

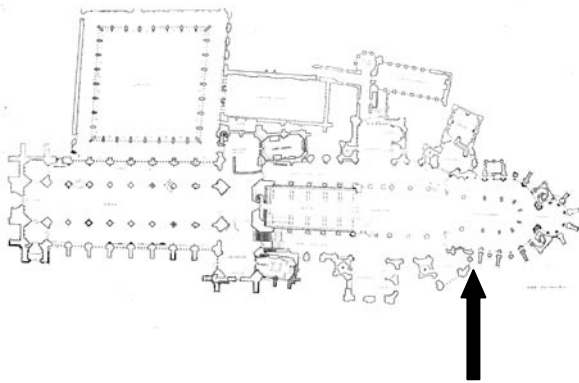




	CONSTGLASS 
	Data sheet for pilot objects 




Object: CAN sVII 4	Date: 10/05/10
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OBJECT IDENTIFICATION	
Site	Canterbury, UK
Building	Canterbury Cathedral, Trinity Chapel ambulatory
Location and orientation of the window Plan of the building	

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	Data sheet for pilot objects	




Description of the window opening (dimensions, number of lights; photo, test panel marked)		One light window. Total width: 1.57m Total height: 6.7m Test panel installed at 1.68m from the floor
Date	Probably around the same time as or not long after nII (in or not long after 1213).	
Short description of the window (identification of subject, artist, workshop)	The last window in the Becket Miracle window series, consisting of sixty-three panels. Single lancet.	
Owner	Dean and Chapter of Canterbury	
Person(s) in charge	The Cathedral Studios	
Investigated panel (inventory number CVMA number, size)	sVII 4	

Manufacturing technique	unpainted glazing	<input type="checkbox"/>
	painted glazing	<input checked="" type="checkbox"/>

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	Data sheet for pilot objects	

		oxide paint / grisaille paint inside	<input checked="" type="checkbox"/>
		oxide paint / grisaille paint outside	<input checked="" type="checkbox"/>
		silver stain inside	<input type="checkbox"/>
		silver stain outside	<input type="checkbox"/>
		transparent enamel inside	<input type="checkbox"/>
		transparent enamel outside	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
	<i>Further information:</i>		

ENVIRONMENT IN SITU / IN STORAGE			
Protective glazing	no protective glazing		<input type="checkbox"/>
	protective glazing		<input checked="" type="checkbox"/>
		installed in the original position of the ancient panels	<input checked="" type="checkbox"/>
		mounted to the outside (ancient panels stay in their original position)	<input type="checkbox"/>
		no ventilation	<input type="checkbox"/>
		internal ventilation	<input type="checkbox"/>
		external ventilation	<input checked="" type="checkbox"/>

	CONSTGLASS 	
	Data sheet for pilot objects	




		size of interspace between ancient panel and protective glazing	4cm
		ventilation slot at the top (size)	Unknown
		ventilation slot at the bottom (size)	Unknown
		date of installation	
	<i>Further information</i>		

Material protective glazing	3mm float glass (not distorted) leaded to follow the design of the ferramenta rather than the stained glass. The protective glazing is held into the original ferramenta with linseed oil putty.
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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.
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Museal exposition / Storage	Room	<input type="checkbox"/>
	Cabinet	<input type="checkbox"/>
	Store	<input checked="" type="checkbox"/>
	Since the panel was removed from the window it has been in storage in a glass tray protected with a sheet of Melinex® on top in the Cathedral Studios strong room. This room has a relatively stable average of 60% RH with rare extremes of 45% up to 75%.	

Objects exposed to	partial sunlight	<input checked="" type="checkbox"/>
	daylight, but no direct sunlight	<input type="checkbox"/>

	CONSTGLASS 	
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	artificial warmlight	<input type="checkbox"/>
	artificial coldlight	<input type="checkbox"/>
	mixed warm-/coldlight	<input type="checkbox"/>
	<i>Note:</i>	



Climate of the building

There is a radiator directly underneath this window which is on for approximately nine 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°]) and relative humidity (RH [%])

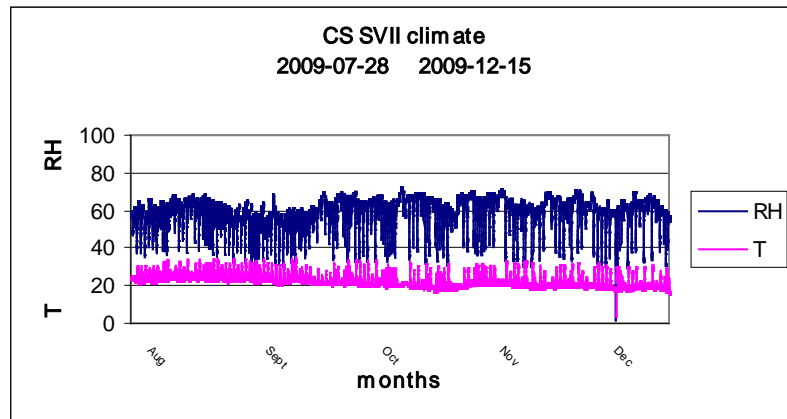






fig.1 CS SVII climate




The graph shows that climatic conditions of the SVII window are very stable through the measurement period and. both T and RH levels are on the safe side and it seems that neither condensation nor wetness may occur.

