

incorporated P.O. Box 185, West Chesterfield, NH 03466 (603) 256 - 8800

JOB TITLE: CLEMENTS-KING LOCATION: 48 MERRILL STREET PORTLAND, ME

## PROJECT NOTES:

- \* ALL WALL PANELS ARE TO BE 84" EPS SIP.
- \* ALL PANELS ARE TO BE SHIPPED TO THE SITE PRE-CUT & ARE TO BE ASSEMBLED & INSTALLED BY OTHERS.
- \* ALL ENGINEERED MATERIAL & 2x'S SHOWN ON THESE PLANS ARE TO BE SUPPLIED BY OTHERS.

## FPI GENERAL NOTES:

- \* ANY ENGINEERED MATERIAL SPECIFIED BY FPI MUST BE ASSEMBLED & INSTALLED ACCORDING TO THE MANUFACTURES SPECIFICATIONS.
- \* THE FOUNDATION, TRUSSES, STICK-BUILT AREAS AND TIMBER FRAME SYSTEMS ARE TO BE DESIGNED, ENGINEERED, SUPPLIED, AND INSTALLED BY OTHERS.
- \* WHEN STUFFING EXPOSED PANEL EDGES W/ 2× MATERIAL USE THE LONGEST CONT. LENGTH POSSIBLE #2 KD OR BETTER. BE SURE THAT 2×'S DO NOT BREAK WITHIN 16" OF PANEL JOINTS.
- \* ALL ROUGH OPENING BLOCKING MATERIAL STUFFED OR KEYED INTO PANEL MUST BE RUN CONTINUOUS.
- \* ALL PRODUCTS ARE TO BE AS SPECIFIED BY FPI OR AN EQUIVALENT SUBSTITUTE MAY BE USED.
- \* FOR QUESTIONS PLEASE CALL KEVIN B. AT FOARD PANEL INC. (1-800-644-8885)

## ENGINEERING GENERAL NOTES:

## . MATERIAL

- a. STRUCTURAL INSULATED PANEL (SIP) SYSTEM A PRESSURE LAMINATED COMPOSITE PANEL USING APPROVED COMPONENTS IN ACCORDANCE WITH NTA LISTING REPORT FRD031609—25.
- b. DIMENSION LUMBER FOR 2X BEARING WALLS AND FOR USE IN JOINING PANELS, PLATES, HEADERS AND SILLS: SPF #1/#2 (NLGA) KILN-DRIED, UNLESS NOTED OTHERWISE.
- c. PRESERVATIVE PRESSURE TREATED LUMBER: SOUTHERN PINE NO. 2 AS GRADED BY SPIB. AWPA TREATMENT ACQUISING WATER BORNE PRESERVATIVE WITH 0.40 PERCENT RETAINAGE.
- d. STRUCTURAL COMPOSITE LUMBER (SCL) SHALL MEET THE FOLLOWING MINIMUM DESIGN VALUES:
- i. MODULUS OF ELASTICITY: 2,000,000 PSI
- ii. FLEXURAL STRESS: 2,600 PSI iii. TENSION STRESS: 1,555 PSI
- iv. COMPRESSION PERPENDICULAR TO GRAIN: 750 PSI
- v. COMPRESSION PARALLEL TO GRAIN: 2,510 PSI
- vi. HORIZONTAL SHEAR PARALLEL TO GRAIN: 285 PSI vii. SPECIFIC GRAVITY: 0.50
- | vii. SPECIFIC GRAVITY: 0.50 | e. FLOOR TRUSSES: TRIFORCE OPEN JOIST
- f. FLOOR AND ROOF SHEATHING: APA RATED OR ADVANTECH SHEATHING, THICKNESS AS INDICATED, SPAN RATING AS REQUIRED TO SUIT SUPPORT SPACING INDICATED, EXPOSURE DURABILITY 1, TWO SPAN MINIMUM.
- g. SUBFLOOR GLUE: APA AFG-01, WATERPROOF OF WATER SOLVENT BASE, AIR CURE TYPE, CARTRIDGE DISPENSED.

