



EXPORT GRADING RULES FOR SOUTHERN PINE LUMBER

EFFECTIVE JANUARY 1, 1982

SUPERCEDES THE GCC '23

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Southern Pine Inspection Bureau
Pensacola, FL

FOREWORD

Manufacturers, exporters and importers of Southern Pine lumber and timber have traditionally used GCC '23 Rules to conduct their business. Since GCC '23 Rules provide for a heartwood content that is no longer available, these EXPORT RULES are issued to provide for the grades that are being shipped. Shipment may be any species of Southern Pine.

GENERAL RULES

1. In the absence of special contract, exception or specification, Southern Pine lumber or timber sold or bought under this Export Rule shall be subject to provisions included herein to applicable provisions of SPIB Standard Grading Rules. Southern Pine lumber and timber conforming to this Export Rule is eligible for grade-marking.
2. All lumber shall contain only sound wood, free from any form of decay except as grade specifications limit or include.
3. Rough lumber shall be well manufactured, square butted with saw and full to size except as grade specifications provide.
4. Unless otherwise specified in the contract of purchase and sale, all lumber shall be rough and shall not be less than the size requirement as provided in the individual grade categories. Dressed and worked lumber sizes, unless otherwise specified, shall be those published in the latest edition of the SPIB Standard Grading Rules.
5. In the measurement of a knot, the average of the maximum and minimum diameter determines the size of a knot unless otherwise specified.
6. When the term "percent" is used in relation to defects, reference is made to pieces; for example, "eighty percent free from knots" means that 80 of every 100 pieces shall be free from knots except in the limitation as to percentage free of knots. No account shall be taken of knots $\frac{1}{3}$ (or less) of the diameter of the maximum knot allowed in the grade, provided that knots covered by this exception are sound and do not exceed the maximum diameter of $\frac{3}{4}$.
7. Wane shall be measured across its face, unless otherwise specified and the limits apply to rough and dressed alike unless otherwise specified. In grades allowing wane, same may be anywhere on the corners of the piece and need not be continuous, but the aggregate must not exceed the total allowance.
8. Lumber shall be considered bright if the discoloration is such that it can be eliminated by reasonable dressing or planing, or if the discoloration does not exceed $\frac{1}{5}$ the width of the piece.
9. When the terms "no sap stain permitted" or "free from sap stain" are used in grade descriptions, it is construed to mean that lumber contains no visible or concealed sap stain.
10. Medium grain lumber averages on either one end or the other not less than 4 annual rings per inch, measured over a portion of the radial line from the pith as required in dense, paragraph 12.

11. Dense grain lumber averages on either one end or the other not less than 6 annual rings per inch and not less than $\frac{1}{3}$ summerwood, measured over a radial line from the pith as described in paragraph 12. Contrast in color between springwood and summerwood shall be distinct. Pieces that average not less than 4 annual rings per inch shall be accepted as dense if they average $\frac{1}{2}$ or more summerwood.
12. Measurement of density shall be made in such a way as to insure that the measured radial line is representative. Measurement shall be made over a continuous length of three inches or as nearly three inches as is available. The length shall be centrally located in side cut (pithless) pieces. In pieces containing the pith, the measurement may exclude an inner portion of the radius amounting to $\frac{1}{4}$ of the least nominal dimension of the piece.
13. Heartwood or sapwood, or a combination of both, is permitted in the grades described in this grading rule except as specifically required or restricted. Red heart, if firm or sound, is not a defect, unless expressly excluded in the particular grade herein described.
14. Inspection of lumber is not an exact science because it is based on a visual inspection of each piece and on the judgement of the grader, but these rules are sufficiently explicit to establish 5% below grade as a reasonable variation in judgement between inspectors; therefore a variation of not more than 5% of the quantity upon reinspection shall not disturb the original inspection. Lumber must be inspected for grade in the form in which it was shipped; any subsequent change in manufacture or mill work will relieve the seller of responsibility of recognizing any grade complaint.

