

Select grades are three in number - B & Better Select, C Select and D Select.

Common lumber includes five grades. Number 1 may contain all sound knotted stock with knots from one-half to two inches in diameter. Season checks, light stain or equivalent characteristics are also admissible. Number 2 Common is subject to the same general inspection but admissible characteristics are more numerous, larger or more pronounced.

Number 3 Common retains a smooth appearance but characteristics are still more pronounced than in No. 2. A typical 1x12"-6' may show some 14 red and black knots from one to two inches in diameter, some season checks and skip in dressing. Number 4 Common may contain wane, knotholes, some skip in dressing and limited amount of rot. Number 5 is the lowest recognized grade and admits all defects known in lumber provided the piece is of usable size and quality.

Dimension, Decking and Factory Lumber is graded according to the rules for all species published by the Western Wood Products Association.

### Distribution

Ponderosa Pine lumber is distributed throughout the United States, and into several foreign countries, from Western Woods Region mills. It is frequently available in mixed carloads together with other woods of the Western Woods Region. Ponderosa Pine is available to the consumer at most retail lumberyards and building material dealers.

For a list of Ponderosa Pine lumber manufacturers, grading rules or further information, write to:

Western Wood Products Association  
Yeon Building  
Portland, Oregon 97204

Handsome, sturdy  
doors of Ponderosa  
Pine add beauty,  
hospitality and  
character to  
the home.

Ponderosa Pine  
trees grow in open,  
park-like forests.  
They average from  
125 to 185 feet in  
height and three  
to six feet  
in diameter.

# Ponderosa Pine

facts about

An extraordinarily popular and versatile softwood lumber, Ponderosa Pine has the greatest growth range of any commercially important lumber species in America. It is found in abundance and produced in volume in the 11 Western states and the Black Hills of South Dakota - an area of more than 35 percent of the total land coverage of the United States.

Of all the species manufactured into lumber in the Western Woods Region, Ponderosa Pine is exceptional in both supply and production. With a standing sawtimber inventory of more than 255 billion board feet, average annual output is approximately four billion board feet, assuring a plentiful supply for the foreseeable future. And the rapid advance in modern industrial forest management methods is leading to the spreading adoption of Tree Farms and forest regeneration principles by Ponderosa Pine timber owners and sawmill operators.

### Botanical Classification

Ponderosa Pine (*Pinus ponderosa*) is one of the soft-textured pines - a group distinct from the southern yellow pines, which are heavier, harder and pitchier and have widely different values and uses. The soft pine species of commercial importance in the United States, in addition to Ponderosa Pine, include Idaho White Pine, Sugar Pine and Lodge Pole Pine.

Botanically, not a true white pine, Ponderosa Pine wood is classified by authorities as generally similar in properties to the white pines.

The Ponderosa Pine tree averages from 125 to 185 feet in height. In favored locations it exceeds 200 feet. It grows in diameters of three to six feet with occasional specimens up to eight feet in diameter. Bark is a distinctive yellow-brown and on mature trees is arranged in large plates. Needles grow in bundles of three and are 5 to 10 inches long and dark yellow-green in color. The red-brown cones are 3 to 5 inches long and contain seeds approximately 1/4 to 1/3-inch long with a 3/4 to 1-inch wing.

### Properties

Ponderosa Pine is a soft-textured wood with typically straight, close and uniform grain, unexcelled for smoothness and fine appearance when surfaced, and easy to work with hand or machine tools.

The wood is light in color, varying from creamy white to straw. After dressing it presents a delicately figured grain. Specific gravity at 12 percent moisture content is 0.40, within the 0.30-0.58 range of all softwoods. At the same moisture content, the mean weight of Ponderosa Pine is 28 pounds per cubic foot, compared to the 23-41 pound variance among all softwoods.

For its weight, the wood is strong enough for most residential and light commercial building purposes. In shrinkage it is about equal to the average for all soft-textured pines. Raised grain, which develops from

Siding of Ponderosa  
Pine is precisely  
manufactured in a  
wide range of  
attractive patterns. It  
is dimensionally  
stable, takes paint  
without grain  
raising and grips  
it firmly.



uneven shrinkage in flat-grained pieces of some of the heavier woods, is not found in Ponderosa Pine.

The wood has long been noted for its ability to take and hold nails and other fastenings without splitting or without extra care in fastener selection. It is an extremely workable wood, respected by the woodworking profession for the ease with which it is fashioned into fine moulding and other intricate detail work.

