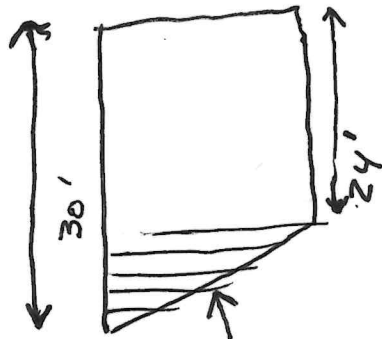
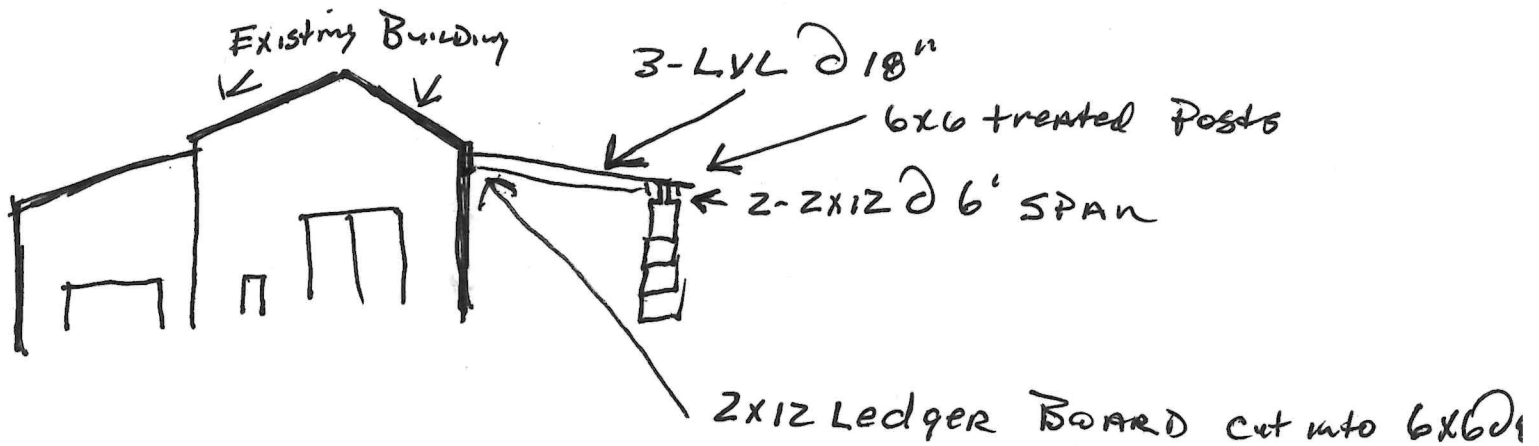


Pat Mollman
171 Charles St
Deadwood, SD

\$ 10,000⁰⁰ Value



31- 2 1/2 x 11 7/8 I Joist @ 12"

Bearing Plate (see Attached)

