

SUSTAINABILITY VERSUS LIFESPAN

The world is changing at breakneck speed. Also insights into the building construction of, say 20 years ago, are no longer recognizable today.

You can visit any building fair, or open any brochure, the item of sustainable building shows up. Roughly twenty years ago almost nobody spoke about sustainable constructions. However, this item was hot already in

the 70's. Then (over 40 years ago!) one realized energy scarcity was developing and therefore would become expensive. In those days the necessity to look for thermal insulation, energy-efficient appliances and recyclable construction and demolition waste developed.

But what do we really mean with the concept of Sustainable Construction? Do we have to choose environmentally friendly materials? Or just a high thermal insulation-value? And what to do with 100% natural regrowing raw materials with inadequate isolation? Or what about a synthetic substance that insulates optimally and thereby reduces the energy consumption? Or is just the longevity the critical aspect of sustainable constructing?

Today we are constructing for a period of 50 to 100 years. In particular, the discussion about the lifespan of façade-cladding calls into questions. Facades build 20 years ago are now "peeled off" because they do no longer meet today's requirements. However these walls were designed for a much longer lifetime. So this destruction is both financially and environmentally damaging. Indeed not sustainable for sure!

Maybe today we must design (more economical) façade constructions for a period of 20 years only?

The concept of Sustainable Construction is much more complex than just the aforementioned. Sustainable construction is a matter of making right choices. You must consider constantly how to create the highest 'profits'. What is the relationship between life, environmental and energy conservation in relation to (re) construction and maintenance?

How can we create conditions in the design and maintenance management that meet a certain desired lifespan, while ensuring the least possible environmental impact during this lifespan? And how do we fit this in the building standards?

We do not know the answers to these questions either, but nevertheless we think we have to ask ourselves about these issues.