

Appendix 7

Energy efficiency evaluation of air filters for general ventilation purposes			Testing Organization: RISE Research Institutes of Sweden AB Brinellgatan 4, 501 15 Borås, Sweden +460105165000																				
Test ID: SP201612161		Date of test: 2016-12-20		Operator: UH																			
DEVICE TESTED																							
Model: 592x592x635 F9/10 T-G		Manufacturer: Scandcenter AB		Construction: Pocket filter																			
Article number: 9106001TG		Type of medium: Glass		Net effective filtering area: 7.9 m ²																			
				Filter dimensions (width x height x depth): 592x592x635 mm																			
TEST DATA DETAILS																							
i		m_i		Δp_i																			
		g		Pa																			
0		0.0		132.1																			
1		30.0		137.1																			
2		70.0		142.6																			
3		110.0		147.1																			
4		150.0		152.2																			
5		190.0		157.7																			
6		230.0		163.2																			
7		270.0		168.6																			
8		310.0		174.2																			
<p>i, number of the dust loading step m_i, total amount of dust fed to the air filter after the dust loading step i Δp_i, pressure drop of the air filter after dust loading step i</p>																							
<table border="1"> <tr> <td>Δp₀</td> <td>132.1</td> <td>Pa</td> </tr> <tr> <td>a</td> <td>-4.31E-09</td> <td>Pa/g⁴</td> </tr> <tr> <td>b</td> <td>3.02E-06</td> <td>Pa/g³</td> </tr> <tr> <td>c</td> <td>-6.69E-04</td> <td>Pa/g²</td> </tr> <tr> <td>d</td> <td>1.81E-01</td> <td>Pa/g</td> </tr> <tr> <td>M_x</td> <td>200</td> <td>g</td> </tr> </table>		Δp ₀	132.1	Pa	a	-4.31E-09	Pa/g ⁴	b	3.02E-06	Pa/g ³	c	-6.69E-04	Pa/g ²	d	1.81E-01	Pa/g	M _x	200	g				
Δp ₀	132.1	Pa																					
a	-4.31E-09	Pa/g ⁴																					
b	3.02E-06	Pa/g ³																					
c	-6.69E-04	Pa/g ²																					
d	1.81E-01	Pa/g																					
M _x	200	g																					
RESULTS																							
ISO group		PM1		Δp _a , Average pressure drop																			
Amount of dust fed, M _x		200 g		145.9 Pa																			
				Yearly energy consumption																			
				1653.8 kWh																			
NOTE: The results of this test relate only to the test device in the condition stated herein. The performance results cannot by themselves be quantitatively applied to predict filtration performance in all "real life" environments.																							