



CONSTGLASS



Table of results



1-Pilot object

Pilot object

Canterbury Cathedral NXVII C1

Picture



Identification of the panel:

NXVII C1 internal face in transmitted and reflected light

Treatment:

Product:

The panel was used as a test panel for a pilot study on paint consolidation by the Fraunhofer Institut Silicatforschung. Three different consolidation materials have been used on separate glass pieces within the panel: SZA, Ormocer®/Paraloid® B72 1/1 and Paraloid® B72.

Numbering system:

B1, G1, G4 and **W2** tested with SZA,

B2, G2, and **W1** tested with Ormercer® and Paraloid B72,®

B3 and **G3** tested with Paraloid® B72.





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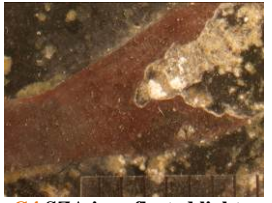
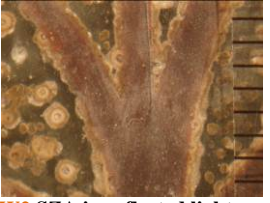
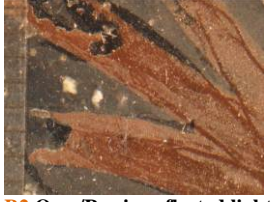


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2-Results

sample reference

CAN NXVII C1

Questions	Techniques	Answers
<p>Morphology:</p> <p><i>Has there been any deterioration or change to the consolidants since application in 1992?</i></p>	<p>Optical Microscope</p>	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">  <p>B1 SZA in reflected light</p> </div> <div style="width: 50%;">  <p>G1 Test SZA in reflected light</p> </div> <div style="width: 50%;">  <p>G4 SZA in reflected light</p> </div> <div style="width: 50%;">  <p>W2 SZA in reflected light</p> </div> </div> <p>Test areas B1, G1, G4 there is no visible deterioration of the coatings.</p> <p>Test area W2 the coating appears to have developed a white opaque surface since application.</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">  <p>B2 Orm/Par in reflected light</p> </div> <div style="width: 50%;">  <p>G2 Orm/Par in reflected light</p> </div> <div style="width: 50%;">  <p>W1 Orm/Par in reflected light</p> </div> </div>

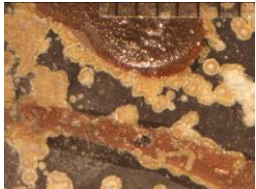
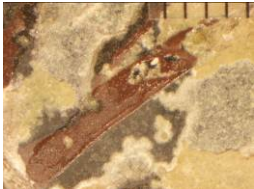


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		<p>Test areas for Ormercer® and Paraloid® 1/1 show no visible deterioration of the coating on all test pieces.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>B3 Paraloid® B72 in reflected light B3 Paraloid® B72 in reflected</p> <p>Test areas for Paraloid® B72 show no visible deterioration of the coating on all test pieces.</p>
	SEM	
	Desktop tomography	
	Phase-contrast tomography on Synchrotron	
Chemical Composition	SEM	
Organic component composition	FTIR	
	RAMAN	
Microbiology	Molecular biology ATP measurements	
Reversibility	Test studies Elimination	<p>The consolidants applied to the panel are all stable and no change or deterioration to the surfaces has occurred since application in 1992. Test area W2 using SZA is the only coating which has altered. The coating now appears to have developed a white opaque surface.</p>
Re-treatability	Test studies Re-treatability	No need. No treatment recommended