

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: SP201611222		Date of test: 2016-11-24		Operator: CM																			
DEVICE TESTED																							
Model: 592x592x635 F7/10 T-S		Manufacturer: Scandcenter AB		Construction: Pocketfilter, 10 Pockets																			
Article number: 7106001TS	Type of medium: Synthetic	Net effective filtering area: 7.8 m ²		Filter dimensions (width x height x depth) 592x592x635 mm																			
TEST DATA DETAILS																							
i	m_i	Δp_i																					
	g	Pa																					
0	0.0	109.0																					
1	30.0	117.1																					
2	85.0	131.5																					
3	140.0	152.6																					
4	195.0	185.5																					
5	250.0	236.0																					
6	315.0	315.8	i, number of the dust loading step																				
7	-	-	m _i , total amount of dust fed to the air filter after the dust loading step i																				
8	-	-	Δp _i , pressure drop of the air filter after dust loading step i																				
<table border="1"> <tr> <td>Δp₀</td> <td>109.0</td> <td>Pa</td> </tr> <tr> <td>a</td> <td>-1.40E-08</td> <td>Pa/g⁴</td> </tr> <tr> <td>b</td> <td>1.27E-05</td> <td>Pa/g³</td> </tr> <tr> <td>c</td> <td>-1.52E-03</td> <td>Pa/g²</td> </tr> <tr> <td>d</td> <td>3.11E-01</td> <td>Pa/g</td> </tr> <tr> <td>M_x</td> <td>250</td> <td>g</td> </tr> </table>		Δp ₀	109.0	Pa	a	-1.40E-08	Pa/g ⁴	b	1.27E-05	Pa/g ³	c	-1.52E-03	Pa/g ²	d	3.11E-01	Pa/g	M _x	250	g				
Δp ₀	109.0	Pa																					
a	-1.40E-08	Pa/g ⁴																					
b	1.27E-05	Pa/g ³																					
c	-1.52E-03	Pa/g ²																					
d	3.11E-01	Pa/g																					
M _x	250	g																					
RESULTS																							
ISO group		PM2.5	Δp _a , Average pressure drop		155.0 Pa																		
Amount of dust fed, M _x		250 g	Yearly energy consumption		1757.0 kWh																		
ePM _x		70																					
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.																							