Guide to Planks and Platforms

Introduction

Many types of planks and platforms, manufactured from numerous different materials, are used in construction and maintenance. Different types of planks and platforms have different capabilities and intended uses, and it is important that users and specifiers understand the differences among the various available products.

To assist in this regard, the Plank-Platform Section of the Scaffolding, Shoring, & Forming Institute (SSFI) has developed this guide to planks and platforms. For further information about requirements related to planks and platforms, consult the following standards and codes:

- OSHA 29CFR1926.451, Subpart L
- ANSI A10.8, American National Standard for Construction and Demolition Operations-Scaffolds
- ANSI/SSFI S100, Standards for Testing and Rating Scaffold Components and Assemblies
- ANSI/UL 1322
- CAN/CSA – S269.2, Access Scaffold for Construction Purposes
- PS 20, American Softwood Lumber Standards
- CAN/CSA – S269.2, Access Scaffold for Construction Purposes

Definitions

Metal plank - Manufactured scaffold platform unit up to 12”(12.5”) wide and made from a ductile material such as steel or-- aluminum alloy.

Surface - Top horizontal plane on which workers walk or stand.

End cap - An enclosure with or without hooks that is fastened to each end of a plank. Include Dog Eared Hooks—Straight Hooks and any other hook end applicable

Edge - Vertical longitudinal surface of a plank.

Hooks - Devices attached to a plank to support the plank on a bearer or ledger.

Wind latch - Device intended to prevent uplift.
Edge Laminated Plank – A plank made from two or more members (either sawn lumber, finger jointed lumber and/or structural composite lumber) where the members are bonded with an exterior grade adhesive. The primary bond is along the least dimension of each member.

Face Laminated Plank – A plank made from two or more members (either sawn lumber, finger jointed lumber and/or structural composite lumber) where the members are bonded with an exterior grade adhesive. The primary bond is along the largest dimension of each member.

Pinned Plank – A plank made of two or more members (sawn lumber, finger-jointed lumber and/or structural composite lumber) where the members are mechanically fastened together.

Structural Composite Lumber (SCL) – products where discrete elements are bonded together with an exterior grade adhesive. Laminated Veneer Lumber (LVL) is most common SCL used for scaffold plank. Other SCL products include:

Laminated Strand Lumber (LSL) Oriented Strand Lumber (OSL) Parallel Strand Lumber (PSL)

Solid Sawn Lumber – a product of a sawmill and planing mill usually not further manufactured other than by sawing, resawing, passing lengthwise through a standard planing machine, crosscutting to length, and matching. Solid sawn lumber is stress graded either visually or mechanically. All solid sawn wood planks must be rated as “scaffold plank” and shall be certified by, or bear the grade stamp of a grading agency approved by the American Lumber Standards Committee.

Visual Evaluation – identification and appraisal of lumber growth (i.e. knots, slope of grain, splits) and manufacturing characteristics by visual means as a part of lumber segregation.

Visually Graded Lumber – lumber graded by visual evaluation in accordance with grading rules of the applicable grading or inspection agency. Stress grades are established on the basis of features that relate to mechanical properties. Stress grades designate near-minimum strength properties and near-average stiffness properties. An example of a visually graded product is the Southern Yellow Pine Dense Industrial 65 (DI65). Normally Marked V with a number to signify its grade or strength

Mechanical Evaluation – identification and appraisal of one or more physical or mechanical lumber characteristics as a part of the lumber segregation process. A common machine used in this process is a continuous lumber tester.

Mechanically Graded Lumber – solid sawn lumber graded by mechanical evaluation. Visual evaluation may also be required. The material has assigned design properties and is manufactured for use as structural members.

Mechanical grades, as defined by the American Lumber Standards Committee Standard Voluntary Product Standard PS 20 “American Softwood Lumber Standard” are Machine Stress Rated (MSR) Lumber and Mechanically Evaluated Lumber (MEL). Normally Marked with an M and a number to signify its grade or strength

Cross rung – A structural support member of a fabricated platform that is located between and fastened to the platform siderails.

Rated Working Load – The maximum static load that may be imposed on a fabricated platform, including the weight of workers, equipment and materials but excluding the weight of the platform.

Also known as Working Load Limit or WLL

Scaffold Tower – A temporary elevated platform structure used for supporting workers or materials or both.

Siderail – The main longitudinal structural support member of a fabricated platform.