Further information / observations:

	<p>CONSTGLASS</p> 
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INSPECTION OF THE SITE BEFORE REMOVAL (WITH PICTURES)

<p>Requirements for a safe removal in respect of minimal intervention</p>	<p>Handling with gloves, the panel was kept upright at all times.</p>
<p>Environmental causes for damage</p>	<p>Since the protective glazing was installed in 1984 there has been no condensation on the historic glass, though dust has accumulated on the surface.</p>
<p>Short report of removal</p>	<p>Handling with gloves, the panel was carefully removed from the frame. The putty seal had to be removed with a knife.</p> <p>In situ.</p> 
<p>Short report of transport</p>	<p>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.</p>




	CONSTGLASS 	
	Data sheet for pilot objects	

CONSERVATION MATERIAL




Conservation material (producer, product name, characterization, data, etc.)	Microcrystalline wax mixed with polythene 'A' wax diluted with white spirit.	
Purpose of use	consolidation of paint layer / paint pigments	<input checked="" type="checkbox"/>
	coating / lamination	<input type="checkbox"/>
	edge bonding	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
Application technique	application with brush	<input checked="" type="checkbox"/>
	application with spray	<input type="checkbox"/>
	single application	<input type="checkbox"/>
	repeated application	Unknown
	concentration	%
	mixing ratio	Unknown
	
	
	<i>Further information :</i> Verbal accounts from former colleagues who worked on this window explain that the wax was applied with a brush and then polished mechanically.	




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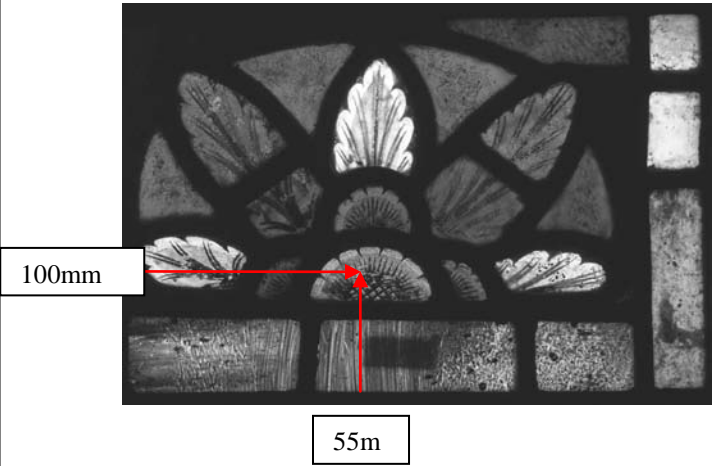
Date of application			
Documentation of this treatment	photographs (colour transparencies, b&w prints, colour prints, digital images)	<input checked="" type="checkbox"/>	
	written records	<input type="checkbox"/>	
	diagrams	<input checked="" type="checkbox"/>	
	data-files	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<i>Further information:</i> Very limited source material.		
Do you think this documentation is	exact	<input type="checkbox"/>	
	more or less reliable	<input checked="" type="checkbox"/>	
Previous restorations (data, treatments, material)	The window was releaded and conservation work was carried out in 1984. The panels were dismantled and cleaned with deionised water and cotton swabs, scalpel and a soft brush. Fractures were bonded with Rhodorsil® CAF 3 + 33 Silicone.		
	Do you think the information is	exact	<input type="checkbox"/>
		more or less reliable	<input checked="" type="checkbox"/>
		hearsay	<input type="checkbox"/>

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CONDITION REPORT / DOCUMENTATION IN THE WORKSHOP

<p>Pictures of panel / glass in transmitted light</p>	
<p>Pictures of panel / glass in reflecting and raking light, internal and external surface</p>	
<p>Examination of the object (if possible with microscope)</p>	<p>Please refer to attached conservation record.</p>
<p>Selected damages</p>	 <p>Wax swab tested for microbiological analysis.</p>

	CONSTGLASS 	
	Data sheet for pilot objects	

<p>Selection and documentation of samples to be analysed</p> <p>Questions to the scientists</p>	
<p>Selection and documentation of areas for reversibility tests or reactivation tests</p>	<p>Sample was taken from the area shown by the arrows.</p> <p>Has there been/ is there any microbial activity?</p>

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