## DESIGN LOADS

CODE BODY: IBC 2006 Pg: 20 PSF ls: 1.0

G: 1.0 Cs: .90 Ct: 1.1

Ps: 20 PSF (MINIMUM)

ROOF DEAD LOAD: 4 PSF CEILING LIVE LOAD: 0 PSF CEILING DEAD LOAD: 7 PSF WIND LOAD: 90 MPH

EXPOSURE: C

lw: 1.0

BUILDING COLORS

ROOF METAL	FOREST GREEN	WAINSCOT CORNER	N.A.
GABLES	TAUPE	WAINSCOT CAP	N.A.
SIDES	TAUPE	CORNER	FOREST GREEN
WAINSCOT	N.A.	EAVE/FASCIA	FOREST GREEN
SOFFIT	FOREST GREEN	GABLE/RAKE	FOREST GREEN
RIDGE CAP	FOREST GREEN	DOOR TRIM	FOREST GREEN

1. SITEWORK: THE SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING.

2. BACK FILL: BACK FILL SHALL CONSIST OF GRAVEL, PEAROCK OR CRUSHED STONE 2 FOOT BACK FROM PANEL/FOUNDATION WALL. GRANULAR BACKFILL TO START AT OR BELOW BOTTOM OF FOOTING & EXTEND VERTICALLY TO WITHIN 8" OF GRADE. COVER GRANULAR MATERIAI W/ ASPHALT OR POLYETHYLENE STRIPS PRIOR TO ADDING 8" OF TOP SOIL SLOPE AWAY FROM WALL  $\frac{1}{2}$ " PER FOOT MIN. 6' FROM WALL.

3. CONCRETE WORK: THE CONCRETE WORK SHALL CONSIST OF ALL NECESSARY POUR-IN-PLACE CONCRETE FOOTINGS (OR FOUNDATION) AS PER BUILDING PLANS DESIGNED BY OTHERS THE CONCRETE SHALL MEET A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS. ALL CONCRETE SHALL BE DESIGNED IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-05) AND COMMENTARY (ACI 318R-05).

WITH THE PROVISIONS OF THE 2005 EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. UNLESS NOTED OTHERWISE ALL FRAMING LUMBER SHALL BE SPF#2 GRADE.

5. TRUSSES: WOOD TRUSSES ARE SHOP/PLANT FABRICATED WITH CONNECTOR PLATES PER SPECIFICATIONS. DESIGN CRITERIA ESTABLISHED BY THE TRUSS PLATE INSTITUTE - (ANSI/TPI 1-2002). REFER TO THE BCSI(BUILDING COMPONENT SAFETY INFORMATION) MANUAL FOR WOOD TRUSS TEMPORARY BRACING REQUIREMENTS.

6. METAL CONNECTORS: ALL METAL CONNECTORS ARE OF GALVANIZED STEEL AND DESIGN APPROVED TO MEET OR EXCEED REQUIRED STANDARDS. | PREMATURE DEGRADATION OF STRUCTURAL BUILDING COMPONENTS.

7. ROOFING AND SIDING MATERIAL: THE METAL ROOF AND WALLS SHALL BE EPS FULL FORMED PANEL. THE RIBBED DESIGN HAS  $\frac{3}{4}$ " HIGH PRIMARY RIBS 9" O.C. FOR BEAM STRENGTH AND 2 INTERMEDIATE LOW RIBS 3" O.C. FOR ADDITIONAL STIFFENING. THE EPS ROLL FORM PANEL IS MANUFACTURED TO ASTM SPECS. W/ AN 80,000 PSI MIN. YIELD POINT AND AN 82,000 PSI MINIMUM TENSILE STRENGTH. A FOUR-LAYER COLOR-CLAD PROCESS INCLUDES G-60 GALVANIZED ZINC COATING, BONDERIZED COATING, BAKED ON PRIMER COATING, AND A SILICONIZED POLYESTER(WHITE IS POLYESTER ONLY) BAKED-ON PAINT FINISH.

8. FASTENERS: ALL ROOF AND WALL METAL SHEATHING SHALL BE FASTENED TO THE BUILDING STRUCTURE W/ TRUE-GRIP SCREWS W/MILL POINT AND HEX HEAD. THE SCREWS SHALL HAVE A EPDM RUBBER WASHER TO ENSURE WEATHER TIGHTNESS.

9. SHORING AND BRACING: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING.



**ENERGY PANEL STRUCTURES** 102 EAST INDUSTRIAL PARK GRAETTINGER, IA 51342 PHONE: 712/859-3219 FAX: 712/859-3275 WWW.EPSBUILDINGS.COM

THIS SET OF PLANS ARE INTENDED TO BE USED BY CONTRACTORS WITH BUILDING CONSTRUCTION KNOWLEDGE.

ENERGY PANEL STRUCTURES CAN NOT BE HELD RESPONSIBLE FOR MISUSE OR MISINTERPRETATION OF INFORMATION INCLUDED IN THESE DRAWINGS, OR THE USE OF THIS SET OF PLANS BY PEOPLE WITHOUT BUILDING CONSTRUCTION KNOWLEDGE.

