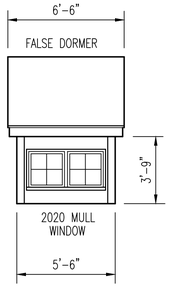
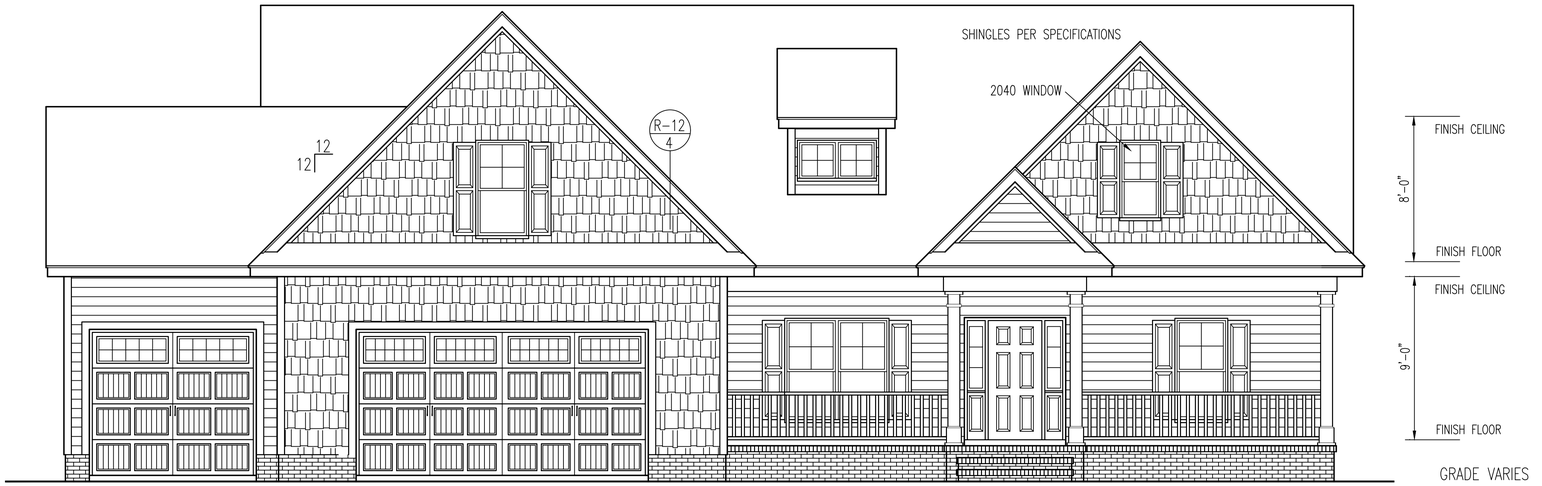




FRONT ELEVATION

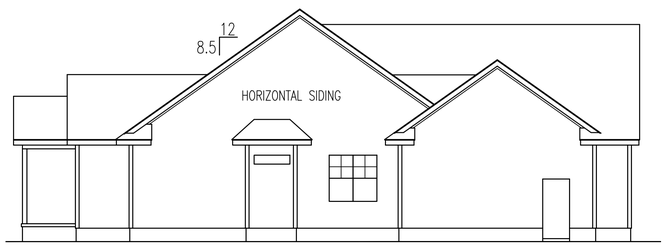
SCALE:1/4"=1'-0"

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

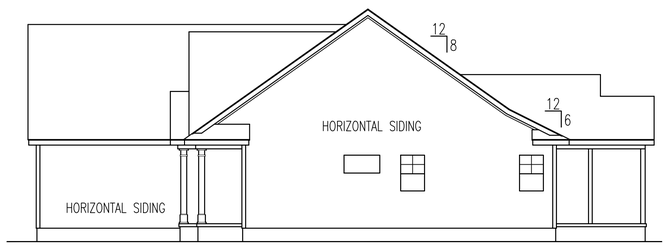
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

07/26/2021

Harnett COUNTY NORTH CAROLINA

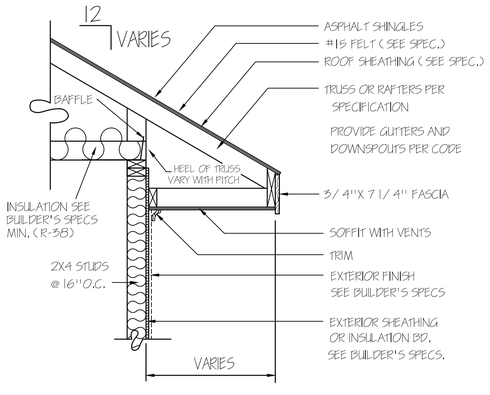


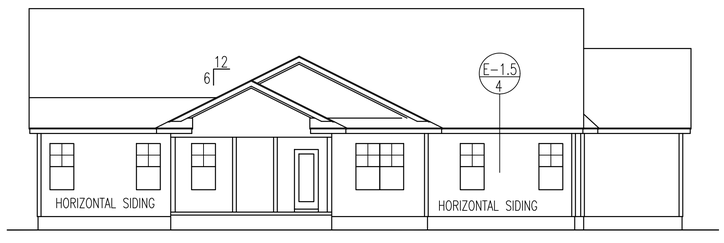
LEFT ELEVATION



RIGHT ELEVATION

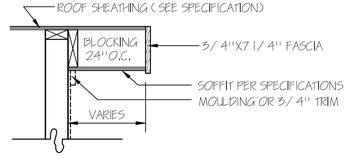
HERO PACKAGE





REAR ELEVATION

SCALE:1/8"=1'-0"



RAKE DETAIL FOR GABLE ENDS

EXCLUSIVE RESIDENCE DESIGN FOR:
WATERMARK HOMES
NAME: OLEANDER II
LOT: 119 BALLARD WOODS

TM DESIGNS
RESIDENTIAL PLANS BY TINA MCFADDEN
(910) 354-4736 TMDESIGNS2016@GMAIL.COM

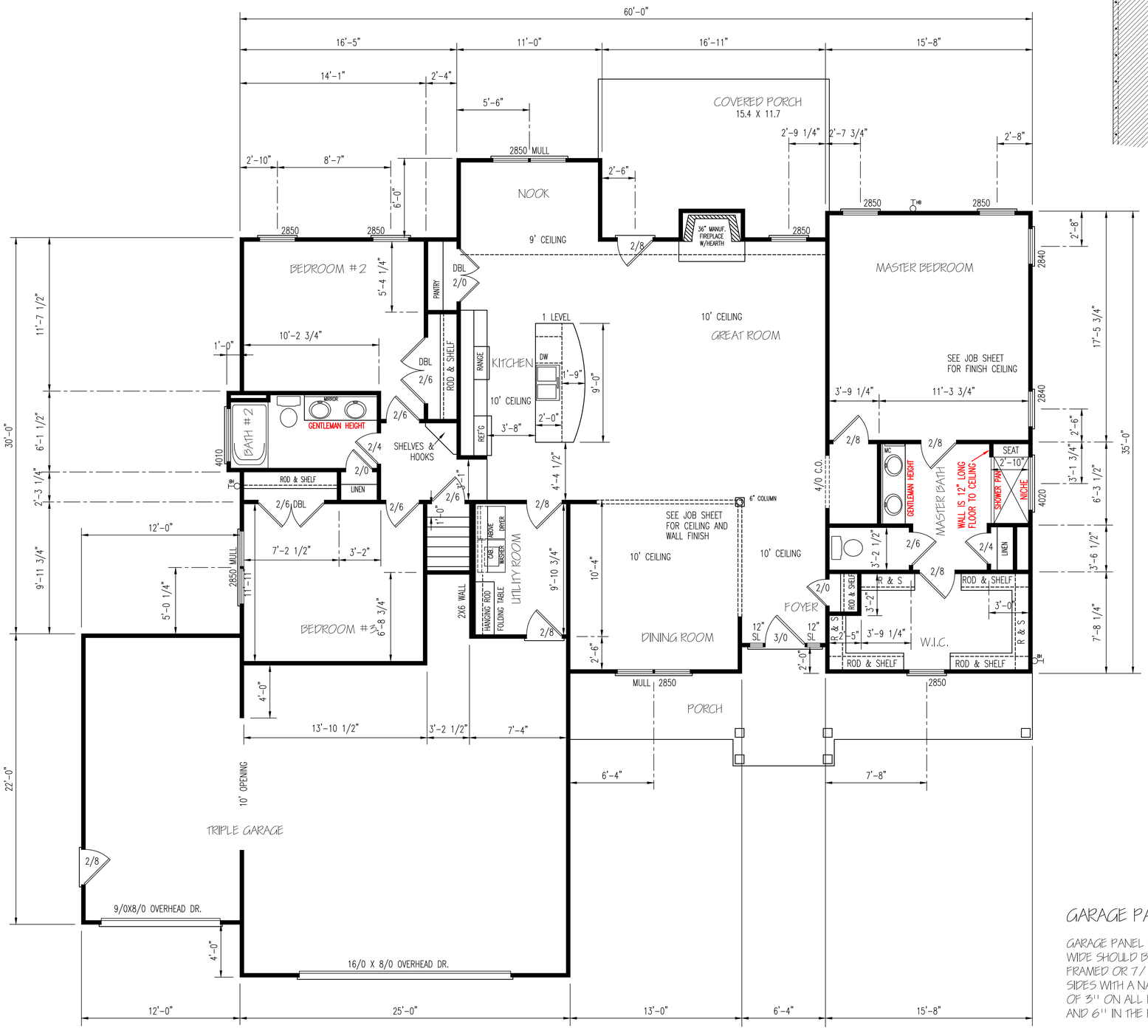
I HEREBY CERTIFY THAT THIS DRAWING MEETS LOCAL CODES, 2012 INTERNATIONAL BUILDING CODES

