

TEST SERVICES REPORT

Enquiry No. 84/125/MP

Date Received 16 February 1984

Date Issued 8 February 1994

Client E Wood Ltd
Standard Way
Darlington Rd
Northallerton
N Yorks

FAO Mr A Hill

Samples Submitted Aqua-Tech WP (product originally tested as Manalox 403/60 WS), Ibstock Red multi facing bricks, Monks Park limestone blocks

Work requested Tests for compliance with BS 6477

Work carried out by T Winter

Approved by

Norman Falla

NAR Falla Head of Research & Analytical Services

1. Materials Submitted For Testing

Aqua-Tech WP

Ibstock Red multi facing bricks

Monks Park limestone blocks

The results in this report were obtained in 1984 on a material named Manalox 403/60/WS manufactured by Manchem Ltd. We have been informed that this product is supplied to E Wood Ltd by Rhone Poulenc Chemicals Ltd (formerly known as Manchem Ltd) and used in a 1:7 dilution in white spirit formulation to produce Aqua-Tech WP

2. Test Procedure

The product was tested for compliance with the following clauses of BS 6477:-

Clause 5.2

Appendix E Early Water Repellency

Three separate pools of de-ionized water were discharged on the test face of treated substrate specimens and examined after 10 minutes.

Clause 5.3

Appendix F Determination of Water Absorption

The treated specimens of each type of block were stored at $23 \pm 5^\circ\text{C}$ and $65 \pm 5\%$ RH for 11 days, weighed and placed on moist absorbent paper pads for 7 days as specified, reweighed and the percentage water absorption calculated.

Clause 5.4

Appendix G Determination of Evaporation of Water Through Surfaces

The specimens used in Appendix F, together with untreated control specimens were dried at $50 \pm 2^\circ\text{C}$ for 72 hours, immersed in water for 72 hours, superficially dried and all faces except the test face sealed then weighed, kept at $23 \pm 5^\circ\text{C}$ for 7 days and then reweighed. The percentage evaporation ratio of water was determined as specified.

Clause 5.5Appendix H Durability Test

The specimens were weathered for 24 months as specified, still partially sealed on the top and sides. Appendices F and G were then repeated. The specimens were then weathered for a further 12 months with appendices F and G repeated at the end of this time.

All tests on the material were carried out in conformity with the requirements of the specification.

Twelve samples of each of Ibstock Red multi facing bricks and Monks Park limestone blocks were prepared and treated with Aqua-Tech WP water repellent in accordance with Appendix D. Five samples of each material which met the minimum pick up of water repellent solution as indicated in Table 2 of Appendix D were used for the test.

The numbers selected were as follows:-

Ibstock bricks Nos 1, 2, 3, 5 and 7.

Monks Park limestone blocks 1, 2, 6, 9, and 12.

3. Test Results and ObservationsAppendix E Early Water RepellencyIbstock Bricks

1.	All three pools of water remained on surface)	
2.	ditto)	No pool
3.	ditto)	completely
5.	ditto)	absorbed
7.	ditto)	

Monks Park Limestone Blocks

1.	All three pools of water remained on surface)	
2.	ditto)	No pool
6.	ditto)	completely
9.	ditto)	absorbed
12.	ditto)	

Appendix F Determination of Water Absorption

Before WeatheringIbstock Bricks

1. - 0%
 2. - 0.1%
 3. - 0%
 5. - 0%
 7. - 0%

Monks park Limestone Blocks

1. - 2.7%
 2. - 2.6%
 6. - 2.0%
 9. - 2.5%
 12. - 2.4%

After 24 Months Natural WeatheringIbstock Bricks

1. - 0%
 2. - 0%
 3. - 0%
 5. - 0%
 7. - 0%

Monks park Limestone Blocks

1. - 2.8%
 2. - 2.1%
 6. - 3.2%
 9. - 3.1%
 12. - 4.0%

After 36 Months Natural WeatheringIbstock Bricks

1. - 0%
 2. - 0%
 3. - 1.2%
 5. - 2.0%
 7. - 0%

Monks park Limestone Blocks

1. - 1.5%
 2. - 6.9%
 6. - 1.3%
 9. - 1.6%
 12. - 4.1%

The sample complied with the performance requirements specified in Clauses 5.2 (Early Water Repellency) , 5.3 (Water Absorption) and 5.4 (Evaporation of Water Through Surfaces) before weathering. After weathering the sample complied with Clause 5.5 in which the water absorption test and evaporation of water through surfaces test were repeated.

End of Report

N.F.