

Report on Internal Mastic
Joints, Node 49
Levels 3/4/5/6

at

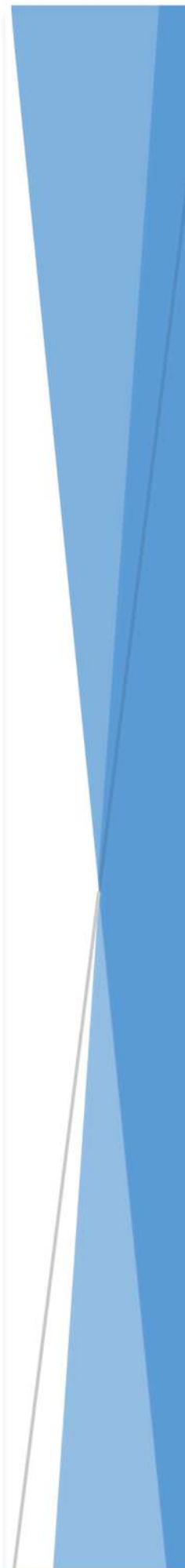
National Oceanography
Centre, Southampton

for

National Oceanography
Centre, Southampton

Job Number: 2198

Date: 29th September 2017



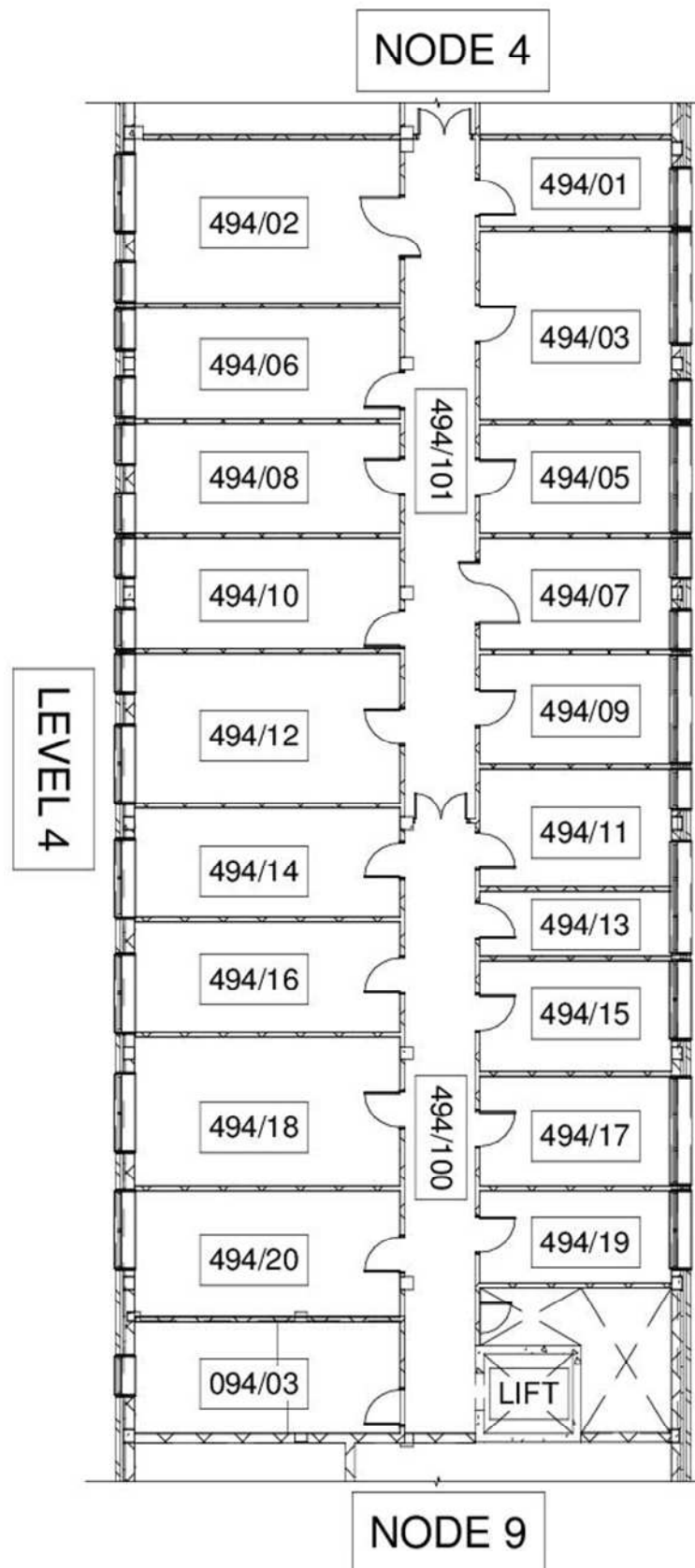
REVISION SCHEDULE

ISSUE	TITLE	DATE	PREPARED BY	CHECKED BY	APPROVED BY
1.0	Final	12.10.2017	GA	WAA	WAA

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1. REFERENCE PLAN

Please refer to drawings for additional information.