THIS IS FOR THE CONSTRUCTION OF ONE HOUSE ON A SINGLE LOT, NOT TO BE REUSED

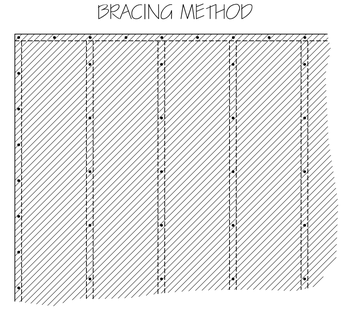
PLAN NUMBER
RG16-A01

OPTION #4

1 | GARAGE L F | DATE: 12/18/19



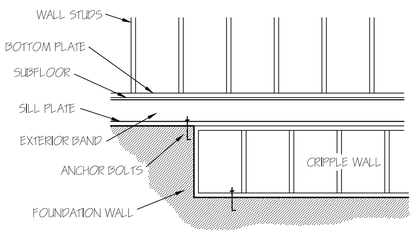
BRACING METHOD



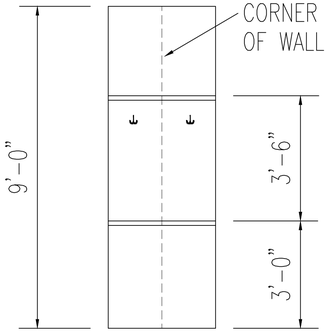
EXTERIOR WALL TO BE FULLY SHEATHED WITH 7/16" OSB. NAILING PATTERN TO BE 8" ON ALL EDGES AND 12" IN FIELD, WITH 8d NAILS.

ENERGY TABLE

U FACTOR OF WINDOWS .30
CLIMATE ZONE 3
INSULATION: WALLS 15
CEILING 38
FLOORS 19



FOUNDATION CRIPPLE WALLS SHALL BE FRAMED OF STUDS NOT SMALLER THAN THE STUDDING ABOVE. WHEN EXCEEDING 4 FT. IN HEIGHT, SUCH WALLS SHALL BE FRAMED OF STUDS HAVING THE SIZE REQUIRED FOR AN ADDITIONAL STORY. CRIPPLE WALLS WITH A STUD HEIGHT LESS THAN 14 INCHES SHALL BE CONTINUOUSLY SHEATHED ON ONE SIDE WITH WOOD STRUCTURAL PANELS FASTENED TO BOTH THE TOP AND BOTTOM PLATES IN ACCORDANCE WITH TABLE R602.3(1), OR CRIPPLE WALLS SHALL BE CONSTRUCTED OF SOLID BLOCKING.



SHELVES IN HALLWAY DETAIL

NOTE:
CEILINGS ARE 9'-0" UNLESS NOTED.

HERO PACKAGE

GARAGE PANEL WALL

GARAGE PANEL WALLS UNDER 24" WIDE SHOULD BE EITHER PORTAL FRAMED OR 7/16" OSB ON BOTH SIDES WITH A NAILING PATTERN OF 3" ON ALL PANEL EDGES AND 6" IN THE FIELD.

FIRST FLOOR PLAN

SCALE: 1/4"=1'-0"

HEATED AREA

1ST FL	2015	SQ FT
2ND FL	399	SQ FT
TOTAL	2414	SQ FT

OTHER AREAS

GARAGE	894	SQ FT
F.PORCH	203	SQ FT
R.PORCH	208	SQ FT

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(910) 354-4736 TMDESIGNS2016@GMAIL.COM

EXCLUSIVE RESIDENCE DESIGN FOR:
WATERMARK HOMES

LOT: 119 BALLARD WOODS

NAME: OLEANDER II

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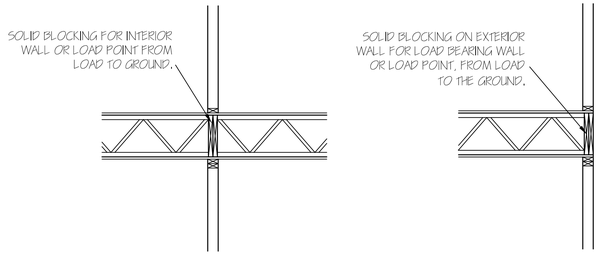
PLAN NUMBER
RG16-A01

OPTION #4

2 A | GARAGE L F | DATE: 12/18/19



BONUS ROOM

SCALE:1/ 4"=1'-0"

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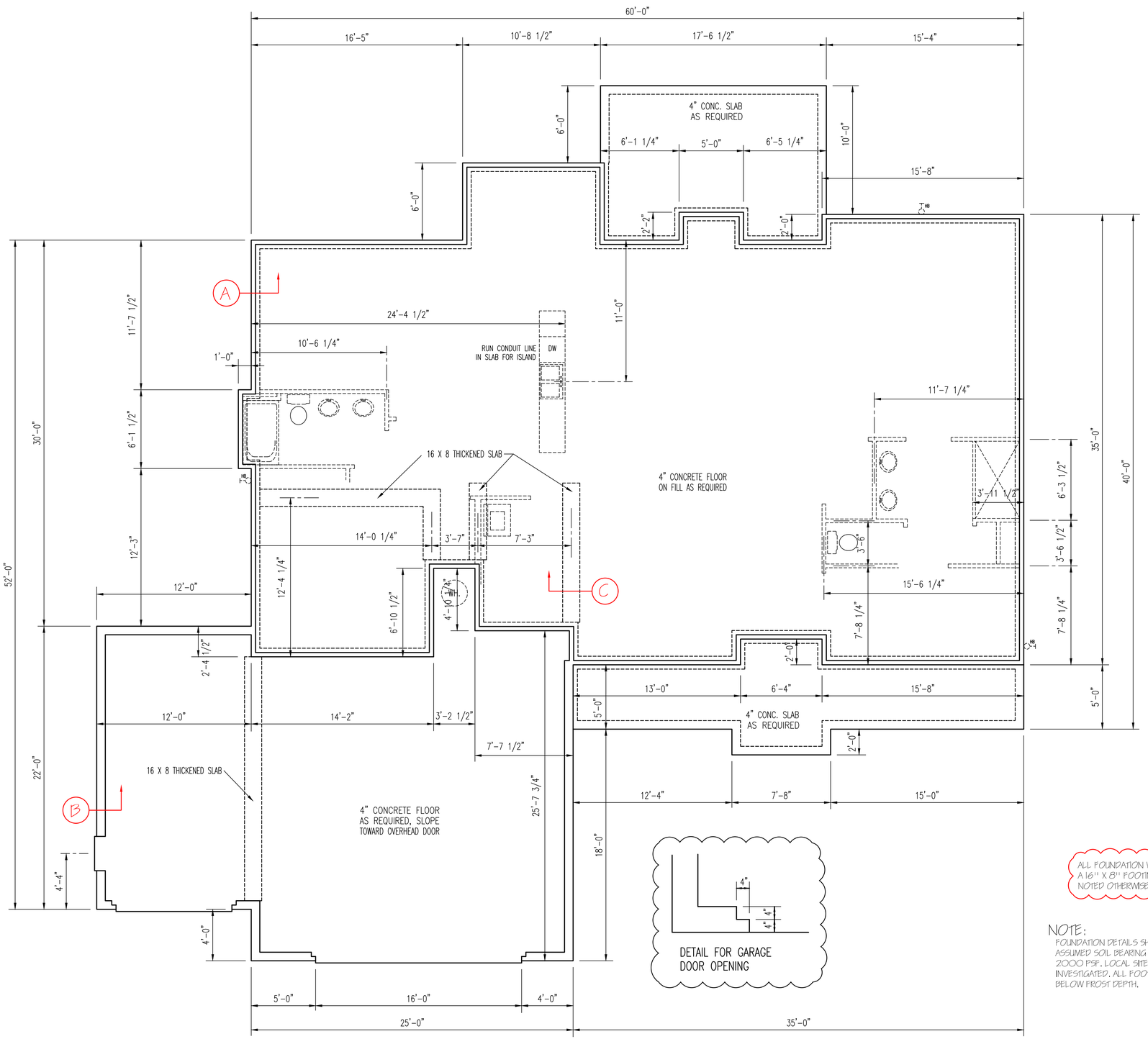
RESIDENTIAL PLANS BY TINA MCFADDEN
(910) 354-4736 TMDESIGNS2016@GMAIL.COM

EXCLUSIVE RESIDENCE DESIGN FOR:
WATERMARK HOMES
LOT: 119 BALLARD WOODS
NAME: OLEANDER II

PLAN NUMBER
RG16-A01

OPTION #4

2 B | GARAGE L F | DATE: 12/18/19

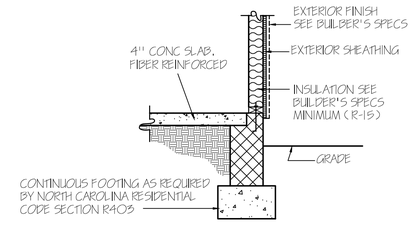


ALL FOUNDATION WALLS HAVE A 16" X 8" FOOTING UNLESS NOTED OTHERWISE.

NOTE:
FOUNDATION DETAILS SHOWN ARE BASED ON ASSUMED SOIL BEARING CAPACITY OF 2000 PSF. LOCAL SITE CONDITIONS MUST BE INVESTIGATED. ALL FOOTING TO BE LOCATED BELOW FROST DEPTH.