20 KILN DRIED SAPS

Sizes (Rough):

7/8" x 3" and wider through 3" x 3" and wider

Moisture Content: 19% or less

Lengths: 10' and up; 5% 8' and 9' allowed. If lineal average required it must be specified.

Characteristics permitted and limiting provisions for both wide faces shall be:

- Checks – medium surface checks (not over 1/32' wide and not over 10" long)
- Compression Wood – prohibited if in readily identifiable and damaging form
- Firm red heart – not over 25% of face area
- Knots – sound and tight, limited to one 1-1/8" in 4" widths, one 1-1/4" in 6" widths, one 1-1/2" in 8" and one 1-3/4" for 10" and wider, to each 6' of length or fraction thereof; provided that 70% of the pieces shall be free of knots.
(The distribution of knots need not be proportionate, i.e., one to each 6' or fraction thereof means that a piece 24' long may have four knots anywhere in the piece, and not one knot in each separate 6'.)
- Pitch – not over 25% of face area, pitch pockets over 1/4" wide shall be considered equal to a 1' knot
- Scantness – must be full nominal thickness, but allowing width to be 3/8" scant of nominal in 3" to 6" widths and 1/2" scant of nominal in 8" to 12" widths
- Shakes – none permitted
- Splits – permitted in the ends only and length may not exceed the width of the piece
- Stain – no sap stain permitted
- Wane – 20% of the pieces will permit wane not to exceed 1/6 the width and 1/2 the thickness and extending 1/6 the length of the piece on one corner, or the equivalent on two or more corners. The remaining 80% of the shipment must be free of wane
- Warp – medium if under 2" thick; very light if 2" and over

FINISH and BOARDS

Sizes (Rough):

7/8" x 3" and wider through 3" x 3" and wider

Moisture Content: 15% or less

Lengths: 10' and up; 7% 8' and /or 9' allowed and 5% 6' and/or 7' allowed. If lineal average required, it must be specified

There are three grades of Finish: C&Btr Both Faces, C&Btr and D. There is one grade of Boards: No. 2 Export Boards:

30 C&BTR BOTH FACES

This quality is required to meet the requirements of the C&Btr on both faces except that through checks are not permitted.

31 C&BTR FINISH

Characteristics permitted and limiting provisions shall be:

- Checks – medium surface checks (not over 1/32" wide and not over 10" long); through checks not over 1/32" wide are allowed if not longer than width of piece
- Compression wood – prohibited if in readily identifiable and damaging form
- Firm red heart – on not over 25% of face
- Holes – average of not over 6 pin holes (1/16" or less) per surface foot
- Knots – sound or firm and tight, limited to small size (not over 3/4") except one medium (over 3/4" and not over 1-1/2") allowed also in 5" and 6" widths, and two medium in widths over 6", but sum of diameter of all knots in any 4' length must not exceed twice diameter of maximum single knot allowed
- Scantness – rough must be full nominal thickness, but allowing width to be 3/8" scant of nominal in 3" to 6" widths and 1/2" scant of nominal in 8" to 12" widths. When surfaced: Standard C manufacture; very light face and edge skip for 6" or equivalent area if not full width
- Pitch – light pitch only, small closed pitch pockets, except one medium allowed also in 5" and 6" widths, and two medium in widths over 6"; medium pitch streaks
- Pith – small (3/4 square inch or less)
- Shakes – light (not over 1/32" wide) if not through and not longer than width of piece
- Splits – short (not longer than width of piece)
- Stain – no sap stain permitted

- Wane – not to exceed 1/8" deep or 1/2" wide
- Warp – medium if under 2" thick, very light if 2" and over (Reverse side not lower than D Finish)

32 D FINISH

Characteristics permitted and limiting provisions shall be:

- Checks – large surface checks (not over 1/16" wide and not over 20" long); medium through checks (not over 1/32" wide and not over 10" long); large through checks if face side is otherwise C&Btr
- Compression wood – not restricted
- Firm red heart – on entire face
- Holes – an average of not over 12 pin holes (1/16" or less) per surface foot
- Knots – decayed small knots (not over 3/4") permitted if their surface is smooth and even with the surrounding surface; sound, firm, encased and pith knots limited to small size in 2", 3" and 4" widths, medium (not over 1-1/2") in 5" and 6" widths, and 2" in 8", 10" and 12" widths; all knots must be tight; sum of diameters of all knots in any 4' of length must not exceed twice diameter of maximum single knot allowed
- Scantness – rough must be full nominal thickness, but allowing width to be 3/8" scant of nominal in 3" to 6" widths and 1/2" scant of nominal in 8" to 12" widths. When surfaced: Standard D manufacture; light skip not to exceed 10% of face; hit or miss on edges except scant width from skip not over 1/32" for each inch of nominal width.
- Pitch, pitch pockets, pitch streaks – medium pitch, medium closed pitch pockets and medium pitch streaks; if face side otherwise as good as C&Btr, large pitch streaks or equivalent in heavy pitch, and one large closed pitch pocket in 5" and 6" widths or two in widths over 6" allowed; medium through pitch pockets allowed also if face side otherwise as good as C&Btr
- Pith – not longer than 1/6 length of piece
- Shakes – light (not over 1/32" wide) if not through
- Splits – medium (not over 1/6 length of piece)
- Stain – no sap stain permitted
- Wane – not to exceed either 1/4" deep or 1/8" width or 1/3 length
- Warp – heavy warp if under 2" thick; light warp if 2" and over

(Reverse side shall be free of defects which might prevent its use for the purpose intended under these rules except that the diameter of sound knots may not exceed 1/2 the width and decayed knots may not exceed 1/4 the width. Wane on reverse side limited to 1/2" deep and may not exceed either 1/4 the width or 2" wide)

33 No. 2 EXPORT BOARDS

Sizes (Rough):

1" X 2" and wider through 1-1/2" X 2" and wider

(This grade is usually shipped as a dressed or worked item but if shipped rough, the thickness may not be scant of nominal but allowing width to be 3/8" scant of nominal in 3" to 6" widths, 1/2" scant of nominal in 8" and wider.)

Characteristics permitted and limiting provisions shall be:

- Decay – in streaks of heart-center decay not to exceed 1/2" wide by 1/4 the length of piece, or equivalent in unsound red heart
- Holes – pin holes (1/16" or less)
- Knots – sound, firm and encased knots, but must be tight and limited to:

Nominal Width	Allowable Knot Size
2"	1"
3"	1-1/2"
4"	2"
5"	2-1/4"
6"	2-1/2"
8"	3"
10"	3"
12"	3-1/2"

- Manufacture – Standard "E"
- Pitch, Pitch Pockets and Pitch Streaks – not limited
- Pith – not limited
- Shakes, Check and Splits – not limited, except through shakes, through checks, and splits limited to 1/6 the length of piece – but must be close fitting
- Skips – medium skip allowed on face not to exceed 25% of the face. Hit or miss (1/16") dressing on reverse side. Hit or miss on edge may be scant in width up to 1/8"
- Stain – light on not over 20% of face of any piece
- Wane – not to exceed either 1/4" deep or 1/8 width or 1/3 length of face and limited to 1/2" deep on reverse side; in dressed and matched wane shall not be so deep as to extend into the tongue or over 1/2 the thickness of top lip of groove, or for over 1/2 the thickness of face lap on ship lap
- Warp – heavy
(Reverse side shall be free of defects which might prevent its use for sheathing and other general used except that sound knots are permitted. In worked and matched lumber, wane on reverse side may destroy the tongue or lower lip or the bottom lap for 1/6 the length providing the wane does not exceed 1/3 the width except short wane dip permitted provided it does not enter either tongue or groove or extend more than 1/2 the thickness of the bottom lap.)

