

Date: 09/13/2024 - 10:27 AM

Design Name: Post Frame Design42x64

Design ID: 302854831724

System V Estimate ID: 56327

Estimated price: \$32,950.85 *

*Today's estimated price, future pricing may go up or down. Tax, labor, and delivery not included.

MENARDS

Design & Buy™ POST FRAME

How to recall and purchase a saved design at home



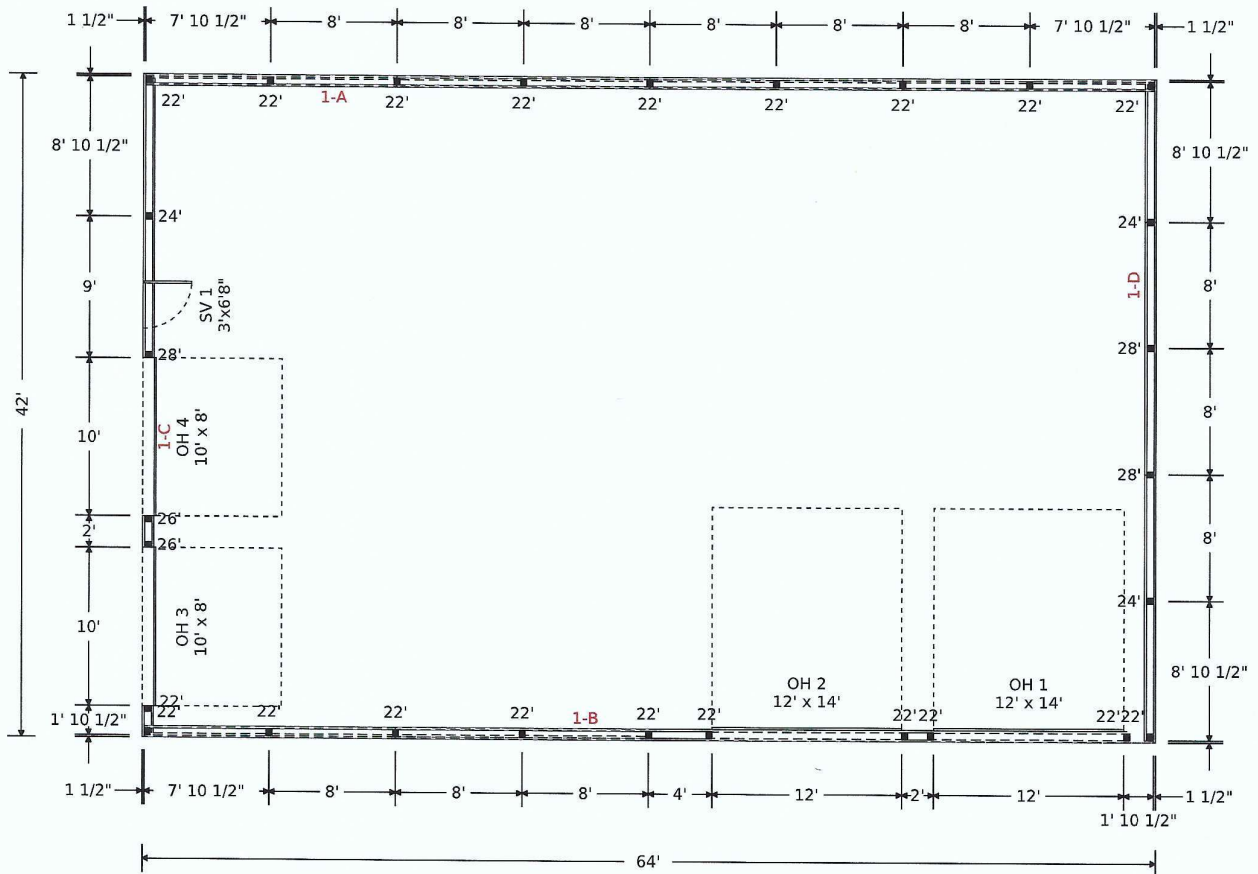
OR

1. On Menards.com, enter "Design & Buy" in the search bar
2. Select the Buildings Designer
3. Recall your design by entering Design ID: 302854831724
4. Follow the on-screen purchasing instructions