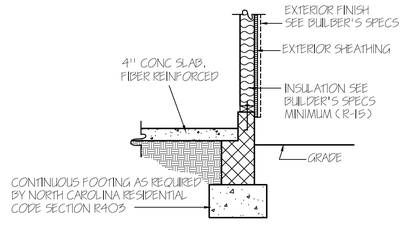
WALL ANCHOR OPTIONS

USE ANCHOR BOLTS
ANCHOR BOLTS: 1/ 2" DIA. BOLTS AT 6'-0" O.C. AND NOT MORE THAT 12" FROM CORNERS, EMBEDDED MIN. 7" INTO FOUNDATION. USE A MIN. OF 2 BOLTS PER EACH STUD WALL



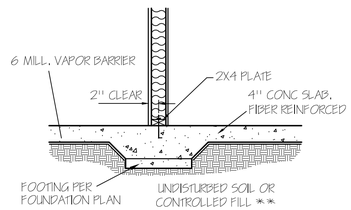
NOTE:
PERIMETER INSUL. MAY EXTEND HORIZ. UNDER SLAB 24" OR VERTICAL 24" BELOW SLAB FLOOR

CONCRETE SLAB FLOOR — (A)



NOTE:
PERIMETER INSUL. MAY EXTEND HORIZ. UNDER SLAB 24" OR VERTICAL 24" BELOW SLAB FLOOR

GARAGE WALL — (B)



LOAD BEARING WALL THICKENED SLAB — (C)

FOUNDATION PLAN

SCALE: 1/4"=1'-0"

TM DESIGNS
RESIDENTIAL PLANS BY TINA MCFADDEN
(910) 354-4736 TMDESIGNS2016@GMAIL.COM

EXCLUSIVE RESIDENCE DESIGN FOR:
WATERMARK HOMES
NAME: OLEANDER II
LOT: 119 BALLARD WOODS

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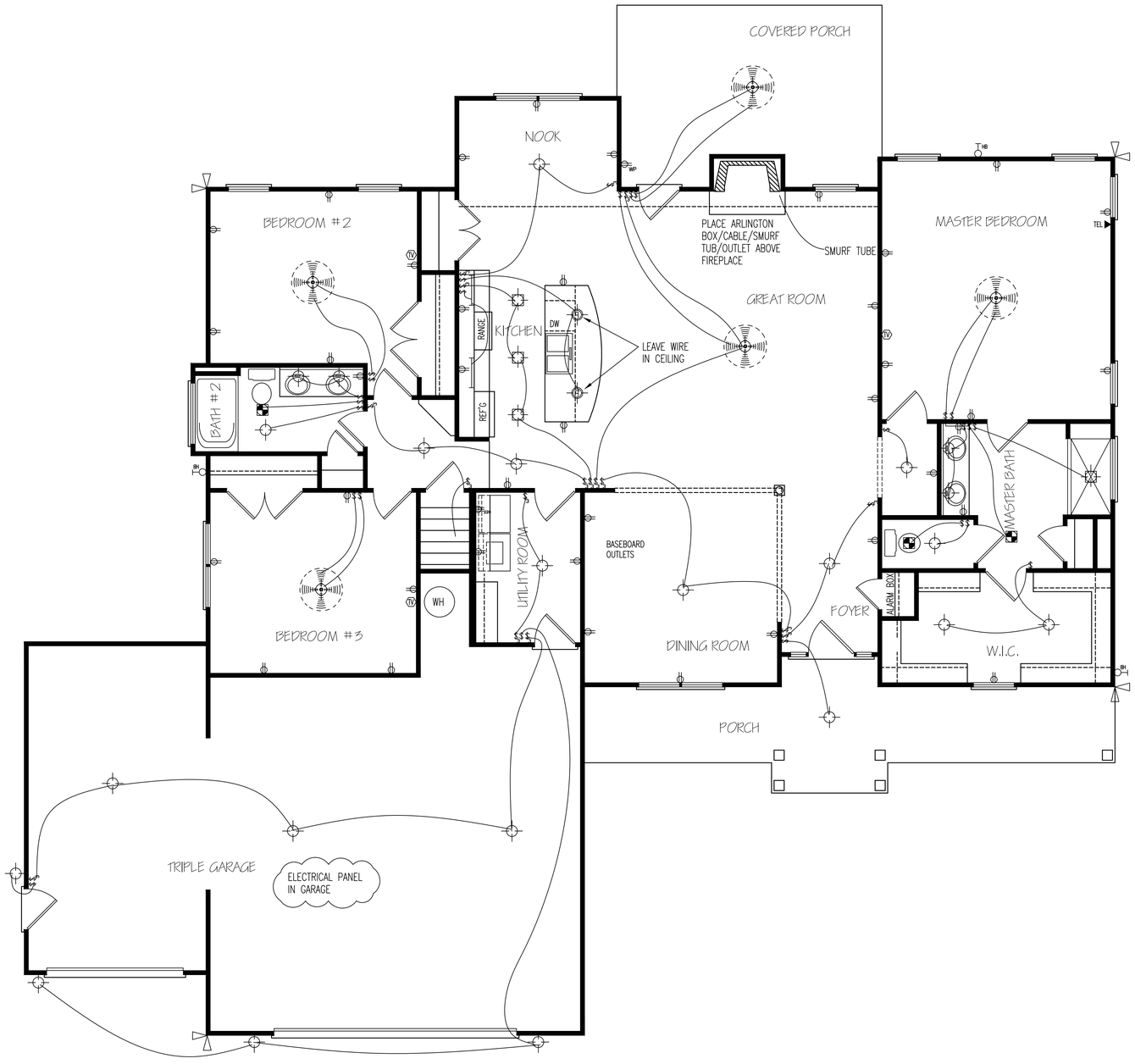
PLAN NUMBER
RG16-A01

OPTION #4

3 | GARAGE | L | F
DATE: 12/18/19



HERO PACKAGE

FIRST FLOOR ELECTRICAL LAYOUT

NOTE: SWITCHED RECEPTACLES ARE HOT TOP AND SWITCHED BOTTOM

TM DESIGNS
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(910) 354-4736 TMDESIGNS2016@GMAIL.COM

EXCLUSIVE RESIDENCE DESIGN FOR:
WATERMARK HOMES

LOT: 119 BALLARD WOODS

NAME: OLEANDER II

I HEREBY CERTIFY THAT THIS DRAWING MEETS LOCAL CODES, 2012 INTERNATIONAL BUILDING CODES

THIS IS FOR THE CONSTRUCTION OF ONE HOUSE ON A SINGLE LOT, NOT TO BE RELEASED

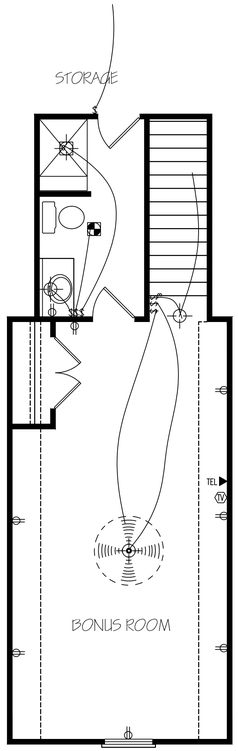
PLAN NUMBER
RG16-A01

OPTION #4

E-1

GARAGE L F

DATE: 12/18/19



HERO PACKAGE

BONUS ROOM ELECTRICAL LAYOUT

NOTE: SWITCHED RECEPTACLES ARE HOT TOP AND SWITCHED BOTTOM

TM DESIGNS
RESIDENTIAL PLANS BY TINA MCFADDEN
(910) 354-4736 TMDESIGNS2016@GMAIL.COM

EXCLUSIVE RESIDENCE DESIGN FOR:
WATERMARK HOMES
LOT: 119 BALLARD WOODS
NAME: OLEANDER II

I HEREBY CERTIFY THAT THIS DRAWING MEETS LOCAL CODES, 2012 INTERNATIONAL BUILDING CODES

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PLAN NUMBER
RG16-A01

OPTION #4

E-2

GARAGE L | F

DATE: 12/18/19

Truss List					
Truss	Qty	Span	Ply	Overhang	Height
A1-GE	1	39' 11"	1	1' 3"	11' 5 3/4"
A2	7	39' 11"	1	1' 3"	11' 5 3/4"
A3	3	37' 11"	1		11' 5 3/4"
A4	1	37' 11"	1		11' 5 3/4"
A5	6	37' 11"	1	L: R:1' 3"	11' 5 3/4"
A6	4	30' 3 3/4"	1		11' 5 3/4"
A7	2	20' 1 1/2"	1	L:1' 3" R:	11' 5 3/4"
A7A	4	20' 1 1/2"	2	L:1' 3" R:	11' 5 3/4"
A8	3	32' 4"	1	L:1' 3" R:	11' 5 3/4"
A9-GE	1	32' 4"	1	L:1' 3" R:	11' 5 3/4"
B1-GE	1	17' 7"	1	1' 3"	5' 8 7/16"
B2	2	17' 7"	1	1' 3"	5' 8 7/16"
C1-GE	1	28' 2 1/2"	1	1' 3"	8' 4 5/16"
C2	1	28' 2 1/2"	1	1' 3"	8' 4 5/16"
C3	1	28' 2 1/2"	1	L:1' 3" R:	8' 4 5/16"
D1-GE	1	24' 11"	1	1' 3"	11' 5 3/4"
D2	1	24' 11"	1	1' 3"	11' 5 3/4"
D3	7	24' 11"	1	L:1' 3" R:	11' 5 3/4"
D4	2	24' 11"	1		11' 5 3/4"
D5	1	24' 11"	1		11' 5 3/4"
E1-GE	1	7' 7"	1	1' 3"	5' 9 7/16"
E2	1	7' 7"	1		5' 9 7/16"
G1-GE	1	21' 11"	1	1' 3"	9' 4 1/4"
G2	5	21' 11"	1	1' 3"	9' 4 1/4"
PB1	2	10' 0"	1		3' 6 1/2"
PB2	24	10' 0"	1		3' 6 1/2"
PB3	4	6' 2"	1		3' 6 1/2"
PB4	12	5' 11 5/16"	1		2' 11 11/16"
VA-1	1	23' 3 9/16"	1		11' 7 3/4"
VA-2	1	20' 5 9/16"	1		10' 2 3/4"
VA-3	1	17' 7 9/16"	1		8' 9 3/4"
VA-4	1	14' 9 9/16"	1		7' 4 3/4"
VA-5	1	11' 11 9/16"	1		5' 11 3/4"
VA-6	1	9' 1 9/16"	1		4' 6 3/4"
VA-7	1	6' 3 9/16"	1		3' 1 3/4"
VA-8	1	3' 5 9/16"	1		1' 8 3/4"
VC-1	1	26' 10 5/8"	1		6' 8 5/8"
VC-2	1	21' 2 5/8"	1		5' 3 5/8"
VC-3	1	15' 6 5/8"	1		3' 10 5/8"
VC-4	1	9' 10 5/8"	1		2' 5 5/8"
VC-5	1	4' 2 5/8"	1		1' 0 5/8"

