

# WESTERN RED CEDAR

PANELING & MOULDINGS

WESTERN RED CEDAR LUMBER ASSOCIATION

**REAL CEDAR**



WESTERN RED CEDAR EXPORT ASSOCIATION







## WESTERN RED CEDAR – A RENEWABLE & SUSTAINABLE RESOURCE

### CERTIFIED SUSTAINABLE AND LEGAL

British Columbia is a leader in third-party sustainable forest management certification. Suppliers of Western Red Cedar are committed to high environmental standards, upholding harvesting practices that are recognized as legal and sustainable.

There are three Certification processes in use in BC; Canadian Standards Association's Sustainable Forest Management Standard (CSA); Sustainable Forestry Initiative (SFI); Forest Stewardship Council (FSC). All involve independent, qualified third-party audits that measure the company's planning, practices, systems and performance against predetermined standards.

These three certification processes all ensure that forest management promotes sustainability. They all examine how operations address a range of forest values such as biological diversity, wildlife habitat, soils and water resources. They all ensure that harvest areas are reforested, that laws are complied with, and that there is no unauthorized or illegal logging.

Customers of BC-based companies have the added confidence of knowing that certification is not a substitute for government regulation but rather an added assurance. A recent independent review found that BC is among the top of the 38 jurisdictions studied. These policies are backed by enforcement and the independent Forest Practices Board, which monitors both industry and government actions.

### HARVESTS

Less than 1% of BC's Cedar growing stock volume is harvested each year, with three quarters of the harvest originating from the coastal forest areas. Clearcut harvesting is now being phased out on the BC coast. A system called variable retention, which requires retaining enough trees, snags and coarse woody debris to keep the forest structure intact, is now widely practiced. The degree of retention depends on the designated zoning of the forest. For zones in which the emphasis is on conserving old-growth, most of the trees will be retained. This may dictate leaving groups of trees or even single trees untouched.

### GROWTH AND REGENERATION

Artificial regeneration of Western Red Cedar began in British Columbia in the late 1960s in association with other species. BC is aggressively replanting Cedar. An average of approximately 8 million seedlings are planted each year on the coast which represents about 15% of total coastal planting. The result is expected to be an increase in Cedar available for harvest in 70-plus years.

Old-growth remains the larger portion of BC's timber, but second-growth Red Cedar is on a steady gain. This second-growth is already being harvested for the high value wood it produces.



## THE WARMTH & PERFORMANCE OF WESTERN RED CEDAR PANELING & MOULDING

### RESISTANCE TO DECAY

Western Red Cedar heartwood is renowned for its high decay-resistance. This natural durability is attributed to the presence of extractives, mainly the thujaplicins, and to a lesser extent, the water-soluble phenolics which are toxic to a number of wood rotting fungi. Western Red Cedar has a durability Class 2 in Europe and Australia, the highest category for durability of any softwood listed.

### DIMENSIONAL STABILITY

Western Red Cedar wood has excellent dimensional stability because of its low wood density and low shrinkage factor. A major contributor to this stability is the fact that its moisture content at the fibre saturation point is 18 to 23%, compared to 25 to 30% in most Canadian softwoods. As a result, Western Red Cedar shrinks and swells minimally, displaying only small movements with changes in humidity. Lower absorption of water is a result of the high extractive content blocking absorption sites. This property contributes to Western Red Cedar's suitability for use in paneling, mouldings and a number of other applications such as saunas where dimensional stability and water repellency is important.

### THERMAL AND INSULATING PROPERTIES

Western Red Cedar has good insulation value because of its low wood density and coarse texture. It is the best insulator among the most common available softwood species and is far superior to brick, concrete and steel. This property ensures that homes built with

