



Commonwealth of Massachusetts

Manufactured Buildings Program

Transmittal Form for all correspondences relating to
Manufactured Buildings and Building Components

To: Linda McAlister Linda.McAlister@e.ma.us	Manufactured Buildings Program	Phone Number: 508-422-1955	Date Transmitted 11/8/16
Commonwealth of Massachusetts		Department of Public Safety	
Board of Building Regulations and Standards		50 Maple Street, Suite One	
Milford		Massachusetts	01757-3698

The person forwarding this material shall complete the following portion of this transmittal

Name of Person Transmitting Material	Brett Hebert	MC Number 352	TPIA Number 02
---	--------------	------------------	-------------------

The following information is being transmitted to the Board of Building Regulations and Standards and / or the Department of Public Safety for reasons detailed below (Please check the appropriate box or give a further description of the transmitted items under the section labeled *other*. Be sure to identify the appropriate Use Group.)

	Please indicate the Distinct Model and / or Serial Number pertaining to transmitted items	Use Group
--	---	-----------

Building Plans for Review and Approval	<input type="checkbox"/>		
Building Plans forwarded as a record copy for your files (Review not required)	<input checked="" type="checkbox"/>	ON#6540	R-3
Revised building plans for review. (Please clearly identify revisions on the plans.)	<input type="checkbox"/>		
Revised Building Plans forwarded as a record copy for your files (Review not required - Please clearly identify revisions on the plans.)	<input type="checkbox"/>		

Compliance Assurance Programs	Original Submission <input type="checkbox"/>	Modification to: _____	<input type="checkbox"/>
Calculations Manual	Original Submission <input type="checkbox"/>	Modification to: _____	<input type="checkbox"/>
Installation Manual	Original Submission <input type="checkbox"/>	Modification to: _____	<input type="checkbox"/>
Systems Drawings	Original Submission <input type="checkbox"/>	Modification to: _____	<input type="checkbox"/>

Other - Provide a detailed description of any other materials which are being transmitted. **Identify any revisions clearly along with BBRs number.**
Also, identify the requested action.


Site Location: 471 EAST STREET, WESTWOOD, MA 02090 (NORFOLK COUNTY)

The office transmitting this information has reviewed the above mentioned and attached materials and has found them, to the best of our knowledge and abilities, to be in compliance with the codes and \ or rules and regulations for the Commonwealth of Massachusetts' Manufactured Building Program, as applicable

Signed By for TPIA:	<div style="border: 1px solid black; width: 150px; height: 80px;"></div>	BBRS No: assigned by Mass.	<div style="border: 1px solid black; width: 150px; height: 20px;"></div>	Signed By for MASS:	<div style="border: 1px solid black; width: 150px; height: 80px;"></div>
---------------------	--	----------------------------	--	---------------------	--

Print Form

Public View

 Owner Dashboard

471 East St
Westwood, MA 02090
Status: Sold

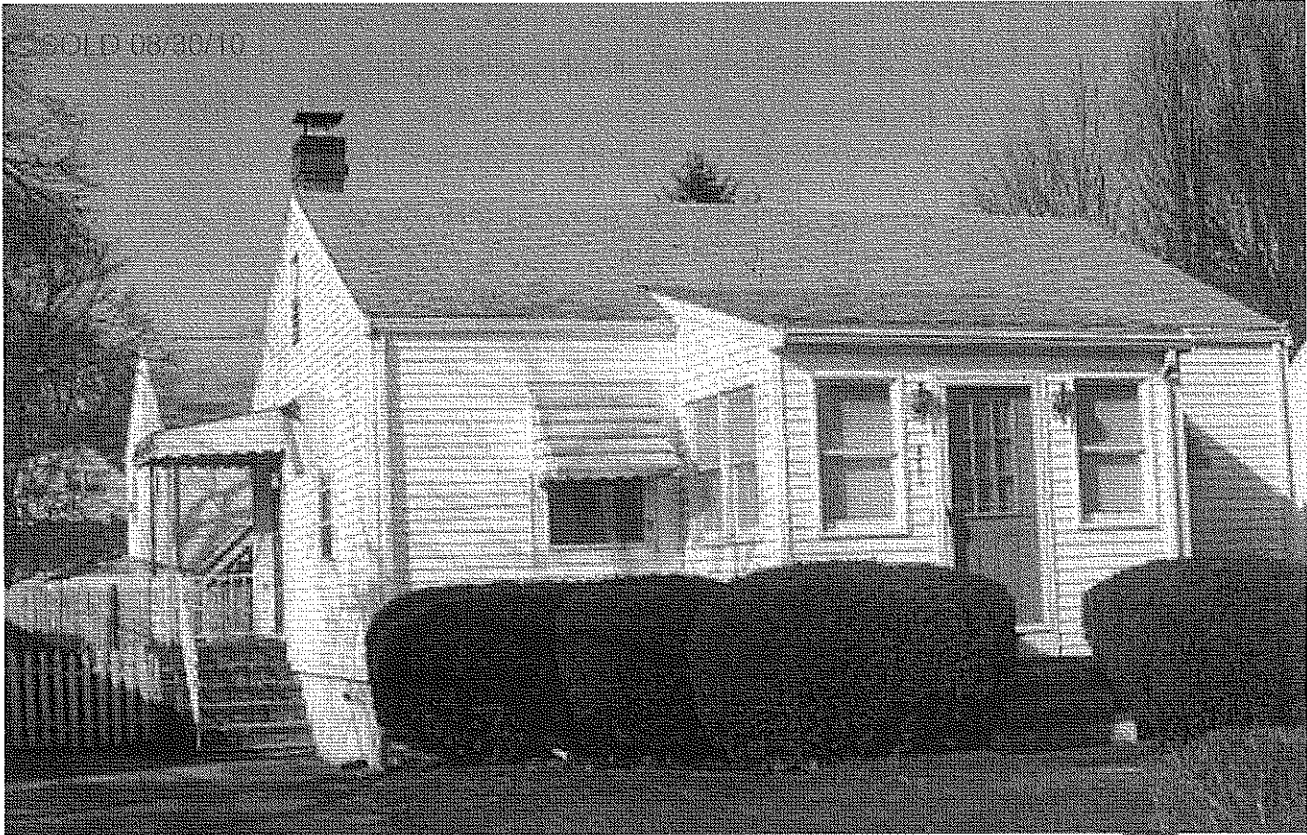
\$315,256
Redfin Estimate

\$250,000
Sold Aug 30, 2010

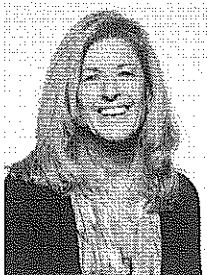
2
Beds

1
Bath

804 Sq. Ft.
\$392 / Sq. Ft.
Built: 1937



Street View



Nancy Schiff
REDFIN Real Estate Agent

☆☆☆☆☆
346 client reviews

PFS REVIEW ONLY
Date: 11/14/16
PFS CORPORATION
Bloomsburg, PA

DRAWING INDEX

SHEET#	DESCRIPTION
CV	COVER SHEET
EV1	FRONT ELEVATION
EV2	REAR ELEVATION
EV3	LEFT ELEVATION
EV4	RIGHT ELEVATION
FP1	2ND STORY FLOOR PLAN
SW1	2ND STORY BRACE WALL PLAN
EL1	2ND STORY ELECTRICAL PLAN
ELC	ELECTRICAL LOAD CALCS
CS	CIRCUIT SCHEDULE
FND	EXISTING 1ST FLOOR
TR1	7/12 25'-0" RAFTER
TR2	7/12 25'-0" RAFTER CONNECTIONS
SE1	7/12 25'-0" CROSS SECTION
DWS	DOOR AND WINDOW SCHEDULE
PL1	PLUMBING DETAILS
PL2	PLUMBING DETAILS
PL3	PLUMBING NOTES
HL1	2ND STORY HEATLOSS
CD	CANTILEVER DETAIL

CLASSIFICATION	
OCCUPANT LOAD:	SINGLE FAMILY
USE GROUP:	R-3
CONSTRUCTION TYPE:	VB WOOD FRAME UNPROTECTED

DESIGN LOADS	
ROOF LIVE LOAD:	40 PSF GSL
ROOF DEAD LOAD:	10 PSF
CEILING DEAD LOAD:	10 PSF
CEILING LIVE LOAD:	20 PSF (STORAGE) / 30 PSF (HABITABLE)
FLOOR LIVE LOAD:	40 PSF
FLOOR DEAD LOAD:	10 PSF
HORIZONTAL WIND LOAD:	100 MPH @ 3 SEC GUST
EXPOSURE:	C
GROUND SNOW LOAD:	40 PSF
SEISMIC CATEGORY:	B

APPLICABLE CODES	
MA 1&2 FAMILY DWELLING CODE -(780 CMR) 8TH EDITION	
MA FUEL/GAS/PLUMBING (248 CMR)	
2009 INTERNATIONAL MECHANICAL CODE W/ MA AMENDMENTS	
2014 NATIONAL ELECTRICAL CODE W/ MA AMENDMENTS	
2012 INTERNATIONAL ENERGY CONS. CODE W/ MA AMENDMENTS	

INSULATION VALUES	
ROOF TO EXTERIOR:	R-38
EXTERIOR WALLS TO EXTERIOR:	R-21 HIGH DENSITY
FLOOR TO BASEMENT OR CRAWL SPACE:	R-30 (ON-SITE)

THESE DRAWINGS ARE DESIGNED TO BE USED FOR THE CONSTRUCTION OF FACTORY BUILT HOUSING UNITS. THESE UNITS ARE DESIGNED IN ACCORDANCE WITH THE APPROVED SYSTEMS PACKAGE AND THE APPLICABLE STATE BUILDING CODES AS LISTED ABOVE ON THIS PAGE.

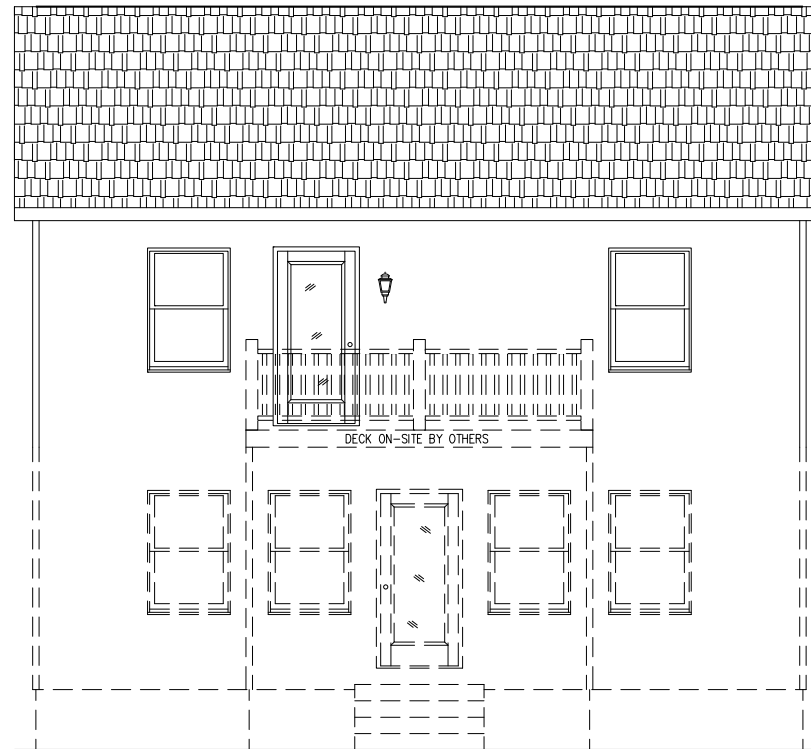
A 48 HOUR NOTIFICATION IS REQUIRED PRIOR TO THE SET. THE CSL ON RECORD WILL RELAY THIS TO THE LOCAL BUILDING AUTHORITY. IF ANY CONNECTIONS HAVE BEEN CONCEALED PRIOR TO INSPECTION, THE BUILDING OFFICIAL MAY REQUEST HAVING THE REMOVAL OF ELEMENTS THAT CONCEAL THE CONNECTIONS TO PROVIDE ACCESS. THIS WOULD NOT CONSTITUTE "DESTRUCTIVE DISSASSEMBLY". ALL CONNECTIONS ON SITE MUST BE INSPECTED BY THE LOCAL AUTHORITY.



Icon - Legacy Custom Modular Homes, LLC

246 SAND HILL ROAD
SELINGROVE, PA 17870
PHONE 570-374-3280
FAX 570-374-1122
WWW.ICONLEGACY.COM

O#6540 ADDITION



FRONT ELEVATION

R.A. AND P.E. STAMP

PFS STAMP



PFS CORPORATION
Approval Limited to Factory Built Portion Only

State: **MA**

Signature: *Renee Moise*

Title: **Staff Plan Reviewer**

Date: **11/14/16**

REVISION	DATE	BY
PRELIM	6/21/16	JBG
FINAL	11/1/16	PIF

BUILDER	AVALON BUILDING SYSTEMS
PROJECT	DEMEN BACHARA
ADDRESS	471 EAST STREET
CITY	WESTWOOD
COUNTY	NORFOLK
ORDER NO	6540
STATE	MA
ZIP	02090
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	100
SFT	742
TYPE	TWO STORY
FILE NAME	O#6540

246 SAND HILL ROAD
SELINGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM

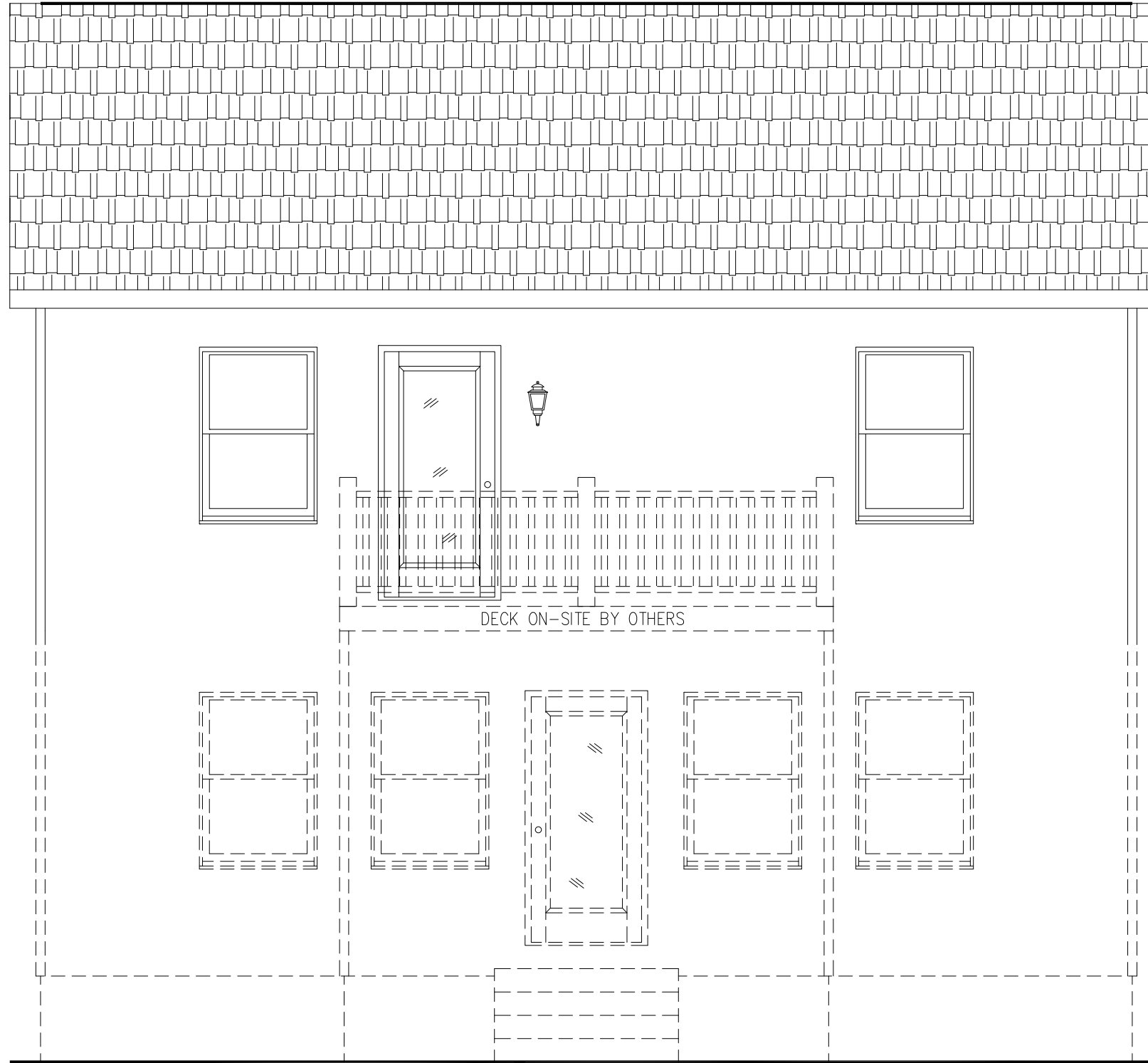


COVER PAGE

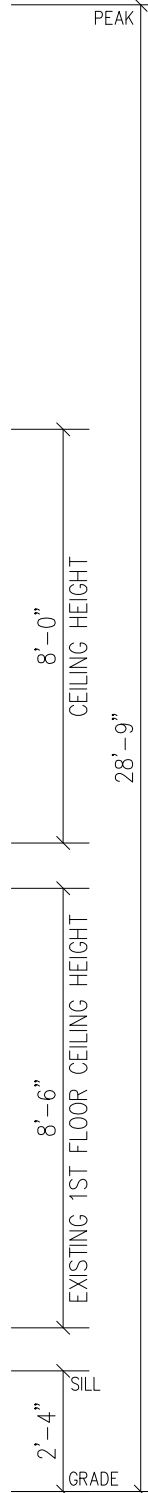
THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #
CV