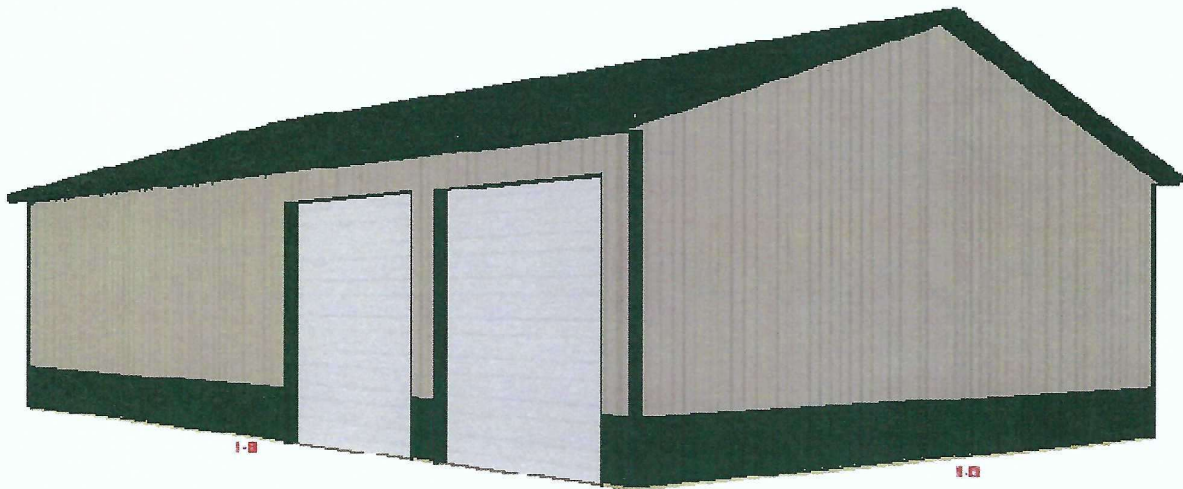
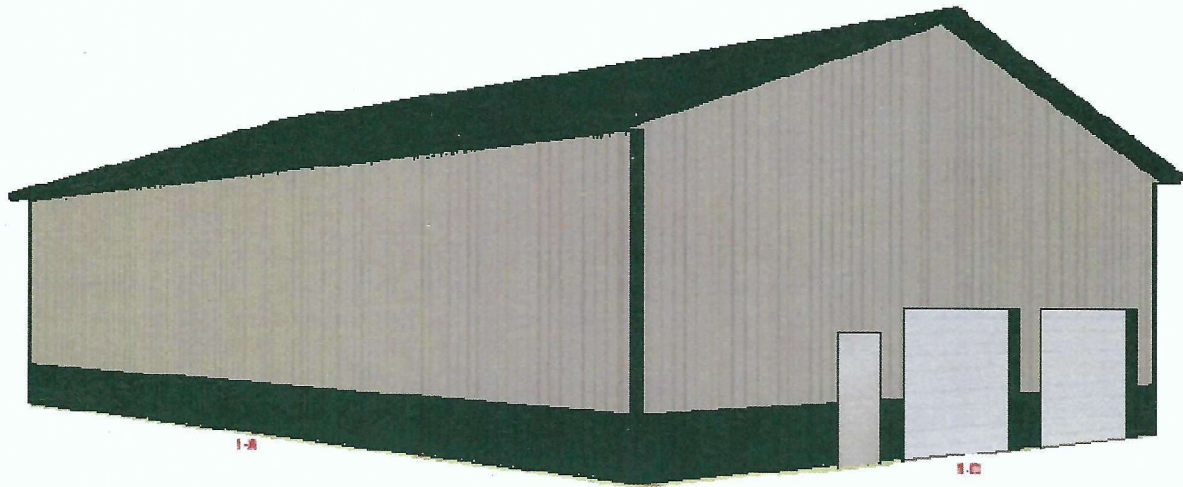
How to purchase at the store

1. Enter Design ID: 302854831724 at the Design-It Center Kiosk in the Building Materials Department
2. Follow the on-screen purchasing instructions.