Ponderosa Pine is an extremely paintable wood and responds splendidly to varnish, stain and lacquer treatments. No special paint mixtures or other than ordinary methods of application are required for good results. In glueability, the wood is rated in Class 1 by the U.S. Forest Products Laboratory.

Ponderosa Pine has the characteristic pleasant pine odor but it is only slightly resinous and comparatively free from pitch and resin pockets. The typical knot is red and sound.

## Uses

Ponderosa Pine is generally recognized as the most versatile wood found in abundance in North America. Its uses range throughout every phase of the light construction field. It is extremely valuable to general industry and it is widely used in the woodworking field for fabricating into architectural woodwork, furniture and specialty products.

## Siding

Because it is an exterior finish product, siding demands a wood that will retain an attractive appearance under the rigorous effects of weathering. Yet it must provide protection to the house and at the same time be inherently adaptable to a tremendous variety of architectural treatments. Ponderosa Pine's properties fit it to all siding requirements. The wood takes nails without splitting and holds them tightly. It works smoothly to any pattern. It grips paint firmly without grain raising, furnishing exceptionally smooth, clean-lined surfaces. It is high in insulation value. And it is dimensionally stable so there is no cupping or warping after installation.

Thanks to a recent product of industry-sponsored research, knotty grades of Ponderosa Pine siding may now be used without fear of paint failure caused by knot resins bleeding through paint. The product, WP-578 Knot Sealer, is a clear liquid and may be applied over knots before painting. It is manufactured by more than 80 paint and varnish makers the country over. Economy Siding is available in a wide range of patterns.

## Sheathing and Subflooring

Subflooring and sheathing, both wall and roof, of Ponderosa Pine furnishes stiffness, insulation and smooth, uniform nailing surfaces to the structure. The wood is dimensionally stable, has firm knots and is

smoothly and accurately milled. Its light weight and easy workability contributes greatly to economy of construction.

Good nailing properties, a feature of Ponderosa Pine, are important to quality sheathing.

## Light Framing

Light framing (floor joists, studding and rafters) employed in the usual residence and commercial building requires strength with minimum weight, good dimensional stability, ready workability, smooth and accurate manufacture and top nailing qualities. Ponderosa Pine, although limited in use for general framing when compared to other lower cost structural woods, is ideally suited for many framing purposes.

## Concrete Forms

Ponderosa Pine concrete forms are a dual-purpose article - first used to mold concrete, and then applied as subflooring, sheathing or decking. Not subject to pronounced changes in shape or size, or to raised grain, the wood provides smooth, even surfaces to permit consistent, level concrete facing. Low in shrinkage and swelling coefficients, free from splitting tendencies and light in weight, Ponderosa Pine is universally accepted wood for concrete forms.

## Panel and Architectural Woodwork

Knotty Pine paneling and windows of wood are traditional in the quality American home. First used by early new England colonists and adopted intact in their early colonial settings for many succeeding generations, both have been successfully adapted to subsequent architectural styles spanning three centuries.

Each has kept pace with the recent tremendous popularity of interior coloring by lending itself to color tints without losing its distinctive identity. And today, Ponderosa Pine is used for more paneling, windows and other architectural woodwork purposes than any other wood in America.

Clear grades of pines, too, have been used since colonial days for

fine paneling. With the contemporary trend toward clean lines unrelieved by ornamentation, clear pine paneling has been re-discovered by alert architects and decorators who have used the material in enormous quantities.

For all architectural woodwork, Ponderosa Pine has been a dominant material since the beginning of its commercial manufacture more than a half-century ago. Combining beauty, durability, economy, workability, glueability and ability to take finish treatments, it is fabricated into window sash, window and door frames, doors, shutters, screens, stairwork, cabinet units, mouldings and other interior and exterior trim and woodwork.

