

SIKA AT WORK GREEN SMART LIVING CONCEPT, DESIGN AND SUSTAINABILITY CULTURE

ARCHITECT MASSIMILIANO MANDARINI IN COOPERATION WITH SIKA ITALY

FLOORING: Sikafloor® ROOFING: Sikalastic®



BUILDING TRUST

GREEN SMART LIVING, DESIGN AND SUSTAINABILITY CULTURE

PROJECT DESCRIPTION

Green Smart Living is an innovative concept of a living module promoting the culture of sustainability and an environmentfriendly-oriented lifestyle in hybrid "green and social" architectural spaces. The project, based on NZEB (Nearly Zero Energy Building) principles, was created and realized in 2017 by Architect Massimiliano Mandarini, in cooperation with Sika Italia, under the sponsorship of Green Building Council Italia.

This special project, carried out in partnership with the Italian National Confederation of Craftsmanship (CNA), was presented from 4th to 9th April 2017 during the Tortona Design Week of Fuorisalone in Milan, the most important event in the world related to the topic of design. It was displayed in the areas dedicated to Manufacture 4.0 at BASE, the historical spaces of the former Ansaldo area adjacent to the Museum of Cultures (MUDEC), nowadays an international creative centre in one of the most charming and dynamic areas of Milan.

Green Smart Living is a platform with new design and architectural content, created to make the community and the market aware of new eco-oriented lifestyles and sustainable and responsible living.

The combining is a fifty-square-metre prototype home, all the Green Living concepts, where you can live and work in a flexible, shared way following new smart and social lifestyles. The design and architecture are based on one product, where interior and exterior spaces are hybridized. For instance, the winter garden and the photovoltaic greenhouses are thought to be energy self-sufficient and in harmony with the landscape; the innovative design is focused on the modularity of the elements composing the spaces, guaranteeing the earthquakeresistance behavior of the frame along with high thermal and acoustic performanc of the building envelope. Finally, the living module Green Smart Living encompasses several possibilities for contemporary living in hybrid and multifunctional spaces such as living area, office, kitchen, bathroom, winter garden, vegetable greenhouse and relaxing wellness area where you can be reinvigorated.

The living module created by Architect Mandarini is also intended to be a type of "educational architecture" where any space is designed to educate about sustainability, the Green Building principles and creative and innovative use of environmentsProject requirements The client wanted to have a floor which looks sleek and modern, at the same time is durable.





SIKA SOLUTION

Sika promotes sustainable solutions by providing eco-friendly solutions with the goal of raising awareness about energy efficiency improvement, raw materials consumption optimization, and water consumption reduction.

Sika has always been committed to measuring, improving and communicating sustainable values: "More value, less impact" is our way of working and refers to the commitment to maximize the value of our solutions, reducing resource consumption and environmental impact.

Through sustainability-driven systems and technologies, Sika has met the requests of the clients, becoming promoter and testimonial of Green Smart Living concepts.

The liquid waterproofing membrane Sikalastic®-560, based on the exclusive Sika Co-Elastic Technology, has been applied as cladding of the living module. Sikalastic®-560 is waterbased, namely without solvents and irritating Volatile Organic Compounds, and represents a valuable elastic waterproofing solution for durable roofs (compliant with LEED EQ Credit 4.2: Low-Emitting Materials). Sikalastic®-560, thanks to its highly reflective white color, is compliant with the Initial Solar Reflectivity requirements envisaged by the "Energy Star" program and has actively contributed to the increase in the energy efficiency of the living module, by reducing cooling costs in compliance with "Credit 7.2 LEED SS - Heat Island Effect".





For indoor flooring of the module, Sika Comfortfloor® PS-65 system, a low-VOC-emission polyurethane resin flooring system, was applied for self-levelling floors, with recycled rubber mat interposed between resin layers.

The reason for this solution was, first of all, esthetics. The architect was looking for a smart surface, with a bright color to communicate freshness and refinement. In addition, Sika Comfortfloor® PS-65 was chosen for being highly easytoclean and hygienic, was chosen for being highly easy to clean and hygienic, for a soft surface to reduce tiredness from walking, and for decreasing the noise generated by tread. Furthermore, the content of recycled materials in the thickness of the covering and the low VOC emissions have actively contributed to the sustainable context of the living module.

The flooring system, was made in the technical laboratories of Sika Italia and later assembled at the work site, includes:

- Sikafloor[®] Comfort Adhesive, low-VOC emission polyurethane adhesive to bond the sound-resistant mat
- Sikafloor[®] Comfort Regupol 6015 H
- Sikafloor[®] Comfort Porefiller, low-VOC polyurethane resin, to fill the pores of the rubber mat.
- Sikafloor®-330 self-levelling, polyurethane, solvent-free and low-VOC-emission resin
- Sikafloor[®]-305 W, colored polyurethane water-based and low-VOC-emission sealer as a top coat.



The experience of Sika experts was essential to fulfil the requests of the Architect regarding the final color of the flooring system, which was obtained by a final mixture of 97% RAL 1016 yellow and 3% RAL 6018 green.

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PRODUCTS/SYSTEMS USED

- Sikalastic[®]-560
- Sikafloor[®] Comfort Adhesive
- Sikafloor[®] Comfort Porefiller
- Sikafloor[®] Comfort Regupol 6015 H
- Sikafloor®-330
- Sikafloor®-305 W

PROJECT PARTICIPANTS

Architect: Massimiliano Mandarini Consultant, applicator and material supplier: Ing. Giorgio D'Alò, Target Market Refurbishment, Sealing and Bonding, Distribution Channel Manager, Sika Italy

Photos provided by Alessandro Negrini e Lamberto Cesaroni

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SIKA SERVICES AG Tüffenwies 16

CH-8048 Zürich

Switzerland

Contact Phone +41 58 436 40 40 www.sika.com



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