NATIONAL LUMBER GRADES AUTHORITY

SUPPLEMENT No. 2 (FINAL)

for the

December 1, 2010 Edition

NLGA STANDARD GRADING RULES FOR CANADIAN LUMBER

(Approved by the NLGA Board, CLSAB & the ALSC Board of Review)

Effective November 1, 2013

Note: This supplement supersedes the following sections of the December 1, 2010 edition of the NLGA Standard Grading Rules for Canadian Lumber. It was prepared following approvals by the NLGA Board, ALSC Board of Review and CLS Accreditation Board (CLSAB) to revise the methodology for grading knots in Beams & Stringers and Posts & Timbers as follows:

A. Supplement No. 2 (a) – Para. 130. – BEAMS AND STRINGERS

- In the third paragraph, add "<u>320b,</u>" after "320".
- Add the following sentence, "<u>Knots appearing on the narrow faces are limited to the same displacement as</u> <u>knots at the edges of the wide faces.</u>" after the sentence: "For measurement of respectively."
- B. Supplement No. 2 (b) Para. 130a. "SELECT STRUCTURAL" BEAMS AND STRINGERS pages 91-92
 - Delete "Slope of Grain: centre 1/3 1 in 15; balance 1 in 12" and replace with:
 "Slope of Grain 1 in 14"
 - Revise Knots as follows:
 - Knots sound, tight, and well-spaced, may be present in the following sizes: and are permitted in sizes not to exceed the following or equivalent displacement:

Nominal Face Width	On Narrow Face & Edge of Wide Face in Middle 1/3 of Length At Edge of Wide Face	At Ends & along Centerline of <u>Centreline</u> Wide Face
5"	1-1/4"	
6"	1-1/2"	
8"	1 3/4" <u>1-7/8"</u>	2″
10"	2″	2-1/2" <u>2-5/8"</u>
12"	2-1/4" <u>2-1/8"</u>	<mark>3"</mark> <u>3-1/8"</u>
14"	2-3/8"	3-1/4"
16"	<u>2-1/2"</u>	3-1/2"
18"	<u>2-3/4"</u>	3-1/2"

-The sizes of knots permitted on the narrow face and at edge of wide face are the same and are determined by the width of the narrow face. These sizes may increase proportionately from that permitted in the middle 1/3 of the length to that permitted at the ends.

-On wide faces, the sizes of knots are proportionate from the sizes at edges of the face to the permissible size along the centreline of the wide face.

The size of the knots on the wide faces may be increased proportionately from the size permitted at the edge to the size permitted at the centerline.

The size of the knots at the ends and along the centre are the same and are determined by the wide face. In Cedar, characteristic soft knots 1/2 the size of the sound and tight knots are permitted.

C. Supplement No. 2 (c) – Para. 130b. – "NO. 1" - STRUCTURAL BEAMS AND STRINGERS - pages 92-93

Delete <u>"Slope of Grain: "middle 1/3 1 in 10; balance 1 in 8"</u> and replace with:
 "<u>Slope of Grain - 1 in 10</u>"

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- Revise Knots as follows:
 - Knots sound, tight, and well-spaced, may be present in the following sizes: and are permitted in sizes not to exceed the following or equivalent displacement:

	On Narrow Face & Edge of Wide Face	At Ends & along Centerline of
Nominal Face	in Middle 1/3 of Length	Centreline
Width	At Edge of Wide Face	Wide Face
5"	1-7/8"	
6"	2-1/4"	
8"	2-1/2" <u>2-5/8"</u>	3″
10"	2_3/4″ <u>2-7/8″</u>	3-3/4"
12"	3-1/4"	4-1/2"
14"	3-1/2"	5″
16"	<u>3-3/4"</u>	5-1/4"
18"	<u>3-7/8"</u>	5-1/2" <u>5-5/8"</u>

The sizes of knots permitted on the narrow face and at edge of wide face are the same and are determined by the width of the narrow face. These sizes may increase proportionately from that permitted in the middle 1/3 of the length to that permitted at the ends.

