



## High Praise for Steel Building System

### PEAK2PEAK GONDOLA STATION WHISTLER, BRITISH COLUMBIA

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ArcelorMittal Dofasco Steel Design, 2009)

#### DESIGN AND CONSTRUCTION TEAM

OWNER:  
Intrawest Placemaking

ARCHITECT:  
Cannon Design

ENGINEERING:  
BEHLEN Industries LP

GENERAL CONTRACTOR:  
Timberline Construction

BUILDING MANUFACTURER:  
BEHLEN Industries LP

BUILDING INSTALLER:  
Colony Management Inc.



Gondola station and lodge on the Whistler side.

Initially the design was based on a conventional steel structure which, unfortunately, came in significantly over budget. Intrawest approached Colony Management Inc. of Vancouver, BC about the possibility of substituting a steel building system (SBS). John Morley, VP Development for Intrawest, explains: "We thought we could achieve significant cost savings, but we and the architect had misgivings about a subsequent loss of architectural integrity. We were concerned about losing some of the interesting visual features."

David Thompson, President of Colony, takes up the story. "I suggested that before we quote on an 'ordinary' building, we should see if we could build what they designed and within budget. In collaboration with BEHLEN Industries LP we came back with a design that achieved exactly that."

Moving from design to finished building provided its own challenges, beginning with the logistics of getting construction materials up the mountains. And then you have to erect them. Meredith Perez, Marketing Supervisor at BEHLEN, adds, "You not only face the challenge of the location in terms of seismic, wind and snow loads not normally encountered, but the construction crews face extreme weather conditions, even in summer."

"Both buildings are our FLEX-SYS® Building System. Their advantage over other structures is

that all the structural elements were manufactured in our plant and after delivery only needed assembling versus being cut, welded, and constructed on site." The buildings were completed between June and September 2008. Fast simple construction saw the Whistler building, for example, erected in six working days.

The mountain peak 'feel' of each building is achieved with a single slope roof with a high point that tapers out from the base of the building at two different angles. The high side wall is clad with a translucent Rodeca panel through which natural light floods the interior and also allows people outside to see the steelwork and gondolas inside the building. The remainder of the cladding is ArcelorMittal Dofasco's silver-grey Galvalume Plus™ steel. The other structural components were fabricated from galvanized steel.

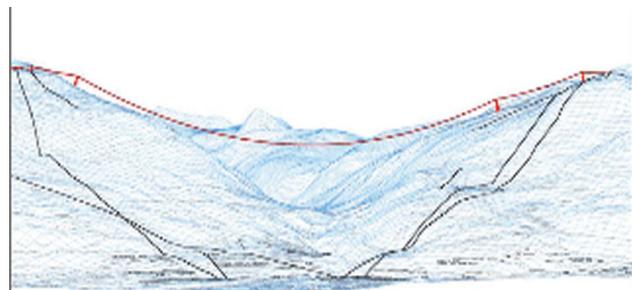
From Intrawest's point of view a further advantage of working with a SBS was that every change they wanted as the project progressed was met by a hard quote from Colony. As David Thompson points out, "With other types of construction, change costs are a best guess. With SBS you can quote accurately up-front, be flexible enough to customize – and do it for less."



Buildings at both Whistler and Blackcomb are the FLEX-SYS® Building System from BEHLEN Industries LP. One of the advantages over other structures is that all the structural elements were manufactured in-plant and only needed assembling on site.



Views of the gondola station with Galvalume Plus cladding and translucent Rodeca panels, allowing views of the interior workings.



Valley and Lift – Whistler to Blackcomb

SPECIFICATIONS - WHISTLER/BLACKCOMB

Angles, Bracing and Light Gauge:  
 Z275 Galvanized. Approx 8,840m (29,000 lineal feet) of 203mm (8”) and 254mm (10”) Lite gauge Cee’s and Zee’s shapes/angles.

Columns, Rafters and I beams:  
 Hot rolled plate welded to many different shapes and sizes.

Wall Cladding:  
 Approx 1,254m<sup>2</sup> (13,500 sq. ft.) .61mm (.0239”) Galvalume steel substrate coloured QC2624 Metallic Silver. Cladding profile: BEHLEN Elite Rib.

Standing Seam Roof:  
 Approx 2880m<sup>2</sup> (31,000 sq. ft.) .61mm (.0239”) AZM-180 Galvalume Plus steel

Roof Profile:  
 BEHLEN SSR24. Misc. components and fasteners – 27,600 Kg (61,000 lbs.)



Canadian Sheet Steel Building Institute  
 652 Bishop St. N., Unit 2A  
 Cambridge, ON N3H 4V6  
 Tel: (519) 650-1285  
 Fax (519) 650-8081  
 www.cssbi.ca