THE UNITED STATES

HEAT TREATED

WOOD PACKAGING

MATERIAL PROGRAM
• The Animal Plant Health Inspection Service (APHIS) under the US Department of Agriculture is the National Plant Protection Organization (NPPO) for the United States.

• APHIS has entered into a memorandum of understanding with the American Lumber Standard Committee (ALSC) whereby the ALSC implements a quality control program for the labeling of heat treated wood packaging material (WPM) in compliance with the International Standards For Phytosanitary Measure (ISPM 15)- Guidelines For Regulating Wood Packing Material In International Trade.
ISPM 15—Guidelines For Regulating Wood Packing Material In International Trade

• This international standard regulating WPM manufactured from coniferous and non-coniferous raw wood packaging material was officially approved by the United Nations in March 2002.

• The standard is available for adoption by the roughly 120 signature countries of the UN—a number of countries have accepted the ISPM 15 standard and plan to implement it in the near future. The US has announced implementation of the standard for WPM imports into the US in September 2005.

• The ISPM 15 standard has two treatment methods—heat treatment and fumigation with methyl bromide. The ALSC accredits agencies to supervise facilities that label only heat treated (HT) wood packaging material in compliance with the ISPM 15 standard.

• The standard provides for other treatments—these include chemical pressure impregnation or other fumigates that may be used if bilateral agreements between the trading countries can be agreed upon.
Definition of Heat Treated Lumber and Heat Treated Wood Packaging Material

- Heat treated (HT) lumber is defined as lumber that has been heated in a closed chamber to achieve a temperature of 56°C (133°F) at the core for a minimum of 30 minutes.

- Heat treated wood packaging material is defined as wood packaging material being heated in accordance with a specific time-temperature schedule that achieves a minimum wood core temperature of 56°C (133°F) for a minimum of 30 minutes.

(Note the definitions for HT lumber and HT WPM are the same.)

- Lumber labeled as being heat treated (HT) under the ALSC system and wood packaging material (WPM) labeled under the ALSC system as being heat treated (HT) under the ISPM 15 standard conform to the above definitions.
Background Information on the US Lumber Industry

- The American Lumber Standard system is an integral part of the forest products industry’s economy and is the basis for the sale and purchase of a significant volume of all softwood lumber traded in North America.

- The American Lumber Standard system provides the basis for the labeling and acceptance of lumber and lumber design values by the US building codes and other government agencies.

- The American Lumber Standard system also provides the basis for acceptance of lumber (both coniferous and non-coniferous) that is labeled and represented as being heat treated in compliance with the ISPM 15 standard.
History of ALSC System

• First efforts to standardize lumber in the US began in 1922.
• First lumber standard for the US was published in 1924.
• ALSC operates under a consent decree with US District Court.
• This 1941 consent decree required the lumber industry to create an impartial agency to oversee standardization, certification and accreditation for softwood lumber.
• In 1953 a US District Court found the ALSC, appointed by the Department of Commerce, and the ALSC’s Board of Review were impartial bodies appropriate to carry out the decree.
• ALSC continues to operate under the consent decree and the Voluntary Product Standard system of the Department of Commerce.
The American Softwood Lumber Standard PS 20 is maintained by the ALSC under Procedures for Development of Voluntary Product Standards developed by the Department of Commerce’s National Institute of Standards and Technology (NIST).

PS 20 establishes:
- standard minimum green/dry sizes to which lumber is manufactured
- nomenclature used to describe lumber
- criteria for assigning design values to lumber in consultation with the U.S. Forest Products Laboratory
- provisions for lumber grades
- provisions for labeling of softwood lumber including heat treatment
- provisions for inspection, reinspection and settlement of claims

PS 20 is unique among standards in that it also provides for a Board of Review to enforce provisions of the standard.
American Lumber Standard Committee Structure

- Membership on the ALSC is diverse and is appointed by the US Secretary of Commerce from the following groups:
  - Manufacturers
  - Retailers
  - Wholesalers
  - Wood Treating Industry
  - Engineers
  - Homebuilders
  - Wood Using Industries
  - Consumers
  - Architects
  - Wood Packaging Material

- At present the ALSC membership has 22 members and 22 alternate members and each serves a 5 year term.