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	JUS26	USP	4	Varies	10d/3"	10d/3"

Beam Schedule					
PlotID	Length	Product	Plies	Net Qty	Fab Type
DBL-28	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
GDH-1	25' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
GDH-2	12' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
BM1	11' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
BM2	11' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF

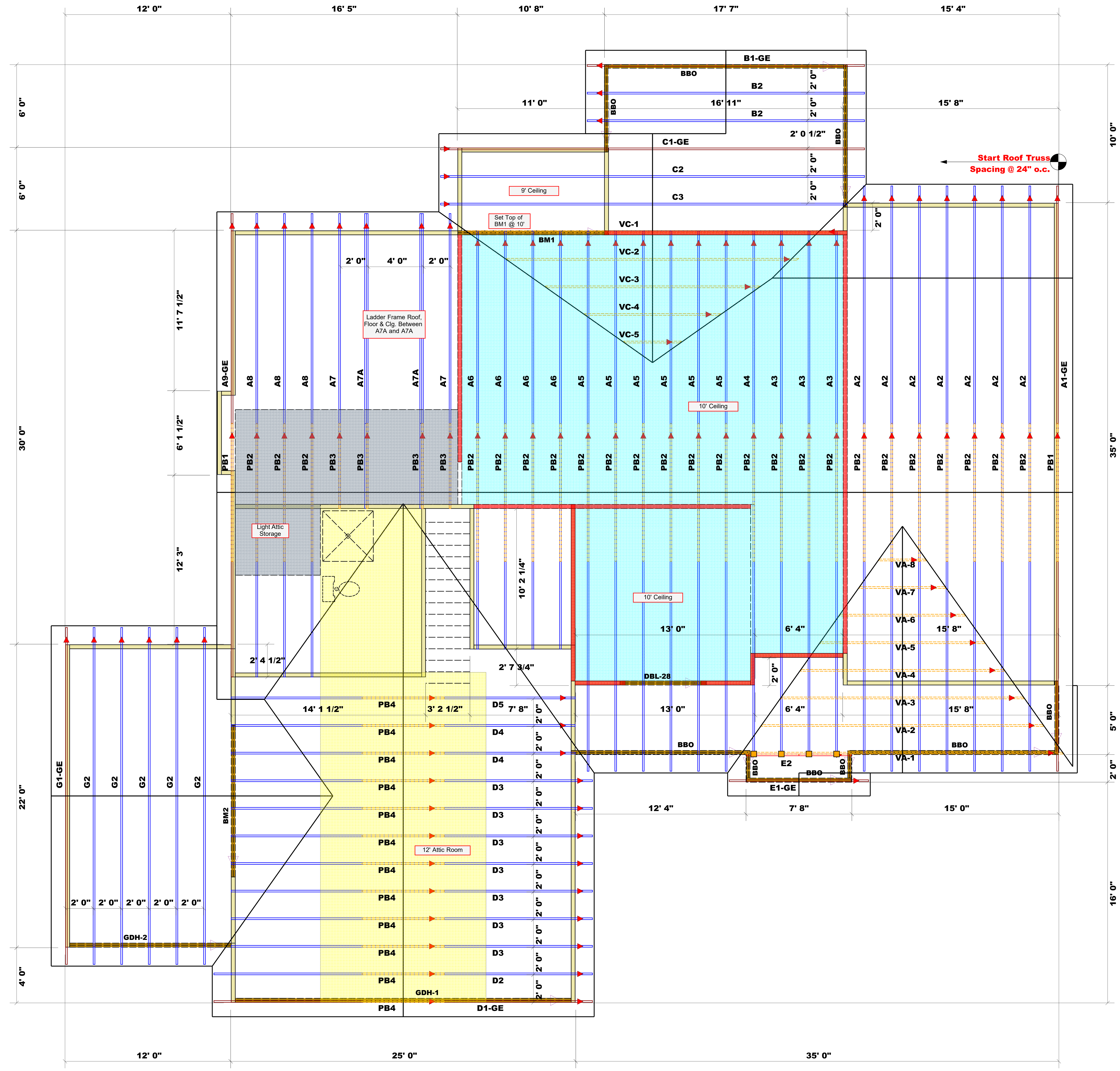
▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do Not Erect Trusses Backwards

Roof Area = 4581.87 sq.ft.
Ridge Line = 161.78 ft.
Hip Line = 0 ft.
Horiz. OH = 122.65 ft.
Raked OH = 278.43 ft.
Decking = 158 sheets

All Walls Shown Are Considered Load Bearing

WALL SCHEDULE

- 9' Plate Height
- 10' Plate Height
- Non-Bearing Walls



Truss Placement Plan
SCALE: 1/4" = 1'-0"

comtech
ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature________________________

Sales Area

COUNTY	Harnett County
ADDRESS	Lot 119 Ballard Woods
MODEL	Roof
DATE REV.	7/6/21
DRAWN BY	Anthony Williams
SALESMAN	Anthony Williams
BUILDER	Watermark Homes
JOB NAME	Lot 119 Ballard Woods
PLAN	Oleander II Plan
SEAL DATE	12/18/19
QUOTE #	NA
JOB #	J0721-4155

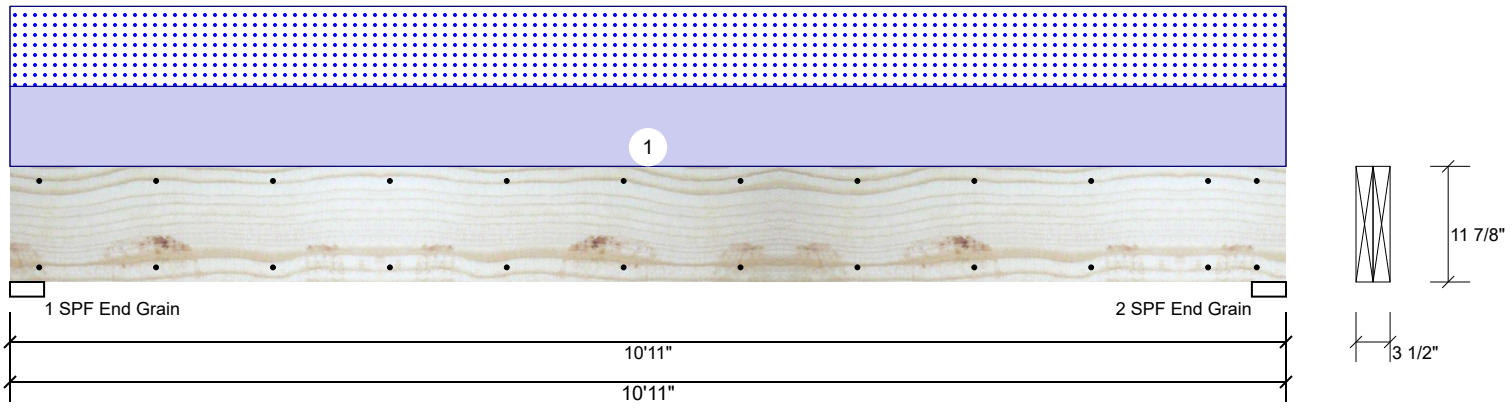
LOAD CHART FOR JACK STUDS
(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

BM1 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1808	1758	0	0
2	Vertical	0	1808	1758	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	33%	1808 / 1758	3566	L	D+S
2 - SPF End Grain	3.500"	Vert	33%	1808 / 1758	3566	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8931 ft-lb	5'5 1/2"	22897 ft-lb	0.390 (39%)	D+S	L
Unbraced	8931 ft-lb	5'5 1/2"	9033 ft-lb	0.989 (99%)	D+S	L
Shear	2738 lb	9'7 5/8"	10197 lb	0.268 (27%)	D+S	L
LL Defl inch	0.101 (L/1243)	5'5 1/2"	0.261 (L/480)	0.386 (39%)	S	L
TL Defl inch	0.205 (L/613)	5'5 1/2"	0.349 (L/360)	0.587 (59%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at end bearings.
7. Bottom must be laterally braced at end bearings.
8. Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	322 PLF	0 PLF	322 PLF	0 PLF	0 PLF	A5
	Self Weight				9 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 3/30/2024

Manufacturer Info

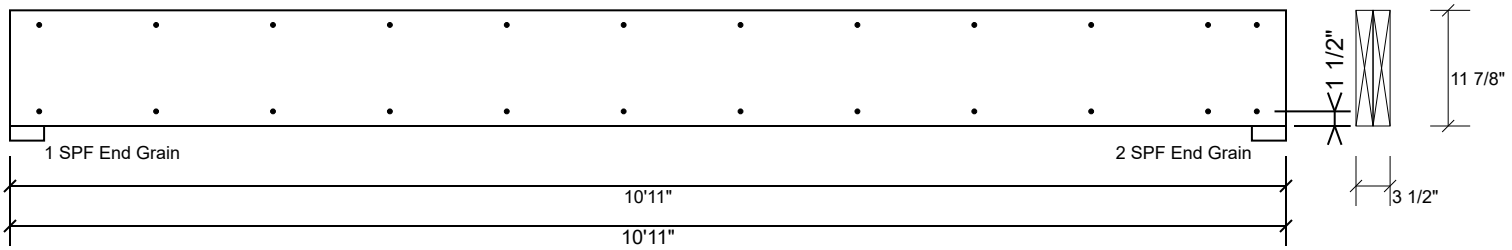
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

