



**National Lumber
Grades Authority**



**Canadian Lumber
Standards
Accreditation Board**

The Canadian Lumber Grading System

Presented by:



**Chris Lee
President & CEO
&**



**Al Rozek
Executive Director**

**Presented at the MLB Annual Meeting
June 2008**



Objectives of Presentation

1) Canadian Grading System

a) **NLGA Background**

b) **Components of the Grade Stamp**

c) **CLSAB's Role**

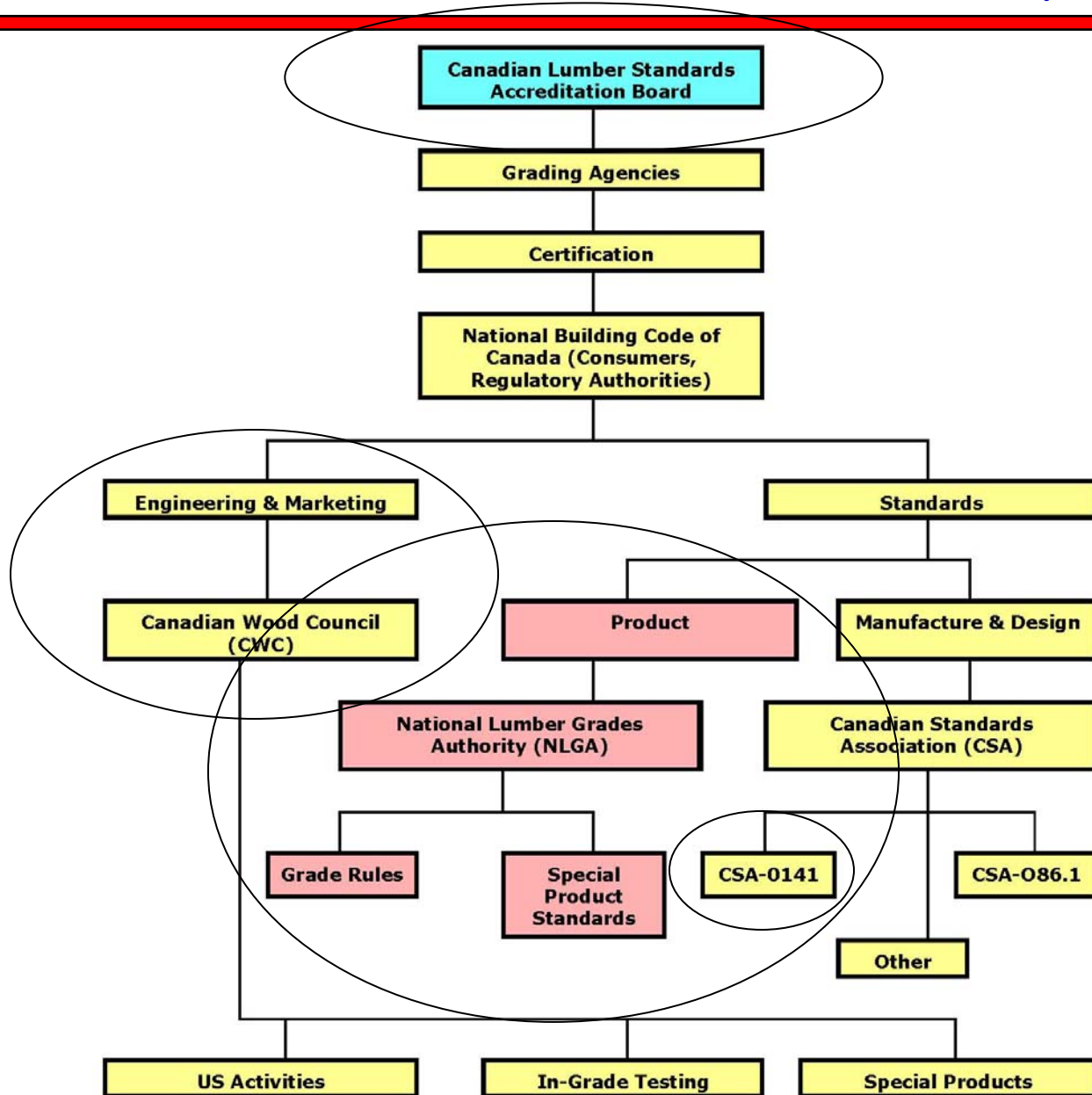


Canadian Lumber Quality System



The Canadian lumber grading system is a transparent regulatory system that provides ongoing assurance to the designer, user and public that the lumber is of the quality as indicated on the product mark or grade-stamp.

Structure of the Canadian Lumber Quality System





Objectives of Presentation

1) Canadian Grading System

a) NLGA Background

b) Components of the Grade Stamp

c) CLSAB's Role

NLGA Background

✓ Incorporated in January 1971 to amalgamate all Canadian lumber grading rules under one rule.

✓ NLGA's role is to:

- ☺ establish;
- ☺ publish & issue;
- ☺ interpret; and
- ☺ maintain & amend

Lumber Grading Rules & Special Product Standards for all Canadian species of lumber.

