

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: SP201705161		Date of test: 2017-05-22		Operator: CM	
DEVICE TESTED					
Model: 592x592x635 F7/10 T-G Eco		Manufacturer: Scandcenter AB		Construction: Pocket filter	
Article number: 7106001TGE		Type of medium: Glass		Net effective filtering area: 8.2 m ²	
				Filter dimensions (width x height x depth) 592 x 592 x 635 mm	
TEST DATA DETAILS					
i		m_i		Δp_i	
		g		Pa	
0		0.0		65.0	
1		30.0		66.5	
2		70.0		68.5	
3		110.0		70.6	
4		150.0		71.6	
5		190.0		73.6	
6		230.0		75.1	
7		270.0		76.7	
8		310.0		78.7	
				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	
Δp ₀		65.0		Pa	
a		5.52E-10		Pa/g ⁴	
b		-1.36E-07		Pa/g ³	
c		-4.51E-05		Pa/g ²	
d		5.49E-02		Pa/g	
M _x		200		g	
RESULTS					
ISO group		PM1		Δp _a , Average pressure drop	
Amount of dust fed, M _x		200 g		69.8 Pa	
				Yearly energy consumption	
				790.5 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.					