FLOOR PLAN



Elevation Views



Design #: 302854831724
Estimate #: 56327
Store: COON RAPIDS



Post Frame Building Estimate
Date: Sep 13, 2024, 10:27:05 AM

Congratulations, you have taken the first step towards making your new post frame building a reality!

- You have selected Menards to provide you with superior products produced by Midwest Manufacturing that will meet your needs. For a more detailed look at these premium products visit us on the web at www.midwestmanufacturing.com.

*Delivery charge is not included in price. Items ordered to complete your building from vendors other than Midwest Manufacturing are not available for pickup from the plant.



Building Information

1. Building Use:	Code Exempt
2. Width:	42 ft
3. Length:	64 ft
4. Inside Clear Height:	16 ft
5. Floor Finish:	Dirt / Gravel
6. Post Embedment Depth:	4 ft
7. Footing Pad Size:	14 in x 4 in

Wall Information

1. Post Spacing:	8 ft
2. Post Type:	Columns
3. Girt Type:	Double
4. Exterior Wall Panel:	Pro-Rib
5. Exterior Wall Color:	Beige
6. Trim Color:	Emerald Green
7. Wainscot Size:	36 in
8. Wainscot Color:	Emerald Green
9. Sidewall A Wainscot:	Yes
10. Sidewall B Wainscot:	Yes
11. Endwall D Wainscot:	Yes
12. Endwall C Wainscot:	Yes
13. Gable Accent:	No
14. Sidewall A Eave Light:	None
15. Sidewall B Eave Light:	None
16. Wall Fastener Location:	In the Flat
17. Gradeboard Type:	2x6 Treated Gradeboard

Interior Finish

1. Wall Insulation Type:	None
2. Wall Liner Type:	None
3. Roof Condensation Control:	None

Roof Information

1. Pitch:	4/12
2. Truss Spacing:	4 ft
3. Roof Type:	Pro-Rib
4. Roof Color:	Emerald Green
5. Ridge Options:	Universal Ridge Cap
6. Roof Fastener Location:	On the Rib
7. Endwall Overhangs:	1 ft
8. Sidewall Overhangs:	1 ft
9. Fascia Size:	6 in Fascia
10. Soffit Color:	Emerald Green
11. Skylight Size:	None
12. Ridge Vent Quantity:	None
13. Ceiling Liner Type:	None
14. Purlin Placement:	Flat
15. Ceiling Insulation Type:	None

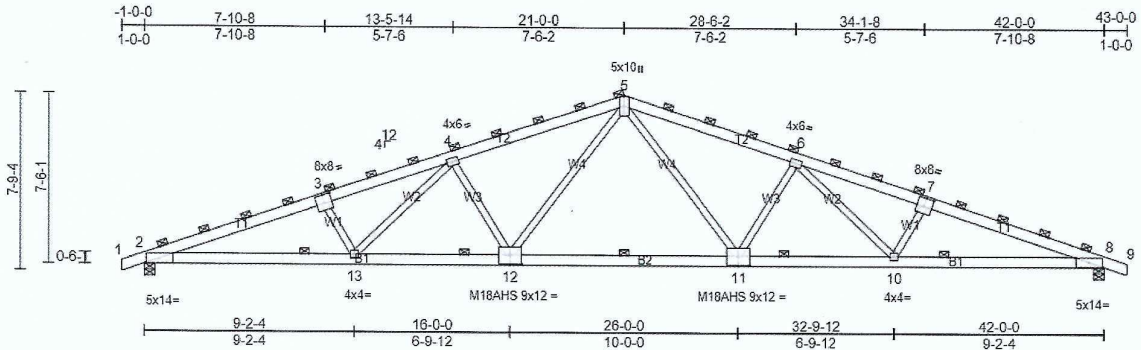
Accessories

1. Outside Closure Strip:	Standard
2. Inside Closure Strip:	Standard
3. Gable Vent Type:	None
4. Cupola Size:	None
5. Gutters:	No
6. End Cap:	No
7. Mini Print:	Email Only

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
QTREC0826480	PT1	COMMON	14	1	

