



COMPANY



- France (Head office)
- Belgium (R&D)
- Active in 15 countries (& counting)

EXPERTISE



- 35 years of experience
- CE label
- Declaration of performance

SOLUTIONS



- 40 size-references of fire resistant boards
- Custom-made boards without cut-outs
- 3 mounting options
- 100 % Natural Glass Reinforced Gypsum products
- No waste – tailor-made deliveries
- EI (S) 60-120-180-240

[Video](#)





CONCEPT & NORMS

Geostaff has certified solutions that were tested according to the European test standards as indicated below:



FIRE RATED VENTILATION DUCTS/SHAFTS



FIRE RATED SMOKE EVACUATION DUCTS/SHAFTS



FIRE RATED PROTECTION OF SERVICES/TECHNIQUES



FIRE RATED INSPECTION HATCHES



PROTECTION OF CARBON REINFORCEMENT OF CONCRETE STRUCTURES



CONCEPT & NORMS

The Geostaff boards are CE marked, guaranteeing the quality of the boards. Installations need to be carried out in accordance with the installation instructions in order to guarantee a fire resistance properties needed.

TEST STANDARDS

CLASSIFICATION

CERTIFICATION

European Technical Assessment

ETA 18/0343
Version 01
Date of issue: 2018-06-12



UBAto Assessment Operator:
Belgian Construction Certification Association
Rue d'Arlon 53 - 1040 Brussels
www.bcca.be - info@bcca.be