\* SIP PANEL WALL CONSTRUCTION BUILDINGS ARE DESIGNED FOR MINIMAL AIR INFILTRATION. IT IS RECOMMENDED THAT GENERAL CONTRACTOR/OWNER WORKS IN CONJUNCTION WITH AN HVAC PROFESSIONAL TO DESIGN A SYSTEM TO INSURE AIR QUALITY AND MOISTURE CONTROL. AIR TO AIR EXCHANGERS ARE RECOMMENDED IN SUCH TYPE STRUCTURES.

\* RESPONSIBILITY OF THIS SET OF PLANS IS LIMITED TO THE BUILDING DESIGN SHOWN ON THE PLANS. BUILDING DESIGN IS BASED ON NUMBER, SIZE AND LOCATION OF OPENINGS SHOWN ON THE PLANS. NO · RESPONSIBILITY IS ASSUMED FOR ADDITIONAL OPENINGS NOT SHOWN ON THE PLANS OR CHANGES IN THE LOCATION OF OPENINGS.

\* ALL DOOR AND WINDOW OPENINGS SHOWN ON THIS SET OF PLANS ARE THE ACTUAL SIZE OF THE OPENING PROVIDED. IT IS THE GENERAL CONTRACTOR/OWNER'S RESPONSIBILITY TO VERIFY ALL LOCATIONS AND SIZES OF OPENINGS PRIOR TO CONSTRUCTION.

\* EPS WALL PANELS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY CONCRETE FOUNDATION WALLS. CONCRETE WALLS TO BE DESIGNED TO ABSORB ALL LOADS IMPOSED BY EPS STRUCTURE AND 100% OF ALL MATERIAL/BACKFILL/ETC (IF ANY) STORED AGAINST THEM. CONCRETE WALL TO IMPOSE NO HORIZONTAL LOAD TO EPS STRUCTURE.

4. WOOD FRAMING: ALL WOOD CONSTRUCTION SHALL BE IN CONFORMANCE | \* THIS BUILDING IS DESIGNED USING THE ROOF AS A DIAPHRAGM(DEEP THIN BEAM) TO TRANSFER SIDEWALL AND ROOF WIND LOADS TO THE ENDWALL SHEAR WALLS SHOWN. STEEL PANELS ARE AN INTEGRAL PART OF THE BUILDING STRUCTURE AND ANY FUTURE FIELD MODIFICATIONS MADE MAY BE DETRIMENTAL TO THE BUILDING'S STRUCTURAL PERFORMANCE.

> \* THIS IS A STRUCTURAL FRAMING PLAN AND IS TO BE USED FOR THAT PURPOSE ONLY, CODES REGARDING FIRE SAFTEY, PERSONAL SAFTEY & INJURY ARE NOT ADDRESSED IN THIS SET OF PLANS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR/OWNER.

\* THE ATTIC OF THIS STRUCTURE MUST BE PROPERLY VENTILATED. CONSULT AN HVAC ENGINEER FOR PROPER SIZING OF EAVE INLETS, RIDGE OPENINGS, END WALL LOUVERS, OR MECHANICAL SYSTEMS. FAILURE TO PROPERLY VENTILATE THE ATTIC MAY CAUSE PARTITION TO SEPARATE AT ROOF/CEILING, CONDENSATION ON ROOF MATERIALS, LARGER AIR CONDITIONING LOAD, MOLD OR MILDEW, CORROSION OF TRUSS PLATES,

\* THE CEILING SYSTEM PROVIDED HAS NOT BEEN DESIGNED FOR HUMAN TRAFFIC. CONTRACTORS — IT IS YOUR RESPONSIBILITY TO WARN OTHER TRADES.

\* TO MINIMIZE THE POSSIBILITY OF FASTENER POPPING AND CRACKING IN AREAS ADJACENT TO A WALL AND CEILING INTERSECTION, A FLOATING GYPSUM CORNER ANGLE METHOD OF APPLICATION SHOULD BE USED. PLEASE REFER TO THE GYPSUM ASSOCIATION'S SPECIFICATIONS FOR THE APPLICATION AND FINISHING OF GYPSUM PANEL PRODUCTS.

\* THE PLASTIC LAMINATE PROPOSED, .030 NRP, .060 FRP, OR .090 FRP IS A CLASS "C" PRODUCT. A CLASS "C" RATED PRODUCT WHEN TESTED PER ASTM 84, WHICH MEANS IT HAS A FLAME SPREAD LESS THAN 200. THESE PANELS ARE SUSCEPTIBLE TO IGNITION. ONCE IGNITED, THEY WILL BURN RAPIDLY AND WILL RELEASE DENSE SMOKE. FIRE SAFETY REQUIRES PROPER DESIGN OF FACILITIES AND FIRE SUPPRESSION SYSTEMS, AS WELL AS PRE-CAUTIONS DURING CONSTRUCTION AND OCCUPANCY.

\* THERE MAY BE SOME "BOWING" OF EXTERIOR STRUCTURAL INSULATED PANELS DUE TO A TEMPERATURE AND MOISTURE DIFFERENTIAL BETWEEN INTERIOR AND EXTERIOR OSB SKINS. WHEN THE EXTERIOR SKIN EXPERIENCES COLD TEMPERATURE, ITS MOISTURE CONTENT RISES, WHICH CAUSES THE EXTERIOR SKIN TO EXPAND. THIS MAY CAUSE THE PANEL TO BOW OUT. TO MINIMIZE THE EFFECT, YOU MAY WANT TO

A.) HIDE THE "BOW" BY USING FLOATING CORNERS ON THE INTERIOR GYPSUM BOARD. B.) MECHANICALLY FASTENING ONE STRUCTURAL INSULATED PANEL TO THE CROSS WALLS. THE CROSS WALL WILL HAVE TO BE DESIGNED TO RESIST FORCES OF THE BOW, AS WILL THE MECHANICAL FASTENERS.

