

Noise fences for peaceful living in new build area 'Zuidhoek'

Municipality of Kapelle, the Netherlands continues to choose Noistop®



"An area intended for people who appreciate the intimacy and safety of a village," as the municipal website describes the neighbourhood concept, of which commenced the third phase construction in 2020. That creates obligations in terms of the quality of its layout and appearance. Intimate and rural are the keywords in this. Because the district partially borders a railway line, measures have been take to prevent noise pollution from passing trains.

Noise reduction fence

Between Zuidhoek 3 – the last phase of the project plan – and the railway line, a 3 m high soil wall has been erected, on top of it is a 1.45 m high noise reduction

Noistop fence. This guarantees peace and residential enjoyment for the residents. The first section of the screen to be installed is 400 m long and is to be extended in the future by a further 200 m of screen.

Extra safety

The municipality of Kapelle chose Noistop noise fences due to its earlier positive experiences gained from a similar system which was installed in 2010 alongside 200 m of the A58. As Melvin Poppe, Civil Engineering project leader at the municipality of Kapelle says: "The system performs superbly and achieves the required reduction in noise. It's also a modular system, the elements of which are easy to install and have a long lifespan. The system is suitable to



Noise pollution is a health risk

When environmental noise rises beyond an acceptable level, over time it can have serious repercussions for health - directly or indirectly. More than 40% of Europeans are exposed to noise that is harmful to their health. Noise pollution caused by traffic and industry can be prevented or mitigated by the construction of sound barriers and the installation of noise fences. Noistop fences are used in (new) supermarkets in residential areas, for example where residents may experience pollution from deliveries by goods vehicles. They have also proved their worth in new developments built alongside busy roads and to combat noise pollution on school playgrounds.

By reducing noise pollution from traffic, residential areas, businesses and industry, noise fences help people to enjoy a more peaceful living and working environment and promote health and wellbeing.

NOISTOP FROM LAPINUS, SUPPLIED BY MOBILANE

Noistop is the brand name under which Lapinus, which is part of the ROCKWOOL Group, manufactures these special noise fences for private houses, industrial, commercial as well as municipality projects.

Mobilane, which is part of the leading family business, the Darthuizer Group, supplier of Mobilane Green Roofs and Green Walls, is a Noistop fence dealer for the Netherlands, the United Kingdom and Germany



allow greenery to grow alongside it, which is what we are going to do again. All of Zuidhoek is a sustainable district, and this contributes to the green appearance that we want to achieve here. Naturally, the fact that it is a sustainable and circular product was an absolute prerequisite. Therefore we also chose Noistop because it is the complete package. According to our calculations, the fence needs to be 1.35 m high, which gave us a noise level of 53 dB, whereas the preferred limit value is 55 dB.

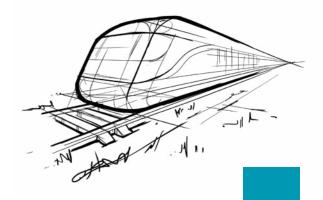
Simple installation

Noistop noise fences consists of specifically engineered stone wool elements enclosed in steel frames. The installation of the sound barrier was carried out by H2 Groen, which is part of H2 Infra. Landscaper Daan Ras: "We also installed the previous sound barrier along the A58, but at the time the decision was made to use hardwood posts. Based on increased insight, on this new project, we have used steel H-sections, between which the elements fit, with a tolerance of 3 mm. It's a little more expensive, but has a much longer lifespan. Once the sections were installed, it was easy to move the panels into place by using a crane.

Hermetically sealed structure

The sections are sunk one and a half metres into the barrier. In between, there is a layer of sand, stabilised with a horizontal concrete edge on top. Daan Ras: "A

band is glued on top of that, to which the first screen connects, with another band on top of that for the second screen and the protective cap on top of that. Using this technique, we managed to achieve a hermetically sealed barrier. We had scheduled three weeks for installation, but in the end we finished it in twelve days. In other words, we were able to speed up the chain. We had already begun to attach the bands while the posts were still being installed, and before that was completed, we started to install the fences. Elements that were delivered in the morning were often already installed the same afternoon. When the poles are firmly affixed, the installation of the stone wool elements is literally a piece of cake."





Exceptional acoustic qualities

The easy to install panels have a sound-absorbent core of water-repellent and UV-resistant stone wool elements, enclosed in steel or wooden frames in various versions and colours. The fences with steel frames are exceptionally suitable for planting, to give a natural appearance. Noistop combines exceptional acoustic qualities (sound absorption and noise protection) with a sleek Scandinavian design. The noise fences are thin and the modular system is available in various dimensions, so that in any environment in which they are fitted, depending on height and location, Noistop panels deliver a noise absorption of between 8 and 11 dB.

The benefits of Noistop fences

- Significant noise reduction and absorption
- Immediate peace, privacy and safety
- Low or no maintenance
- Multifunctional application

Unique features

- Easy installation
- Choice of various designs and dimensions
- Sustainable material
- Circular and recyclable

