

NO ROOF LOADS ON FLOOR TRUSSES

GENERAL NOTES

- 1. BBO BEAMS PROVIDED BY OTHER

Truss Placement Plan
SCALE: NTS

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

LOAD CHART FOR JACK STUDS

PROJECTION INCHES	NO. OF JACKS	MAXIMUM LOAD PER JACK KIP	NO. OF JACKS REQUIRED
1700	1	2550	1
3400	2	5100	2
5100	3	7650	3
6800	4	10200	4
8500	5	12750	5
10200	6	15300	6
11900	7		
13600	8		

BUILDER	PBS/R&D INVESTMENTS	CITY / CO.	DUNN / Johnston
JOB NAME	STRICKLAND GARAGE	ADDRESS	38 WILLOWCROFT COURT
PLAN	35X35	MODEL	FLOOR
SEAL DATE	Seal Date	DATE REV.	04/30/24
QUOTE #	B0424-2524	DRAWN BY	Michael Turner
JOB #	J0424-2524	SALES REP.	Paul Hawkins

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 plan-view 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 bracing structure including bracing, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult EC-1101 and EC-1102 provided with the truss delivery package or online at electrotruss.com.

Roofing reaction forces 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: Michael Turner
Michael Turner

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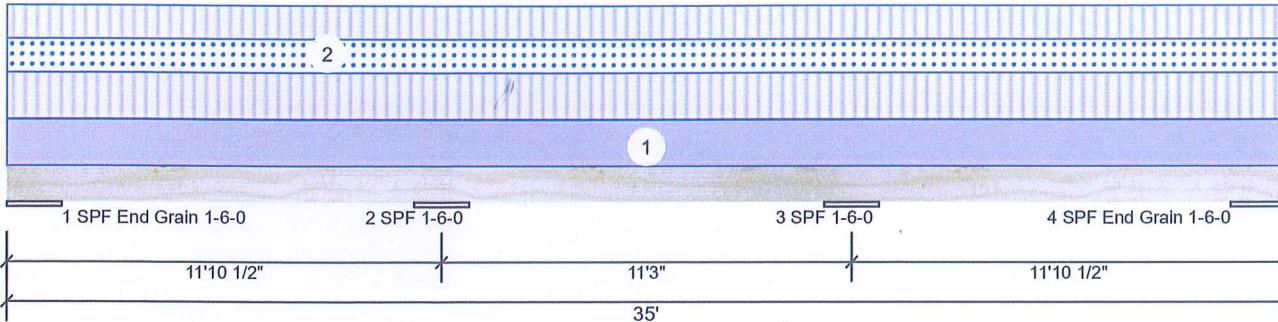


Client:
Project:
Address:

Date: 6/26/2024
Input by: Joe Ciferni
Job Name:
Project #:

BBO-3 onCENTER 2.1E LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	12 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2018
Load Sharing:	No
Deck:	Not Checked

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	4774	2843	1999	0	0
2	Vertical	10276	6118	4301	0	0
3	Vertical	10276	6118	4301	0	0
4	Vertical	4774	2843	1999	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	18.000"	Vert	18%	2833 / 5550	8383	L_L	D+0.75(L+S)
2 - SPF	18.000"	Vert	67%	6128 / 11699	17827	LL_	D+0.75(L+S)
3 - SPF	18.000"	Vert	67%	6128 / 11699	17827	_LL	D+0.75(L+S)
4 - SPF End Grain	18.000"	Vert	18%	2833 / 5550	8383	L_L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-17648 ft-lb	11'10 1/2"	21278 ft-lb	83%	D+L	LL_
Unbraced	-17648 ft-lb	11'10 1/2"	17675 ft-lb	100%	D+L	LL_
Pos Moment	13813 ft-lb	5'11 1/16"	21278 ft-lb	65%	D+L	L_L
Unbraced	13813 ft-lb	5'11 1/16"	13835 ft-lb	100%	D+L	L_L
Shear	6465 lb	10'1 5/8"	7897 lb	82%	D+L	LL_
LL Defl inch	0.208 (L/602)	28'6 3/4"	0.261 (L/480)	80%	0.75(L+S)	L_L
TL Defl inch	0.293 (L/428)	6'4 3/16"	0.522 (L/240)	56%	D+0.75(L+S)	L_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 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 6'2 15/16" o.c.
- 6 Bottom must be laterally braced at a maximum of 4'3 1/2" 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	500 PLF	500 PLF	0 PLF	0 PLF	0 PLF	Floor Truss Above
2	Uniform			Top	0 PLF	360 PLF	360 PLF	0 PLF	0 PLF	Roof Truss Above
	Self Weight				12 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 2/14/2027

