

The glass facades of the future architecture and the ways of its tightness

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Abstract:

The recent technological advances have affected the architectural glass facades in the formation, as well as the application of environmental control techniques on it, and influenced by aesthetic and economic factors. This confirms of the Weather-tightness glass face many difficulties and most of these obstacles through multiple natural influences such as (air force, water rush, wind loaded with dust and the impact of natural sunlight) in different regions and countries. In Egypt we find the applications of architectural glass facades are subject to several problems and this has been we tested it in this research.

The problem of research is determined in the following:

Failure to test the site tightly and determine the basic considerations of the methods of tightness through the procedures of technology and coatings and materials appropriate to prevent the entry of natural lighting in the building irregularly.

(Lack of studies and tests to tighten the glass facades well to dust, light, heat and humidity through a set of technological procedures and considerations assumed by the designer when designing those facades).

Research Goal:

Making some choices and using structures and materials for each country, especially Egypt, to avoid obstacles caused by the momentum of rain and wind and control the flow of air and dust on the level of glass architectural facades.

To achieve this must be studying:

- 1- Studies of façade locations shall be carried out and the special functions requirements shall be determined to meet the expectations of building users.
- 2 - The role and responsibility of the designer of facades in the processes of tightening.
- 3 - Access to the most important results of the rules of design guidance for the tightness of the facades.

Keywords:

Weather-tightness – Future architecture - the driving forces behind the flow of water - Facade Functions.