weber
SAINT-GOBAIN

No more excuses:

Our best **ETICS** is convincing.

Our best:
weber.therm circle

weber.therm circle is the the first external thermal insulation composite system (ETICS) that is pure separable and recyclable. Once it has reached the end of its service life, again new high-quality products are created from the sorted components.

„Nothing in the world is as powerful as an idea, whose time has come."

Victor Hugo

Zero Waste.
Better¬ build.

For construction activities in Germany, among others around 5 million cubic meters of insulating materials and 100 million tons of sand are used. Real estate is a long term investment, but it is subject to constant changes such as extensions or conversions. The building materials are mixed in these cases during dismantling and are thus lost for further use in building construction. Our society can no longer afford this expensive and ecologically unsatisfactory process.

The lack of recyclability of external thermal insulation composite systems was a major criticism of this and other composite construction methods from the outset. As the word "composite" already expresses, all components are bonded one to another, so that they only can be disposed of mixed together, and not sorted type by type.

Saint-Gobain Weber has now developed a solution: With the new Zero Waste external thermal insulation composite system **weber.therm circle** all components can be separated according to each type and recycled after dismantling.

From a one-time use of valuable resources, building thus develops into a raw material cycle. This future-proof premium system makes it possible to work in highest quality and at the same time to plan and to build peak of ecological progress.

Robust, durable and **recyclable**

Many advantages in one system

weber.therm circle combines the advantages of all Weber ETICS. As a fully mineral thermal insulation composite system, it offers a high fire protection of the building material class A 1 and is therefore non-combustible. The diffusion-open premium ETICS keeps the heat in the house in winter and in summer the heat outside. The massive construction scores with its high mass and good heat storage capacity. This favours rapid drying and thus prevents from algal growth. Due to the heavy mineral wool quality and the solid construction the system also improves sound insulation.

With a solid render shell up to 25 mm thickness, **weber.therm circle** is also suitable for highly stressed facades. The solid render system is low-maintenance and its service life is significantly longer than that of a thin-layer system.

With AquaBalance mineral overlay renders (finish top coats) and AquaBalance colours the facade remains also protected against algal and fungal growth in the long term. The environmentally friendly AquaBalance technology is based on a physical principle and does not require biocidal additives. This protects the facade and the environment.

In addition to these advantages, **weber.therm circle** is the first thermal insulation composite system to pursue the approach of recyclability consistently The system is mechanically fastened to the wall. A woven mesh as separation fabric embedded in the specially developed base coat render and the absence of bonding mortar ensures that it can be completely dismantled and separated according to each component type. During the entire use phase **weber.therm circle** meets the same requirements for durability and safety as any other ETICS approved by the building authorities. Due to its design, it enables the components to be recycled and facilitates extensions and conversions as well as the integration of future technological leaps.

The building authority approval has been applied for under nr. Z-33.9-167.

All **advantages** at a glance

- ✓ Completely dismountable
- ✓ Separation of components according to each type
- ✓ Non-combustible
- ✓ Solid, fully mineral system
- ✓ Robust, thick-layer render facade; no hollow sound
- ✓ Biocide-free overlay render system

One surface, **unlimite** possibilities

Individual facade design
with mineral renders

Texture-diversity:

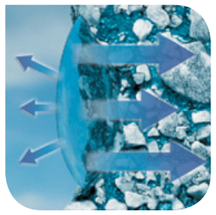
1. broom render
2. scratch render
3. smooth render
4. float render
5. dragged render
6. rilled render

A high-quality wall construction deserves a proper finish. After all, a technically demanding and permanently beautiful facade does not only serve as a figurehead, but also contributes to the long-term preservation of the value of the property.

Mineral overlay renders do not only score points for their longevity, but also unfold a great depth effect. Variable render thicknesses give the facade an interesting and individual look.

The design spectrum for mineral renders is almost infinite. Thanks to a multitude of colour and texture combinations, every facade becomes unique. In addition to well-known textures, such as float render, rilled render or smooth renders, classic texturing techniques, like renders with broom or dragged textures are also available.

The principle of **AquaBalance**



When air humidity drops, the moisture is immediately returned to the atmosphere. The facade dries significantly faster, so that algae andfungi do not have a breeding ground.

The hydrophilic render surface stretches the drops of water and thus enlarges the evaporation-active surface. Excess moisture will be temporarily absorbed into the capillaries.

Solid and **mineral**

High-quality materials without biocides

weber.therm circle is not only convincing by its premium construction and recyclability. With this top-class system, the use of a mineral AquaBalance scratch render provides a surface finish of highest quality.

From 2019, Weber equips its entire range of overlay renders with biocide-free AquaBalance technology. It picks up the hydrophilic principle of mineral renders and reinforces it. The moisture is drawn off from the surface, stored in fine capillaries in the upper render layer and released in a controlled manner as temperatures rise. No moisture remains on the facade, and fungi and algae have no chance.