Manufacturer Info

BlueLinX
1950 Spectrum Circle, Suite 300
Marietta, GA 30067
877-914-7770
www.buildoncenter.com
ICC-ES: ESR-2909, ESR-2913,
ESR-1210

Professional Builders Supply
3941 US Hwy. 421 North, NC
28401
910-386-4300

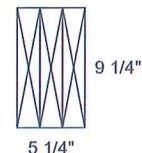
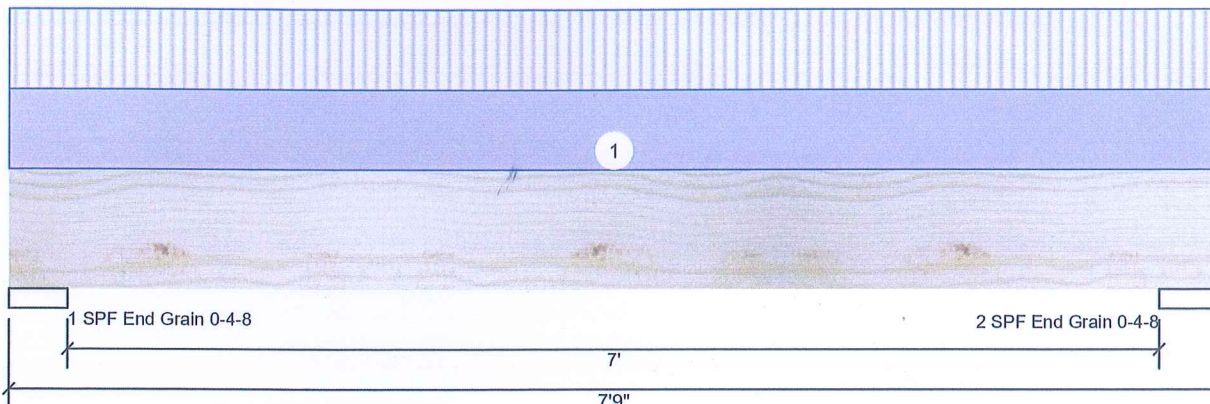




Client:
Project:
Address:

Date: 6/26/2024
Input by: Joe Ciferni
Job Name:
Project #:

BBO-2 onCENTER 2.1E LVL 1.750" X 9.250" 3-Ply - PASSED Level: Level



Member Information

Type:	Girder	Application:	Floor
Piles:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IRC 2018
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	12 PSF		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	4534	4588	0	0	0
2	Vertical	4534	4588	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	51%	4588 / 4534	9122	L	D+L
2 - SPF End Grain	4.500"	Vert	51%	4588 / 4534	9122	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14938 ft-lb	3'10 1/2"	20780 ft-lb	72%	D+L	L
Unbraced	14938 ft-lb	3'10 1/2"	14949 ft-lb	100%	D+L	L
Shear	6425 lb	6'7 1/4"	9227 lb	70%	D+L	L
LL Defl inch	0.110 (L/777)	3'10 9/16"	0.178 (L/480)	62%	L	L
TL Defl inch	0.221 (L/386)	3'10 9/16"	0.356 (L/240)	62%	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 6'10 3/16" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 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	1170 PLF	1170 PLF	0 PLF	0 PLF	0 PLF	Floor Truss Above
	Self Weight				14 PLF					

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

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

Manufacturer Info

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This design is valid until 2/14/2027

