



FAÇADE CLADDING

System Solutions for Curtain Walls

SYSTEM OVERVIEW

Foreword

This brochure is an overview of panel systems available from RHEINZINK worldwide.

This overview shall serve as a guide for planning and design, in accordance with current state-of-the art building engineering and proven development trends. We would explicitly like to point out that situations may arise, in which this type of cladding may not be used or may be restricted in its use. Therefore, the design drawings illustrated herein pertain to standard system details only. The planner must consider how the system itself, along with local and climatic conditions and structural physics will impact the project.

Compliance with application technology and standards described in this document does not preclude personal responsibility.

We reserve the right to make amendments based on developmental changes. For questions pertaining to the system, please contact our Application Engineering Department. Your suggestions are always welcome!

Datteln, March 2010



TRUMPF Sachsen GmbH, Neukirch, Germany



*Terrace-shaped building,
Oswaldgasse, Vienna, Austria*



*New Lecture Hall, Victoria University,
Werribee Campus, Werribee, Australia*

RHEINZINK-Flat-Lock Tiles

Flat-lock tiles are used primarily for large curtain wall areas. This is where the visual effect is the most impressive. By using different sizes of tile and by staggering the layout of the joints, the planner can create individual and inspirational façade designs. RHEINZINK-Flat-Lock Tiles are available in "blue-grey" and "graphite-grey" preweathered versions, as well as in the bright rolled version. The bright rolled version opens up additional design potential; natural weathering of this material enhances the nuance of colour of each individual tile, creating a very special effect. For quality assurance and optimal material usage efficiency customized production is recommended.

- Individual tile sizes
- High degree of design freedom
- Three patinating surfaces
- Environmentally declared product

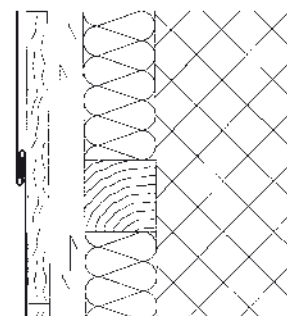


Fig. Cover Page: Operations Building, Montegranaro, Italy



Olympic Stadium, Jinan, China



Head Offices of Berlinwasser Holding AG, Berlin, Germany

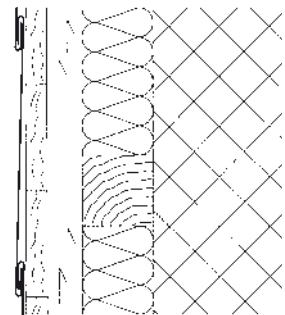
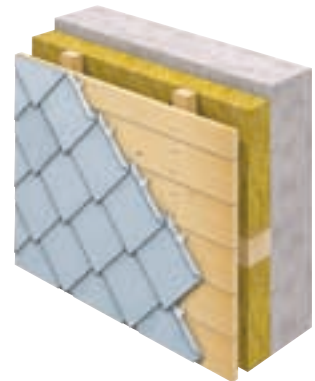


Sir Colin Campbell Building, University of Nottingham, Great Britain

RHEINZINK-Small Tiles

Square and diamond-shaped tiles make up RHEINZINK's small tile group. As with the flat lock tile these tiles have forward facing edges on the top surface and backward facing edges on the lower surface to form simple lock joints. The small format of these tiles ensure a secure and aesthetically pleasing solutions can be achieved, particularly for geometrically complicated buildings. Virtually all corners and curves can be accommodated. Dormer, chimney head and roof edges are some of the more conventional applications for small tiles.

- Available in various sizes
- Flexible adaptation to building shapes
- Three patinating surfaces
- Durable and maintenance free





Lehmann Küchen GmbH warehouse, Rust, Germany



Lehmann Küchen GmbH warehouse, Rust, Germany

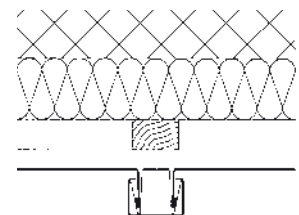


Private Residence, Smallingerland, Netherlands

RHEINZINK-“Solar PV Standing Seam” and “Solar PV Click Roll Cap”

These are two RHEINZINK-solar solutions that are perfect combinations of ecological energy production and aesthetic architecture using a conventional seaming technique: efficient thin-film modules are full-surface adhered and permanently fixed to RHEINZINK-panels. These can be installed onto roofs and façades – with concealed fasteners – using proven RHEINZINK-seaming techniques such as the double or angled standing seam and the click roll cap system. Thanks to “triple junction” technology, these systems can produce energy even through diffused light.