Midwest Manufacturing, Eau Claire, WI

Run: 8.72 S Sep 6 2023 Print: 8.720 S Sep 6 2023 MITek Industries, Inc Fri Jan 12 12:31:56 Page 1
ID:27E\Whr11?NgyTQ7RmMPJzvw5iq-MJUhZ_a3JZykmv3h1afunpA_IKlorW3BAG7LAszw5fX



Scale = 1.74.7

Plate Offsets (X, Y): [3.0-4.0-0.4-8], [7.0-4.0-0.4-8], [11.0-6.0-0.4-12], [12.0-6.0-0.4-12]

Loading	(psf)	Spacing	4-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.52	11-12	>976	240	MT20	244/190
Snow (Ps/Pg)	28.4/50.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.73	11-12	>691	180	M18AHS	142/136
TCDL	4.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.20	8	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	5.0											Weight: 251 lb FT = 15%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
 BOT CHORD 2x6 SP 2400F 2.0E *Except* B2:2x6 SPF No.2
 WEBS 2x4 SPF Stud *Except* W4:2x4 SPF No.2

BRACING

TOP CHORD 2-0-0 oc purlins (3-1-9 max.).
 BOT CHORD 8-0-0 oc bracing.

REACTIONS

(lb/size) 2=3258/0-5-8, (min. 0-2-11), 8=3258/0-5-8, (min. 0-2-11)
 Max Horiz 2=127 (LC 13)
 Max Uplift 2=729 (LC 8), 8=729 (LC 9)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-8093/1705, 3-4=-7730/1682, 4-5=-6202/1359, 5-6=-6202/1359, 6-7=-7730/1682, 7-8=-8093/1705
 BOT CHORD 2-13=-1616/7591, 12-13=-1293/6428, 11-12=-823/4713, 10-11=-1195/6428, 8-10=-1519/7591
 WEBS 3-13=-768/254, 4-13=-306/1170, 4-12=-1781/441, 5-12=-447/2131, 5-11=-447/2131, 6-11=-1781/441, 6-10=-306/1170,
 7-10=-768/254

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16. Vult=105mph (3-second gust) Vasd=83mph; TC DL=2.4psf; BCDL=0.6psf; h=25ft; Cat. I; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed. Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL); Lum DOL=1.15 Plate DOL=1.15; Pg=50.0 psf; Ps=28.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=0.8; Rough Cat C; Fully Exp.; Ce=0.9; Cs=0.94; Ct=1.20; Unobstructed slippery surface
- Roof design snow load has been reduced to account for slope.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 30.2 psf on overhangs non-concurrent with other live loads.
- Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 729 lb uplift at joint 2 and 729 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Doors & Windows

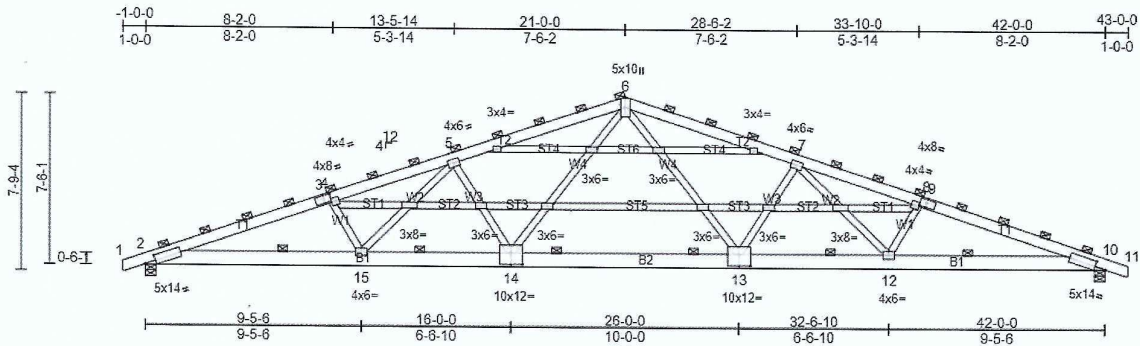
Name	Size	Wall
Overhead Door	12' x 14'	1-B
Overhead Door	12' x 14'	1-B
Overhead Door	10' x 8'	1-C
Overhead Door	10' x 8'	1-C
Service Door	36"x80"	1-C