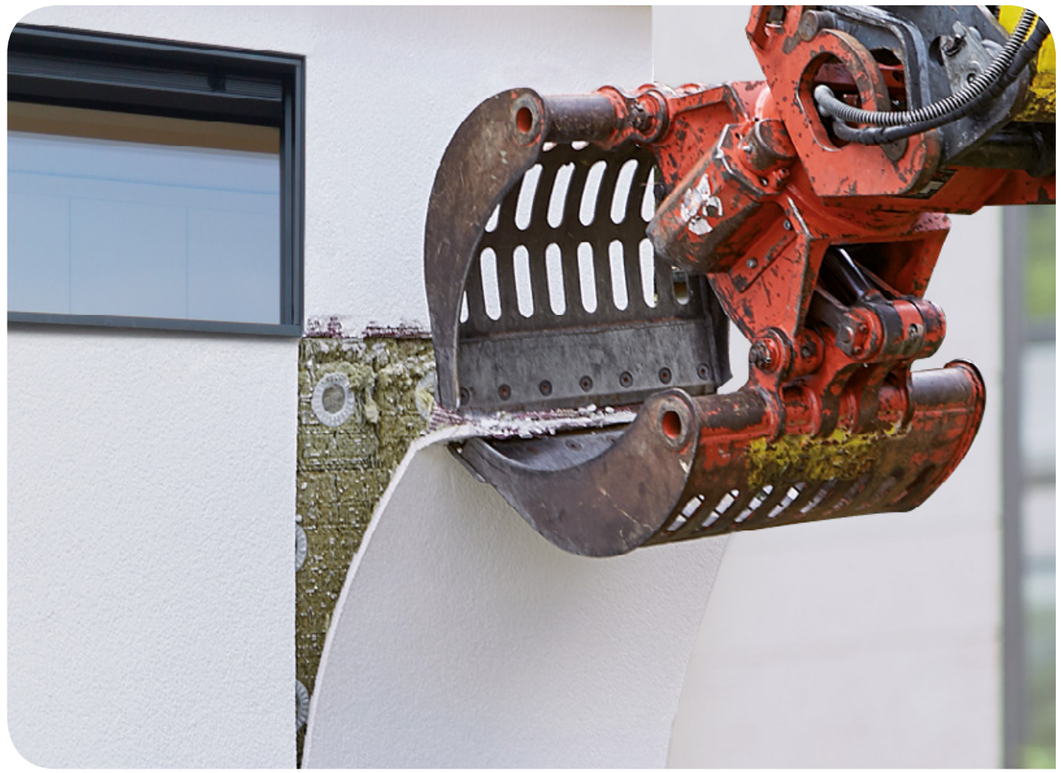
Thanks to its purely mineral components and the renunciation of biocides, **weber.therm circle** contributes to a sustainable ecological lifestyle and meets the growing need for healthy living.

Pull it off once, please!

Clean separation and re-use after recycling

Circle of Life - from the life of an ETICS
At some point every component reaches the end of its life. For the components of **weber.therm circle,** it's time to really get dismantled. Cleanly separated from each other, they become valuable resources and gain a new life.

The excavator shovel removes the render shell, which is divided into small fields, cleanly from the mineral wool together with the separation fabric. Steel screws are screwed out of the wall and the dowel heads are cut with a milling cutter. Afterwards the mineral wool can be completely removed from the wall. Since all components can be easily separated from each other, the dismantling is done quickly. The dismantled components are collected separately and are re-used for a new purpose as single-variety raw materials.



weber.therm circle

provides conclusive answers to all questions about ETICS after
- cold, heat and sound insulation,
- safety in case of fire
- algal prophylaxis, massiveness, freedom of design
- to the hitherto unresolved question of recyclability.

Here are the **raw materials** of the future.

What happens after dismantling with ...

... the mineral-wool insulation board?

The mineral wool can be directly recycled. It finds a new task in building separation joints or flocked as blow-in insulation.

... the mineral render?

The render is crushed and used as additive in subordinated mineral building materials.

... the fiberglass fabric?

The fabric is shredded and returns to the material cycle. It is used for ex. for the reinforcement of plastic components.

... the steel screws?

After the separation of the polyamide sheating, the steel is melted down and used for new steel products.

... the dowel plastic?

The dowel plastic is given a new lease of life on the building site. It is recycled as printing material for third-party assembly on ETICS.

Layer by layer

Innovative system, proven workmanship

1. the insulation boards are fixed to the wall without bonding mortar, but with countersunk screw dowels.

2. by inserting dowel caps of mineral wool over dowel heads heat loss is prevented and the subsequent dismantling made possible.

3. a solid base coat render of 8 - 12 mm thickness is applied directly onto the insulation board.

