



Data sheet for pilot objects



Object: | CAN nII 7 | Date: | 10/05/10

OBJECT IDENTIFICATION		
Site	Canterbury, UK	
Building	Canterbury Cathedral	
Location and orientation of the window Plan of the building	North aisle, Trinity chapel	

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Description of the window opening (dimensions, number of lights; photo, test panel marked)	One light window Total width: 2.25m Total height: 7.0m Test panel installed at 1.82m from floor
Date	Probably in or not long after 1213.
Short description of the window (identification of subject, artist, workshop)	The Becket Miracle Window. A tightly organised, repeating pattern of square, petallic, hatchet-shaped, ornamental and rectangular border panels. The fourth window in the Becket Miracle series. There are six stories, based on Benedict's Book IV. The miracles concern blindness, leprosy, drowning, madness and the Plague.
Owner	Canterbury Cathedral
Person(s) in charge	The Cathedral Studios
Investigated panel (inventory number CVMA number, size)	nII 7 874 x 225 mm

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Manufacturing technique	unpainted glazing		
	painted glazing		V
		oxide paint / grisaille paint inside	V
		oxide paint / grisaille paint outside	V
		silver stain inside	
		silver stain outside	
		transparent enamel inside	
		transparent enamel outside	
	Further information:		

ENVIRONMENT IN SITU / IN STORAGE			
<b>Protective glazing</b>	no protective glazing		
	protective glazing		V
		installed in the original position of the ancient panels	V
		mounted to the outside (ancient panels stay in their original position)	
		no ventilation	
		internal ventilation	

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	external ventilation	
	size of interspace between ancient panel and protective glazing	6ст
	ventilation slot at the top (size)	Unknown
	ventilation slot at the bottom (size)	Unknown
	date of installation	1984
	Further information:	
Material protective glazing	3mm float glass (not distorted) leaded to follow the design of rather than the stained glass. The protective glazing is held in ferramenta with linseed oil putty.	
Surround materials and construction related materials	Surrounded by stone and lime mortar. The stained glass is held into an aluminium sub-frame with black linseed oil putty tape, aluminium wedges and internal saddle bars. It is surrounded by a wooden frame, probably oak.	
Museal exposition /	Room	
Storage	Cabinet	
	Store	V
	Since the panel was removed from the window it has been glass tray protected with a sheet of Melinex® on top and has the Cathedral Studios strong room. This room has a relatively RH of 60% with rare extremes of 45% up to 75%.	been stored in

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Objects exposed to	partial sunlight	
	daylight, but no direct sunlight	✓
	artificial warmlight	
	artificial coldlight	
	mixed warm-/coldlight	
	Note: specify artificial light, if possible with product name.	

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#### Climate of the building

There is a radiator directly underneath this window which is on approximately 9 hours a day at 70°C. There is a condensation tray that is clear and in good working order, showing that condensed water can evacuate when necessary.

Information for whole of Trinity chapel:

	Minimum	Maximum	Average
Relative Humidity (%)	34	70	52.5
Air temperature (°C)	13.9	23.5	18.5

This data was collected over one year.

The climatic data are: air temperature (T  $[C^\circ]$ ) and relative humidity (RH [%]

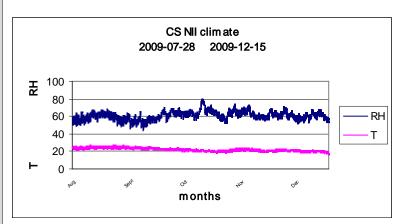


fig.1 CS NII climate

The graph shows that climatic conditions of the N II window rather stable, although the RH variations are more apparent than on other windows. Still both T and RH levels are on the safe side, but in October the short rise of RH occurred, which might cause a short wetness phenomenon.

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INSPECTION OF THE SITE BEFORE REMOVAL (WITH PICTURES)	
Requirements for a safe removal in respect of minimal intervention	Handling with gloves, the panel was kept upright at all times.
Environmental causes for damage	Since the protective glazing was installed in 1984 there has been no condensation on the historic glass, though dust has accumulated on the surface.
Short report of removal	Handling with gloves, the panel was carefully removed from the frame. The putty seal had to be removed with a knife.
Short report of transport	The panel was carried vertically back to the studio, where it was laid horizontally on a glass tray with Melinex® on top. It was stored in the Cathedral Studios' strong room. Handling with gloves, the panel was carefully removed from the frame. The putty seal had to be removed with a knife.

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CONSERVATION MATERIAL		
Conservation material (producer, product name, characterization, data, etc.)	Microcrystalline wax mixed with polythene 'A' wax dilute spirit.	ed with white
Purpose of use	consolidation of paint layer / paint pigments	V
	coating / lamination	
	edge bonding	
Application technique	application with brush	V
	application with spray	
	single application	
	repeated application	Unknown
	concentration	%
	mixing ratio	Unknown
	Further information :	
	Verbal accounts from former colleagues who worked on explain that the wax was applied with a brush and mechanically.	

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Date of application	1984		
<b>Documentation of this</b>	photographs (colour transparences, b&w prints, colour prints, digital images)		V
treatment	written records		
	diagrams		<b>V</b>
	data-files		
	Further information:  Very limited source materials		
	Do you think this documentation is	exact	
		more or less reliable	V
Previous restorations (data, treatments, material)  The window was releaded and conservation wo The panels were dismantled and cleaned with swabs, scalpel and a soft brush. Fractures were CAF 3 + 33 Silicone.		and cleaned with deionised wa	ter and cotton
	Do you think the	exact	
	information is	more or less reliable hearsay	

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### CONDITION REPORT / DOCUMENTATION IN THE WORKSHOP

Pictures of panel / glass in transmitted light



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Pictures of panel / glass in reflecting and raking light, internal and external surface



Examination of the object (if possible with microscope)

Please refer to attached conservation record.

**Selected damages** 



Wax coating on painted decoration.

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# Data sheet for pilot objects



Selection and documentation of samples to be analysed Questions to the scientists	
	Sample taken from the area shown by arrow.
	Can the interface between wax and decoration / glass surface be visualized?

RESPONSIBLE CONSERVATORS (name, phone, e-mail)	
Person 1	Grace Ayson 01227 865266 CathedralStudios@canterbury-cathedral.org
Person 2	Joy Bunclark 01227 865266 CathedralStudios@canterbury-cathedral.org
Person 3	Alison Eaton 01227 865266 CathedralStudios@canterbury-cathedral.org

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