Floor type (concrete, dirt, gravel) is NOT included in estimated price. The floor type is used in the calculation of materials needed. Labor, foundation, steel beams, paint, electrical, heating, plumbing, and delivery are also NOT included in estimated price. This is an estimate. It is only for general price information. This is not an offer and there can be no legally binding contract between the parties based on this estimate. The prices stated herein are subject to change depending upon the market conditions. The prices stated on this estimate are not firm for any time period unless specifically written otherwise on this form. The availability of materials is subject to inventory conditions. MENARDS IS NOT RESPONSIBLE FOR ANY LOSS INCURRED BY THE GUEST WHO RELIES ON PRICES SET FORTH HEREIN OR ON THE AVAILABILITY OF ANY MATERIALS STATED HEREIN. All information on this form, other than price, has been provided by the guest and Menards is not responsible for any errors in the information on this estimate, including but not limited to quantity, dimension and quality. Please examine this estimate carefully. MENARDS MAKES NO REPRESENTATIONS, ORAL, WRITTEN OR OTHERWISE THAT THE MATERIALS LISTED ARE SUITABLE FOR ANY PURPOSE BEING CONSIDERED BY THE GUEST. BECAUSE OF WIDE VARIATIONS IN CODES, THERE ARE NO REPRESENTATIONS THAT THE MATERIALS LISTED HEREIN MEET YOUR CODE REQUIREMENTS. THE PLANS AND/OR DESIGNS PROVIDED ARE NOT ENGINEERED. LOCAL CODE OR ZONING REGULATIONS MAY REQUIRE SUCH STRUCTURES TO BE PROFESSIONALLY ENGINEERED AND CERTIFIED PRIOR TO CONSTRUCTION.

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
QTREC0826480	PT1E	COMMON	1	1	

Midwest Manufacturing, Eau Claire, WI

Run: 8.72 S Sep 6 2023 Print: 8.720 S Sep 6 2023 MTEK Industries, Inc. Fri Jan 12 12:31:56 Page: 1
ID:27EW/hr1?NgyTO7RmMPJzW5lq-4UHz_a3JZykmv3hlfunpA_cKnsrWUBAG7LAszw5fX



Scale = 1.74.7

Plate Offsets (X, Y): [2.0-5-9.0-2-14], [3.0-3-8.0-2-0], [9.0-3-8.0-2-0], [10.0-5-9.0-2-14], [13.0-6-0-0-6-0], [14.0-6-0-0-6-0]

Loading	(psf)	Spacing	4-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.50	13-14	>999	240	MT20	244/190
Snow (Ps/Pg)	28.4/50.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.68	13-14	>738	180		
TCDL	4.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.17	10	n/a	n/a		
BCDL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	5.0										Weight: 320 lb	FT = 15%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
 BOT CHORD 2x8 SP 2400F 2.0E *Except* B2:2x8 SPF No.2
 WEBS 2x4 SPF Stud *Except* W4:2x4 SPF No.2
 OTHERS 2x4 SPF Stud

BRACING

TOP CHORD 2.0-0 oc purlins (3-1-7 max.).
 BOT CHORD 7.0-0 oc bracing.

REACTIONS

(lb/size) 2=3258/0-5-8, (min. 0-2-11), 10=3258/0-5-8, (min. 0-2-11)
 Max Horiz 2=-215 (LC 13)
 Max Uplift 2=-1127 (LC 8), 10=-1127 (LC 9)

