

# TECHNICAL GUIDE

## AN INTRODUCTION TO SUBSTRATES

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FREQUENTLY ASKED QUESTIONS  
CERAMICS PRINTING

Second Edition

 **FESPA**  
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## FREQUENTLY ASKED QUESTIONS

### **1. Is it easy to get into ceramics printing as an extension of my sign and display work?**

Unlikely, as ceramics printing is an extremely specialised business. Traditional ceramics production includes the decoration as part of the manufacturing process, however digital processes offer exciting new possibilities.

### **2. Are there many companies doing digital ceramic printing?**

This is a growing area of the industry but it is limited to a relatively small number of players. That said, direct digital printing of ceramic tiles is a growing market sector as the cost of technology and its ease of use come down.

### **3. Why are inkjet printhead developers interested in the ceramics market?**

The production of ceramic tiles involves long and complex supply chains which digital printing has collapsed. Also bespoke ceramics is considered to be a potentially huge market.

### **4. How does ceramics printing differ from 3D printing?**

3D printers create three dimensional objects using a special printing technique. Ceramics printing adds images to existing 3D objects that have been conventionally produced.

### **5. Are there any printing standards for ceramics print quality control?**

No. ISO has an extensive range of print related quality control standards, most notably the ISO 12647 series, however these standards are print method specific and there is no part that relates to ceramics.

### **6. Do I need special Raster Image Processing (RIP) technology to print ceramics?**

You don't need a special RIP, but you do need software in your RIP that can manage data to optimise it for the substrate, especially for colour rendering.

## **7. Is it possible to add surface texture when printing ceramics?**

This is an emerging area, but using digital deposition techniques it is possible to add special effects to digitally printed ceramics.

## **8. What kind of special effects can be added when digitally printing ceramic tiles?**

This depends on the printing technology you use, but could include such things as matte and glossy effects, metallic and added whites.

## **9. Are there real opportunities in ceramics printing or is it just manufacturers' hype?**

As long as there is new building and repairs to existing buildings there is a need for ceramics. The interest in customised interiors would also suggest that there is much potential in this sector.

## **10. Why has it taken so long for digital printing methods to be used for ceramics printing?**

The main reason is that ceramics inks have very large particle sizes and are very viscous. This means they are difficult to jet, however printhead developers have overcome this limitation and there has been a massive uptake of the technology over the last few years.



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