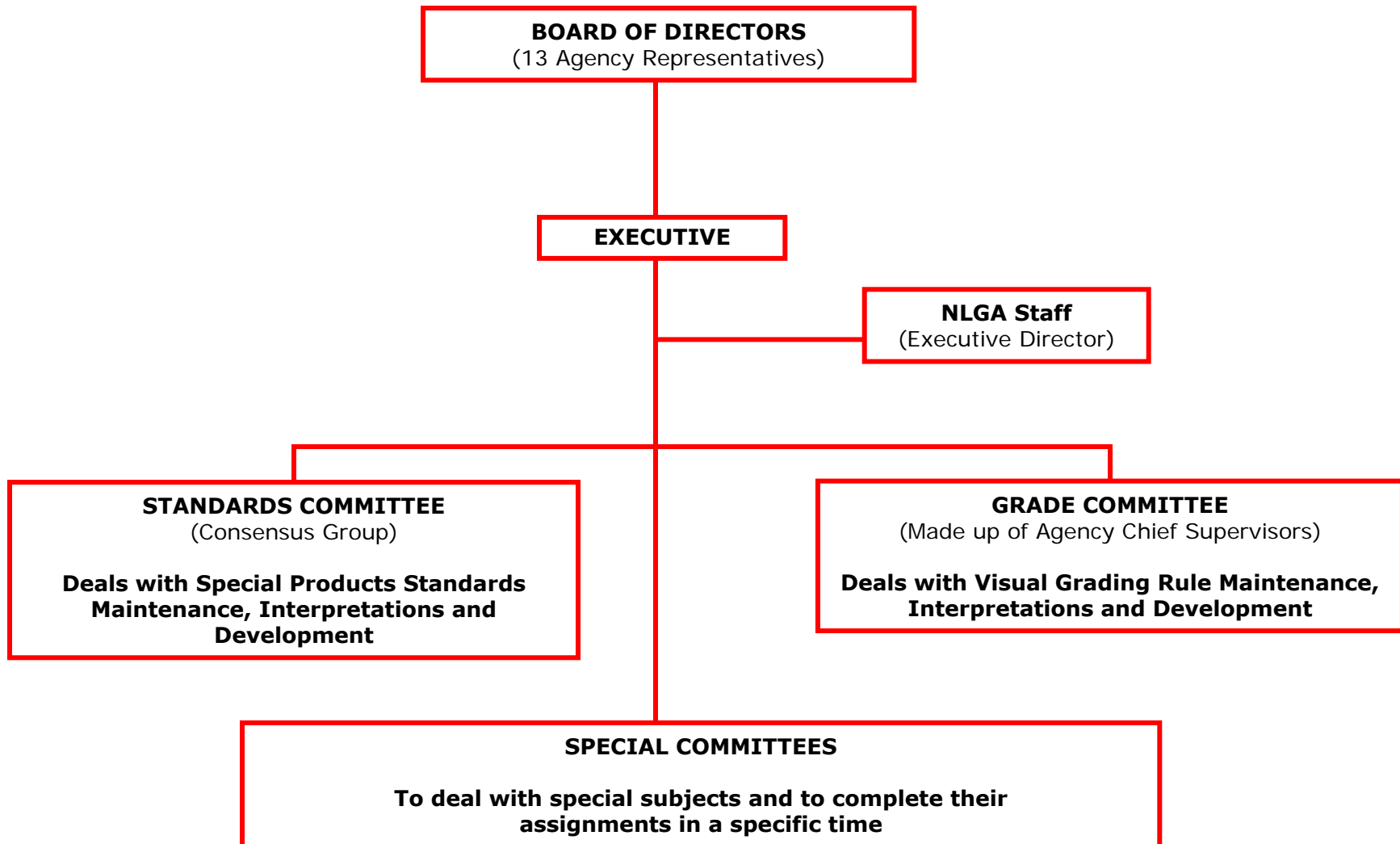
✓ And:

- ☺ establish;
- ☺ maintain & publish

Lumber design values for Canadian species for use in the USA which are recognized in the AF&PA NDS®.

Note: Canadian design values are assigned to NLGA stress grades by the Canadian wood design code committee (CSA O86)

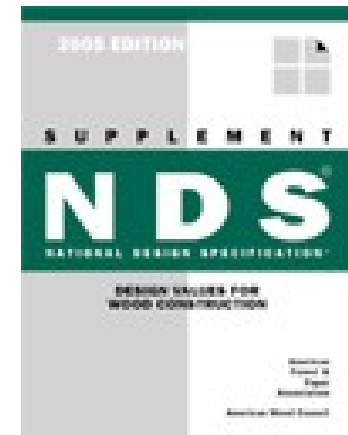
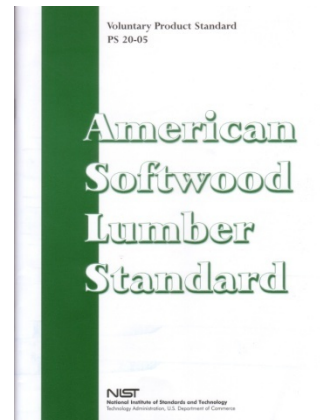
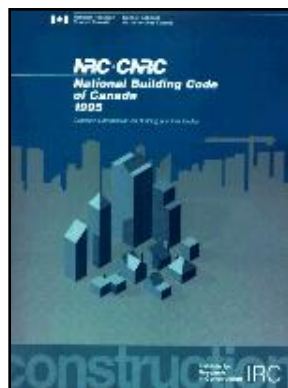
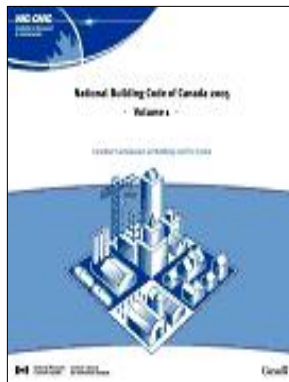
NLGA Organizational Chart



