Historic Wallpaper Digitally Remastered: Early 20th Century Block Printed English Wallpaper in the Yin Yu Tang House at the Peabody Essex Museum

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Huang House Location
Yin Yu Tang House in Village
Forecourt
First Floor Bedrooms
Second Floor, Bedroom 16: Site of 1920’s Wallpaper
Interior Wood Frame Construction
Exterior Masonry Walls
Front Wall Before Dismantling
Side Wall Before Dismantling
Back Wall Before Dismantling
Dismantling House in China Took 4 Months
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Open Storage
Transport to Boston: River Trip Before Crating
Transport to Boston: 19 Containers Loaded
First Reassembly in Boston Warehouse
First Reassembly in Boston Warehouse
Mock Up in Boston Warehouse: Proofing Process
Mock Up in Boston Warehouse
Side Wall, Wood Slats
Mock Up in Boston Warehouse: Ceiling
Second Floor, Bedroom 16: Site of 1920’s Wallpaper
Second Floor, Bedroom 16:
Detail of Original Wallpaper
Construction at Peabody Essex Museum
Back and Side Walls
Wallpaper Adhered with Lascaux 498-20X
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a butyl-methacrylate dispersion thinned 20% with xylene

Reason for Using Lascaux 498-20X

• Concerns about the solubility of Epson’s Ultrachrome inkjet ink’s in water -- this proved to be groundless

• Concern that half-the-year, the space would be exposed to the uncontrolled temperature and humidity of Salem, MA – response has yet to be determined

• Concern for moisture intrusion because the back wall is an exposed exterior wall

• Should lifting, bubbling or pealing occur, due to excessive heat and humidity or moisture intrusion, it can be easily set down using heat and pressure
Courtyard Open to Weather About Half the Year
Wallpaper Adhered with Lascaux 498-20X
Set Down with Pressure and Sealed with Heat
Wallpaper Adhered with Lascaux 498-20X
Set Down with Pressure and Sealed with Heat
Wallpaper Adhered with Lascaux 498-20X
Set Down with Pressure and Sealed with Heat
Tinting, Distressing and Blending With Original Tests in the Studio
Tinting, Distressing and Blending With Original
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Tinting, Distressing and Blending With Original
Consolidating damaged Wallpaper on Wood Using Starch Paste
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Consolidating damaged Wallpaper on Wood
Using Starch Paste
Surrogates for Continuous Display
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Surrogates for Continuous Display
Creation of Digital Wallpaper
Best Example of the Original

- Six wall boards clamped together to eliminate gaps as much as possible
- Lit with two Calumet tungsten soft boxes at 30 degrees from wallpaper
- 22 x 28 area captured at 450 ppi in the Boston warehouse, 12 min. exposures
- Direct to digital using a BetterLight Super 8K scanning back at 12000 x 16000 pixels, Schneider APOchromatic 150 mm lens (60 lp/mm) to a P3 Sony laptop
- BetterLight software focus plus Zig-align to assure best camera alignment
Creation of Digital Wallpaper
Digital Capture of Original
Creation of Digital Wallpaper
Detail from the Digital Capture
Creation of Digital Wallpaper
Detail from the Digitally Restored Repeat Unit
Creation of Digital Wallpaper
Digitally Restored Repeat Unit – Separate Layers
Creation of Digital Wallpaper
False Color to Show Variations in White Background
Creation of Digital Wallpaper
Repeat Unit Matched Top, Bottom, Left & Right
Creation of Digital Wallpaper
Combine Repeat Units into Panels
Creation of Digital Wallpaper
Combine Repeat Units into Panels
Creation of Digital Wallpaper
Digitally Restored Repeat Unit – Separate Layers
Creation of Digital Wallpaper
Digitally Restored Repeat Unit