WOOD PRODUCT MARKINGS

Wood product markings that are important for construction inspection are grade and treatment markings. These markings are indicators of the quality and durability of the material.

Grade markings indicate the species of wood and structural design parameters. The quality of the wood supplied must be equal to or greater than that shown on the drawings and specifications or the stability of these structures will be impaired.

Treatment markings indicate the type of pressure treatment and retention amounts of the treatment. The retention value indicates the exposure expected for the material, i.e., in ground. It also is an indicator of the life expectancy of the material. The most common type of treatment for NRCS designs is waterborne chemicals.

Material certification for wood species, grade, and treatment is needed from the supplier (not the contractor) for wood materials that are not identifiable by markings. The certification must indicate material that is equal to or better than the requirements shown on the drawings and specifications.

Proper inspection of wood materials is difficult due to the following:

1. No markings or markings that are not legible,
2. Variety of symbols and abbreviations used,
3. Identifying the difference between grade and treatment markings,
4. Southern Pine Inspection Bureau has both grade and treatment criteria, and
5. Different standards used by different associations.

The following narrative and exhibits are to assist personnel with wood construction inspection.

Markings are often found 1 foot to 3 feet from the end of the material. Grade markings will have:

1. the association mark or logo;
2. the grade (i.e., construction, No. 1, No. 2, etc.);
3. the material species;
4. the moisture content at the time of surfacing; and
5. a mill number in some cases.

See Exhibit 1 for examples.
The commercial grades from highest strength to lowest strength are:

- Select Structural
- No. 1
- No. 2
- No. 3
- Stud
- Construction
- Standard
- Utility

Note: When a drawing specifies No. 2 grade wood members, No. 2, No. 1, and Select Structural grades may be used. No. 3 and lower grades cannot be accepted.

Lack of identifiable grade markings does not mean the product is acceptable or unacceptable. All wood product suppliers are not members of grading or treatment associations. The non-members may or may not mark lumber. Lumber supplied by non-members will not contain an association logo but may have a company logo.

Treatment markings will usually have:

1. treatment material and retention value (i.e., ACQ, 0.4, etc.),
2. an association name or logo,
3. a treatment process indicated by letters and numbers (i.e., LP-22), and
4. a plant number or name. See Exhibit 2 for examples.

Other abbreviations commonly used for lumber are:

- CM = center matched
- DF = douglas fir
- HEM = hemlock
- MSR = machine stress rated
- RGH, Rgh = rough
- SEL, Sel = select
- SR = stress rated
- STD, std = standard
- STR, STRUCT = structural
- T&G = tongue-and-groove
- WCH = west coast hemlock
- WRD = western red cedar
- YP = yellow pine
Exhibit 1

Example Grade Markings

1. CALIFORNIA LUMBER INSPECTION SERVICE
   MILL 467
   CLS
   S-GRN WCLB DOUG. FIR

2. NORTHEASTERN LUMBER MANUFACTURERS ASSOCIATION
   S-GRN
   NELMA
   CONST EASTERN HEM-TAM

3. NORTHERN HARDWOOD AND PINE MANUFACTURERS ASSOC., INC.
   110
   N
   S-DRY
   BALSAM FIR
   NH & PMA

4. PACIFIC LUMBER INSPECTION BUREAU, INC.
   PLB
   W-10
   CONST S-GRN
   HEM-FIR WCLB RULES

5. REDWOOD INSPECTION SERVICE
   50
   FDTN S-GRN
   REDWOOD
   RAS

6. SOUTHERN PINE INSPECTION BUREAU
   SPIB® No. 1
   KD 15
   7

7. TIMBER PRODUCTS INSPECTION
   a. TP® NO.1 KD-15
      000 SYP
   b. TP. NO 1
      000 D. FIR WWP

8. WEST COAST LUMBER INSPECTION BUREAU
   MILL 10
   WCLB
   NO. 2
   DOUG FIR S-DRY
LEGEND OF GRADE MARKINGS IN EXAMPLES

<table>
<thead>
<tr>
<th>Grade</th>
<th>Moisture Content at Time of Surfacing</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Standard</td>
<td>Green</td>
<td>Douglas Fir</td>
</tr>
<tr>
<td>2. Construction</td>
<td>Green</td>
<td>Eastern Hemlock or Tamarack</td>
</tr>
<tr>
<td>3. Stud</td>
<td>Dry</td>
<td>Balsam Fir</td>
</tr>
<tr>
<td>4. Construction</td>
<td>Green</td>
<td>Hemlock or Douglas Fir</td>
</tr>
<tr>
<td>5. Foundation</td>
<td>Green</td>
<td>Redwood</td>
</tr>
<tr>
<td>6. No. 1*</td>
<td>Kiln Dried</td>
<td>Southern Yellow Pine</td>
</tr>
<tr>
<td>7a. No. 1</td>
<td>Kiln Dried</td>
<td>Southern Yellow Pine</td>
</tr>
<tr>
<td>7b. No. 1</td>
<td>Dry</td>
<td>Douglas Fir</td>
</tr>
<tr>
<td>8. No. 2</td>
<td>Dry</td>
<td>Douglas Fir</td>
</tr>
<tr>
<td>9. No. 2</td>
<td>Dry</td>
<td>Douglas Fir</td>
</tr>
<tr>
<td>10. No. 1</td>
<td>Green</td>
<td>Spruce or Pine or Fir</td>
</tr>
<tr>
<td>11. Construction</td>
<td>Dry</td>
<td>Spruce or Pine or Fir</td>
</tr>
<tr>
<td>12. No. 1</td>
<td>Dry</td>
<td>Ponderosa Pine</td>
</tr>
</tbody>
</table>

*Note the absence of “SYP”, “SP”, or other markings to indicate southern yellow pine. It is the only species graded by this association.
Exhibit 2

EXAMPLE TREATMENT MARKINGS

Pressure Treated Lumber
ACQ-D .40

Ground Contact

PP or SYP

1984-1986

Southern Pine Inspection
Bureau Inspected

NRB 240

Quality Wood
Treating Company
Prairie du Chien, Wi.

Legend of Treatment Markings

ACQ = Alkaline Copper Quat, Type D.

.40 = Treatment Retention (lb/ft³).

Ground Contact = Indicates 0.4 lb/ft³ treatment retention. Use for ground contact only when there is a low replacement cost. Good for occasional exposure to rainwater.

PP or SYP = Treatment process for Ponderosa pine and Southern yellow pine. NOTE: THIS DOES NOT INDICATE THE SPECIES.

1984-1986 = Years plant is certified by Southern Pine Inspection Bureau.

NRB 240 = Coding number used by plant.
This page reserves pages 17-WI-56 through 17-WI-60 for future supplements.