- ☺ NLGA is governed by:
 - NLGA Bylaws; &
 - NLGA Technical Committee Procedures and Regulations (TCP&R).
- ☺ NLGA Standards and Rules were developed:
 - by 'balanced consensus' committees (includes lumber producers, consumers, users, academia, government and regulatory authorities.);
 - following 'due process';
 - through a 'transparent and accountable' voting process;
 - with a rigorous procedure for resolving negatives.
 - Approvals:
 - There is a two-level NLGA approval process:
 - a) Committee (ie, SC or GC)
 - b) Board
 - Followed by CLSAB & ALS BoR approvals.

NLGA Background

- ☺ **NLGA Rules & Standards are:**
 - ☺ Referenced in the National Building Code of Canada (NBC)
 - ☺ Recognized in the US through ALS whose authority is recognized under the US Voluntary Softwood Standard PS 20.
- ☺ NLGA lumber design values for the USA are published & recognized in the AF&PA NDS®.



NLGA Background

☺ **CWC provides engineering and technical support to NLGA**

☺ www.cwc.ca



☺ **FP Innovations (Forintek) does research and provides technical support to NLGA**

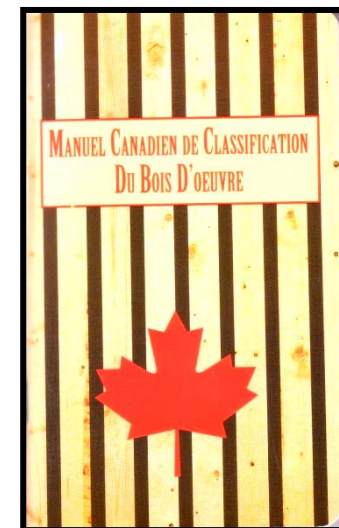
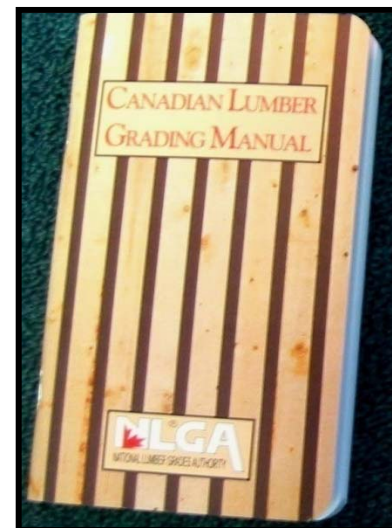
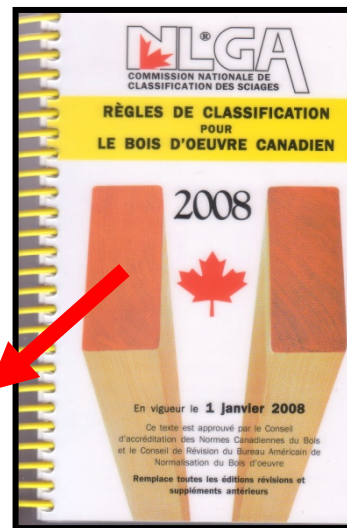
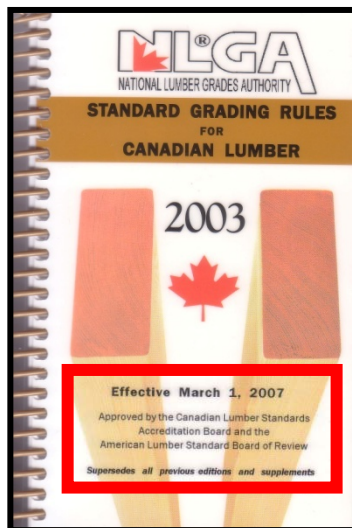
☺ www.fpinnovations.ca




- ✓ **NLGA Standard Grading Rules for Canadian Lumber (Softwood) & Interpretations**

Note: All revisions to NLGA grade rules must be approved by both the CLSAB and the ALS Board of Review prior to implementation.

- ✓ **Canadian Lumber Grading Manual - is a lumber grader training manual.**



- ✓ Supplements to NLGA Standard Grading Rules for Canadian Lumber (Softwood) & Interpretations
- ✓ Supplements are issued between printings to assure all NLGA Board, CLSAB Board and ALS approvals are incorporated in the rule in a timely fashion.
- ✓ The latest supplement to the NLGA Grade Rule was issued Dec. 1, 2007 (Copy to the right)


2003 NLGA Grade Rule (December 2007) – Supplement No. 1 Page 1

SUPPLEMENT No. 1
for the
March 1, 2007
NLGA STANDARD GRADING RULES FOR CANADIAN LUMBER
(Approved by the NLGA Board of Directors & the ALS Board of Review)
Effective December 1, 2007

Note: This supplement supersedes the sections of the March 1, 2007 edition of the NLGA Standard Grading Rules for Canadian Lumber & Interpretations identified as follows:

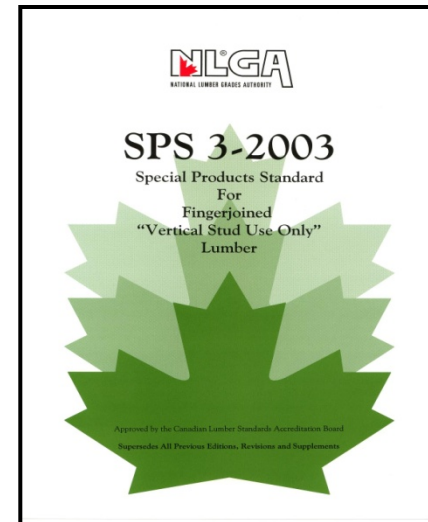
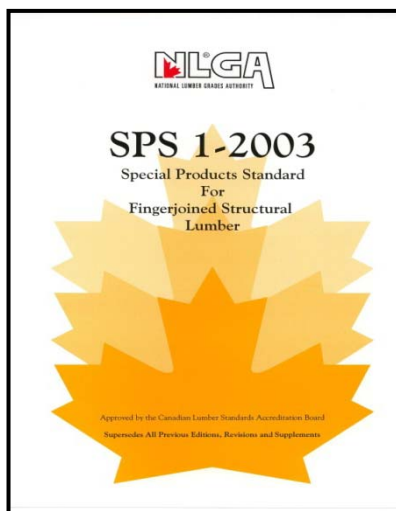
APPROVED REVISIONS TO THE NLGA STANDARD GRADING RULES FOR CANADIAN LUMBER

- Below are the NLGA Board (Sept. 14, 2007), CLSAB (Oct. 27, 2007) and ALS Board of Review (Nov. 1, 2007) approved revisions to the NLGA Standard Grading Rules for Canadian Lumber (March 1, 2007 edition). These changes will be incorporated into the next printing of the NLGA Grade Rule.
- A. **Supplement No. 1 (a) - Para. 108d. - Industrial Clears** - page 31
 - Add "Slough Knots" to the "Hole" provision to Para. 108d. as noted below:
Holes/Slough Knots - 1 small or equivalent smaller on face, two (2) 1/2" or equivalent on back.
- B. **Supplement No. 1 (b) Para. 113b. - 2 Common** - page 40
 - Add the bracketed phrase (Slough Knot) after 3/4" hole in the last paragraph at the bottom of page 40 of the 2 Common provisions to read as follows:
 - *An occasional piece may have the following:
2 small fixed knots or one angling 3/4" hole (slough knot) on the edge
1/2 the thickness of the piece.*
- C. **Supplement No. 1 (c) Para. 126b. - Commercial Patio** - page 77
 - Add the provision for Grub/Teredo Holes to Para. 126b. Commercial Patio to read as follows:
Grub/Teredo Holes - As per Part 2 - NLGA Interpretations
- D. **Supplement No. 1 (d) Para. 200b&c. - "A" & "B" Finish, Panelling, Ceiling & Drop Siding**
 - Add the provision for "Sapwood" to Para. 200b&c. Finish, Panelling, Ceiling & Drop Siding to read as follows:
Sapwood - not limited
- E. **Supplement No. 1 (e) Para. 128a. & b. - Machine Graded Lumber** - Pages 83-86
 - Delete "or decay" from the "In addition Net cross-section than:" clause of both the MSR (Para. 128a) and MEL (Para. 128b) sections of Para. 128 and from the last paragraphs of 128a. and 128b.
- F. **Supplement No. 1 (f) - Grade Stamp Facsimiles** - Page 235
 - Add the second ALS and CLSAB approved facsimile for the Canadian Mill Services Association as noted below.

CMSA® 100 HT

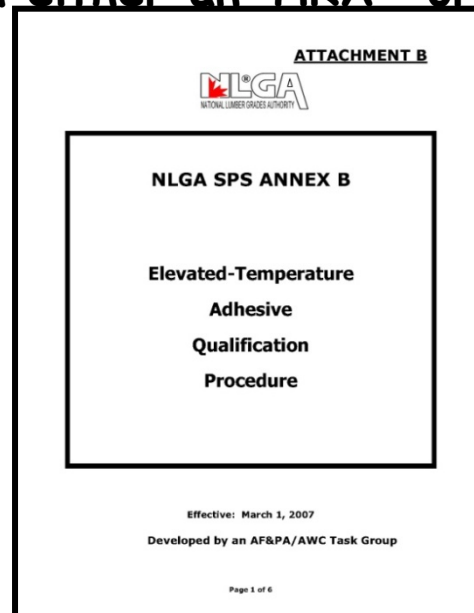
✓ NLGA Special Product Standards

- **SPS 1-2003** - NLGA Special Products Standard For **Finger-joined Structural Lumber** (Revised effective April 1, 2007)
- **SPS 2-2003** - NLGA Special Products Standard For **Machine Graded Lumber** (Revised effective Dec. 1, 2006)
- **SPS 3-2003** - NLGA Special Products Standard For **Finger-joined Stud Lumber "Vertical Stud Use Only"** (Revised effective April 1, 2007)