2. INTRODUCTION

The scope of this survey is to check the condition of the internal mastic joints in Node 49 of the NOC main building, and to give recommendations for repair or replacement as appropriate. The survey was carried out on 21/09/2017.

Intrusive samples of the mastic joint materials were taken from Rooms (494) 03, 06, 07, 10, 14, 15, 16, 17, 19, 20 and corridor 494/100. The remaining rooms and laboratories were subjected to a visual inspection only.

All the room and relevant elements have been rated following RICS Condition Report*

*RICS condition ratings are described as follows:

NI – Not inspected

1 – No repair is currently needed. The property must be maintained in the normal way.

2 – Defects that need repairing or replacing but are not considered to be either serious or urgent . The property must be maintained in the normal way.

3 – Defects that are serious and/or need to be repaired, replaced or investigated urgently.

**Mastic Joints note



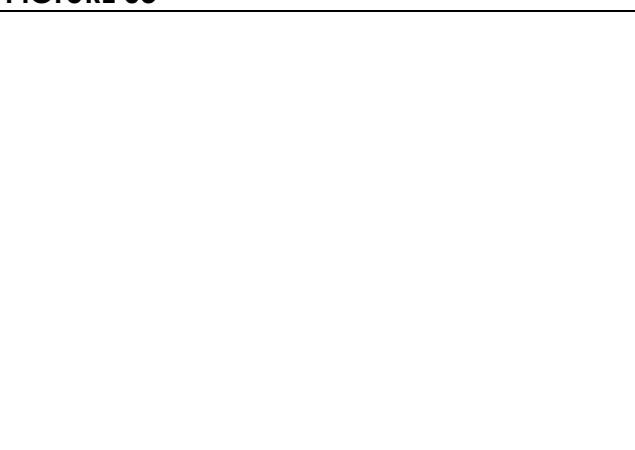
Horizontal mastic joint indicates:




- wall to slab joint
- slab to slab joint



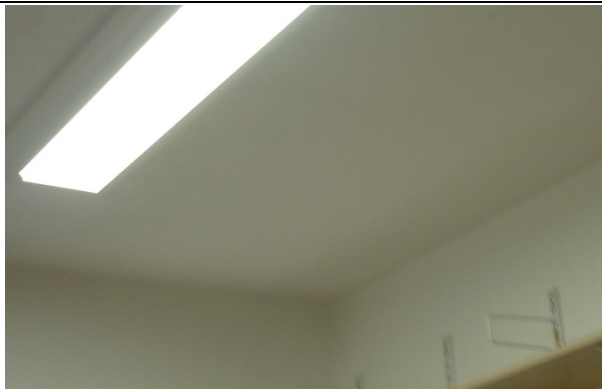

Vertical mastic joint indicates:

- wall to wall joint
- wall to column joint
- column to column joint





3. SURVEY RESULTS





ROOM – BALANCE ROOM	494/01	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
No sample			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	3	HORIZONTAL
			3
<p>NOTE:</p> <p>Mastic joints along the wall panel between 494/01 and node 4 form a primary movement joint for the main structural concrete frame and are in very poor condition throughout. To be completely replaced.</p>			
16mm MASTIC JOINT (length) m		21.40m	

ROOM - LABORATORY	494/02	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
No sample				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	3	HORIZONTAL	3
<p>NOTE:</p> <p>Picture 01 - Mastic joints along the wall panel between 494/02 and node 4 form a primary movement joint for the main structural concrete frame and are in very poor condition throughout. To be completely replaced.</p> <p>Picture 02 – No mastic joint was found between partition wall (Room 02/06) and external wall panel.</p> <p>Picture 03 – Visible cracking to top right-hand corner of window.</p>				
16mm MASTIC JOINT (length) m		27.60m		




ROOM - OFFICE	494/03	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL 2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width has been reduced (from expected 16mm), white foam filler (Compriband?) not found.</p> <p>Pictures 01-02-03 – The movement joints are not cracked and appear in good condition throughout.</p> <p>No movement joint found between partition and external wall panel.</p>			
16mm MASTIC JOINT (length) m		13.50m	