FORCES

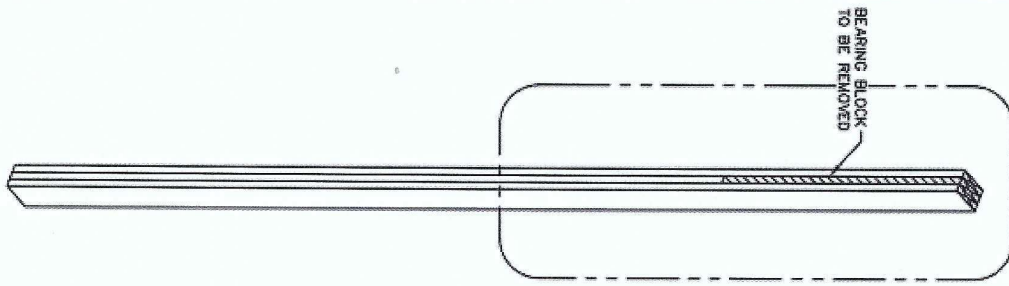
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-8173/2676, 3-4=-7941/2677, 4-5=-7818/2632, 5-8=-6280/2105, 6-7=-6280/2104, 7-8=-7818/2631, 8-9=-7941/2676,
 9-10=-8173/2675
 BOT CHORD 2-15=-2665/7872, 14-15=-2068/6522, 13-14=-1315/4760, 12-13=-1899/6522, 10-12=-2398/7672
 WEBS 4-15=-744/373, 5-15=-487/1192, 5-14=-1810/691, 6-14=-715/2161, 6-13=-714/2161, 7-13=-1810/691, 7-12=-486/1192,
 8-12=-744/373

NOTES

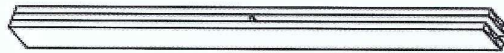
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=105mph (3-second gust) Vasd=83mph; TCCL=2.4psf; BCDL=0.6psf; h=25ft; Cat. I; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; P=20.0 psf (roof LL); Lum DOL=1.15 Plate DOL=1.15, Pg=50.0 psf, Ps=28.4 psf (Lum DOL=1.15 Plate DOL=1.15), Is=0.8, Rough Cat C; Fully Exp.; Ce=0.9; Cs=0.94; Ct=1.20; Unobstructed slippery surface
- Roof design snow load has been reduced to account for slope.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 30.2 psf on overhangs non-concurrent with other live loads.
- Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- Horizontal gable studs spaced at 2'-6" oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1127 lb uplift at joint 2 and 1127 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Building Code section 2308.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