\* ACCORDING TO SECTION 717.4 OF THE 2006 INTERNATIONAL BUILDING CODE DRAFT STOPS ARE NORMALLY REQUIRED EVERY 3,000 SQUARE FEET. THIS STRUCTURE AS ORDERED AND SPECIFIED BY THE DEALER AND/OR OWNER DOES NOT MEET THIS SPECIFICATION. IT IS THE RESPONSIBILITY OF THE DEALER AND/OR OWNER TO ENSURE THAT EITHER THE BUILDINGS MEETS THE EXCEPTIONS NOTED IN THIS SECTION OF THE CODE OR THEY PUT MORE DRAFT STOPS IN. IF IS DECIDED TO PUT MORE DRAFTS STOPS IN THE STRUCTURE, THEY MUST FIRST ENSURE THE EXTRA WEIGHT DOES NOT EFFECT THE STRUCTURAL INTEGRITY OF THE BUILDING.

\* THE INTERIOR OF THIS STRUCTURE IS SEPARATED FROM THE FOAM PLASTIC INSULATION WITH A MINIMUM 5%" THICK MATERIAL, TESTED PER ASTM METHOD E119-98 FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS FOR A MINIMUM 15 MINUTE THERMAL BARRIER REQUIRED

NOTE: WHEN APPLYING ICE & WATER OR "PEEL & SEAL" FOLLOW THE FOLLOWING INSTRUCTIONS TO PREVENT AIR INFILTRATION

1. BE SURE TEMERATURE OF MATERIALS AND AMBIENT TEMPERATURE

ARE BOTH ABOVE 50° F.

2. THOROUGHLY CLEAN SURFACES.

3. APPLY ACETONE(BY OTHERS) TO METAL SURFACE TO CLEAN.

4. ALLOW ACETONE TO FLASH OFF.

5. APPLY "PEEL & SEEL" OR ICE & WATER, BE SURE TO APPLY PRESSURE THROUGH OUT MATERIAL TO ENSURE 100% CONTACT.

\* THIS SET OF PLANS ARE PANEL SHOP PLANS ONLY. OVERALL STRUCTURAL DESIGN OF THIS BUILDING IS BY OTHERS, AND NOT THE RESPONSIBILITY OF ENERGY PANEL STRUCTURES.

\* THE PLASTIC LAMINATE PROPOSED, .090 FRP IS A CLASS "A" PRODUCT. A CLASS "A" RATED PRODUCT WHEN TESTED PER ASTM 84, WHICH MEANS IT HAS A FLAME SPREAD LESS THAN 25, AND SMOKED DELEVOPED OF LESS THAT 450. THESE PANELS ARE SUSCEPTIBLE TO IGNITION. ONCE IGNITED, THEY WILL BURN RAPIDLY AND WILL RELEASE DENSE SMOKE. FIRE SAFETY REQUIRES PROPER DESIGN OF FACILITIES AND FIRE SUPPRESSION SYSTEMS, AS WELL AS PRE-CAUTIONS DURING CONSTRUCTION AND OCCUPANCY.

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B10	TRUSS INSTALLATION

## GENERAL INFORMATION

DEALER:

BBL BUILDINGS 232 SEMO LANE PERRYVILLE, MO 63775 PHONE: 573-547-8363 FAX: 573-547-1641

OWNER:

LAPPE CEMENT 8064 HWY B PERRYVILLE, MO 63775

BUILDING TYPE:

SOLID CORE

BUILDING USAGE:

STORAGE

BUILDING

DIMENSIONS: 42'-0"x128'-0"x13'-11"

AREA:

5376 SQ. FT.

DRAWN: RGW

REVIEWED BY: DMM

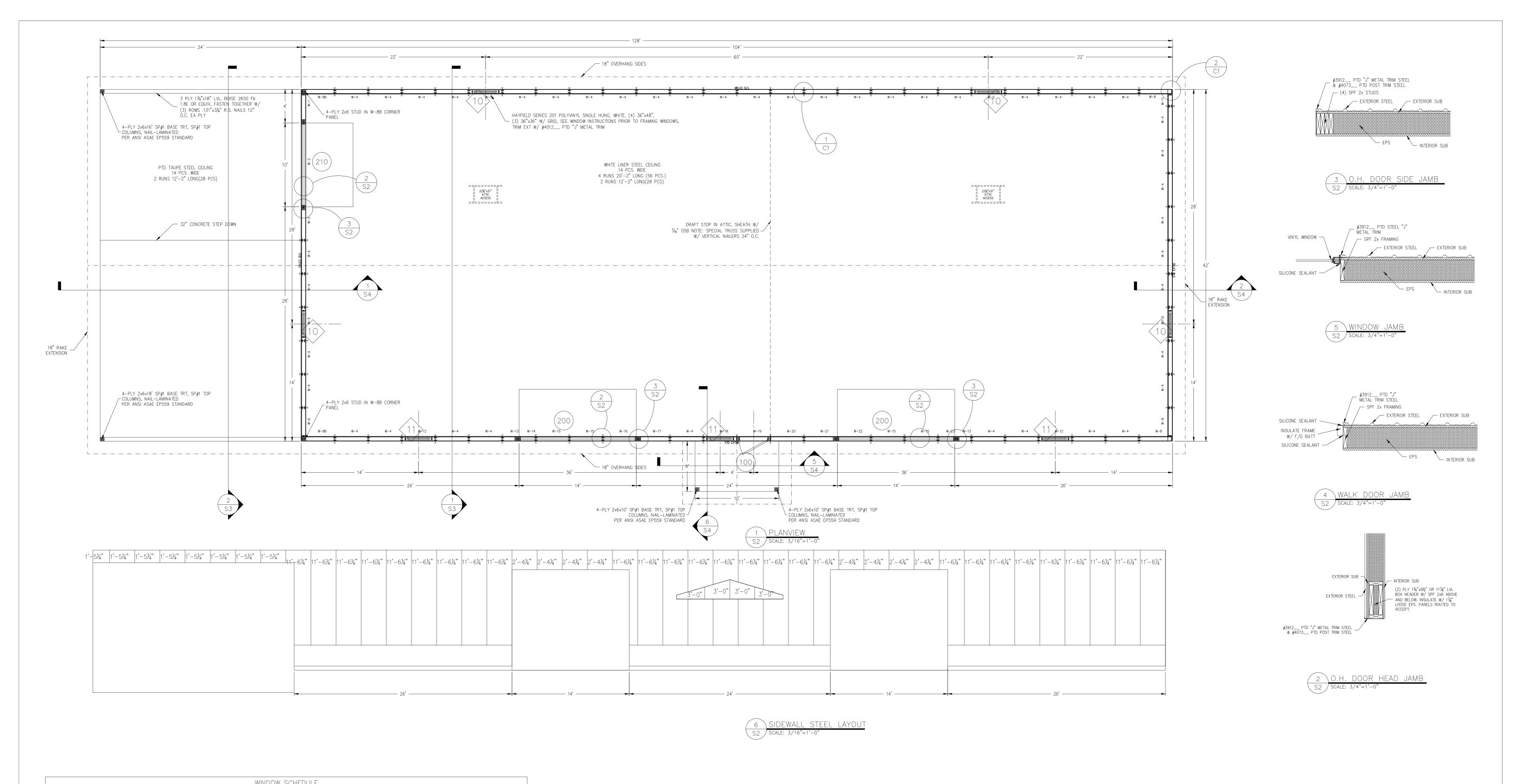
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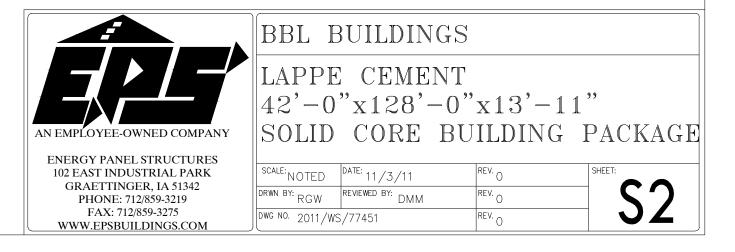
