



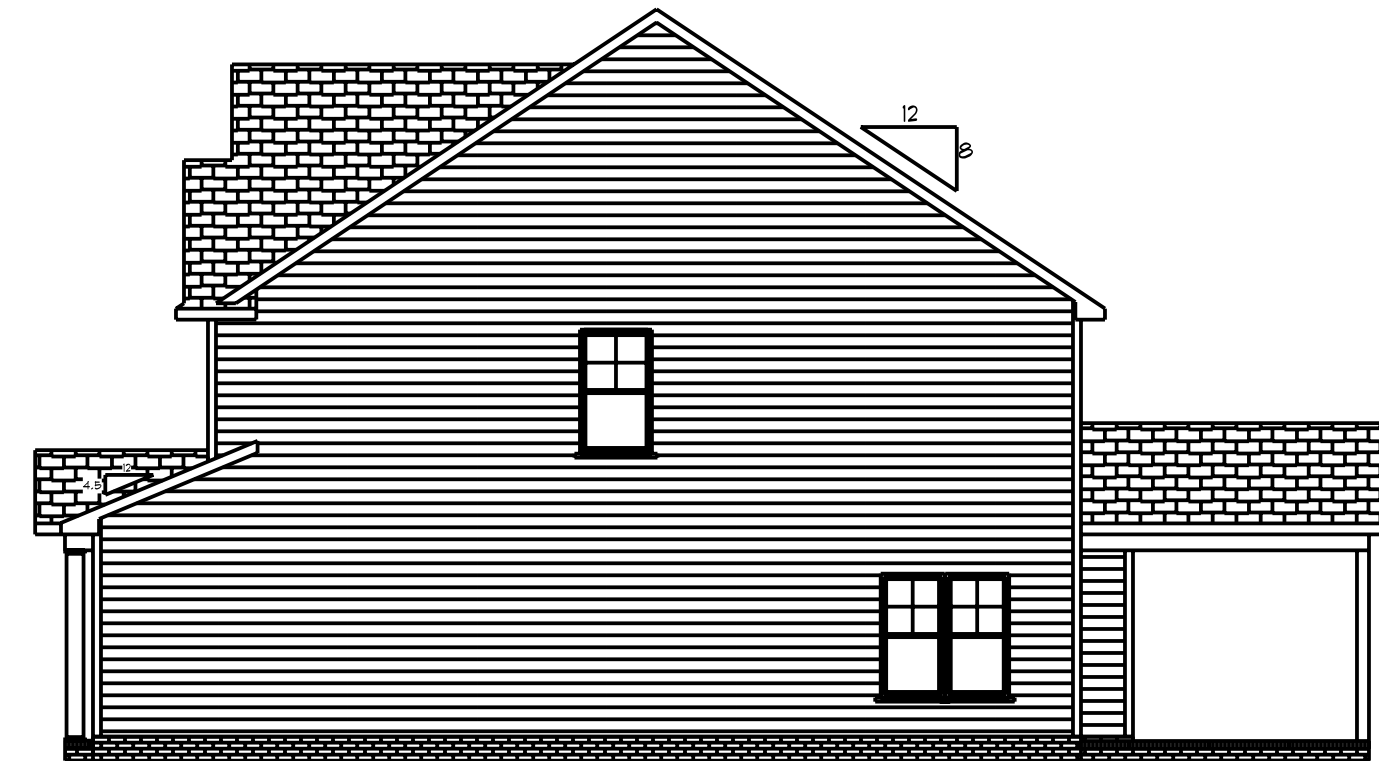
Front Elevation
Scale: 1/4" = 1'0"



Rear Elevation
Scale: 1/8" = 1'0"



Left Elevation
Scale: 1/8" = 1'0"



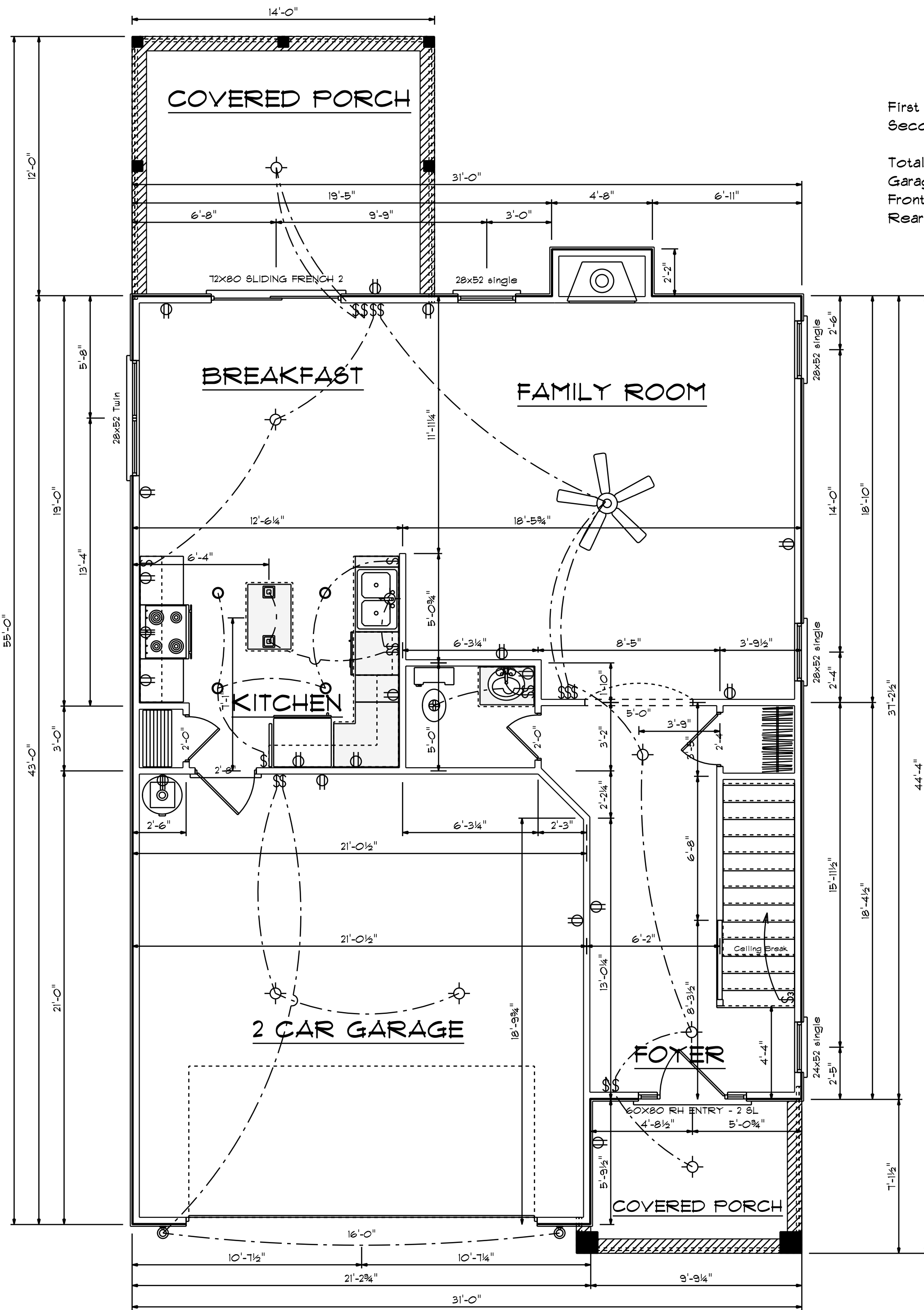
Right Elevation
Scale: 1/8" = 1'0"