FRONT ELEVATION

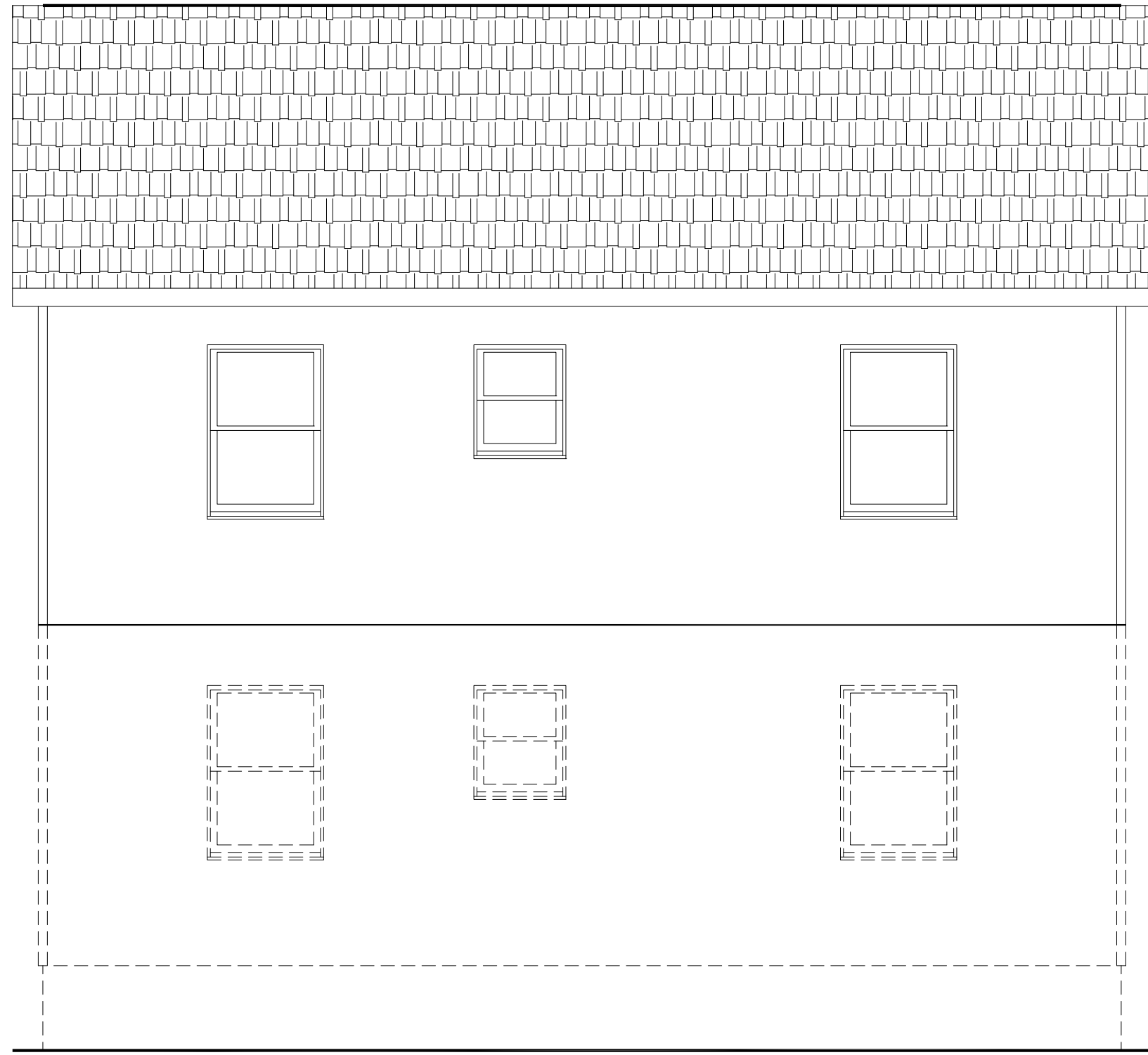


THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
EV1

BUILDER: AVALON BUILDING SYSTEMS HOMEOWNER/PROJECT: DEMIEN BACHARA ADDRESS: 471 EAST STREET CITY: WESTWOOD COUNTY: NORFOLK ORDER NO: 6540 STATE: MA ZIP: 02090 SNOW LOAD (LBS): 40 WIND SPEED (MPH): 100 SFT: 742 TYPE: TWO STORY FILE NAME: O#6540		DATE: 6/21/16 REVISION: PRELIM BY: JBG
DATE: 11/1/16 REVISION: FINAL BY: PIF	246 SAND HILL ROAD SELINSGROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM 	



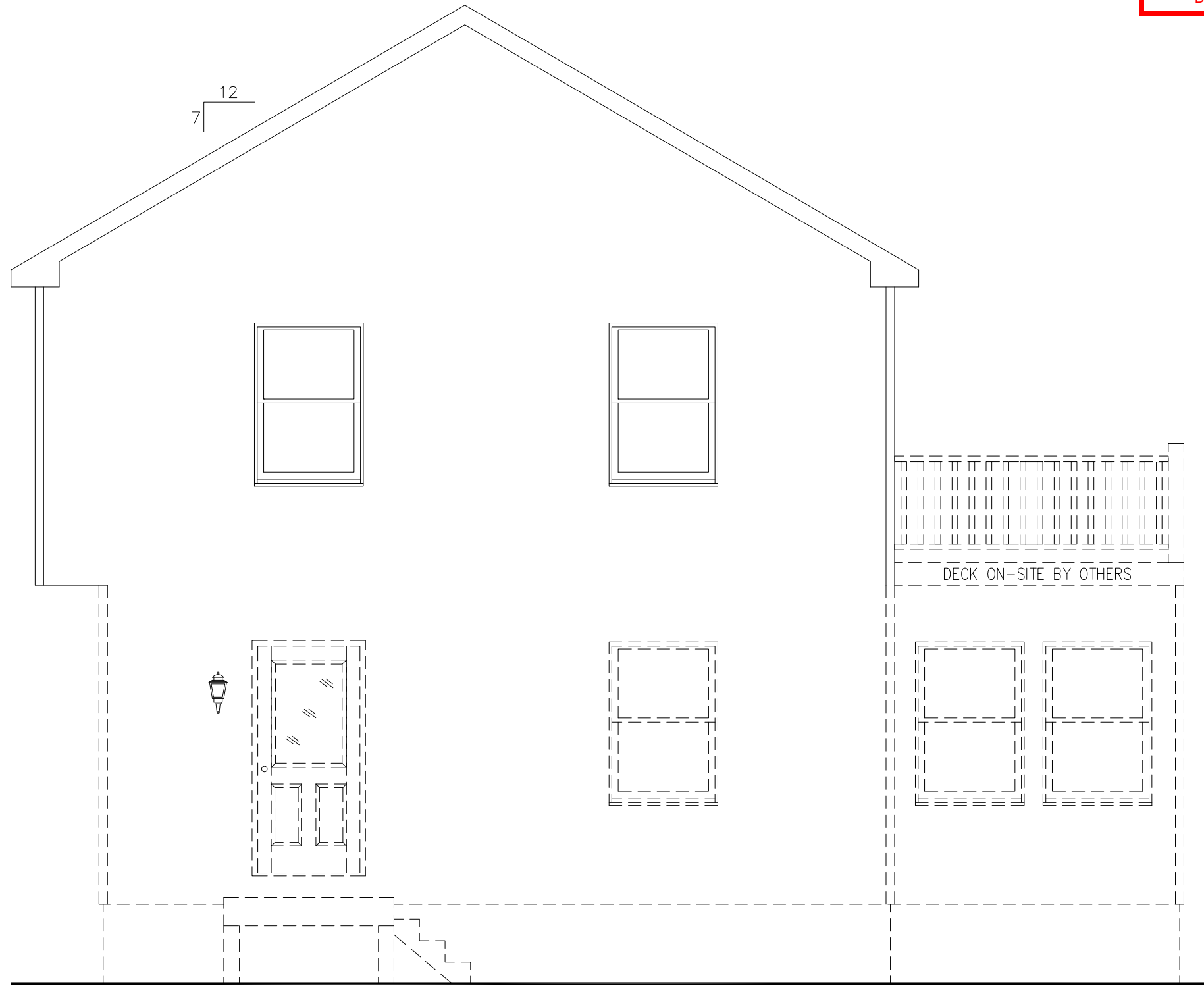
REAR ELEVATION

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
EV2

BUILDER: AVALON BUILDING SYSTEMS HOMEOWNER/PROJECT: DEMIEN BACHARA ADDRESS: 471 EAST STREET CITY: WESTWOOD COUNTY: NORFOLK ORDER NO: 6540 STATE: MA ZIP: 02090 SNOW LOAD (LBS): 40 WIND SPEED (MPH): 100 SFT: 742 TYPE: TWO STORY FILE NAME: O#6540		DATE: 6/21/16 REVISION: PRELIM BY: JBG
DATE: 11/1/16 REVISION: FINAL BY: PIF	246 SAND HILL ROAD SELINGROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM 	



LEFT SIDE ELEVATION



246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM

REVISION	DATE	BY
PRELIM	6/21/16	JBG
FINAL	11/1/16	PIF

LEFT ELEVATION

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #
EV3

BUILDER	AVALON BUILDING SYSTEMS		
HOMEBUYER/PROJECT	DEMEN BACHARA		
ADDRESS	471 EAST STREET		
CITY	STATE	ZIP	
WESTWOOD	MA	02090	
COUNTY	SNOW LOAD (LBS)	WIND SPEED (MPH)	
NORFOLK	40	100	
ORDER NO	SERIAL NO	TYPE	
6540	742	TWO STORY	
FILE NAME	O#6540		



RIGHT SIDE ELEVATION

246 SAND HILL ROAD
 SELINGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



REVISION	DATE	BY
PRELIM	6/21/16	JBG
FINAL	11/1/16	PIF

BUILDER	AVALON BUILDING SYSTEMS	
HOMEOWNER/PROJECT	DEMEN BACHARA	
ADDRESS	471 EAST STREET	
CITY	WESTWOOD	STATE MA
COUNTY	NORFOLK	ZIP 02090
ORDER NO	6540	SNOW LOAD (LBS) 40
		WIND SPEED (MPH) 100
		SFT 742
		TYPE TWO STORY
FILE NAME	O#6540	

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
 JLA

SERIAL # / ORDER #
O#6540

PAGE #
EV4

A 48 HOUR NOTIFICATION IS REQUIRED PRIOR TO THE SET. THE CSL ON RECORD WILL RELAY THIS TO THE LOCAL BUILDING AUTHORITY. IF ANY CONNECTIONS HAVE BEEN CONCEALED PRIOR TO INSPECTION, THE BUILDING OFFICIAL MAY REQUEST HAVING THE REMOVAL OF ELEMENTS THAT CONCEAL THE CONNECTIONS TO PROVIDE ACCESS. THIS WOULD NOT CONSTITUTE 'DESTRUCTIVE DISASSEMBLY'. ALL CONNECTIONS ON SITE MUST BE INSPECTED BY THE LOCAL AUTHORITY.

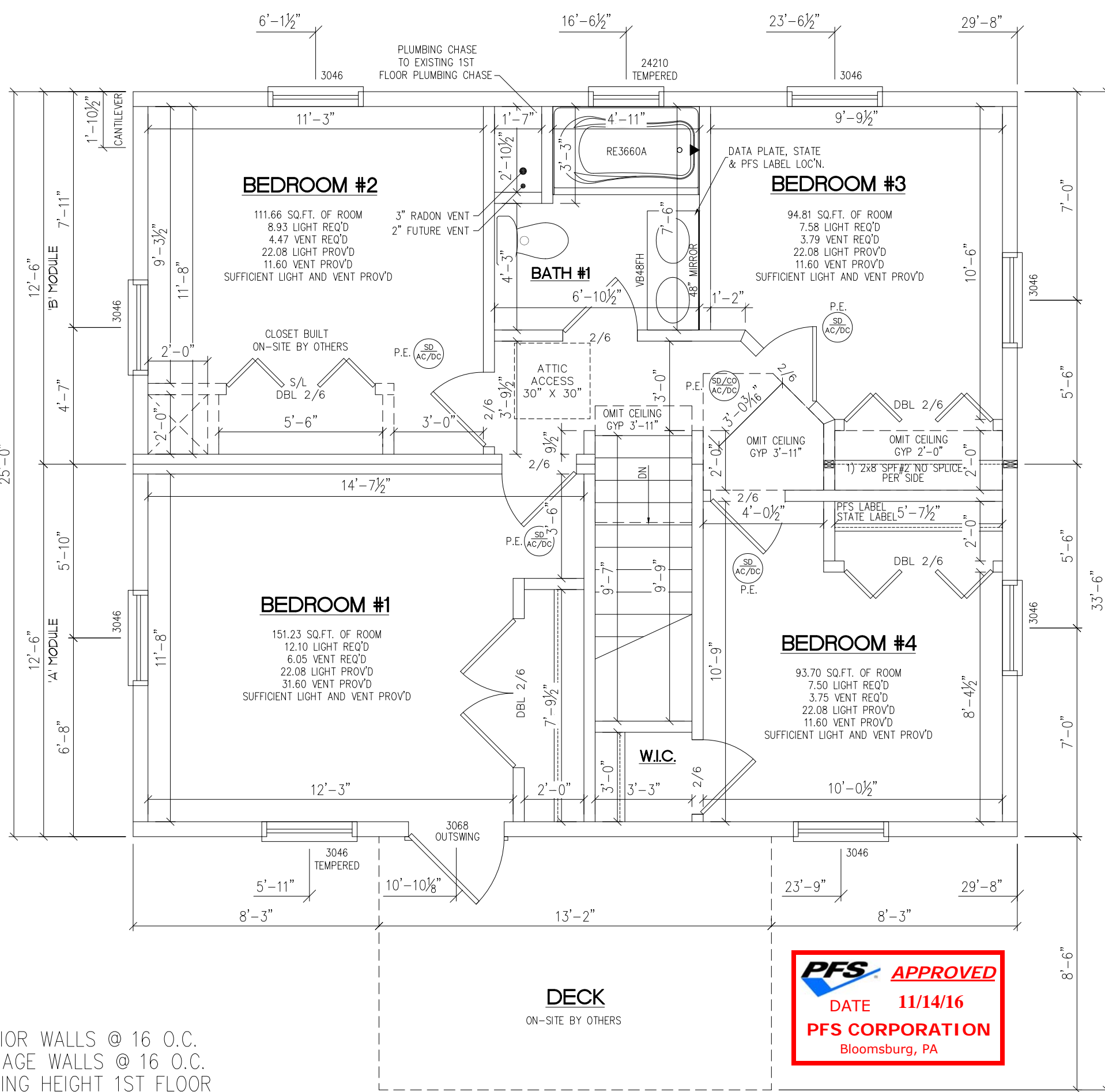
ALL CEILING GYP MUST BE MECHANICALLY FASTENED

BUILDER TO INSTALL & SUPPLY WHOLE HOUSE VENTILATION & TO BE APPROVED & INSPECTED ON-SITE BY LOCAL BUILDING OFFICIAL DUCT TIGHTNESS AND BLOWER DOOR TESTING DONE ON-SITE BY BUILDERS' HERS RATER

*BUILDER IS RESPONSIBLE TO COMPLY WITH R612.2 (WINDOW SILLS) OF THE 2009 IRC (DONE ON-SITE IF APPLICABLE)
 -WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR SURFACE BELOW
 -WHERE THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES ABOVE THE FINISHED FLOOR IN WHICH THE WINDOW IS LOCATED
 -OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 24 INCHES OF THE FINISHED FLOOR

NOTES:

1. 2X6 EXTERIOR WALLS @ 16 O.C.
2. 2X4 MARRIAGE WALLS @ 16 O.C.
3. 8'-0" CEILING HEIGHT 1ST FLOOR
4. SILVERLINE 3000 SERIES DOUBLE HUNG WINDOWS
5. 31,000 TOTAL BTU HEAT LOSS
6. 7/12 NON-STORAGE RAFTER @ 16 O.C.



BUILDER TO VERIFY ALL LOCATIONS MATCH WITH EXISTING 1ST FLOOR BELOW

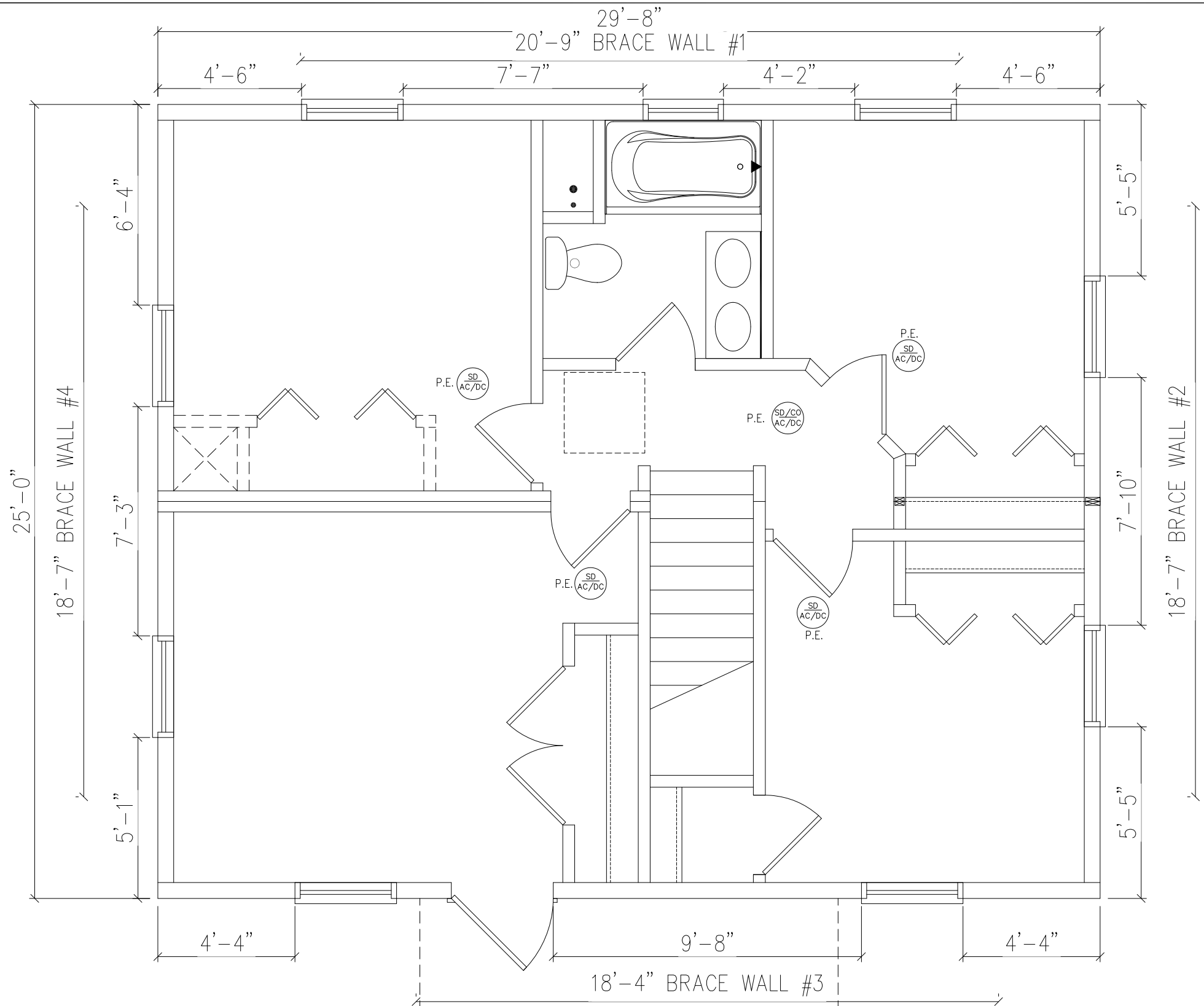
SITE ADDRESS
 471 EAST STREET
 WESTWOOD, MA 02090
 NORFOLK COUNTY

BUILDER:
 3 PORTER ST. UNIT 201
 STOUGHTON, MA 02072

NO LOT FIRE FIRE SEPARATION REQUIRED

246 SAND HILL ROAD SELINGSGROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM	
 ICON LEGACY CUSTOM MODULAR HOMES LLC Make plans with us.	
MA STATE BUILDING CODE -(780 CMR) 8TH EDITION MA FUEL/GAS/PLUMBING (248 CMR) 2009 INTERNATIONAL MECHANICAL CODE W/ MA AMENDMENTS 2014 NATIONAL ELECTRICAL CODE W/ MA AMENDMENTS 2012 INTERNATIONAL ENERGY CONS. CODE W/ MA AMENDMENTS	BUILDER: AVALON BUILDING SYSTEMS PROJECT: DEMIEN BACHARA ADDRESS: 471 EAST STREET CITY: WESTWOOD COUNTY: NORFOLK ORDER NO: 6540 FILE NAME: O#6540
ZIP: 02090 WIND SPEED (MPH): 100 TYPE: TWO STORY	STATE: MA SNOW LOAD (LBS): 40 SFT: 742
BY: JBG PIF	REVISION: PRELIM, FINAL
DATE: 6/21/16, 11/1/16	REVISION: PRELIM, FINAL
2ND STORY FLOOR PLAN	
SERIAL #/ ORDER # O#6540	PAGE # FP1

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
 JLA



16 GAUGE 1 3/4" STAPLES @ 3" & 6" O.C.

METHOD	BRACE	WIND SPEED	BRACE WALL	CONTINUOUS SHEATHING	EXPOSURE/HEIGHT FACTORS	ROOF EAVE TO RIDGE	NUMBER OF BRACE	WALL REDUCTION	LENGTH REQUIREMENTS FOR	FULL HEIGHT
TYPE	WALL	100	LINE SPACING	REQUIRED R602.10.3.2(1)	EXPOSURE B R602.10.3.2(2)	HEIGHT	WALL LINES	FACTOR	BRACE WALL PANELS WITH	SHEATHING PROVIDED
	LINE				1.0	8 FT R602.10.3.(2)		0.9	CONTINUOUS SHEATHING	
CS-WSP	29.667	BRACE WALL #1	25	5.750	5.750 X 1.0 = 5.750	7.000 X 0.9 = 6.300	5.060 X 1.00 = 5.060	5.060 X 0.90 = 4.554	24 "	20.75 Feet
CS-WSP	25	BRACE WALL #2	29.667	7.000	7.000 X 1.0 = 7.000	7.000 X 0.9 = 6.300	6.160 X 1.00 = 6.160	6.160 X 0.90 = 5.544	24 "	18.58 Feet
CS-WSP	29.667	BRACE WALL #3	25	5.750	5.750 X 1.0 = 5.750	7.000 X 0.9 = 6.300	5.060 X 1.00 = 5.060	5.060 X 0.90 = 4.554	35 "	18.33 Feet
CS-WSP	25	BRACE WALL #4	29.667	7.000	7.000 X 1.0 = 7.000	7.000 X 0.9 = 6.300	6.160 X 1.00 = 6.160	6.160 X 0.90 = 5.544	24 "	18.58 Feet

THIS BUILDING HAS BEEN
EXTRACTED FROM AN APPROVED
SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL #/ ORDER #
O#6540

246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM

ICON LEGACY
CUSTOM MODULAR HOMES LLC
Make plans with us.