CE marked boards



ETA European Technical Agreement



APL Appréciation de laboratoire

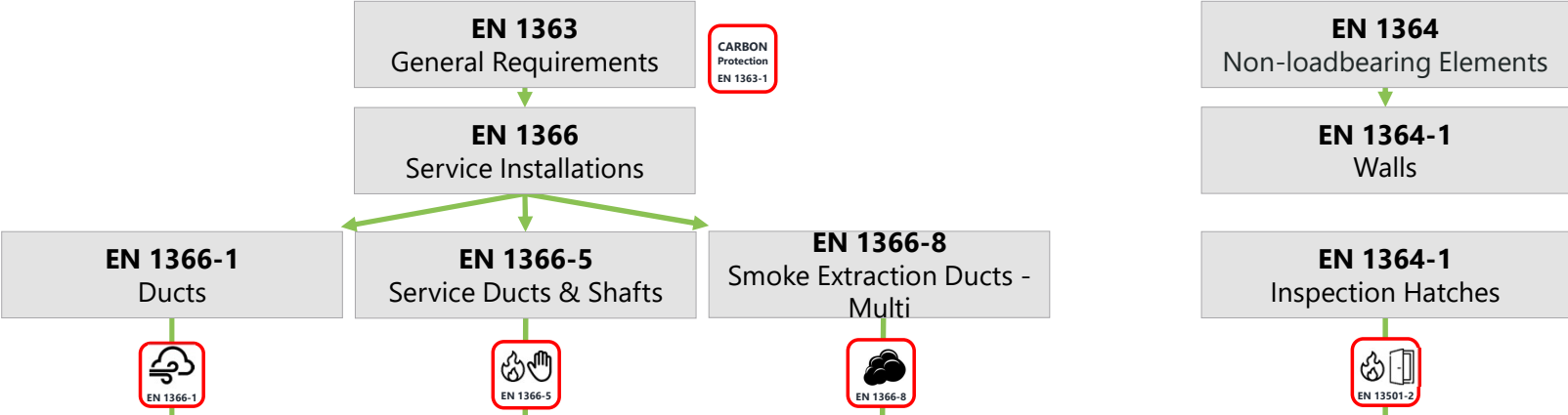


PV Procès-verbal - PV



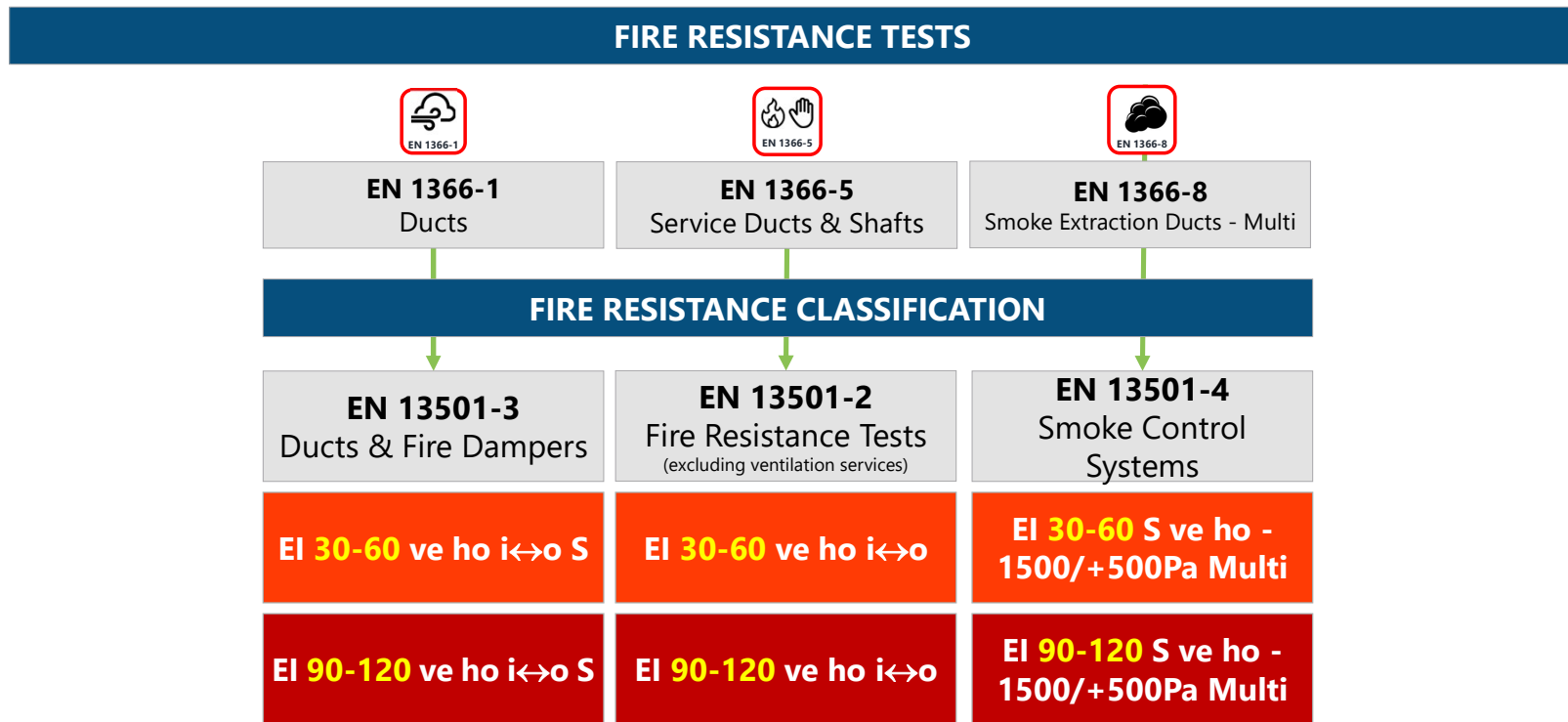


FIRE RESISTANCE TESTS



FIRE RESISTANCE CLASSIFICATION

EN 13501-3 Ducts & Fire Dampers	EN 13501-2 Fire Resistance Tests (excluding ventilation services)	EN 13501-4 Smoke Control Systems	EN 13501-2 Fire Resistance Tests (excluding ventilation services)
EI 30-60 ve ho i↔o S	EI 30-60 ve ho i↔o	EI 30-60 S ve ho - 1500/+500Pa Multi	EI 60 i↔o
EI 90-120 ve ho i↔o S	EI 90-120 ve ho i↔o	EI 90-120 S ve ho - 1500/+500Pa Multi	EI 120 i↔o



In function of the application, the correct fire resistance criteria need to be respected.

