The Measurement And Inspection Of Philippine Lumber

- 1. First and seconds. These two grades are combined and correspond to the highest grade of "Export."
 - 2. Export Common.
 - 3. Export Shorts, Chairstock, etc.
 - 4. Sound Wormy Export.
 - 5. Veneer Flitches.
- 6. Clears. This corresponds to the highest grade of lumber and dimension timbers as sold in local markets and are exported for other than cabinet purposes.
- 7. Merchantable. This grade corresponds to lumber sold in local markets for ordinary house construction, temporary construction, etc., and exported for other than cabinet purposes.
- 8. Culls. This grade is to include all lumber that will not come up to the grade of Merchantable.

GENERAL INSTRUCTIONS

Lumber less than one inch in thickness will be graded and measured the same as one inch. All lumber shall be graded on the poorer side of the piece.

Tapering boards should be measured 1/3 the distance from the narrow end.

Bright sap to the extent of one standard defect admitted on boards 10" and wider in the grades of Firsts and Seconds. On boards under 10" wide, bright sap admitted in proportion.

These rules define the poorest piece admissible in any grade, and each grade shall contain all lumber up to the next higher grade.

STANDARD DIMENSIONS

Standard thickness are 1/2", 5/8", 3/4". 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4", and timbers, etc.

Standard widths are 3", 4", 6", 8", 10", 12", 14", 16", 18", 20", 22", 24", etc.

Standard lengths are 2', 4', 6', 8', 10', 12', 14', 16', 18', 20', 22', 24', 26', etc.

Thicknesses for surfaced lumber, when not otherwise specified, should be as follows:

Rough 1/2" Surfaced two sides should be 5/16" surfaced

Rought 5/8" Surfaced two sides should be 7/16" surfaced

Rough 3/4" Surfaced two sides should be 9/16" surfaced

Rough 1" Surfaced two sides should be 13/16" surfaced

Rough 1-1/4" Surfaced two sides should be 1-3/32" surfaced

Rough 1-1/2" Surfaced two sides should be 1-11/32" surfaced

Rough 2" Surfaced two sides should be 1-3/4" surfaced.

For any thickness over 2" an allowance of 1/4" should be made for surfacing.

Pieces more than 1/4" less than the standard widths must be tallied down to the next standard width. These dimensions apply to all grades, excepting Firsts and Seconds and Export Common in which all cdd widths and lengths will be admitted.

Pieces with a greater variation in thickness than these rules allow shall be graded and tallied as missawn.

DEFECTS

Each of the following shall be known as a standard defect:

One sound 1-1/36" knot.

Two or more smaller knots not exceeding in extent of damage and 1-1/2" knot.

One straight split over 6" long, but not to exceed 12" long.

A "straight split" is defined as one that does not diverse by more than two inches per foot from a line parallel to the edge.

Splits over 12" long may be trimmed off. Grub-holes, knot-holes, pitch-pockets, shake, and any other defects not exceeding in extent of damage one 1-1/2" knot.

One inch of bright sap on one edge or its equivalent on both edges or on one or both ends.

THE EXTENT OF THE DAMAGE CAUSED BY ROT, DRY-ROT, DOTY-HEART, SUN-CHECK, WEATHER STAIN, SPIKE KNOTS, WANE AND HEART-CRACKS IS DIFFICULT TO DEFINE EXACTLY AND INSPECTORS MUST BE VERY CAREFUL IN ESTIMATING THE DAMAGE AS COMFARED WITH STANDARD DEFECTS.

Sound superficial burls having the appearance of knot are not to be considered as defects.

1. FIRSTS

Firsts shall be 8" and over wide, 10' and over long and shall be free of all defects, excepting pinholes not visible in the rough, and excepting the pieces containing 10 feet surface measure and over may have one standard defect or its equivalent. One quarter inch variation allowed in thickness, provided no single piece is more than one-eighth inch under standard rough thickness. This grade will admit not more than 5% with this variation.

2. SECONDS

Seconds shall be 6" and over wide, 8' and over long admitting pinholes not visible in the rough and other defects according to surface measure as follows: 6 feet, one standard defect; 9 feet, two defects; 13 feet, three defects; 18 feet and over, four defects. Variation in sawing as in "Firsts."

3. EXPORT COMMON

Shall be 4 inches and over wide, 6 feet and over long. Variations in sawing as in "Firsts." Pinholes visible in the rough not admitted.

Pieces 4 inches wide up to 10 feet long must work 66-2/3% clear in not over two pieces; 11 feet and over long must work 66-2/3% clear in not over three pieces, in both cases the full width of the piece. Boards 6 inches and over wide must work 66-2/3% clear. No cutting considered that contains less than one board foot.

4. EXPORT-SHORTS, CHAIR-STOCKS, ETC.

Shall be 2 inches and wider, one foot to six feet long. Shall be free from pinholes visible in the rough.

Pieces containing up to two board feet must be clear. Pieces containing over two board feet will admit one standard defect. Variation in sawing as in Firsts.

5. SOUND WORM EXPORT

Shall grade strictly as Firsts and Seconds, but admitting pinholes, excepting boards having black streaks, stained pinholes or pinholes running parallel with the face. One quarter inch variation allowed in the thickness, provided no single piece is more than one-eighth inch under standard rough thickness. Admitting not more than 10% with this variation.

6. VENEER FLITCHES

Flitches to be from 10 feet to 24 feet long, to be sawn as large as is consistent with good quality, and to show figure on two faces, figure showing on not less than 75% of the face.

Shall be free from pinholes visible in the rough, shake, heart and rot, but will allow defects according to sizes as follows:

Pieces up to 9" x 9" must be clear.

Pieces larger than 12" x 12" will admit two inches of sap on one corner, or one standard defect and one straight split in one end not exceeding in length the width of the piece, or the equivalent at both ends.