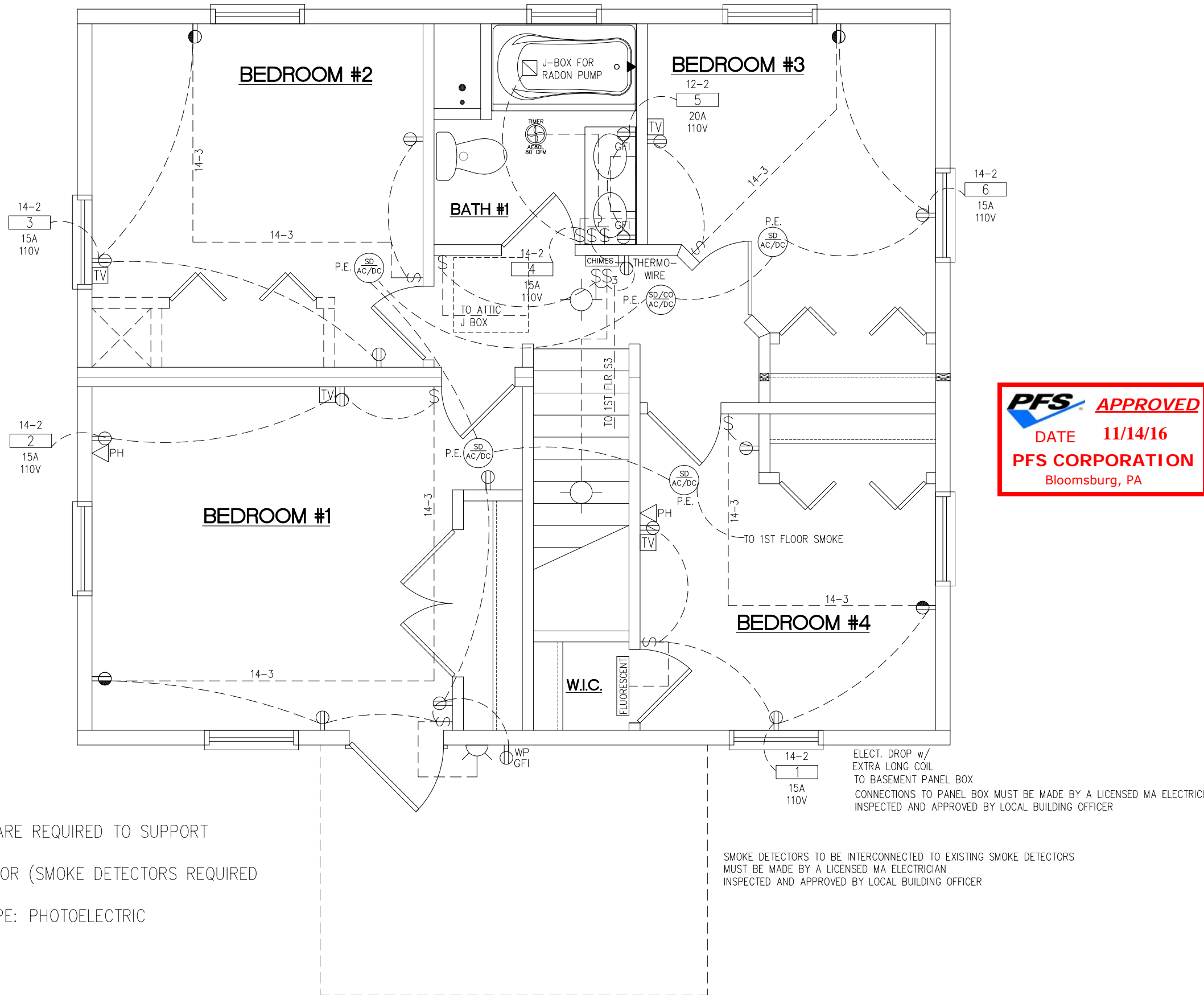
BUILDER	BY	REVISION	DATE
AVALON BUILDING SYSTEMS HOMEBUYER/PROJECT DEMEN BACHARA ADDRESS 471 EAST STREET CITY WESTWOOD COUNTY NORFOLK ORDER NO 6540 SERIAL NO O#6540	JBG	PRELIM	6/21/16
	PIF	FINAL	11/1/16

STATE MA
CITY WESTWOOD
COUNTY NORFOLK
ZIP 02090
SNOW LOAD (LBS) 40
WIND SPEED (MPH) 100
TYPE TWO STORY
SFT 742

1ST STORY SHEAR WALLS

PAGE #
SW1

50# LIGHT BOXES ARE REQUIRED



NOTES:

1. INSULATED STAPLES ARE REQUIRED TO SUPPORT ALL WIRING
2. 742 SQ. FT. PER FLOOR (SMOKE DETECTORS REQUIRED EVERY 1,200 SQ. FT.)
3. SMOKE DETECTOR TYPE: PHOTOELECTRIC

ALL 125-VOLT, 15-20 AMPERE RECEPTS INSTALLED IN AREAS SPECIFIED BY 210.52 SHALL BE LISTED TAMPER-RESISTANT TYPE.

ALL BRANCH CIRCUITS SUPPLYING 15 AND 20 AMPERE OUTLETS ARE TO BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER IN ACCORDANCE WITH THE 2014 NEC

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
EL1

246 SAND HILL ROAD SELINS GROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM	
CUSTOM MODULAR HOMES LLC Make plans with us.	
BY	JBG PIF
REVISION	PRELIM FINAL
DATE	6/21/16 11/1/16
BUILDER	AVALON BUILDING SYSTEMS HOMEOWNER/PROJECT DEMIEN BACHARA ADDRESS 471 EAST STREET CITY WESTWOOD COUNTY NORFOLK ORDER NO 6540 FILE NAME O#6540
STATE	MA
ZIP	02090
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	100
SFT	742
TWO STORY	
2ND STORY ELECTRICAL PLAN	

ELECTRICAL LOAD CALCULATION FOR ON#6540-MA

HOUSE SQFT:	742
AIR CONDITIONING AND HEAT	
AIR CONDITIONING:	0 WATTS
CENTRAL ELECTRIC SPACING HEATING:	0 WATTS (X 0.65)
LESS THAN FOUR SEPARATELY CONTROLLED ELECTRIC SPACE HEATING UNITS:	0 WATTS (X 0.65)
FOUR OR MORE SEPARATELY CONTROLLED ELECTRIC SPACE HEATING UNITS:	0 WATTS (X 0.45)

*NOTE: USE THE LARGER OF THE AIR CONDITIONING OR THE DIVERSIFIED DEMAND OF THE HEATING LOAD.

OTHER LOADS	WATTS OR VOLT-AMPS	CIRCUIT AMPACITY	WIRE SIZE
GENERAL LIGHTING: (742 x 3)	2,226	15A	14-2
SMALL APPLIANCES: (0 x 1,500)	0	N/A	N/A
RANGE:	0	N/A	N/A
DISHWASHER:	0	N/A	N/A
GARBAGE DISPOSAL:	0	N/A	N/A
WASHER:	0	N/A	N/A
DRYER:	0	N/A	N/A
FURNACE:	0	N/A	N/A
WATER HEATER:	0	N/A	N/A
	2,226		

FIRST 10kW OF OTHER LOADS @ 100%:	=	2,226
REMAINDER OF OTHER LOADS @ 40%: (0 x 0.40)	=	0
AIR CONDITIONING OR HEAT FROM ABOVE:	=	0
TOTAL CALCULATED LOAD::	=	2,226
REQUIRED SERVICE SIZE:	=	9 AMPS
INSTALLED PANEL SIZE:	=	200 AMPS



246 SAND HILL ROAD
 SELINSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



BY	REVISION	DATE

BUILDER: AVALON BUILDING SYSTEMS	HOMEOWNER/PROJECT: DEMIEN BACHARA	ADDRESS: MAIN STREET	CITY: WESTWOOD	STATE: MA	ZIP: 02090	COUNTY: NORFOLK	SNOW LOAD (LBS):	WIND SPEED (MPH):	SOFT	TYPE:
ORDER NO: 6540	SERIAL NO:	FILE NAME: O#6540	ELECTRICAL LOAD CALC							

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
ELC

CIRCUIT SCHEDULE

*WIRE WITH GROUND ALL CIRCUITS

CRT	BRK	WIRE	LOCATION	VOLT	CRT	BRK	WIRE	LOCATION	VOLT
1	15A	14-2	BEDRRROM#4	110	2	15A	14-2	BEDROOM#1	110
3	15A	14-2	BEDROOM#2	110	4	15A	14-2	GENERAL LIGHTING	110
5	20A	12-2	BATH GF1	110	6	15A	14-2	BEDRRROM#3	110
7					8				
9					10				
11					12				
13					14				
15					16				
17					18				
19					20				
21					22				
23					24				
25					26				
27					28				
29					30				
31					32				
33					34				
35					36				
37					38				
39					40				

246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



ICON LEGACY
CUSTOM MODULAR HOMES LLC
Make plans with us.

DATE	REVISION	BY

BUILDER	AVALON BUILDING SYSTEMS		
HOMEBUYER/PROJECT	DEMEN BACHARA		
ADDRESS	MAIN STREET	CITY	WESTWOOD
STATE	MA	COUNTY	NORFOLK
SNOW LOAD (LBS)	SQFT	ORDER NO	6540
ZIP	02090	SERIAL NO	
WIND SPEED (MPH)		FILE NAME	O#6540
TYPE			



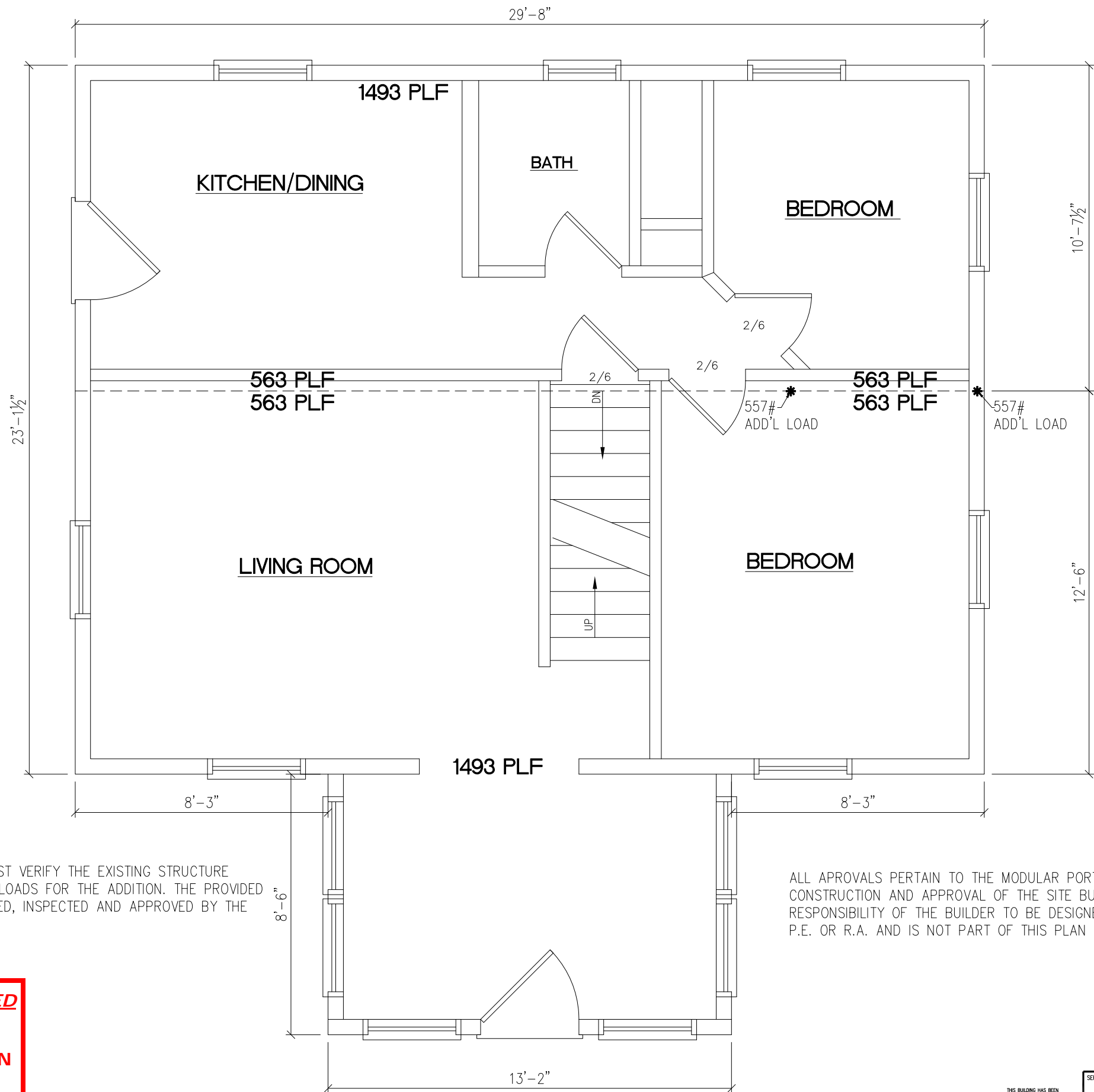
CIRCUIT SCHEDULE

THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
CS

BUILDER TO PROVIDE UPLIFT CONNECTIONS BETWEEN THE EXISTING STRUCTURE AND MODULES AT THE REQUIRED LOCATIONS FOR THE LOADS LISTED.



MA LICENSED P.E. OR R.A. MUST VERIFY THE EXISTING STRUCTURE CAN SUPPORT THE INDICATED LOADS FOR THE ADDITION. THE PROVIDED INFORMATION MUST BE REVIEWED, INSPECTED AND APPROVED BY THE LOCAL BUILDING OFFICIAL.

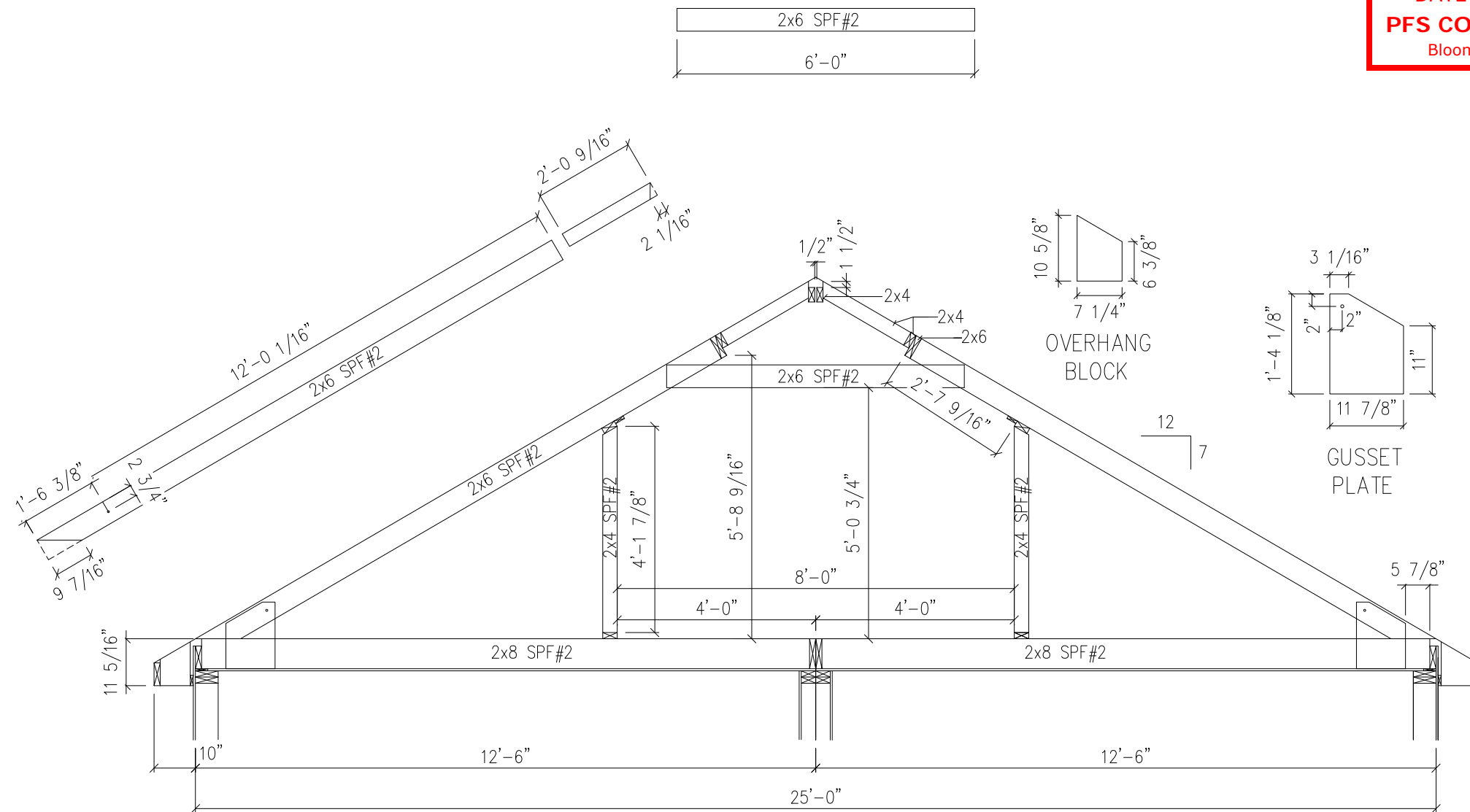


THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #
FND

246 SAND HILL ROAD SELINSGROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM	
BY	JBG
REVISION	PIF
DATE	
6/21/16	PRELIM
11/1/16	FINAL
BUILDER	AVALON BUILDING SYSTEMS
HOMEOWNER/PROJECT	DEMEN BACHARA
ADDRESS	471 EAST STREET
CITY	WESTWOOD
STATE	MA
ZIP	02090
COUNTY	NORFOLK
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	100
TYPE	TWO STORY
ORDER NO	6540
SERIAL NO	742
FILE NAME	O#6540
EXISTING 1ST FLOOR	



246 SAND HILL ROAD
SELINS GROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM

**7/12 - 25'-0" WIDE - GOOD TO 40#GSL - 16" O.C.
NON-STORAGE RAFTER**

THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED
NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.

