

DESIGN OF BACKER BLOCKING FOR MITEK CONNECTORS AND TRUSSES

Backer Blocking Guidelines

- Used when the supporting member's thickness is less than the length of the specified fastener.
- This document provides guidance on nail/screw quantities and minimum spacing distances when a backer block is used.

Materials and Dimensions

- Backer blocking must be of the same species as the main member.
- The height of the backer blocking should be equal to or greater than the height of the hanger.
- When spanning multiple hanger locations, the splice should be centered between the two connections.

Load Considerations

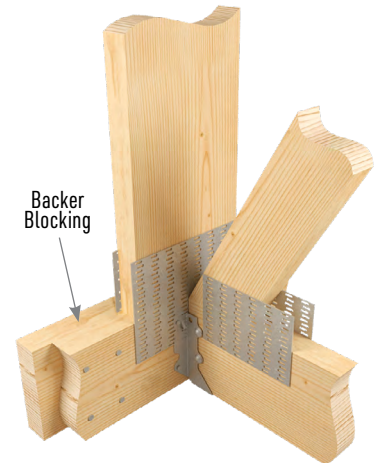
- The allowable load is reduced by 15% for hangers using 16d common (0.162" x 3.5") nails with a backer block.

Fastening Guidelines

- For hangers installed with nails:
 - Use a minimum of (8) - 10d common (0.148" x 3") nails to attach backer block.
- For hangers installed with MiTek Wood Screws (WS):
 - Attach backer block with one WS3 screw for every two WS screws used for the hanger.

Installation Notes

- Backer block fasteners can be installed from either face, split evenly between each side of the connection.
- Ensure the backer blocking length is sufficient to meet the minimum distance requirements as specified. (See Below)



Nail Backer Block Distances

End Distance: 15 x Diameter (D)

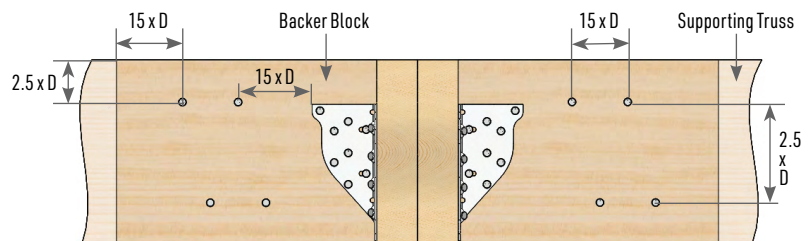
Edge Distance: 2.5 x D

Spacing Between fasteners in a Row: 15 x D

Spacing Between staggered rows: 2.5 x D

Nail spacing per 2018 NDS

Note: Dimensions on the figure are minimums and may not be to scale



Screw Backer Block Distances

End Distance: 2-1/2"

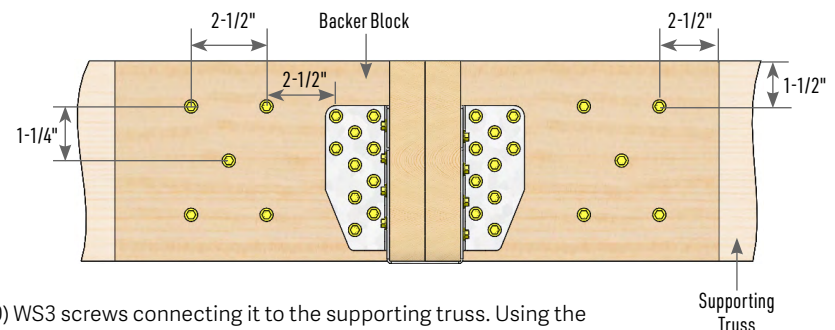
Edge Distance: 1-1/2"

Spacing Between fasteners in a Row: 3"

Spacing Between staggered rows: 1-1/4"

Spacing per ICC-ESR #2761

Note: Dimensions on the figure are minimums and may not be to scale



Example: The THDHQ28-2 shown above has (20) WS3 screws connecting it to the supporting truss. Using the instructions detailed above, (10) WS3 screws must be attached from the supported truss to the backer block to be in compliance with the instructions above to support the applied allowable load of the THDHQ28-2.

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