Historic Wooden Siding & Shingle Cladding

This publication discusses the traditional forms of wood cladding, shakes and shingles used to protect exterior walls of log and/or frame buildings in British Columbia.

Restoration of Siding & Shingles

The fabric of existing siding or shingles should be retained wherever possible. Materials utilized to replace missing portions or repair deteriorated areas can be employed. Chemically constituted fillers such as Abatron's wood restoration system, LiquidWood and WoodEpox, work well in many situations.

Where portions of the fabric have deteriorated beyond repair, they should be replicated. Profiles of original sidings should be taken. New materials can then be milled to match these from the same or similar types and grades of wood as the original. Care should be taken to replicate the original patterns and methods of fastening the siding or shingles to the substrate materials (e.g., size and type of nails). In the case of shingles, it is particularly important to match the butt thicknesses, length and taper of the originals.

As the original materials, with time, will have lost much of their moisture content through shrinkage, replicated replacements should be air-dried if possible to avoid eventual mismatches due to shrinkage. They should be oversized when milled so that the final product will match the profile of the original after shrinkage. Scarf joints between old and new material are preferable to butt joints.

Backing For Siding

It has become a building tradition in western Canada to protect wood-structured buildings with various forms of wooden skins called siding. This siding is applied to log structures, heavy timber structures or wood-framed structures. With few exceptions, it is applied to a solid substrate such as squared logs, board or shiplap sheathing or, for the past several decades, plywood or waferboard. A layer of asphalt-impregnated building paper is usually applied to the substrate before the siding is fixed in place.

Board-&-Batten and Board-on-Board

Following building methods developed in Norway and Sweden, board-&-batten siding was often utilized to protect log structures from weathering. It was used only on squared log structures with dovetailed corner joints, or in Canada, on log piece sur piece buildings such as those constructed
by the Hudson's Bay Company (HBC). This siding type was later used for balloon- or western-framed structures. It was applied directly to the structure on ancillary urban buildings and on agricultural structures. On buildings intended for human occupation, a layer of building paper was usually attached to the frame before this siding was attached, or there may have been an additional layer of rough sheathing such as boards or shiplap.

a. Board-on-Board on Frame  
b. Board- & -Batten on Squared Logs

Among the earliest types of finish siding, lap sidings were usually 1" x 6" or 1" x 8" boards. These were nailed along the top edge so that the nails were concealed by the overlap of the board above. Exposed face-nailing in vertical rows, however, is often evidence that lap siding has been nailed directly to the studs, and the spacing of the studs can
Rusticated Lap Siding

Rusticated Lap Siding was meant to replicate the rustic appearance of logs sawn into rough boards. This siding, which was called "Hide-a-Scroll," was actually milled with a slightly chamfered edge. It was very popular in the 1960s.

Drop Siding

Drop Siding became generally popular all over North America during the nineteenth century. If wider than 6', a face nail was used, as well as a nail concealed in the rabbet, to avoid "cupping" of the board as it seasoned.
Bevelled Lap Siding with V-Groove (V-Joint)

Usually milled from a 1" x 6". Each board was rabbeted on reverse edges at top and bottom, with V-grooves on the face. When attached, the lap protects the board below from water penetration, and the groove defines the joint. An intermediate "false" V-groove was usually milled in the centre of the board (also called "double-bevelled" siding). With time, the boards shrank, and the "false" and real joints became distinguishable as the latter became wider. The example illustrated has a "bead" milled between two V-grooves at each joint. This siding was usually face-nailed.

Sawn Shingles

Sawn shingles were milled with a taper and have always varied in grade and quality. In BC, the wood utilized was first-growth red cedar. Attachment and staggering was done the same way as with shakes. Some of the patterns were:

Common Coursing
The width of the course or "weather" varied with the length of the shingle.

Shadow-Line Coursing
This is achieved by doubling each course,
setting the outside shingle below the inside shingle, to create the shadow. This pattern, which was common during the 1920s and 1930s, also often employed shingles milled with vertical grooves.

**Unequal Coursing**
Commonly associated with the North American Arts and Crafts style, this pattern was achieved by alternating a narrow and a wide course, as illustrated.

**Sawn Shingles**
These utilize shingles cut at the bottom, either in a semi-circle or a 45-degree V, and could produce fish-scale or diamond patterns, either used independently or combined, as shown below.

**Hand-Split Shakes**
Shakes were split by hand from red cedar or spruce blocks with a mallet and froe, and sometimes tapered with a draw-knife. Vertical joints were staggered, and the nails were usually covered by the lap of the next course of shakes. When used on roofs, courses of shakes were often doubled.
Nicholas R. Bawlf, MAIBC Architect is an architect practicing in Victoria, BC. He has worked on a number of restoration projects with log, wood siding, shake and shingle finishes. His projects have included a wide range of types, such as: the 1860s Brotan farmhouse in Sweden in 1966; the Kwagiulth "big house," in Kwak'waka'wakw Village near Port Hardy, BC, in 1979-85; the 1863-1914 Hat Creek Ranch near Cache Creek, BC, from 1980-84; and the 1865 Ross Bay Villa in Victoria, an ongoing project since 1998.

Victoria Heritage Foundation (VHF) was established in 1983 by the City of Victoria to administer a program of grants for exterior and structural restoration of legally protected heritage houses. Of 267 such properties, more than 200 have received VHF grants, and 45 owners have won Hallmark Society Awards for superb restoration. VHF's Education Committee conducts a variety of projects aimed at raising heritage awareness among citizens and visitors to Victoria, and educating owners of heritage structures on sympathetic methods and materials for restoration.

Vancouver Heritage Conservation Foundation (VHCF) is a private, non-profit, charitable organization created by the City of Vancouver in 1992 to assist in the conservation of Vancouver's built heritage, in recognition of its public benefit. The Foundation has a professional staff and is governed by a citizen board appointed by Vancouver City Council. In 1999, the Foundation commenced a building grants project, True Colours, that assists owners of designated houses with exterior maintenance, while emphasizing the importance of authentic period colour schemes.

Heritage Society of British Columbia (HSBC) is a non-profit umbrella organization that represents more than 300 group, individual and corporate members from all parts of BC. Incorporated in 1981, the society's purpose is to provide leadership and encouragement for heritage conservation in BC.

British Columbia Heritage Trust (BCHT) has provided financial assistance to this project to support the conservation of our heritage resources, gain further knowledge and increase public understanding of the complete history of the province of British Columbia.

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