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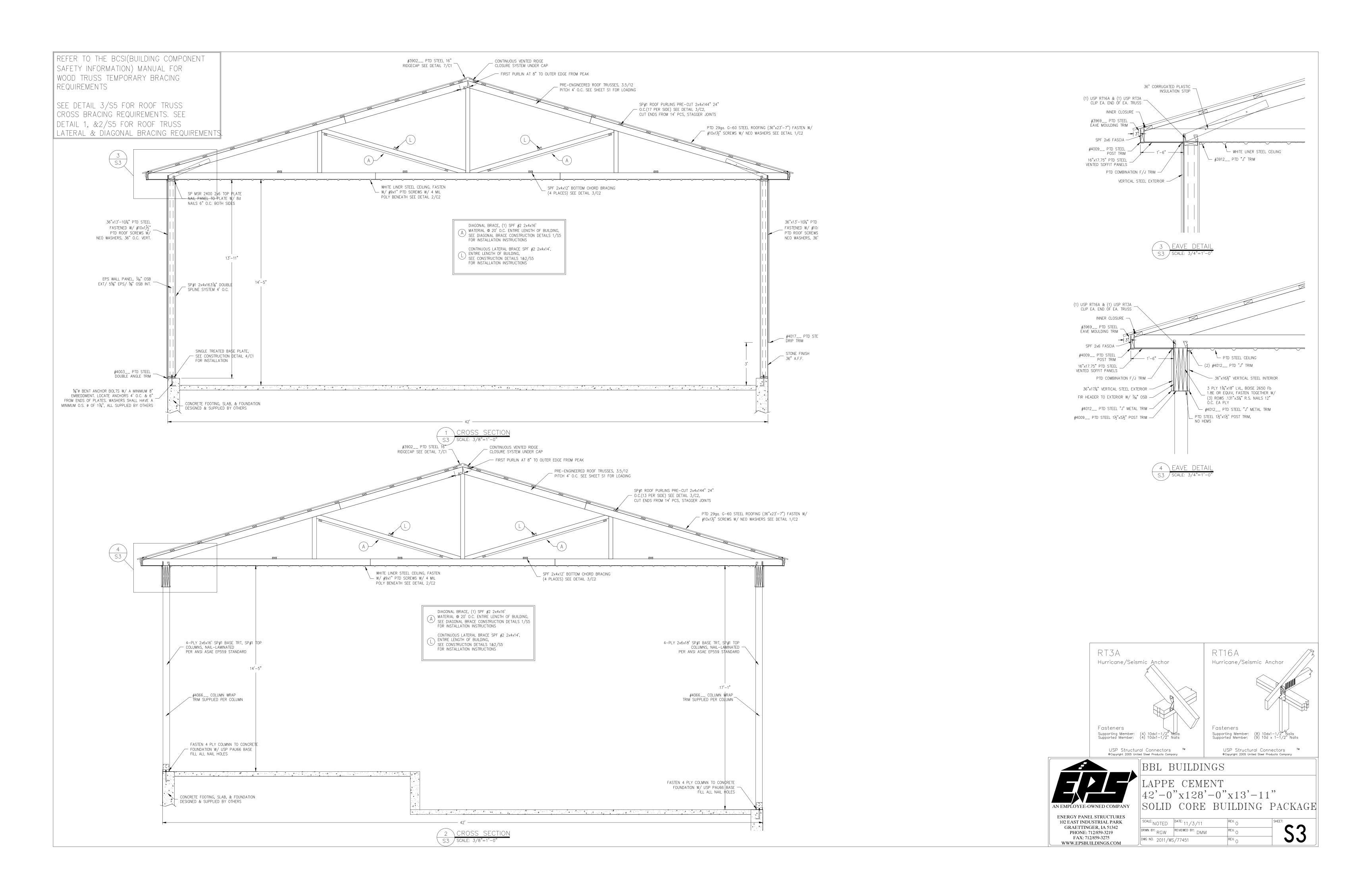
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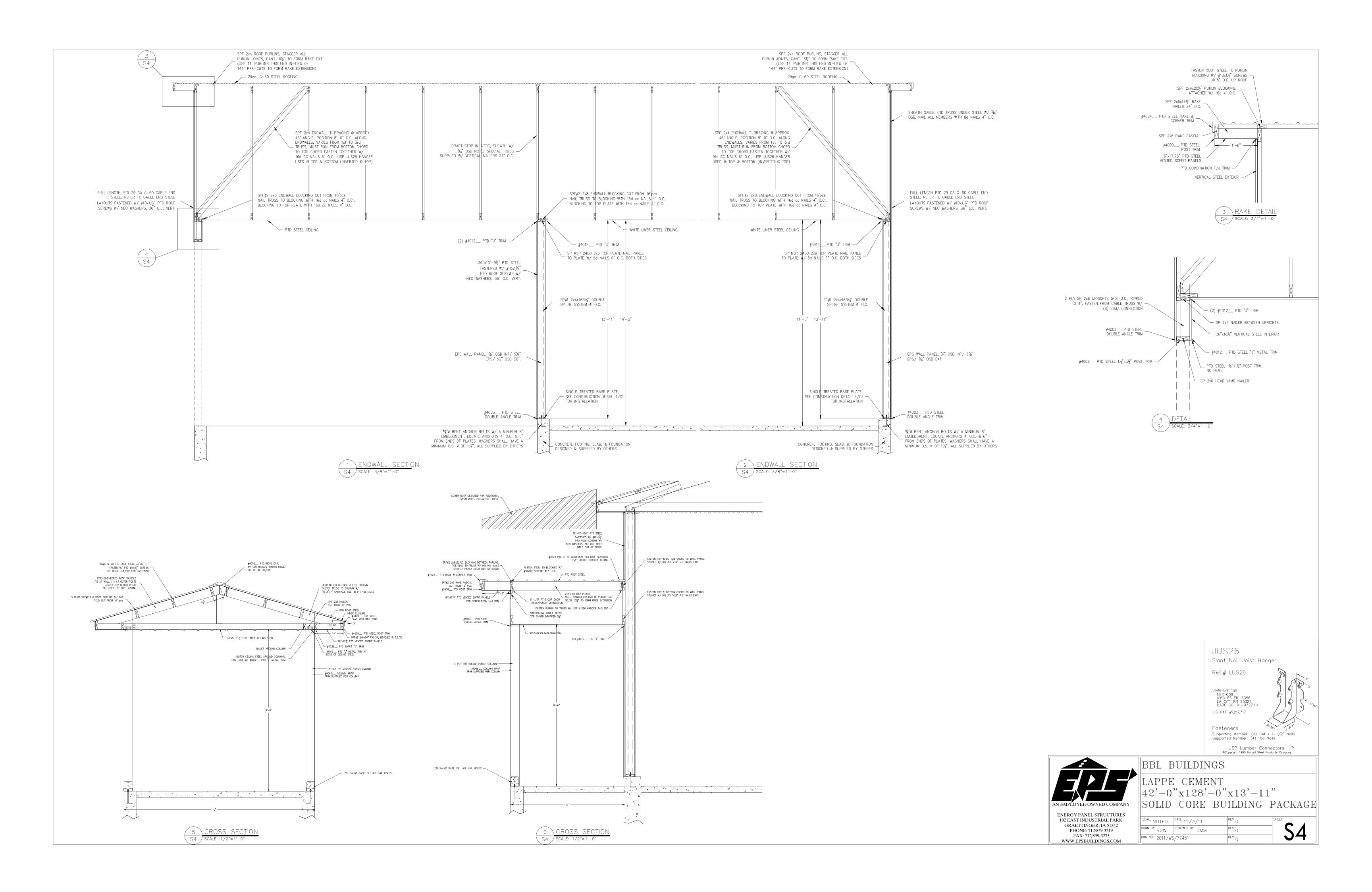