- The ALSC has responsibility to maintain PS 20.

- The ALSC develops policies for the ALS system to operate under and the Board of Review is responsible for carrying out the policies developed by the ALSC.
Board of Review Structure

• The Board is comprised of 3 members and each member is elected by the ALSC for a 3 year term
• The Board has responsibility to certify grading rules and any changes in those rules as conforming to the requirements of PS 20
• The Board has responsibility to accredit agencies to grade under those certified rules including the labeling of heat treated (HT) lumber.
• The Board conducts ongoing audits of each accredited agency for continued conformance to the established requirements.
• The Board has responsibility to accredit agencies to supervise labeling of products under 2 accreditation programs relating to wood packaging material.

1-Heat Treated Lumber Program

2-Heat Treated Wood Packaging Material Program

• The balance of this presentation will address how each of the above accreditation programs are utilized in the US Wood Packaging Material Program.
The ALSC Program
For the Labeling of Heat Treated Lumber
**Board of Review Has Accredited 25 Agencies to Label Lumber as Heat Treated Under PS 20 Certified Rules**

- AFPA  
- CFPA  
- CIS  
- CLA  
- CMSA  
- COFI  
- CSI  
- LIWP  
- MFPA  
- MI  
- MLB  
- NeLMA  
- NHLA  
- NLPA  
- NSLB  
- OLMA  
- PLIB  
- PRL  
- QFIC  
- RIS  
- RRA  
- SPIB  
- TP  
- WCLIB  
- WWPA

- Agencies are non-profit and for-profit organizations.
- 14 agencies are located in the US and 11 agencies are located in Canada.
- Agency has no connection with the producing mill that would influence its independent position as a third party inspection agency.
- Approximately 1800 producing mills use the grade marking services of these agencies.
- Approximate annual production of 53 billion board feet of lumber with a large percentage marked as HT in accordance with the ISPM 15 standard.
- ALSC accredited agencies provide services for the labeling of heat treated lumber to mills located in the US, Canada, Sweden, Finland, Estonia, Latvia, Lithuania, Germany, Austria, Czech Republic, Romania, South Africa, Argentina and Chile.
Locations of Mills Producing Heat Treated Lumber Under the ALSC Program

Mill Locations in the US

Mill Locations in Canada and Alaska

Mill Locations in Europe

Mill Locations in Southern Hemisphere
How the ALSC Heat Treated Lumber Program Works

The ALSC heat treated lumber program is a three tiered program with oversight.

**ALSC** -- establishes policies and procedures that are used to develop a quality control program for the labeling of heat treated lumber. ALSC continually reviews these procedures to assure appropriateness.

Lumber under the ALS system is permitted to be marked as heat treated (HT) if the lumber has been heated in a closed chamber to achieve a temperature of at least 56° C at the core for a minimum of 30 minutes.

The ALSC has established minimum criteria to be used by agencies to verify that heat chambers and heat treating schedules are capable of producing lumber that conform to the HT requirements.

**Board of Review** – accredits agencies and implements the ALS quality control program.

**Agency** -- provides service to the mills that permits heat treated lumber to be stamped as complying with the ALSC requirements.
Board of Review Oversight of the Heat Treated Lumber Program

BOR uses requirements established by the ALSC to accredit an agency to provide supervisory services to mills that manufacture and label lumber as being heat treated to the requirements of the ALSC procedures. The ALSC HT lumber requirements are identical to those of the ISPM 15 for heat treatment.

