

Air Flow Measurement

Test Certificate



Complete Energy
Consultancy

Plot Name & Site Address
12 Seymour Close, Clevedon,

Job Reference
AT10525


Schedule Test Date
30/11/2023

Design Target / Minimum Value				
Kitchen Cooker	Kitchen Other	Utility	En Suite	Sanitary Accomm.
30 / 24	60 / 35	30 / 24	15 / 12	6 / 5

Please note:

The minimum benchmark for the Resistance Factor is included in the above targets. Further details can be found on the following page.

Recorded Air Flow Measurements - Litres / Second					
Fan Location	System	Measured Flow	Design Target	Pass / Fail	Test Engineers' Comments
Kitchen Cooker		37.4	30	PASS	
Sanitary Accomm.		11.6	6	PASS	
Bathroom		13.7	15	PASS	

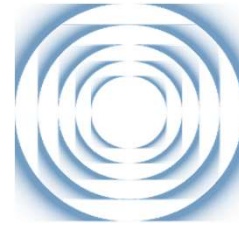
Test Engineer's Details	
Engineer's Name	Richard
Engineer's Signature	

Flow Rate Test Equipment	
Equipment Used	Calibration Expires

Air Flow Measurement

Reasons for Failure

Dependent upon the location of Fan System – each Air Flow Measurement Test is required to meet certain Design Target criteria in order to achieve a ‘PASS’.



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Table 1:

Design Target / Minimum Value				
Kitchen Cooker	Kitchen Other	Utility	Bathroom	Sanitary Accommod.
30 / 24	60 / 35	30 / 24	15 / 12	6 / 5

For example, based upon the table above – for the testing of a Kitchen – Cooker Hood the Design Target is stated as 30.0 Litres / Second – with a minimum ‘Pass’ Rate of 24.0 Litres / Second.

Complete Energy Consultancy use calibrated equipment to carry out all testing. The equipment we use is a non-powered anemometer flow hood which gives a resistance factor when testing. Minimum benchmark levels have been set which factor the impact of the test equipment. If the fan performance exceeds the minimum benchmark value indicated in Table 1 it would be reasonable for us to assume that the fan is performing to the required level and accept the test results as showing compliance with Part F of the Building Regulations.

If any of your tests ‘fail’ - our Engineer will record the ‘Reason for Failure’ for one of the following reasons detailed below:-

The Fan - If the fan is not powerful enough, it will not produce a satisfactory flow rate to achieve Part F compliance. When purchasing an extractor fan, it is important to over-compensate, as with ‘off-the-shelf’ products the manufacturers’ stated ventilation rates are recorded in a laboratory environment and, in some cases, may not represent an accurate level post-installation.

The Ducting – If the ducting is flexible and not rigid, there is the possibility of problems such as kinks or splits and (especially in the case of cavity wall constructions). It is also possible that the movement of materials within the wall may have compressed the ducting

The Outside Vent – It is possible for the outside vent to become blocked, or in the case of an incorrect installation it may not be properly connected to the ducting. It is also possible for the vent flaps to ‘stick’ or in the case of a low ventilation rate, for them to not open due to air resistance. Tile vents may also cause a reduction in the ventilation rate due to their reduced size.

‘Unknown’ – Our Engineer was unable to determine the cause of failure. It is recommended that you contact your installation engineer to carry out further investigations.

Please Note:

Our Engineers are unable to take apart fans or ducting to investigate reasons for failure, as they are not necessarily qualified installation engineers.

Air Flow Measurement

Continuous Fan*

* Enter any text to enable Continuous fan calc.