

Case Study

Service and Distribution Centre Wissensteinfeld in Derendingen, Switzerland

Products:

54'400 m² SWISS PANEL SP 160 DU 9002, 1.00 and 0.88 mm 13'300 m² SWISS PANEL SP 35 RAL 9006, 0.70 mm roof

180 m² SWISS PANEL SP 105 RAL 9006, 0.88 mm

11'600 m² MONTAWALL MK 160/600 DU 9002, 0.75, 1.00 and 1.25 mm

370 m² MONTAWALL MK 160/500 DU 9002, 1.25 mm

Builder:

Steinhoff Properties AG in Baar, Switzerland

General constractor:

GOLDBECK Rhomberg AG, St. Gallen www.goldbeck-rhomberg.com

Architects:

 ${\sf GOLDBECK\ Rhomberg\ AG,\ St.\ Gallen} \qquad {\sf www.goldbeck-rhomberg.com}$

Realisation:

2014 - 2015



METAL PROFILES FOR LARGE SCALE LOGISTICS PROJECT

The globally operating corporate group Steinhoff has had a huge Service and Distribution Centre built in the Canton of Solothurn by its Swiss subsidiary Steinhoff Properties AG. It took less than a year to erect a 45,000 m² hall and two office buildings with an area of 2,860 m² as well as an underground car park on the 80,000 m² large, newly developed industrial estate Wissensteinfeld in Derendingen. The comprehensive use of roof and wall profiles from Montana Building Systems Ltd., Villmergen, distinctively characterises this ensemble, the manufacture of which required a particularly challenging logistic performance.



The globally operating furniture supplier
Steinhoff thinks and plans on a large scale. A
workforce of about 80,000 employees works
for the company worldwide. The originally
German group, with its European headquarters in
Westerstede, is publicly listed in South Africa and
is expanding from year to year.

The major tenant of the new Service and Distribution Centre in Switzerland will be the subsidiary Global Warehouse, which is to deliver to 15 stores of the Swiss furniture chain Conforama from Derendingen. The building project was vast and the time frame tight. The building complex was handed over at the end of September, only 12 months after the first groundbreaking in October 2014. This definitely

posed a logistic challenge to all participants in the project, Michael Schmid, Head of Operations at GOLDBECK Rhomberg AG comments, who was commissioned with the planning and realisation of this large scale project.

As he goes on to mention, 100 lorries, 400 cars, about 40 construction machines and up to 400 craftsmen had to be coordinated every day in a 2-shift system. And on top of all that, strict environmental constraints in terms of noise and dust had to be taken into consideration on the construction site to protect the adjacent residential areas. Each delivery therefore had to be carefully planned to the exact day and site position. A mammoth task requiring the close and excellent cooperation of all involved.

The building owners not only formulated ambitious economic and ecological goals. The design and function of the building envelope were also intended to match the "contents".

GOLDBECK Rhomberg AG - known in the sector as a specialist for economic, fast and flexible solutions in industrial and commercial construction - chose Montana Building Systems Ltd. as its partner for the roof and façade construction. In the versatility of their products they found the respectively suitable metal profiles in close cooperation with the specialists.



Metal profiles for solar plants

Grey white coil-coated trapezoidal sheets sized 1.00 mm and 0.88 mm of type SWISS PANEL SP 160 DU 9002 were used over the full roof surface of the Service and Distribution Centre measuring 41,600 m². These metal profiles withstand great loads. They are therefore particularly suitable for industrial and commercial roofs equipped as in this case in Derendingen, with full-surface, massive solar systems. The facade area of 12,200 m² was made using white and aluminiumcoloured SWISS PANEL SP 35 RAL 9006, 0.70 mm, and a further 460 m² consist of anthracite-coloured SWISS PANEL SP 35 RAL 7016, 0.70 mm. And finally, 180 m² of SWISS PANEL SP 105 RAL 9006, 0.88 mm were used for the canopies.

For the façade construction, the GOLDBECK architects chose the product MONTANAWALL, which is a steel cassette range from Montana that is variable in lengths and

dimensions. Without a doubt, the fact that these energy-saving steel cassettes enable a simple and cost-effective structure with excellent insulation values despite their partially extreme length of 15 metres was certainly a decisive factor. The required static calculations, above all for the cassettes MK 160/600 and MK 160/500, met all requirements of the building authorities.

11,500 m² of the wall surfaces were designed with MONTAWALL MK 160/600 DU 9002, 0.75 mm, 1.00 mm and 1.25 mm, and 370 m² with MONTAWALL MK 160/500 DU 9002, 1.25 mm steel cassettes. They are approved in accordance with the building authority test certificates P-BWU02-094092 and P-09-2001. Tankred Heiling, Deputy Project manager of GOLDBECK Rhomberg AG explains: "The façade construction consists of horizontal, insulated steel cassettes, which are screwed to the vertical roof shell. This protects the roof against wind and moisture."

Montana Ltd. undertook all possible measures to exactly plan the required vast quantities - including the excess lengths - and to coordinate deliveries with the lorry capacities to match the temporal and site location dependent requirements. This was not always easy, but it was a success thanks to the close cooperation with the customer. The handling and assembly of the metal profiles on the construction site was fast and without any problems. Again, Montana Building Systems Ltd. has proved that is can handle large scale projects just in time, enabling building owners, planners, architects and the executing companies to realise their demanding targets.

Upon handing over the object to its new owner at the end of September 2015, a "Construction Site of Extremes" was completed, as GOLDBECK Rhomberg's Managing Director Georg Vallaster put it.



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11/2015

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