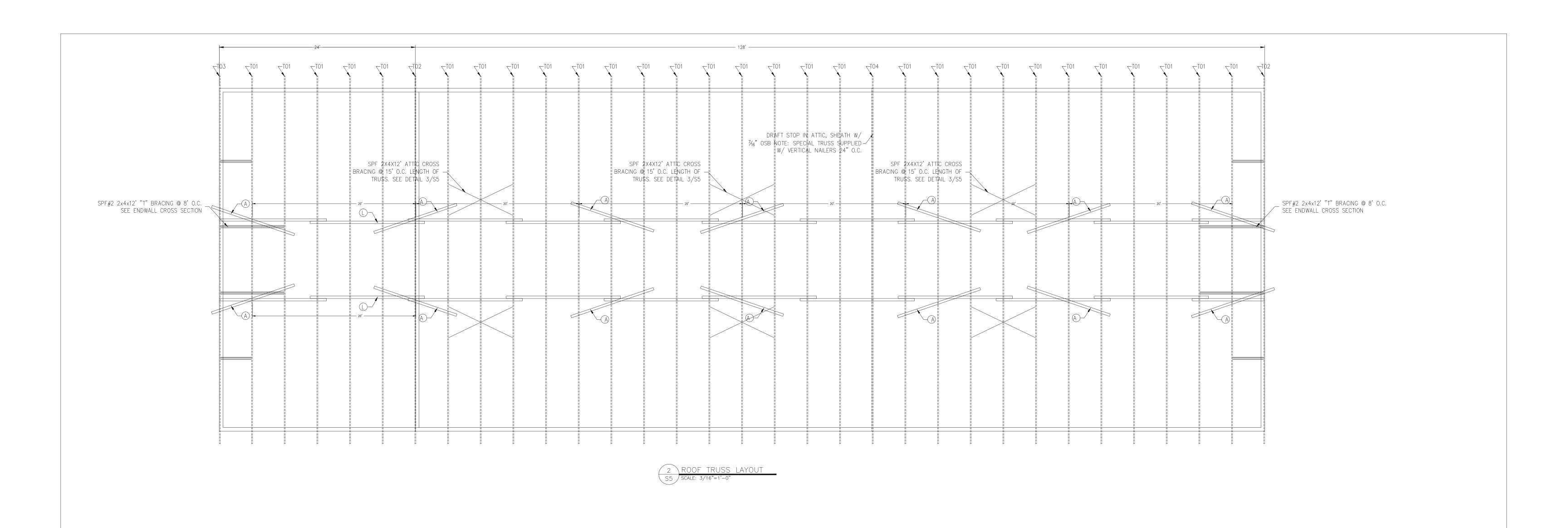
WINDOW SCHEDULE								
Remarks	Number	Quantity	Rough Width	Rough Height	Head Height	Header	Bearing Studs (Each Side)	Full Studs (Each Side)
HAYFIELD SERIES 201 POLYVINYL WINDOW SINGLE HUNG W/ GRID	10	4	3'-0"	4'-0"	6'-9 1/8"	NONE, FRAME W/ SPF#2 2x MATERIAL		
HAYFIELD SERIES 201 POLYVINYL WINDOW SINGLE HUNG W/ GRID	11	3	3'-0"	3'-0"	6'-9 1/8"	NONE, FRAME W/ SPF#2 2x MATERIAL		