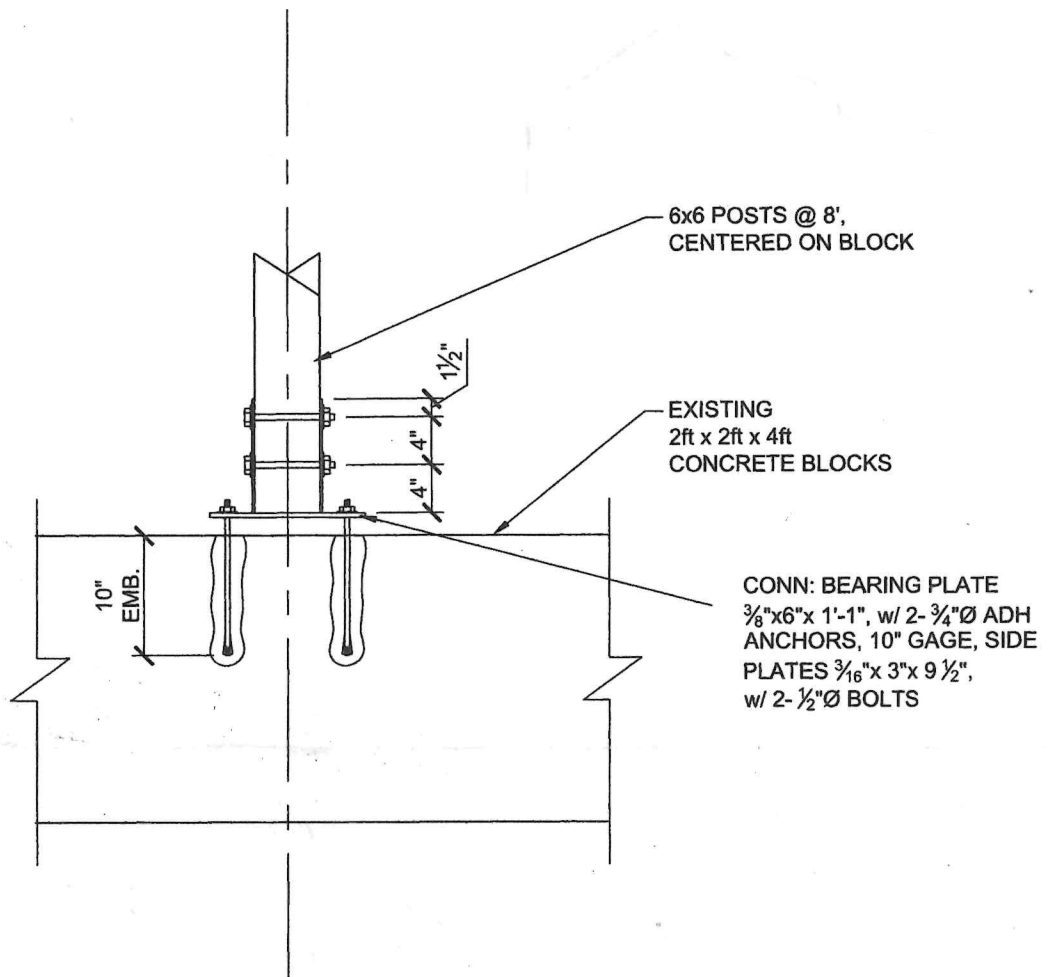
3 LVL @ 18" x 24' 1/2 x 4 x 8 Plywood over I Joist

Contractor:

Roofing Plus Construction

605 920 8372

RoofingPlusConstructionLLC@gmail.com



THIS DETAIL IS FOR PAT MOLLMAN
TO FASTEN EXISTING RETAINING WALL
BLOCKS / POST BEARING TO THE NEW
COVERED OVERHANG CONNECTED
TO HIS GARAGE.

Drawn By LLR
Checked By LLR
Date 10/14/22
LE # MOLLMAN
Cad File TWOOD

PAT MOLLMAN
171 ST. CHARLES ST
DEADWOOD, SD 57754

LANCE
ENGINEERING
LANCE ENGINEERING 605-642-3680
19751 ST. ONGE RD. ST. ONGE, SD 57783

SHEET#

S201

PRODUCT

GLOBAL LVL 1.9E-2850Fb

ALLOWABLE STRESS DESIGN (ASD)

molim an

FLOOR (C_p=1.0) - BEAM SPAN TABLES (feet)