BOR uses a full time staff to continually monitor each accredited agency for compliance with the accreditation requirements by:

- Conducting reviews of the accredited agency office and inspection records to determine compliance to the requirements.
- Conducting a minimum of 2 surveys per year on each accredited agency to obtain information on the performance of the accredited agency. Surveys are developed by randomly selecting a minimum of 10% of the mills using the services of an agency.
- BOR staff makes unannounced inspections at the mills, inspects HT lumber and reviews heat chamber records for compliance to the requirements.
- When problems are encountered the heat treated lumber in question is held for correction by the agency. The agency corrects the problem and furnishes a written report to BOR detailing the steps taken by the agency to correct the problem and prevent recurrence.
- When a problem is found the mill is placed on a list for return inspections by ALS staff to assure the agency has addressed the problem.

Once accredited if the agency does not meet the requirements of the ALSC Heat Treated Lumber Program, the BOR can de-accredit or suspend the accreditation of the agency.
Agency Oversight of the Heat Treated Lumber Program

Agency determines if the mill is capable of producing heat treated lumber in compliance with the ALSC requirements prior to issuing the mill the agency quality mark for HT lumber. Once qualified the mill is permitted to use the agency quality marks on compliant heat treated lumber.

Agency makes a minimum of 12 inspections per year at each mill using its services. Inspections are at approximately monthly intervals and are unannounced. Written reports showing the inspection results are maintained in the agency records.

Agency inspections consist of inspection of heat treated lumber produced by the mill, review mill shipping records as well as heat chamber records to assure compliance with the requirements.

Problems found during the agency inspection are corrected and a record of the corrective actions as well as the steps taken to prevent recurrence is maintained in the agency records.

Agency determines the ongoing ability of each mill using its services to produce complying heat treated lumber. If agency determines the mill is not complying it must withdraw its services.
Labeling of the Heat Treated Lumber

Heat treated lumber complying with the ALS and the ISPM 15 requirements can be produced by several methods.

- Upon verification of the heat chamber and the heating schedule by the supervising agency, a mill can heat treat lumber and label the product as meeting the ALS heat treatment requirements.

or

- Through a process approved by the supervising agency, a mill can purchase ALSC accredited agency HT grade marked lumber, cut components from the HT labeled lumber and label the resultant lumber HT compliant with the heat treated requirements of ALSC and ISPM 15.
Typical Agency Marks Placed on Lumber Indicating the Lumber Has Been Heat Treated In Compliance With ISPM 15

(Note the term “HT” in each mark signifies the lumber has met the HT requirements of ISPM 15)
The US Program

For the Labeling of

Heat Treated Wood Packaging Material

Compliant With ISPM 15
Board of Review Has Accredited 13 Agencies to Label Heat Treated Wood Packaging Material as Compliant With ISPM 15

- CIS  - CLIS  - LIWP
- MFPA  - NeLMA  - NHLA
- PLIB  - PRL  - RIS
- RRA  - SPIB  - TP
- WCLIB

• Agencies are non-profit and for-profit organizations.

• Agency has no connection with the producing facility that would influence its independent position as a third party inspection agency.

• Approximately 1500 producing facilities use the services of these agencies to label wood packaging material as HT in compliance with ISPM 15.

• Approximate annual production of 0.5 billion board feet of wood packaging material marked as HT in accordance with the ISPM 15 standard.

• Producing facilities are located in the US and Puerto Rico.
Locations of Heat Treated WPM Facilities Under the ALSC Program
How the US Heat Treated
Wood Packaging Material Program Works

• The US heat treated wood packaging material program is a three tiered program with oversight.

**ALSC** -- establishes policies and procedures that are used to develop a quality control program for the labeling of heat treated WPM produced in the US as being compliant with the requirements of ISPM 15. ALSC continually reviews these procedures to assure appropriateness.

**Board of Review** – accredits agencies and implements the WPM quality control program.

**Agency** -- provides service to the facilities that produce heat treated WPM as compliant with ISPM 15.
Board of Review Oversight of the Wood Packaging Material Accreditation Program

BOR uses requirements established by the ALSC to accredit an agency to provide supervisory services to WPM facilities that manufacture and label WPM as compliant with ISPM 15.