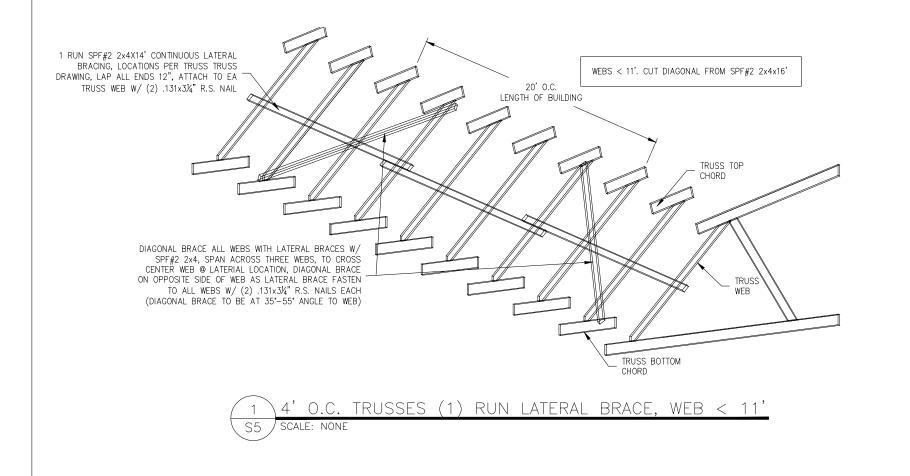
	DOOR OPENING/HEADER SCHEDULE							
Number	r Remarks Quantity Rough Width Rough Height Head Height Head Height		Bearing Studs (Each Side)	Full Studs (Each Side)				
100	A.J./7100/STD 30, BOR-KNOB, WHITE	1	3'-4 3/8"	6'-9 1/8"	6'-9 1/8"	NONE, FRAME W/ 2X MATERIAL		
200	OVERHEAD DOOR	2	14'-0"	12'-0"	12'-0"	2 PLY LP 2650Fb 1 3/4"x11 7/8" LVL BOX HEADER W/ (1) SPF 2x6 ABOVE & BELOW, INSULATE BETWEEN PLYS W/ LOOSE 1 7/8" EPS	2	2
210	OVERHEAD DOOR	1	10'-0"	12'-0"	12'-0"	2 PLY LP 2650Fb 1 3/4"x9 1/2" LVL BOX HEADER W/ (1) SPF 2x6 ABOVE & BELOW, INSULATE BETWEEN PLYS W/ LOOSE 1 7/8" EPS	1	2