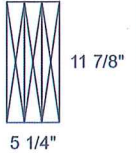
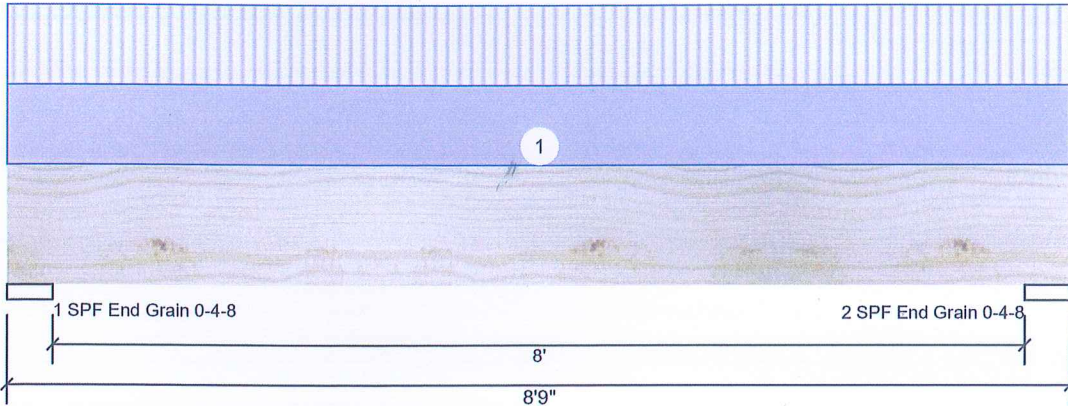


Client:
Project:
Address:

Date: 6/26/2024
Input by: Joe Ciferni
Job Name:
Project #:

BBO-1 onCENTER 2.1E LVL 1.750" X 11.875" 3-Ply - PASSED

Level: Level



Member Information

Type: Girder
Plies: 3
Moisture Condition: Dry
Deflection LL: 480
Deflection TL: 240
Importance: Normal - II
Temperature: Temp <= 100°F
General Load
Floor Live: 40 PSF
Dead: 12 PSF

Application: Floor
Design Method: ASD
Building Code: IRC 2018
Load Sharing: Yes
Deck: Not Checked

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	5119	5198	0	0	0
2	Vertical	5119	5198	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	58%	5198 / 5119	10317	L	D+L
2 - SPF End Grain	4.500"	Vert	58%	5198 / 5119	10317	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	19459 ft-lb	4'4 1/2"	33194 ft-lb	59%	D+L	L
Unbraced	19459 ft-lb	4'4 1/2"	19468 ft-lb	100%	D+L	L
Shear	7099 lb	1'4 3/8"	11845 lb	60%	D+L	L
LL Defl inch	0.092 (L/1065)	4'4 9/16"	0.203 (L/480)	45%	L	L
TL Defl inch	0.185 (L/528)	4'4 9/16"	0.406 (L/240)	45%	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 6'9 1/2" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 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	1170 PLF	1170 PLF	0 PLF	0 PLF	0 PLF	Floor Truss Above
	Self Weight				18 PLF					