- **Building-integrated photovoltaic**
- **Reliable impermeability**
- **High efficiency via thin-film technology**
- **Architectural charm**





Zinkhaus, Copenhagen, Denmark



*Perth Convention & Exhibition Centre,
Perth, Australia*

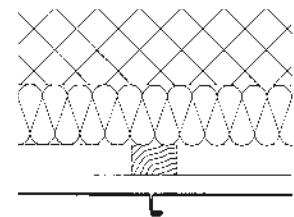


Villa, Prague, Czech Republic

RHEINZINK-Seam Technology

RHEINZINK-seam systems join individual panels longitudinally. The angled standing seam is used primarily for curtain walling. Its distinguishing feature is the bold accentuation of its seams (approx. 12 mm width). A variety of panel lengths and widths, allows even the most elaborate shapes to be realized using seam technology. The forming of the profile by machine guarantees consistency of the panel edges and closing of the seams.

- Suitable for almost every building shape or style
- A variety of panel widths is available
- Three patinating surfaces
- Little or no maintenance or service required





Private Residence, Cantù, Italy



Telenor, Fornebu, Norway



FERI, Maribor, Slovenia

RHEINZINK-Horizontal Panel System

Horizontal panels are similar to reveal panels in appearance. The panels are fabricated with flanges that interlock; they are attached indirectly via a precisely-defined 20 mm groove, using a special RHEINZINK-mounting clip. This ensures that thermal expansion can be accommodated without any difficulty.

- Horizontal façade segmentation
- Panels are available in various widths
- Sliding fastening system
- Panel lengths of up to 6,0 m are available

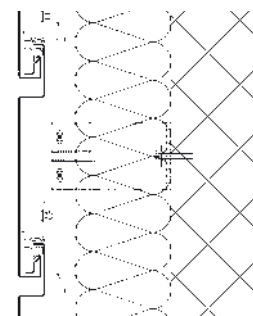


Fig. right: Private Residence, Straden, Austria





Train Station Passageway, Uster, Switzerland



Private Residence, Empel, Netherlands

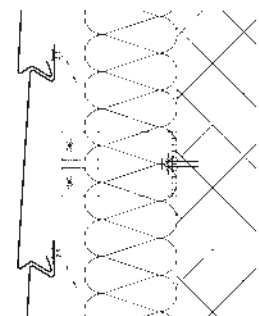


*MG AVU Galerie der modernen Kunst
Akademie bildender Kunst, Prague,
Czech Republic*

RHEINZINK-Shiplap Panel

Due to its layered characteristics and shadowless joint, the shiplap panel is a particularly unique façade cladding, reminiscent of wooden façades. When exposed to light and shade, interesting shadows and sharp contours appear because of its profile geometry. Precision profile manufacturing (in accordance with detailed planning and pre-defined panel dimensions) guarantees efficient and optimum installation on site.

- Layered sheath look
- A variety of panel widths are available.
- Two preweathered surfaces
- No maintenance or painting





University of Nottingham, Business School, Nottingham, Great Britain



Theater am Marientor (previously: Les Misérables), Duisburg, Germany

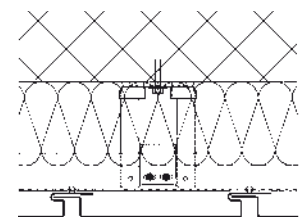


Tropical Islands, Briesen-Brand, Germany

RHEINZINK-Reveal Panels

The benefit of the reveal panel is the choice of bay widths (200-333 mm) and variable joint widths of 0-30 mm. With the flexibility of vertical and diagonal installation, the reveal panel offers the architect an exceptional amount of freedom in implementing their design ideas. Configured panels with an extremely wide range of shapes can be realized. Therefore, permanent quality solutions can be implemented very quickly when it comes to renovations or retrofitting installations.