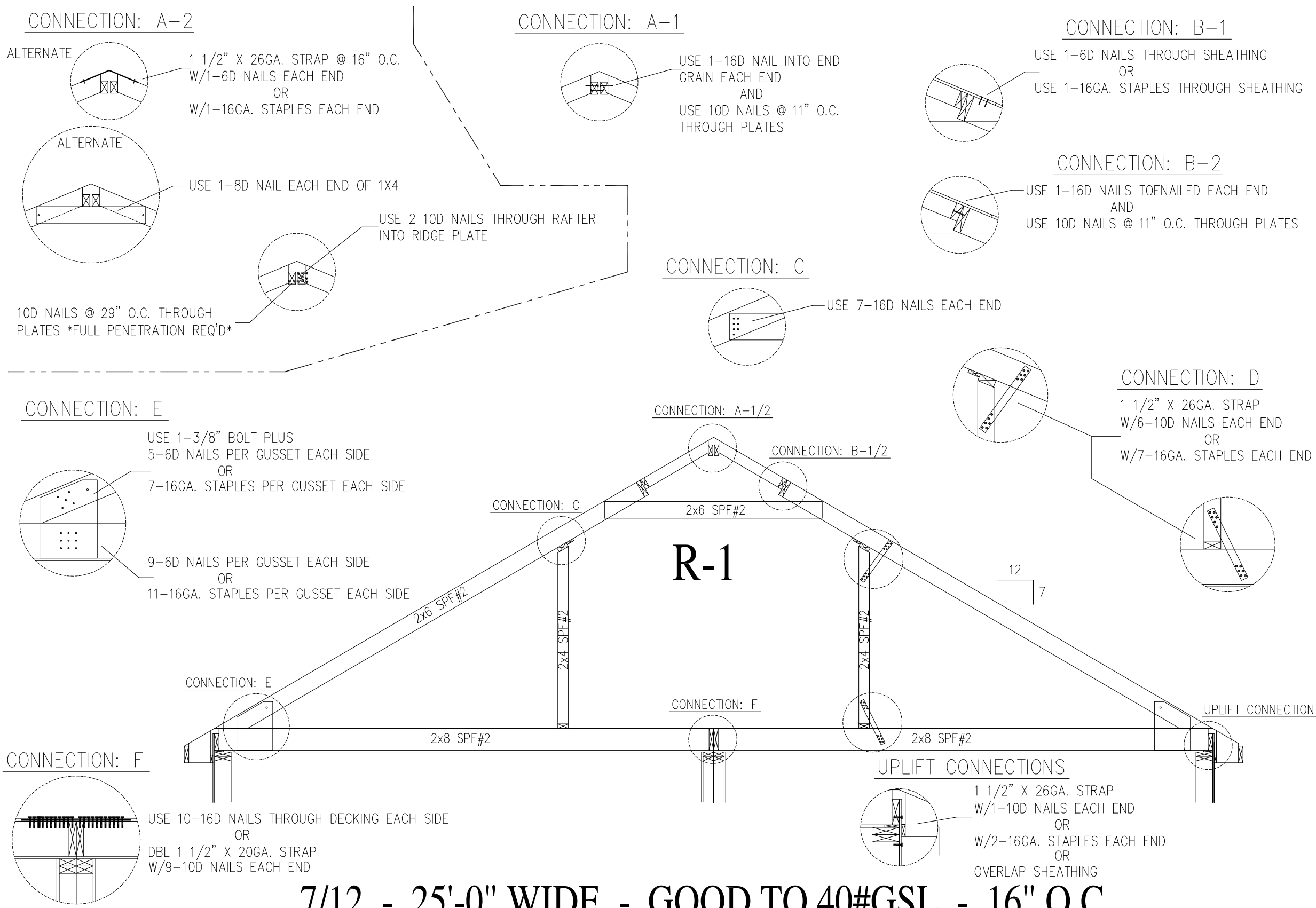
THIS BUILDING HAS BEEN
EXTRACTED FROM AN APPROVED
SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #
TR1

DATE	6/21/16	REVISION	PRELIM	BY	JBG
DATE	11/1/16	REVISION	FINAL	BY	PIF
BUILDER	AVALON BUILDING SYSTEMS				
HOMEOWNER/PROJECT	DEMEN BACHARA				
ADDRESS	471 EAST STREET				
CITY	WESTWOOD	STATE	MA	ZIP	02090
COUNTY	NORFOLK	SNOW LOAD (LBS)	40	WIND SPEED (MPH)	100
ORDER NO	6540	SFT	742	TYPE	TWO STORY
FILE NAME	O#6540				
25'-0" 7/12 RAFTER					

246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



7/12 - 25'-0" WIDE - GOOD TO 40#GSL - 16" O.C.
NON-STORAGE RAFTER
GOOD TO 115 MPH WIND SPEED

THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED
 NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.

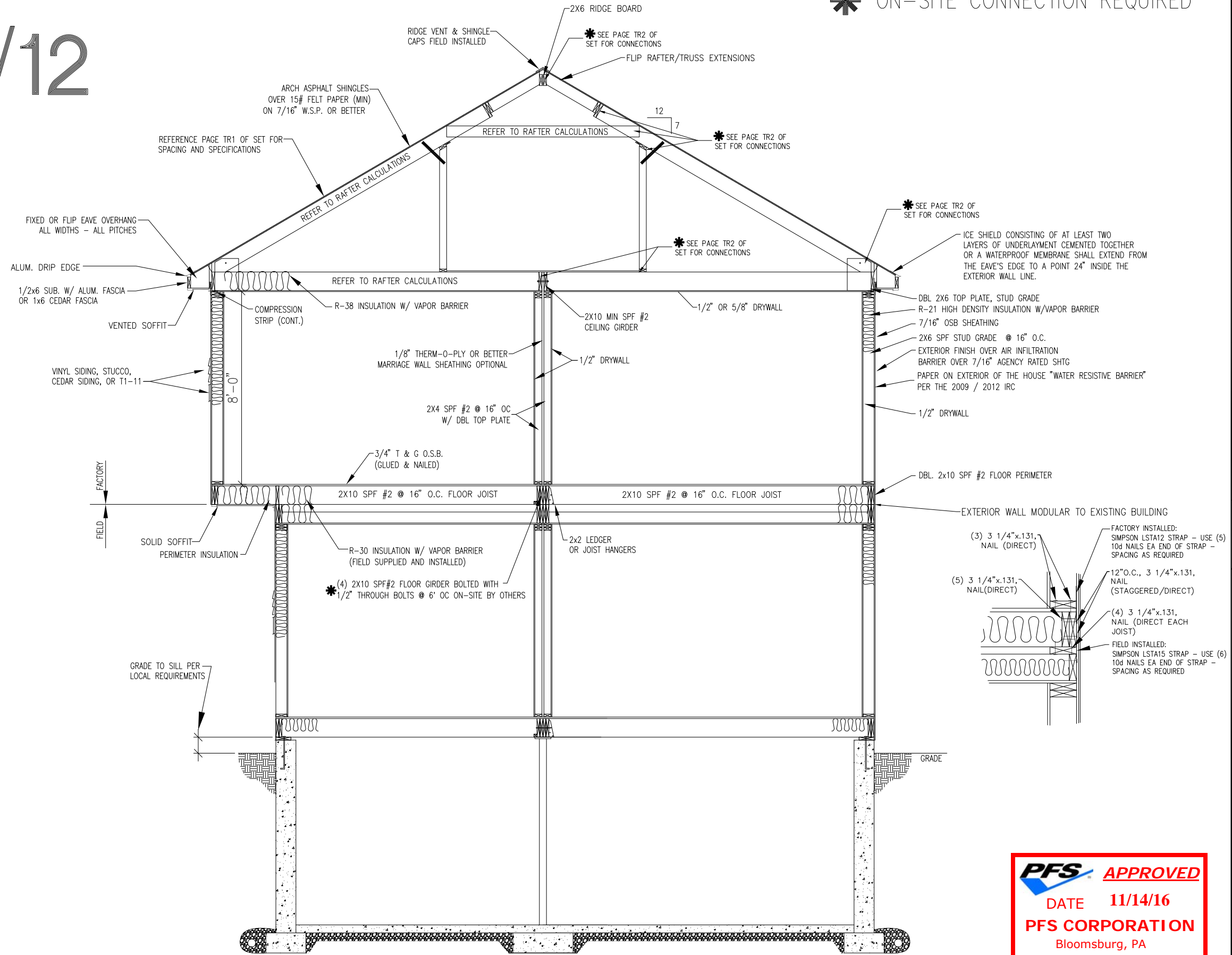


BY	JBG	PIF			
REVISION	PRELIM	FINAL			
DATE	6/21/16	11/1/16			
BUILDER	AVALON BUILDING SYSTEMS		STATE	MA	ZIP
HOMEOWNER/PROJECT	DEMEN BACHARA		SNOW LOAD (LBS)	40	02090
ADDRESS	471 EAST STREET		WIND SPEED (MPH)	100	
CITY	WESTWOOD		SFT	742	TWO STORY
COUNTY	NORFOLK		SERIAL NO	6540	
ORDER NO	6540		FILE NAME	O#6540	
25'-0" 7/12 RAFTER CONNECTIONS					
SERIAL #/ ORDER #			PAGE #		
O#6540			TR2		

THIS BUILDING HAS BEEN
 EXTRACTED FROM AN APPROVED
 SYSTEMS OR PER MODEL APPROVAL
 JLA

7/12

*** ON-SITE CONNECTION REQUIRED**



246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



BY	DATE	REVISION
JBG	6/21/16	PRELIM
PIF	11/1/16	FINAL

BUILDER	AVALON BUILDING SYSTEMS
HOMEOWNER/PROJECT	DEMEN BACHARA
ADDRESS	471 EAST STREET
CITY	WESTWOOD
COUNTY	NORFOLK
ORDER NO	6540
FILE NAME	O#6540
STATE	MA
ZIP	02090
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	100
TYPE	TWO STORY



THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

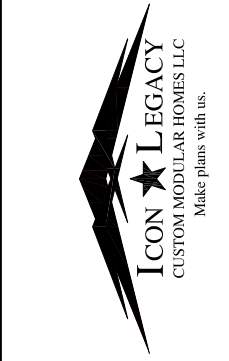
PAGE #
SE1

CROSS SECTION / DETAIL #1

DOOR AND WINDOW SCHEDULE

WINDOWS	DESCRIPTION	ROUGH OPENING	AREA	LIGHT	CLEAR OPENING WIDTH (EACH)	CLEAR OPENING HEIGHT (EACH)	VENT	U-FACTOR	QTY	TOTAL AREA
	SILVERLINE 3000 SERIES DOUBLE HUNG 24210DH	30 1/4" X 37 1/4"	7.83	5.0	26.188	14.438	2.63	0.30	1	7.83
	SILVERLINE 3000 SERIES DOUBLE HUNG 3046DH	38 1/4" X 57 1/4"	15.21	11.0	34.188	24.438	5.80	0.30	8	121.68
									TOTAL AREA:	129.51

EXTERIOR DOORS	DESCRIPTION	ROUGH OPENING	AREA	LIGHT	CLEAR OPENING WIDTH (EACH)	CLEAR OPENING HEIGHT (EACH)	VENT	U-FACTOR	QTY	TOTAL AREA
	PLASTPRO 3068 (< 50% GLASS)	38 1/2" X 82 1/8"	21.96	0.0	0.000	0.000	20.00	0.17	1	21.96
									TOTAL AREA:	21.96



246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM

REVISION	DATE	BY
PRELIM	6/21/16	JBG
FINAL	11/1/16	PIF

BUILDER	AVALON BUILDING SYSTEMS
HOMEBUYER/PROJECT	DEMEN BACHARA
ADDRESS	471 EAST STREET
CITY	WESTWOOD
COUNTY	NORFOLK
ORDER NO	6540
SERIAL NO	
STATE	MA
SNOW LOAD (LBS)	40
SFT	742
ZIP	02090
WIND SPEED (MPH)	100
TYPE	TWO STORY
FILE NAME	O#6540

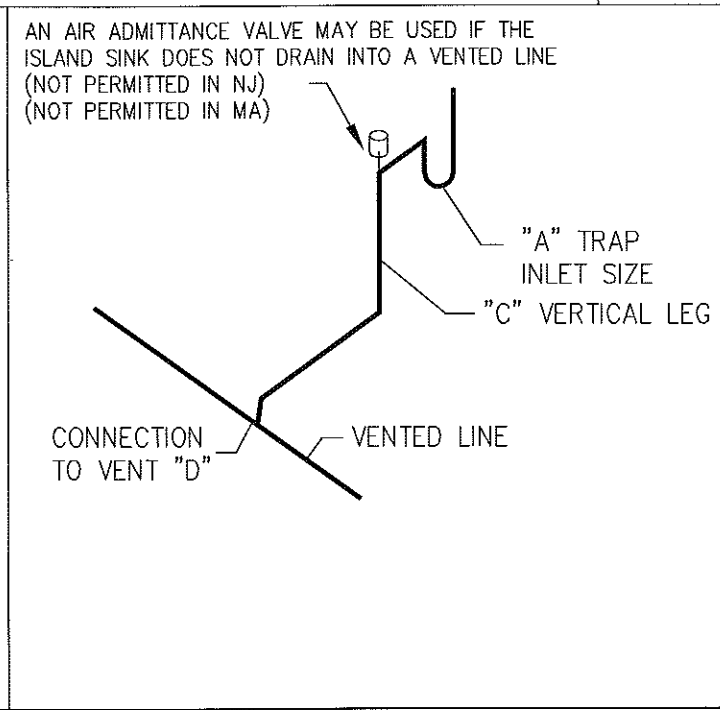
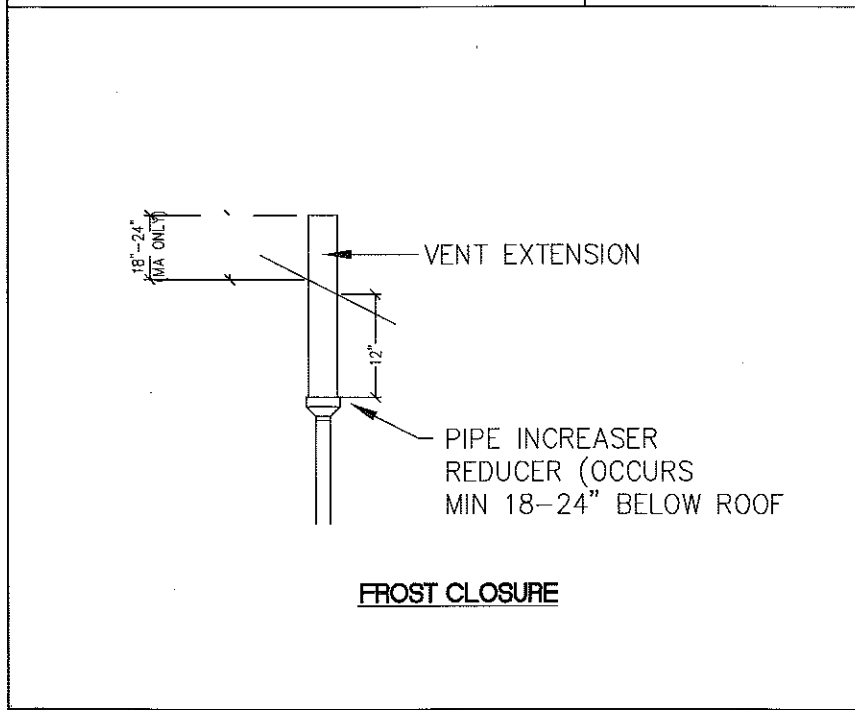
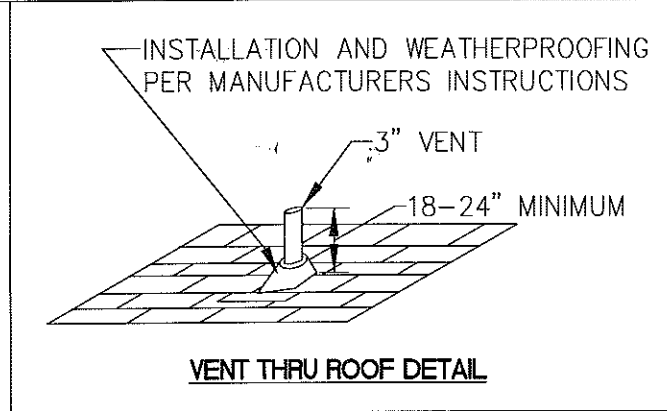
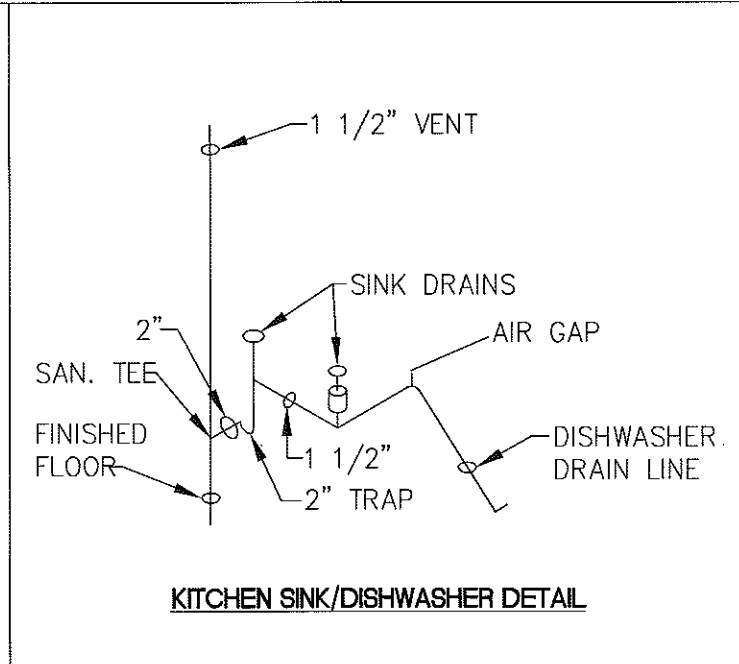
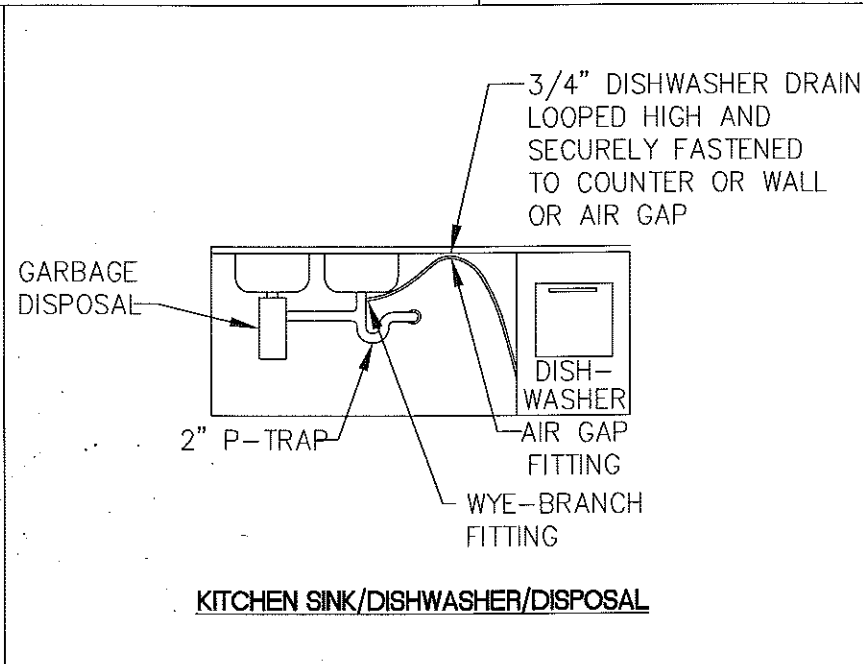
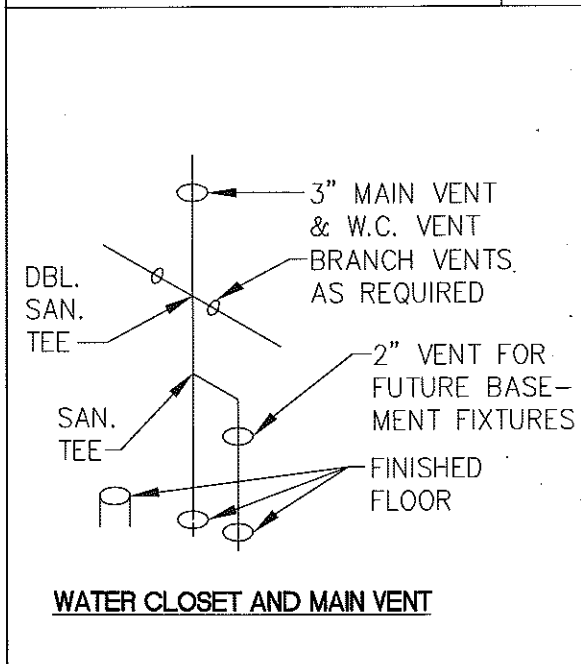
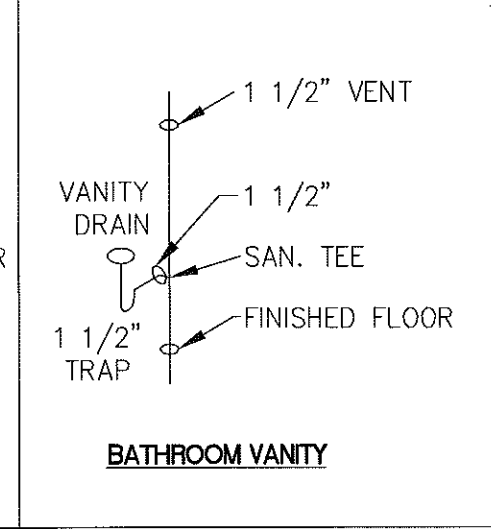
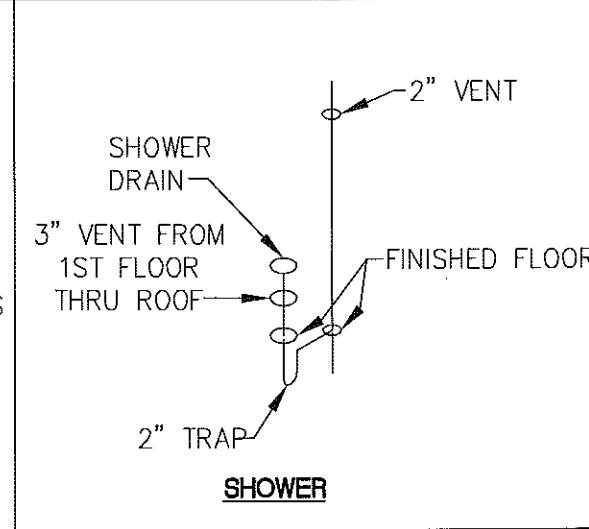
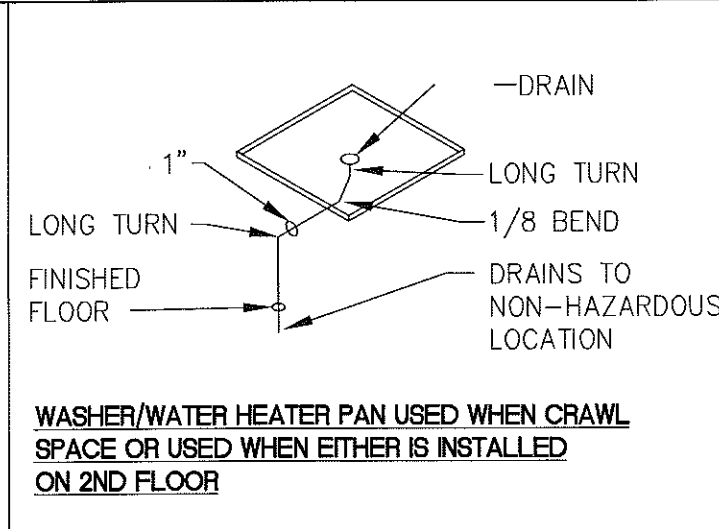
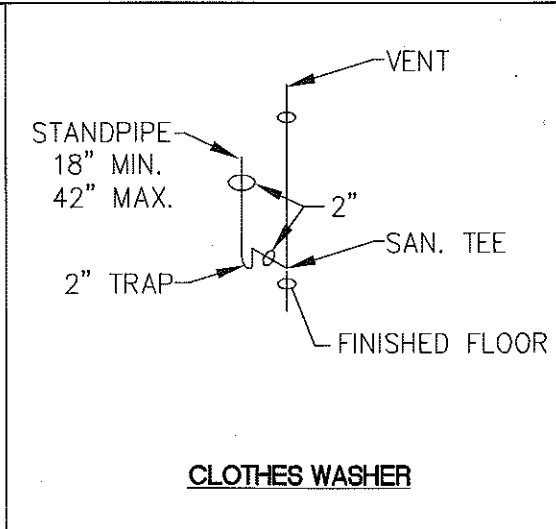
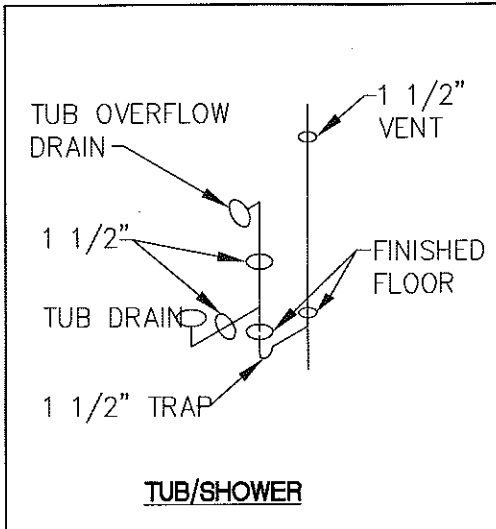


THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
DWS

DOOR & WINDOW SCHEDULE



THE VENT PIPE FROM A FIXTURE DRAIN, EXCEPT WATER CLOSETS AND SIMILAR SIPHONIC FIXTURES, SHALL NOT CONNECT BELOW THE TOP WEIR OF THE TRAP. THE VENT PIPE MAY BE CONNECTED AT A LOWER ELEVATION IF THE FOLLOWING ARE MET:

1. THE VERTICAL SECTION OF THE DRAIN PIPE SHALL BE AT LEAST ONE PIPE SIZE LARGER THAN THE TRAP INLET SIZE.
2. THE HORIZONTAL PIPE CONNECTED TO THE TRAP OUTLET SHALL BE AT LEAST TWO PIPE DIAMETERS LONG.
3. THE DEVELOPED LENGTH OF THE TRAP ARM SHALL NOT EXCEED THE VALUES STATED IN THE APPLICABLE PLUMBING CODES.

"A" - TRAP SIZE PER ALL APPLICABLE PLUMBING CODES
 "B" - TRAP ARM LENGTHS:
 1 1/4" TRAP - 3'-6"
 1 1/2" TRAP - 5'-0"
 3" TRAP - 10'-0"
 4" TRAP - 12'-0"
 "C" - SIZE IS ONE SIZE LARGE THAN TRAP SIZE
 "D" - DISTANCE FROM CROWN WEIR AND VENT CONNECTION ACCORDING TO MAX. DISTANCE OF VENT FROM FIXTURE TRAP



state approval stamp

REV#	DATE	REVISIONS	BY	CHECKED BY:
1	12/14/09	CODE UPDATES	BAH	
2	12/10/10	REVISED SYSTEMS	SLW	
3	11/4/2011	MA CODE UP-DATE	SLW	
4	5/10/2011	Code up-date RI, VA, NJ	SW	
DRAWN BY:		DATE:	SCALE:	
GLENCO		03/14/08		NTS

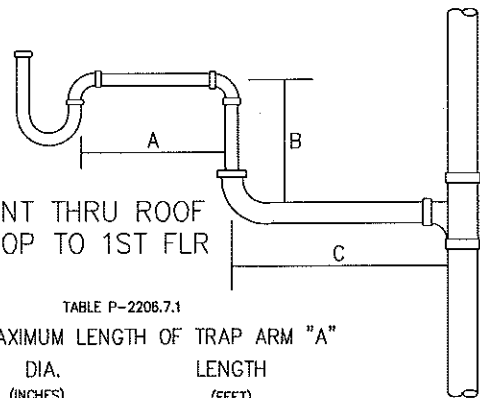
FILE:
SQ.FT.:
STATE:
TYPE:
MODEL:
DRAWING:
PLUMBING DETAILS
SHEET:
PL1

architect seal

Icon - Legacy Custom Modular Homes, LLC
 246 SAND HILL ROAD
 SELLSGROVE, PA 17870
 PHONE 570-374-3280
 FAX 570-374-1122
 WWW.ICONLEGACY.COM

Copyright © 2008
 THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED HEREIN IS PROPRIETARY AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF Icon-Legacy Custom Modular Homes, LLC.

CUSTOMER/PROJECT: SYSTEMS DRAWINGS
 BUILDER:



ALLOWABLE FALL IN TRAP ARM: THE TOTAL FALL IN TRAP ARM DUE TO PIPE SLOPE SHALL NOT EXCEED ONE PIPE DIAMETER, NOR SHALL THE VENT PIPE CONNECTION TO A FIXTURE DRAIN, EXCEPT FOR WATER CLOSETS AND SIMILAR FIXTURES, BE BELOW THE WEIR OF THE TRAP.

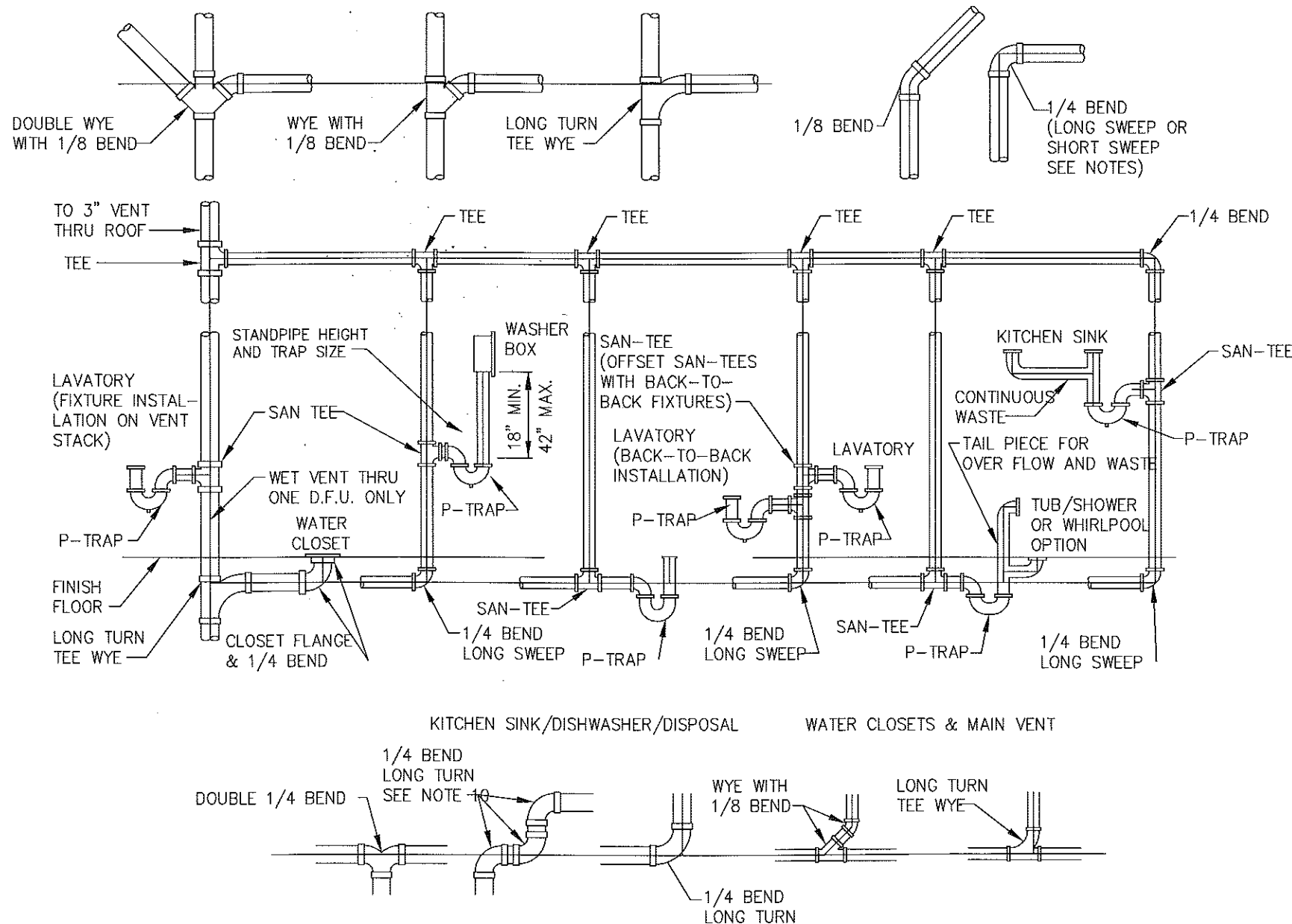
VERTICAL LEG FOR WASTE FIXTURE DRAINS: A VERTICAL LEG ("B" IN DIAGRAM) MAY BE INSTALLED IN THE TRAP ARM OF A WASTE-FIXTURE DRAIN IN LIEU OF THE USUAL TRAP ARM TO VENT CONNECTION. TYPICAL INSTALLATIONS INCLUDE ISLAND SINKS AND FIXTURES NOT ADJACENT TO A WALL. VERTICAL LEG TRAP ARM INSTALLATIONS SHALL MEET THE FOLLOWING CRITERIA:

1. MINIMUM TRAP DIAMETER SHALL MEET CODES
2. THE DIAMETER OF SECTION "A" SHALL BE EQUAL TO THE DIAMETER OF THE TRAP.
3. THE LENGTH OF SECTION "A" SHALL BE NOT LESS THAN "B" AND IN ACCORDANCE WITH TABLE P-2206.7.1.
4. THE DIAMETER OF SECTION "B" SHALL BE ONE PIPE SIZE LARGER THAN THE DIAMETER OF SECTION "A".
5. THE LENGTH OF SECTION "B" SHALL BE NOT MORE THAN 36 INCHES
6. THE DIAMETER OF SECTION "C" SHALL BE ONE PIPE SIZE LARGER THAN THE DIAMETER OF SECTION "B".
7. THERE IS NO RESTRICTION ON THE LENGTH OF SECTION "C".
8. BENDS SHALL BE THE DIAMETER OF THE LARGEST CONNECTED SECTION.

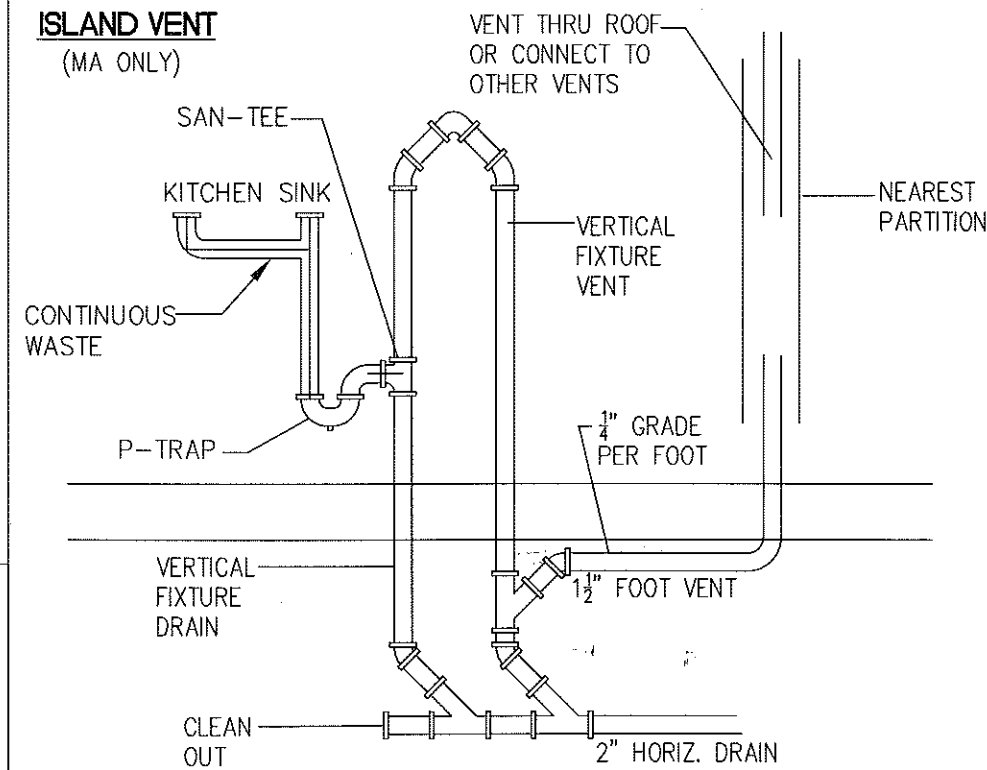
TABLE P-2206.7.1
MAXIMUM LENGTH OF TRAP ARM "A"

DIA. (INCHES)	LENGTH (FEET)
1-1/4	3'-6"
1-1/2	5'
2	8'
3	10'
4	14'

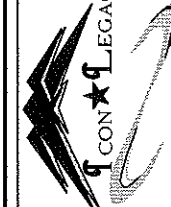
NOT PERMITTED IN MASSACHUSETTS



ISLAND VENT (MA ONLY)



Icon - Legacy Custom Modular Homes, LLC
246 SAND HILL ROAD
SELENSGROVE, PA 17870
PHONE 570-874-3280
FAX 570-874-1122
WWW.ICONLEGACY.COM



COPYRIGHT © 2008

THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED HEREIN IS PROPRIETARY AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF Icon-Legacy Custom Modular Homes, LLC.