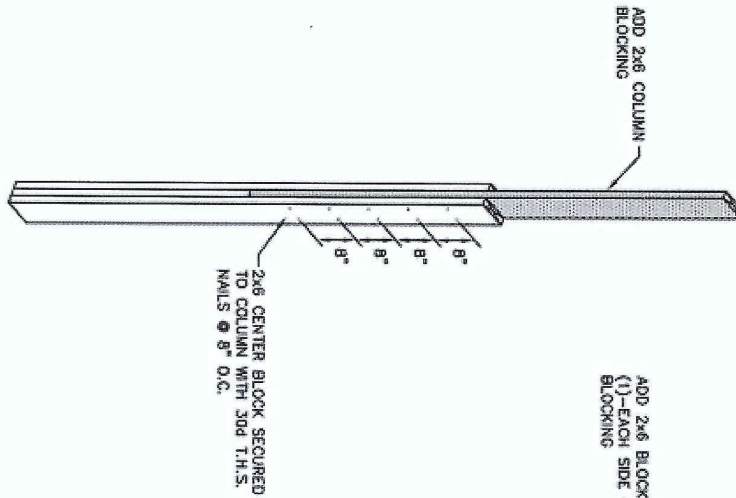
ORIGINAL COLUMN



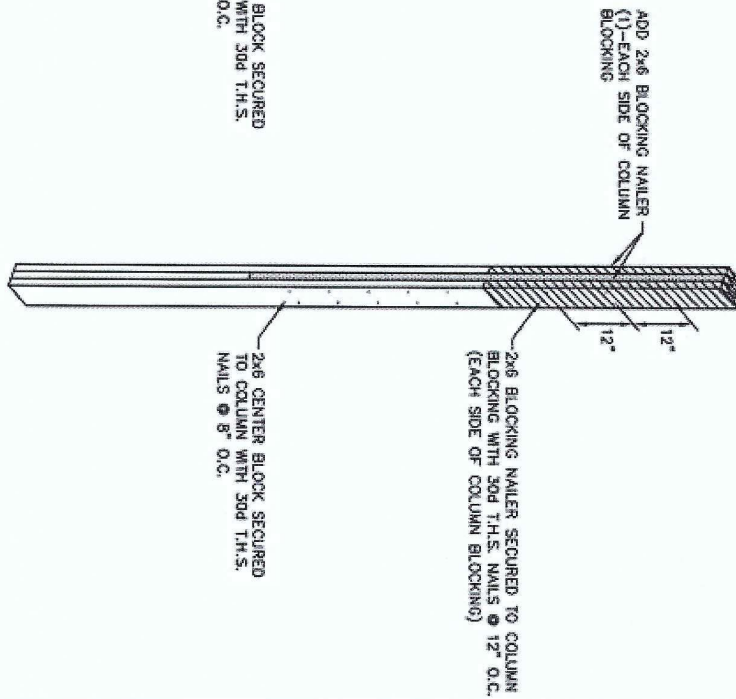
STEP 1
REMOVE CENTER BLOCK



STEP 2
ADD CENTER BLOCK
NAILS @ 8" O.C.



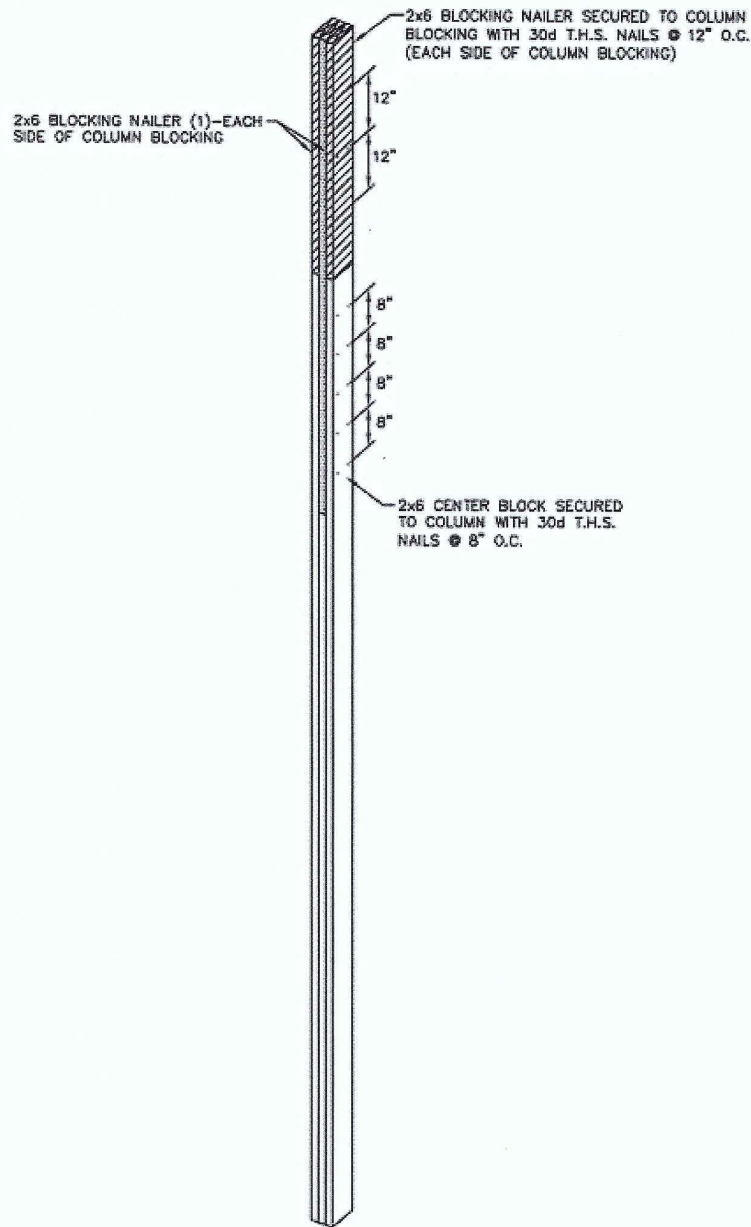
STEP 3
ADD SIDE BLOCKING NAILERS
NAILS @ 12" O.C.



