

CITY OF NAPOLEON GENERAL PERMIT APPLICATION

THIS APPLICATION IS FOR RESIDENTAL CONSTRUCTION INCLUDING BUILDING, ELECTRICAL,
PLUMBING, MECHANICAL & REMODELING

P-19-0277

DATE 8-25-16 JOB LOCATION 408 Fair St

OWNER David Graham TELEPHONE # 419-579-4210

OWNER ADDRESS 408 Fair St Napoleon OH

CONTRACTOR Nick Roseman Const LLC CELL PHONE # 419-261-5566

DESCRIPTION OF WORK TO BE PERFORMED Remove Kitchen Dining room wall.

ESTIMATED COMPLETION DATE 9-5-16 ESTIMATED COST \$4500

Affected Floor Area (AFA): In existing structures, it is the area affected by the improvement, i.e. a new wall dividing a room (the AFA would be only the room and not all the rooms).

DESCRIPTION	FEE	TOTAL COST
BUILDING:		
<i>Decks</i>	\$25.00	\$
<i>Addition & Alterations</i> Square foot in (AFA) _____ x \$0.05 = \$ _____ +	\$25.00 = \$	\$ <u>25⁰⁰</u>
<i>Garage and Shed over 200 SF (Detached)</i>	\$25.00	\$
<i>Siding and/or Roofing</i>	\$25.00	\$
<i>Windows/Doors</i>	\$25.00	\$
ELECTRICAL:		
<i>Electrical</i> Circuits in (AFA) _____ x \$3.00/Circuit = \$ _____ +	\$25.00 = \$	
<i>Electrical Service Upgrade</i>	\$25.00	\$
MECHANICAL:		
<i>Water Heater</i>	\$25.00	\$
<i>Furnace and/or AC Replacement</i>	\$25.00	\$
PLUMBING:		
<i>Plumbing</i> Traps in (AFA) _____ x \$3.00/Trap = \$ _____ +	\$25.00 = \$	
TOTAL plus Ohio Board of Building Standards Fee 1%		\$ <u>25</u>

TOTAL FEE: \$ 25²⁵

I FULLY UNDERSTAND THAT NO EXCAVATION, CONSTRUCTION OR STRUCTURAL ALTERATION, ELECTRICAL OR MECHANICAL INSTALLATION OR ALTERATION OF ANY BUILDING STRUCTURE, SIGN, OR PART THEREOF AND NO USE OF THE ABOVE SHALL BE UNDERTAKEN OR PERFORMED UNTIL THE PERMIT APPLIED FOR HEREIN HAS BEEN APPROVED AND ISSUED BY THE CITY OF NAPOLEON BUILDING/ZONING DEPARTMENT.