CUSTOMER/PROJECT: SYSTEMS DRAWINGS

REV#	DATE	REVISIONS	BY	CHECKED BY:
1	12/14/08	CODE UPDATES	RJH	NTS
2	12/10/10	REVISED SYSTEMS	SLW	
3	1/4/2011	MA CODE UP-DATE	SLW	
4	9/10/2011	Code up-date RI, VA, NJ	SW	

SCALE: 03/14/08
DRAWN BY: DATE: GLENCO/TH



FILE:
SQ.FT.:
STATE:
TYPE:
MODEL:
DRAWING: PLUMBING DETAILS
SHEET: PL2

state approval stamp

architect seal

PLUMBING NOTES:

1. ALL PLUMBING CONSTRUCTION AND MATERIAL BELOW THE MODULAR FLOOR AND BETWEEN FLOORS IS THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR AND IS TO BE DONE IN ACCORDANCE W/STATE AND LOCAL CODES.
2. CONCEALED PIPING IN UNHEATED AREAS, INCLUDING OUTSIDE WALLS, SHALL BE PROTECTED AGAINST FREEZING IN PLANT. PIPING SHALL BE KEPT OUT OF UNHEATED AREAS WHERE POSSIBLE.
3. ALL WASTE AND VENT LINES IN MODULES ARE ABS OR PVC PIPE. ALL SUPPLY LINES IN MODULES ARE COPPER, PEX, OR CPVC.
4. PITCH ON HORIZONTAL WASTE LINES IS $\frac{1}{8}$ " PER FOOT FOR GREATER THAN 3" DIAMETER PIPE, $\frac{1}{4}$ " PER FOOT FOR 3" DIAMETER PIPE OR LESS.
5. WASTE LINES: INSTALL WYE WITH CLEANOUT PRIOR TO EXITING WALL FOR CONNECTION TO DISPOSAL SYSTEM. 4" MINIMUM WASTE LINE TO SEPTIC (BY BUILDER IN FIELD).
6. WASHER SHALL HAVE MINIMUM 2" TRAP.
7. REMOVABLE TRAPS UNDER ALL SINKS TO PROVIDE CLEANOUT ACCESS.
8. GARBAGE DISPOSAL MUST HAVE SEPARATE TRAP. DISHWASHER CANNOT DISCHARGE INTO GARBAGE DISPOSAL.
9. KITCHEN SINK SHALL HAVE 2" DRAIN WHEN A GARBAGE DISPOSAL OR DISHWASHER ARE CONNECTED.
10. HORIZONTAL TO HORIZONTAL AND VERTICAL TO HORIZONTAL DRAIN CHANGES IN DIRECTION SHALL BE 45° WYES, LONG SWEEP 90° ELBOWS, LONG SEEP TY'S, 6TH, 8TH, OR 16TH BENDS, APPROVED COMBINATIONS OF THESE OR EQUIVALENT LONG SWEEP FITTINGS. SHORT SWEEPS ARE PERMITTED IN SINGLE BRANCH HORIZONTAL TO VERTICAL CHANGES IN DIRECTION ON 3" PIPE AND LARGER.
11. ALL HORIZONTAL VENT BRANCH PIPING SHALL BE LOCATED A MINIMUM OF 6" ABOVE THE FLOOD LEVEL OF THE HIGHEST FIXTURE IN THAT BRANCH.
12. PVC-DWV PIPE SUPPORTS: AT BRANCHES, CHANGES IN DIRECTION, AND AT THE BASE, EACH FLOOR AND MID STORY (VERTICAL) MAXIMUM EVERY 4'-0" AT THE END OF BRANCHES, AND CHANGE OF DIRECTIONS OR ELEVATION,
13. PIPE PENETRATING FIRE RATED ASSEMBLIES INCLUDING FLOOR/CEILING SHALL BE FIRE STOPPED WHERE REQUIRED BY ALL CODES WITH MATERIAL EQUIVALENT TO CONSTRUCTION THROUGH WHICH IT PENETRATES AND BE SUITABLE TO PIPE MATERIAL, OR USE METAL PIPE FROM A MINIMUM OF ABOVE THE FIRE RATED ASSEMBLY AND DOWN.
14. FIRE STOPPING SHALL BE PROVIDED AND VERIFIED BEFORE IT IS COVERED OR CONCEALED IN THE CONSTRUCTION PROCESS.
15. ANY STRUCTURAL MEMBER SUBJECT TO HOLE DRILLING, CUTTING, OR NOTHCING SHALL BE LEFT IN A SAFE STRUCTURAL CONDITION BY BEING REINFORCED, REPAIRED, OR REPLACED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE CODE.
16. FIELD INSTALLED (ON-SITE) PIPING SHALL BE APPROVED BY THE LOCAL BUILDING CODE ENFORCEMENT OFFICER. PIPING SHALL BE FIELD TESTED FOR LEAKS.
17. BATH TUBS, INCLUDING GARDEN TUBS, HYDRO-MASSAGE, AND HOT TUBS SHALL HAVE A 1 $\frac{1}{2}$ " MIN OVERFLOW.
18. JOINTS AROUND PLUMBING FIXTURES SHALL BE MADE WATERPROOF AT FLOORS, WALLS, & COUNTERTOPS.
19. EACH FIXTURE SHALL BE INDIVIDUALLY DIRECT OR WET VENTED.
20. EACH DWELLING UNIT SHALL HAVE ONE MAIN 3" STACK FROM BUILDING DRAIN.
21. ALL VENTS THROUGH ROOF TO BE 3" MIN DIAMETER AND SHALL TERMINATE 18'-24" ABOVE THE ROOF.
22. BASEMENT MODELS SHALL BE PROVIDED IN FACTORY WITH A 2" VENT TO BASEMENT STUBBED BELOW THE FIRST FLOOR, THEN CAPPED AND LABELED. BASEMENT VENT MAY BE DELETED WHEN CLOTHES WASHER IS ON THE FIRST OR SECOND FLOOR.

23. ALL TRAP ARMS MUST BE SUPPORTED WITH $\frac{3}{4}$ " MINIMUM BEARING.(MA ONLY)
24. ALL PLASTIC PIPE MUST BE SUPPORTED AT INTERVALS IN ACCORDANCE WITH APPLICABLE PLUMBING CODES.
25. TRAPS SHALL BE PLACED AS CLOSE AS POSSIBLE TO FIXTURE OUTLET. MAXIMUM VERTICAL DROP FROM FIXTURE OUTLET TO TRAP WEIR IS 24".
26. INACCESSIBLE TRAPS SHALL NOT HAVE UNIONS, CLEANOUTS OR SLIPJOINTS. ACCESSIBLE TRAPS SHALL BE REMOVABLE WITH UNION IN TRAP SEAL OR HAVE CLEANOUT OPENING SIZED THE SAME AS THE TRAP.
27. MAXIMUM DISTANCE OF FIXTURE TRAP WEIR TO VENT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE PLUMBING CODES.
28. PLASTIC PIPING SHALL BE PROTECTED WITH $\frac{1}{8}$ " STEEL PLATE WHEN PIPE PASSES THROUGH WOOD MEMBERS LESS THAN 1 $\frac{1}{4}$ " FROM EDGE OF MEMBER.
29. FIRST FLOOR FIXTURES SHALL CONNECT INTO HORIZONTAL BUILDING DRAIN MORE THAN 10 PIPE DIAMETERS DOWNSTREAM OF STACK BASE AND NOT CONNECT INTO SECOND FLOOR DRAIN STACK.
30. POTABLE WATER SYSTEM SHALL BE DISINFECTED ON SITE BY BUILDER IN ACCORDANCE WITH APPLICABLE STATE PLUMBING CODES.
31. ISLAND FIXTURE VENTING SHALL NOT BE PERMITTED FOR FIXTURES OTHER THAN SINKS AND LAVATURES. (SEE ISLAND DETAILS).
32. ANTI-SIPHONING DEVICE, VACUUM BREAKDERS, AND AIR GAPS: FOR WATER DISTRICTUION SYSTEMS "PROTECTION OF POTABLE WATER SUPPLY".
 - 32.1. WATER HEATER LOCATED AT OR ON LIVING SPACE LEVEL MUST HAVE AN ANTI-SIPHONING DEVICE INSTALLED.
 - 32.2. CLOTHES WASHER MUST HAVE AN ANTI-SIPHONING DEVICE INSTALLED (IF NOT BUILT INTO THE APPLIANCE).
33. WATER HAMMER ARRESTORS SHALL BE INSTALLED WHERE QUICK CLOSING VALVES ARE UTILIZED. (I.E. WASHING MACHINES AND DISHWASHERS).
34. PIPE INSTALLED DOWNSTREAM OF THE POINT OF POINT OF DELIVERY SHALL NOT EXTEND THROUGH ANY TOWNHOUSE UNIT OTHER THAN THE UNIT SERVED BY SUCH PIPING.



Icon - Legacy Custom Modular Homes, LLC
 246 SAND HILL ROAD
 SELINGROVE, PA 17570
 PHONE 570-374-9280
 FAX 570-374-1122
 WWW.ICONLEGACY.COM

COPYRIGHT © 2008
 THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED HEREIN IS PROPRIETARY AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF Icon-Legacy Custom Modular Homes, LLC."

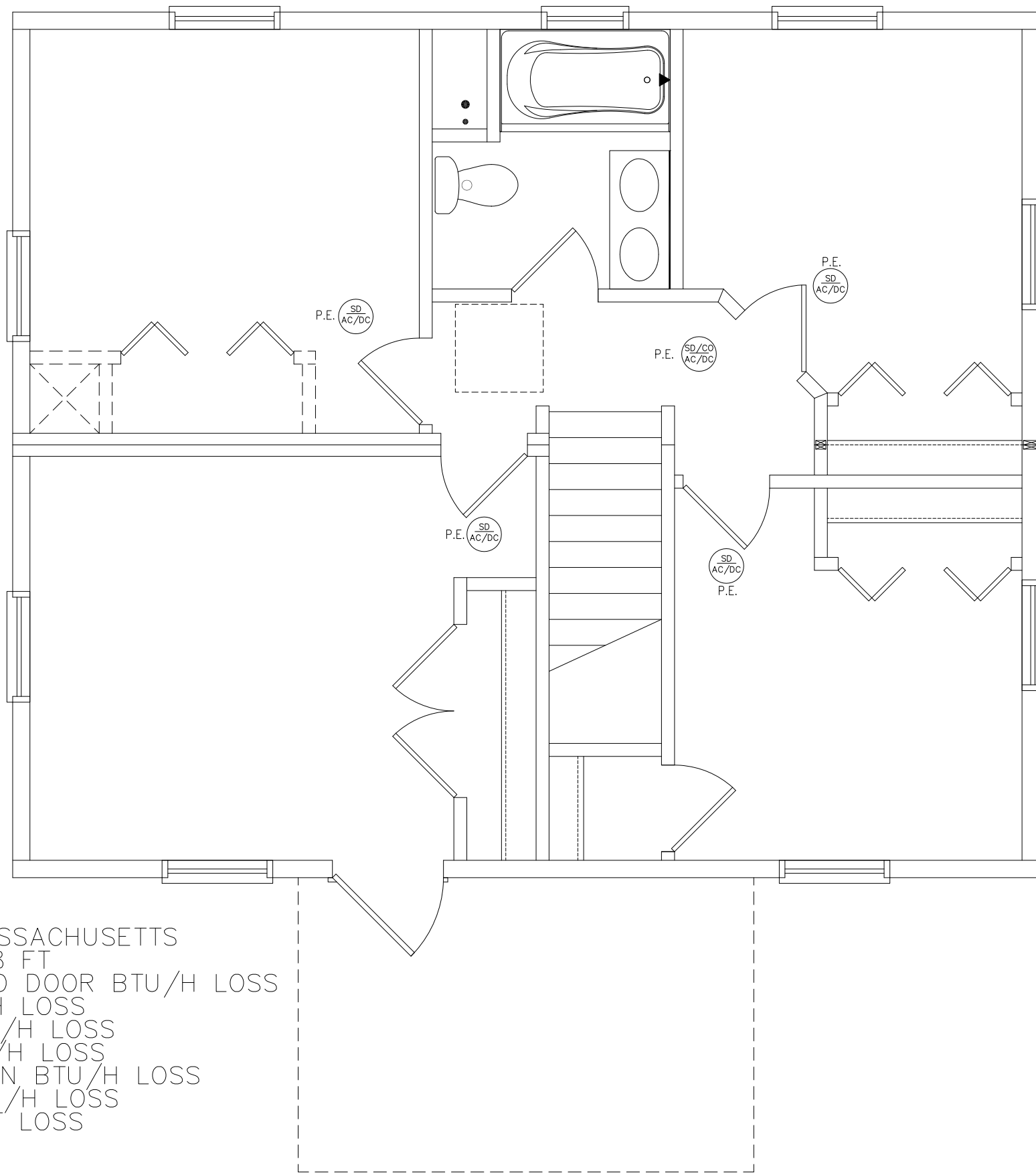
CUSTOMER/PROJECT: SYSTEMS DRAWINGS
 BUILDER:

REV#	DATE	REVISIONS	BY	CHECKED BY:
1	12/14/09	CODE UPDATES	BLF	NTS
2	12/10/10	REVISED SYSTEMS	SLW	
3	1/14/2011	MA CODE UP-DATE	SLW	
4	5/10/2011	Code up-date RI, VA, NJ	SN	
DRAWN BY: DATE: 03/14/08			SCALE: NTS	
GLENCO/TH				

FILE:
 SQ.FT.:
 STATE:
 TYPE:
 MODEL:
 DRAWING: PLUMBING NOTES
 SHEET: PL3

state approval stamp

architect seal

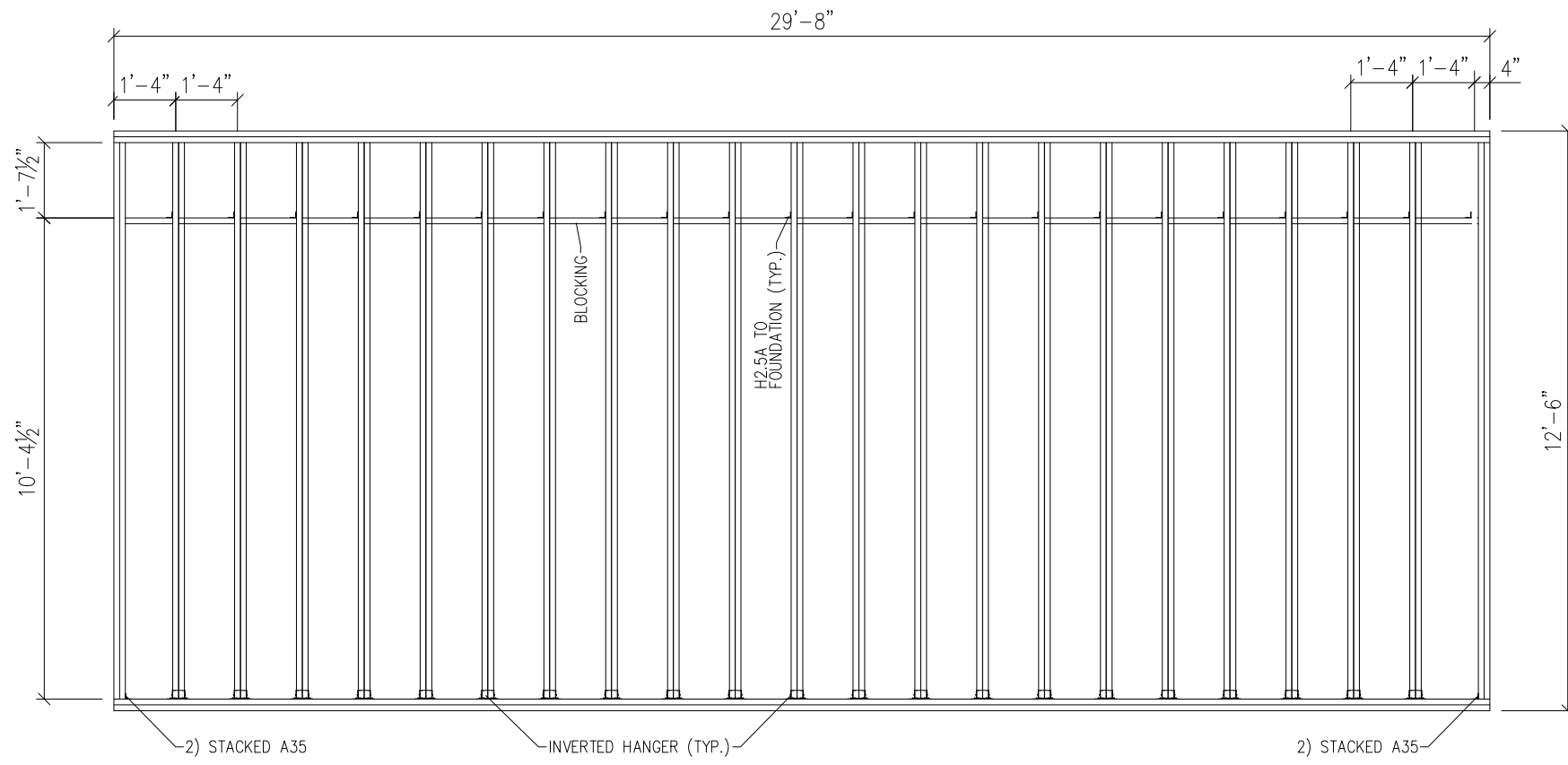


STATE: MA – MASSACHUSETTS
 CEILING HEIGHT: 8 FT
 3398 WINDOW AND DOOR BTU/H LOSS
 2712 WALL BTU/H LOSS
 1539 CEILING BTU/H LOSS
 3078 FLOOR BTU/H LOSS
 18271 INFILTRATION BTU/H LOSS
 28998 TOTAL BTU/H LOSS
 8496 TOTAL WATT LOSS
 34 FT. RADIATION
 53 FT. HWBB
 35 FT. HI CAPACITY HWBB



246 SAND HILL ROAD SELINSGROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM	
BY	JBG PIF
REVISION	PRELIM FINAL
DATE	6/21/16 11/1/16
BUILDER	AVALON BUILDING SYSTEMS
HOMEOWNER/PROJECT	DEMEN BACHARA
ADDRESS	471 EAST STREET
CITY	WESTWOOD
STATE	MA
ZIP	02090
COUNTY	NORFOLK
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	100
ORDER NO	6540
SERIAL NO	742
TYPE	TWO STORY
FILE NAME	O#6540
2ND STORY HEAT LOSS	
SERIAL # / ORDER #	O#6540
PAGE #:	HL1

THIS BUILDING HAS BEEN
 EXTRACTED FROM AN APPROVED
 SYSTEMS OR PER MODEL APPROVAL
 JLA



FLOOR FRAMING

2) 2X10 SPF#2 JOISTS @ 16" O.C.