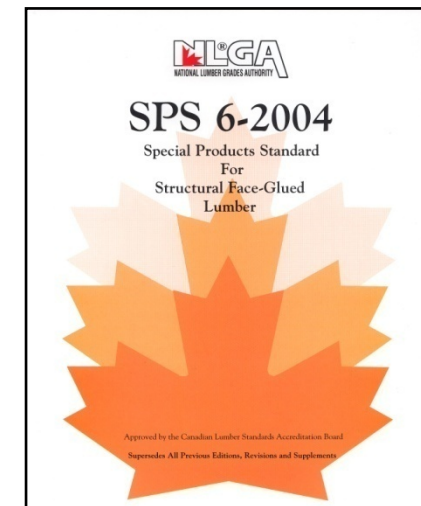
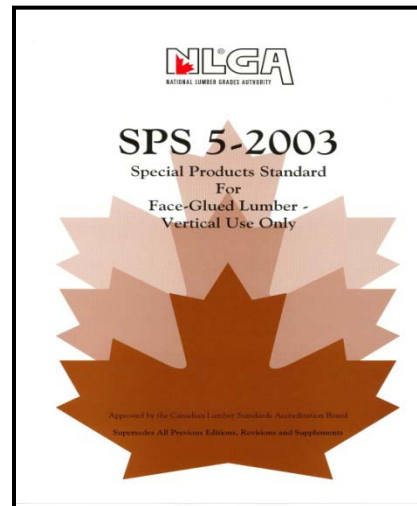
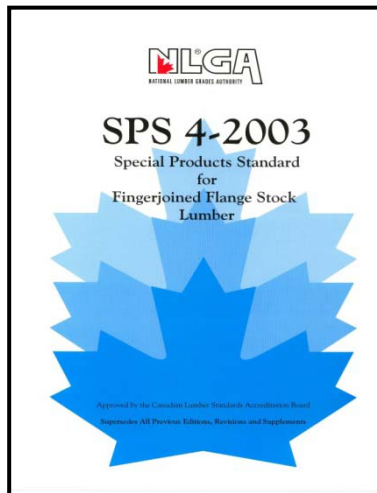
SPS 1 and 3 (Major Change)

- ✓ A major change to SPS 1 and SPS 3 in 2007 was to introduce criteria to deal with Finger-joint adhesive heat-resistant performance.
- ✓ In order for fingerjoint (FJ) lumber to be used in fire-rated assemblies, the adhesive must be a "Heat Resistant" Adhesive (HRA).
- ✓ As of April 1, 2007, all SPS 1 and SPS 3 FJ products must be grade stamped with either an 'HRA' or 'Non-HRA'.



NLGA Publications

- **SPS 4-2003** - NLGA Special Products Standard For **Finger-joined Flange Stock Lumber** (Revised effective Dec. 1, 2006)
- **SPS 5-2003** - NLGA Special Products Standard For **Face-Glued Lumber - Vertical Use Only** (Revised effective Dec. 1, 2006)
- **SPS 6-2004** - NLGA Special Products Standard For **Structural Face-Glued Lumber** (New Standard Dec. 1, 2004) (Revised effective Dec. 1, 2006)



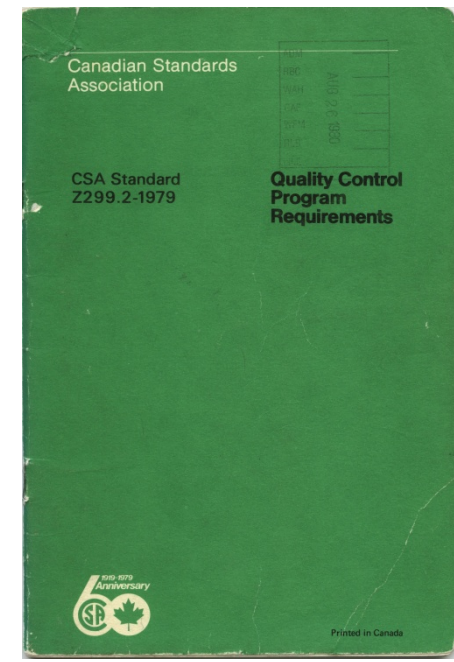
Note: a. All Changes to all SPS's must be approved by CLSAB prior to implementation.

b. All NLGA Publications are available in both English and French

CSA Standards & ISO 9000

☺ NLGA SPS 1 thru 6 were formatted using CSA Standard requirements outlined in CSA Standard Z299.2-1979 (latest -1986).