CRITERIA:

E = Integrity (no flames/hot gasses)

I = Insulation

S = Smoke leakage – the S-criterium is compulsory in ventilation and/or smoke evacuation applications because we it needs to prevent the propagation of both fire and smoke.

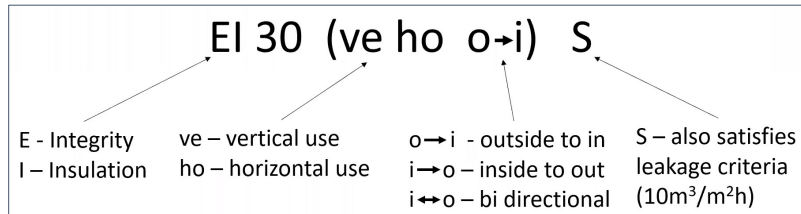
For Smoke extraction ducts and dampers/shutters, two types are possible

a) **Single** → refers to ‘single compartment smoke evacuation’ – the smoke comes from one compartment only

b) **Multi** → the smoke can originate from multiple compartments (! For high rise buildings)

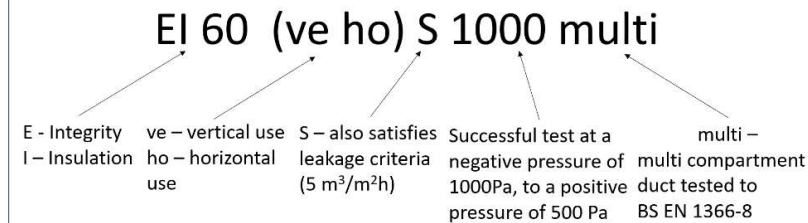


Example of classifications:



- This “EIS” solution is for ventilation. We can question if the direction of the fire o→i is sufficient (we suppose to know the direction of the fire propagation). o↔i guarantees both ways of fire propagation.

- An explanation of the Classification system for smoke control ducts from BS EN 13501-4

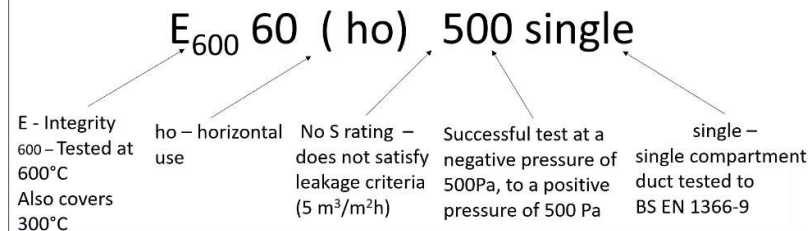


- This solution has been tested for multi compartment smoke evacuation. The pressure level here -1000Pa upto +500Pa.

Why choose Geostaff e.g. for Multi Compartment Smoke Evacuation:

- ✓ The Geostaff solutions give the possibility to go upto **pressure levels of -1500 upto +1500Pa!**
- ✓ Fire resistance levels **60-90-120-180-240 minutes**
- ✓ Dimensions upto **2500x1500mm**
- ✓ **One-Stop-Shopping** for **tailored** solutions (minimize waste & logistics)

- An explanation of the Classification system for smoke control ducts from BS EN 13501-4



- This certification is for single compartment smoke evacuation solutions. The testing conditions are different / less severe vis-à-vis the multi-compartment application. This is a different kind of test (as described in EN1366-9).

Fire dampers/shutters for multi-compartment smoke evacuation are tested according to EN1366-10. They are installed in EN1366-8 ductwork.

Example of the classification of e.g. the smoke shutter Kamouflage MP: **EI 120 (ved i n o) S 1500 C10000**

AA multi

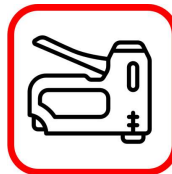


INSTALLATION METHODS

Geostaff has multiple products available. For the Cyprus market the *GEOTEC* boards give you the highest flexibility. These boards can be installed by 'gluing & screwing', but also stapling or fiber reinforced plaster can be used.