BM1 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 3/30/2024

Manufacturer Info

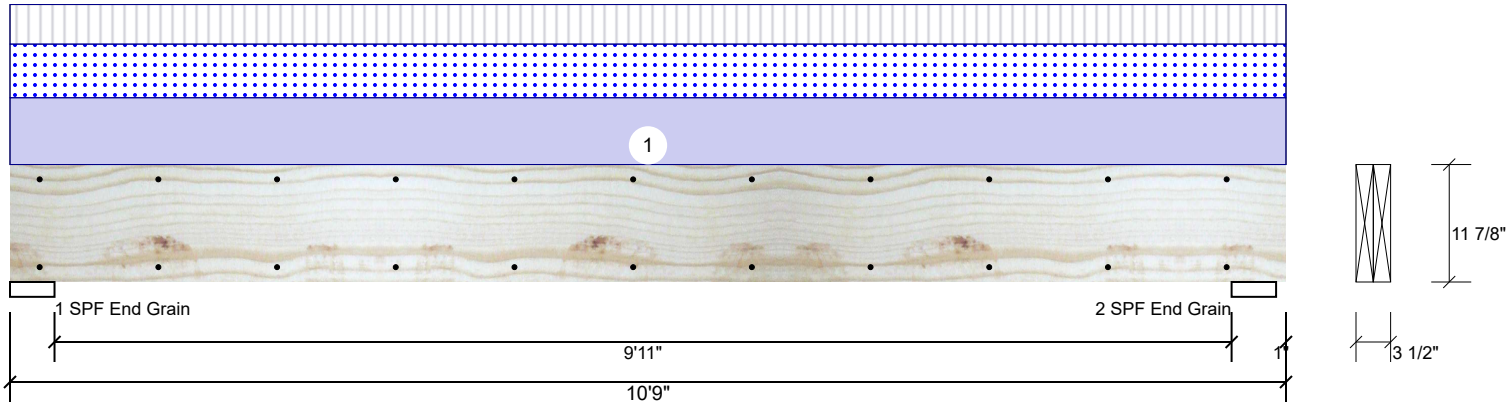
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

BM2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1036	1798	1403	0	0
2	Vertical	1028	1784	1392	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	26%	1798 / 1829	3627	L_	D+0.75(L+S)
2 - SPF End Grain	4.500"	Vert	26%	1784 / 1815	3599	LL	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-2 ft-lb	10'8"	22897 ft-lb	0.000 (0%)	D+0.75(L+S)	LL
Unbraced	-2 ft-lb	10'8"	9241 ft-lb	0.000 (0%)	D+0.75(L+S)	LL
Pos Moment	8685 ft-lb	5'4 3/4"	22897 ft-lb	0.379 (38%)	D+0.75(L+S)	L_
Unbraced	8685 ft-lb	5'4 3/4"	9241 ft-lb	0.940 (94%)	D+0.75(L+S)	L_
Shear	2719 lb	1'4 3/8"	10197 lb	0.267 (27%)	D+0.75(L+S)	L_
LL Defl inch	0.096 (L/1277)	5'4 3/4"	0.254 (L/480)	0.376 (38%)	0.75(L+S)	L_
TL Defl inch	0.189 (L/644)	5'4 3/4"	0.339 (L/360)	0.559 (56%)	D+0.75(L+S)	L_
LL Cant	-0.002 (2L/914)	Rt Cant	0.200 (2L/480)	0.011 (1%)	0.75(L+S)	L_
TL Cant	-0.004 (2L/461)	Rt Cant	0.300 (2L/360)	0.014 (1%)	D+0.75(L+S)	L_

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at end bearings.
7. Bottom must be laterally braced at end bearings.
8. Lateral slenderness ratio based on single ply width.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 3/30/2024

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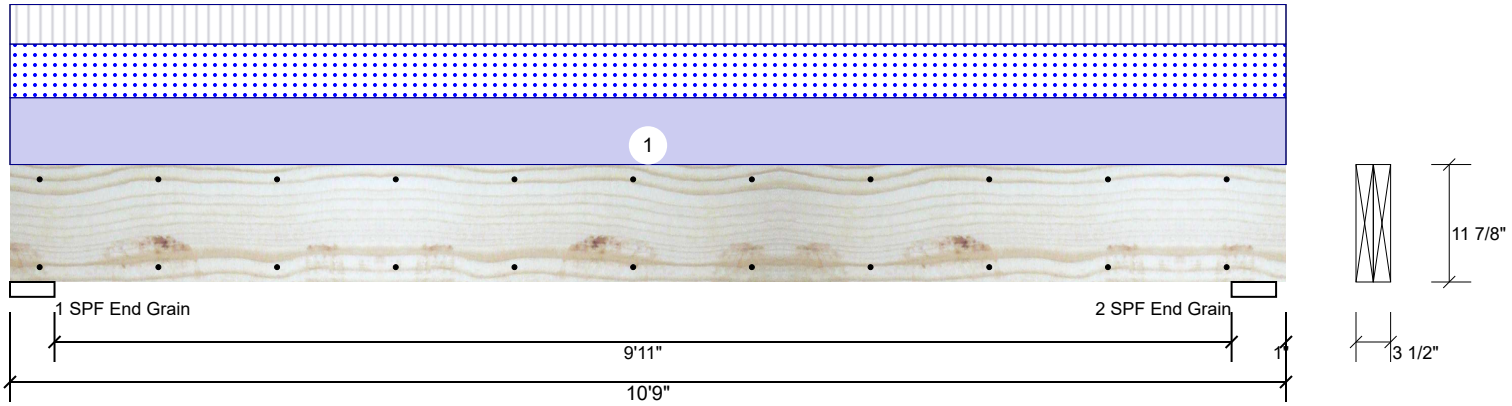
Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

BM2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	324 PLF	192 PLF	260 PLF	0 PLF	0 PLF	D3
	Self Weight				9 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

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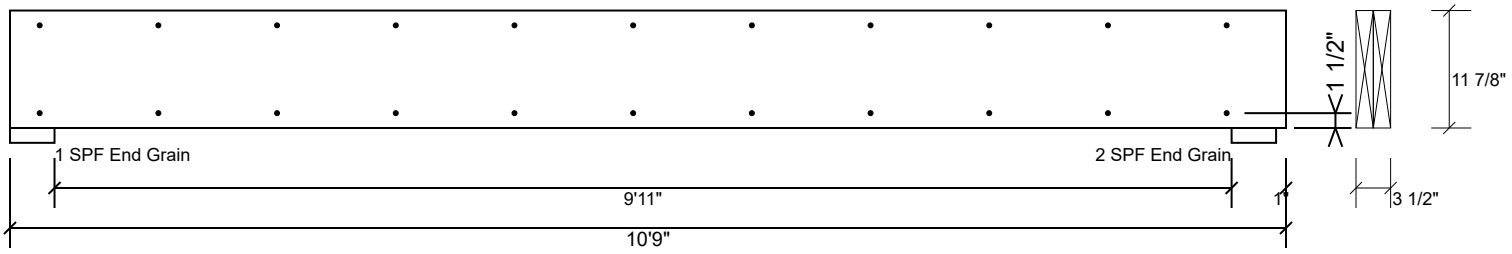
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

BM2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
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3. Damaged Beams must not be used
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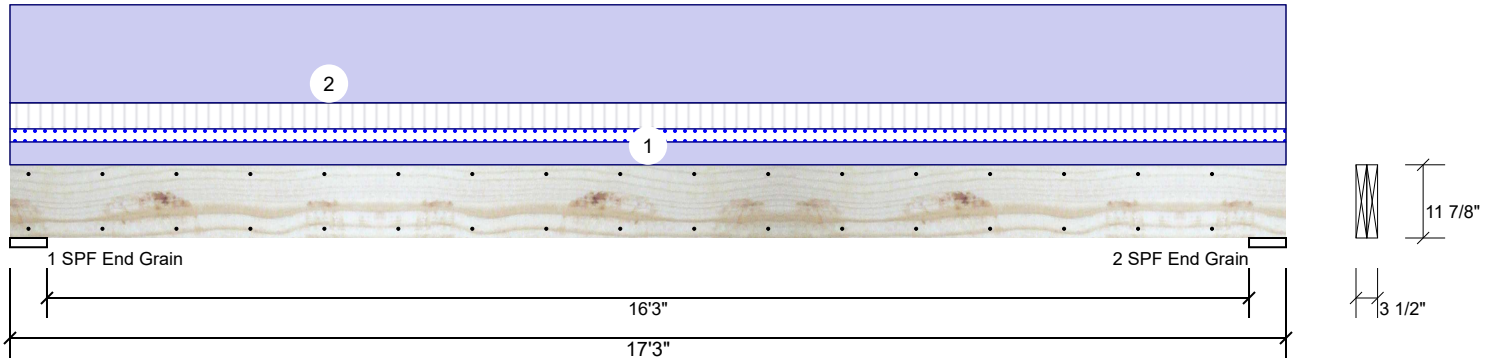
Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	345	1675	173	0	0
2	Vertical	345	1675	173	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	6.000"	Vert	11%	1675 / 388	2063	L	D+0.75(L+S)
2 - SPF End Grain	6.000"	Vert	11%	1675 / 388	2063	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7851 ft-lb	8'7 1/2"	19911 ft-lb	0.394 (39%)	D+L	L
Unbraced	8019 ft-lb	8'7 1/2"	8035 ft-lb	0.998 (100%)	D+0.75(L+S)	L
Shear	1681 lb	15'9 1/8"	8867 lb	0.190 (19%)	D+L	L
LL Defl inch	0.079 (L/2497)	8'7 9/16"	0.409 (L/480)	0.192 (19%)	0.75(L+S)	L
TL Defl inch	0.418 (L/470)	8'7 9/16"	0.546 (L/360)	0.767 (77%)	D+0.75(L+S)	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3 Refer to last page of calculations for fasteners required for specified loads.
4 Girders are designed to be supported on the bottom edge only.
5 Top loads must be supported equally by all plies.
6 Top must be laterally braced at a maximum of 12' 11/16" o.c.
7 Bottom must be laterally braced at end bearings.
8 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	35 PLF	40 PLF	20 PLF	0 PLF	0 PLF	ROOF+FLOOR
2	Uniform			Top	150 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
	Self Weight				9 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 3/30/2024

