

Innovated molds to produce Glass Vents for architecture

Assist.Prof. Dr. Rasha Mohamed Ali Hassan

Faculty of applied arts- glass department- Helwan University.

rashazehom@gmail.com

Assist. Prof. Dr. Ola Abd Ellattif Sabbah

Faculty of applied arts- glass department- Helwan University.

Osabbah4@gmail.com

Assist. Lect. Ibraheam Mohamed Taha Elkhateb

Faculty of applied arts- glass department- Damietta University.

Ibmimt82@gmail.com

Abstract:

This research is exposed to a new type of glass products, which are glass vents that are used in internal and external architecture, which require special molds that we may increase the number of its parts to suit the nature of the structural body of the glass vents to be obtained and the method of pressing used in their production, and at the same time we can obtain vents It can be installed together and installed in architecture. These molds may sometimes be similar to some of the glass products molds used in the method of pressing, but they are different from them at other times to ensure the safety of glass exit from the mold that has a different nature from the products that are produced by traditional pressing molds such as tiles and glass bricks used in architecture, so Several experiments are needed to find suitable parts of the molds with which to obtain these vents, and the research went through a design study for one of the types of glass vents, which is a vicious unit. A design study was made for the molds, passing through a template consisting of a part and a multi-part template of different types and a sister Bar each of them until arriving at the best template suitable for the production of that vent unit and then adopting that template and making a prototype for an alternative material after drawing them as three-dimensional cut-outs achieving the selected idea with the help of printing to produce plastic models and then testing those models to ensure the success of the idea and safe exit of the product using the alternative material for the molten The glass and after successful testing of the models, the actual application of the template is made by selecting the best suitable materials for the mold to produce the glass unit. Molded glass melt, producing the hollow glass unit that was studied and suitable for application in the fields of internal and external architecture.

Keywords:

Production of glass vents, production of glass by pressing, architectural glass vents