

A7 ROOFING SYSTEM NOTES

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 12/17/13

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Allied Engineering
Structural Mechanical Electrical Commissioning

STATE OF MAINE
WILLIAM P. FALCHER
No. 7153
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

Date: 11-01-2013
Drawn By: PED
Checked By: WPF
Project Mgr: WPF
Project No: 13097
Cad File: 13097S.dwg
Graphic Scale: 0 1"

NOTES

BAY CITY MOTORS
RE-ROOFING
324 WARREN AVE., PORTLAND, ME

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