DATE: Wednesday, August 24, 2022
REVISED
DRAWING*

SCALE: 1/4"
DRAWN BY
APPROVED

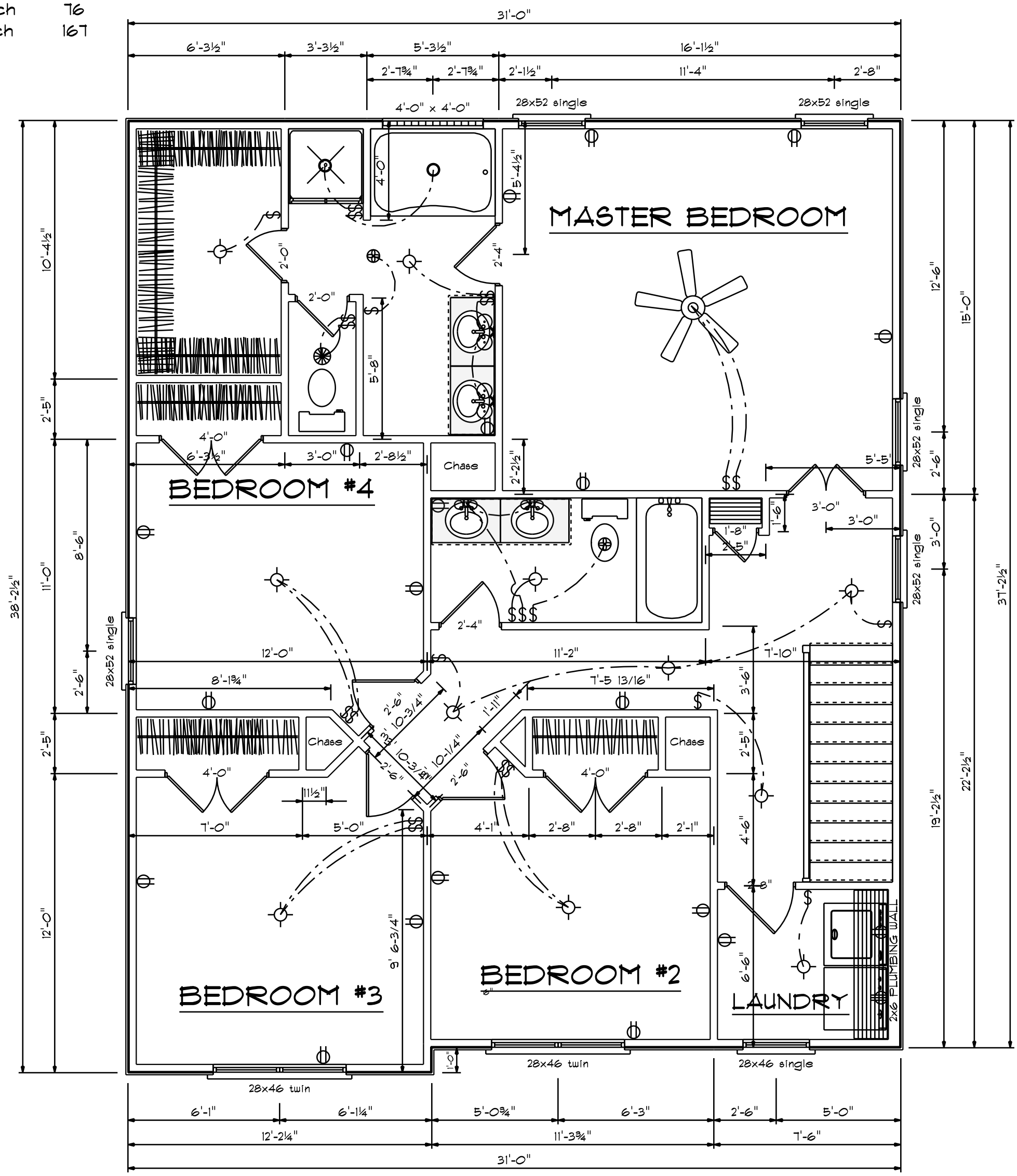
Plan #10





Areas

First Floor	842
Second Floor	1139
=====	
Total Heated	1981
Garage	437
Front Porch	76
Rear Porch	167



