



MINIMUM SPECIFICATION OF HANDMADE CERAMIC MURAL MANUFACTURE

TILES

Water Absorption	Less than 3% (fully vitrified) Conforms with BS6431:(E<3%)
Hardness (Tile) Rating:	7 - 8 Moh's scale
Hardness (Glazes) Rating:	5 - 8 Moh's scale
Strength (Glazed): (Unglazed):	Transverse, 36.6 N/mm ² (DIN18166): 17.0 N/mm ² Compressive in the range 192 to 193 N/mm ²
Thermal Expansion:	Conform to BS64321: Part 2 1984 Glaze and body not affected by chemicals except hydrofluoric acid and not caustic solutions 6.322.
Fire:	Non-combustible
Effect of Frost:	Conform to BS6431: Part 2 - tiles are frost proof
Durability:	Vitrified ceramic materials are unaffected by ageing weathering, ultra violet radiation or atmospheric pollution
Approx Weight Square Metre:	Tiles 10mm thick - 25Kg
Precious Metals:	Gold: 22 carat Platinum: 95% Purity Copper: 95% Purity
Adhesive/Grout:	This all depends on the surface that the ceramics are to be fixed to

**DESCRIPTION OF REQUIRED MANUFACTURING PROCESS FOR HAND MADE
CERAMIC ARTWORK – TO BE READ IN CONJUNCTION WITH MINIMUM
SPECIFICATIONS**

SPECIFICATION RELATING TO MANUFACTURE OF HANDMADE CERAMICS

PRE-QUALIFICATION

The company which is to design, manufacture and install the handmade ceramic murals is required to have a minimum of 35 years experience of this type of work. The one company should be involved in all aspects of the above-mentioned points and no elements of the work are to be sub contracted unless with prior knowledge and approval by the client.

DESIGN

The mural is to be designed for a given area in a given location. The client's tastes and the environment into which the proposal mural should exist form the basis of the design.

Slips, glazes and lustre are to be developed to match or compliment the colour schemes of adjacent areas as determined by the design brief.

Each commission is to be unique, individually designed mural – a one off work of art that will not be replicated or utilized in any other way, for any other project without prior approval from the client.

MATERIALS

All clay and glazes used in production should conform to British Standard (or similar European/American status) and are to be of the highest quality.

PRODUCTION

Clay in a malleable form is laid on a prepared surface to the full size of the area it is to fit. Unless in extreme circumstances, all work is to take place with the mural as one in order to ensure a flow and a continuity to the finished product.

Drawing on the clay by hand and modeling the clay by hand are essential ingredients. For this the original approved design is to be at hand and from this a large 'scaling up' process is to be carried out. The artist will be responsible for this and it will be completed entirely by hand without recourse to computers or other mechanical techniques to obtain this enlargement. The work must be an expression of the artist who uses the approved designs as a guide.

A certain degree of three dimensions, up to 50mm deep (depending on the design), should be obtained during modelling and the finest of textures are to be achieved. Liquid clay and oxides must be used at this stage in appropriate circumstances.

The mural is should then be cut into small pieces, each 'cut' carefully considered so as to enhance the design of the mural. No two pieces will be the same shape or size. The pieces or tiles will vary from quite small mosaic sized pieces up to 400/500mm long. Each tile has to be carefully numbered and fettled before firing. The cutting will contribute to the character, the ambience and experience of the work.

FIRING

The first firing is to a minimum temperature of 1220 degrees centigrade. This will stabilize and fully vitrify the clay rendering it impervious to climatic change and thus suitable for use inside, outside or underwater.

After each firing, the complete mural is sorted and laid on the floor in preparation of the subsequent treatments.

GLAZING

After its first high temperature firing the mural will be glazed. It may have up to six gloss or glaze firings, each to temperatures appropriate for the colours used. All the glazes will be applied by hand, again frequently using the original design scheme for reference. Many coats or layers of glaze may be required to achieve the desired effect. Techniques to be used include brushing, trailing, sponging, spraying, layering, wiping back.

LUSTRE

Precious metals of the appropriate qualities are to be applied in the final stage. Gold, copper and platinum are to be used as appropriate. These will be fired on, although in a lower temperature range of between 700 and 800 degrees centigrade.

PACKAGING

Finally, the people who have been involved throughout production pack the murals into custom-made crates. This continuity of people ensures care and attention for the mural from the beginnings of design work to its leaving the factory.

INSTALLATION

Installation is to be carried out by Craig Bragdy Design using a combination of experienced tile fixers and people involved with the design and manufacture. The highest standards of site work and practices are to be ensured and all health and safety issues and local sites rules, regulations and general practices are to be observed.

The thickness of tile is 10mm

The thickness of adhesive is 3mm

Therefore, total thickness of approximately 13mm.

FIXING MATERIALS

Adhesives are chosen for each individual project depending upon the substrata to which the mural will be fixed. Once fixed they are permanent. This is to be guaranteed. The work needs to suit installation on the following surfaces:

Concrete	Stone
Cement	Plasterboard
Plaster	Marble
Wood	Fibreglass
Metal	

Manufacturing and installation techniques and materials all need to conform to British Standards. All ceramics have been tested by the British Ceramic Research Centre and have been approved for use in the following situations.

Interior	
Exterior	between temperatures of -20 degrees centigrade to 95 degrees centigrade
Underwater	