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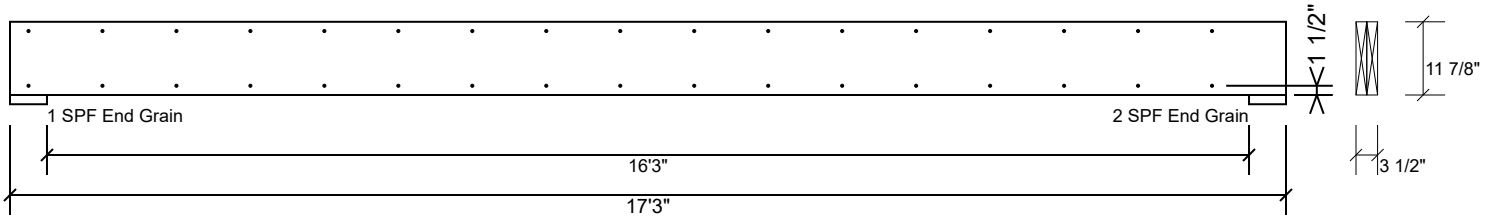
Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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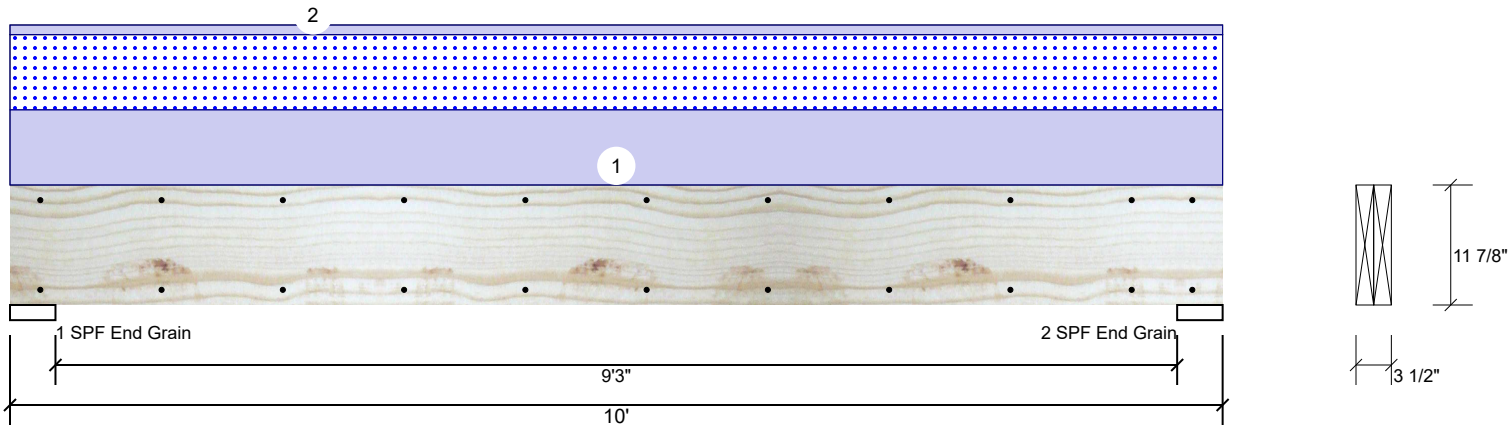
Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

GDH-2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1371	1175	0	0
2	Vertical	0	1371	1175	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	19%	1371 / 1175	2546	L	D+S
2 - SPF End Grain	4.500"	Vert	19%	1371 / 1175	2546	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5595 ft-lb	5'	22897 ft-lb	0.244 (24%)	D+S	L
Unbraced	5595 ft-lb	5'	9857 ft-lb	0.568 (57%)	D+S	L
Shear	1860 lb	1'4 3/8"	10197 lb	0.182 (18%)	D+S	L
LL Defl inch	0.049 (L/2297)	5'	0.234 (L/480)	0.209 (21%)	S	L
TL Defl inch	0.106 (L/1060)	5'	0.312 (L/360)	0.340 (34%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at end bearings.
7. Bottom must be laterally braced at end bearings.
8. Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	235 PLF	0 PLF	235 PLF	0 PLF	0 PLF	G2
2	Uniform			Top	30 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
	Self Weight				9 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
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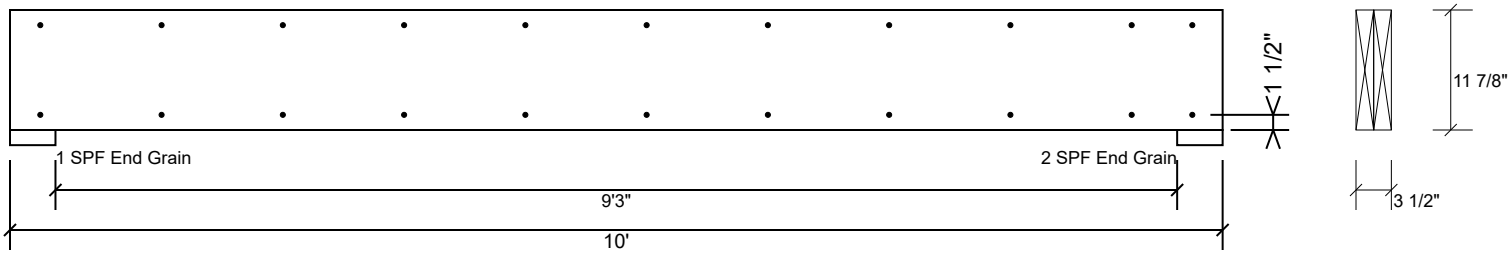
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

GDH-2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

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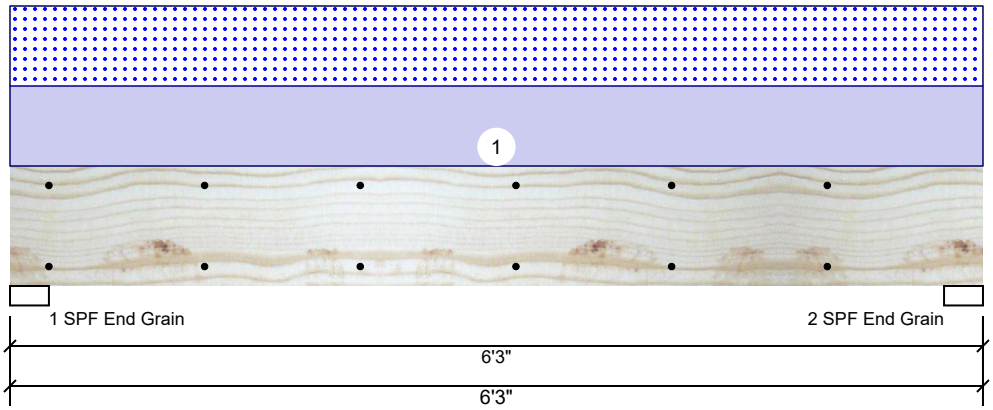
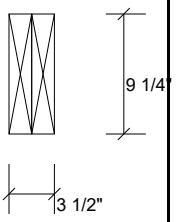
Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

DBL-28 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1432	1409	0	0
2	Vertical	0	1432	1409	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	31%	1432 / 1409	2841	L	D+S
2 - SPF End Grain	3.000"	Vert	31%	1432 / 1409	2841	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3923 ft-lb	3'1 1/2"	14423 ft-lb	0.272 (27%)	D+S	L
Unbraced	3923 ft-lb	3'1 1/2"	10696 ft-lb	0.367 (37%)	D+S	L
Shear	1919 lb	5'2 3/4"	7943 lb	0.242 (24%)	D+S	L
LL Defl inch	0.033 (L/2129)	3'1 1/2"	0.147 (L/480)	0.225 (23%)	S	L
TL Defl inch	0.067 (L/1056)	3'1 1/2"	0.196 (L/360)	0.341 (34%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at end bearings.
7. Bottom must be laterally braced at end bearings.
8. Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	451 PLF	0 PLF	451 PLF	0 PLF	0 PLF	A5
	Self Weight				7 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 3/30/2024

Manufacturer Info

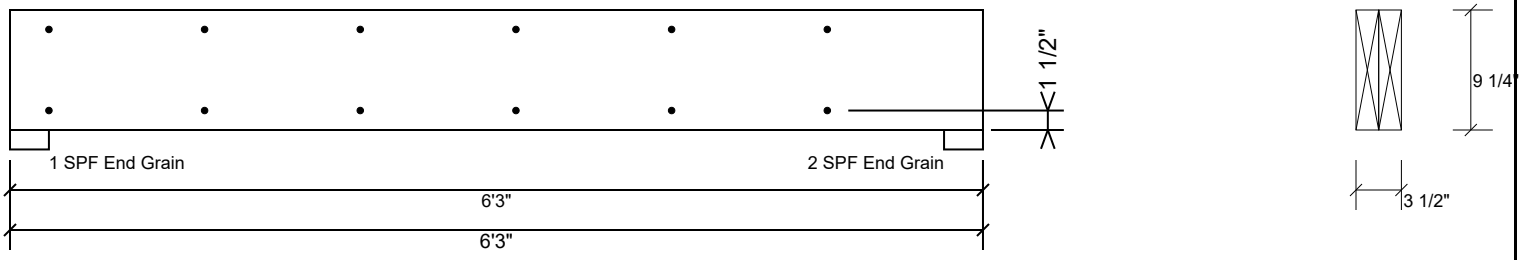
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Watermark Homes	Date:	7/8/2021
Project:		Input by:	Anthony Williams
Address:	Lot 119 Ballard Woods, Lillington NC	Job Name:	Lot 119 Ballard Woods
		Project #:	J0721-4155