- A panel system, with different visual effects
- Choice of reveal and panel widths
- Preweathered surface quality
- Environmentally declared product





Private Residence, Berlin, Germany



Multisport Complex, Walferdange, Luxembourg

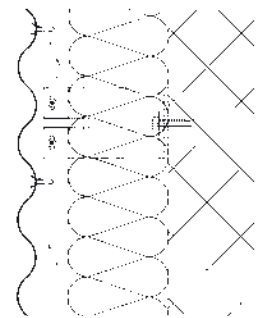
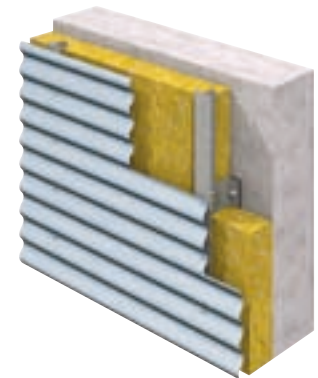


Private Residence, Datteln, Germany

RHEINZINK-Corrugated Profiles

The fluid design of the conventional sine wave gives the corrugated profile a soft appearance. Various types of installation – horizontal, vertical or diagonal – permit detailed panelization or clearly visible segmentation of the façade image, panel by panel. The soft interplay of light and shadow creates a vitality on these large surfaces that is both aesthetically interesting and appealing.

- Flexible application as a result of large formats
- Accentuated façade design
- Preweathered surface quality
- Diverse corrugated formats upon request





Verbier Gondola Station, Verbier, Switzerland



Rosenberg School, Neuhausen, Switzerland

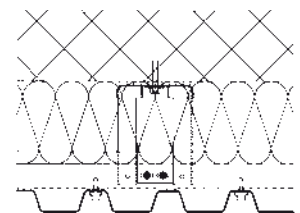


Verbier Gondola Station, Verbier, Switzerland

RHEINZINK-Trapezoidal Profiles

The sharp-edged rib-shaped design of the trapezoidal profile conveys a cool language of form whether arranged horizontally, vertically or diagonally. The strong contrast which is produced when light strikes it, is of greater intensity than in the corrugated profile, which is somewhat subdued. The option of choosing between A or B as the visible side, makes this a façade cladding with two faces.

- Flexible installation by using large formats
- Clean design lines
- Preweathered surface quality
- Diverse bead formats upon request





RHEINZINK-bright rolled

RHEINZINK-“preweathered^{pro} blue-grey”

RHEINZINK-“preweathered^{pro} graphite-grey”

Three natural surfaces

The ecological Material

Within the realm of sustainable building, the environmental compatibility of building products is becoming increasingly important. This, in turn, influences the decision-making of building owners and planners when selecting materials. Apart from durability, the focus is on the amount of energy used during production, the rate of recycling and the energy savings attained as a result of the high rate of recycling.

Durable and sustainable

Traditionally, environmental compatibility has been extremely important to RHEINZINK. Ecological standards are set during raw material extraction and processing: energy consumption is extremely low.

Modern production equipment reduces emissions to a minimum. RHEINZINK is 100% recyclable; a lifespan of several decades, also sets very high standards. Apart from exemplary ecological properties, the “self-healing” material surface is telling: the protective, aesthetic patina which develops through weathering, naturally evens out any scratches or other smaller damage, thereby guaranteeing maintenance-free lifespan lasting decades. This applies equally to the bright rolled and “preweathered^{pro}” RHEINZINK surfaces. Once the roof, façade cladding or roof drainage system has run its course, RHEINZINK is still very valuable: as the energy expended for recycling is only about 5% of the primary energy content and, because the goal is to get up to 60% of the raw material price for high-purity zinc scrap metal, to

decide for RHEINZINK is to decide in favour of future generations. Thanks to the high rate of recycling – over 95% – a further reduction of energy requirements for primarily material is achieved. In the RHEINZINK manufacturing process, any production scrap is fed back into the smelting process without any additional pre-treatment.

Lasting Values

With a service life lasting several generations, RHEINZINK sets very high standards. The 30-year quality guarantee underscores the longevity of the 100% recyclable material. Now that adds to the security and dependability of the material.



QUALITY ZINC
Certificate



TÜV Certificate DIN EN
ISO 9001:2008 and
ISO 14001:2004



IGEF Certificate



ECO Environmental
Declaration

Please see www.rheinzink.com and www.follow-your-inspiration.com for many other exemplary solutions for working creatively with RHEINZINK. We would also be pleased to send you detailed information on the diverse RHEINZINK-Program!



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