40 EXPORT DIMENSION SPECIFICATIONS

Sizes (Rough):

2" X 2" and wider through 4" X 4" and wider

40.1

There are two grade qualities of export dimension: No. 1 Export and No. 2 Export

(These grades are usually shipped as a dressed or worked item but if shipped rough, the thickness may not be scant of nominal but allowing width to be 3/8" scant of nominal in 3" to 6" widths and 1/2" scant of nominal in 8" and wider.)

40.2

Lengths: 10' and longer except 5% of 6' and 7% of 8' permitted

40.3

Moisture content: 19% or less

41 No. 1 EXPORT

Characteristics permitted and limiting provisions shall be:

- Check – surface seasoning check, not limited. Through checks at ends are limited as splits
- Knots – sound, firm and encased knots, tight and well-spaced, are permitted in size not to exceed the following or equivalent displacement:

Nominal Widths	At Edge Wide Face	Centerline Wide Face
2"	1/2"	1/2"
3"	3/4"	3/4"
*4"	1"	1-1/2"
5"	1-1/4"	1-7/8"
6"	1-1/2"	2-1/4"
8"	2"	2-3/4"
10"	2-1/2"	3-1/4"
12"	3"	3-3/4"
14"	3-1/8"	4"

*In 3 X 4 and 4 X 4 sizes, a 1-1/2" knot is permitted anywhere on the 4" face

- Manufacture – Standard "E"

- Pitch and Pitch Streaks – not limited
- Pockets – pitch or bark – not limited
- Shakes – on ends limited to 1/2 the thickness. Away from ends several heart shakes up to 2' long, none through
- Skips – hit and miss skips in 10% of pieces
- Slope of grain – 1" in 10"
- Splits – equal in length to width of the piece
- Stain – light on not over 20% of face of any piece
- Wane – 1/4 the thickness, 1/4 the width. 5% of the pieces may have wane up to 1/2 the thickness and 1/3 the width for 1/4 the length
- Warp – 1/2 of medium

42 No. 2 EXPORT

Characteristics permitted and limiting provisions shall be:

- Checks – seasoning checks are not limited. Through checks at ends are limited as splits
- Knots – sound and tight knots are permitted in the following sizes or their equivalent displacement:

Nominal Width	Anywhere on Wide Face
2"	1"
3"	1-1/2"
4"	2"
6"	2-7/8"
8"	3-1/2"
10"	4-1/4"
12"	4-3/4"

- Manufacture – Standard "E"
- Pitch and Pitch Streaks – not limited
- Pockets – pitch and/or bark – not limited
- Shakes – on ends limited to 1/2 the thickness. Away from ends, through heart shakes may be 3' long or up to 1/4 the length, whichever is greater
- Skips – allowing up to 1/8" undersize in thickness and width
- Slope of grain – 1" in 4"
- Splits – equal to width of piece
- Stain – light on not over 20% of face of any piece
- Unsound Wood – in spots or streaks limited to 1/3 the thickness and 1/3 the width
- Wane – 1/4 the thickness, 1/4 the width. 5% of the pieces may have wane up to 1/2 the thickness and 1/3 the width for 1/4 the length
- Warp – light

50 EXPORT PRIME

Sizes (Rough):

1-1/2" X 4" and wider through 4" X 4" and wider

Moisture Content: 19% or less

Lengths: 8' and longer. If lineal average required, it must be specified.