ENDWALL COLUMN BLOCKING

ENGINEERING SERVICES

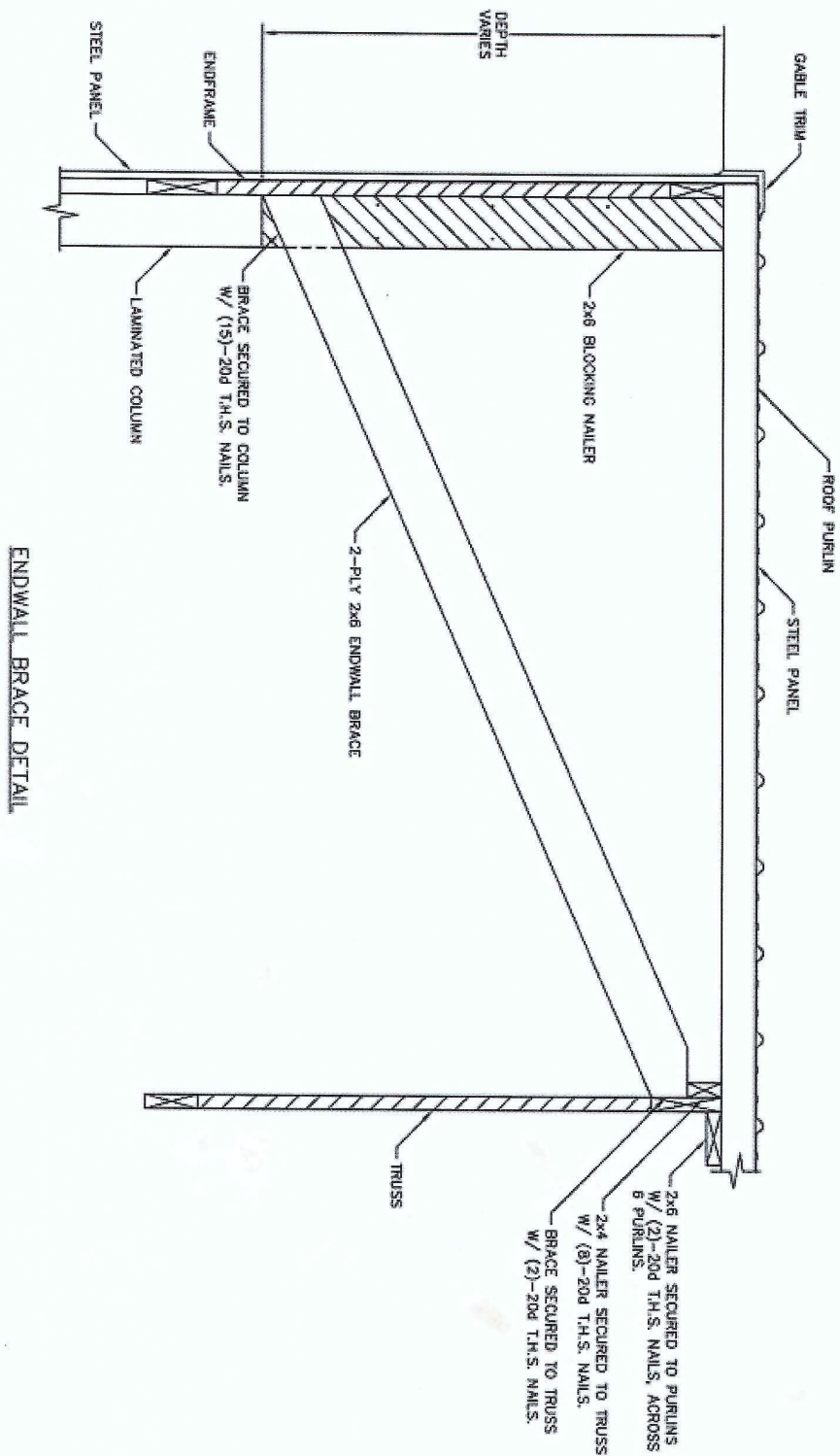
5541 STATE RD. 2ND FLOR. VT 05403 (254) 876-6999



ENDWALL COLUMN BLOCKING DETAIL

ENDWALL COLUMN BLOCKING DETAIL

MM ENGINEERING SERVICES
6511 KANIS RD. WAU CLAIR, WI 54180 (726) 876-0860



ENDWALL BRACE DETAIL

MME ENGINEERING SERVICES

5551 KALAM RD. 3RD. FL. CLARK, NJ 07066 (732) 876-8550