

Stainless steel drainage: The sure way to bring down CO₂ emissions

In the Danish subsurface, thousands of kilometers of pipework connect our drainage and sewer system. But the sustainability of materials installed below ground is rarely considered. It is time to focus on the environmental issues below ground.

In construction, there is an increasingly strong focus on sustainability, not only as regards the energy consumed when the house has been built. It is also about the amount of CO₂ released in connection with the construction of the house, all down to individual components. Consequently, we need to know the environmental impact of the materials used for the building, and requirements are to be established – for now voluntary requirements, but as from 2023 legislation will cover this area. To this end, drains and pipes should be considered part of the sustainability way of thinking. Drains and pipes are an integral part of the building and consequently relevant from an overall perspective. Not least when a property is put up for sale.

We can do better

There are lots of theories of what is best practice when it comes to sewage work. But recognized, factual calculations show that we can do much better than we do now. Instead of filling the ground beneath us up with materials that maybe or maybe not are as perishable as we imagine, we should look at alternatives to these materials.

The problem arises when we cannot reuse or recycle the materials that we place below ground when their service life comes to an end. This is due to the fact that some of these contain substances that are not allowed back in circulation. This means that old pipes must be deposited – and for many years!

Reuse or recycle

In environmental terms we distinguish between reuse and recycling. Reuse means using the same pipe again for a new purpose. Recycling means using the material – or the raw material – for creating a new product, either for the same purpose or for another purpose. And looking at cold facts, there are considerable benefits from recycling the material – when it comes to sustainability and financially.

Recycles steel

At BLÜCHER they support the cradle-to-grave principle. This is actually recycling as the advantages of using recycled stainless steel in the production of stainless steel pipes include a huge environmental benefit, and this is often overlooked in the sustainability way of thinking that is applied to all other building components and construction processes.

- We mainly use recycled steel in our production of stainless steel pipes for drainage – up to 85% recycled stainless steel content, says Palle Madsbjerg, Business Development Manager at BLÜCHER.

- This means that a drain or pipe that has served as such for many years – in some instances more than 50 years – can be dismantled, melted down, and used for a new pipe or another purpose.

Consequently, there is no depositing of old pipes, and in addition you get the numerous advantages of using a stainless steel pipe, for instance that stainless steel is the only material that rats cannot bite through. And in a product lifetime perspective, the cost of a stainless steel pipe is not higher than that of other types of pipes, says Palle Madsbjerg.