

A proposed methodology for design integration as one of the sustainable design goals for light metal construction

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Abstract:

knowing that, the lightweight metal building is a critical field of the environmental practices in its designing and applying frame work. And according to the definition of the sustainable development it is an international direction for various countries. That's because of its importance for all levels in present and future situation, with its critical aims. which includes the environmental side, the economic side and the social side, and because both of the policy-makers and decision makers are facing the same International challenge which is facing the designer too, the decisions which is made by the designers became very important according to its effect on the environmental, the economic, and the social future through the results of the design. suggesting a methodology to make integration in the sustainable design for light metal building supports the designer to achieve the sustainable aims.

As the lightweight metal building is a functional program which works in a complementary way through an alternative relations and reactions between its components, complementarity is the integrity, And the complementary design is differ from the regular design in its interest of harmonious interaction and its good performance in different fields through complicated relations between its pieces and functions, And this appears in the design of the light metal building in its relations between the functions of the building, its requirements that we should do, the relation between the components, different items for the building, the relation between the interior design of the building and the exterior form of it and the urban environment of the building, And given that the design should go through specific procedural stages. these stages have been developed and performed by alot of specialists. and they have proved that these performs could merge with the aims of sustainable design which is produced from the sustainability axes then it could activate according to complementary strategies to make a harmonious interaction and a good performance between the parts and the functions of the light metal building.

Key word:

(sustainable design - light metal structures - design integration)