EASTERN WHITE PINE
FROM THE USA
INTRODUCTION

NELMA:

GRADING RULES:
The *Standard Grading Rules for Northeastern Lumber*, developed and published by NELMA, define the limiting characteristics (knots, holes, splits, etc.) allowed in each grade of Eastern White Pine lumber. While the rules describe the poorest piece permitted within a grade, it is unlikely the maximum size or number of these characteristics would be present in any single board.

EASTERN WHITE PINE:
Eastern White Pine (*pinus strobus*) is grown throughout the Northeastern region of the U.S. and manufactured in a wide range of grades and sizes. Favored for its desirable characteristics and manufacturing qualities, it has a fine grain and uniform texture, shapes easily for patterns and profiles, stays true to form, and holds finishes very well. This species is a favorite for siding, paneling, wainscoting, furniture, millwork, moulding, and a variety of trim. For centuries, Eastern White Pine has been the mainstay in quality construction and fine woodworking.

ABOUT THIS PUBLICATION:
The following pages provide a visual expectation of the range of characteristics that may found within each of the five primary lumber grades of Eastern White Pine, plus a summary of the grade rule itself. A photo gallery of Eastern White Pine in a variety of uses is also provided for your viewing pleasure.

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ADDITIONAL INFORMATION:
The complete rule for each grade may be viewed and downloaded from the Association website, [www.nelma.org](http://www.nelma.org). In addition, the website offers a photo library that showcases Eastern White Pine’s versatility in a wide variety of end-use applications.
NELMA GRADE:

D & BETTER SELECT

D & Better Select is a combination of the top two Eastern White Pine grades, C Select and D Select. Material of this high-quality grade combination is used for natural or stained finish applications, fine woodworking, or interior trim. Although the reverse face of D Select shall permit sound characteristics typical of Standard grade material, C Select shall only permit the characteristics of D Select on the back.

D Select, which is the lower of the two grades, allows pin knots (maximum size is approximately 13 mm) and limits the total number of pin knots to one knot per surface foot. Checks and shake are barely perceptible. The occasional pocket is very small. A split will not exceed 1/3 the width. Pitch, when present, is evident, but limited by surface area of the piece. Medium stain (blue or coffee) cannot exceed 1/4 of the face surface area in a clear board, and less if present with other limiting characteristics. A larger surface area is allowable if the stain is light. Skip is permissible on the back face or one edge of 20% of the pieces. Wane is limited to the back face. Occasional pieces may require a cut to yield all useable lumber for finish work (loss not to exceed approximately 5%). Characteristics in C Select are no larger and less numerous than those same characteristics in D Select.

Refer to the NELMA Standard Grading Rules for Northeastern Lumber booklet for complete detailed information on all Eastern White Pine lumber grades.
NELMA GRADE: FINISH

Finish grade material is a fine appearance, knotty grade calling for sound, tight knots that can be finished to take advantage of the natural characteristics of the piece or to give a fine smooth painted surface. The reverse face of Finish shall permit sound characteristics typical of Standard grade material.

This grade allows small, sound and tight knots ranging from 32 mm red knots and 16 mm black knots on a 89 mm board to 58 mm red knots and 22 mm black knots on a 286 mm or wider board. Knot holes in the face are not allowed. Checks will be no longer than 102 mm. Pockets are very small and well scattered. Shake is light. A split will not exceed 1⁄2 the width. Pitch, when present, is evident but limited in its impact on the appearance of the piece. Medium stain (blue or coffee) cannot exceed 1⁄2 the face surface area. Wane is limited to the back face on one edge only. Skip (back face or one edge) is limited to 10% of the pieces.

Refer to the NELMA Standard Grading Rules for Northeastern Lumber booklet for complete detailed information on all Eastern White Pine lumber grades.
NELMA GRADE: PREMIUM

Premium grade is a good appearance knotty grade used in the same applications as Finish where larger and more numerous characteristics are desired. The reverse face of Premium shall permit sound characteristics typical of Standard grade material.

This grade allows generally sound and tight knots ranging from 51 mm red knots and 19 mm black knots on a 89 mm board to 95 mm red knots and 38 mm black knots on a 286 mm or wider board. Black knots of maximum size are limited to one in pieces 183 mm through 274 mm and two in 305 mm and longer or equivalent smaller. A 286 mm board allows one knot hole up to 25 mm in diameter and proportionately smaller knot holes for narrower widths. Checks will be no longer than 254 mm. Pockets are small but well scattered. Shake is light. Splits will not exceed the width of the board. When present, pitch is slightly more evident in this grade than in the Finish grade. Medium stain (blue or coffee) is permissible full face. Wane is limited to the back face. Skip on the reverse face or one edge is allowed in not more than 20% of the pieces. Seams are permitted partially surrounding a red knot.

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NELMA GRADE:

STANDARD

Standard grade is highly serviceable and used in a wide variety of applications that take advantage of the full range of Eastern White Pine characteristics.

This grade allows for knots of any quality, in sizes ranging from 60 mm red knots and 44 mm black knots in a 89 mm board, to 152 mm red knots and 102 mm black knots in a 286 board. Knot holes must be no larger than \( \frac{1}{4} \) the width to a maximum of 51 mm. Holes smaller than the maximum size are allowed, however, within any 244 linear mm the total combined size of the smaller holes must not exceed the maximum size hole allowed. Checks may be \( \frac{1}{4} \) the length of the board (not to exceed 91 mm). Shake can be through, up to \( \frac{1}{3} \) the length of the board. Pockets are large. Splits can be twice the width of the board but cannot exceed \( \frac{1}{4} \) the length. Edge breaks are allowed. Pitch can be heavy. Allowed stain is heavy. Wane is limited to the back face. Skip is on the reverse face and can be on one edge and is limited to 20% of the pieces. Seams are up to \( \frac{1}{4} \) the length of the board. Unsound wood is combined from both faces; if advanced decay is at the maximum allowed of 10% (no more than 1% on the best face) no other decay is allowed on the piece. The grade also permits worm holes.

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NELMA GRADE:
INDUSTRIAL

Industrial grade is the lowest common board grade. It admits large characteristics in any combination as long as the piece is usable full length. This material is generally used in rough construction where strength and appearance are not of primary importance.

This grade allows large characteristics in any combination as long as the full length of the board is useable. Sound and unsound knots, shake, checks, pitch, pitch pockets, hit or miss dressing, pith, stain, warp, knot holes, bark and pitch, seams, wane, skip, and worm holes are allowable. Any characteristics which seriously weaken the piece for reasonable handling will not be permitted. The splits in this grade cannot exceed $\frac{1}{4}$ the length. Advanced decay is limited to no more than $\frac{1}{2}$ the surface area.

Refer to the NELMA Standard Grading Rules for Northeastern Lumber booklet for complete detailed information on all Eastern White Pine lumber grades.
Tongue-and-groove bead board in a bathroom.

Classic European exterior siding.
A rustic tradition of knotty pine on walls and ceiling of a dining room.

Fine crafted barrel ceiling.
Eastern white pine is an architect’s favorite species for warmth and design in bedrooms.

Adding character to a modern kitchen space.
Adding details to a basketball court. Used for flooring, eastern white pine provides an historic appeal in a great room. Warmth and character with rustic charm in a hallway.