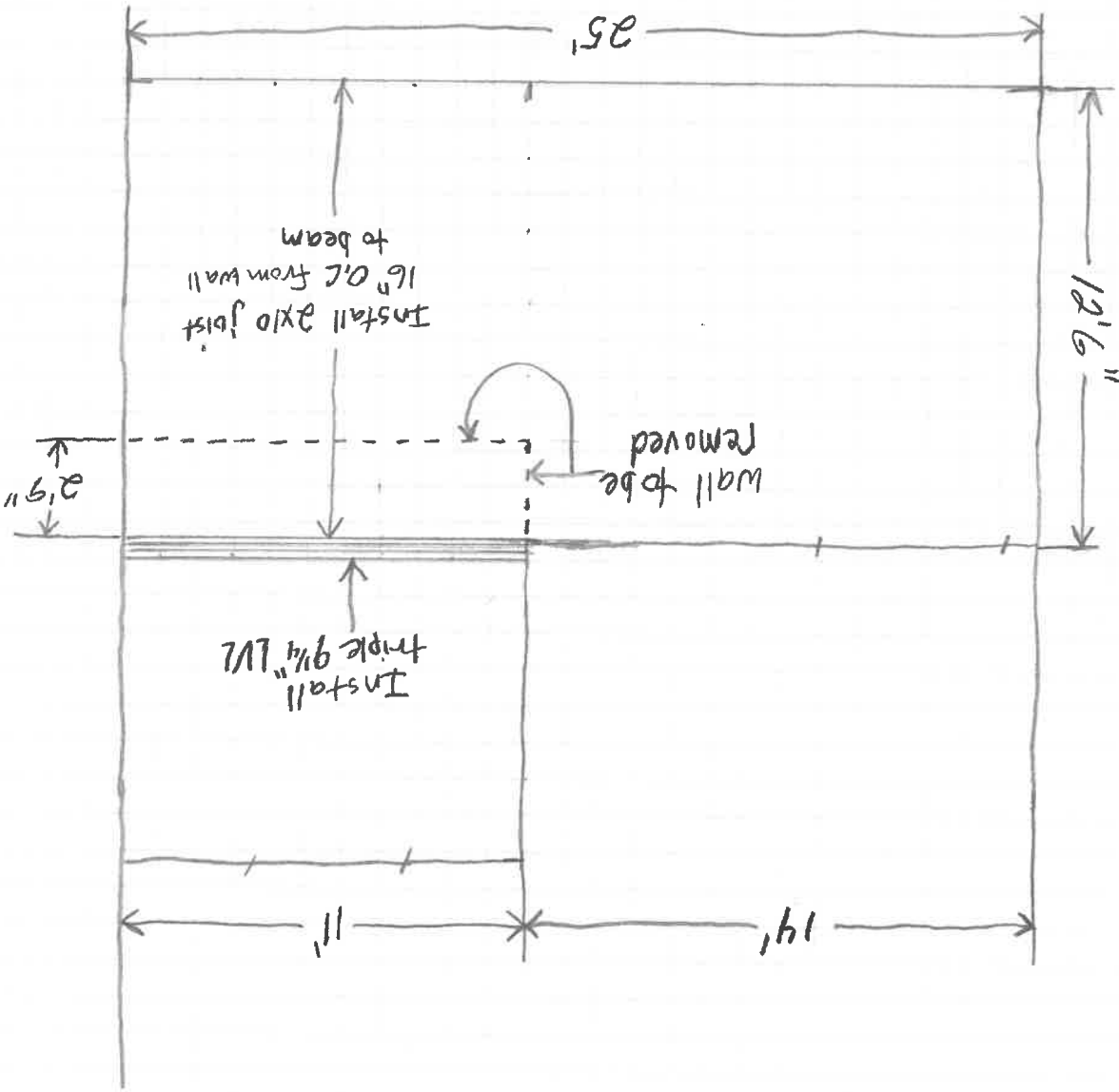
I hereby certify that I am the Owner of the named property, or that the proposed work is authorized by the Owner of record and that I have been authorized by the Owner to make this application as his/her authorized agent and I agree to conform to all applicable laws of the jurisdiction. In addition, if a permit for Work described in this application is issued, I certify that the code official or the code official's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.

I HEREBY ACKNOWLEDGE THAT I HAVE READ AND FULLY UNDERSTAND THE ABOVE LISTED INSTRUCTIONS.

SIGNATURE OF APPLICANT: Nick Roseman DATE: 8-25-16

PRINT NAME: Nick Roseman

PERMIT # _____ BATCH # 34992 CHECK # 2044 DATE 08-25-16



-Joist hanger joist to beam

Contractor
 Nick Roseman Const
 2740 Co Rd V
 Liberty Center, OH 43532
 419-261-5566

Job
 David Graham
 408 Fair St
 Napoleon OH

Client AFFILIATED

Shipping

Project Name: ROSEMAN

Job#:

Quantity 1 (3pcs.)

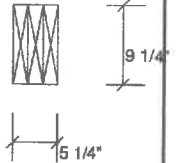
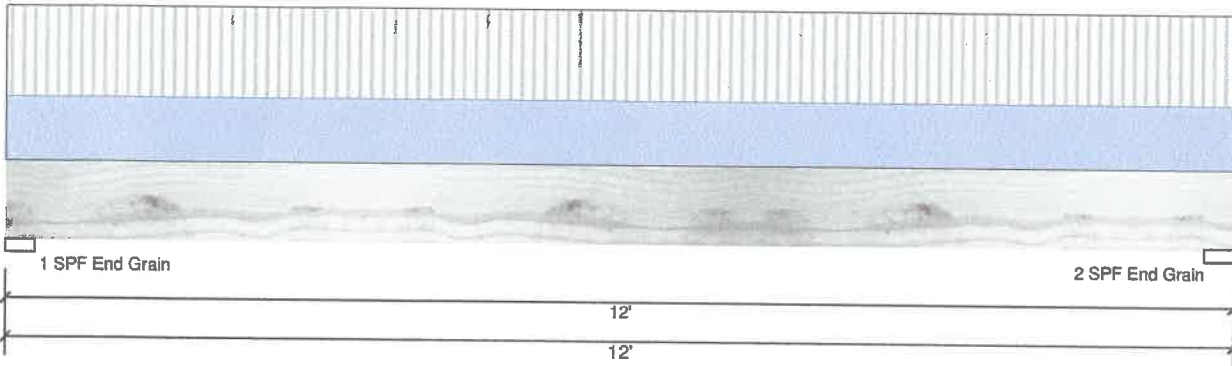
Description:

HEADER Murphy 2.0E-3100F LVL 1.750" X 9.250" 3-Ply - PASSED

8/23/2016 4:24 PM

Page 1 of 1

Designer: DERRICK ANDREWS



Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2012
Deflection LL:	360	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Reactions					
Brg	Live	Dead	Snow	Wind	Const
1	1440	1102	0	0	0
2	1440	1102	0	0	0