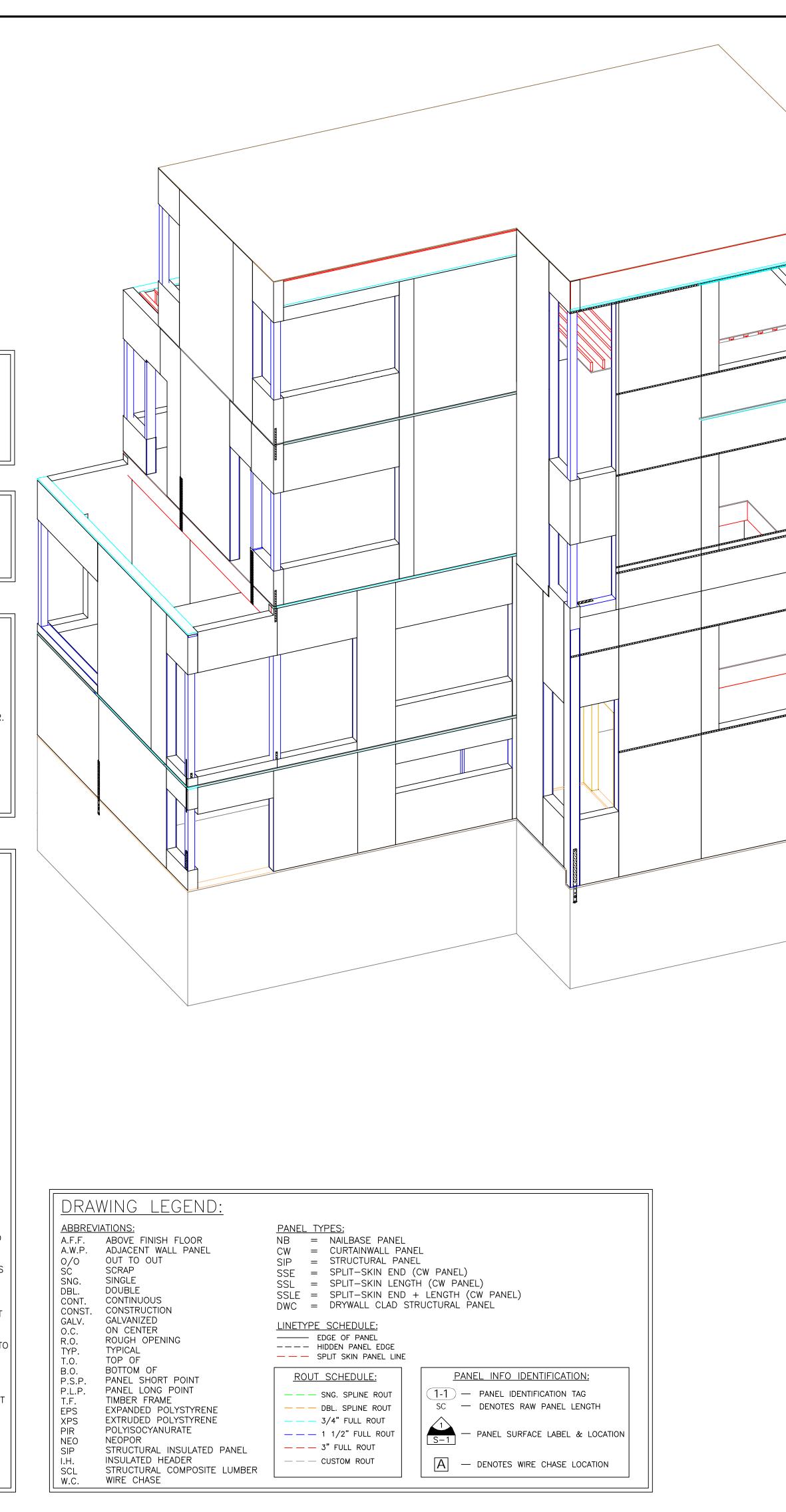
  2. FASTENERS
- a. COMMON NAILS: ASTM F1667
- b. PANEL SCREWS: HEADLOK GIMLET THREAD POINT FASTENER
- c. WOOD CONSTRUCTION CONNECTORS: BY SIMPSON STRONG—TIE UNLESS NOTED OTHERWISE. CONFORM TO MANUFACTURER'S COATING RECOMMENDATIONS.
- d. BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED STEEL.
- DIP GALVANIZED TO G-185.