Characteristics permitted and limiting provisions shall be:

Medium grain to dense grain required

- Checks – in thicknesses of 2-1/2" and less large surface checks (not over 1/16" wide and not over 20" long); in 3" and thicker, checks limited to 1/8" wide and 20" long. No through checks permitted except through at ends limited as split
- Firm red heart – not to exceed 25% of the area of the face
- Compression wood – prohibited if in readily identifiable and damaging form
- Knots – 70% of the pieces free of knots on one side and two edges. Knots up to 2" diameter permitted on the face side of the remaining 30% if sound, tight and well scattered. Knots on reverse side, if sound, tight and well scattered may be up to 2" in diameter.
- Pitch – pitch, pitch pocket not considered a defect
- Scantness – must be full nominal thickness, but allowing width to be 3/8" scant of nominal in 4" to 6" widths and 1/2" scant of nominal in 8" to 12" widths. When surfaced: Light face skip for 6" or equivalent area if less than full width, medium narrow face skip
- Shakes – through shake prohibited except if at ends through shake limited as split
- Splits – permitted at ends only and length may not exceed the width of piece
- Stain – no sap stain permitted
- Wane – 20% of the pieces will permit wane not to exceed 1/6 the width and 1/2 the thickness and extending 1/6 the length of the piece on one corner, or the equivalent on two or more corners
- Warp – heavy if under 2" thick, light if 2" and over

60 MERCHANTABLE SAWN TIMBERS

Sizes (Rough):

6" X 6" and larger

Moisture Content: any stage of seasoning

Lengths: 10' and longer. Lineal average must be specified if required

Merchantable Sawn Timbers must be dense grain, and admit:

- Checks – large surface checks
- Compression wood – prohibited if in readily identifiable and damaging form
- Firm red heart – not to exceed 25% of area of the face on which it appears
- Holes – none permitted
- Knots – sound and tight if well scattered not to exceed the following:

Nominal Width of Face	Size of Knot
6"	2-1/8"
8"	2-1/2"
10"	2-3/4"
12"	3-1/8"
Over 12"	3-1/2"

- Pitch – pitch and pitch pockets no defect
- Scantness – must be full nominal size unless otherwise specified
- Shakes – must be free from shakes extending to the surface
- Splits – none permitted
- Stain – sap stain no defect
- Unsound Wood – none permitted
- Wane – 1/6 width of any face and not to exceed 1/3 the length except wane not exceeding 5/8" across the face is not considered as wane
- Warp – very light

(Note: Merchantable Sawn Timbers do not limit or restrict sapwood; however, if heartwood is to be required it must be specified.)

70 SAWN FLITCHES

Sizes (Rough):

1" X 6" and wider (average) though 4" X 6" and wider (average)

Measurements: Flitches should be sawn full so they will be full nominal thickness after drying. Flitches less than full thickness after drying shall be measured as the next lower nominal thickness and not reduced in grade.

The width of a flitch is measured at mid-length of the piece on the narrow face and the width for purposed of tall shall be the width of the narrow face plus one wane. Widths containing fractions less than 1/2" shall be lowered to the next inch, and fractions 1/2" or more shall be counted as the next higher inch.

Moisture Content: 19% or less

Lengths: 10' and longer. Lineal average must be specified if required.

Fitches are usually sawn from butt or No. 1 logs free of visual defects such as knots, unsound wood or other growth characteristics that affect quality. Fitches must be medium to dense grain.

Characteristics permitted and limiting provisions shall be:

- Checks – large surface checks (not over 1/16" wide and not over 20" long.) No through checks permitted.
 - Compression wood – prohibited if in readily identifiable and damaging form
 - Firm red heart – not over 25% of face area
 - Holes – none permitted
 - Knots – 80% of the pieces must be free of knots on one face and two edges. Sound and tight knots up to 1-1/2" diameter allowed on the face side of the remaining 20% if well scattered. On the reverse side, sound and tight knots up to 1-1/2" diameter; provided they do not touch the edge. Spike knots not allowed on either face.
 - Pitch – pitch and pitch pockets no defect
 - Scantness – must be full nominal thickness
 - Shakes – none permitted
 - Splits – permitted in ends only and length may not exceed the average width of piece
 - Stain – no sap stain permitted
- (Note: Heartwood is permitted but no minimum is required.)