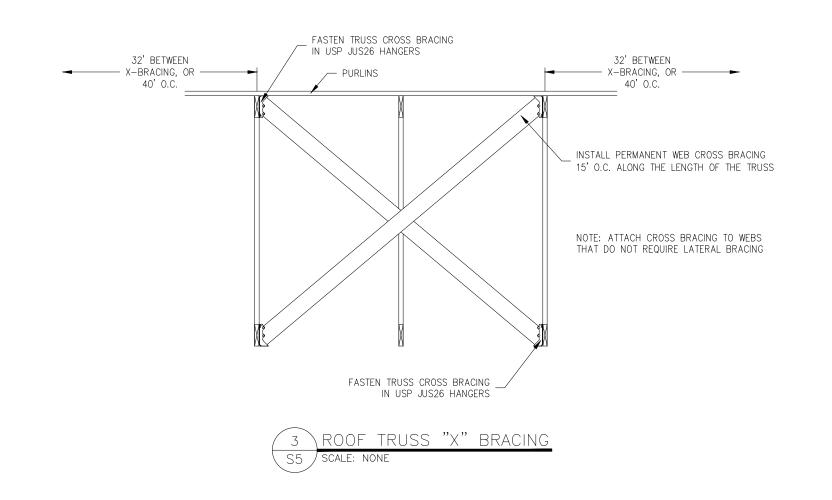


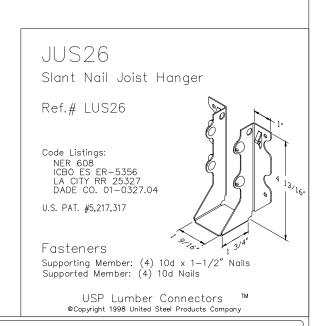






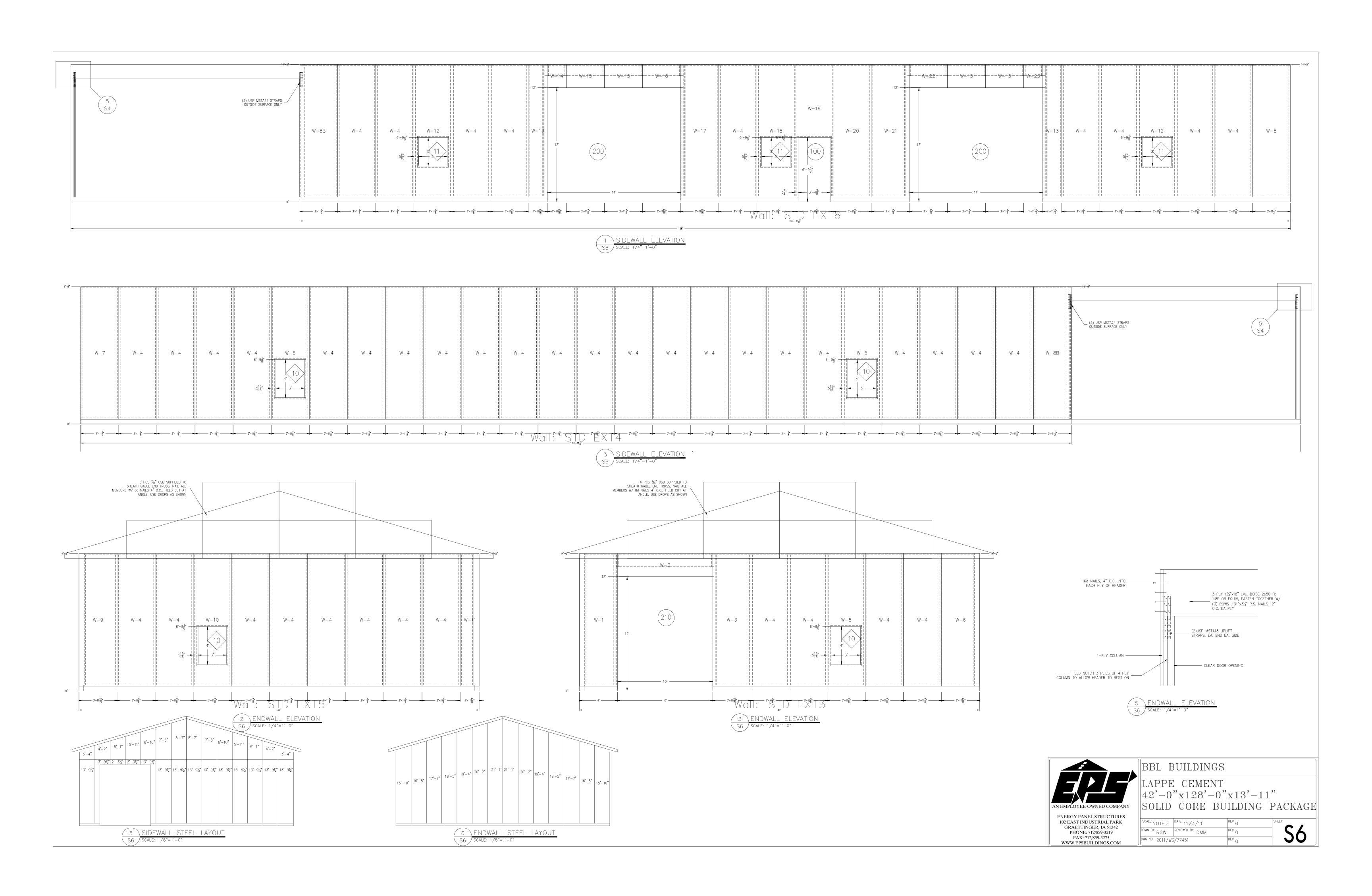


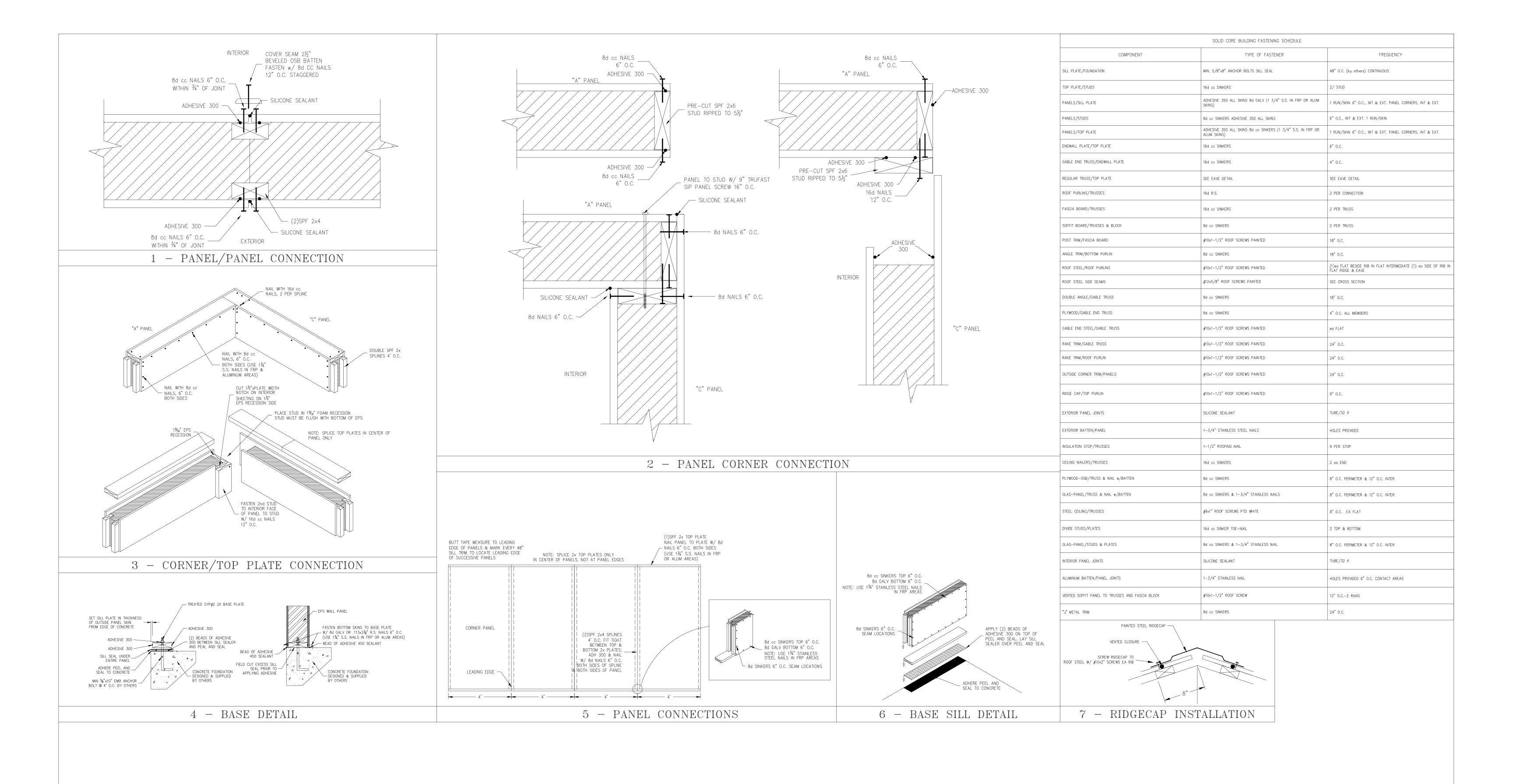






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BBL	BUILDIN	IGS		
LAPP	E CEME	ENT	1 1 99	
42	D CORE	ENT -0"x13' BUILDII	-II NG PA	CKAGF
SCALE: NO TEE	DATE: 11 /7 /11	REV.	SHEET	:







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	DRWN BY: RGW	REVIEWED BY: DMM	REV. O	(
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