DBL-28 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

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2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
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Reaction Summary of Order

ComTech
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	**ORDER #**	J0721-4155
ORDER DATE	07/06/21	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	000030
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Justin Thomas	**INVOICE #**	
COUNTY	Harnett	**TERMS**	Net 10 Days
SUPERINTENDANT	Justin Thomas	**SALES REP**	Anthony Williams
JOBSITE PHONE #	(910) 759-1307	**SALES AREA**	Anthony Williams

SOLD TO
Watermark Homes, Inc.
196 Annettte Drive
Benson, NC 27504
(919) 938-8194

SHIP TO
Watermark Homes
Lot 119 Ballard Woods
Lillington, NC

JOB NAME: Lot 119 Ballard Woods **LOT #** 119 **SUBDIV:** Ballard Woods
MODEL: Roof **TAG:** Oleander II **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Copied from Lot 6 Oak Haven - J01020-5007 (JB)

PLAN SEAL DATE:

BUILDING DEPARTMENT
Roof Order

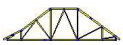
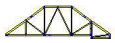
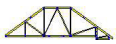
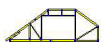
OVERHANG INFO		HEEL HEIGHT	00-06-08	REQ. LAYOUTS		REQ. ENGINEERING			BY	DATE
END CUT	RETURN									
	NO	GABLE STUDS	16 IN. OC	JOBSITE	1	JOBSITE	1	QUOTE	aw	07/06/21
								LAYOUT	aw	07/06/21
								CUTTING	aw	07/06/21

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY / PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS
	1	6.00	0.00	GABLE A1-GE	39-11-00 39-11-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 2 274.3 lbs. -129.9 lbs. / Joint 26 209.7 lbs. -66.5 lbs. / Joint 27 196.4 lbs. -222.7 lbs. / Joint 28 174.9 lbs. -68.9 lbs. / Joint 29 179.0 lbs. -97.3 lbs.
	7	6.00	0.00	PIGGYBACK A2	39-11-00 39-11-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 2 1417.8 lbs. -83.8 lbs. / Joint 14 1904.8 lbs. -79.4 lbs.
	3	8.50	0.00	PIGGYBACK A3	37-11-00 37-11-00	2 X 6	2 X 6			Joint 1 1230.8 lbs. -54.5 lbs. / Joint 10 214.8 lbs. -89.3 lbs. / Joint 13 1581.1 lbs. -39.1 lbs.
	1	8.50	0.00	PIGGYBACK A4	37-11-00 37-11-00	2 X 6	2 X 6			Joint 1 1316.0 lbs. -54.7 lbs. / Joint 10 132.8 lbs. -38.7 lbs. / Joint 13 1569.6 lbs. -68.6 lbs.
	6	8.50	0.00	PIGGYBACK A5	37-11-00 37-11-00	2 X 6	2 X 6		01-03-00	Joint 1 1286.8 lbs. -57.2 lbs. / Joint 14 1803.6 lbs. -80.2 lbs.
	4	8.50	0.00	PIGGYBACK A6	30-03-12 30-03-12	2 X 6	2 X 6			Joint 1 1199.5 lbs. -44.4 lbs. / Joint 8 1201.7 lbs. -15.7 lbs.
	2	8.50	0.00	PIGGYBACK A7	20-01-08 20-01-08	2 X 6	2 X 10	01-03-00		Joint 2 1032.0 lbs. -5.6 lbs. / Joint 9 1332.1 lbs. -163.6 lbs.
	2 / 2 Ply	8.50	0.00	PIGGYBACK A7A	20-01-08 20-01-08	2 X 6	2 X 10	01-03-00		Joint 2 2064.1 lbs. -11.2 lbs. / Joint 9 2664.2 lbs. -327.2 lbs.
	3	8.50	0.00	PIGGYBACK A8	32-04-00 32-04-00	2 X 6	2 X 10	01-03-00		Joint 2 1192.3 lbs. -64.7 lbs. / Joint 11 1019.2 lbs. -59.6 lbs. / Joint 13 772.6 lbs. 6.8 lbs.
	1	8.50	0.00	GABLE A9-GE	32-04-00 32-04-00	2 X 6	2 X 6	01-03-00		Joint 20 262.8 lbs. -242.7 lbs. / Joint 21 341.8 lbs. -206.6 lbs. / Joint 22 180.3 lbs. -104.1 lbs. / Joint 23 180.7 lbs. -74.3 lbs. / Joint 24 165.8 lbs. 11.2 lbs.
	1	6.00	0.00	GABLE B1-GE	17-07-00 17-07-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 2 768.8 lbs. -203.6 lbs. / Joint 10 768.8 lbs. -203.6 lbs.

Reaction Summary of Order

ComTech
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	**ORDER #**	J0721-4155
ORDER DATE	07/06/21	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	000030
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Justin Thomas	**INVOICE #**	
COUNTY	Harnett	**TERMS**	Net 10 Days
SUPERINTENDANT	Justin Thomas	**SALES REP**	Anthony Williams
JOBSITE PHONE #	(910) 759-1307	**SALES AREA**	Anthony Williams

SOLD TO
Watermark Homes, Inc.
196 Annettte Drive
Benson, NC 27504
(919) 938-8194

SHIP TO
Watermark Homes
Lot 119 Ballard Woods
Lillington, NC

JOB NAME: Lot 119 Ballard Woods **LOT #** 119 **SUBDIV:** Ballard Woods
MODEL: Roof **TAG:** Oleander II **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Copied from Lot 6 Oak Haven - J01020-5007 (JB)

PLAN SEAL DATE:

BUILDING DEPARTMENT
Roof Order

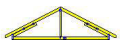
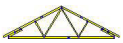
OVERHANG INFO		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**		**REQ. ENGINEERING**			**BY**	**DATE**
END CUT	**RETURN**									
	NO	**GABLE STUDS**	16 IN. OC		JOBSITE 1		JOBSITE 1		**QUOTE**	aw	07/06/21
									LAYOUT	aw	07/06/21
									CUTTING	aw	07/06/21

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY	PITCH		TYPE	BASE	LUMBER		OVERHANG		REACTIONS				
	PLY	TOP	BOT	ID	O/A	TOP	BOT	LEFT	RIGHT					
	2	6.00	0.00	COMMON B2	17-07-00 17-07-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 2 768.8 lbs. -157.7 lbs.	Joint 6 768.8 lbs. -157.7 lbs.			
	1	6.00	0.00	QUEENPOST C1-GE	28-02-08 28-02-08	2 X 6	2 X 6	01-03-00	01-03-00	Joint 2 440.5 lbs. 18.2 lbs.	Joint 16 910.9 lbs. -214.8 lbs.	Joint 20 974.4 lbs. -265.5 lbs.	Joint 21 91.6 lbs. -375.1 lbs.	Joint 22 147.2 lbs. -32.8 lbs.
	1	6.00	0.00	COMMON C2	28-02-08 28-02-08	2 X 6	2 X 6	01-03-00	01-03-00	Joint 2 892.4 lbs. -75.0 lbs.	Joint 10 1008.1 lbs. -164.6 lbs.	Joint 14 600.0 lbs. -130.8 lbs.		
	1	6.00	0.00	COMMON C3	28-02-08 28-02-08	2 X 6	2 X 6	01-03-00		Joint 2 894.5 lbs. -75.2 lbs.	Joint 10 940.5 lbs. -159.5 lbs.	Joint 13 599.0 lbs. -129.6 lbs.		
	1	12.00	0.00	GABLE D1-GE	24-11-00 24-11-00	2 X 6	2 X 10	01-03-00	01-03-00	Joint 18 1622.3 lbs. 49.0 lbs.	Joint 22 1622.3 lbs. 49.0 lbs.			
	1	12.00	0.00	PIGGYBACK D2	24-11-00 24-11-00	2 X 6	2 X 10	01-03-00	01-03-00	Joint 12 1622.3 lbs. 183.9 lbs.	Joint 16 1622.3 lbs. 183.9 lbs.			
	7	12.00	0.00	PIGGYBACK D3	24-11-00 24-11-00	2 X 6	2 X 10	01-03-00		Joint 11 1552.2 lbs. 202.5 lbs.	Joint 15 1624.2 lbs. 185.3 lbs.			
	2	12.00	0.00	PIGGYBACK D4	24-11-00 24-11-00	2 X 6	2 X 10			Joint 10 1554.1 lbs. 203.9 lbs.	Joint 14 1554.1 lbs. 203.9 lbs.			
	1	12.00	0.00	PIGGYBACK D5	24-11-00 24-11-00	2 X 6	2 X 10			Joint 10 2331.1 lbs. 305.8 lbs.	Joint 14 2331.1 lbs. 305.8 lbs.			
	1	12.00	0.00	COMMON E1-GE	07-07-00 07-07-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 8 189.1 lbs. -132.4 lbs.	Joint 9 222.8 lbs. -173.8 lbs.	Joint 10 213.1 lbs. 80.6 lbs.	Joint 11 227.1 lbs. -177.6 lbs.	Joint 12 195.1 lbs. -137.8 lbs.
	1	12.00	0.00	COMMON E2	07-07-00 07-07-00	2 X 6	2 X 8			Joint 4 637.6 lbs. -186.0 lbs.	Joint 6 638.5 lbs. -200.9 lbs.			