| Loads (psf) | Tributary width A/2 (feet) | 5½" | | 7½" | | 9" | | 9½" | | 11½" | | 11¾" | | 14" | | 16" | | 18" | | 20" | | 22" | | 24" | |
|----------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply | 2 ply | 3 ply |
| LL=10 DL=30 | 8 | 8.15 | 9.37 | 10.75 | 12.35 | 13.71 | 15.76 | 14.08 | 16.19 | 16.68 | 19.17 | 17.61 | 20.23 | 20.76 | 23.86 | 23.73 | 27.26 | 26.69 | 30.67 | 29.65 | 34.07 | 32.63 | 37.48 | 35.59 | 40.89 |
| | 10 | 7.55 | 8.68 | 9.95 | 11.44 | 12.70 | 14.60 | 13.04 | 15.00 | 15.44 | 17.76 | 16.30 | 18.74 | 19.22 | 22.10 | 21.97 | 25.26 | 24.71 | 28.41 | 27.46 | 31.57 | 30.21 | 34.73 | 32.96 | 37.88 |
| | 12 | 7.09 | 8.15 | 9.34 | 10.75 | 11.92 | 13.71 | 12.24 | 14.08 | 14.50 | 16.68 | 15.31 | 17.61 | 18.04 | 20.76 | 20.62 | 23.73 | 23.20 | 26.69 | 25.78 | 29.65 | 28.36 | 32.62 | 30.94 | 35.58 |
| | 14 | 6.72 | 7.73 | 8.85 | 10.19 | 11.30 | 13.01 | 11.60 | 13.36 | 13.74 | 15.82 | 14.50 | 16.70 | 17.11 | 19.68 | 19.54 | 22.50 | 21.99 | 25.31 | 24.43 | 28.12 | 26.88 | 30.93 | 29.32 | 33.74 |
| | 16 | 6.41 | 7.38 | 8.45 | 9.73 | 10.78 | 12.42 | 11.07 | 12.75 | 13.11 | 15.10 | 13.84 | 15.94 | 16.32 | 18.80 | 18.65 | 21.48 | 20.99 | 24.17 | 23.31 | 26.85 | 25.65 | 29.54 | 27.99 | 32.22 |
| | 18 | 6.15 | 7.09 | 8.11 | 9.34 | 10.34 | 11.92 | 10.62 | 12.24 | 12.58 | 14.50 | 13.28 | 15.31 | 15.66 | 18.04 | 17.90 | 20.62 | 20.14 | 23.20 | 22.37 | 25.78 | 24.61 | 28.35 | 26.85 | 30.93 |
| 20 | 5.92 | 6.83 | 7.81 | 9.01 | 9.97 | 11.49 | 10.24 | 11.80 | 12.12 | 13.98 | 12.80 | 14.75 | 15.09 | 17.40 | 17.25 | 19.88 | 19.40 | 22.37 | 21.55 | 24.85 | 23.72 | 27.33 | 25.87 | 29.82 | |
| LL=15 DL=30 | 8 | 8.15 | 9.37 | 10.75 | 12.35 | 13.71 | 15.76 | 14.08 | 16.19 | 16.68 | 19.16 | 17.61 | 20.23 | 20.76 | 23.85 | 23.73 | 27.26 | 26.69 | 30.67 | 29.65 | 34.07 | 32.63 | 37.48 | 35.59 | 40.89 |
| | 10 | 7.55 | 8.68 | 9.95 | 11.44 | 12.70 | 14.60 | 13.04 | 15.00 | 15.44 | 17.76 | 16.30 | 18.74 | 19.22 | 22.10 | 21.97 | 25.26 | 24.71 | 28.41 | 27.46 | 31.57 | 30.21 | 34.73 | 32.96 | 37.88 |
| | 12 | 7.09 | 8.15 | 9.34 | 10.75 | 11.92 | 13.71 | 12.24 | 14.08 | 14.50 | 16.68 | 15.31 | 17.61 | 18.04 | 20.76 | 20.62 | 23.73 | 23.20 | 26.69 | 25.78 | 29.65 | 28.36 | 32.62 | 30.94 | 35.58 |
| | 14 | 6.72 | 7.73 | 8.85 | 10.19 | 11.30 | 13.01 | 11.60 | 13.36 | 13.74 | 15.82 | 14.50 | 16.70 | 17.11 | 19.68 | 19.54 | 22.50 | 21.99 | 25.31 | 24.43 | 28.12 | 26.88 | 30.93 | 29.19 | 33.74 |
| | 16 | 6.41 | 7.38 | 8.45 | 9.73 | 10.78 | 12.42 | 11.07 | 12.75 | 13.11 | 15.10 | 13.84 | 15.94 | 16.32 | 18.80 | 18.65 | 21.48 | 20.99 | 24.17 | 23.27 | 26.85 | 25.30 | 29.54 | 27.30 | 32.22 |
| | 18 | 6.15 | 7.09 | 8.11 | 9.34 | 10.34 | 11.92 | 10.62 | 12.24 | 12.58 | 14.50 | 13.28 | 15.31 | 15.66 | 18.04 | 17.90 | 20.62 | 20.01 | 23.20 | 21.94 | 25.78 | 23.85 | 28.35 | 25.74 | 30.93 |