Analysis	Actual	Location	Allowed	Capacity	Load Comb.	Ld. Case
Moment	7063 ft-lb	6'	21079 ft-lb	0.335 (34%)	D+L	L
Unbraced	7063 ft-lb	6'	20786 ft-lb	0.340 (34%)	D+L	L
Shear	2121 lb	11'	9389 lb	0.226 (23%)	D+L	L
LL Defl inch	0.138 (L/1001)	6'	0.385 (L/360)	0.360 (36%)	L	L
TL Defl inch	0.245 (L/566)	6'	0.577 (L/240)	0.420 (42%)	D+L	L

Bearings							
Bearing	Input Length	In Analysis	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	1.500"	43%	1102 / 1440	2542	L	D+L
2 - SPF End Grain	3.500"	1.500"	43%	1102 / 1440	2542	L	D+L

Design OK.
 Design Notes
 1 Girders are designed to be supported on the bottom edge only.
 2 Multiple plies must be fastened together as per manufacturer's details.
 3 Top loads must be supported equally by all plies.
 4 Top unbraced.
 5 Bottom unbraced.

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	170 PLF	240 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				14 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.

Handling & Installation

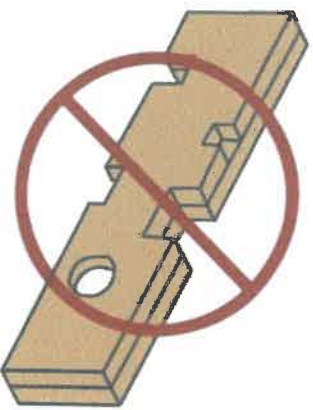
- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- Provide lateral support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

Lumber

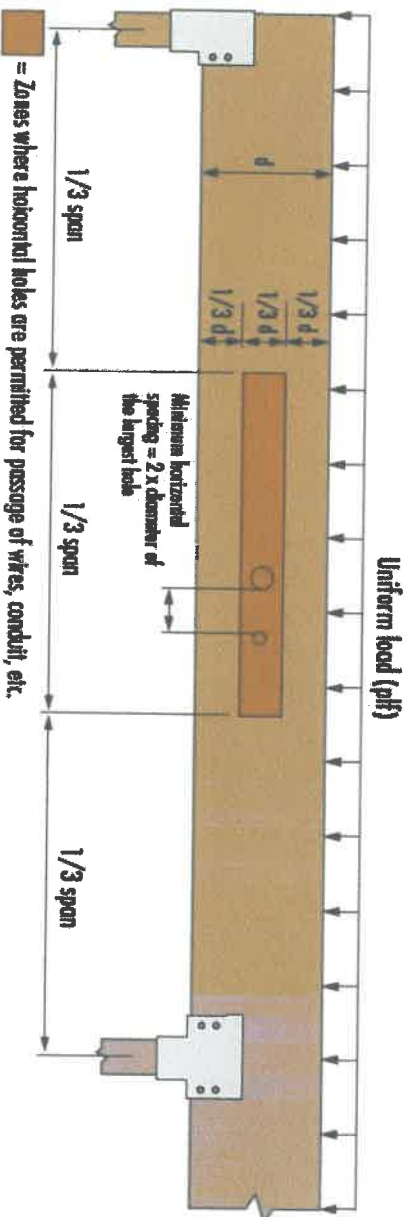
- Dry service conditions, unless noted otherwise
- LVL not to be treated with fire retardant or corrosive chemicals

TRI-STATE FOREST PRODUCTS, INC.
 13010 ECKEL JUNCTION RD, OH
 43551
 1-866-216-9025

Permissible Hole Locations



Do not notch, drill or cut LVL except as noted in this guide.



1. For beam depth of $3\frac{1}{2}$ " , $5\frac{1}{2}$ " and $7\frac{1}{4}$ " , the maximum hole diameter is $\frac{3}{4}$ " , $1\frac{1}{8}$ " and $1\frac{1}{2}$ " , respectively. For deeper beams, the maximum diameter is 2" .
2. The maximum number of holes for each span is limited to 3.
3. Holes should not be cut in cantilevers.