-The size of the knots at the ends and along the centre are the same and are determined by the wide face.

On wide faces, the sizes of knots are proportionate from the sizes at edges of the face to the permissible size along the centreline of the wide face.

The size of the knots on the wide faces may be increased proportionately from the size permitted at the edge to the size permitted at the centerline.

In Cedar, characteristic soft knots 1/2 the size of the sound and tight knots are permitted.

D. Supplement No. 2 (d) – Para. 130c. – "NO. 2" - STRUCTURAL BEAMS AND STRINGERS

- pages 93-94

- Delete the phrase "full length" from "Slope of Grain" to read: "Slope of Grain 1 in 6"
- Revise Knots as follows:

Knots - sound, not firmly fixed or holes, well-spaced, may be present in the following sizes: and are permitted in sizes not to exceed the following or equivalent displacement:

Nominal Face Width	On Narrow Face & Edge of Wide Face in Middle 1/3 of Length	At Ends & along Centerline of
	At Edge and Centreline of Wide Face	Wide Face
5"	2-1/2"	
6"	3 1/4"	
8"	4-1/2"	4-1/2"
10"	5-1/2"	5-1/2"
12"	6-3/4" <u>6-7/8"</u>	6-3/4"
14"	7-1/2"	7-1/2"
16"	<u>8-1/4"</u>	<u>8"</u>
18"	<u>8-5/8"</u>	8-1/2"

Unsound knots are limited to 1/2 the size of other knots.

Increase in knot sizes - the size of knots permitted on the narrow face and edge of wide face are the same and are determined by the width of the narrow face. These may be increased proportionately from the size permitted in the middle 1/3 of the length to twice that size at the ends of the piece, except that the size of no knot shall exceed the size permitted at the centre of the wide face.



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E. <u>Supplement No. 2 (e) – Para. 131. – POSTS AND TIMBERS</u>

In the second paragraph - add "<u>320b,</u>" after "320".

On wide faces, the sizes of knots are proportionate from the sizes at the edges of the face to the permissible size along the centreline of the wide face.

 In the second paragraph, add a second sentence to read: "Except as provided in the graph knots appearing on narrow faces are limited to the same displacement as knots specified faces." 	
F. Supplement No. 2 (f) – Para. 131a. – "SELECT STRUCTURAL" - POSTS AND TIMBERS	- page 95
 Knots - Add "<u>or their equivalent displacement:</u>" after "following sizes" and delete: "In rect wider face determines the size of knots." 	angular sizes the
G. Supplement No. 2 (g) – Para. 131b. – "NO. 1" - STRUCTURAL POSTS AND TIMBERS	- page 96
 Knots - Add "or their equivalent displacement:" after "following sizes" and delete: "In rect wider face determines the size of knots." 	angular sizes the
H. Supplement No. 2 (h) – Para. 131c. – "NO. 2" – STRUCTURAL POSTS AND TIMBERS	- page 97
 Knots - Add "or their equivalent displacement:" after "following sizes" and delete: "In rect wider face determines the size of knots." 	angular sizes the
I. <u>Supplement No. 2 (i) – Para. 320 – "Measurement of Knots for Stress Grades"</u>	- page 174
 Delete "In all framing lumber 4" and less in thickness," from clause iii) to begin the sentence " 	e with: "The size
 Delete "Framing lumber 4" and less in thickness is," from the third sentence in clause iii) and "Stress grades are" full length." 	replace with:
J. Supplement No. 2 (i) – Para. 320c. – "BEAMS AND STRINGERS KNOTS"	- pages 175-177
Delete Para. 320c. "Beams and Stringers Knots" in its entirety.	
K. Supplement No. 2 (j) – Para. 320d. – "POST & TIMBERS KNOTS"	- page 178
• Delete Para. 320d. "Post & Timbers Knots" in its entirety.	

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