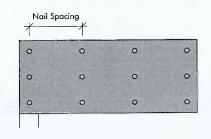
3

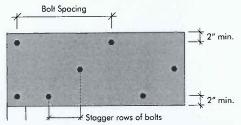
MULTIPLE-PLY CP-LAM BEAM ASSEMBLY



COMBINATIONS OF 13/4" AND 31/2" PLIES

CONDITION D CONDITION E CONDITION C CONDITION B CONDITION A a de la companya de 2" 2 pieces 31/2" 2 pieces 13/4" 4 pieces 13/4" 1 piece 13/4" 3 pieces 13/4" 2 pieces 13/4" 1 piece 31/2" 1 piece 31/2"





MAXIMUM UNIFORM SIDE LOAD (PLF) 2.0E CP-LAM

| Pieces in Member | 3½" x 0.131" Nails | | 16d Common Nails | | ½" Bolts | | |
|-------------------------------------|------------------------------|-----------------------|--------------------|-----------------------|--------------------|-----------------------|-----------------------|
| | 2 rows at 12" o.c. | 3 rows at 12" o.c. | 2 rows at 12" o.c. | 3 rows at 12" o.c. | 2 rows at 24" o.c. | 2 rows at 12" o.c. | 3 rows at 12" o.c. |
| Condition A (2 - 1¾") | 390 | 585 | 505 | 760 | 510 | 1015 | 1520 |
| Condition B (3 - 134") | 290 | 435 | 380 | 570 | 380 | 760 | 1140 |
| Condition C (2 - 13/4" + 1 - 31/2") | 260 | 390 | 340 | 505 | 465 | 930 | 1395 |
| Condition D (4 – 1¾") | use bolts for this condition | | | | 340 | 680 | 1015 |
| Condition E (2 - 31/2") | use bolts for this condition | | | | 860 | 1720 | 2580 |

Notes:

- 1. Minimum fastener schedule for smaller side loads and top-loaded CP-LAM beams:
 - Conditions A, B & C, beams 12" deep or less: 2 rows 3½" x 0.131" at 12" o.c. Conditions A, B & C, beams deeper than 12":

 - 3 rows 31/2" x 0.131" at 12" o.c. Conditions D & E, all beam depths:
 - 2 rows 1/2" bolts at 24" o.c.
- 2. The table values for nails may be doubled for 6" o.c. and tripled for 4" o.c. nail spacings.
- 3. The nail schedules shown apply to both sides of a three-ply CP-LAM beam.
- 4. The table values apply to common bolts that conform to ANSI/ASME Standard B18.2.1-1981. A washer not less than a standard cut washer shall be between the wood and the bolt head and between the wood and the nut. The distance from the edge of the CP-LAM beam to the bolt holes must be at least 2" for 1½" bolts. Bolt holes shall be the same diameter as the bolt.
- 5. 7" wide CP-LAM beams must be loaded from both sides and/or top
- 6. CP-LAM beams wider than 7" must be designed by the engineer of record.
- Load duration factors may be applied to the table values.

HOW TO USE THE MAXIMUM UNIFORM SIDE LOAD TABLE

EXAMPLE:

2.0E CP-LAM beam loaded from both sides and above THREE 1%'' PLIES (CONDITION B)

- Use allowable load tables or sizing software to size the CP-LAM beam to carry a total load of (300 + 610 + 550) = 1460 plf.
- 2. Refer to the 2.0E CP-LAM table for beam assembly requirements. Refer to the Condition B row in the table. Scan across the Condition B row from left to right for a table value greater than 550 plf, which is the greatest side load carried by the beam. The fourth value in the row indicates that 3 rows of 16d common nails at 12" o.c. will accommodate a side load of 570 plf which is greater than the 550 plf required. Use 3 rows of 16d common nails at 12" o.c., from both sides, to assemble the beam.