ROOM - OFFICE	494/05	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
No sample	Not accessible		
PICTURE 02	PICTURE 03		
Not accessible	Not accessible		
RICS CONDITION RATING	VERTICAL	2	HORIZONTAL 2
<p>NOTE: Room not accessible.</p> <p>Sample has been taken from adjacent rooms (494/03 and 494/07).</p>			
16mm MASTIC JOINT (length) m		11.60m	




ROOM - OFFICE	494/06	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL 2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – Cracking located between partition and external wall panel. No movement joint found.</p>			
16mm MASTIC JOINT (length) m		15.10m	

ROOM - OFFICE	494/07	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL 2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – No movement joint found between partition and external wall panel.</p>			
16mm MASTIC JOINT (length) m		11.80m	



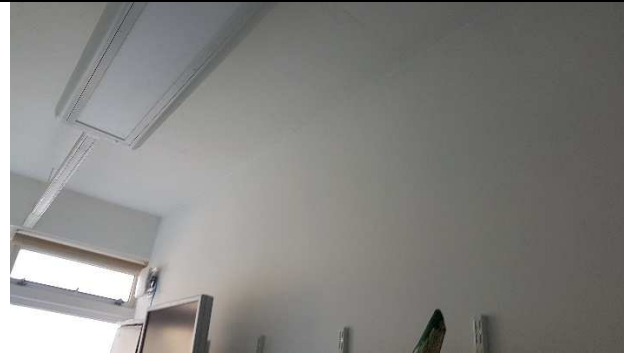
ROOM - OFFICE	494/08	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
No sample	Not accessible		
PICTURE 02	PICTURE 03		
Not accessible	Not accessible		
RICS CONDITION RATING	VERTICAL	2	HORIZONTAL 2
<p>NOTE: Room not accessible.</p> <p>Sample has been taken from adjacent rooms (494/06 and 494/10).</p>			
16mm MASTIC JOINT (length) m	15.10m		


ROOM - OFFICE	494/09	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
No sample			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	2	HORIZONTAL
			2
<p>NOTE:</p> <p>SAMPLE - Sample taken from adjacent rooms (494/03 and 494/07).</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – No movement joint found between partitions and external wall panel.</p>			
16mm MASTIC JOINT (length) m		11.70m	




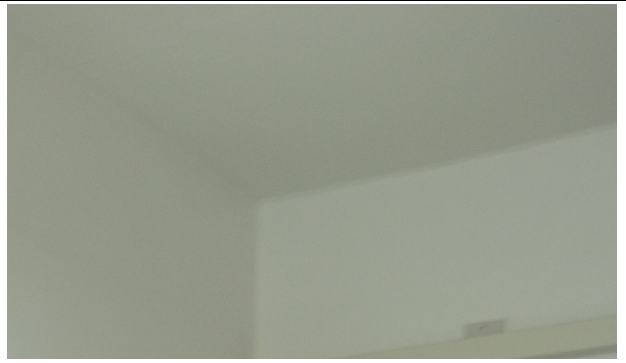
ROOM - OFFICE	494/10	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLES	PICTURE 01		
			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	3	HORIZONTAL 2
<p>NOTE:</p> <p>RIGHT SAMPLE – Horizontal mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>LEFT SAMPLE – Wall/wall vertical joint between 494/10 and 494/101 not made with a suitable material (probably grout or caulk)</p> <p>Picture 01 – Shows where the horizontal and vertical samples have been taken.</p> <p>Pictures 02-03 – Cracking between partition and external wall panel. No movement joint found.</p>			
16mm MASTIC JOINT (length) m	15.05m		

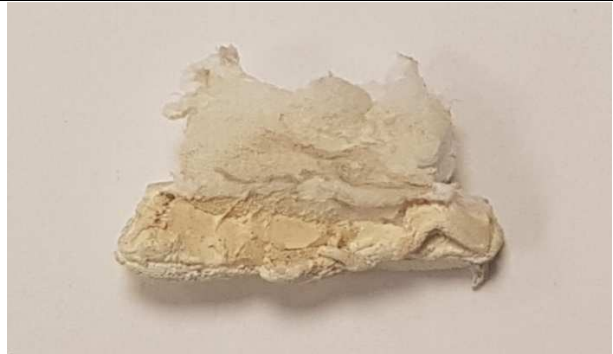


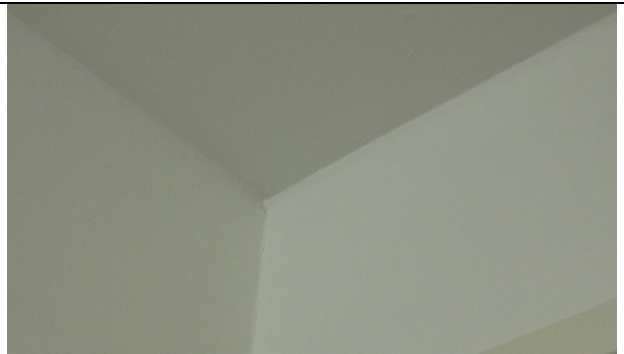
ROOM - OFFICE	494/11	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
No sample			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL 2
<p>NOTE:</p> <p>SAMPLE - Sample taken from adjacent room (494/15).</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – No movement joint found between partitions and external wall panel.</p>			
16mm MASTIC JOINT (length) m		11.75m	





