

HERTALAN EPDM FOR A SUSTAINABLE CONSTRUCTION

Sustainable Constructing is a form of construction in which:

“At all stages of the planning process, the changes and possibilities are exploited to achieve a higher quality in architectural developments with a lower impact on the environment. Maintaining this process in time, so that also future owners and users will feel these advantages”

Durability, ecological responsibility, aesthetics, Return on Investment are statements that determine the success of Sustainable Constructing. Roofing is an important element in a sustainable construction and EPDM membranes have proven to be the best proposition for sustainable roofing.

Research

At the end of 2000 the German institute SKZ (Würzburg) published the report: “Expected lifespan for EPDM roofing membranes”.

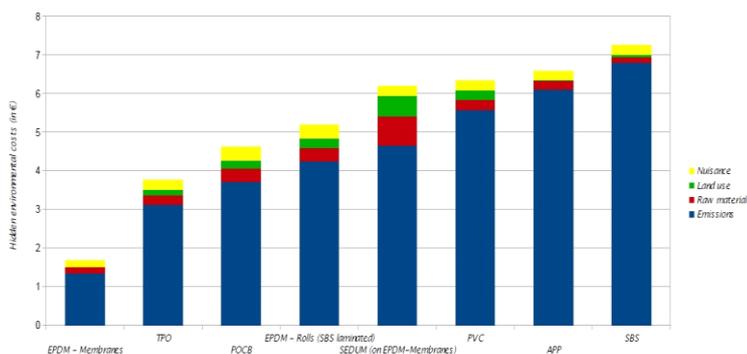


This was the result of an extensive research study to examine the expected service life and minimum lifespan of EPDM membranes. More than 39 varied roof projects were selected in Germany, Austria, Netherlands and Sweden that were installed between 1968 and 1996. The results indicated a lifespan of at least 70 years. Taking all the different production methods and material properties into account, the SKZ advised for North-West Europe a minimum practical use of (more than) 50 years.

Ecological responsibility

The Dutch institute NIBE (Dutch Institute for Biological and Ecological Constructions) publishes an annual comparison between the environmental qualification of various building products and their impact on the environment. For roofing applications the NIBE selected seven (for the Dutch market) basic roofing products and judged them on ecological and health aspects. The most environmental friendly product, category 1A, is EPDM pre-fabricated membranes.

The environmental qualification and costs of the roofing materials in this survey are based on a calculation period of 75 years. In the cost calculation two major aspects are important: Building costs (installation costs per sq. meter) and the Hidden Environmental costs (Emissions, Raw Materials, etc.).



Explanation

The NIBE has examined the effects on our environment for various building products (2007-2008), roofing products are among them. For this they developed their TWIN2002-model, this model is primarily based on the CML2-method, which is developed by the Centre for Environmental Studies in Leiden (The Netherlands).

Return on Investment

With all the good environmental intentions of 'Sustainable constructing'; at the end the price is still one of the most important decision factors. For architects and project owners it is therefore very important to gain knowledge in the early phase of a project. As "partners in design" we are able to support the market with our knowledge and experience. EPDM was developed more than 50 years ago. Compared with traditional bituminous roofing membranes (developed in the mid 80's), EPDM producers have significantly more lifespan experience.

In the price/quality discussion EPDM takes a favorable and unique position. The product price of one square meter EPDM is sometimes higher than other roofing products. But if you take important aspects into consideration such as: installation time, maintenance, prefabricated membranes, proven service life and lifespan, than a small -extra- investment in the early stages of a project has important beneficial consequences at the end. Especially for sustainable building projects, in which durability and lifespan will be an important deciding factor.

EPDM has an extensive long lifespan, needs hardly any maintenance and due to the flexibility of EPDM, the membranes still have elasticity and resistance at all service temperatures (at any temperatures, from -40 to +120°C). Other roofing products have to change their properties to make it root resistant for green roof projects, EPDM is already root resistant by nature!

Hertalan products have been awarded the DUBOkeur[®]

The DUBOkeur[®] certificate proves that a product, material or property is an environmentally friendly choice. This is demonstrated by means of an environmental life cycle assessment made by the Dutch Institute for Building Biology and Ecology (NIBE). The purpose of the DUBOkeur[®] label is solely for the top end of the market in the field of sustainability, so it really worth getting!



Conclusion

EPDM is a roofing product with unique properties! In the roofing industry it has the highest service life, an exceptional lifespan; the impact on the environment is the lowest and the Return on investment the highest. The savings that can be achieved during the installation of EPDM membranes are unique.

EPDM is the Best Choice for a roofing product in a Sustainable Construction!!