

Attachment 1a

Norm EN 12101-2:2003-09

EG-certificate of conformity Nr.1368-CPD-C-010/2009

Date:30.10.2009

for natural smoke and heat exhaust ventilation (NSHEV) of **Fieger Lamellenfenster GmbH**Productname: **Lamellenfenster Typ FGL SmoTec****Datasheet**

Possible actuators 24V	Security of functionality RE 1000 (TYP B)	Open with load SL 0	Low ambient temperature T 00	Heat resistance B300	Fire behaviour of materials minimum E
D+H LDF 100/60	yes	yes	yes	yes	yes
STG Beikirch FLA 1200	yes	yes	yes	yes	yes
WSS 60000413 -417	yes	yes	yes	yes	yes
G-U Eltral S 24 LAM	yes	yes	yes	yes	yes

*=considering windload

Sizes	BFR min	BFR max	BFR max with centre mullion	HFR min	HFR max	surface area max with one actuator
FGL SmoTec PG ESG 8mm	0,3 m	1,68 m *	3,3 m	0,24 m	3,0 m	3 m ² > 3 m ² = 2. actuator
FGL SmoTec PG ESG 10mm	0,3 m	1,68 m *	3,3 m	0,24 m	3,0 m	3 m ² > 3 m ² = 2. actuator
FGL SmoTec PG VSG 12mm	0,3 m	1,68 m	3,3 m	0,24 m	3,0 m	3 m ² > 3 m ² = 2. actuator
FGL SmoTec LG ESG 8mm	0,3 m	1,68 m *	3,3 m	0,24 m	3,0 m	3 m ² > 3 m ² = 2. actuator

Sizes of blades	heights	blade surface
	min 0,17 m	max 0,53 m ²
	max 0,326 m	

Glazing	ESG 8 mm / ESG 10 mm 2 holes on each side to fix glass punctiform, overlapping design
	VSG 12 mm of 2 x ESG 6 mm mit PVB foil 0,76 mm, 2 holes on each side to fix glass punctiform, overlapping design or interlocking design
	ESG 8 mm, laterally supported, overlapping design

Windload	ESG 8 mm PG oder LG		ESG 10 mm PG oder LG		VSG 12 mm PG	
Glasstickness accordingly	ALam < 0,3 m ²	WL 1100	ALam < 0,3 m ²	WL 1500	ALam < 0,3 m ²	WL 2400
	0,3 m ² ≤ ALam < 0,4 m ²	WL 850	0,3 m ² ≤ ALam < 0,4 m ²	WL 1250	0,3 m ² ≤ ALam < 0,4 m ²	WL 1850
	0,4 m ² ≤ ALam < 0,48 m ²	WL 750	0,4 m ² ≤ ALam < 0,52 m ²	WL 1000	0,4 m ² ≤ ALam < 0,52 m ²	WL 1500
Windload	ESG 8 mm PG oder LG		ESG 10 mm PG oder LG		VSG 12 mm PG	
Glasstickness accordingly incl. security bolting	ALam < 0,3 m ²	WL 1500	ALam < 0,3 m ²	WL 2000	ALam < 0,3 m ²	WL 2900
	0,3 m ² ≤ ALam < 0,4 m ²	WL 1100	0,3 m ² ≤ ALam < 0,4 m ²	WL 1750	0,3 m ² ≤ ALam < 0,4 m ²	WL 2250
	0,4 m ² ≤ ALam < 0,48 m ²	WL 1000	0,4 m ² ≤ ALam < 0,52 m ²	WL 1500	0,4 m ² ≤ ALam < 0,52 m ²	WL 2000

PG = stainless steel brackets, punctiform glazing**ESG** = tempered glass**LG** = stainless steel brackets, laterally supported**VSG** = laminated glass

Aerodynamic free area calculated by windowsurface Aaero with an opening angle of 85°	
Cv0 =0,61	if vent has less than 5 blades
Cv0 =0,59	if vent has 5, 6 or 7 blades
Cv0 =0,57	if vent has more than 7 blades
B opening = width minus 84mm (units with centre mullion minus 64mm per mullion)	
H opening = height minus 59mm (blades are ignored)	
A _v = B opening x H opening	
A _a = C _{v0} x A _v	