Second Floor Plan

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

DATE: Wednesday, August 24, 2022

REVISED

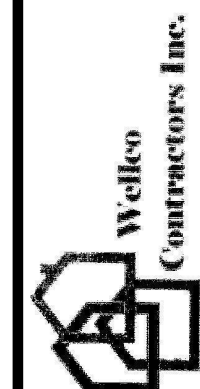
DRAWING#

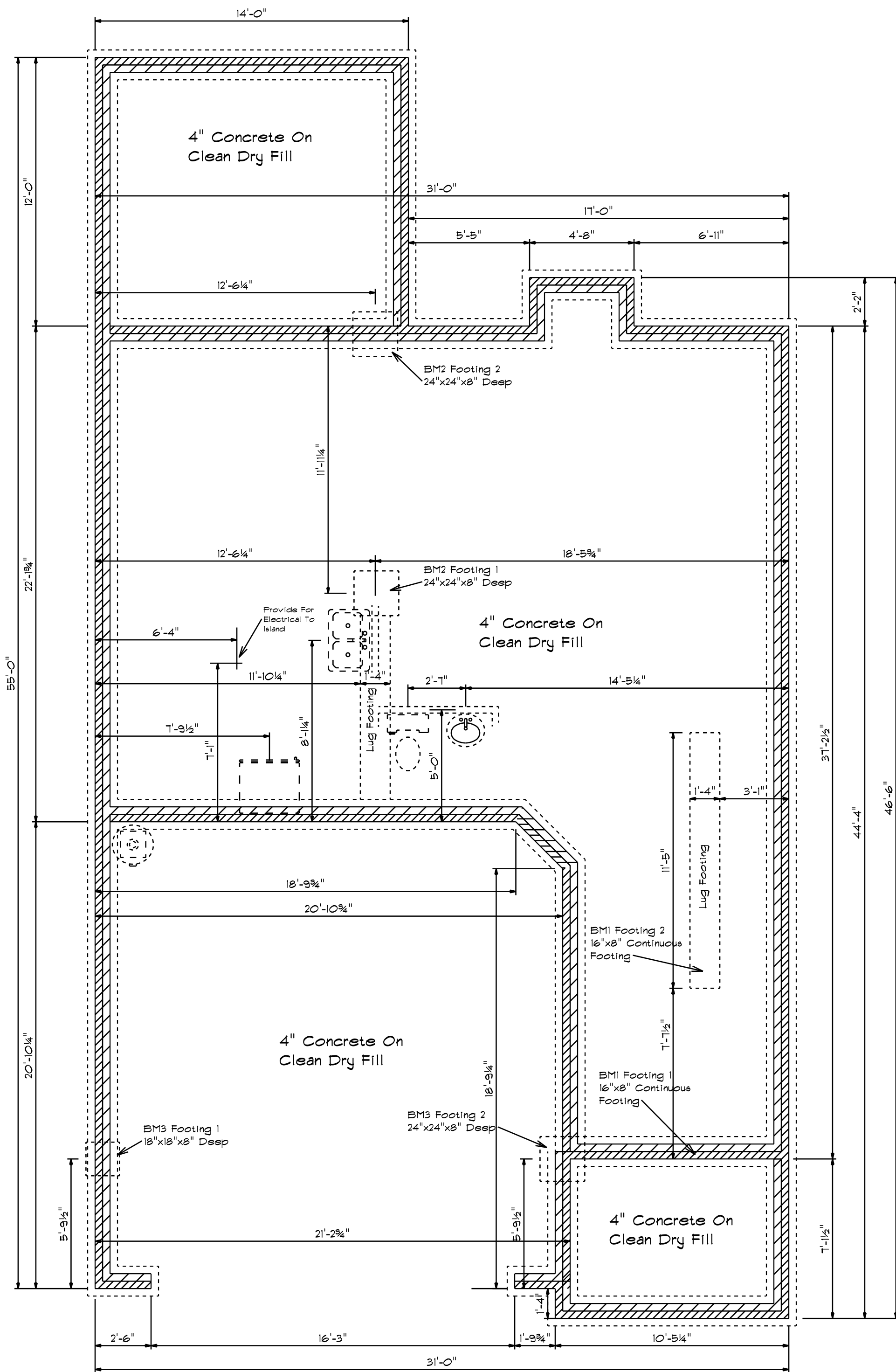
SCALE: 1/4"

DRAWN BY

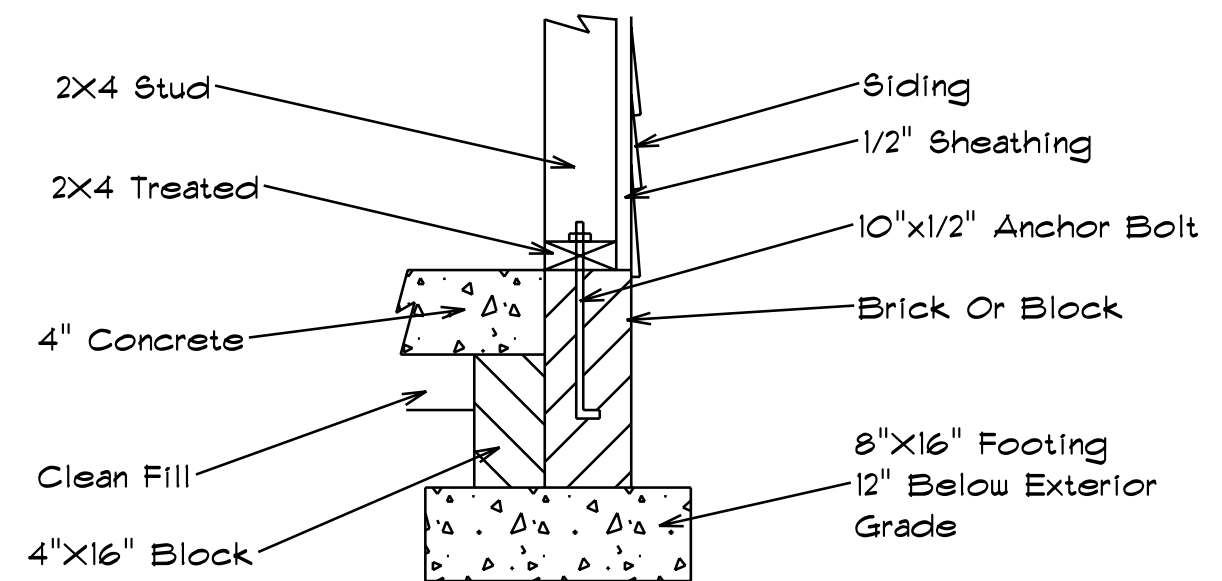
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Plan #10

