



RENOVATE. UPGRADE. MONTANA.



**NEW BRILLIANCE FOR OLD BUILDINGS –
WITH MONTANA PRODUCTS MADE OF STEEL AND ALUMINIUM**

RENOVATING WITH MONTANA –



Ferro, Wohlen (CH)

Before: Construction made of concrete with steelpanels and light elements

After: Sandwich-elements MONTANATHERM® for roof and light elements



RENOVATION IS ALSO ECONOMICAL FOR THE SHORT TERM

Renovation is also economical for the short term and medium perspective. Lower energy consumption has an immediate effect after renovation. In the case of uncertain cost developments, the energy price can produce a significant leverage effect. In almost all cases, the building to be renovated has a solid supporting structure, which means that hardly any adjustments are necessary in this regard. In addition, excellent infrastructure links (e.g. rail connection) and the very good positions often prove to be important location as advantages. The new cladding upgrades the building, which has a positive impact on the rental value.



RENOVATION IS ALSO A GOOD INVESTMENT IN THE LONG TERM

A renovated building attains a distinctive additional value on the market. Furthermore, renovated buildings are also convincing through low maintenance and operating costs – over years.



RENOVATION IS SUSTAINABLE AND SAFEGUARDS THE FUTURE

Professional renovation measures with 100% recyclable components from Montana Building Systems Ltd relieve the burden on the environment through substantially lower energy consumption over a period of decades. Sustainable future-oriented thinking is ensured by the building's considerably extended life cycle.



RENOVATION CAN LEAD TO THE STATE GIVING YOU MONEY

In a large number of European countries, the renovation of buildings is assisted by state support funding. In Switzerland, for example, Canton funding is also granted in addition to national support if the building is renovated in accordance with the MINERGIE® guidelines.

CREATING ADDITIONAL VALUE



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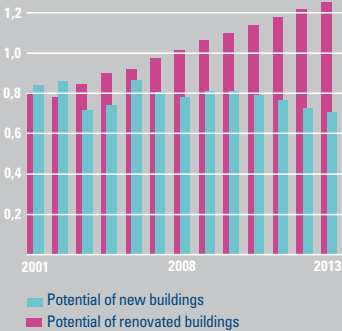
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Façade in m m²



RENOVATION FOLLOWS THE TREND

The chart above shows that the number of new buildings decreases in economically difficult times, while expenditure on property preservation and renovations increases continuously. This proves that renovated properties are in demand and are also suitable for change of use.

Schibli Kabeltechnik, Schinznach-Dorf (CH)
Before: Brickwork
After: Ventilated metal façade with SWISS PANEL® SP 18



RENOVATING WITH MONTANA –

STEEL, ALUMINIUM AND SANDWICH PROFILES FOR ROOFS, CEILINGS AND FACADES

ADVANTAGE:

POSSIBILITIES FOR CREATIVE DESIGN

The approximately 30 colours and our wide variety of Montana products provide you with countless possibilities and tremendous creative freedom in the design and formation of façades.

ADVANTAGE:

EASY INSTALLATION

The highly flexible façade and roof systems are especially suitable for renovations of existing buildings. Fast and easy fitting of the Montana products means that the use of the building is not disrupted during the renovation work. Intact buildings can be insulated and cladded by simple means with a rear-ventilated metal façade.

ADVANTAGE:

COMFORT

The rear-ventilated façade is one of the preferred building shells in relation to air exchange, moisture balance and comfort. Every solution is matched to the building and the climate conditions up to and including façade cladding with the certified Minergie module MONTAPLUS®.


ADVANTAGE:

LONGEVITY AND SUSTAINABILITY

Montana metal façades and roofs have a long life and are completely recyclable. With regard to sustainability it makes them to the market leader.

ADVANTAGE:

COST-BENEFIT RELATION

Montana metal façades and roofs fare extremely well in cost-benefit calculations. Easy fitting, distinctively less energy consumption, long life, increased value of the building and low recycling costs make the products from Montana Building Systems Ltd.  must for every builder, planner and architect thinking in economical terms.

Animal feed mill, Buchs (CH), before



MONTANA SWISS PANEL®

You can use over 20 different trapezoidal and corrugated profiles in various dimensions and designs in a universal manner ranging from industrial to residential buildings.

