



THE SUSTAINABLE AND LOW CARBON FENCE SOLUTION TO NOISE REDUCTION

British Columbia communities looking for visually appealing and environmentally friendly ways to reduce traffic noise can find the ideal solution in the Pacific HemFir Sound Shield.

The Pacific HemFir sound abatement fencing system provides communities with a sustainable, cost-effective, and high-performance roadside barrier that reduces traffic noise. Sourced from responsibly managed B.C. forests, the Pacific HemFir Sound Shield is a **highly effective sound barrier that is eco-friendly, easy to install and popular with residents.**

Better Fences Make Better Neighbours

A sound barrier should do more than protect residents from noise pollution. While the Pacific HemFir Sound Shield is a practical and cost-competitive solution to noise reduction, the system also brings the warmth and aesthetic appeal of wood to surrounding communities. It blends seamlessly and naturally into the landscape and creates a curb appeal that concrete cannot replicate.

In one of B.C.'s first communities to undertake the system installation, **85% of residents preferred the Pacific HemFir Sound Shield** over alternate products, citing its visual appeal and acoustic performance as advantages.

FAST FACTS	
Cost-effective and easy to install	Easy to maintain and paint over graffiti
Meets or exceeds code standards without intensive use of concrete or steel	Pressure treatment of the wood extends the system's lifespan
Use sustains employment and local economies	Saves 21 tonnes of CO₂e per km over alternatives
Long lengths available which means fewer posts and less disruption to area	Ranks as Recognized Product on B.C. Ministry of Transportation and Infrastructure list of sound reflective walls



Better Design

A product of advanced wood construction technologies, the Pacific HemFir Sound Shield is a wood-concrete hybrid system that delivers a wealth of competitive advantages and design benefits.

Available in long lengths, the Pacific HemFir Sound Shield system can be installed with fewer posts and less disturbed ground making installation easier.

The Sound Shield's unique tongue and groove construction makes for easy assembly and delivers an **acoustical performance exceeding North American requirements.**

Its lightweight, modular wood design means it can often be installed without the use of heavy machinery, which is an advantage in tight urban settings and complex geotechnical areas. All this saves on cost and time as well as damage and disruption to the surrounding area.

The Pacific HemFir Sound Shield also stands up to rocks and other highway debris and is **an excellent choice for colder climates where roads are treated with salt.**

Its lightweight, modular wood design means it can often be installed without the use of heavy machinery, which is an advantage in tight urban settings and complex geotechnical areas.



Eco-friendly, Low Carbon Choice

Wood harvested from sustainably managed forests is the greenest choice available for sound abatement fencing because wood-based sound abatement panels have a lower carbon footprint than concrete panels. Wood removes carbon from the atmosphere and stores it through the wood products' entire lifespan helping to create a low carbon future. Pressure treatment with wood preservatives further extends the life of wood products while storing carbon, enabling continued forest growth and carbon sequestration.

A Pacific HemFir Sound Shield barrier 10' high and 1 km long reduces CO₂e emissions by 21 tonnes. This is more than the average Canadian carbon footprint of 15.5 CO₂e in one year.

The environmental benefits of using pressure treated wood in building projects are significant. Several Life Cycle Assessment reports point to the fact that when compared to non-renewable materials—concrete, steel and plastic—pressure treated wood products use less energy and water to produce.

Low-Cost and Easier to Maintain

Pacific HemFir is plentiful in B.C., so it costs less than other building products and offers an innovative and natural solution to traffic noise reduction. Wood is also lighter than other building materials which translates into lower transportation costs.

In communities where graffiti is on the rise, the Pacific HemFir Sound Shield offers a low-cost solution. With a coating of solid paint, vandalism disappears without damage to the wood substrate.

The system is built in sections so if there is damage to certain panels, they can be repaired or replaced without disturbing the rest of the barrier. **This modular fabrication keeps maintenance costs down for both public and private developers.**

Longer Lasting

For exposed fencing systems that will have ground contact and no coverage from the elements, Pacific HemFir can be pressure treated with an environmentally friendly preservative. This ensures less need for replacement in years to come.

Pacific HemFir's high strength to weight ratio and excellent pressure treatment performance make the Sound Shield a durable and long-lasting product.

All preservatives are registered by Health Canada's Pest Management Regulatory Agency.

Over time, Pacific HemFir fencing products stay true with very little contracting and expanding in response to varying moisture content, which is especially important in humid climates.



Beautiful. Sustainable. Strong. For performance and design, the Pacific HemFir Sound Shield is wood that works.



Stronger

After years of rigorous research and advanced testing, the Department of Wood Science at the University of British Columbia found that Pacific HemFir's load bearing capacity is much greater than previously reported. These findings were so compelling, they led to a code upgrade by CSA 086 Technical Committee on Engineering Design in Wood, the Canadian Standard. This is good news for engineers and municipalities in need of **highly durable wood products**.

Fabrication and Installation

For Fabrication and Installation, follow the engineered drawing for B.C.'s Ministry of Transportation and Infrastructure.

Proper construction and installation of the Pacific HemFir Sound Shield by a qualified contractor will ensure top performance.

**For installers near you, contact
Brian Hawrysh at BC Wood:
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For more information visit PacificHemFir.com



**Forestry Innovation
Investment**

For more information about British Columbia wood products and the sustainably managed forests they come from, visit naturallywood.com.

