

StreetHouse Lighting

Light your street, feel at home

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INTRODUCTION

As a MediaLAB Amsterdam team we are competing in the Light Challenge 2013 to create a new lighting system for the Agavestraat, in Almere. During the initial phase of our research we conducted a survey to discover the main problems, needs and wishes of the residents of the Agavestraat in regards to their street lighting. The two important considerations that came out of this investigation and also from the first meeting we had with the residents (13th of February 2013) were safety and the old fashioned look of the current street lighting. Also, a non-homogeneous distribution of the light is the cause of dark corners in the street, which gives the people a feeling of insecurity. We first created five concepts and each focused on a different aspect of light. Step by step, thanks to experts' advice and Light Challenge inspiring masterclasses, we arrived at a final concept that merges the best solutions for an effective lighting system.

thought of recreating a home-like environment using light by bringing the inside of the house outside. The main lighting is provided by street lamps, distributed in strategic points of the street in order to give an equal diffusion of light so its covering the most important parts of the Agavestraat. The lamp is in line with the concept of the house; therefore it has a design connected with the typical indoor lamp idea.

The lamp includes two different light sources: white LED placed at the bottom of the fixture - a safe light for bicycles, cars and pedestrians - and a coloured light inside the fixture, an ambience light to turn the street into a cozy environment.



Figure 1. Installation of the lamp.



Figure 2. White LED and colored light.

CONCEPT

Safety and meaning: our home

We asked ourselves what a possible safe and meaningful environment could be for the residents. The answer was easy: our home. Home is, by definition, our shelter, a place where we feel safe and at ease.

How can we recreate the sense of 'home' on the street through light? With the StreetHouse Lighting project, we

The lamp is equipped with sensors that dim the LED light when no one is in the street, saving energy and increasing the lifespan of the lights and therefore sustainable.

To even increase the 'home-like' feeling, part of the concept is to visualize typical and iconic elements we find in our living room, our kitchen or in our house in general. In this way the street is turned into a house, the residents' house, and entering the street would be like entering your own safe home. It is possible to use the blind walls of the houses that are present in the street to visualize these objects. Also the ground can be a canvas to draw the house. In this way we can mark the perimeter of the different rooms, creating a sort of blue-

print of an *Agavestraat* house. The visualization of the rooms will be divided on the street and the walls: on the street there will not only be the plan, but also several objects placed on the ground corresponding to the room they are placed in. The walls on the other hand will have the silhouette of the front view of the elements commonly seen in the various rooms. This concept can also be easily implemented in the narrow alleys between houses, perceived unsafe by the residents.

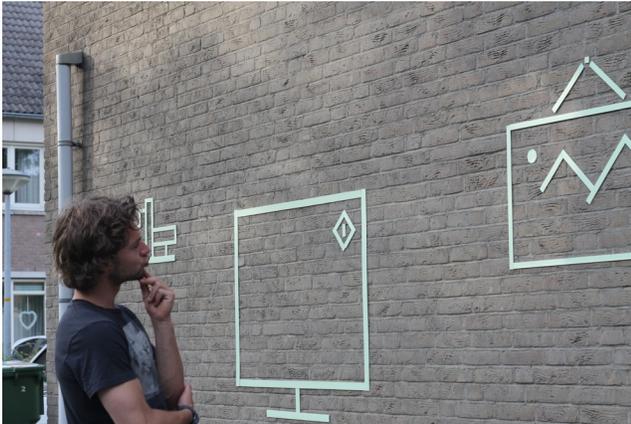


Figure 3. Luminous tape on the walls.

Far from being a common lighting system, the light will be an innovative and playful element with an expected effect on the relationship between the residents and their street. The light installation can become a meeting point for kids or a game for passers-by. Residents are expected to feel safer, as they would be in their own house. This idea can help them to reach that feeling and at the same time it can create a unique and new experience, making them feel proud of their own street. The theme applied throughout the entire street is expected to help increase social cohesion, visual appeal and pride.

StreeHouse Lighting aim to solve that lack of meaningfulness and safety the residents were complaining about, creating a cozy environment where to feel at ease like in your own house.

USED MATERIALS

- Fixture of the lamp, a company specialized in public design projects. Made with polyethylene, a recyclable and very resistant material.
- LED units. White LED are placed at the bottom of the fixture to give a safe light for bicycles, cars and pedestrians.
- Philips Hue Lamp. Placed inside the lamp fixture this specific light bulb can change colour, creating an ambience light able to give to the street a cozy atmosphere.



Figure 4. Reflective stones create shapes on the ground.

- Sensors. Thanks to them, it is possible to dim the LED light, saving energy consumption and, at the same time, increasing the life span of the lights.
- Aluminum pole.
- Luminous tape. This specific tape, usually applied in road signs, were used in our project to create shapes on the wall.
- Reflective stones. Thanks to these tiles it is possible to make drawings on the ground, placing them among the regular street stones.

Using all these materials, we calculated that an approximate price for the entire lighting system would be around 1.500 euro. LED light, together with reflective stones and luminous drawings will, in the near future, be more cost effective. These elements are energy efficient: reflective stone permit the use of less light and luminous coating is an autonomous source, able to charge with natural light without any artificial support.

Aknowledgment

These are the companies that provided us all the materials:

- CM3 Custome Made, specialized in public design projects
- Lightronics
- Tvilight
- HIG
- Kijlstra
- Nedal Aluminuim