Split diverging from a line parallel to edge by more than two inches to the lineal foot must be cut off. White Lauan flitches must be free of sap, otherwise should grade as other veneer flitches.

7. CLEARS

Clears shall be sound lumber, well manufactured and free of rot, unsound knots, shake, splits dry-rot or other defects impairing the strength of the piece. Pinholes not considered a defect unless so numerous as seriously to affect the strength of the piece.

Variations in sawing in "Clears" will be admitted as follows:

Up to 4" in thickness, one quarter inch allowed, provided no piece is more than one quarter inch under standard rough thickness. This grade will admit not more than 10% with this variation.

Stained sap that will be removed when surfaced to the standard surfaced thickness of the respective dimensions shall not be considered a defect in clears but inspectors must be very careful in estimating the damage caused by same.

Defects admitted as follows:

- a. Pieces 1" thick up to 6" wide and up to 12" long shall be clear; over 12" long will admit one standard defect, or bright sap not to exceed one-fifth the surface measure of the piece.
- b. Pieces 1" thick from 8" to 12" wide, 6' and 8' long will admit bright sap not to exceed 1/5 the surface measure of the piece; pieces 10' and 12' long will admit one standard defect or defects or bright sap not to exceed one-fifth the surface measure of the piece; pieces 14' and 16' long will admit two standard defects, or bright sap not to exceed one-fifth the surface measure of the piece; pieces over 16' long, three standard defects, or bright sap not to exceed one-fifth the surface measure of the piece.
- c. Pieces 1" thick and over 12" wide, and 6' and 8' long will admit one standard defect or bright sap not to exceed one-fifth the surface measure of the piece; pieces 10' and 12' long will admit two standard defects or bright sap not to exceed one-fifth the surface measure of the piece; pieces 15'

- and 16' long will admit three standard defects or bright sap not to exceed 1/5 the surface measure of the piece; pieces over 16' long will admit four standard defects or bright sap not to exceed 1/5 the surface measure of the piece.
- d. Pieces 1-1/2" to 2-1/2" thick up to 6" wide and up to 12' long must be clear; over 12' long will admit one standard defect or bright sap not to exceed one-fifth the surface measure of the piece.
- e. Pieces 1-1/2" to 2-1/2" thick, 8" to 12" wide up to 12' long will admit one standard defect or bright sap not to exceed one-fifth the surface measure of the piece; pieces 14' and 16' long will admit two standard defects, or bright sap not to exceed one-fifth the surface measure of the piece; pieces over 16' long, three standard defects.
- f. Pieces 3" to 4" thick up to 6" wide and up to 12' long will admit bright sap not to exceed 1/5 the surface measure of the piece; pieces 15' and 16' long will admit one standard defect or bright sap not to exceed one-fifth the surface measure of the piece; pieces over 16' long, two standard defects or bright sap not to exceed one-fifth the surface measure of the piece.
- g. Pieces 3" to 4" thick, 8" to 12" wide and up to 12' long will admit one standard defect or bright sap not to exceed 1/5 of the surface measure of the piece; pieces 14' and 16' long will admit two standard defects or bright sap not to exceed 1/5 of the surface measure of the piece; pieces over 16' long three standard defects, or bright sap not to exceed 1/5 of the surface measure of the piece.
- h. Pieces 6" x 6" not over 9" x 9", up to 16' long will admit two standard defects: pieces over 16' long three standard defects. Boxed heart not admitted.
- i. Fieces upward of 9" x 9", up to 16" long will admit three standard defects; pieces over 16' long, four standard defects.

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the world show that precipitation at the station surrounded by forests was considerably more than at the stations in the open. The condensation of vapor on the leaves, branches and other parts of trees and its later dripping to the ground add to the annual precipitation. The more abundantly developed the vegetal cover, the faster the moisture is returned to the air through evaporation and transpiration combined, and there is larger amount for reprecipitation available. In the late afternoons and evenings, although there is no rain, the ground under the trees are wet the next morning. Small shallow pools of water 1 to 2 feet in diameter are frequent on trails under trees.

If our people would only understand and appreciate the influence of forests as discussed above, they will not mercilessly cut forest trees and illegally occupy forest lands. There would not have been huge expenditures appropriated yearly for irrigation and river control projects as are found in Pangasinan, Iloilo and other provinces.

Compliments

of

Johnny Motoomul Logging Interprises

Concessions:

Binuangan - Odiongan Gingoog, Misamis Oriental The installations of deep artesian wells have become now a necessity in the rural areas and still a must program of the government, because the springs common in previous years are no longer in existence.

The Bureau of Forestry should not be left alone working single handed to provide the required protection of our forests. This Bureau, because of limited funds, could only allow one instead of three personnel to guard 15,000 hectares of forest land. So, it is very necessary that every one should do his part in this gigantic task for our happiness and survival.

THE MEASUREMENT . . .

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8. MERCHANTABLE

Variations in sawing same as in "clears." Sound stained sap not considered a defect in this grade.

Up to 4" in thickness, this grade will admit all sound lumber that does not contain defects seriously impairing the strength of the piece for ordinary temporary structural purposes.

Timbers from 6" x 6" upward, this grade will admit boxed heart, provided heart cracks do not extend to more than one face; also sun checks, pitch pockets, slight shakes or heart cracks, sound sap, knots, or other defects not seriously affecting the strength of the piece.

Pieces containing more sap than heartwood shall be excluded from this grade. In determining this, the solid contents and not surface measure should be taken into consideration.

Arts and sciences are not cast in a mould, but are found and perfected by degrees, by often handling and polishing.

-Michel de Montaign

Logic is the art of thinking well: the mind, like the body, requires to be trained before it can use its powers in the most advantageous ways.

-Lord Kames