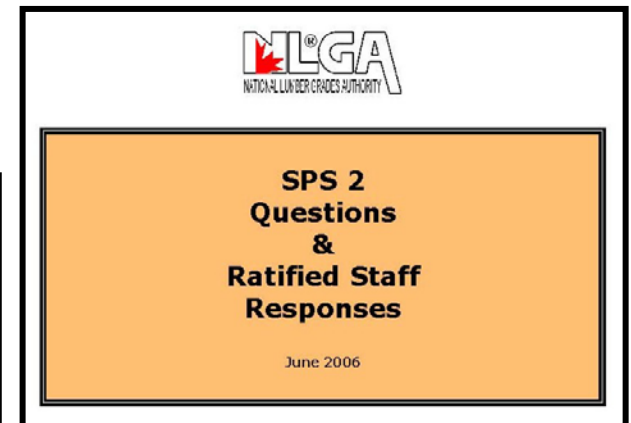
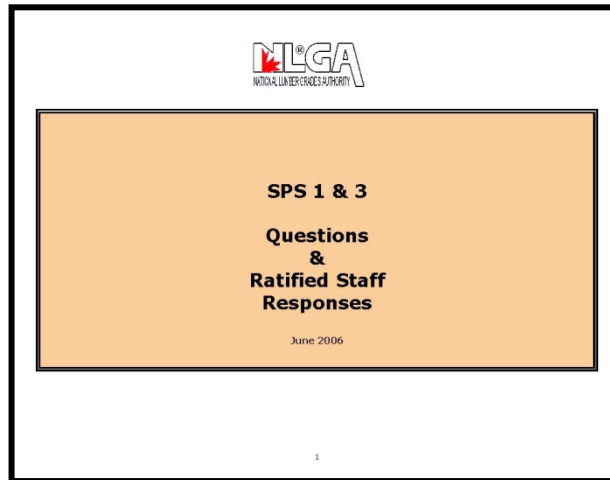
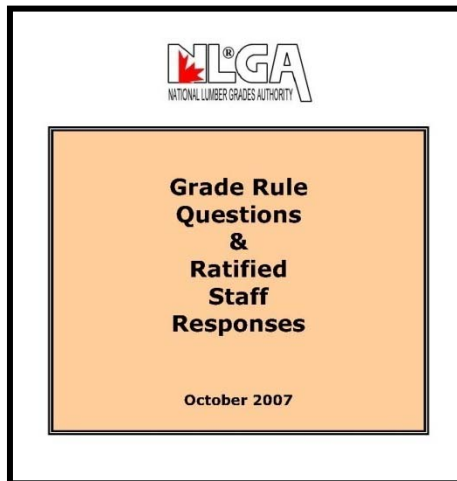
I.	CSA Standard Z299.1 -1978	Quality Assurance Program Requirements
✓ II.	CSA Standard Z299.2 -1979	Quality Control Program Requirements
III.	CSA Standard Z299.3 -1979	Quality Verification Program Requirements
IV.	CSA Standard Z299.4 -1979	Inspection Program Requirements



☺ The CSA Z299 series of standards set the basis for ISO 9000 Series of Standards.

Ratified Staff Responses

- ☺ The Ratified Staff Responses Document is a list of questions posed to NLGA staff and the staff response that has been ratified by the NLGA Standards Committee and/or the NLGA Grade Committee.
- ☺ NLGA has ratified response documents for:
 - ☺ the NLGA Grade Rule;
 - ☺ for FJ Lumber (SPS 1 & 3); &
 - ☺ for MGL (SPS 2)



NLGA Website

The NLGA Website is www.nlga.org

It includes:

- Available NLGA publications & ordering info
- Member Agency Gradestamp Facsimiles & Contact Information
- Links to CLSAB, Forintek, ALSC & CWC websites



Objectives of Presentation

1) Canadian Grading System

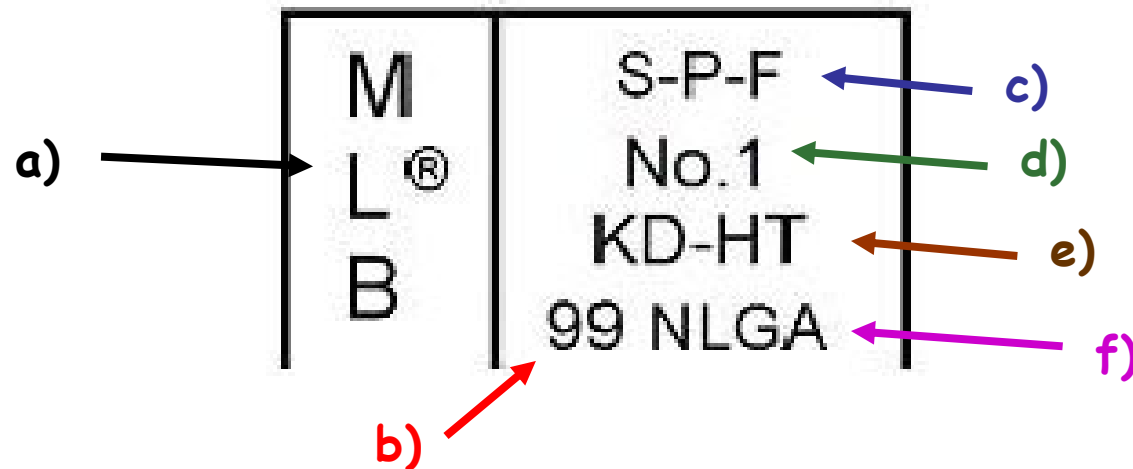
a) NLGA Background

b) Components of the Grade Stamp

c) CLSAB's Role

Grade Stamps

Typical Grade Stamp Facsimile for Visually Graded Lumber



- a) **Registered Symbol (logo)** - of the grade stamping agency.
- b) **Facility (mill) Identification** - usually by number or mill name.
- c) **Species Identification** - indicates species individually or in comb.
- d) **Grade Designation** - grade name, abbreviation or number.
- e) **Condition of Seasoning** - at time of grade stamping:
 - KD or S-DRY - Max. 19% moisture content
 - S-GRN - Over 19% moisture content (unseasoned)
 - HT - Lumber heated in a kiln to a core temperature of 56° for 30 minutes
- f) **Grade Rule** - requirement of CLSAB (Para. 40 - NLGA Grade Rule)