Notes

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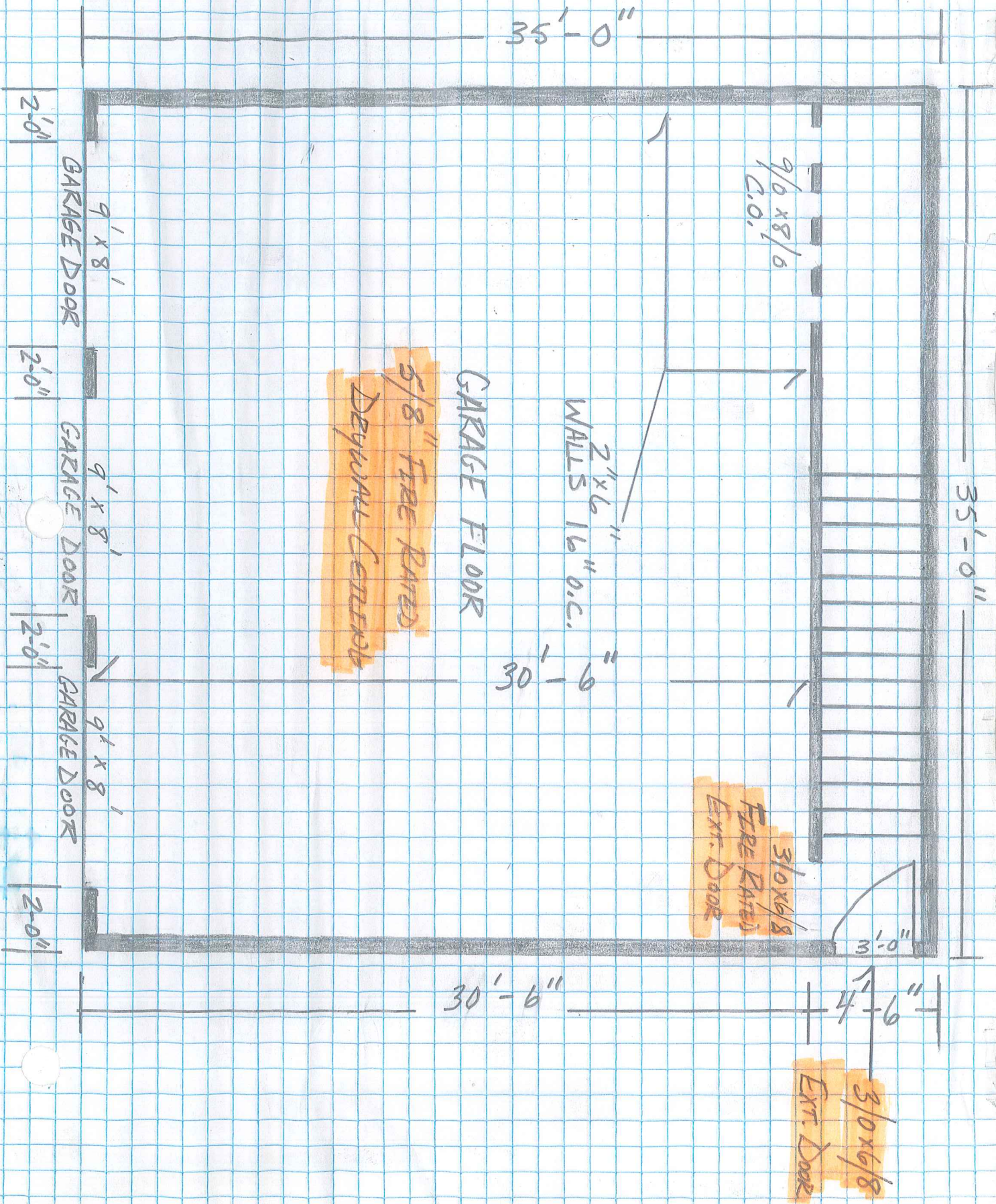
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35'-0"

35'-0"

9/0 x 8/0
C.O.

GARAGE FLOOR

5/8" FIRE RATED
Drywall Ceiling

2" x 6" WALLS
16" O.C.

30'-6"

3/0 x 6/8
FIRE RATED
EXT. DOOR

3'-0"

30'-6"

4'-6"

3/0 x 6/8
EXT. DOOR

2'-0"

