TECO BUILDING CONFIDENCE

TECH TIP

TECO PS 1 and PS 2 Gradestamp Explanation

Gradestamp examples are included at the end of this document for reference.

1 **Thickness label.** The thickness in 1000ths of an inch shall be labeled on the panel. For PS 1 unsanded, touch sanded, and overlaid panels and all PS 2 panels, a tolerance of plus or minus 1/32" is allowed on a trademark-specified Performance Category of 13/16 or less and plus or minus 5% of a trademark-specified Performance Category for panels greater than a 13/16 Category. Sanded PS 1 panels are allowed a tolerance of plus or minus 1/64" for a trademark-specified Performance Category of 3/4 or less and plus or minus 3% of a trademark-specified Performance Category for panels greater than a 3/4 Category.

2 **Third-party inspection agency.** TECO is an accredited agency recognized and accepted by the International Accreditation Service (IAS), certificate AA-654. TECO's certification mark, TECO TESTED with the roof logo, is registered with the U.S. Patent and Trademark Office (USPTO).

3 **Product standards for structural panels.** U.S. building codes require that structural panels for applications in the U.S. comply with either PS 1 or PS 2. PS 1 and PS 2 are nationally recognized Voluntary Product Standards developed under procedures published by the U.S. Department of Commerce. PS 1, *Structural Plywood,* establishes requirements for structural plywood. PS 2, *Performance Standard for Wood-Based Structural-Use Panels,* establishes requirements for structural wood-based panels such as oriented strand board (OSB), waferboard and certain types of plywood.

4 **Bond classifications.** The Exposure 1 classification appears in both PS 1 and PS 2 product standards, while Exterior classification is only referenced in PS 1. An Exposure 1 classification means that the panels are suitable for uses not permanently exposed to the weather; i.e., intended to resist the effects of moisture on structural performance due to construction delays or other conditions of similar severity. An Exterior classification means that the panels are suitable for repeated wetting and redrying or long-term exposure to weather or other conditions of similar severity.

5 **Panel grades.** Panels may be identified as single floor (combination of subfloor and underlayment), sheathing (roof, subfloor, and/or wall), Structural 1 sheathing (roof and/or wall), underlayment, Structural 1 underlayment, concrete form, siding, or marine. In addition, plywood panels are often identified with regard to the quality of the face and back veneers (e.g. A-C, C-D, etc).

- TECO has USPTO registered marks for specific panel applications such as FLOOR SPAN® (single floor) and SHEATHING SPAN® (sheathing).

6 **Group classification (for plywood only).** For plywood manufactured to PS 1 in North America, the species group classification (number 1 – 5) is determined directly by the wood species used in the panel face and back veneers or – for some products – by performance testing. For plywood manufactured to PS 1 outside of North America, most plywood products are group classified by

performance testing. Lower group classification numbers represent greater product strength, with Group 1 being the strongest. Most commonly, sanded plywood products intended for a variety of industrial and construction uses are identified only with a group classification, not with a span rating.

7 **Span rating.** The span rating identifies the recommended maximum[1] center-to-center support spacing under normal use conditions. Panels for which there is no span rating are identified by the largest species group number of the face and back, or by the span rating of the next thinner comparable panel. Depending upon the product, a span rating will consist of (1) or (2) numbers, with details as follows:

- Single floor panels have a single-number (e.g., 20 oc, 24 oc, etc.) span rating (joist spacing).
- Typical sheathing and Structural 1 sheathing have a two-number span rating (e.g., 24/0, 24/16, 32/16, 48/24, etc). For a two-number span rating, the number on the left identifies the span rating (truss or rafter spacing) if the panel is used in a roof application and the number on the right identifies the span rating (joist spacing) if the panel is used in a subfloor application. Panels with the number zero on the right are not allowed to be used in subfloor applications.
- Sheathing grade panels are often used in wall applications. Some products are marked with a single-number span rating (e.g., Wall-16 or Wall-24). Alternatively, sheathing products with two-number span ratings may also be used in wall applications by referring to the span rating number on the left. If the number on the left is 16 or 20 (e.g., 16/0, 20/0, etc.), the allowable wall span rating (stud spacing) is 16 inches. If the number on the left is 24 or greater (e.g., 24/16, 32/16, etc.), the allowable wall span rating (stud spacing) is 24 inches.

8 **Performance Category.** A panel designation related to the panel thickness range that is linked to the nominal panel thickness designations used in the International Building Code and the International Residential Code. For purposes of labeling, abbreviations PERF CAT, CAT, or Category are permitted.

9 **Strength axis (OSB only).** OSB panels are marked to identify the orientation with the greatest strength (strength axis). The strength axis is parallel to the flake or grain orientation of the panel face and back surfaces, which is generally aligned with the long panel dimension.

10 **Mill number.** The mill number is assigned by TECO to identify the individual panel manufacturer. TECO mill numbers and corresponding manufacturer names are listed on the TECO website at www.tecotested.com/clients.

11 Additional information may also be stamped on the panel by the manufacturer. Such information might include: “SIZED FOR SPACING”, “THIS SIDE DOWN”, “WALL ONLY”, manufacturer’s name or logo, net face dimension, tongue and groove, minimum edge and/or end spacing, etc. to assist in installation.

[1] Certain products may require additional panel edge support to achieve the maximum roof span rating. Consult the building code for additional requirements.

PS 1 Group Classified Plywood

1. **THICKNESS 0.703 IN.**
2. TECO TESTED
3. **PS 1 - XX**
4. **EXTERIOR**
5. **A - C**
8. **23/32 CATEGORY**
6. **GROUP 1**
10. **MILL NO.**
11. **ADDITIONAL MANUFACTURER INFORMATION**

PS 1 Sheathing Plywood

1. **THICKNESS 0.451 IN.**
2. TECO TESTED
3. **PS 1 - XX**
4. **EXPOSURE 1**
5. **SHEATHING SPAN®**
7. **32/16**
8. **15/32 CATEGORY**
10. **MILL NO.**
11. **ADDITIONAL MANUFACTURER INFORMATION**

PS 2 Flooring OSB

1.	THICKNESS 0.578 IN.
2.	TECO TESTED
3.	PS 2 - XX
4.	EXPOSURE 1
5.	FLOOR SPAN®
7.	20 OC
8.	19/32 CATEGORY
9.	↕ STRENGTH AXIS THIS DIRECTION ↕
10.	MILL NO.
11.	ADDITIONAL MANUFACTURER INFORMATION