| 20 | 5.92 | 6.83 | 7.81 | 9.01 | 9.97 | 11.49 | 10.24 | 11.80 | 12.12 | 13.98 | 12.80 | 14.75 | 15.09 | 17.40 | 17.12 | 19.88 | 19.88 | 22.37 | 20.82 | 24.85 | 22.63 | 27.33 | 24.42 | 29.82 | |
| LL=10 DL=40 | 8 | 7.38 | 8.49 | 9.73 | 11.19 | 12.42 | 14.28 | 12.75 | 14.66 | 15.10 | 17.37 | 15.94 | 18.33 | 18.80 | 21.62 | 21.48 | 24.71 | 24.17 | 27.79 | 26.85 | 30.88 | 29.54 | 33.97 | 32.23 | 37.05 |
| | 10 | 6.83 | 7.86 | 9.01 | 10.36 | 11.49 | 13.23 | 11.80 | 13.58 | 13.98 | 16.08 | 14.75 | 16.98 | 17.40 | 20.02 | 19.88 | 22.88 | 22.36 | 25.74 | 24.85 | 28.60 | 27.34 | 31.46 | 29.83 | 34.32 |
| | 12 | 6.41 | 7.38 | 8.45 | 9.73 | 10.78 | 12.42 | 11.07 | 12.75 | 13.11 | 15.10 | 13.84 | 15.94 | 16.32 | 18.80 | 18.65 | 21.48 | 20.99 | 24.17 | 23.31 | 26.85 | 25.65 | 29.54 | 27.99 | 32.22 |
| | 14 | 6.07 | 7.00 | 8.00 | 9.23 | 10.21 | 11.77 | 10.49 | 12.09 | 12.42 | 14.32 | 13.11 | 15.11 | 15.46 | 17.82 | 17.67 | 20.36 | 19.88 | 22.91 | 22.09 | 25.45 | 24.30 | 28.00 | 26.51 | 30.54 |
| | 16 | 5.79 | 6.68 | 7.64 | 8.81 | 9.74 | 11.24 | 10.01 | 11.54 | 11.85 | 13.67 | 12.51 | 14.42 | 14.75 | 17.01 | 16.86 | 19.44 | 18.96 | 21.87 | 21.07 | 24.29 | 23.18 | 26.72 | 25.29 | 29.15 |
| | 18 | 5.55 | 6.41 | 7.32 | 8.45 | 9.34 | 10.78 | 9.60 | 11.07 | 11.37 | 13.11 | 12.00 | 13.84 | 14.14 | 16.32 | 16.17 | 18.65 | 18.10 | 20.99 | 20.21 | 23.31 | 22.23 | 25.65 | 24.25 | 27.98 |
| 20 | 5.35 | 6.18 | 7.05 | 8.14 | 9.00 | 10.39 | 9.25 | 10.67 | 10.95 | 12.64 | 11.65 | 13.34 | 13.62 | 15.73 | 15.57 | 17.98 | 17.92 | 20.22 | 19.46 | 22.47 | 21.41 | 24.71 | 23.16 | 26.96 | |
| LL=15 DL=40 | 8 | 7.38 | 8.49 | 9.73 | 11.19 | 12.42 | 14.28 | 12.75 | 14.66 | 15.10 | 17.37 | 15.94 | 18.33 | 18.80 | 21.62 | 21.48 | 24.71 | 24.17 | 27.79 | 26.85 | 30.88 | 29.54 | 33.97 | 32.23 | 37.05 |
| | 10 | 6.83 | 7.86 | 9.01 | 10.36 | 11.49 | 13.23 | 11.80 | 13.58 | 13.98 | 16.08 | 14.75 | 16.98 | 17.40 | 20.02 | 19.88 | 22.88 | 22.36 | 25.74 | 24.85 | 28.60 | 27.34 | 31.46 | 29.83 | 34.32 |
| | 12 | 6.41 | 7.38 | 8.45 | 9.73 | 10.78 | 12.42 | 11.07 | 12.75 | 13.11 | 15.10 | 13.84 | 15.94 | 16.32 | 18.80 | 18.65 | 21.48 | 20.99 | 24.17 | 23.31 | 26.85 | 25.65 | 29.54 | 27.99 | 32.22 |
| | 14 | 6.07 | 7.00 | 8.00 | 9.23 | 10.21 | 11.77 | 10.49 | 12.09 | 12.42 | 14.32 | 13.11 | 15.11 | 15.46 | 17.82 | 17.67 | 20.36 | 19.88 | 22.91 | 22.09 | 25.45 | 24.30 | 28.00 | 26.40 | 30.54 |
| | 16 | 5.79 | 6.68 | 7.64 | 8.81 | 9.74 | 11.24 | 10.01 | 11.54 | 11.85 | 13.67 | 12.61 | 14.42 | 14.75 | 17.01 | 16.86 | 19.44 | 18.96 | 21.87 | 21.05 | 24.29 | 22.88 | 26.72 | 24.69 | 29.15 |
| | 18 | 5.55 | 6.41 | 7.32 | 8.45 | 9.34 | 10.78 | 9.60 | 11.07 | 11.37 | 13.11 | 12.00 | 13.84 | 14.14 | 16.32 | 16.17 | 18.65 | 18.10 | 20.99 | 19.85 | 23.31 | 21.57 | 25.65 | 23.28 | 27.98 |
| 20 | 5.35 | 6.18 | 7.05 | 8.14 | 9.00 | 10.39 | 9.25 | 10.67 | 10.95 | 12.64 | 11.65 | 13.34 | 13.62 | 15.73 | 15.49 | 17.98 | 17.17 | 20.22 | 18.83 | 22.47 | 20.47 | 24.71 | 22.09 | 26.96 | |