9' x 8'
GARAGE DOOR

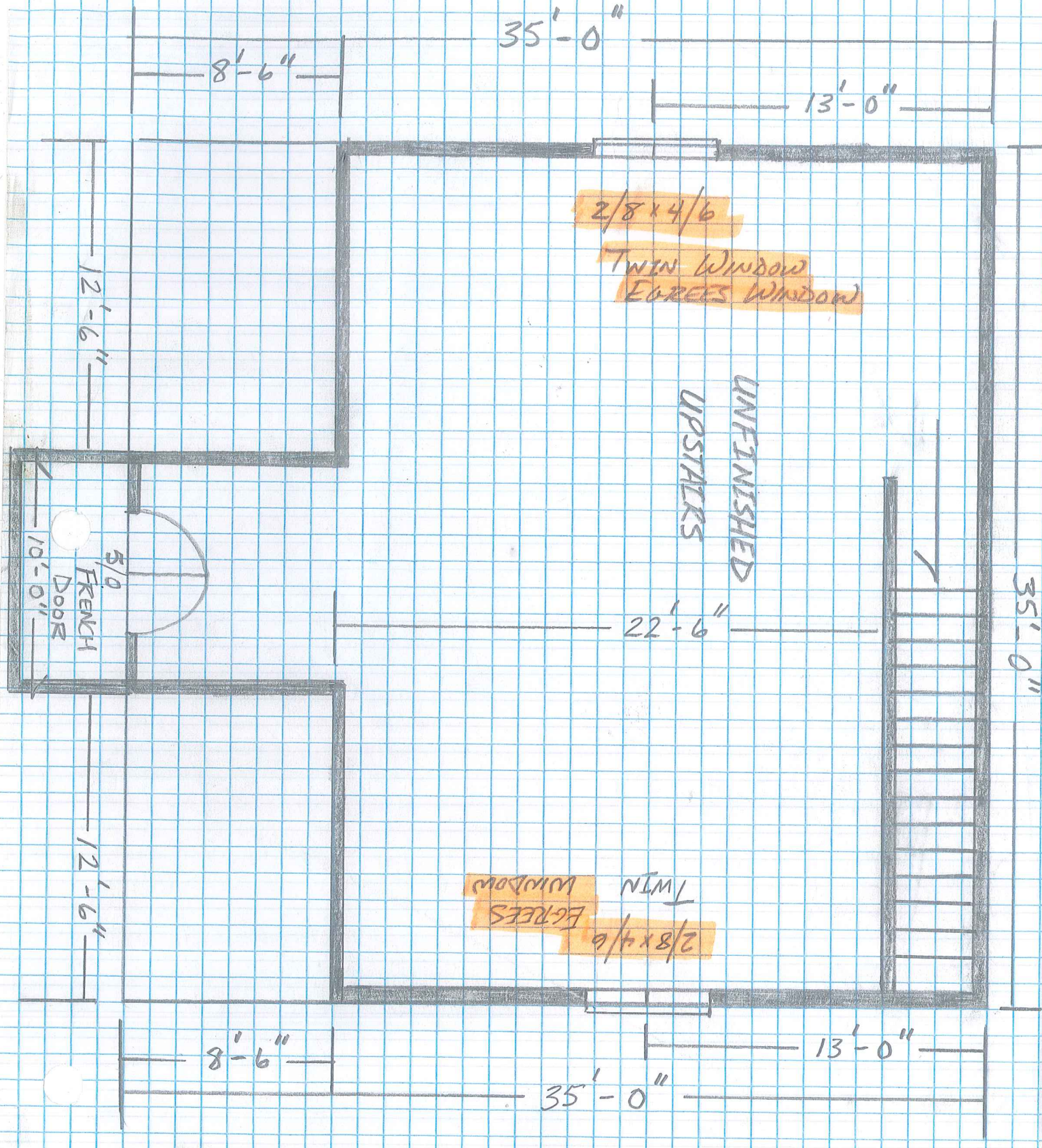
2'-0"

9' x 8'
GARAGE DOOR

2'-0"

9' x 8'
GARAGE DOOR

2'-0"



35'-0"

8'-6"

13'-0"

12'-6"

2/8x4/6

TWIN WINDOW
EGREES WINDOW

UPSTAIRS
UNFINISHED

22'-6"

35'-0"

5/0
FRENCH
DOOR
10'-0"