GLUE & SCREW



GLUE & STAPLE



GLUE & FIBRE CAULKING



Your premium partner for passive fire protection

Installation method



		HORIZONTAL		
V E R T I C A L	<p>Fire resistance</p> <p>EI 60-120 ve ho i ↔ o S</p>	<p>2500 x 1500</p> <p>EI 60-120 S ho - 1500 / + (1)500 Pa Multi</p>	<p>Maximal Dimensions</p> <p>EI 60-120 ve ho i ↔ o</p>	
	<p>EI 60-90 ve ho i ↔ o S</p>	<p>1250 x 1000</p> <p>EI 60-90 S ho - 1500 / + (1)500 Pa Multi</p>	<p>EI 60-90 ve ho i ↔ o</p>	
	<p>EI 60-120 ve ho i ↔ o S</p>	<p>2500 x 2000</p> <p>EI 60-120 S ho - 1500 / + (1)500 Pa Multi</p>	<p>EI 60-120 ve ho i ↔ o</p>	

Application

VENTILATION



SMOKE EVACUATION



PROTECTION





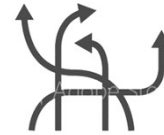
Why choose GEOSTAFF?



ONE STOP SHOP
Online calculation tool



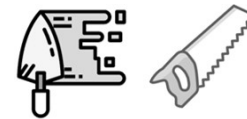
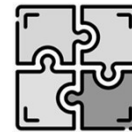
TAILOR-MADE



FLEXIBLE



CERTIFIED SOLUTIONS



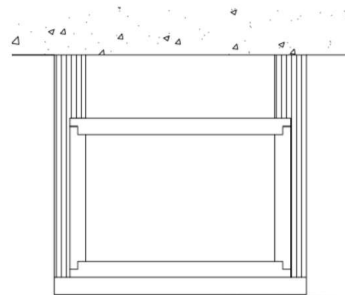


GEOSTAFF SYSTEM - ONLINE CALCULATION-TOOL

The dummy-proof online calculation tool enables you to calculate duct sections rapidly. Why waste days of calculation if you can calculate a duct section in 30 seconds with a full Bill of Material and an installation sketch?

INPUT TABLE										
Reference	N°	Fire resistance	Type	Direction	Width (mm)	Height / Depth (mm)	Plenum or Floor to floor height	Surface (m²)	Length (m)	Changes of direction
Geostaff Academy	1	EI 120 S	Smoke extraction	H	600	500	300 mm	26,00	10,00	0
Total surface :								26,00		

Duct n°1
 Geostaff Academy
 EI 120 S
 GEOTEC®S Ep 45mm
 Smoke extraction
 Horizontal
 600mm x 500mm int.
 700mm x 600mm ext.
 Plenum 300mm
 Length 10,00m
 Number of suspension cradles : 11
 Surface : 26,00m²



- Horizontal Boards**
 - 20 Boards GEOTEC®S de 700mm
- Vertical Boards**
 - 20 Boards GEOTEC®S de 550mm
- 10 U-plaster (PFU0011) GEOFLAM®A in 1 m
 - 30 ½ Shells GEOFLAM®A in 1 m
 - 22 Brass anchors Ø 8
 - 22 Zinc-plated nuts Ø 8
 - 22 Zinc-plated washers Ø 8
 - 22 Threaded rods Ø 8 in 1 m
 - 4 U Channel Steel 21x41x21 in 3 m
 - 360 Wood screws Ø 5 mm - L = 90
 - 2,60 bags of GEOCOL®





GEOSTAFF - Getting launched

- TECHNICAL DOCUMENTATION
- TECHNICAL SUPPORT
- ACCESS ONLINE CALCULATION TOOL
- GEOSTAFF ACADEMY – training session on concept – product – system – practices
- 2021: BIM-modeling
- ON SITE TRAINING
- DIGITAL ANIMATIONS
- MORE COMING UP!







