

WALL COVERING > OMBRAE™ OPTICAL TILES

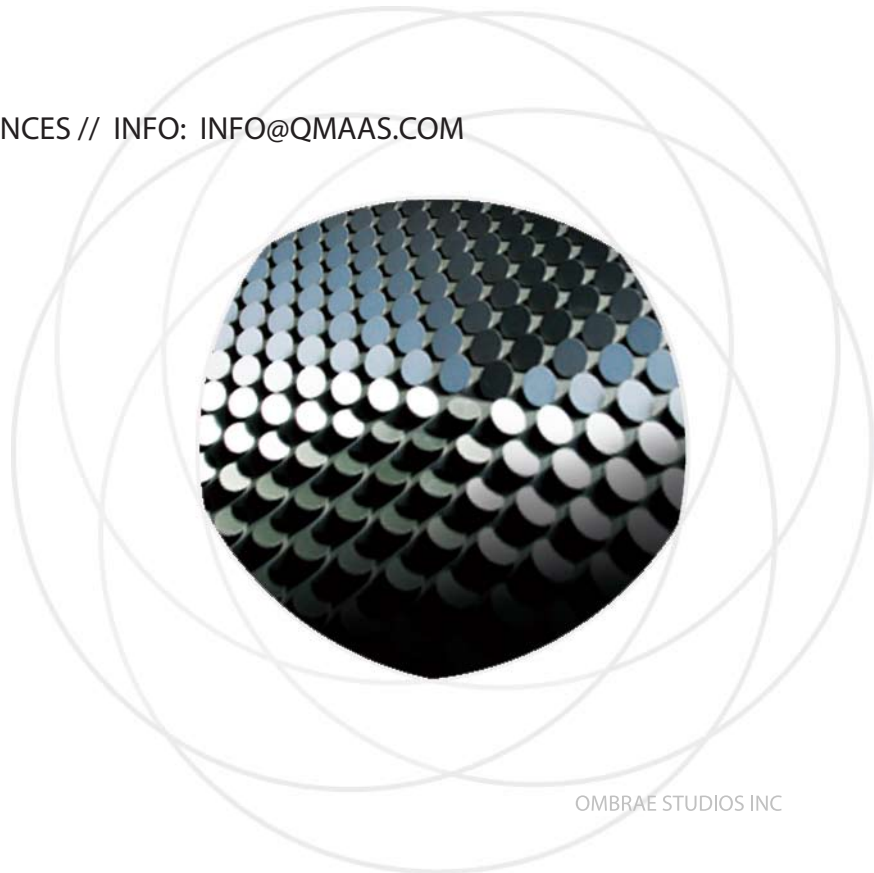
Developed by Vancouver-based firm QMAAS, Ombrae is the first, patent pending, computer based surface image processing system that allows for any digital source image, a photograph, or a computer graphic design to be embedded directly into any material substrate at any scale.

This cost effective surface treatment uses conventional material and manufacturing technologies. The image is made from physical three-dimensional pixels, or optical tile™. The optical tile pixel creates just the right amount of light and shadow at just the right places at the surface of the material substrate. The image is a simple bas-relief - no lenses, laminated layers, or printed dyes or inks are involved. The technique opens virtually unlimited opportunities. Images of this kind can be created by casting and/or machining into glass, resin, plastic, cast stone, concrete, metal, stone and some woods, for uses in architectural and interior design, industrial, fashion and furniture design, using materials such as leather, vinyl, rubber, composites and fabrics are just some of the other areas and material of possible use of the Ombrae system.

Moreover, the system offers unique morphic and visually dynamic effects. An Ombrae image is never just a static surface; it morphs with changing lighting conditions and angles of view. The image object never seems the same as it will appear to shift, moving with the viewer as they move. Not to forget the possibility of unlimited combinations of materials, colour and transparency.

According to its creators, Ombrae allows for aesthetic and technical problem solving to be considered from a common platform. Sound attenuation, sun shading, thermal insulation, even aerodynamics and photovoltaic power generation are just some of the technical considerations that designer can address while creating uniquely aesthetic solutions for architecture, interior design, landscape design, and much more.

MANUFACTURER: QUIN MEDIA ARTS AND SCIENCES // INFO: INFO@QMAAS.COM



The Basics of the Ombrae System™

The Ombrae System is a method of changing the topology of a surface in a material to cause it to display a programmed image.

Using data from a digital source, optical tiles™ are embedded into the surface of a material. An optical tile is a 3D pixel, that recreates the lightness or darkness at a given pixel location in the image. The Ombrae System controls how light reflects from the surface of each optical tile. The system calculates the optimal reflective position of the tiles so that they represent the source input. Ombrae images behave in a dynamic fashion, having a holographic 3D effect changing as viewers move and as lighting conditions vary.

The dynamic properties of the Ombrae System can capture a viewer's attention in unique ways. This feature is ideal for applications in the field of architecture and product design. Ombrae's uniqueness and breadth of application allow branding across many materials and scales. This extraordinary ability is ideal in the field of architecture and design.

Steps within the Ombrae System:

A typical project in architecture and design consists of the following steps:

The first step in the process begins with a consultation with:

1. The Ombrae design team and the client/architect/designer to determine:

- Project Overview - The scope of the design application; image selection and branding considerations.

2. The Ombrae team conducts computer pre-visualization and 3D modeling to determine:

- Most appropriate or desired image resolution and optical tile density, material selection and lighting consideration.

- Site Synchronization: analysis of site, range (distance from viewer to treated surface), principle angles of view and principle angles of incident light.

3. The Ombrae team then prepares instruction and computer files for manufacturing in the selected material.

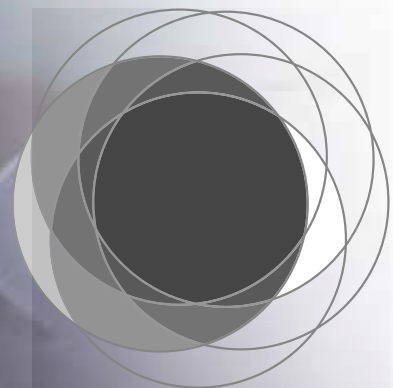
4. Ombrae manages the project to completion, coordinating all aspects of the design, manufacture and installation.

The Future of the Ombrae System

Exploring Opportunities for Architecture and Design

We are continually developing the Ombrae technology to meet the demands and opportunities for architects and designers. Integrated alternatives for power generation, passive solar heating, cooling, and water recycling are a few of the potential areas in development.

Quin Media Arts and Sciences™ is dedicated to bridging the worlds of technology and applied industrial and artistic design. As innovation in architecture and design advances, so does the range of opportunities for the Ombrae System.



"Any sufficiently advanced technology is indistinguishable from magic"
- Arthur C Clarke -