

APRIL 1, 2025

## BEARING BLOCK DETAIL-SPF BLOCK

MII-BLCK5.5-SPF



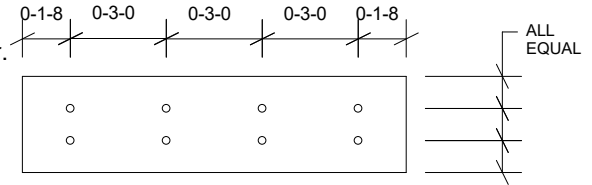
REFER TO INDIVIDUAL TRUSS DESIGN  
FOR PLATE SIZES AND LUMBER GRADES

MiTek USA, Inc.

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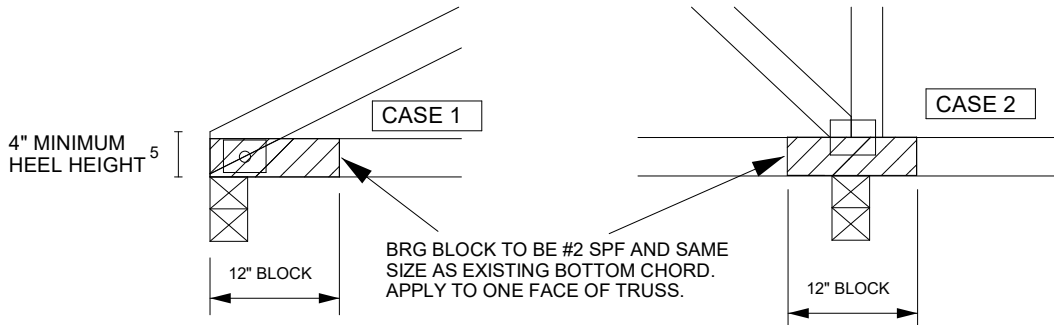
**IMPORTANT**

This detail to be used only with one ply trusses with a D.O.L. lumber increase of 1.15 or higher. Trusses not fitting these criteria should be examined individually.

**0-5-8 ACTUAL BEARING SIZE**

NAIL PATTERN FOR 2x4  
SIMILAR FOR 2x6 OR 2x8

| BOTTOM CHORD SIZE<br>AND<br>NAILING PATTERN              | LUMBER<br>SPECIE | ALLOWABLE<br>REACTION<br>(lb) <sup>1</sup><br>CASE 1 | ALLOWABLE<br>REACTION<br>(lb) <sup>4</sup><br>CASE 2 | ALLOWABLE<br>BLOCK<br>CAPACITY<br>(lb) | BEARING BLOCK & WOOD BEARING ALLOWABLE |                         |             |                         |
|----------------------------------------------------------|------------------|------------------------------------------------------|------------------------------------------------------|----------------------------------------|----------------------------------------|-------------------------|-------------|-------------------------|
|                                                          |                  |                                                      |                                                      |                                        | CASE 1 (lb)                            | CASE 1<br>(FT-IN-16THS) | CASE 2 (LB) | CASE 2<br>(FT-IN-16THS) |
| 2x4 BOTTOM CHORD<br>2 ROWS @ 3" O.C.<br>(8 TOTAL NAILS)  | SP               | 4661                                                 | 5127                                                 | 847                                    | 5508                                   | 0-6-8                   | 5974        | 0-7-1                   |
|                                                          | DF               | 5156                                                 | 5672                                                 | 818                                    | 5974                                   | 0-6-6                   | 6490        | 0-6-15                  |
|                                                          | HF               | 3341                                                 | 3675                                                 | 767                                    | 4108                                   | 0-6-12                  | 4442        | 0-7-5                   |
|                                                          | SPF              | 3506                                                 | 3857                                                 | 758                                    | 4265                                   | 0-6-11                  | 4615        | 0-7-4                   |
| 2x6 BOTTOM CHORD<br>3 ROWS @ 3" O.C.<br>(12 TOTAL NAILS) | SP               | 4661                                                 | 5127                                                 | 1270                                   | 5932                                   | 0-7-0                   | 6398        | 0-7-9                   |
|                                                          | DF               | 5156                                                 | 5672                                                 | 1226                                   | 6383                                   | 0-6-13                  | 6898        | 0-7-6                   |
|                                                          | HF               | 3341                                                 | 3675                                                 | 1150                                   | 4491                                   | 0-7-6                   | 4825        | 0-7-15                  |
|                                                          | SPF              | 3506                                                 | 3857                                                 | 1138                                   | 4644                                   | 0-7-5                   | 4994        | 0-7-13                  |
| 2x8 BOTTOM CHORD<br>4 ROWS @ 3" O.C.<br>(16 TOTAL NAILS) | SP               | 4661                                                 | 5127                                                 | 1694                                   | 6355                                   | 0-7-8                   | 6821        | 0-8-1                   |
|                                                          | DF               | 5156                                                 | 5672                                                 | 1635                                   | 6792                                   | 0-7-4                   | 7307        | 0-7-13                  |
|                                                          | HF               | 3341                                                 | 3675                                                 | 1533                                   | 4874                                   | 0-8-0                   | 5209        | 0-8-9                   |
|                                                          | SPF              | 3506                                                 | 3857                                                 | 1517                                   | 5023                                   | 0-7-14                  | 5374        | 0-8-7                   |

**NOTES:**

1. USE LOWER  $F_c$  perpendicular value OF TOP PLATE OR TRUSS WOOD SPECIES.
2. USE 1.5" END DISTANCE AND SPACE ROWS OF NAILS EQUALLY WITHIN THE DEPTH OF THE BLOCK, SEE DETAIL ABOVE .
3. NAILS DESIGNATED ARE 10d (0.131" X 3")
4. BEARING FACTOR OF 1.1 APPLIED, SEE CASE 2 DETAIL, END OF BLOCK MORE THAN 3" FROM THE END OF THE CHORD MEMBER.
5. BEARING BLOCK SHALL NOT BE CLIPPED FOR DETAIL TO BE VALID.
6. JOINT SPLICE PERMITTED IN A CASE 2 CONDITION

LOADS BASED ON FOLLOWING  $F_c$  PERPENDICULAR VALUES:

SP = 565 psi  
DF = 625 psi  
HF = 405 psi  
SPF = 425 psi

NOTE: VALUES DO NOT INCLUDE MSR LUMBER WITH "E" VALUES GREATER THAN 1,900,000 PSI OR NON-DENSE GRADE LUMBER.