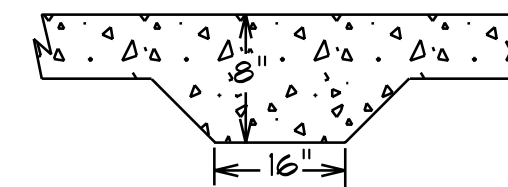




Foundation Detail Siding



Lug Footing Detail



Foundation Plan

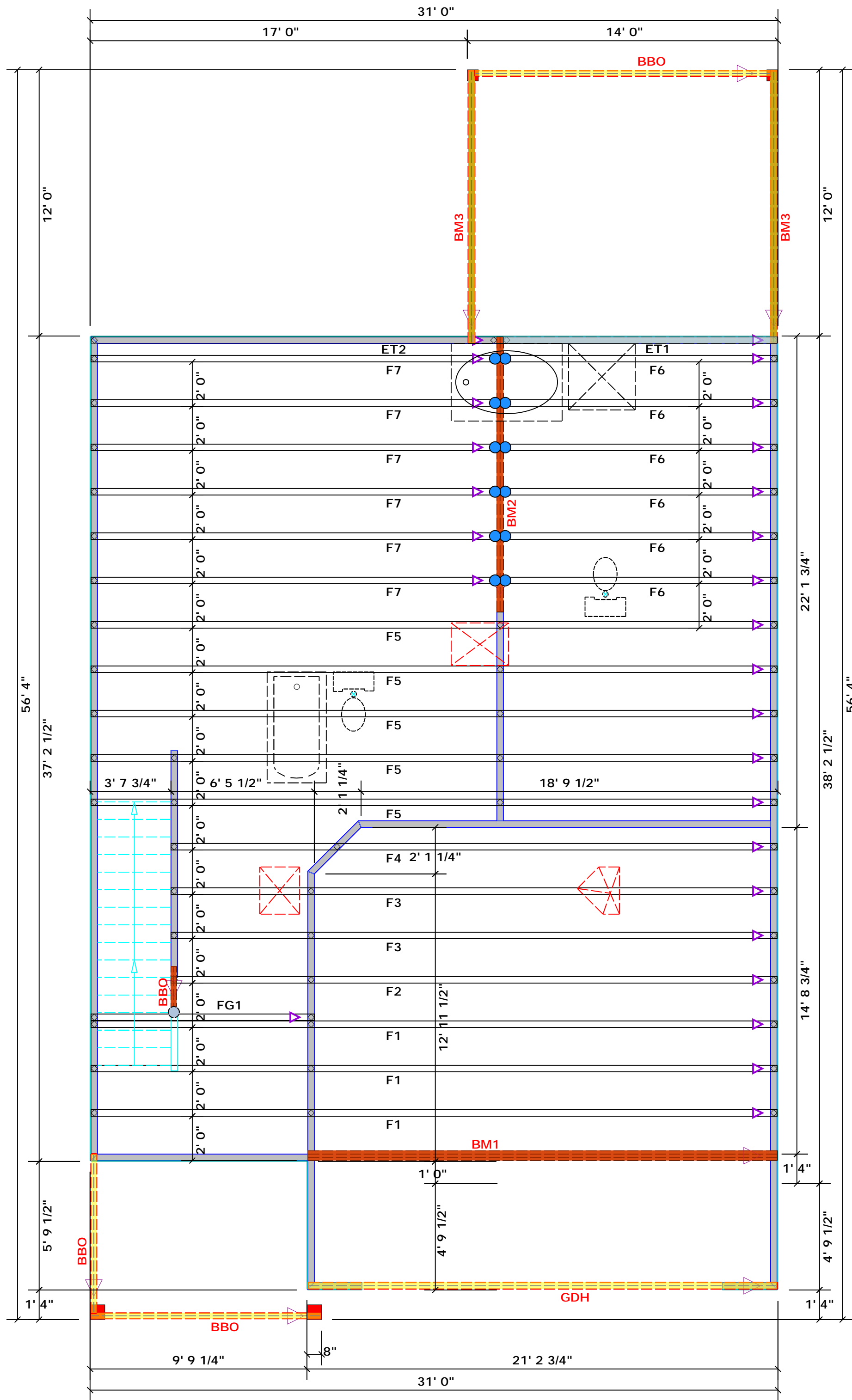
Scale: 1/4" = 1'-0"

DATE: Wednesday, August 24, 2022
 REVISED
 DRAWING*

SCALE: 1/4"
 DRAWN BY
 APPROVED

Plan #10





Hatch Legend	
	2nd Floor Walls
	Box Storage
	Flush Beams
	Drop Beam

All Walls Shown Are Considered Load Bearing

- Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact.
 2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
 3. Adjust spacing as needed not to exceed 24"oc.

- Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
 2. All interior wall dimensions are to face of frame wall unless noted otherwise
 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Connector Information				Nail Information		
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS410	USP	12	NA	16d/3-1/2"	16d/3-1/2"
	MSH422	USP	1	Varies	10d/3"	10d/3"

Products					
PlotID	Length	Product	Plies	Net Qty	
BM1	22' 0"	1-3/4"x 23-7/8" LVL Kerto-S	3	3	
BM2	13' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM3	13' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	4	
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	

1 Truss Placement Plan
Scale: 1/4"=1'

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

LOAD CHART FOR JACK STUDS

MEMBER	SPACING	LOAD	MEMBER	SPACING	LOAD
1700	1	2550	1700	1	3400
3400	2	5100	3400	2	6800
5100	3	7650	5100	3	10200
6800	4	10200	6800	4	13600
8500	5	12750	8500	5	17000
10200	6	15300			
11900	7				
13600	8				
15300	9				