Reaction Summary of Order

ComTech
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

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ORDER DATE	07/06/21	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	000030
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Justin Thomas	**INVOICE #**	
COUNTY	Harnett	**TERMS**	Net 10 Days
SUPERINTENDANT	Justin Thomas	**SALES REP**	Anthony Williams
JOBSITE PHONE #	(910) 759-1307	**SALES AREA**	Anthony Williams

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(919) 938-8194

SHIP TO
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Lillington, NC

JOB NAME: Lot 119 Ballard Woods **LOT #** 119 **SUBDIV:** Ballard Woods
MODEL: Roof **TAG:** Oleander II **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Copied from Lot 6 Oak Haven - J01020-5007 (JB)

PLAN SEAL DATE:

												BY	DATE
BUILDING DEPARTMENT	**OVERHANG INFO**		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**			**QUOTE**	aw	07/06/21
Roof Order	**END CUT**	**RETURN**										**LAYOUT**	aw	07/06/21
		NO	**GABLE STUDS**	16 IN. OC			JOBSITE	1			JOBSITE	1	**CUTTING**	aw	07/06/21

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY / PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS
	1	8.50	0.00	GABLE G1-GE	21-11-00 21-11-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 14 223.3 lbs. -31.4 lbs. / Joint 15 243.4 lbs. -200.0 lbs. / Joint 16 168.0 lbs. -88.3 lbs. / Joint 17 183.1 lbs. -104.6 lbs. / Joint 19 176.1 lbs. -63.9 lbs.
	5	8.50	0.00	COMMON G2	21-11-00 21-11-00	2 X 6	2 X 6	01-03-00	01-03-00	Joint 8 939.2 lbs. -57.4 lbs. / Joint 11 939.2 lbs. -57.4 lbs.
	2	8.50	0.00	GABLE PB1	08-06-10 08-06-10	2 X 4	2 X 4			Joint 1 79.6 lbs. -79.3 lbs. / Joint 2 185.2 lbs. -83.3 lbs. / Joint 6 158.8 lbs. -57.1 lbs. / Joint 7 38.2 lbs. -32.1 lbs. / Joint 8 217.2 lbs. -111.3 lbs.
	24	8.50	0.00	PIGGYBACK PB2	08-06-10 08-06-10	2 X 4	2 X 4			Joint 2 219.1 lbs. -37.4 lbs. / Joint 4 219.1 lbs. -45.2 lbs. / Joint 6 302.6 lbs. 26.7 lbs.
	4	8.50	0.00	PIGGYBACK PB3	05-05-05 05-05-05	2 X 4	2 X 4			Joint 2 192.1 lbs. -4.5 lbs. / Joint 5 0.1 lbs. -52.6 lbs. / Joint 6 267.5 lbs. -8.1 lbs.
	12	12.00	0.00	PIGGYBACK PB4	04-09-11 04-09-11	2 X 4	2 X 4			Joint 2 140.5 lbs. -47.0 lbs. / Joint 4 140.4 lbs. -53.6 lbs. / Joint 6 149.1 lbs. 8.8 lbs.
	1	12.00	0.00	GABLE VA-1	23-03-09 23-03-09	2 X 4	2 X 4			Joint 1 235.3 lbs. -140.0 lbs. / Joint 15 182.2 lbs. -60.1 lbs. / Joint 16 190.6 lbs. -138.9 lbs. / Joint 17 108.5 lbs. -78.0 lbs. / Joint 18 122.9 lbs. -97.1 lbs.
	1	12.00	0.00	VALLEY VA-2	20-05-09 20-05-09	2 X 4	2 X 4			Joint 1 185.8 lbs. -106.7 lbs. / Joint 7 162.1 lbs. -67.9 lbs. / Joint 8 294.2 lbs. -135.1 lbs. / Joint 9 459.9 lbs. -184.2 lbs. / Joint 11 371.8 lbs. 71.6 lbs.
	1	12.00	0.00	VALLEY VA-3	17-07-09 17-07-09	2 X 4	2 X 4			Joint 1 207.5 lbs. -23.0 lbs. / Joint 5 182.4 lbs. 10.4 lbs. / Joint 6 524.0 lbs. -213.7 lbs. / Joint 8 344.9 lbs. 62.3 lbs. / Joint 9 524.2 lbs. -213.9 lbs.
	1	12.00	0.00	VALLEY VA-4	14-09-09 14-09-09	2 X 4	2 X 4			Joint 1 159.7 lbs. -32.3 lbs. / Joint 5 138.8 lbs. -4.4 lbs. / Joint 6 418.3 lbs. -177.1 lbs. / Joint 7 344.6 lbs. 59.8 lbs. / Joint 8 418.5 lbs. -177.3 lbs.
	1	12.00	0.00	VALLEY VA-5	11-11-09 11-11-09	2 X 4	2 X 4			Joint 1 112.5 lbs. -65.4 lbs. / Joint 5 90.1 lbs. -43.1 lbs. / Joint 6 337.6 lbs. -160.0 lbs. / Joint 7 223.4 lbs. 54.9 lbs. / Joint 8 337.8 lbs. -160.2 lbs.

DATE 07/08/21 PAGE 4

Reaction Summary of Order

ROOF & FLOOR TRUSSES & BEAMS
ComTech
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	ORDER #	J0721-4155
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DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY	Justin Thomas	INVOICE #	
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DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Copied from Lot 6 Oak Haven - J01020-5007 (JB)

PLAN SEAL DATE:

BUILDING DEPARTMENT	OVERHANG INFO		HEEL HEIGHT	00-06-08	REQ. LAYOUTS				REQ. ENGINEERING					BY	DATE
Roof Order	END CUT	RETURN											QUOTE	aw	07/06/21
		NO	GABLE STUDS	16 IN. OC			JOBSITE	1			JOBSITE	1	LAYOUT	aw	07/06/21
													CUTTING	aw	07/06/21

ROOF TRUSSES

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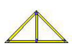
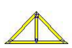
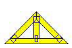
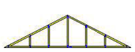
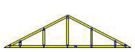
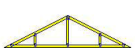
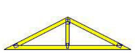
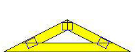
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS				
	1	12.00	0.00	VALLEY VA-6	09-01-09 09-01-09	2 X 4	2 X 4			Joint 1 191.1 lbs. -25.1 lbs.	Joint 3 191.1 lbs. -25.1 lbs.	Joint 4 291.9 lbs. 11.8 lbs.		
	1	12.00	0.00	VALLEY VA-7	06-03-09 06-03-09	2 X 4	2 X 4			Joint 1 136.2 lbs. -24.3 lbs.	Joint 3 136.2 lbs. -24.3 lbs.	Joint 4 174.9 lbs. 23.1 lbs.		
	1	12.00	0.00	VALLEY VA-8	03-05-09 03-05-09	2 X 4	2 X 4			Joint 1 67.2 lbs. -12.0 lbs.	Joint 3 67.2 lbs. -12.0 lbs.	Joint 4 86.3 lbs. 11.4 lbs.		
	1	6.00	0.00	VALLEY VC-1	26-10-10 26-10-10	2 X 4	2 X 4			Joint 1 168.3 lbs. -2.8 lbs.	Joint 7 168.3 lbs. 6.2 lbs.	Joint 8 410.2 lbs. -84.6 lbs.	Joint 9 336.1 lbs. -69.5 lbs.	Joint 11 399.6 lbs. 71.5 lbs.
	1	6.00	0.00	VALLEY VC-2	21-02-10 21-02-10	2 X 4	2 X 4			Joint 1 59.7 lbs. -3.1 lbs.	Joint 7 51.7 lbs. 9.0 lbs.	Joint 8 268.3 lbs. -54.5 lbs.	Joint 9 350.5 lbs. -77.7 lbs.	Joint 11 358.2 lbs. 52.6 lbs.
	1	6.00	0.00	VALLEY VC-3	15-06-10 15-06-10	2 X 4	2 X 4			Joint 1 102.5 lbs. -3.4 lbs.	Joint 5 102.5 lbs. 2.2 lbs.	Joint 6 338.9 lbs. -75.9 lbs.	Joint 7 273.8 lbs. 32.1 lbs.	Joint 8 338.9 lbs. -75.9 lbs.
	1	6.00	0.00	VALLEY VC-4	09-10-10 09-10-10	2 X 4	2 X 4			Joint 1 159.9 lbs. -21.1 lbs.	Joint 3 159.9 lbs. -26.0 lbs.	Joint 4 375.2 lbs. 0.3 lbs.		
	1	6.00	0.00	VALLEY VC-5	04-02-10 04-02-10	2 X 4	2 X 4			Joint 1 119.3 lbs. -7.2 lbs.	Joint 3 119.3 lbs. -7.2 lbs.			

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
4	Hangers, USP	JUS26			SIMPSON (LUS26)
2	LVL Beams (Sized)	LVL, 1-3/4" x 9-1/4" (S)	07-00-00		DBL-28
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	25-00-00		GDH-1

Reaction Summary of Order

ComTech
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	**ORDER #**	J0721-4155
ORDER DATE	07/06/21	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	000030
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Justin Thomas	**INVOICE #**	
COUNTY	Harnett	**TERMS**	Net 10 Days
SUPERINTENDANT	Justin Thomas	**SALES REP**	Anthony Williams
JOBSITE PHONE #	(910) 759-1307	**SALES AREA**	Anthony Williams

SOLD TO
Watermark Homes, Inc.
196 Annettte Drive
Benson, NC 27504
(919) 938-8194

SHIP TO
Watermark Homes
Lot 119 Ballard Woods
Lillington, NC

JOB NAME: Lot 119 Ballard Woods **LOT #** 119 **SUBDIV:** Ballard Woods
MODEL: Roof **TAG:** Oleander II **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Copied from Lot 6 Oak Haven - J01020-5007 (JB)

PLAN SEAL DATE:

BUILDING DEPARTMENT
Roof Order

OVERHANG INFO		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**					**BY**	**DATE**
END CUT	**RETURN**											**QUOTE**	aw	07/06/21
	NO	**GABLE STUDS**	16 IN. OC			JOBSITE	1			JOBSITE	1	**LAYOUT**	aw	07/06/21
												CUTTING	aw	07/06/21

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	12-00-00		GDH-2
4	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	11-00-00		BM1 & BM2