



**REPORT ON BLOCKWORK  
AIR PERMEABILITY TESTING  
FOR: Pristine Elite Airtight Coating  
CLIENT: Pristine Coatings**

Date  
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For and on behalf of HRS Services Ltd  
J. Rhodes

Project: Pristine Airtight Coatings

Report Ref: 109848

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# 1.0 INTRODUCTION

This report details the results of the block work air porosity testing carried out by HRS Services Ltd for Pristine Coatings.

The testing was carried out on the 2<sup>nd</sup> March 2011, between 09.30 and 16.00 hours.

The test was carried in accordance with BS EN 12114:2000 Thermal performance of buildings – Air permeability of building components and building elements – Laboratory test method. The test was conducted inside the HRS test facility using calibrated flow equipment.

The test was commissioned by Mr. Peter Williams of Pristine Coatings.

## 1.1 SUMMARY OF TEST RESULTS

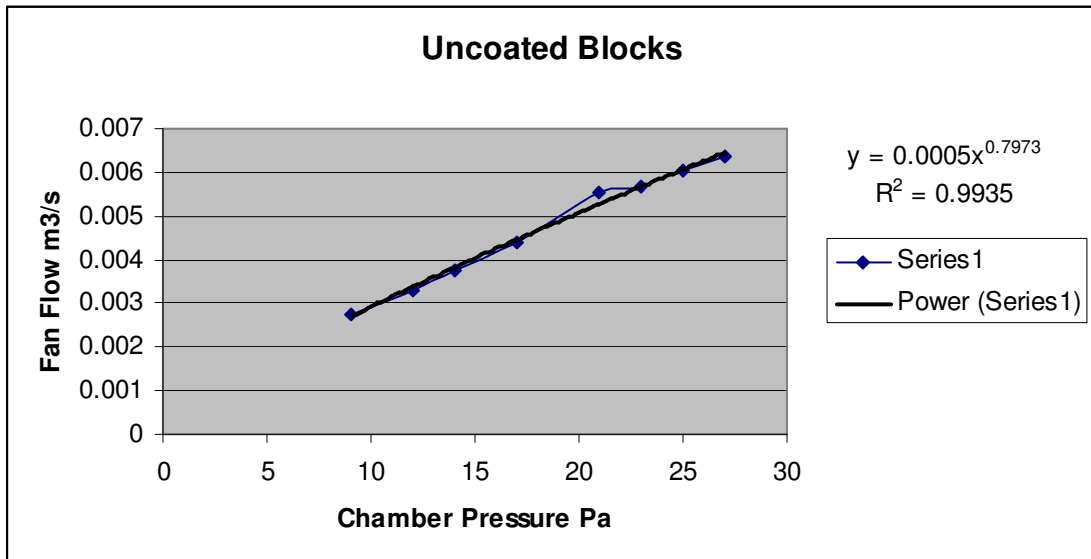
One block type was subject to the test as follows:-

- Standard Cellular Blocks – Uncoated
- Standard Cellular Blocks – coated with 'Elite Airtight'

The following air permeability was determined at 50Pa.

### Standard Cellular Blocks – Uncoated:

Leakage rate greater than 80m<sup>3</sup>/h.m<sup>2</sup>



### Standard Cellular Blocks – Coated with 'Elite Airtight' :

Leakage rate: Too low to detect.

Due to exceptionally low leakage it was not possible to produce a graph of readings.

## 2.0 TEST METHOD

The blockwork tests were carried out in line with the following standard:

BS EN 12114:2000 Thermal performance of buildings – Air permeability of building components and building elements – Laboratory test method.

Cellular blocks were supplied uncoated or coated by Pristine Coatings.

Sample walls were constructed for each block type. Each sample area was 2 blocks wide by 4 blocks high. All joints were sealed with silicon mastic.

Each sample was pressurised using the HRS Services Ltd 'LVF FAN' system and test chamber. The 'LVF FAN' system comprises a low flow centrifugal fan, designed to supply between 0.1 and 8 l/second. The 'LVF FAN' system was tested and calibrated at Sheffield Hallam University

The test chamber was sealed against each test sample wall using bolts and silicon mastic.

Pressure differences across the 'LVF FAN' venturi and the test sample were measured using digital micromanometers at the start, during and end of the test.

Air temperatures were measured using a Therma 1 digital thermometer with K Special penetration probes. Measurements were taken at the start and end of the test.

Barometric pressure was established using an absolute pressure meter.