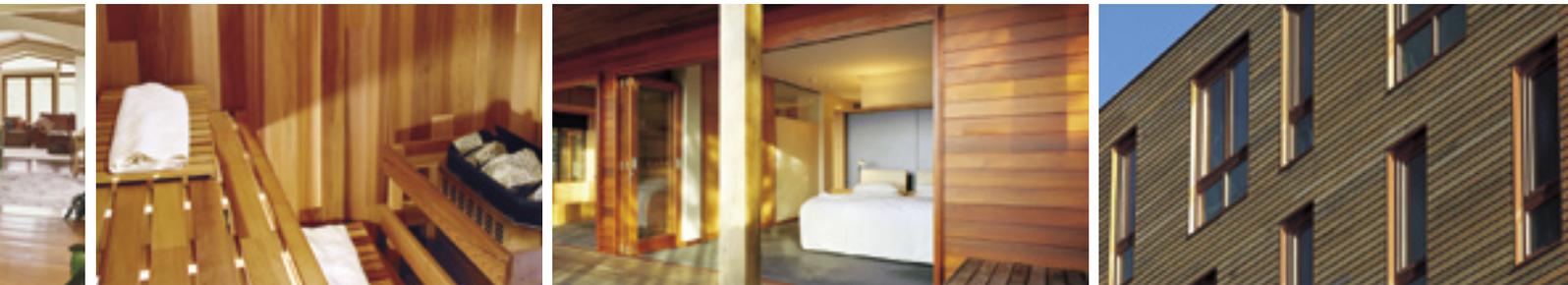
Western Red Cedar will be cooler in the heat of summer and warmer in winter as opposed to homes using denser species or man-made products. Western Red Cedar's ability to dampen vibrations is an important acoustical property which makes it particularly effective as paneling and moulding where it is desirable to reduce or confine noise.

### FLAME SPREADING RATE

The flame-spread rating of Western Red Cedar is 67 to 73 (Class II rating) and the smoke developed classification is 98. Both of these are used to regulate the use of materials where potential to generate smoke or smoke control movement is important. Due to its low flame-spread rating, it will perform better than most dense softwoods which have flame-spread ratings around 100. Western Red Cedar has a flame spreading rate and a smoke-developed classification that are considerably below the maximum limits set by most building codes.

### FINISHING AND WORKABILITY

The lack of pitch or resinous extractives that are soluble in paint vehicles contributes to Cedar's good finishing properties. Cedar takes a variety of coatings, paints and stains exceptionally well, particularly when dried and properly primed. Western Red Cedar is among the easiest timbers to work with because of its straight grain and uniform texture. It planes and sands cleanly and, because of its low wood density, requires little energy to saw or otherwise work. Cedar also glues well with a wide range of adhesives and gluing conditions.



## CEDAR PANELING & MOULDINGS COME IN A SPECTRUM OF PATTERNS & GRADES

Manufacturers of Western Red Cedar paneling and mouldings offer a wide variety of patterns, many of which are custom produced to suit the specific needs of your project. These products can be used for interior and exterior applications and installed horizontally, vertically or a mixture of both.

Cedar paneling and mouldings are available in Clear or Knotty grade categories. Clear grades, typically supplied with a smooth finish, are suitable for a more formal, elegant appearance, particularly when pieces are smooth faced. Knotty grades are supplied with a rough or smooth texture and are popular for their smart, casual look. Many manufacturers will offer their own customized grades. Check with your local supplier to ensure you understand these specifications and that the grade you select will suit your needs. Alternatively you can use the following popular industry standards as a guide.

### CLEAR HEART

Graded based on National Lumber Grading Agency (NLGA) paragraph 200a, Clear Heart is the highest quality of Western Red Cedar paneling available. It includes only pieces with heartwood on the exposed faces. Most pieces are completely clear and free of imperfections. The grade allows only minor imperfections that do not detract from their overall fine appearance. Most manufacturers will offer this grade with 100% vertical grain.

### 'A' CLEAR

This grade references NLGA paragraph 200b. 'A' Clear permits slightly more imperfections than Clear Heart but the grade is still restricted to pieces with excellent overall performance. It is ideally suited to applications where clear appearance is desired but requirements are somewhat less exacting. Typically paneling of this grade is offered by manufacturers as A & Better with a certain percentage of a lower grade B.

### SELECT KNOTTY

The highest standard of knotty paneling and moulding, Select Knotty is graded according to standards specified in NLGA 204a. This grade offers a distinctive, high quality knotty appearance. It has limited imperfections and restricts knots to sound and tight. Select Knotty is typically offered with a percentage of quality knots.

### QUALITY KNOTTY

Quality Knotty, graded according to NLGA 204b, is a lower grade of knotty paneling that is typically not sold on its own but rather combined with Select Knotty. In this grade, natural growth characteristics are not as stringently limited and a cut out is permitted. Cross cutting may be required on some pieces to yield tight knotted paneling.

Whatever grade or pattern of Western Red Cedar paneling or moulding you select, it will add warmth, beauty and performance to your project that cannot be matched by other species or man-made alternatives.



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