THIS BUILDING HAS BEEN EXTRACTED FROM AN APPROVED SYSTEMS OR PER MODEL APPROVAL
JLA

SERIAL # / ORDER #
O#6540

PAGE #:
FF1

BUILDER	AVALON BUILDING SYSTEMS	
HOMEOWNER/PROJECT	DEMEN BACHARA	
ADDRESS	471 EAST STREET	
CITY	STATE	ZIP
WESTWOOD	MA	02090
COUNTY	SNOW LOAD (LBS)	WIND SPEED (MPH)
NORFOLK	40	100
ORDER NO	SERIAL NO	TYPE
6540	742	TWO STORY
FILE NAME	O#6540	

DATE	REVISION	BY
6/21/16	PRELIM	JBG
11/1/16	FINAL	PIF

246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



REScheck Software Version 4.6.1 Compliance Certificate

Project **DEMIEN BACHARA**

Energy Code: **2012 IECC**
 Location: **Westwood, Massachusetts**
 Construction Type: **Single-family**
 Project Type: **Addition**
 Climate Zone: **5 (6650 HDD)**
 Permit Date:
 Permit Number:

Construction Site:
 471 EAST STREET
 WESTWOOD, MA 02090

Owner/Agent:
 AVALON BUILDING SYSTEMS
 3 PORTER ST. UNIT 201
 STOUGHTON, MA 02072

Designer/Contractor:
 ICON LEGACY CMH
 246 SAND HILL RD
 SELINGSGROVE, PA 17870

Compliance: Passes using UA trade-off

Compliance: **2.3% Better Than Code** Maximum UA: **133** Your UA: **130**
 The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.
 It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling 1: Flat Ceiling or Scissor Truss	742	38.0	0.0	0.030	22
Wall 1: Wood Frame, 16" o.c.	875	21.0	0.0	0.057	41
Window 1: Vinyl/Fiberglass Frame:Double Pane with Low-E	130			0.300	39
Door 1: Glass	22			0.170	4
Floor 1: All-Wood Joist/Truss:Over Unconditioned Space	742	30.0	0.0	0.033	24

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2012 IECC requirements in REScheck Version 4.6.1 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

ICON LEGACY CMH
 Name - Title _____ Signature *Brett J Helvert* Date 11/14/16





Inspection Checklist

Energy Code: 2012 IECC

Requirements: 0.0% were addressed directly in the REScheck software



Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹	Construction drawings and documentation demonstrate energy code compliance for the building envelope.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
103.1, 103.2, 403.7 [PR3] ¹	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
302.1, 403.6 [PR2] ²	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr _____ Cooling: Btu/hr _____	Heating: Btu/hr _____ Cooling: Btu/hr _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:



1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
------------------------	--------------------------	-----------------------

2012 IECC	Foundation Inspection	Complies?	Comments/Assumptions
303.2.1 [FO11] ² 	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.8 [FO12] ² 	Snow- and ice-melting system controls installed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:



1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.1, 402.3.3, 402.3.6, 402.5 [FR2] ¹	Glazing U-factor (area-weighted average).	U-____	U-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] ¹	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.1.1 [FR23] ¹	Air barrier and thermal barrier installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.3 [FR20] ¹	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.4 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.1 [FR12] ¹	Supply ducts in attics are insulated to ≥R-8. All other ducts in unconditioned spaces or outside the building envelope are insulated to ≥R-6.	R-____ R-____	R-____ R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.2 [FR13] ¹	All joints and seams of air ducts, air handlers, and filter boxes are sealed.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.3 [FR15] ³	Building cavities are not used as ducts or plenums.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3 [FR17] ²	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R-3.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.1 [FR24] ¹	Protection of insulation on HVAC piping.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4.2 [FR18] ²	Hot water pipes are insulated to ≥R-3.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)



DATE **11/14/16**

PFS CORPORATION

Bloomsburg, PA



1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] ²	All installed insulation is labeled or the installed R-values provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.1.1, 402.2.6 [IN1] ¹	Floor insulation R-value.	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2, 402.2.7 [IN2] ¹	Floor insulation installed per manufacturer's instructions, and in substantial contact with the underside of the subfloor.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.1.1, 402.2.5, 402.2.6 [IN3] ¹	Wall insulation R-value. If this is a mass wall with at least 1/2 of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] ¹	Wall insulation is installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:



1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
------------------------	--------------------------	-----------------------

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.6 [FI1] ¹	Ceiling insulation R-value.	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [FI2] ¹	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft ² .			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.2.3 [FI22] ²	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.2.4 [FI3] ¹	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.1.2 [FI17] ¹	Blower door test @ 50 Pa. ≤5 ach in Climate Zones 1-2, and ≤3 ach in Climate Zones 3-8.	ACH 50 = ____	ACH 50 = ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.2 [FI4] ¹	Duct tightness test result of ≤4 cfm/100 ft ² across the system or ≤3 cfm/100 ft ² without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	____ cfm/100 ft ²	____ cfm/100 ft ²	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.2.1 [FI24] ¹	Air handler leakage designated by manufacturer at ≤2% of design air flow.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.1 [FI9] ²	Programmable thermostats installed on forced air furnaces.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.2 [FI10] ²	Heat pump thermostat installed on heat pumps.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4.1 [FI11] ²	Circulating service hot water systems have automatic or accessible manual controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1 [FI25] ²	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.1 [FI6] ¹	75% of lamps in permanent fixtures or 75% of permanent fixtures have high efficacy lamps. Does not apply to low-voltage lighting.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	



1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
404.1.1 [F123] ³	Fuel gas lighting systems have no continuous pilot light.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
401.3 [F17] ²	Compliance certificate posted.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
303.3 [F18] ³	Manufacturer manuals for mechanical and water heating systems have been provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:



1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------



2012 IECC Energy Efficiency Certificate

Insulation Rating	R-Value
Above-Grade Wall	21.00
Below-Grade Wall	0.00
Floor	30.00
Ceiling / Roof	38.00
Ductwork (unconditioned spaces):	_____

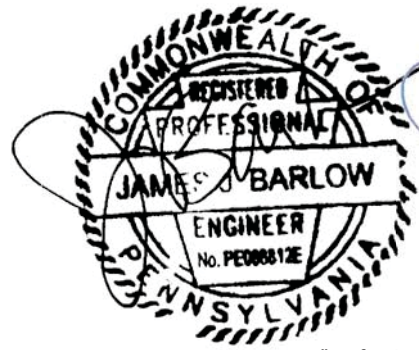
Glass & Door Rating	U-Factor	SHGC
Window	0.30	
Door	0.17	

Heating & Cooling Equipment	Efficiency
Heating System: _____	_____
Cooling System: _____	_____
Water Heater: _____	_____

Name: _____ Date: _____

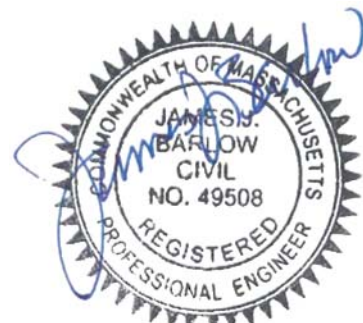
Comments



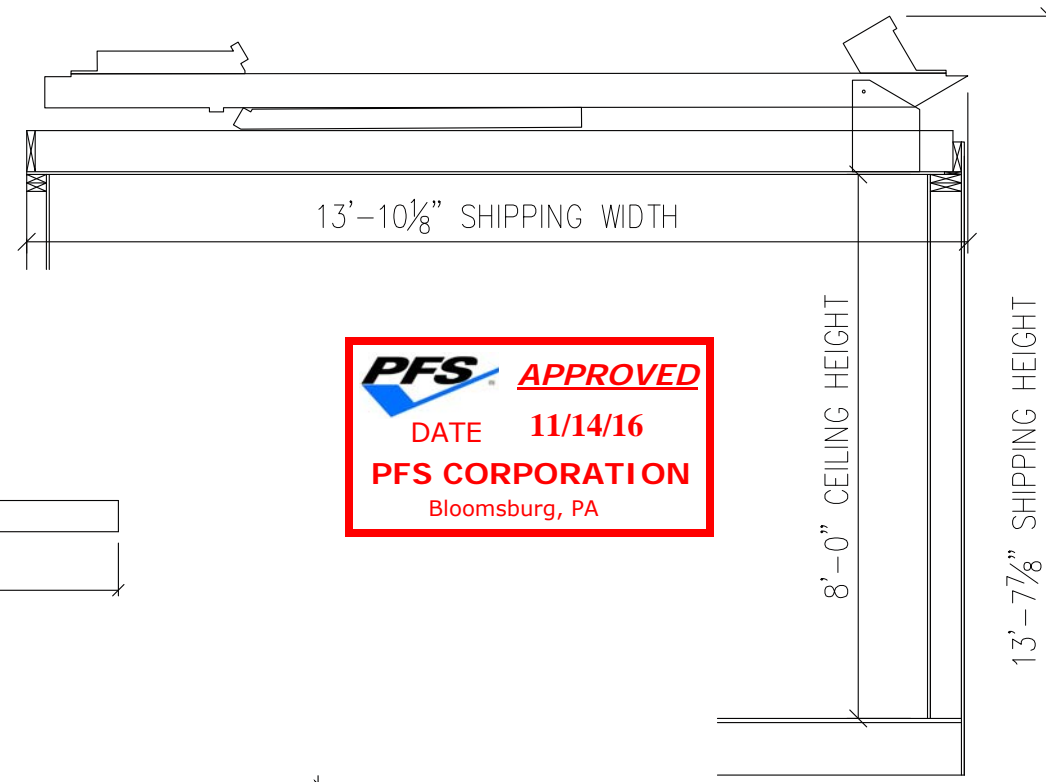


01/03/13

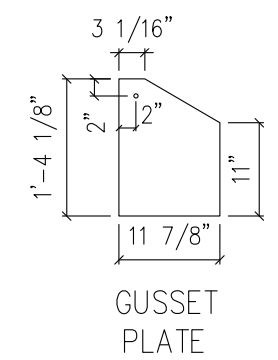
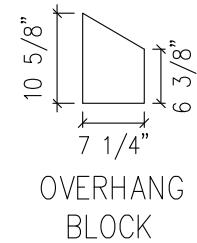
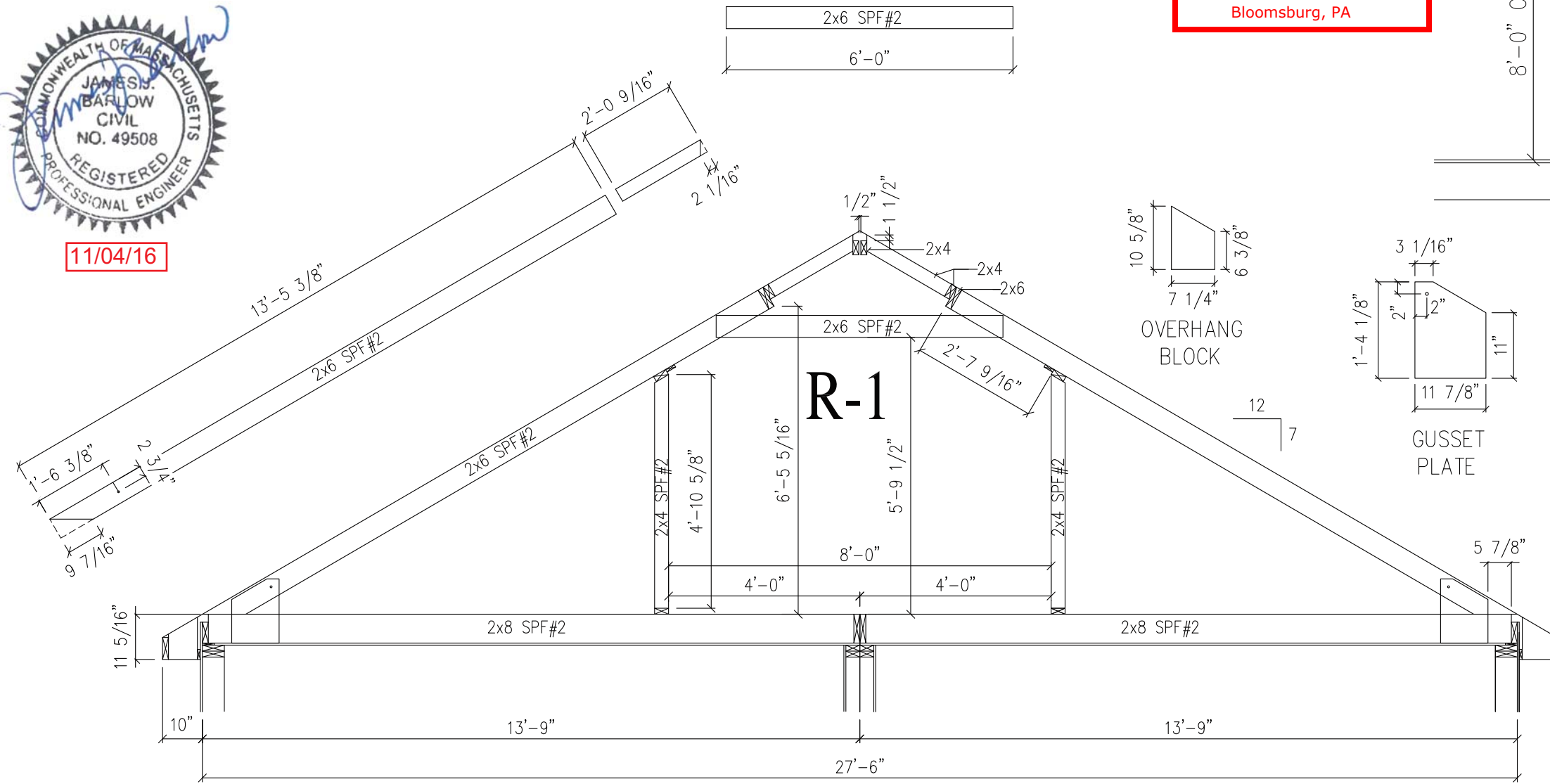
"Professional Certification. I hereby certify that these documents were prepared or approved by me and that I am a duly licensed professional engineer under the laws of the State of Maryland." License No.: 33421 Expiration Date: 7/16/14



11/04/16



PFS APPROVED
 DATE 11/14/16
PFS CORPORATION
 Bloomsburg, PA



**7/12 - 27'-6" WIDE - GOOD TO 40#GSL - 16" O.C.
 NON-STORAGE RAFTER**

THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.

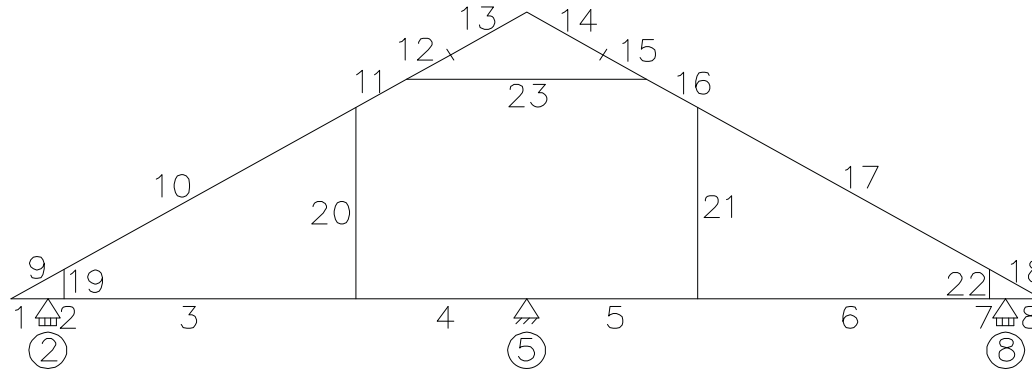
TRUSS: 7-275-01

SERIAL # / ORDER #
 S#????/O#????

246 SAND HILL ROAD SELINS GROVE, PA 17870 PHONE: (570) 374-3280 FAX: (570) 374-1122 WWW.ICONLEGACY.COM	
BY	
REVISION	
DATE	
BUILDER	
CUSTOMER/PROJECT	
ADDRESS	
CITY	ZIP
COUNTY	WIND SPEED (MPH)
ORDER NO	SNOW LOAD (LBS)
SERIAL NO	SOFT
FILE NAME	
TRUSS: 7-275-01	
SERIAL # / ORDER # S#????/O#????	
PAGE # 6A	

**STRUCTURAL LUMBER
INTERACTION CALCULATIONS**

LEGACY CUSTOM MODULAR HOMES



TRUSS NO.: TR7-27-6
JOB NO.: 120111
PITCH: 7/12
SPAN: 27'-6"

TRUSS CENTERS FOR 115 mph WIND: 16"
TRUSS CENTERS FOR 150 mph WIND: 16"

TC DL: 10 psf
BC LL: 10 psf WHERE h < 42"
BC LL: 20 psf WHERE h ≥ 42"
BC DL: 10 psf

11/04/16



	20 psf	30 psf	40 psf	60 psf	70 psf	90 psf
GROUND SNOW:	20 psf	30 psf	40 psf	60 psf	70 psf	90 psf
TRUSS CENTERS:	16	16	16	12	12	N/A in
BALANCED SNOW LOAD:	*20.4	23.1	30.8	46.2	53.9	N/A psf
UNBALANCED SNOW LOAD:	36.02	42.72	54.32	77.44	89.02	N/A psf
OPPOSITE SIDE UNB. SNOW LOAD:	6.12	6.93	9.24	13.86	16.17	N/A psf
UNBALANCED SNOW LOAD LENGTH:	5.09	5.93	6.63	7.75	8.22	N/A ft

* ADDITIONAL 5 psf RAIN ON SNOW SURCHARGE APPLIED



MEMBER INFORMATION:

MEMBER	SIZE & SPECIES
1 - 8	2 x 8 SPF #2
9 - 12 & 15 - 18	2 x 6 SPF #2
13 & 14	2 x 4 SPF #2
19 - 22	2 x 4 SPF #2
23	2 x 6 SPF #2

APPLIED MWFRS UPLIFT: 21.67 psf WINDWARD AT 115 mph
12.31 psf LEEWARD AT 115 mph
36.87 psf WINDWARD AT 150 mph
20.94 psf LEEWARD AT 150 mph

APPLIED C & C UPLIFT: 23.06 psf AT 115 mph
39.23 psf AT 150 mph

MAXIMUM SUPPORT REACTIONS (lbs):

	DEAD LOAD	MWFRS UPLIFT						C & C UPLIFT			
		DL + LL + 20 psf SNOW	DL + LL + 30 psf SNOW	DL + LL + 40 psf SNOW	DL + LL + 60 psf SNOW	DL + LL + 70 psf SNOW	DL + LL + 90 psf SNOW	0.6 DL + 115 mph UPLIFT	0.6 DL + 150 mph UPLIFT	0.6 DL + 115 mph UPLIFT	0.6 DL + 150 mph UPLIFT
EXTERIOR WALL	435.3	932.4	983.3	1107.5	1087.5	1217.4	N/A	-76.2	-312.9	-154.1	-445.3
MATING WALL	83.4	200.6	206.6	223.5	196.1	208.6	N/A	0	-21.4	-7	-47

- NOTES:**
- MATING WALL LOADS ARE TOTAL FOR BOTH SIDES.
 - WIND PER ASCE 7-10, 115 & 150 mph, EXP. C, RISK CATEGORY II.
 - SNOW PER ASCE 7-10, Ct = 1.1, Ce = 1.0.
 - COMPONENT DESIGN IS BASED ON C & C PRESSURES
TRUSS UPLIFT CONNECTIONS ARE BASED ON MWFRS PRESSURES.
 - THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.