ROOM - LABORATORY	494/12	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
No sample	Not accessible		
PICTURE 02	PICTURE 03		
Not accessible	Not accessible		
RICS CONDITION RATING	VERTICAL	2	HORIZONTAL
			2
<p>NOTE:</p> <p>Room not accessible – laboratory with suspended ceiling and fitted out.</p> <p>Samples taken from adjacent rooms (494/10 and 494/14).</p>			
16mm MASTIC JOINT (length) m		16.00m	

ROOM - OFFICE	494/13	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
No sample				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
<p>NOTE:</p> <p>Picture 01 – No movement joint found on 494/11/494/13 partition.</p> <p>Picture 02 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 03 – No movement joint found between partitions and external wall panel.</p>				
16mm MASTIC JOINT (length) m		11.80m		





ROOM	494/14	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLE	PICTURE 01		
	Not pictures		
PICTURE 02	PICTURE 03		
Not pictures	Not pictures		
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL
			2
<p>NOTE:</p> <p>The movement joints are not cracked and appear in good condition throughout.</p> <p>No movement joint found between partitions and external wall panel.</p>			
16mm MASTIC JOINT (length) m		11.80m	





ROOM - OFFICE	494/15	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – Cracking located between partition and external wall panel. No movement joint found.</p>				
16mm MASTIC JOINT (length) m		11.70m		






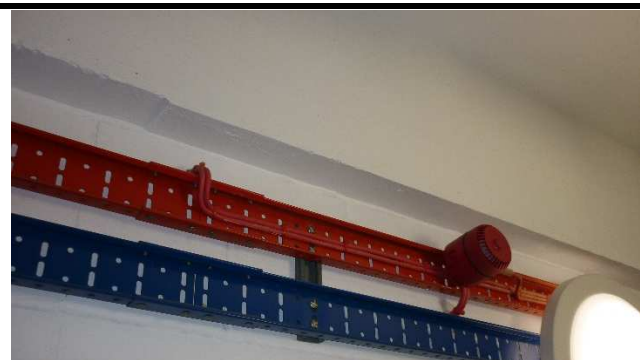
ROOM - OFFICE	494/16	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – Cracking located between partition and external wall panel. No movement joint found.</p>				
16mm MASTIC JOINT (length) m		15.10m		



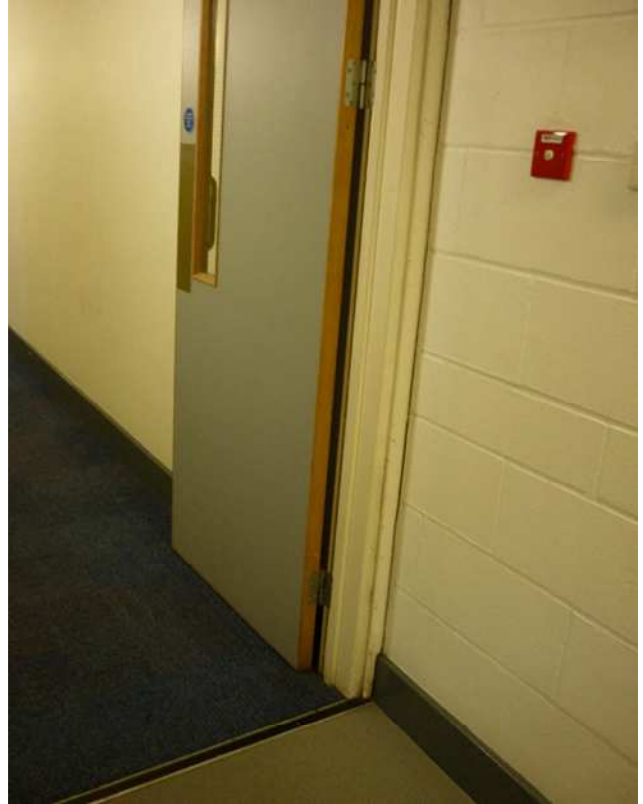
ROOM	494/17	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
NOTE: SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width has been reduced (from expected 16mm), white foam filler (Compriband?) not found. Picture 01– No movement joint found between partition and external wall panel. Pictures 02-03 – The movement joints are not cracked and appear in good condition throughout.				
16mm MASTIC JOINT (length) m		11.70m		




