SUMMERLAND RCMP DETACHMENT

LOCATION

Summerland, British Columbia

SIZE

1,500 m²

COMPLETION

201

ARCHITECT

KMBR Architects Planners Inc./ Allen + Maurer Architects

STRUCTURAL ENGINEER

Fast + Epp

PROJECT OWNER

District of Summerland

PROJECT OVERVIEW

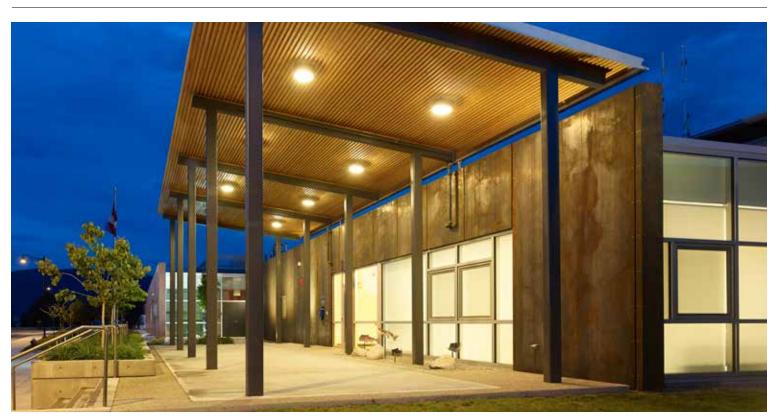
Completed in 2012, this 1,500 square metre, single-storey building provides state-of-the-art accommodation and facilities for the Summerland RCMP detachment in the southern interior of British Columbia.

With the existing facility outdated and in need of major repairs, the town faced a difficult referendum question: either raise funds for a new building or have the community police force replaced by a regional one. The simple, elegant and economical design of the proposed facility helped convince a majority of citizens to vote in favour of a new building.

The site is close to the centre of town and adjacent to an existing arena. The building is designed according to passive design principles, with a rectangular plan elongated in the east-west direction to maximize solar exposure. The south

facade has extensive areas of curtain wall glazing, while the other elevations have only a few strategically placed windows and are clad in either profiled aluminum or weathered steel. The exception is the glazed reception area at the northwest corner, where a generous entrance plaza is sheltered by a large canopy.

On the south side of the building, an open work area is surrounded by administrative offices with abundant natural light. Fixed exterior sunshades control solar heat gain and glare, and the large roof overhang provides both weather protection and further shading to the curtain wall. The roof itself is a single-pitch shed configuration, sloping down from south to north, and of ventilated 'cold roof' construction, which has the roof structure above the insulation.



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"Our new facility is an outstanding building that is state of the art. The RCMP recognize they couldn't have moved into this new home without the support of the community they serve."

Inspector Brad Haugli , Officer in Charge, RCMP South Okanagan, Similkameen Region

WOOD USE

This is a building in which wood is used in very traditional ways, with solid sawn lumber exposed as both a structural and finish material. Such an approach also maximizes the sustainable attributes of wood as a natural medium for carbon storage and as a construction material with low embodied energy.

The architects chose a conventional glulam post and beam structure for the building, with exterior and interior infill walls of light wood-frame construction.

However, the shed roof over the administrative areas of the building is of an unusual double layer construction. The main glulam beams are spaced at 1.8-metre centres and support a structural deck consisting of 2x6-inch tongue and groove pine decking. The ceiling is constructed using 2x4-inch joists with a drywall finish below, and fibreglass batt insulation above. This leaves a substantial cavity within the depth of the beams and grilles at either end to ensure constant cross ventilation. These grilles are made from heavy gauge steel and also provide bracing between the beams. The exterior soffits are clad with unfinished pine planks.

The entrance canopy at the north side of the building is freestanding and thus requires no insulation. It is constructed using nail laminated 2x4-inch pine members. Internally, an acoustic ceiling, comprising 1x4-inch composite wood slats on 2x4-inch strapping with acoustic insulation in the voids, is installed where necessary.







Photos courtesy of Florian Maurer

FOR MORE INFORMATION

This profile is published by Forestry Innovation Investment, the Government of British Columbia's market development agency for forest products.

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