**LISTED BELOW ARE GRADE STAMP FACSIMILES
AND ADDRESSES OF CLSAB ACCREDITED AGENCIES**



A.F.P.A.® 00
S-P-F NLGA **1**
KD-HT

Alberta Forest Products Association
Suite 500-10709 Jasper Avenue
Edmonton, Alberta, T5J 3N3
Tel: (780) 452-2841 **Fax:** (780) 455-0505
Website: www.albertaforestproducts.ca
E-mail: info@albertaforestproducts.ca

CSI **No.1**
00 **KD-HT**
NLGA **D FIR-L (N)**

Canadian Softwood Inspection Agency Inc.
1047 - 250A Street
Aldergrove, B.C. V4W 2S8
Tel: (604) 857-2112 **Fax:** (604) 857-2177
E-mail: canadiansoftwood@telus.net

CLA® 100
1 NLGA S-P-F
KD-HT

Canadian Lumbermen's Association
Suite 200 - 30 Concourse Gate
Ottawa, Ontario K2E 7V7
Tel: (613) 233-6205 **Fax:** (613) 233-1929
Website: www.cla-ca.ca
E-mail: info@cla-ca.ca

QFA **KD-HT**
91 **1**
NLGA **S-P-F**

Council of Forest Industries
360 - 1855 Kirschner Road
Kelowna, B.C. V1Y 4N7
Tel: (250) 860-9663 **Fax:** (250) 860-0009
Website: www.cofi.org
E-mail: desrosier@cofi.org

CMSA **No 1**
100 KD-HT
NLGA
S-P-F

Canadian Mill Services Association
#200, 601 - 6th Street
New Westminster, B.C. V3L 3C1
Tel: (604) 523-1288 **Fax:** (604) 523-1289
Website: www.canserve.org
E-mail: sing@canserve.org

ILMA **KD-HT**
25 **1**
NLGA **D FIR-L(N)**

CFPA® **26**
S-P-F
KD-HT
NLGA **2**

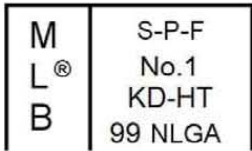
Central Forest Products Association Inc.
Box 1169, Hudson Bay, SK S0E 0Y0
Tel: (306) 865-2595 **Fax:** (306) 865-2621
E-mail: cfpa@sasktel.net

5 **No. 2**
KD-HT
S-P-F
NLGA

Macdonald Inspection Services Ltd.
842 Eland Drive
Campbell River, B.C. V9W 6Y8
Tel: (250) 923-3250 **Toll Free Tel:** 1-888-331-8200
Fax: (250) 923-3258
Website: www.gradestamp.com
E-mail: macinsp@island.net



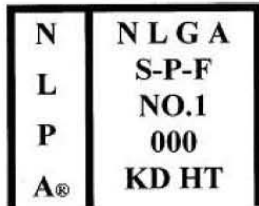
**LISTED BELOW ARE GRADE STAMP FACSIMILES
AND ADDRESSES OF CLSAB ACCREDITED AGENCIES**



Maritime Lumber Bureau
P.O. Box 459
Amherst, Nova Scotia B4H 4A1
Tel: (902) 667-3889 **Fax:** (902) 667-0401
Website: www.mlb.ca
E-mail: mlb@ns.sympatico.ca



Ontario Lumber Manufacturers' Association
210 - 65 Queen St. W.,
Toronto, Ontario M5H 2M5
Tel: (416) 367-9717 **Fax:** (416) 367-3415
Website: www.olma.ca
E-mail: info@olma.ca



Newfoundland & Labrador Lumber Producers Association
P.O. Box 8, Glovertown, NF AOG 2LO
Tel: (709) 533-2206 **Fax:** (709) 533-2611
Website: www3.nf.sympatico.ca/nllpa
E-mail: nllpa@nf.sympatico.ca



Pacific Lumber Inspection Bureau
33442 First Way South, Suite 300
Federal Way, Washington 98003
Tel: (253) 835-3344 **Fax:** (253) 835-3371
Website: www.plib.org
E-mail: info@plib.org

B.C. Division:
P.O. Box 19118
Fourth Avenue Postal Outlet
Vancouver, B.C. V6K 4R8
Tel/Fax: (604) 732-1782



10
CONST S-P-F
S-GRN
NLGA

Northwest Territories Forest Industries Association
P.O. Box 220,
Fort Smith, N.W.T. XOE OPO
Tel: (867) 872-2155 **Fax:** (867) 872-5311
E-mail: geoffstock@northwesttel.net



Conseil de industrie forestière du Québec
Quebec Forest Industry Council
1175, avenue Lavigerie, bureau 200
Sainte-Foy, Quebec G1V 4P1
Tel: (418) 657-7916 **Fax:** (418) 657-7971
Website: www.qfic.qc.ca
E-mail: info@qfic.qc.ca



Objectives of Presentation

1) Canadian Grading System

a) **NLGA Background**

b) **Components of the Grade Stamp**

c) **CLSAB's Role**



Organizational Chart





The Role of CLSAB

✓ CLSAB's role is to:

1 Establish policy for & control of:

✱ the identification and certification of lumber to be used in Canada, exported from Canada, or manufactured in accordance with standards approved in Canada

2 Review, advise upon and approve or disapprove grading rules or other product standards for Canada

✱ utilized in accreditation of Agencies and the certification of their manufacturers by CLSAB accredited Agencies.