  3. EXECUTION
- a. ENSURE SURFACES TO RECEIVE PANELS ARE STRUCTURALLY SOUND, EVEN, SMOOTH, CLEAN, DRY AND FREE FROM DEFECTS DETRIMENTAL TO WORK PRIOR TO INSTALLATION.

e. FASTENERS AND ANCHORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL OR STEEL HOT

- b. DO NOT INSTALL COMPONENT PARTS THAT ARE OBSERVED TO BE DEFECTIVE, INCLUDING WARPED, BOWED, DENTED AND BROKEN MEMBERS.

  c. ALLOW FOR ERECTION LOADS AND FOR SUFFICIENT TEMPORARY BRACING TO MAINTAIN STRUCTURE SAFE, PLUMB, HELD DOWN AND IN TRUE ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRACING, SHEAR WALLS
- | AND DIAPHRAGMS. | d. SIPS SHALL BE KEPT DRY AND PROTECTED WITH WATERPROOF COVERING DURING TRANSPORTATION AND STORAGE.
- e. TAKE CARE IN HANDLING SIPS TO PREVENT DELAMINATION. DO NOT LIFT PANELS BY THE TOP SKIN.
  f. CONSTRUCT LOAD BEARING FRAMING, STRUCTURAL SPLINES, KING STUDS, HEADERS CONTINUOUS FULL LENGTH WITHOUT
- g. ALL POSTS AND COLUMNS FROM HEADERS AND BEAMS SHALL BEAR CONTINUOUSLY TO CONCRETE FOUNDATIONS INCLUDING SOLID BLOCKING IN FLOOR AND ROOF SPACES. SUPPORTING FRAMING AND FOUNDATION SHALL BE ADEQUATE TO SUPPORT THE REQUIRED LOADING.
- h. Provide and install weather—tight wall and roof protection in a timely fashion to avoid water and
- WEATHER DAMAGE.
  i. DO NOT OVERCUT SIP SKINS AT OPENINGS.
- j. DO NOT FIELD CUT PANEL SKINS WITHOUT APPROVAL FROM SIP MANUFACTURER AND ENGINEER. PLUMBING SHALL NOT BE LOCATED WITHIN SIPS WITHOUT APPROVAL FROM SIP MANUFACTURER AND ENGINEER.
- k. DO NOT INSTALL SIPS SO THAT THEY ARE IN CONTACT WITH CONCRETE OR OTHER POROUS MATERIALS. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE PRESSURE TREATED.
- I. ALL STUD BEARING WALLS SHALL BE BLOCKED AT 4'-0" ON CENTER VERTICALLY, U.N.O.
- m. FILL ALL FASTENER HOLES IN WOOD CONSTRUCTION CONNECTORS WITH MANUFACTURER'S RECOMMENDED FASTENER.
- n. CONNECTION OF MULTIPLE PLY ENGINEERED WOOD BEAMS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS, U.N.O. o. FOLLOW PREFABRICATED WOOD JOIST MANUFACTURER RECOMMENDATIONS.



DESIGN CRITERIA:

ROOF LIVE LOAD: SNOW LOAD GOVERNS FLOOR LIVE LOAD, TYPICAL: 40 PSF

FLOOR LIVE LOAD, SLEEPING AREAS: 30 PSF

INTERNAL PRESSURE COEFFICIENTS: +/- 0.18

SPECTRAL RESPONSE COEFFICIENT, SDS: 0.280 SPECTRAL RESPONSE COEFFICIENT, SD1: 0.118

SEISMIC RESPONSE COEFFICIENT, CS: 0.140 RESPONSE MODIFICATION FACTOR, R: 2.00

MAPPED SPECTRAL RESPONSE ACCELERATION, SS: 0.265
MAPPED SPECTRAL RESPONSE ACCELERATION, S1: 0.074

ANALYSIS PROCEDURE USED: EQUIV. LATERAL FORCE PROCEDURE

DRIFTING SNOW LOADS HAVE BEEN INCLUDED IN ACCORDANCE WITH ASCE 7-05.

BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT-FRAMED WALLS SHEATHED WITH SHEAR

BUILDING CODE: MAINE UNIFORM BUILDING AND ENERGY CODE (REFERENCING 2009 IBC)

SELLERS TREYBAL STRUCTURAL ENGINEERS PC

802.497.1174 | www.STS-Engineers.com

65 Huntington Rd, Suite 201

Richmond, VT 05477

DEAD LOAD ROOF DEAD LOAD: 15 PSF FLOOR DEAD LOAD: 15 PSF

GROUND SNOW LOAD: 60 PSF SNOW EXPOSURE FACTOR: 1.0 SNOW THERMAL FACTOR: 1.0 SNOW IMPORTANCE FACTOR: 1.0 FLAT ROOF SNOW LOAD: 42 PSF

BASIC WIND SPEED: 100 MPH WIND IMPORTANCE FACTOR: 1.0

WIND EXPOSURE CATEGORY: C

OCCUPANCY CATEGORY: II

SITE CLASS: D (ASSUMED)

No. 14037

SEISMIC DESIGN CATEGORY: B

SEISMIC IMPORTANCE FACTOR: 1.0