

Small Projects

Tips & Tricks on sustainable measures to integrate into low budget and/or small eco-projects. Focus on healthier materials and finishes.


Expert Name: Ms. Maha Nasrallah

Architect, expertise in Sustainability



Short Profile: Born in Beirut Lebanon in 1960. Received the Bachelor of Architecture from the American University of Beirut in 1983.

Maha Nasrallah architect is based in Beirut. The office was established in 2002 with the aim of developing an architectural language that responds to the local needs and regional and environmental characteristics while using a contemporary vocabulary. The projects include private projects, institutional projects, rural development projects for NGOs and local Municipalities and finally interior design projects. In 2008 and in collaboration with Prime Design, the office focused on Climate Responsive Design Projects in the design and construction of the Ibrahim El Hibri Social Complex for Dar al Aytam, followed by a new collaboration in 2011 with EcoConsulting for the ecological renovation of the Casa Batroun. Casa Batroun was awarded the Gold Medal with the Green Apple Award 2103 for the Built Environment and Architectural Heritage, the BREEAM 2010 International Excellent rating in 2014 and lately the Lebanese Architect Award for Sustainable Architecture in 2017.

Definition / Benefits	Constraints / Challenges / Barriers
<p>strengthen or support physically or mentally</p>  <ul style="list-style-type: none">✓ Cradle to cradle, look at the full cycle✓ Healthy living✓ Healthy environment✓ Harmony with nature, long term economy,	<ul style="list-style-type: none">✓ Initial cost might be high if no help from government✓ But in the long term savings in energy will make up for initial cost✓ Awareness: clients may need to be educated✓ Availability of certain materials on the local market✓ Implementation on an existing structure

beauty, reduction of energy consumption	
Best Practice / Solutions / Tools	Resources / local Availability
<ul style="list-style-type: none"> ✓ Start with a self-mapping to assess one's own carbon footprint and become aware ✓ Install PV cells and Solar water heating ✓ Collect Rain water ✓ Treat Sewage Water ✓ Energy light bulbs: replace all bulbs with LED ✓ Install motion sensors where possible for lighting ✓ Create Shading in summer ✓ Allow for sun in winter ✓ Cross ventilation ✓ Use breathable and natural construction materials ✓ Plant indigenous plants that need little irrigation 	<ul style="list-style-type: none"> ✓ Looking back to our ancestors and how they learned to live in harmony with nature through experience. ✓ As a user: Be more nomadic: you move following cooler or warmer areas in a house. ✓ As a designer: Create multiple settings and options for different times of the day and of the year <p>Examples:</p> <p>2- theArisheplanted in front of the south oriented opening allows for shade and cool air in the summer, then when it loses its leaves in the winter, it allows the sun to go in.</p> <p>3- thick stone of mud brick walls: they allow for thermal mass, thermal insulation, breathability and beauty</p>