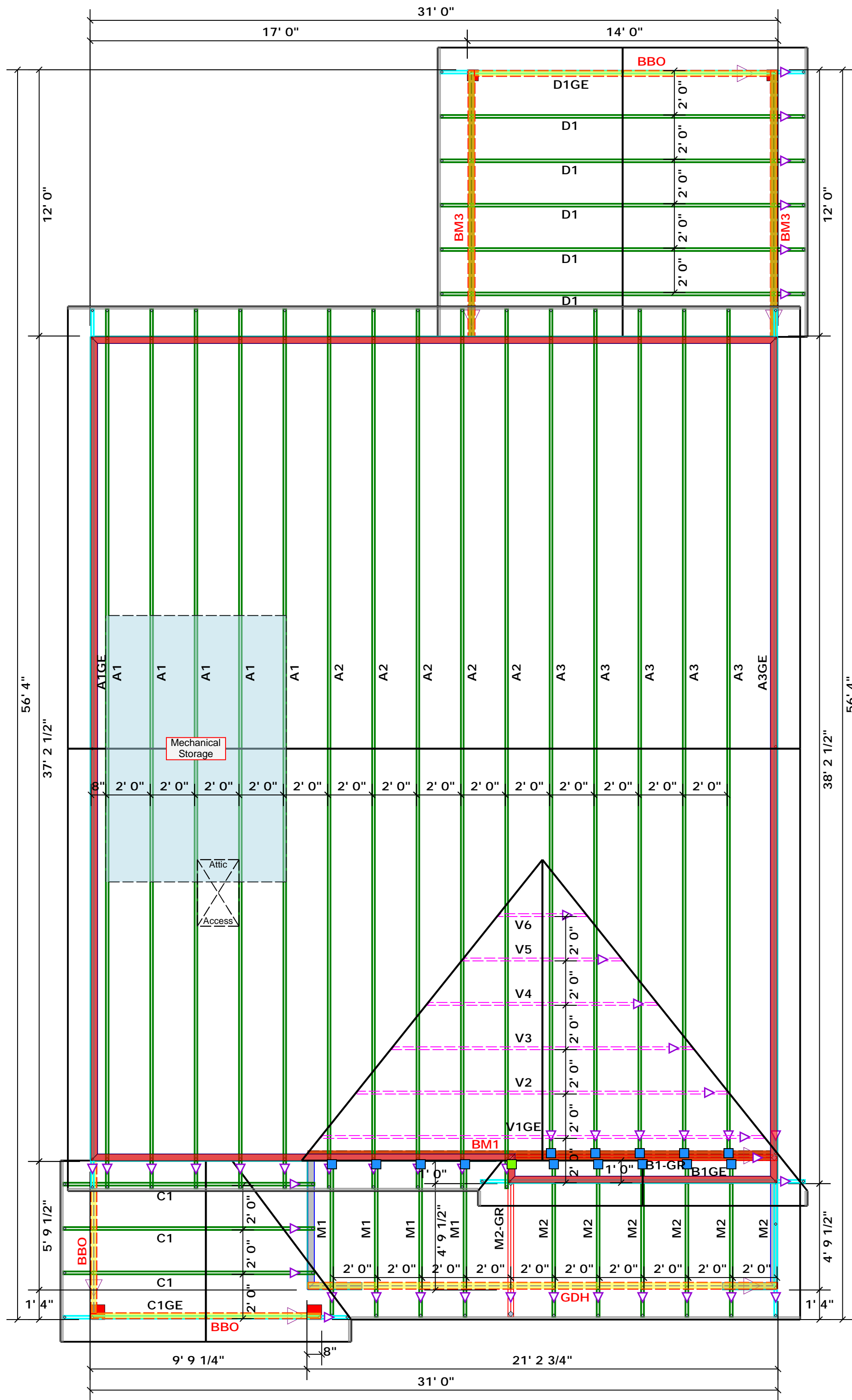
BUILDER	Wellco Contractors, Inc.	CITY / CO.	Spring Lake / Harnett
JOB NAME	Lot 146 Hidden Lakes	ADDRESS	Lot 146 Hidden Lakes
PLAN	Plan 10	MODEL	Floor
SEAL DATE	Seal Date	DATE REV.	09/12/22
QUOTE #	Quote #	DRAWN BY	David Landry
JOB #	J0822-4269	SALES REP.	Lenny Norris

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 BCSH-B1 and BCSH-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: David Landry
David Landry

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



Hatch Legend	
	2nd Floor Walls
	Box Storage
	Flush Beams
	Drop Beam

All Walls Shown Are Considered Load Bearing

Roof Area = 2113.53 sq.ft.
 Ridge Line = 69.81 ft.
 Hip Line = 0 ft.
 Horiz. OH = 131.93 ft.
 Raked OH = 192.12 ft.
 Decking = 73 sheets

- Dimension Notes**
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
 2. All interior wall dimensions are to face of frame wall unless noted otherwise
 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Connector Information				Nail Information		
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	14	NA	16d/3-1/2"	16d/3-1/2"
	THD26-2	USP	1	NA	16d/3-1/2"	10d/3"

Products					
PlotID	Length	Product	Plies	Net Qty	
BM1	22' 0"	1-3/4"x 23-7/8" LVL Kerto-S	3	3	
BM2	13' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM3	13' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	4	
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	

1 Truss Placement Plan
 Scale: 1/4"=1'

= Indicates Left End of Truss
 (Reference Engineered Truss Drawing)
 Do NOT Erect Truss Backwards

LOAD CHART FOR JACK STUDS

INT. SPACING (ft)	REACT. (lb)	REACT. (k)	INT. SPACING (ft)	REACT. (lb)	REACT. (k)
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				

BUILDER	Wellco Contractors, Inc.	CITY / CO.	Spring Lake / Harnett
JOB NAME	Lot 146 Hidden Lakes	ADDRESS	Lot 146 Hidden Lakes
PLAN	Plan 10	MODEL	Roof
SEAL DATE	Seal Date	DATE REV.	09/12/22
QUOTE #	Quote #	DRAWN BY	David Landry
JOB #	J0822-4268	SALES REP.	Lenny Norris

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 BCSH-B1 and BCSH-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#.

