

Ceramic swimming pool architecture

THE APPEAL OF THE AMBITIOUS

Contemporary spa architecture must meet high standards. Sports pools, spas and private pools should be comfortable and safe, sustainable in maintenance, easy to clean and permanently hygienic. The demands on the design are no less high. We asked Dipl.-Ing. Architect Silvia Lederer, swimming pool expert and project consultant at Agrob Buchtal, about the trends, pitfalls and temperaments that make swimming pool construction so exciting and challenging. The former competitive swimmer is surprisingly open in her interview.

Ms Lederer, how should you go about planning and designing a swimming pool?

As simple as it sounds. The first question is what the building project must be able to do, i.e. how the building is to be used and what it is to be designed for. It makes a difference what type of pool it is. Not all swimming pools are the same.

Can you explain this?

In order to avoid a "patchwork quilt" of materials in the complex spatial planning, which connects several pools and areas such as therapy, wellness and foyer via circulation areas, holistic solutions are required. Ceramic tiles are a gift here thanks to the variety of shapes, formats and slip resistance.

Has the design language in swimming pool construction increased in complexity?

I would say yes. Pools are no longer just rectangular shoeboxes and swimming pools don't always have to use the classic 12.5 x 25 cm format.

What tips do you have from your wealth of experience?

Depending on the proportion and laying direction, the use of different rectangular formats can highlight areas. A non-directional square format, on the other hand, tends to emphasise the flatness. In the foyer of a public swimming pool, XXL tiles with edge lengths of over 60 cm might be a good choice. But the other extreme is also exciting from a design point of view: small-format mosaics not only look elegant and filigree, but also nestle like a made-to-measure ceramic suit against columns, benches and rounded pool heads. Just the thing for creative people.

And the technical challenges?

First, of course, there is the construction of the concrete pool body. Due to the shrinkage, it is essential to plan for a resting phase. In the case of a swimming pool, we are talking

about at least six months. Another two weeks during the leak test. If it is an outdoor pool, an enclosure is necessary so that the concrete does not form a skin in hot weather that could impair the bond with the tile. From a structural point of view, the pool should be treated as a separate structure, as it works differently from the rest of the building when empty or filled with water. Otherwise, of course, professional waterproofing is important, especially in the area of the pool head because of the so-called capillary effect. Finally, a water analysis specifies whether the ceramic tiles are to be laid and grouted with mineral-cementitious or specially tempered materials. After these technical-functional obligations, the design "freestyle" follows, i.e. the selection of colours, formats and slip resistance of the tiles for the individual areas.

Sounds rather complicated.

First of all, the constructive aspects are the usual basic principles of building physics, secondly, the design part is great fun, and thirdly, we support the professional builders with comprehensive consulting and services so that the corresponding visions and ideas become built reality. In terms of our self-image, we see ourselves as problem solvers, advisors and sources of inspiration for architects and craftsmen.

What role can and should colour play?

With ceramic tiles, any mood can be created in a pool or room, from crystalline white to fresh blue or Caribbean turquoise: all the way to dark blue with mystical depth. An explicit advantage of ceramic tiles is that unwanted colour changes such as fading or darkening are not an issue, even with intense sunlight or lighting, thanks to absolute colour and light fastness.

That sounds like bathing fun.

Yes, but what is sometimes forgotten: Light is refracted under water. This physical effect can cause unwanted effects.

Do you have an example?

Think of a yellow pool. In the upper area, the colour yellow can appear exotically attractive. However, as the water gets deeper, the colour quickly drifts into greenish and develops more and more into an unkempt algae look as it goes deeper.

Would you be on the safe side with a metal pool?

Quite the opposite. Metal pools are visually monotonous. A study by VAMED AG, Vienna, has shown that bathers stay longer in a ceramic pool than in a metal pool, for example. This clearly has to do with the feel-good factor. Just like the following example from diving: A tiled pool conveys clarity, purity, transparency and depth. People like to dive into the colour because such a water surface conveys security. Metal pools, on the other hand, can look like a mirror that first has to be "broken through". As a result, competitive athletes jump less cleanly.

Metal pools have the reputation of being inexpensive. Do you agree with that?

Unfortunately, costs can never be considered across the board. Ultimately, it depends on the individual circumstances and the individual requirements. As soon as free forms or differentiated, lasting colours are required, ceramic pools are the right choice. The same applies to thermal waters, which may contain salt, sulphur, ozone or minerals. This may then require expensive special metallic alloys. In this case, a tiled concrete pool may be less expensive. If you then look not only at the purchase costs but also at the maintenance costs, a metal pool certainly comes off worse. My Norwegian colleague told me about an interesting example: At the "Aquarama" in Kristiansand, the operators took a 60-year horizon into consideration in the planning and then decided on a tiled pool for economic, technical and optical-conceptual reasons.

And what about energy and sustainability?

I'm glad you asked. Let's take the "Bamberger Rinne", a pool edge system that was installed for the first time in the "Bambados" in Bamberg/Germany. This solution saves energy thanks to its ingenious design: by reducing the evaporating water mass flow. In addition, the channel enables a particularly soft, quiet water inflow. This acoustic effect is, by the way, very welcome in public swimming halls or school and therapy pools.

Health living. They all say that's also in the DNA of natural ceramic tiles...

On this subject, I would like to draw particular attention to our "Hytect" technology. This is an innovative factory finish whose effects are activated by the incidence of light. They break down air pollutants or unpleasant odours, for example in changing rooms, showers or toilets. Ceramic tiles with Hytect are extremely easy to clean because water forms a thin film that washes away dirt. They therefore have an antibacterial effect, without any chemicals. Advantages that come into their own in swimming pools, saunas, wellness oases.

I cannot imagine a more sustainable combination than that of swimming pools and ceramic tiles in terms of aesthetics, functionality and economy.

PRESS CONTACT

Gabriele Busse

Press Spokeswoman / Senior PR Manager

T. +49 (0)228 391-1104 / M. +49 (0)151 14976931

gabriele.busse@deutsche-steinzeug.de