RHEINZINK®

ROOFING

System Solutions for Roofs

SYSTEM OVERVIEW

Foreword

If the best material curtails creativity, what good is it? If the best idea cannot be realized, what good is it? Materials that foster creativity and lend form to ideas are required for individual solutions, as are consulting services that take technical perfection, structural physics and aesthetics into consideration.

RHEINZINK offers all of the above. Not only does the name stand for unique creative material to clad roofs and façades, but also for exemplary service to implement your ideas – regardless of the size of your project – big or small. We offer solutions that are as unique as your project. A comprehensive range of RHEINZINK roofing, façade, and solar system products, along with diverse installation techniques, make it easy to find a perfect solution for every design.

RHEINZINK is extremely malleable; it is compatible with every architectural environment and its aesthetic is timeless. Furthermore, requirements for sustainable building using natural material are met without difficulty. RHEINZINK is absolutely maintenance and service free. Its lifetime comprises several generations and that, in and of itself, sets standards; its ecological balance is exemplary.

The examples in this brochure illustrate the design potential of RHEINZINK, along with various options available to you by using this ecological material.

Datteln, July 2010

Schwielowsee Resort, Werder, Germany

„Il sogno di Ivana", Turin, Italy

Česká pojišťovna Pankrác – Administrative Building, Prague, Czech Republic

RHEINZINK-Double Standing Seam

The double standing seam is a further development of the original hollow folded joint or single standing seam. This reliable system has been referenced in technical literature since 1899 and is the top choice for roof pitches from 3° to 25°. Here, the name "double standing seam" characterises one of the conventional types of longitudinal joints above the water level. A fine-lined seam height of 25 mm is rainproof without any additional measures. The double standing seam, manufactured with pre-profiled panels, has gained international recognition. Seams are folded and closed manually or with a seaming machine. Custom shapes such as convex and concave curves and conical panels are produced without difficulty. Thanks to a multitude of detail variations, the double standing seam emphasizes both traditional and modern architectural design.

- **Individual shapes are possible**
- **High degree of design freedom**
- **Roof-integrated solar solutions**
- **Environmentally declared product**

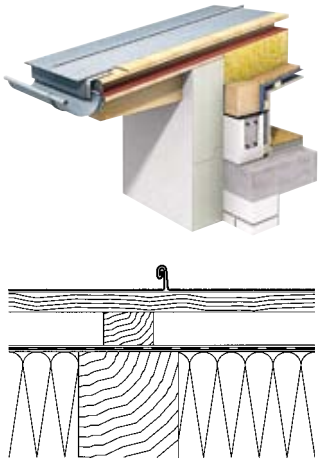


Fig. Cover page: Dorothy House Hospice, Bradford on Avon, United Kingdom
Fig. Left: Schwielowsee Resort, Werder, Germany

Private Residence, Stavoren, Netherlands

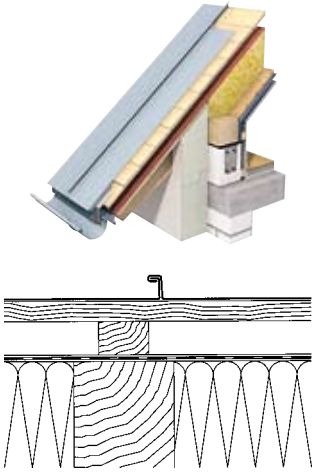
Private Residence Montaña del Socorro, Tafira Baja, Spain

Private Residence Möllmann, Bielefeld, Germany

RHEINZINK-Angled Standing Seam

Within conventional sheet metal techniques, the angled standing seam is a relatively new development; it has only been referenced in technical literature since the beginning of the 20th Century. Closing the seam of a pre-profiled panel is very easy compared with the double standing seam. The angled standing seam is completed simply by folding in one leg. It is particularly suitable for visible design areas on metal roofs where the pitch is greater than 25°, as well as for rounded parapets, attics or mansard roofs – in a conventional vertical, diagonal or horizontal application. As the angled standing seam looks wider than the double standing seam, it lends a vibrant, distinctive structure to large surface projects.