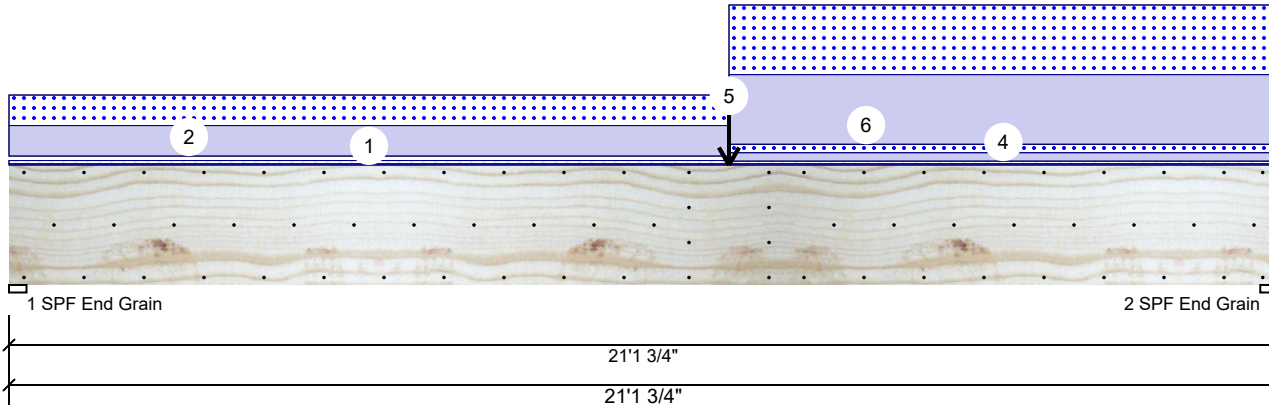
Signature: David Landry
 David Landry

ROOF & FLOOR TRUSSES & BEAMS

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

BM1 Kerto-S LVL 1.750" X 24.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	423	4121	3667	0	0
2	Vertical	423	6030	5575	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	50%	4121 / 3667	7788	L	D+S
2 - SPF End Grain	3.500"	Vert	75%	6030 / 5575	11606	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	61594 ft-lb	12'	131295 ft-lb	0.469 (47%)	D+S	L
Unbraced	61594 ft-lb	12'	61804 ft-lb	0.997 (100%)	D+S	L
Shear	10110 lb	18'10 1/4"	30912 lb	0.327 (33%)	D+S	L
LL Defl inch	0.196 (L/1266)	11'3 15/16"	0.518 (L/480)	0.379 (38%)	S	L
TL Defl inch	0.409 (L/607)	11'3 9/16"	0.690 (L/360)	0.593 (59%)	D+S	L

Design Notes

- 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.
- Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at a maximum of 4'3 7/16" o.c.
- 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	Tie-In Far	0-0-0 to 21-1-12	1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
1	Tie-In Near	0-0-0 to 21-1-12	0-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
2	Part. Uniform	0-0-0 to 12-0-0		Near Face	188 PLF	0 PLF	188 PLF	0 PLF	0 PLF	M2
3	Point	12-0-0		Near Face	431 lb	0 lb	431 lb	0 lb	0 lb	M2-GR

Continued on page 2...

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- 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 11/3/2024

Manufacturer Info

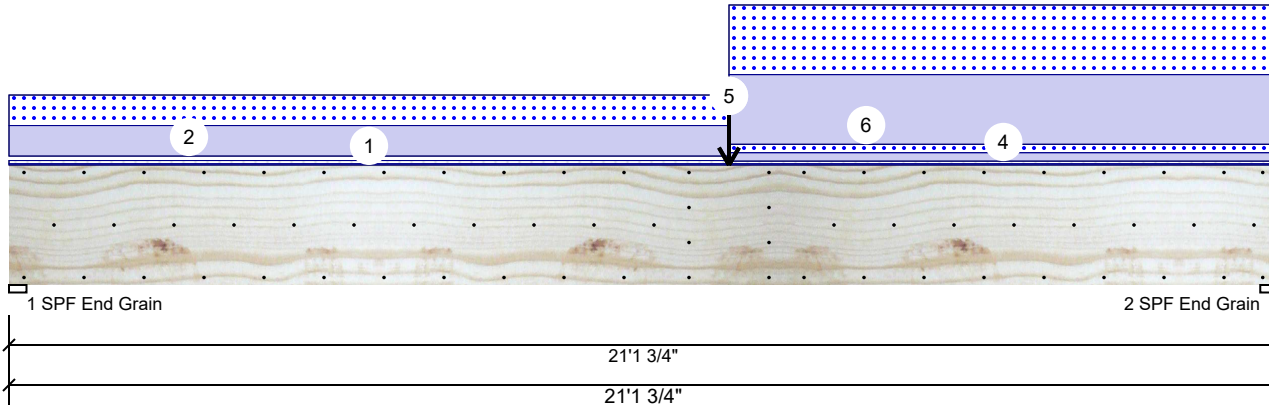
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 910-864-TRUS



BM1 Kerto-S LVL 1.750" X 24.000" 3-Ply - PASSED

Level: Level



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
4	Part. Uniform	12-0-0 to 21-1-12		Near Face	52 PLF	0 PLF	52 PLF	0 PLF	0 PLF	M1
5	Point	12-0-0		Top	2156 lb	0 lb	2156 lb	0 lb	0 lb	B1-GR
	Bearing Length	0-3-8								
6	Part. Uniform	12-0-0 to 21-1-12		Top	429 PLF	0 PLF	429 PLF	0 PLF	0 PLF	A2
	Self Weight				28 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 11/3/2024

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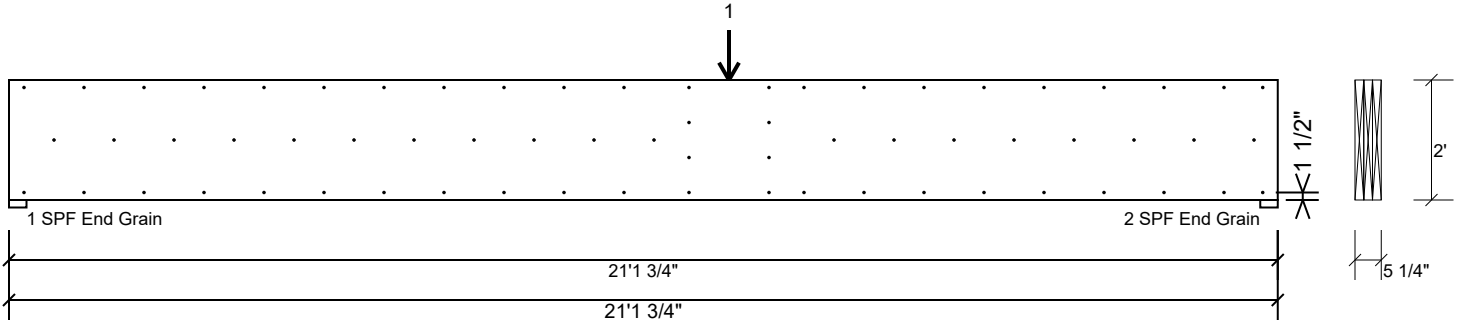
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BM1 Kerto-S LVL 1.750" X 24.000" 3-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Nail from both sides. Maximum end distance not to exceed 6".