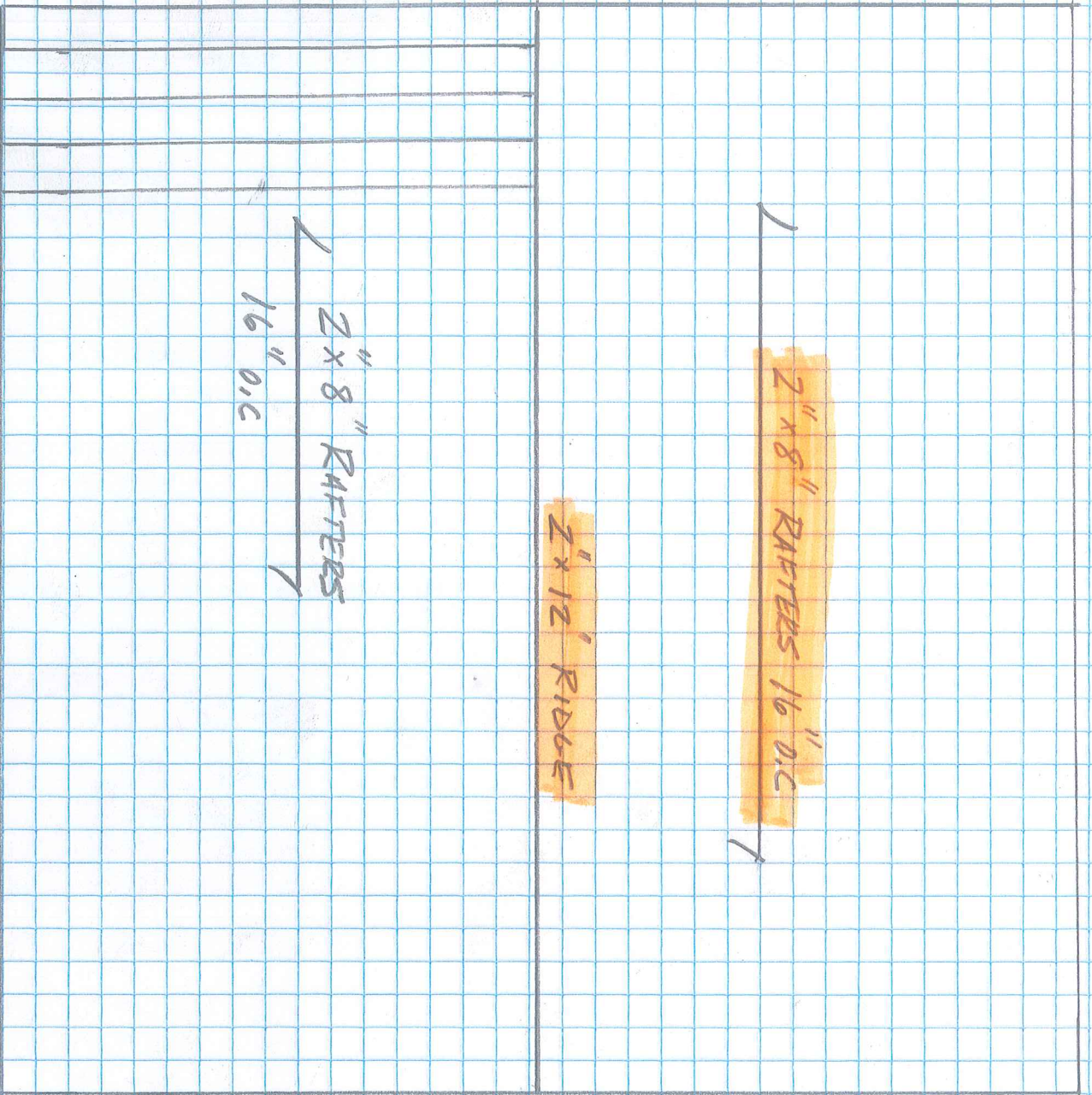
12'-6"

2/8x4/6
EGREES
WINDOW
TWIN WINDOW

9'-8"

35'-0"

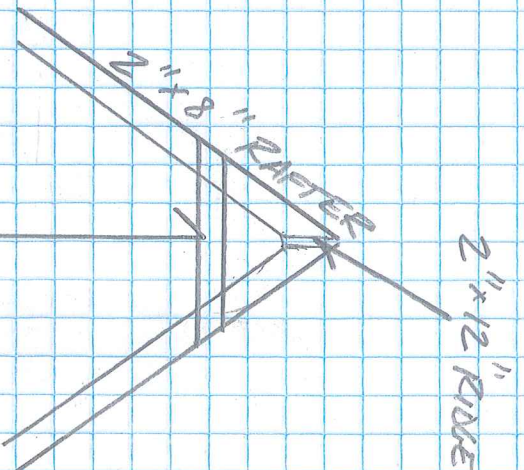
13'-0"



2" x 8" RAFTERS 16" O.C.

2" x 12" RIDGE

2" x 8" RAFTERS
16" O.C.



2" x 12" RIDGE

2" x 8" RAFTER

2" x 8" COLLAR
TIES @ 32" O.C.

16" OVERHANG