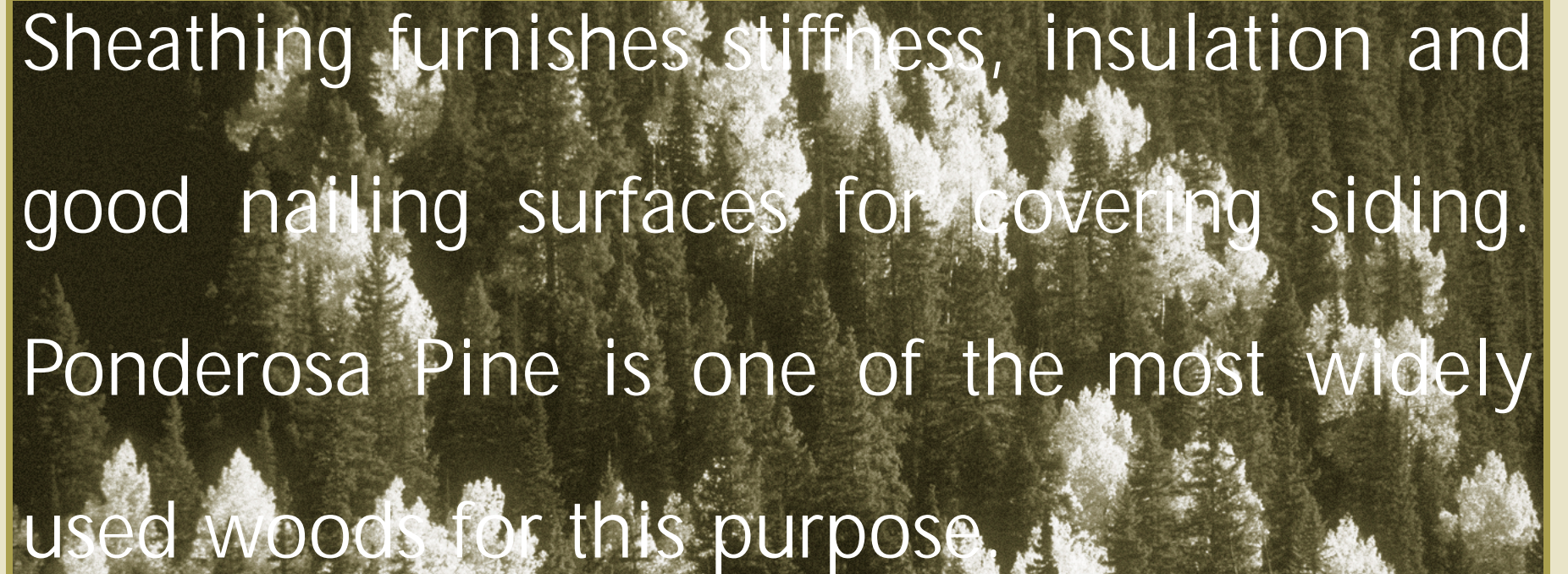
The ability of Ponderosa Pine to withstand shocks and jars without splitting or slivering is important to the

lines and variety of tones of present-day interior styles. Easy to work, readily fastened, and dimensionally stable, Ponderosa Pine is one of the finest softwoods obtainable for all types of furniture.

## Boxes and Crates

Among industrial uses of Ponderosa Pine, the largest is box manufacture. Light in weight, strong and resilient, and easily nailed without splitting, Ponderosa Pine is the ideal material for wood containers. Its light color and smooth surfaces give the box an attractive, bright appearance and provide a good base for printing.

## Wood Novelties and Specialty Cuttings



Sheathing furnishes stiffness, insulation and good nailing surfaces for covering siding. Ponderosa Pine is one of the most widely used woods for this purpose

Durable and easy to clean, smooth and glowing, Knotty Ponderosa Pine paneling is the nation's favorite for every room in the house.

manufacture of doors, windows and cabinetwork where durability under movement is essential. The fact that it will respond to paint, varnish and stain treatments without disfiguring grain raising is vital to top quality woodwork products.

## Furniture

Traditionally, Knotty Pine furniture has been a standard product for centuries and unpainted knotty and clear pine furniture a staple of department and furniture store items for decades.

Inherently adaptable to modern design and color treatments, Ponderosa Pine has recently been fabricated into fine finished furniture with the clean

Because of its ready workability and its exceptional adaptability to finish treatments, Ponderosa Pine is the most widely used wood for specialty cuttings such as toys, window shade slats and rollers, drawing boards, fence pickets and many other products. The uniformly grained, soft-textured wood can be cut with or across the grain with little loss. It glues well without special care.

## Grading

Lumber manufactured from Ponderosa Pine is graded under current published grading rules for the Western Wood Products Association and is separated into Select, Common, Dimension, Decking and Factory (Shop) grades.