- **Design through distinct lines**
- **Roof-integrated solar solutions**
- **Cost-efficient for virtually every building style**
- **Little or no service or maintenance**



Hôtel du Louvre, Paris, France

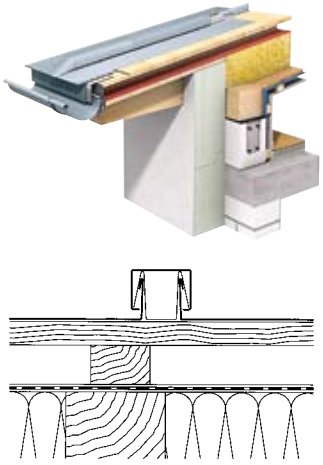
Hala Sazka, Prague, Czech Republic

University of Fine Arts, Dresden, Germany

RHEINZINK-Click Roll Cap

The roll cap system with battens is one of the more traditional of today's prevailing sheet metal work techniques. The name "Click Roll Cap System" stands for a type of longitudinal joint, whereby the RHEINZINK-Click Roll Cap Fastener, made of galvanized steel, is used as a fastener between the panels. Both fastening alternatives are covered with a roll cap. Efficient system installation is telling. Prefabricated adjustable profiles support the design quality and sophisticated look. The dominant longitudinal joints typical of the click roll cap system create a strong structural effect; the interplay of light and shadow is striking and charming. This lends itself to interesting design possibilities for both roofs and large curtain walls. An even greater wealth of variations exists when the roll cap system is combined with double standing seam techniques.

- **Simple planning and installation**
- **Few tools are required as a result of pre-fabrication**
- **Panel lengths of up to 20 m are possible**
- **Roof-integrated solar solutions**



Hotel Kempinski, Hohe Tatra, Slovak Republic

Elisabeth Heilbad, Miskolc, Hungary

Kaplan Residence, Illinois, USA

RHEINZINK-Tiles

Tiles are becoming more and more popular for roofing as well. Small RHEINZINK-Tiles (square and diamond-shaped) provide secure and aesthetically pleasing solutions, even for geometrically complicated building designs. Dormer, chimney head and roof edge cladding counts as part of conventional tile utilization. RHEINZINK-Flat-Lock Tiles are most effective for large roof areas and curtain walls. These represent a further development of the diamond-shaped and square tiles; they are impressive, not only because of their aesthetic appeal, but because of the design benefits. Using different sizes of tiles opens up a multitude of façade design possibilities. The bright rolled version provides more design options, because the natural weathering of the shiny material will vary from tile to tile, which can be quite striking.

- **Individual tile sizes**
- **High degree of design freedom**
- **Three natural, patinating surfaces**
- **Little or no maintenance or service**

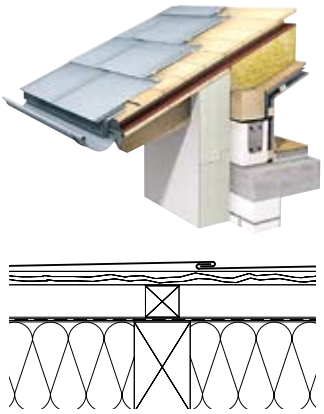
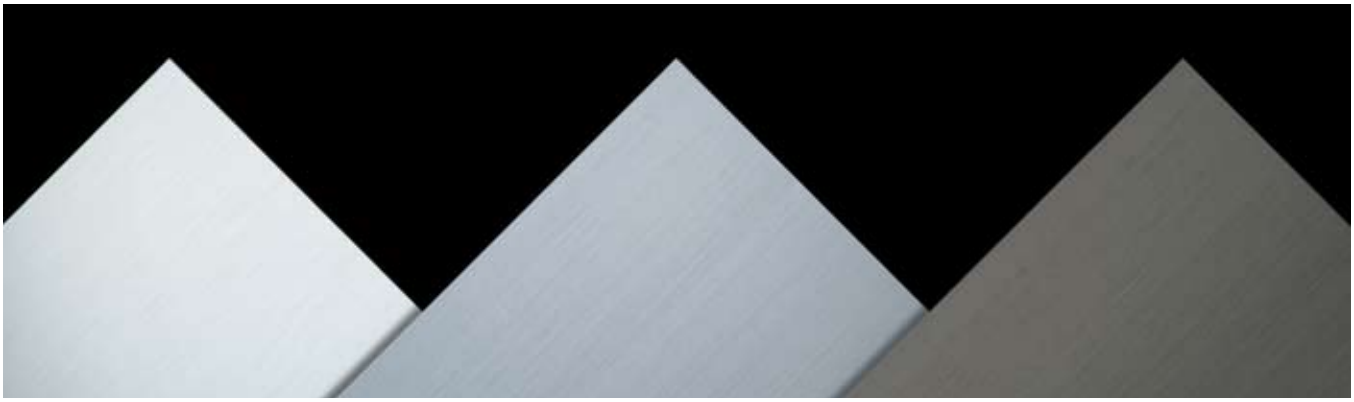


Fig. Right: Domkuppel San Pietro, Gattinara, Italy

RHEINZINK®



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% recycleable; 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 recyling 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.

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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