Established in 1933 as a Lumber Code Authority under The National Industrial Recovery Act and Roosevelt’s “New Deal”, in which national, regional, and local code boards had to be created to interpret and enforce the Act.

The “Lumber Code Authority” was established and structured in order to monitor and enforce the code and its provisions, which included the most common provision of price filing by each lumber manufacturer. Lumber mills were required to file their prices with their particular code authorities and give advance notice of any price changes. Other provisions of the lumber code were maximum employee work hours, minimum wages, set worker’s wage, field inspections, and forest conservation requirements.

In 1935 NIRA was ruled as unconstitutional by the Supreme Court, and NELMA transformed into a voluntary trade association, in order to represent the northeastern lumber industry on common issues.
• Headquartered in Cumberland Maine

• Staff of 15
  • President
  • Director of Inspection Services
  • 10 inspectors
  • 3 Administrative Assistants
  • Provide Services to 55 Lumber Manufacturers and 475 Wood Packaging Facilities. Operating in 20 states.

• Accredited by American Lumber Standards Committee as a grade rules writing agency. Accredited to provide heat treating services, lumber & timber grading services, and wood packaging materials certification (ISPM 15).

• Approved by USDA APHIS to issue KD HT Certificates for exporting softwood lumber to non-EU countries.

• Established and wrote the common Eastern White Pine Grade Rules utilized by many pine lumber mills in the Northeast.
Why is Lumber and Packaging Heat Treated?

- Lumber and Packaging is heat treated to minimize the introduction and transfer of invasive species of timber destructive pests such as:
  - The Pine Wood Nematode
  - Emerald Ash Borer
  - Asian Long Horned Beetle
  - Dutch Elm Disease
    - Three different bark beetles
  - Just to name a few, there’s plenty of others!
What is Heat Treating

- Typical Kiln or Heat Chamber (HT)
  - The core temperature of the lumber is brought to 133° for 30 consecutive minutes. NELMA requires 140°.
  - This kills any pests that may be present. Sterilization!
- Kiln Drying and Heat treating are not the same thing. However Heat Treating is easily achieved during drying.
- Lumber, firewood, or packaging is not immune to re-infestation after HT.
What is Heat Treating

- Drying accompanying Heat Treating, as well as proper storage is best to ward off re-infestation.

- Heat Treated lumber must be stored separately from non-treated material to avoid contamination. (not touching)

- Other Approved treatment methods
  - Fumigation – Methyl Bromide (MB)
  - Dielectric Heating (Microwave) (DH)
  - **Pressure Treating is not an approved treatment!**

How is Heat Treating Monitored

- Core Temperature is monitored by placing sealed thermocouples in the core of the thickest material in the chamber.

- Proven time and temperature schedules are strictly mandatory for kilns or heat chambers not utilizing core temperature monitoring.

- In both methods a report or chart showing time and temperature duration is supplied to the certifying agency for review during monthly audits.
HT Certification Programs

- Kiln Drying an HT Certificates Issued by NELMA under Memorandum of Understanding with USDA (Softwood and Non EU countries only)
- ISPM 15 – International Standard for Phytosanitary Measures
- IPPC – International Plant Protection Convention
  - Regulates Wood Packaging Materials (WPM) and treatment methods
- Three basic programs are derived from the ISPM 15 Standard with oversight by the American Lumber Standards:
  - Heat Treatment (Lumber or Completed packaging i.e. pallets)
  - Remanufacturing
  - Wood Packaging Material (WPM) i.e. End user

Lumber Manufacturer or Kiln Drying Operation

- Heat treats and dries lumber
- HT stamps lumber
- Sells HT lumber to end users

May Export Lumber via Certificate from NELMA or USDA APHIS

Facility Types and Process
HT Lumber Remanufacturer

Cuts, rips, and re-saws HT lumber into smaller components

HT Stamps all lumber components

Sells HT components to end users

Lumber will still require a phytosanitary certificate for export to most countries

Facility Types and Process

Original manufacturer HT stamp

Remanufacturer’s HT stamp
Wood Packaging Material (WPM) Facility (Final assembly)

- Purchases HT lumber
- Constructs packaging and stamps with IPPC HT Stamp
- Ships a commodity in or on the packaging
- May sell completed packaging for use by others

Facility Types and Process

WPM Facility End User

- Full length HT Stamped Lumber inventory
- IPPC HT Stamp applied to completed packaging
- Original HT Stamps Visible
Wood Packaging Material (WPM) Heat Treating Facility

- Primarily builds hardwood pallets
- Heat treats pallets and stamps with IPPC HT Stamp
- Sells completed packaging to end users
- May re-man or recycle and reheat treat packaging for export, also may HT lumber and stamp it for sale to end users.
After repairs, original IPPC stamps are obliterated and the pallet must be re-heat treated if the pallets will be exported, after treatment the pallets can be re-stamped with the facility’s IPPC stamp. The pallet may be used for domestic use without re-heat treatment; but in any case once repairs are made to a previously certified pallet, the original IPPC stamps must be obliterated.
The Inspection Process

- Inspectors observe all facets of the program during each visit.
- Review each kiln chart for time and temperature verification and ensure that proven schedules are followed or that probes reached the proper time and temperature.
- Verify proper probe placement and probe and wiring condition.
- Confirm proper HT Lumber storage and inventory practices are upheld.
- Check for stamping legibility.
- Verify purchase and usage volumes.

The Inspection Process

- Inspect packaging and lumber for overall compliance to the standard such as bark restrictions, the proper lumber is being used, and if the proper stamps are applied.
- Take inventory of all stamps maintained by the facility.
- If all is well, we leave and everyone is happy!
Checking the Probes

Nice Try!
Probes and wires…oh this looks promising!

NELMA inspectors will evaluate stacking!

What is happening here? Not heating efficiently!

How about here??…no!
Reinfestation!

Preferred storage methods!
How is the stamping?
Most People do it right!

Some people skirt the system entirely.
Is the wood bug free?

It may be, but good luck convincing anyone!

Certificate Resources

NELMA
- KD HT Certificates for softwood
- Non European Union Countries only
- No Certificates Issued for Hardwood

USDA APHIS
- Phytosanitary Certificates for all lumber, logs and other wood products
- All Countries and European Union

NHLA
- Kiln Dried Hardwood Certificates
- 5 countries including European Union
- EU requires many additional steps for NHLA KD-HT Certs for Ash Lumber
NELMA Wood Packaging Inspection Program  www.nelma.org/inspection-programs/


NHLA KD Hardwood Certificate Program www.nhlal.com/home/nhla-services


ALSC Wood Packaging and HT Accredited Agencies www.alsc.org

CFIA Generic Heat Treatment Schedules http://www.inspection.gc.ca/plants/forestry/exports/ht-program/pi-07/eng/1383841840107/1383841890825


Thank You 
Presented by Matthew Pomeroy Director of Inspection Services

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