MONTANATHERM®

The sandwich construction method is a good alternative for roof and wall areas. The light structural elements with a high level of rigidity have excellent structural properties and the distinctive feature of excellent heat insulation qualities.

MONTALINE®

The elegant façade cladding made of steel or aluminium is also available with a shadow gap. MONTALINE® appears optically as a panel façade, exuding an aesthetic and high-quality exterior. In addition, the innovation of MONTAFIX® provides a substructure for fast, high-quality fitting without directly screwing down the panels.

Trampolino, Dietikon (CH)

Before: Roof of fibre cement boards

After: Sandwich panels MONTANATHERM® for roof (during the building phase)



THE ADVANTAGES, THE PRODUCTS

Animal feed mill, Buchs (CH), after



DESCRIPTION

Property: Animal feed mill in Buchs (CH), total renovation

In the renovation of the former animal feed mill, a horizontally laid aluminium substructure was placed on the existing masonry using angle brackets. The additional heat insulation applied with an insulation thickness of 140 mm and thermal conductivity of 0.032 W/mK ensures that the building achieves an excellent U-value of less than 0.20 W/(m²K). Used as façade cladding over a total area of around 2,600 square metres was the trapezoidal profile SP 45 in aluminium with a classic titanium-look finish fitted with vertical alignment.

This has enabled the disused feed mill in Buchs to assume a new function as a 10-storey commercial and office building. A prime example of how disused buildings can be upgraded and designated for different use through sustainable conversion and renovation measures.



MONTAFORM®, MF DESIGN

MONTAFORM® façade profiles are the most individual in the range offered by Montana Building Systems Ltd. They are predestined for residential buildings or smaller aesthetic façades. You can create your own shape for MONTAFORM DESIGN profiles yourself and Montana will produce it for you.



MONTATWIN®, MONTASTEP®

The MONTATWIN® and MONTASTEP® profiles are especially suitable for structuring façades in combination with other Montana products. They give the façade a contemporary appearance and open up new perspectives in modern architecture.



MONTAWALL®

MONTAWALL® liner trays form a variable system of load-bearing liner trays in different finishes and dimensions. They facilitate an easy, economical structure with excellent heat and sound insulation properties. Perforated coffers guarantee high acoustic absorption values and are used very successfully to reduce noise.

AMEWA AG, Wald/ZH (CH)

Before: Concrete-construction with windows

After: SWISS PANEL® SP 41 prebended by snapping and light sheets



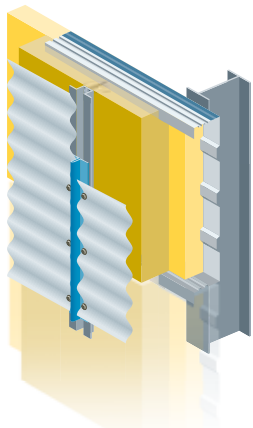
RENOVATING WITH MONTANA –

CASE EXAMPLES FOR RENOVATION

NEW: MONTAPLUS®- MINERGIE® MODULES

To ensure easy planning, design and construction, Montana Building Systems Ltd. has optimised a large number of roof and wall structures in energy terms, resulting in U-values of $< 0.20 \text{ W}/(\text{m}^2\text{K})$. The MINERGIE® certification available for these structures guarantees planning certainty for architects and builders.

A good example: our MINERGIE®-certified MONTAPLUS®



• U-value $< 0.20 \text{ W}/(\text{m}^2\text{K})$

• R_w up to 57 dB



FAÇADE:

U-value old: $> 1.000 \text{ W}/(\text{m}^2\text{K})$

U-value new: $0.187 \text{ W}/(\text{m}^2\text{K})$

4 Existing façade in need of renovation with 60 mm insulation thickness

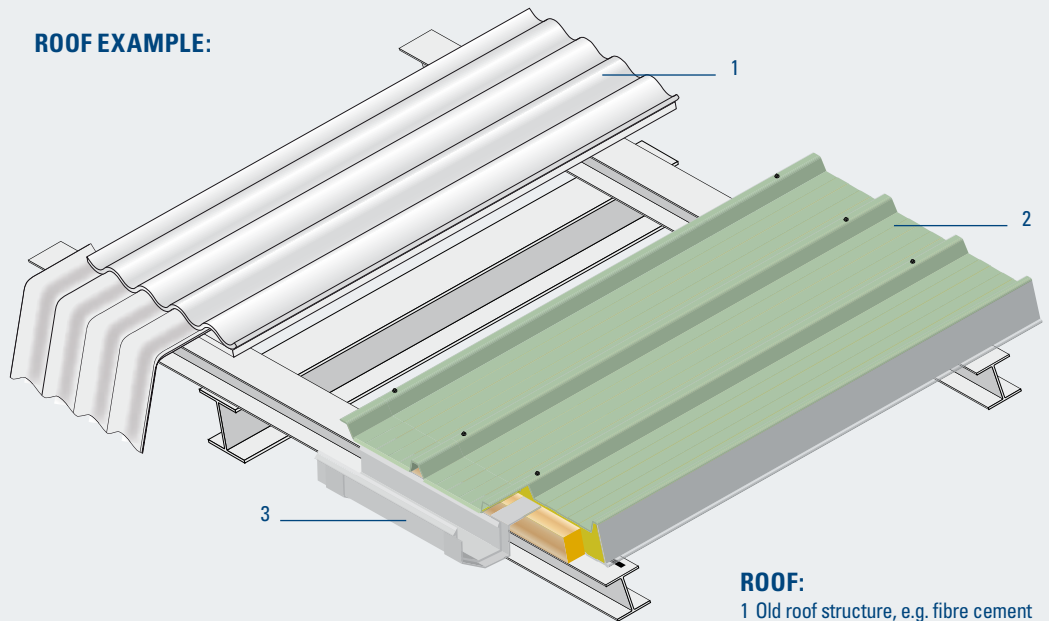
5 Timber lathing 80/60 vertical every 1.20 m, with heat insulation ISOVER PB F 032 in between

6 Timber lathing 80/60 horizontal every 1.50 m, with heat insulation ISOVER PB F 032 in between

7 Z-profile vertical

8 Façade cladding e.g. SWISS PANEL® corrugated profile, horizontal

ROOF EXAMPLE:



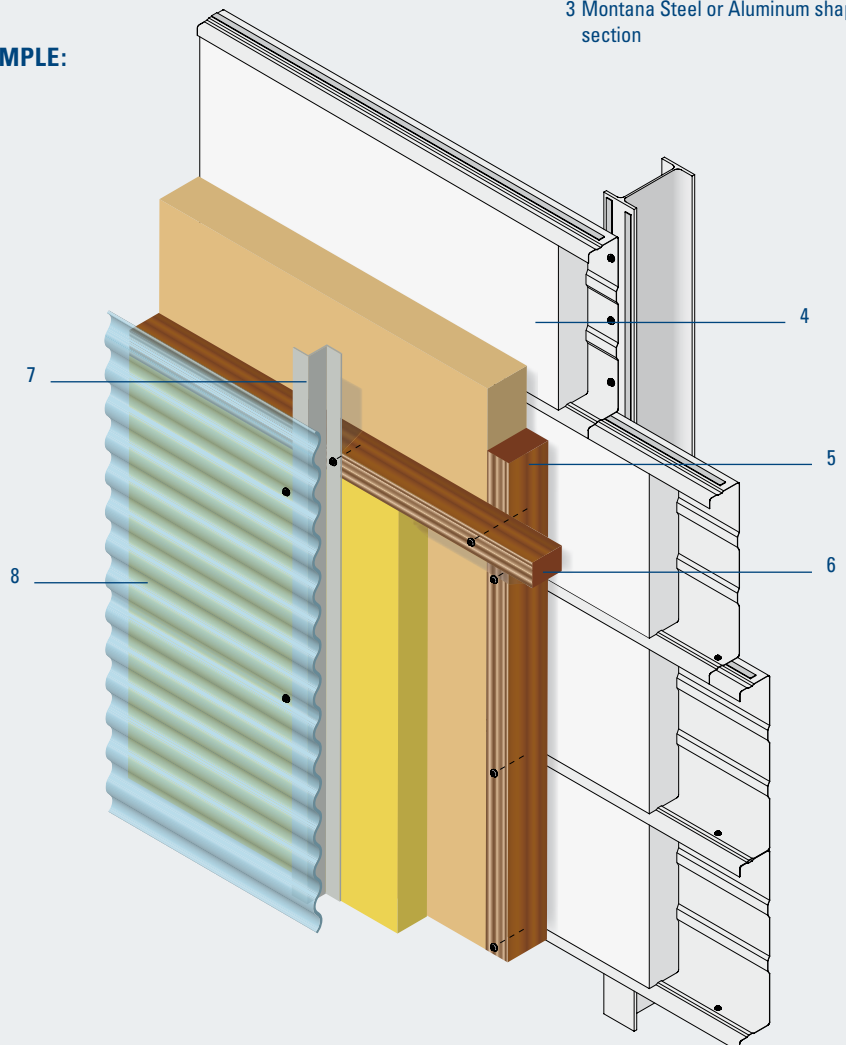
ROOF:

1 Old roof structure, e.g. fibre cement boards or profiles sheets, not insulated

2 Sandwich roof element MONTANATHERM®

3 Montana Steel or Aluminum shaped section

FAÇADE EXAMPLE:



TECHNOLOGY AND SUPPORT

SERVICE ELEMENTS RELATING TO RENOVATION



RENOVATING WITH PROFESSIONAL STANDARDS

Montana offers builders, planners and architects a service package that ensures professional work and the optimised use of all Montana products.



WWW.MONTANA-AG.CH

The website montana-ag.ch is a high-quality information medium without any unnecessary padding. You can download all the information available for each product 24 hours per day.



PRINTED DOCUMENTATION

If you prefer your information in print, you will be well served by our overall documentation or the individual brochures relating to our different products.



CONSULTATION FIELD SERVICE

The Montana field service staff members are competent specialists. They will be delighted to advise you on the subject of renovation. Send an email to info@montana-ag.ch to request the consultant responsible for your country or region!



TECHNICAL SUPPORT

You can access all the necessary working documents in digital form: from the printed structural calculation table to CAD files and tender documents.



MONTANA SHOWROOM

If you would like to feel the Montana products, see colours on original material or examine structures close up, then it's time for you to visit our showroom in Villmergen. The field service member responsible for you will be delighted to arrange an appointment for your visit!



Homepage www.montana-ag.ch
With additional product information and references.



CAD files
For downloading.
www.montana-ag.ch > Products > CAD



Dimensioning tables
For downloading.
www.montana-ag.ch > Products > Structural calculation
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Dimensioning software
Request CD-ROM.
www.montana-ag.ch > Services > HOLORIB® dimensioning software
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MONTANA BAUSYSTEME AG –
THE SWISS COMPANY WITH INTERNATIONAL
REFERENCES IN THE INDUSTRIAL,
COMMERCIAL, ADMINISTRATIVE AND
RESIDENTIAL BUILDING SEGMENTS



Montana Building Systems Ltd. has become synonymous with innovative construction solutions among planners and architects. Many years of experience, a broad product range, a high degree of flexibility and the resources of a multinational group make Montana a top supplier of international calibre. Architects recognised around the world reconcile visual creativity with technical requirements using products like SWISS PANEL®, MONTAWALL®, MONTANATHERM®, MONTALINE®, MONTASTEP®, MONTATWIN®, MONTAFORM® and HOLORIB/SUPERHOLORIB® from Montana Building Systems Ltd. Please ask for more information!

Every construction project is a challenge. A well-coordinated, highly competent Montana team ensures a completely smooth process, from consultation and planning to production and prompt delivery on site.



MONTALINE® Lehner Versand AG, Schenkton (CH)



MONTAWALL® Stade de Suisse, Bern (CH)



SWISS PANEL® Zentrum Paul Klee, Bern (CH)



PERFORATION Stade de la Maladière, Neuenburg (CH)



MONTAFORM® Wohnsiedlung, Olten (CH)



MONTANATHERM® Neomat AG, Beromünster (CH)



MONTATWIN® Kaufland, Dingolfing (D)



MONTASTEP® Connect GmbH, Freiburg (D)

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