MINIMUM BEARING REQUIREMENTS:
3" BEARING AT BOTH ENDS AND 7½" AT INTERMEDIATE

SHADED AREAS:
4½" BEARING AT BOTH ENDS AND 11½" BEARING AT INTERMEDIATE
6" BEARING AT BOTH ENDS AND 15" BEARING AT INTERMEDIATE
7½" BEARING AT BOTH ENDS AND 18½" BEARING AT INTERMEDIATE

NOTES

1- TABLE ASSUME UNIFORM LOADS AND SINGLE FLOOR JOIST SPANS. WHEN THE FLOOR JOISTS ARE CONTINUOUS OVER THE BEAM, MULTIPLY TRIBUTARY WIDTH BY 1.25 AND ALWAYS SELECT THE NEXT HIGHER TRIBUTARY WIDTH:

EXAMPLE: TRIBUTARY WIDTH OF 12' MULTIPLIED BY 1.25 = 15'.
IN TABLES, USE 16' FOR TRIBUTARY WIDTH;

- LATERAL RESTRAINT IS REQUIRED ALONG COMPRESSION EDGE OF BEAM AT INTERVALS OF 24" OR CLOSER;
- LATERAL SUPPORT IS REQUIRED AT BEARING POINT TO PREVENT ROTATION OR LATERAL DISPLACEMENT;
- MAXIMUM SPANS SHOWN ARE MEASURED CENTRE-TO-CENTRE BETWEEN SUPPORTS;
- DEFLECTION LIMITATIONS: L/360 FOR LIVE LOAD AND L/240 FOR TOTAL LOAD;
- CONTACT LVL GLOBAL INC. TECHNICAL DEPARTMENT FOR OTHER APPLICATIONS AND SIZES.

