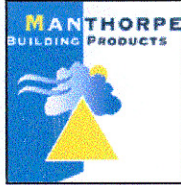


# TEST REPORT

Client:



**Manthorpe Building Products Ltd**  
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**Our Reference:** SW031/04  
**Date Tested:** February 2004  
**Date of Issue:** 3 March 2004

## REPORT OF AIR LEAKAGE TESTS ON MANTHORPE G912/48 JOIST SEAL USED WITHIN BLOCKWORK WALLS, TESTED TO A METHOD BASED ON MOB PF2 PS/SPU, & CIBSE DOCUMENT TM23: 2000

### INTRODUCTION

CERAM Building Technology was requested by the client, Manthorpe Building Products, to undertake air leakage tests on a new end detail for joists. For comparative purposes tests were also under taken on the current NHBC detailing, embedded timber to masonry joist hangers, and a control wall (blockwork only)

### METHOD OF CONSTRUCTION

Each detailing was built into a 2 ½ long x 4 high wall using a designation (iii) mortar and was allowed to cure for 28 days under polythene sheeting. A 1.1m x 0.9m x 0.6m Plywood box, incorporating a 1.1m x 0.9m opening, with all joints made airtight was sealed around the wall such that the external face of the wall was open.

### METHOD OF TEST

A fan was connected up to the sample and run up to achieve a pressure of 50Pa measured using an electronic manometer. The airflow into the sample was then measured and used to calculate the air leakage rate.

### RESULTS

Sample	No of Samples	Air Pressure (Pa)	Air Leakage (litres/sec)		Air Leakage (m <sup>3</sup> /h)	
			Panel	Per Detail	Panel	Per Detail
NHBC Detailing	4	50	1.10	0.27	3.96	0.99
Manthorpe G912/48 Joist Seal	4		0.61	0.15	2.18	0.54
JHMI Timber to Masonry Joist Hangers	2		0.33	0.16	1.18	0.59
Control wall	~		0.19	~	0.68	~

Authorised by

Dave Dix  
 (Testing Coordinator/Project Manager)