The Role of CLSAB (con't)

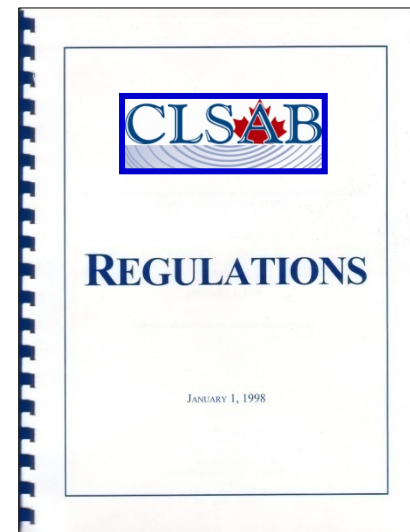
- 3 **Accredit Lumber Grading Agencies (13 in Canada):**
 - to **supervise and certify lumber manufacturers to assign grades** to lumber (grade stamp or certify) by visual or mechanical means;
 - to **establish and monitor quality assurance methods** for the manufacture of lumber;
 - to **apply identification marks (grade stamps) and certificates** attesting to the grade and quality of the lumber.

- 4 **Review, advise upon and approve or disapprove** grading rules or other product standards for Canada
 - **utilized in accreditation** of Agencies and the **certification** of their manufactures by accredited Agencies.



Regulations

- ☺ Developed in accordance with the CLSAB By-laws and criteria derived from CSA 0141 for Softwood Lumber, and include:
 - ✳ Requirements for Approval of Grading Rules and or Product Standards;
 - ✳ Requirements for Supervising Agencies to monitor Machine Grade lumber (MGL) facilities
 - ✳ Accreditation of Agencies
 - ✳ CLSAB Monitoring of Agencies
- ☺ CLSAB also has a policy for approving MGL Machines & residual MGL





Levels of Supervision

1. CLSAB - Monitors grading agency performance
2. Accredited Grading Agencies
 - ★ Issues grade stamps
 - ★ Trains and Certifies MGL & FJ lumber Operators & Graders
 - ★ Monitors mill lumber grading and grade stamping
 - ★ Has the ability to put a mill on probation, suspend or revoke grade stamps for non-conformance to standards
3. Mill Quality Control Supervisors
 - ★ Regularly inspects mill lumber graders & FJ & MGL operators
4. Mill Lumber Graders & MGL Operators
 - ★ MGL & FJ Operators pass certification test & perform daily QC
 - ★ Graders must pass Agency's lumber grading course & perform hands-on piece-by-piece visual inspection of each piece of lumber



New Programs

Supervises - Treated Wood Program including grade stamping

Monitors - CFIA Heat Treating Program

Oversees - CE Marking Program for Canada using BM Trada as their Notification Body in Europe

CLSAB Website



The CLSAB Website is:



www.clsab.ca



NLGA / CLSAB Role Summary



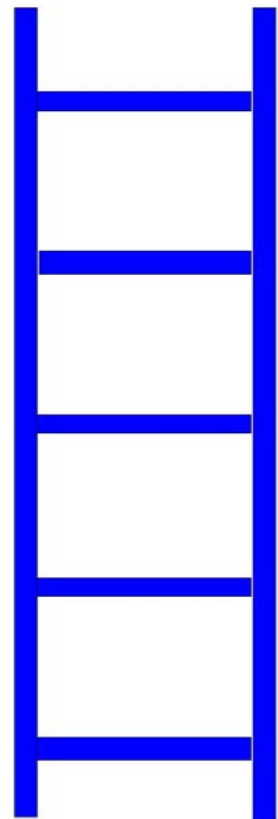
☺ **NLGA** & **CLSAB** are autonomous organizations who work at arms length.

	
<ul style="list-style-type: none"> Writes & Revises and maintains Lumber Grading Rules 	<ul style="list-style-type: none"> Approves new lumber Grade Rules & any revisions thereafter
<ul style="list-style-type: none"> Writes & Revises Special Products Standards 	<ul style="list-style-type: none"> Accredits Agencies to administer NLGA Grading Rules & Special Products Standards (SPSs) Approves NLGA SPS's including any revisions
<ul style="list-style-type: none"> Publishes and amends Grading Rules and Standards 	<ul style="list-style-type: none"> Establishes regulations and minimum inspection & reporting procedures for Agencies to follow when monitoring mills
<ul style="list-style-type: none"> Interprets Grading Rules and Special Product Standards 	<ul style="list-style-type: none"> Oversees agencies who monitor facilities who use SPS 1, 2, 3, 4 &/or SPS 5 as well as the Grade Rules. Recognizes NLGA's role to interpret NLGA Grade Rules and Standards.

✓ Simply put:

- ☺ **NLGA** writes, interprets and maintains the Grade Rules & Special Product Standards; &
- ☺ **CLSAB** accredits Agencies & polices the administration these Grade Rules and Standards generally through visits to Agency mills

Quality Verification Ladder



← **Qualification**

← **Mill Quality Control**

← **Agency Verification**

← **ALS/CLS Verification**

← **Re-inspection**

Thank You!!!



Questions?