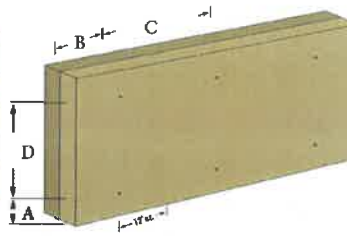
Fastening Requirements

2.0E ES LVL Top-Loaded Definition

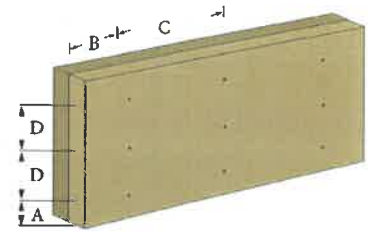
For required multiple-ply member fastening, only conditions where the loading is applied evenly across the top of all plies shall be considered "top-loaded." All other conditions must be fastened using the side-loaded recommendations on page 17. All top-loaded multiple-ply LVL members must meet the minimum fastener requirements and required fastener spacing shown above.

Clearances for Multiple-Ply Members

Fastener	A		B		C		D
	Min.	Min.	Max.	Min.	Max.	Min.	
10d & 16d Nails	2"	2"	6"	4"	12"	3"	
Bolts & Screws	2"	4"	12"	4"	24"	3"	



2 rows "ES" (offset on backside)



3 rows "ES" (offset on backside)

General Notes:

1. Confirm the adequacy of the beam (depth and thickness) for carrying the designated load.
2. Stress level for nail, bolt and screw values is 100%. Increases of 15% for snow loaded roof conditions or 25% for non-snow roof conditions are permitted.
3. Top and bottom rows of fasteners should be as shown in the fastener clearances detail. For staggered fastening patterns, the maximum end distance applies to all rows.
4. All fasteners must have the length fully embedded, but must not be over-driven, countersunk, or over-tightened.
5. Bolt holes are to be 1/32" to 1/16" diameter larger than the bolts. Bolts must meet or exceed ASTM A 307 or SAE J42" Grades 1 or 2. Every bolt must extend through the full thickness of the member. Use washers not less than a standard cut washer under the head and nut meeting ANSI B18.22.1.
6. 7" wide beams should only be side-loaded when loads are applied to both sides, when the lesser side load plf is at least 25% of the opposite side, or when the beam is otherwise restrained to minimize rotation.
7. For beam depths < 7 1/4", the maximum beam thickness must not exceed the beam depth and all fasteners must be staggered up to one-half the required o.c. spacing. For depths ≥ 7 1/4", the maximum beam thickness is 7".
8. Fastening recommendations are based on the 2005 & 2012 National Design Specification for Wood Construction (NDS) or fastener manufacturer's design information.
9. SDS structural screws are produced by Simpson Strong-Tie Company, Inc., WS structural screws are produced by United Steel Products Company, and TrussLok structural screws are produced by FastenMaster-OMG, Inc. Structural screws must be installed per manufacturer's recommendations.

Minimum Fastening Requirements for Top- and Side-Loaded Members		3 1/2" Wide	5 1/4" Wide		7" Wide		
Fastener Type	LVL Depth	2-ply, 1 1/4"	3-ply, 1 1/4"	1 1/4" + 3 1/2"	4-ply, 1 1/4"	2-ply, 1 1/4" + 3 1/2"	2-ply, 3 1/2"
10d (0.128" x 3") Nails	7 1/4" ≤ d < 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
	d ≥ 14"	4 rows @ 12" o.c.	4 rows @ 12" o.c. (ES)	4 rows @ 12" o.c.	-	4 rows @ 12" o.c. (ES)	-
16d (0.162" x 3 1/2") Nails	7 1/4" ≤ d < 14"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (ES)	2 rows @ 12" o.c.	-	2 rows @ 12" o.c. (ES)	-
	d ≥ 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
1/2" Through Bolts	d ≥ 7 1/4"	2 rows @ 24" o.c.		2 rows @ 24" o.c.		2 rows @ 24" o.c.	
SDS 1/4" x 3 1/2", WS35 3% TrussLok		2 rows @ 24" o.c.	2 rows @ 24" o.c. (ES)	2 rows @ 24" o.c.	-	2 rows @ 24" o.c. (ES)	-
SDS 1/4" x 6", WS6		-	-	-	2 rows @ 24" o.c. (ES)		
5" TrussLok		-	2 rows @ 24" o.c.		-		
6 3/4" TrussLok		-	-		2 rows @ 24" o.c.		

NOTES:

1. All fasteners must meet the minimum requirements in the table above. Side-loaded multiple-ply members must meet the minimum fastening and side-loading capacity requirements given on page 17.
2. Minimum fastening requirements for depths less than 7 1/4" require special consideration. Please contact a Gorilla Lam technical representative.
3. Three general rules for staggering or offsetting for a certain fastener schedule: (1) if staggering or offsetting is not referenced, then none is required; (2) if staggering is referenced, then fasteners installed in adjacent rows on the front side are to be staggered up to one-half the o.c. spacing, but maintaining the fastener clearances above; and (3) if "ES" is referenced, then the fastener schedule must be repeated on each side, with the fasteners on the back side offset up to one-half the o.c. spacing of the front side (whether or not it is staggered).