

## **The mural design between the richness of the formation and the diversity of materials and techniques with application to (ceramic, glass)**

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### **Abstract:**

The art of wall formation has been associated with human civilization since the Stone Age, as it is the focus and painter of its cultures, and it is the result of civilized communication, and the porcelain and glass materials have also been associated with the civilization development of man over the ages, and the research has dealt with the historical development of the mural through different ages and the most important characteristic of mural photography in each era of In terms of formation, subjects, materials and techniques, it also dealt with environmental, technical and aesthetic considerations of mural design and its relationship to formation and its design determinants and their differences according to the previous criteria, then the research moved to an applied study that provided design solutions for the design of the mural based on the research methodology in classifying murals into wall photography murals according to the determinants of direct printing techniques on porcelain and glass The technique of water jetting using glazed porcelain tiles and mosaic technology, then moved to dynamic murals, which depended on the techniques of water jetting of glass and glazed slices, ending with interactive murals, as it depended on the use of modular units, whose arrangement or rotation results in a variety of formation, levels, surfaces or colors.

### **Research Problem:**

- 1- How to employ murals in the design of architectural cladding in airports and public places such as train and metro stations .... in a way that reflects the plastic richness in design, and is compatible with the possibilities of the porcelain and glass materials in expression and wall design?
- 2- Are there technical and environmental limitations that make the role of ceramics / glass as murals limited and ineffective?
- 3- Do architects propose the combination of glass and ceramic walls as one of the alternatives in coordinating internal spaces for public places such as airports, train and metro stations, as well as open places such as public gardens .....?
- 4- Reducing the use of glass mural techniques in mosaic techniques despite the great diversity in glass technologies.

### **Research Aims:**

- 1- Emphasis on the visual richness in the design of murals in porcelain and glass materials for public places such as airports and public parks.

2- Determine the most important design considerations that the designer must take into account in the wall formation of glass and ceramic materials.

**Research Importance:**

1- Providing an analytical study specializing in the design of porcelain and glass murals and their aesthetic and cultural value to support architects and designers interested in the relationship of mural design to the technology, materials used and the proposed context for implementation.

**Keywords:**

Murals, formation, glass, ceramics, techniques