4. the separation fabric is installed close to the insulating material. During dismantling, it stabilizes the render shell and ensures a clean separation of the render layers from the insulating material.

5. the separation layer is followed by a reinforcement layer. A lightweight reinforcing render is used for this purpose of 5 - 8 mm thickness and the reinforcing fabric is embedded.

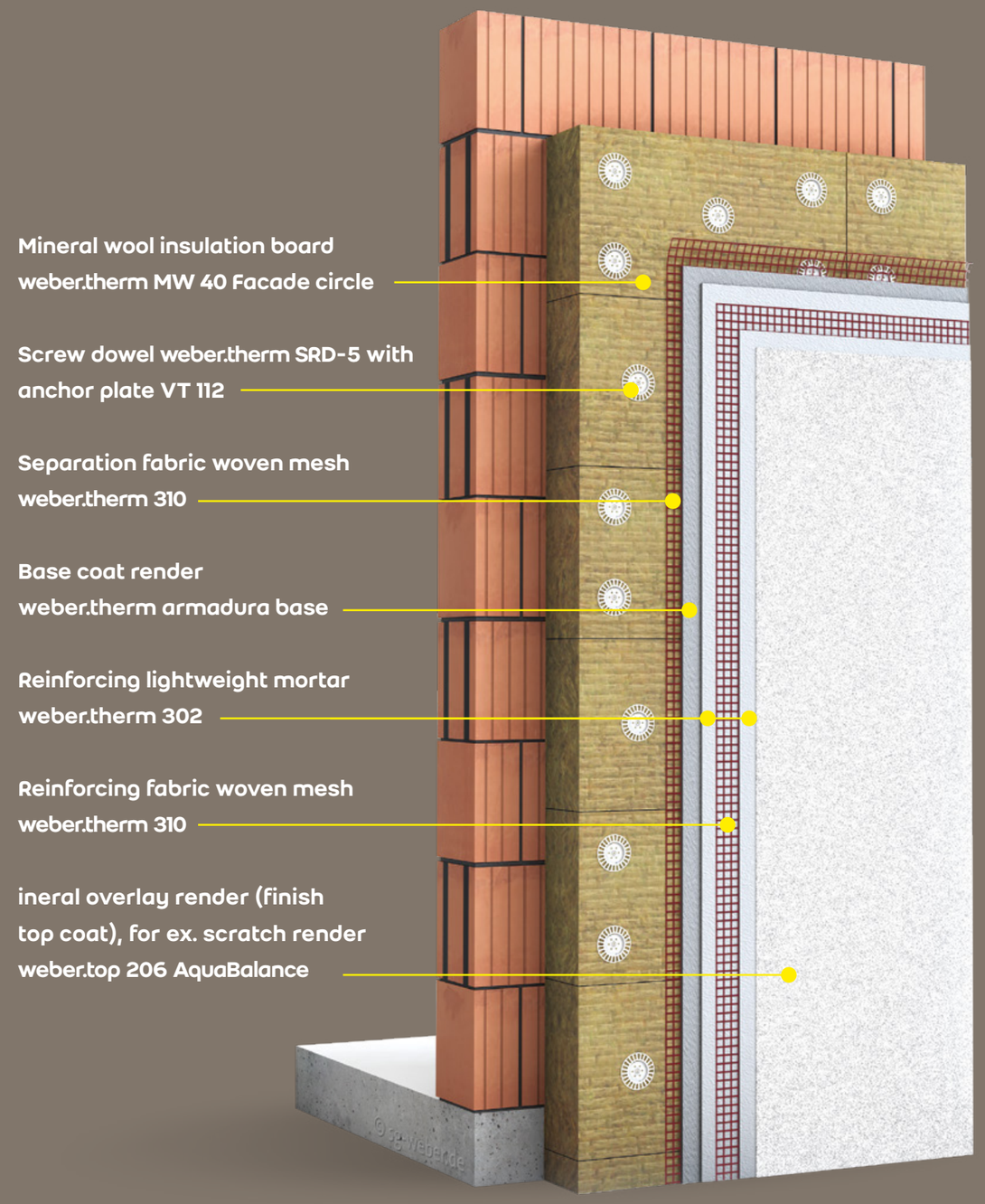
6. corners and connections are done in the same way as with conventional ETICS.

7. as third layer of render use an overlay render. The whole solid render shell can thus achieve a layer thickness of over 25 mm.

8. the use of mineral overlay renders enables the simple, single-variety recycling of the whole render shell.

Zero Waste premium-ETICS

weber.therm circle



At Weber, we believe that the most important in the building industry is to care about people and their environment

= Well-being

We care for the well-being of people.

= Empathy

We care about what matters to people..

= Long-lasting

We care about our long-term responsibility.

NEUE WEBSITE de.weber

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