GXN
-the Innovation Unit at 3XN Architects

Established in 2007 as an internal division, GXN has driven architectural research in the newest materials and building technologies. The ‘G’ stands for Green, highlighting GXN’s dedication to ecological design research through digital processes and innovative material solutions. The core goal is to develop a building culture that positively affects the world in which we live both architecturally and environmentally.

GXN has developed partnerships with leading experts across various industries for investigation in material research, data analysis, biology, and digitalization. Using applications of building innovation technologies from several disciplines allows GXN to create custom solutions for unique architectural challenges.

The Five Innovation Strategies in this booklet describe how GXN pushes the limits of research, design and commercial application in the quest for Better Buildings and Better Environments for People.
LifeCycleDesign
GREEN DESIGN

Green architecture is not just responsible and healthy – it is also economical and important in the long-term

DESCRIPTION

Green design strategy is a mindset for all of our work, where we are particularly sensitive to building design as it affects people, nature, and context. This regenerative approach results in a positive impact on the local social, ecological, and economic spheres.

SO WHAT DOES THIS DO?

Our focus is to take the negative aspects of a building and turn them into a positive result. For example, creating buildings that produce more green energy than they consume, using recycled materials that either are or can be recycled, designing healthier indoor environments. We develop solutions that support nature and biodiversity and encourage it to thrive.

HOW CAN THIS CREATE VALUE?

Through Green Design, we create better environments for people increasing productivity, reducing sick days, and providing a healthier workplace, through the choice of materials and design. This approach creates desirable buildings that are cost-effective in a modern real estate market.

HOW CAN THIS CHANGE THE WORLD?

Through the use of Green Design Strategies, we can have a major positive impact on the built environment addressing its social, ecological, and economic challenges.

DO YOU WANT TO LEARN MORE?

Read about the following projects on 3bm.com:
- Green Southern House
- Grade C Grade Pavilion
- Urban Green

Green School Stockholm

Green School Stockholm is an example of school concepts with a modern approach for sustainable living, by actively educating about locally grown food, and by creating a multitude of green external public spaces. The building incorporates a full system of sustainable living, from kindergarten to high school, college dorms to senior apartments. The school emphasizes food production technology showcasing an array of innovative green solutions, such as organic gardens, vertical farming, living walls and algae facades.
Green Catalog
Algae Facade

This facade uses a process of photosynthesis that can then be used for biofuel. The system also acts as a natural filtration system, turning carbon dioxide and other air toxins into clean oxygen and turning gray water into usable filtered water.

Architectural Application
These facades can be located on any exterior surface and act as sunshading devices for the interiors. The facade can be designed as a system of panels or a system of tubes. These two architectural typologies offer a great diversity of design opportunity.
MIND YOUR BEHAVIOUR

How Architecture Shapes Behaviour