BOR uses a full time staff to continually monitor each accredited agency for compliance with the accreditation requirements by:

- Conducting reviews of the accredited agency office and inspection records to determine compliance to the requirements.
- Conducting a minimum of 2 surveys per year on each accredited agency to obtain information on the performance of the accredited agency. Surveys are developed by randomly selecting a minimum of 10% of the facilities using the services of an agency.
- BOR staff makes unannounced inspections at the facilities, inspecting WPM products, reviewing facility incoming and outgoing shipping records as well as heat chamber records for compliance to the requirements.
- When problems are encountered the WPM in question is held for correction by the agency. The agency corrects the problem and furnishes a written report to BOR detailing the steps taken by the agency to correct the problem and prevent recurrence.
- When a problem is found the facility is placed on a list for return inspections by ALS staff to assure the agency has addressed the problem.

Once accredited if the agency does not meet the requirements of the ALSC WPM program, the BOR can de-accredit or suspend the accreditation of the agency.
Agency Oversight of the Heat Treated Wood Packaging Material Accreditation Program

Agency determines if the facility is capable of producing heat treated WPM in compliance with the ALSC requirements and the ISPM 15 requirements prior to issuing the facility the agency quality mark for WPM. Once qualified the facility is permitted to use the agency quality marks on compliant heat treated WPM.

Agency makes a minimum of 12 inspections per year at each facility using its services. Inspections are at approximately monthly intervals and are unannounced. Written reports showing the inspection results are maintained in the agency records.

Agency inspections consist of inspection of heat treated WPM produced by the facility, review facility incoming and outgoing shipping records and review of the heat chamber records to assure compliance with the requirements.

Problems found during the agency inspection are corrected and a record of the corrective actions as well as the steps taken to prevent recurrence is maintained in the agency records.

Agency determines the ongoing ability of each facility using its services to produce complying heat treated WPM. If agency determines the facility is not complying it must withdraw its services.
Implementation of the Heat Treated Wood Packaging Material Program in the US

- Heat treated WPM complying with ISPM 15 requirements can be produced by several methods.

  - The WPM producer can purchase previously ALSC accredited agency HT grade marked lumber, cut components from this HT labeled lumber for the WPM and label the resultant WPM product as compliant with the heat treated requirements of ISPM 15.

  or

  - The producer can construct the WPM from lumber that is not heat treated, place the product in a heat chamber and heat treat the WPM product to the requirements of ISPM 15.
Interpreting an ALSC Wood Packaging Material Quality Mark For Compliance With ISPM 15

a. Trademark – the identifying symbol, logo, or name of the ALSC accredited agency

b. Mill Identification – product manufacturer name, brand or assigned mill number

c. Heat Treated mark

d. Country Code – the two letter ISO country abbreviation

e. Approved International symbol for compliant wood packaging material
Typical WPM Agency Quality Marks Placed on Wood Packaging Material Indicating WPM Has Been Heat Treated In Compliance With ISPM 15

(Note the term “HT” and the term “US” in each mark signifies the wood packaging material has met the HT requirements of ISPM 15 and was produced and labeled in the United States.)
Summary of How the ALSC System Enables WPM to be Labeled Heat Treated in Compliance with the ISPM 15

Department of Commerce

PS 20-American Softwood Lumber Standard

ALSC

Board of Review

ALSC enters into MOU with APHIS, develops accreditation program to monitor performance of agencies that audit heat treated WPM labeled for international trade under the ISPM 15

Accredits Heat Treated Lumber Agency

Accredits WPM Agency

Provides Service to HT Lumber Producer

Provides Service to WPM Producer

WPM producer can label WPM as heat treated in compliance with ISPM 15

WPM producer purchases ALS agency HT labeled lumber and builds HT WPM with this lumber

WPM producer builds WPM from non-heat treated lumber

WPM producer places WPM in heat chamber and heats WPM to achieve 56°/30 min

- Manufactures and subjects lumber to heat treating process labeling lumber HT
  or
- Remanufactures ALS agency HT grade marked lumber labeling product HT

WPM producer builds WPM with this lumber
Additional Information on the ALSC

• ALSC website address:
  www.alsc.org

• ALSC phone number:
  301.972.1700