MAXIMUM INTERACTION & DEFLECTION:

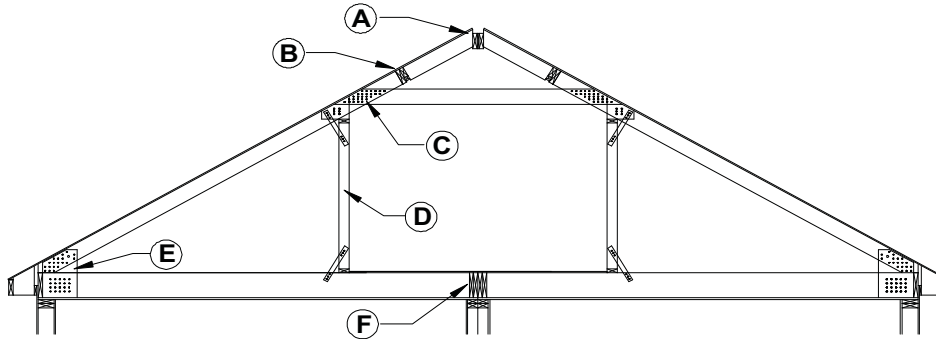
	MAXIMUM CSI	MAXIMUM DEFLECTION (in)	L /
BOTTOM CHORD	0.86922	0.42228	409
TOP CHORD	0.97162	0.42514	527
WEB	0.12172	0.00	*****

**CONNECTIONS
TRUSS FRAMING**

LEGACY CUSTOM MODULAR HOMES

PROJECT NUMBER : 120111
 TRUSS NUMBER : TR7-27-6
 TRUSS PITCH : 7/12
 TRUSS SPACING : 16 in O.C.
 TRUSS SPAN : 27'-6"

DESIGN LOADS: 20 - 40 psf GROUND SNOW
 115 / 150 mph WIND



11/04/16

UPLIFT CONNECTIONS (MWFRS LOADS):

EXTERIOR WALL

115 mph WIND

UPLIFT DESIGN LOAD = 76.2 lbs
 BASED ON WIND LOAD $C_D = 1.6$

OK FOR 1 1/2" x 26ga STRAP

WITH 1 10 d NAILS EACH END

OR WITH 2 16 ga STAPLE EACH END

150 mph WIND

UPLIFT DESIGN LOAD = 312.9 lbs
 BASED ON WIND LOAD $C_D = 1.6$

OK FOR 1 1/2" x 26ga STRAP

WITH 4 10 d NAILS EACH END

OR WITH 6 16 ga STAPLE EACH END

MATING WALL (PER SIDE)

115 mph WIND

UPLIFT DESIGN LOAD = 0 lbs
 BASED ON WIND LOAD $C_D = 1.6$

OK FOR 1 1/2" x 26ga STRAP

WITH 0 10 d NAILS EACH END

OR WITH 0 16 ga STAPLE EACH END

150 mph WIND

UPLIFT DESIGN LOAD = 10.7 lbs
 BASED ON WIND LOAD $C_D = 1.6$

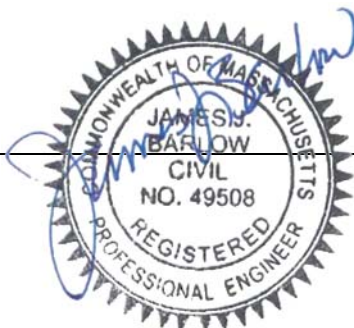
OK FOR 1 1/2" x 26ga STRAP

WITH 1 10 d NAILS EACH END

OR WITH 1 16 ga STAPLE EACH END



CONDITION "A" - RIDGE:	MEMBER: 14	START JOINT	
	MEMBER: 13	END JOINT	
SHEAR CONNECTION	<u>DL + LL & DL + 115 mph WIND</u>		
	MAX SHEAR DESIGN LOAD =	91.6 lbs	
	BASED ON SNOW LOAD	C _D = 1.15	
	USE 1	16 d NAILS INTO END GRAIN EACH END	
	<hr/>		
	USE 10 d NAILS AT	11 " O.C. THROUGH PLATES	
	<hr/>		
	<u>DL + LL & DL + 150 mph WIND</u>		
	MAX SHEAR DESIGN LOAD =	91.6 lbs	
	BASED ON SNOW LOAD	C _D = 1.15	
USE 1	16 d NAILS INTO END GRAIN EACH END		
<hr/>			
USE 10 d NAILS AT	11 " O.C. THROUGH PLATES		
<hr/>			
TENSION CONNECTION	<u>DL + LL & DL + 115 mph WIND</u>		
	MAX TENSION DESIGN LOAD =	49 lbs	
	BASED ON WIND LOAD	C _D = 1.6	
	OK FOR 1 1/2" x 26ga STRAP		
	WITH 1	6 d NAILS EACH END	
	OR	WITH 1	16 ga STAPLE EACH END
	<hr/>		
	ALTERNATE CONNECTION:	USE 1	8 d NAILS EACH END OF 1 x 4
	<hr/>		
	ALTERNATE CONNECTION:	USE 2	10 d NAILS TOENAILED THROUGH RAFTER INTO RIDGE PLATE
<hr/>			
USE 10 d NAILS AT	29 " O.C. THROUGH PLATES		
<hr/>			
*** FULL PENETRATION INTO PLATE IS REQUIRED			
<hr/>			
<u>DL + LL & DL + 150 mph WIND</u>			
MAX TENSION DESIGN LOAD =	94.3 lbs		
BASED ON WIND LOAD	C _D = 1.6		
OK FOR 1 1/2" x 26ga STRAP			
WITH 2	6 d NAILS EACH END		
OR	WITH 2	16 ga STAPLE EACH END	
<hr/>			
ALTERNATE CONNECTION:	USE 1	8 d NAILS EACH END OF 1 x 4	
<hr/>			



11/04/16



CONDITION "B" - TOP CHORD FLIP:	MEMBER: 13 / 15	START JOINT
	MEMBER: 12 / 14	END JOINT
TENSION CONNECTION	<u>DL + LL & DL + 115 mph WIND</u>	
	MAX TENSION DESIGN LOAD =	38.5 lbs
	BASED ON WIND LOAD	C _D = 1.6
	USE 1	6 d NAILS THROUGH SHEATHING EACH SIDE
	OR	USE 1 16 ga STAPLE THROUGH SHEATHING EACH SIDE
	<u>DL + LL & DL + 150 mph WIND</u>	
	MAX TENSION DESIGN LOAD =	83.7 lbs
	BASED ON WIND LOAD	C _D = 1.6
	USE 2	6 d NAILS THROUGH SHEATHING EACH SIDE
	OR	USE 2 16 ga STAPLE THROUGH SHEATHING EACH SIDE
SHEAR CONNECTION	<u>DL + LL & DL + 115 mph WIND</u>	
	MAX SHEAR DESIGN LOAD =	91.6 lbs
	BASED ON SNOW LOAD	C _D = 1.15
	USE 1	16 d NAILS TOENAILED EACH END
		USE 10 d NAILS AT 11 " O.C. THROUGH PLATES
	<u>DL + LL & DL + 150 mph WIND</u>	
	MAX SHEAR DESIGN LOAD =	91.6 lbs
	BASED ON SNOW LOAD	C _D = 1.15
	USE 1	16 d NAILS TOENAILED EACH END
		USE 10 d NAILS AT 11 " O.C. THROUGH PLATES

CONDITION "C" - COLLAR TIE:	MEMBER: 23	START JOINT
	MEMBER: 23	END JOINT
	<u>DL + LL & DL + 115 mph WIND</u>	
	DESIGN LOAD =	856.8 lbs
	BASED ON SNOW LOAD	C _D = 1.15
	USE 7	16 d NAILS EACH END
		BEARING BLOCK NOT REQUIRED
	<u>DL + LL & DL + 150 mph WIND</u>	
	DESIGN LOAD =	856.8 lbs
	BASED ON SNOW LOAD	C _D = 1.15
	USE 7	16 d NAILS EACH END
		BEARING BLOCK NOT REQUIRED

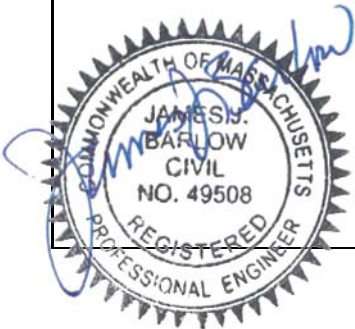


11/04/16



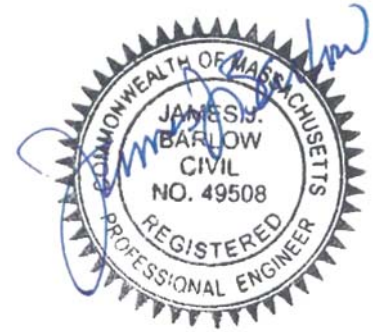
CONDITION "D" - KNEE WALLS:	MEMBER: 20 / 21	START	JOINT
	MEMBER: 20 / 21	END	JOINT
TENSION CONNECTION	<u>DL + LL & DL + 115 mph WIND</u>		
	DESIGN TENSION LOAD =	346.5 lbs	
	BASED ON SNOW LOAD	$C_D =$	1.15
	<u>OK FOR 1 1/2" x 26ga STRAP</u>		
	WITH	6	10 d NAILS EACH END
	OR	WITH	7 16 ga STAPLE EACH END
	<u>DL + LL & DL + 150 mph WIND</u>		
	DESIGN TENSION LOAD =	346.5 lbs	
	BASED ON SNOW LOAD	$C_D =$	1.15
	<u>OK FOR 1 1/2" x 26ga STRAP</u>		
	WITH	6	10 d NAILS EACH END
	OR	WITH	7 16 ga STAPLE EACH END

CONDITION "E" - HEEL:	MEMBER: 1 / 9	START	JOINT
	MEMBER: 8 / 18	END	JOINT
TOP CHORD	<u>DL + LL & DL + 115 mph WIND</u>		
	DESIGN LOAD =	943.4 lbs	
	BASED ON SNOW LOAD	$C_D =$	1.15
	USE	1	3/8" BOLT PLUS
		5	6 d NAILS PER GUSSETT EACH SIDE
	OR	7	16 ga STAPLE PER GUSSETT EACH SIDE
	<u>DL + LL & DL + 150 mph WIND</u>		
	DESIGN LOAD =	943.4 lbs	
	BASED ON SNOW LOAD	$C_D =$	1.15
	USE	1	3/8" BOLT PLUS
		5	6 d NAILS PER GUSSETT EACH SIDE
	OR	7	16 ga STAPLE PER GUSSETT EACH SIDE
BOTTOM CHORD	<u>DL + LL & DL + 115 mph WIND</u>		
	DESIGN LOAD =	951.3 lbs	
	BASED ON SNOW LOAD	$C_D =$	1.15
	USE	9	6 d NAILS PER GUSSETT EACH SIDE
	OR	USE	11 16 ga STAPLE PER GUSSETT EACH SIDE
	<u>DL + LL & DL + 150 mph WIND</u>		
	DESIGN LOAD =	951.3 lbs	
	BASED ON SNOW LOAD	$C_D =$	1.15
	USE	9	6 d NAILS PER GUSSETT EACH SIDE
	OR	USE	11 16 ga STAPLE PER GUSSETT EACH SIDE



11/04/16





11/04/16

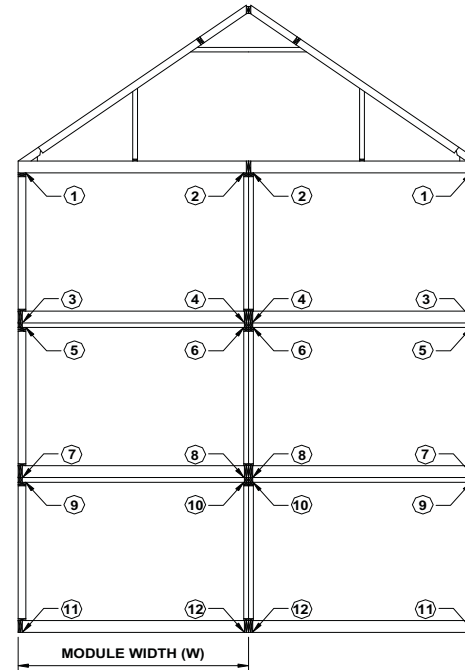
CONDITION "F" BOTTOM CHORD AT CENTER:	MEMBER:	5	START	JOINT
	MEMBER:	4	END	JOINT
<u>DL + LL & DL + 115 mph WIND</u>				
	DESIGN LOAD =	951.3	lbs	
	BASED ON SNOW LOAD	C _D =	1.15	
	USE	10	16 d NAILS THROUGH DECKING EACH SIDE	
<u>OR</u>	USE	1	DBL 1 1/2" x 20ga STRAP	
	WITH	9	10 d NAILS EACH END	
<u>OR</u>	WITH	18	16 ga STAPLE EACH END	
<u>DL + LL & DL + 150 mph WIND</u>				
	DESIGN LOAD =	951.3	lbs	
	BASED ON SNOW LOAD	C _D =	1.15	
	USE	10	16 d NAILS THROUGH DECKING EACH SIDE	
<u>OR</u>	USE	1	DBL 1 1/2" x 20ga STRAP	
	WITH	9	10 d NAILS EACH END	
<u>OR</u>	WITH	18	16 ga STAPLE EACH END	



**COMPONENT LOAD SUMMARY
FOLDING TRUSSES**

LEGACY CUSTOM MODULAR HOMES, LLC.

LOCATION 1 = EXT. WALL HEADER & EXT. WALL STUD 1 STORY & 2 OR 3 STORY UPPER LEVEL
LOCATION 2 = M. WALL HEADER & M. WALL STUD 1 STORY & 2 OR 3 STORY UPPER LEVEL
LOCATION 3 = PERIMETER BAND 1 STORY & 2 OR 3 STORY UPPER LEVEL
LOCATION 4 = CENTER GIRDER 1 STORY & 2 OR 3 STORY UPPER LEVEL
LOCATION 5 = EXT. WALL HEADER & EXT. WALL STUD 2 STORY LOWER & 3 STORY MIDDLE LEVEL
LOCATION 6 = M. WALL HEADER & M. WALL STUD 2 STORY LOWER & 3 STORY MIDDLE LEVEL
LOCATION 7 = PERIMETER BAND 2 STORY LOWER & 3 STORY MIDDLE LEVEL
LOCATION 8 = CENTER GIRDER 2 STORY LOWER & 3 STORY MIDDLE LEVEL
LOCATION 9 = EXT. WALL HEADER & EXT. WALL STUD 3 STORY LOWER LEVEL
LOCATION 10 = M. WALL HEADER & M. WALL STUD 3 STORY LOWER LEVEL
LOCATION 11 = PERIMETER BAND 3 STORY LOWER LEVEL
LOCATION 12 = CENTER GIRDER 3 STORY LOWER LEVEL
LOCATIONS 3, 4, 7, 8, 11 & 12 MAY BE USED TO GENERATE FOUNDATION LOADS



11/04/16



COMPONENT LOADS (lbs/ft)

TRUSS TR7-27-6, 7/12 PITCH, 27'-6" WIDTH, 20 psf GROUND SNOW

LOCATION 1		LOCATION 2		LOCATION 3		LOCATION 4		LOCATION 5		LOCATION 6		LOCATION 7		LOCATION 8		LOCATION 9		LOCATION 10		LOCATION 11		LOCATION 12	
LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL
373	864	44	92	648	1362	319	561	648	1414	319	612	923	1912	594	1080	923	1963	594	1132	1198	2461	869	1600
115 mph WIND UPLIFT LOADS												150 mph WIND UPLIFT LOADS											
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
-116	-3	-27	-	-7	-	-	-	-	-	-	-	-334	-18	-245	-	-225	-	-135	-	-115	-	-25	-

TRUSS TR7-27-6, 7/12 PITCH, 27'-6" WIDTH, 30 psf GROUND SNOW

LOCATION 1		LOCATION 2		LOCATION 3		LOCATION 4		LOCATION 5		LOCATION 6		LOCATION 7		LOCATION 8		LOCATION 9		LOCATION 10		LOCATION 11		LOCATION 12	
LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL
411	902	46	94	686	1400	321	563	686	1452	321	614	961	1950	596	1082	961	2001	596	1134	1236	2499	871	1602
115 mph WIND UPLIFT LOADS												150 mph WIND UPLIFT LOADS											
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
-116	-3	-27	-	-7	-	-	-	-	-	-	-	-334	-18	-245	-	-225	-	-135	-	-115	-	-25	-

TRUSS TR7-27-6, 7/12 PITCH, 27'-6" WIDTH, 40 psf GROUND SNOW

LOCATION 1		LOCATION 2		LOCATION 3		LOCATION 4		LOCATION 5		LOCATION 6		LOCATION 7		LOCATION 8		LOCATION 9		LOCATION 10		LOCATION 11		LOCATION 12	
LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL	LIVE	TOTAL
504	995	52	100	779	1493	327	569	779	1545	327	620	1054	2043	602	1088	1054	2094	602	1140	1329	2592	877	1608
115 mph WIND UPLIFT LOADS												150 mph WIND UPLIFT LOADS											
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
-116	-3	-27	-	-7	-	-	-	-	-	-	-	-334	-18	-245	-	-225	-	-135	-	-115	-	-25	-

Project: 6540

Location: CANTILEVER CALCS

Floor Joist


[2015 International Building Code(2012 NDS)]

(2) 1.5 IN x 9.25 IN x 12.084 FT (10.4 + 1.7) @ 16 O.C.

#2 - Spruce-Pine-Fir - Dry Use

Section Adequate By: 64.7%

Controlling Factor: Moment



Brett Hebert
Icon Legacy Custom Modular Homes, LLC
246 Sand Hill Road
Selinsgrove, PA 17870

page
/ of

StruCalc Version 9.0.2.5

11/14/2016 9:41:53 AM

CAUTIONS

* Properly connect sheathing to double joists/rafters or fully laminate to transfer diaphragm forces.

DEFLECTIONS

	Center	Right
Live Load	-0.05 IN L/2410	0.05 IN 2L/802
Dead Load	-0.03 in	0.04 in
Total Load	-0.08 IN L/1524	0.09 IN 2L/460
Live Load Deflection Criteria:	L/360	Total Load Deflection Criteria: L/240

REACTIONS

	A	B
Live Load	278 lb	1153 lb
Dead Load	-3 lb	900 lb
Total Load	275 lb	2053 lb
Uplift (1.5 F.S)	-118 lb	0 lb
Bearing Length	0.22 in	1.61 in

SUPPORT LOADS

	A	B
Live Load	209 plf	865 plf
Dead Load	-2 plf	675 plf
Total Load	206 plf	1540 plf

MATERIAL PROPERTIES

#2 - Spruce-Pine-Fir

	Base Values	Adjusted
Bending Stress:	Fb = 875 psi	Fb' = 1069 psi
	Cd=1.00 Cl=0.97 CF=1.10 Cr=1.15	
Shear Stress:	Fv = 135 psi	Fv' = 135 psi
	Cd=1.00	
Modulus of Elasticity:	E = 1400 ksi	E' = 1400 ksi
Comp. \perp to Grain:	Fc \perp = 425 psi	Fc \perp ' = 425 psi

Controlling Moment:

-2313 ft-lb

10.42 Ft from left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 3

Controlling Shear:

1449 lb

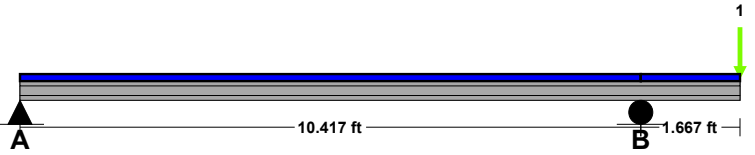
At left support of span 3 (Right Span)

Created by combining all dead loads and live loads on span(s) 2, 3

Comparisons with required sections:

	Req'd	Provided
Section Modulus:	25.97 in3	42.78 in3
Area (Shear):	16.1 in2	27.75 in2
Moment of Inertia (deflection):	103.21 in4	197.86 in4
Moment:	-2313 ft-lb	3811 ft-lb
Shear:	1449 lb	2498 lb

LOADING DIAGRAM



JOIST DATA

	Center	Right
Span Length	10.42 ft	1.67 ft
Unbraced Length-Top	0 ft	0 ft
Unbraced Length-Bottom	0 ft	0 ft
Floor sheathing applied to top of joists-top of joists fully braced.		
Floor Duration Factor	1.00	

JOIST LOADING

	Center	Right
Uniform Floor Loading		
Live Load	LL = 40 psf	40 psf
Dead Load	DL = 15 psf	15 psf
Total Load	TL = 55 psf	55 psf
TL Adj. For Joist Spacing wT =	73.3 plf	73.3 plf
Wall Loading		
Wall One		
Live Load (\perp to Joists):	L1 = 0 plf	504 plf
Dead Load (\perp to Joists):	D1 = 0 plf	491 plf
Load Location	X1 = 0 ft	1.67 ft

NOTES



11/14/16