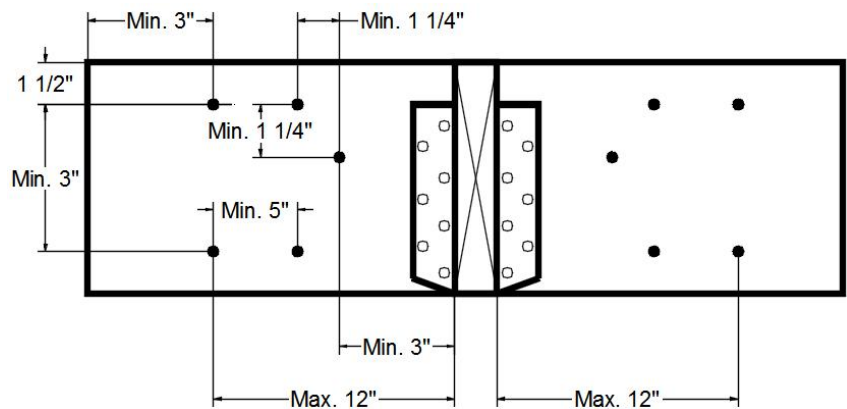
Capacity	88.8 %
Load	250.7 PLF
Yield Limit per Foot	282.4 PLF
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

Concentrated Load

Fasten at concentrated side load at 12-0-0 with a minimum of (8) – 10d Box nails (.128x3") in the pattern shown. Repeat fasteners on both sides.

Capacity	76.4 %
Load	574.7lb.
Total Yield Limit	752.6 lb.
Cg	0.9994
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Load Combination	D+S
Duration Factor	1.15

Min/Max fastener distances for Concentrated Side Loads



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 11/3/2024

Manufacturer Info

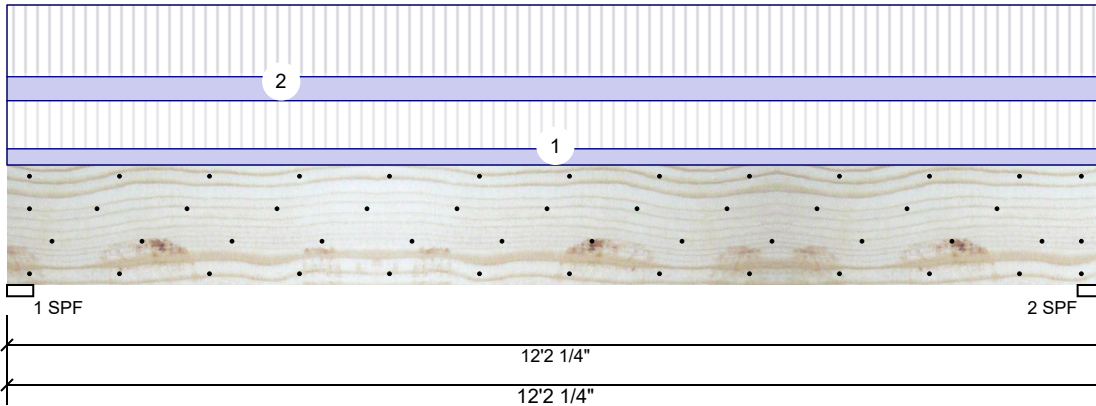
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BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

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	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3790	1343	0	0	0
2	Vertical	3790	1343	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	99%	1343 / 3790	5134	L	D+L
2 - SPF	3.500"	Vert	99%	1343 / 3790	5134	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14539 ft-lb	6'1 1/8"	34565 ft-lb	0.421 (42%)	D+L	L
Unbraced	14539 ft-lb	6'1 1/8"	14539 ft-lb	1.000 (100%)	D+L	L
Shear	4888 lb	1'7 1/2"	11947 lb	0.409 (41%)	D+L	L
LL Defl inch	0.134 (L/1054)	6'1 1/8"	0.294 (L/480)	0.455 (46%)	L	L
TL Defl inch	0.181 (L/778)	6'1 1/8"	0.392 (L/360)	0.462 (46%)	D+L	L

Design Notes

- 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.
- Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top must be laterally braced at a maximum of 8'1 1/2" o.c.
- 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			Far Face	84 PLF	250 PLF	0 PLF	0 PLF	0 PLF	F6
2	Uniform			Near Face	124 PLF	372 PLF	0 PLF	0 PLF	0 PLF	F7
	Self Weight				12 PLF					

Notes

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Lumber

- Dry service conditions, unless noted otherwise
- LVL not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- 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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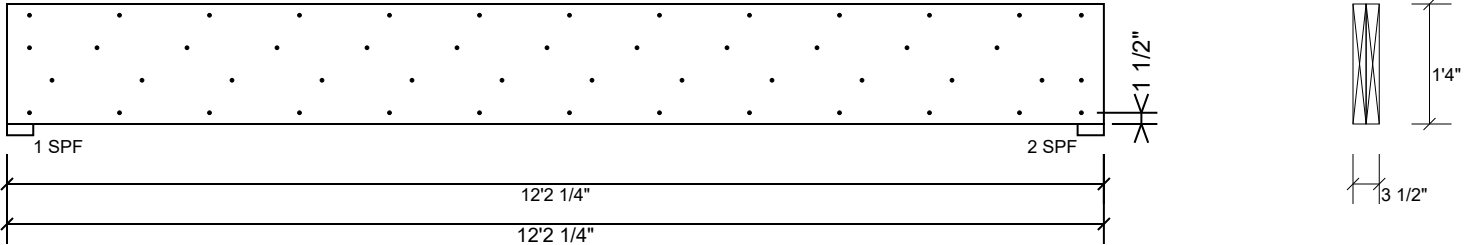
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BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	75.7 %
Load	248.0 PLF
Yield Limit per Foot	327.4 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
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