ROOM - LABORATORY	494/18	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
No sample	Not accessible			
PICTURE 02	PICTURE 03			
Not accessible	Not accessible			
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
<p>NOTE:</p> <p>Room not accessible – laboratory with suspended ceiling and fitted out.</p> <p>Sample has been taken from adjacent rooms (494/16 and 494/20).</p>				
16mm MASTIC JOINT (length) m		16.00m		




ROOM - OFFICE	494/19	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – No movement joint found between partition and external wall panel.</p>				
16mm MASTIC JOINT (length) m		11.35m		

ROOM - OFFICE	494/20	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
SAMPLE	PICTURE 01			
				
PICTURE 02	PICTURE 03			
				
RICS CONDITION RATING	VERTICAL	no	HORIZONTAL	2
<p>NOTE:</p> <p>SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>Picture 01 – The movement joints are not cracked and appear in good condition throughout.</p> <p>Pictures 02-03 – No movement joint found between partition and external wall panel.</p>				
16mm MASTIC JOINT (length) m		15.50m		

ROOM - CORRIDOR	494/100	INSPECTION DATE	21/09/2017	
SCOPE	MASTIC JOINT INVESTIGATION			
CEILING SAMPLES		WALL SAMPLE		
				
PICTURE 01		PICTURE 02		
				
PICTURE 03		PICTURE 04		
				
RICS CONDITION RATING	VERTICAL	2	HORIZONTAL	2
<p>NOTE:</p> <p>CEILING SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was found, and in good condition.</p> <p>WALL SAMPLE - Mastic joint not dry or cracked; flexibility and plasticity of sealant maintained. The movement joint width is 16mm, white foam filler (Compriband) was not found.</p> <p>Pictures 01/02/03/04 – Horizontal and vertical movement joints are not cracked and appear in good condition throughout.</p>				
16mm MASTIC JOINT (length) m		55.65m		

ROOM - CORRIDOR	494/101	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLES	PICTURE 01		
No sample			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	3	HORIZONTAL 3
<p>NOTE: SAMPLE; no sample has been taken.</p> <p>Pictures 01/02/03/ – Mastic joints in the corridor at the junction of Node 9 and Node 4 form a primary movement joint for the main structural concrete frame and are in very poor condition throughout. To be completely replaced.</p>			
16mm MASTIC JOINT (length) m	56.65m		

ROOM - MEDA		493/100		INSPECTION DATE		21/09/2017			
SCOPE		MASTIC JOINT INVESTIGATION							
SAMPLES				PICTURE 01					
No sample									
PICTURE 02				PICTURE 03					
									
RICS CONDITION RATING		VERTICAL		3		HORIZONTAL		3	
NOTE: SAMPLE; no sample has been taken.									
Pictures 01/02/03/ – Mastic joints at level 3 MEDA at the junction of Node 9 and Node 4 form a primary movement joint for the main structural concrete frame and are in very poor condition throughout. To be completely replaced.									
MASTIC JOINT (length) m				33.40m					

ROOM - MEDA	495/100	INSPECTION DATE	21/09/2017
SCOPE	MASTIC JOINT INVESTIGATION		
SAMPLES No sample	PICTURE 01		
			
PICTURE 02	PICTURE 03		
			
RICS CONDITION RATING	VERTICAL	3	HORIZONTAL 3
<p>NOTE:</p> <p>SAMPLE; no sample has been taken.</p> <p>Pictures 01/02/03/ – Mastic joints at level 5 MEDA at the junction of Node 9 and Node 4 form a primary movement joint for the main structural concrete frame and are in very poor condition throughout. To be completely replaced.</p>			
MASTIC JOINT (length) m		33.40m	

ROOM – OFFICES AND CORRIDOR		496/100 496/01-496/02		INSPECTION DATE		21/09/2017	
SCOPE		MASTIC JOINT INVESTIGATION					
SAMPLES No sample				PICTURE 01			
							
PICTURE 02				PICTURE 03			
							
RICS CONDITION RATING		VERTICAL		3		HORIZONTAL	
						3	
<p>NOTE:</p> <p>SAMPLE; no sample has been taken.</p> <p>Pictures 01/02/03/ – Mastic joints in the corridor at the junction of Node 9 and Node 4 form a primary movement joint for the main structural concrete frame and are in very poor condition throughout. To be completely replaced.</p>							
MASTIC JOINT (length) m				56.65m			