1. LVL beams must not be cut or drilled
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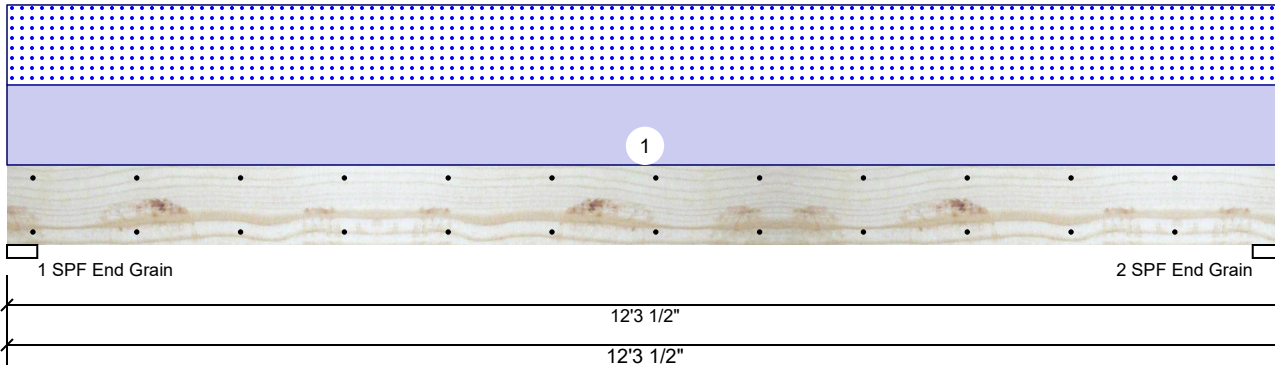
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	997	953	0	0
2	Vertical	0	997	953	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	19%	997 / 953	1949	L	D+S
2 - SPF End Grain	3.500"	Vert	19%	997 / 953	1949	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5552 ft-lb	6'1 3/4"	14423 ft-lb	0.385 (38%)	D+S	L
Unbraced	5552 ft-lb	6'1 3/4"	6421 ft-lb	0.865 (86%)	D+S	L
Shear	1618 lb	1' 3/4"	7943 lb	0.204 (20%)	D+S	L
LL Defl inch	0.158 (L/900)	6'1 3/4"	0.296 (L/480)	0.533 (53%)	S	L
TL Defl inch	0.323 (L/440)	6'1 3/4"	0.394 (L/360)	0.819 (82%)	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 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Const.	Comments
1	Uniform			Top	155 PLF	0 PLF	155 PLF	0 PLF	1.25	0 PLF D1
	Self Weight				7 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 11/3/2024

Manufacturer Info

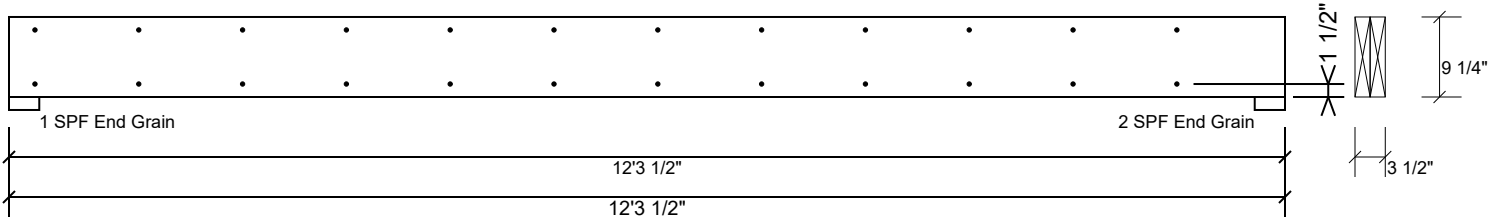
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
www.metsawood.com/us

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



BM3 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

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Lumber

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chemicals

Handling & Installation

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2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
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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 11/3/2024

Manufacturer Info

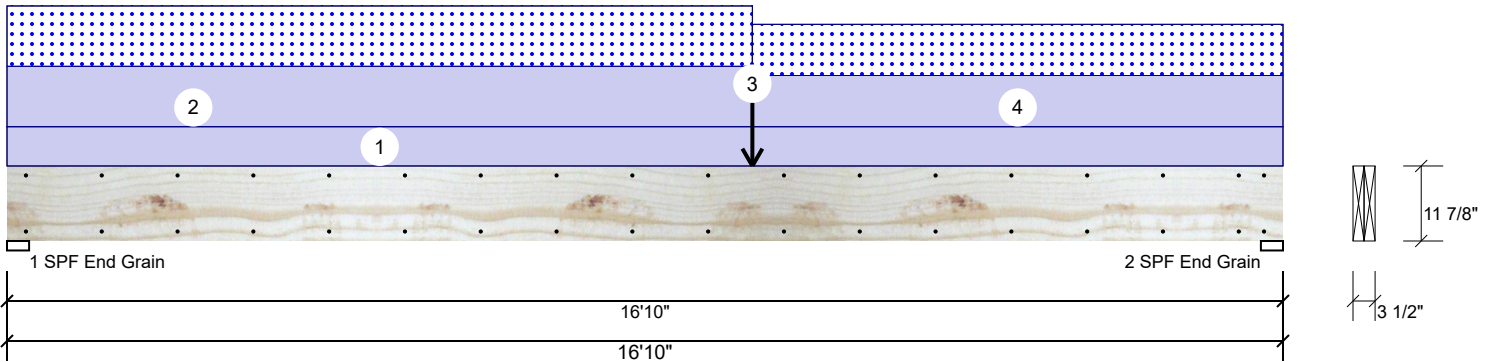
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

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	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1416	833	0	0
2	Vertical	0	1390	807	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	22%	1416 / 833	2249	L	D+S
2 - SPF End Grain	3.500"	Vert	21%	1390 / 807	2197	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9481 ft-lb	8'10 9/16"	22897 ft-lb	0.414 (41%)	D+S	L
Unbraced	9481 ft-lb	8'10 9/16"	9502 ft-lb	0.998 (100%)	D+S	L
Shear	1934 lb	1'3 3/8"	10197 lb	0.190 (19%)	D+S	L
LL Defl inch	0.183 (L/1072)	8'5 3/4"	0.409 (L/480)	0.448 (45%)	S	L
TL Defl inch	0.488 (L/403)	8'5 9/16"	0.546 (L/360)	0.893 (89%)	D+S	L

Design Notes

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- 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 9'9 13/16" o.c.
- 7 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	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Part. Uniform	0-0-0 to 9-10-0		Top	92 PLF	0 PLF	92 PLF	0 PLF	0 PLF	M2
3	Point	9-10-0		Top	190 lb	0 lb	190 lb	0 lb	0 lb	M2-GR
	Bearing Length	0-3-8								
4	Part. Uniform	9-10-0 to 16-10-0		Top	78 PLF	0 PLF	78 PLF	0 PLF	0 PLF	M1
	Self Weight				9 PLF					

Notes

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Lumber

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

Handling & Installation

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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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6. For flat roofs provide proper drainage to prevent ponding

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

Level: Level



Multi-Ply Analysis

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Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
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Load Combination	
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