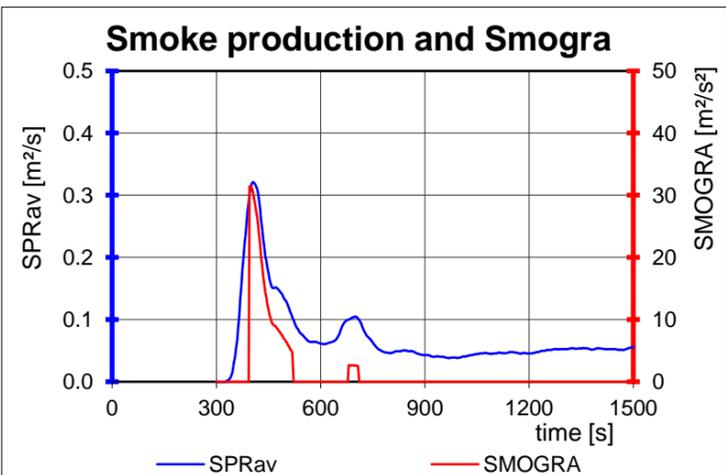
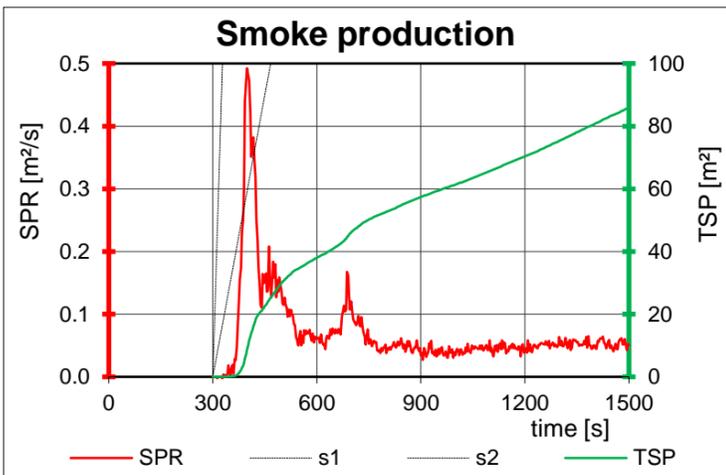
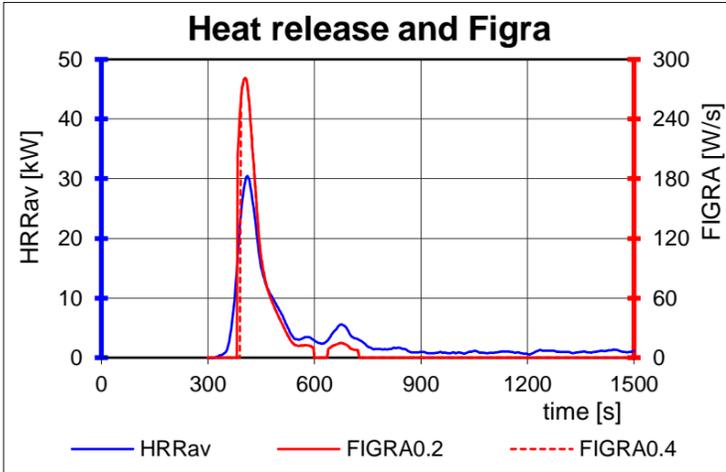
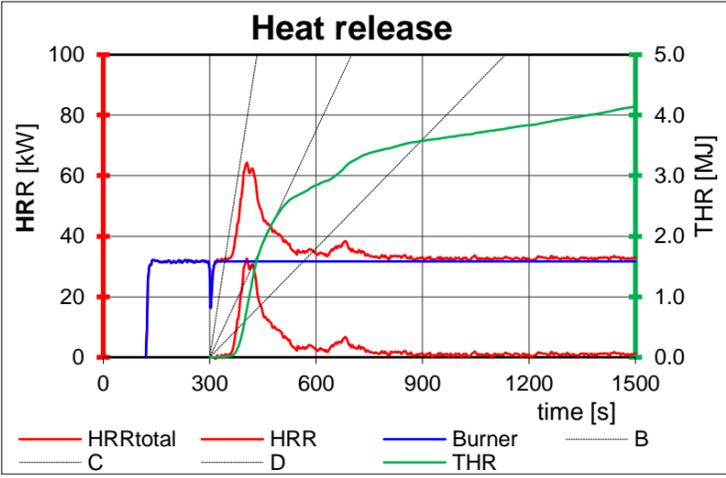


Construction products



Classification criteria		A1*	A2-B	C	D
FIGRA _{0.2MJ}	[W/s] ≤	20	120		
FIGRA _{0.4MJ}	[W/s] ≤			250	750
THR _{600s}	[kW] ≤	4	7.5	15	
		s1, d0	s1	s2	s3
SMOGRA	[m²/s²] ≤		30	180	not s1/s2
TSP _{600s}	[m²] ≤		50	200	not s1/s2

* External non-substantial component having PCS > 2,0 MJ/kg and a PCS ≤ 2,0 MJ/m²

Final classification assessment is based on 3 repetitive SBI tests and other tests:

- A1: EN ISO 1182 or EN ISO 1716
- A2: EN ISO 1182 or EN ISO 1716
- B, C, D: EN ISO 11925-2

General information

Date of test: 09/08/2023
Report identification number/file: ENL-23-000636_1.xls
Operator: ckb

Specimen

Sponsor: Probo
Description: Multiexpro 4 mm zwart

Standard used: EN 13823:2020

Fire attack

Start of test: [s] 300
Burner exposure time: [s] 1200
Burner exposure level: [kW] 31.7
Std 0-28

Results

Heat release related

	[kW]	t-t0 [s]	t [s]
Peak HRRav (t<t0+600s)	30.5	111	411
Peak HRRav (t<t0+900s)	30.5	111	411
Peak HRRav (t<t0+1200s) (t0 = 300s)	30.5	111	411

Figra0.2 MJ	[W/s]	281	
Figra0.4 MJ	[W/s]	281	D

Figra [W/s] 281 D

Figra0.2 MJ: Corresponding HRRav	[kW]	29.5	105	405
Figra0.4 MJ: Corresponding HRRav	[kW]	29.5	105	405

t(HRRav ≥ 3 kW)			63	363
(HRRav + t(THRta)) ≥ 0.2 MJ	[kW]	17.14	84	384
(HRRav + t(THRta)) ≥ 0.4 MJ	[kW]	24.2	93	393

THRta (t0+600s) [MJ] 3.58 B or better

THRta (t0+900s) [MJ] 3.8

THRta (t0+1200s) [MJ] 4.1

(t0 = 300s) **Estimated class: D**

Lateral flame spread

Till long wing end of specimen: No No = not to long wing end of specimen

Estimated class: D

Smoke production related

	[m²/s]	t-t0 (s)	t (s)
Peak SPRav (t<t0+600s)	0.32	105	405
Peak SPRav (t<t0+900s)	0.32	105	405
Peak SPRav (t<t0+1200s) (t0 = 300s)	0.32	105	405

Smogra max [m²/s²] 31.5 s2

at SPRav [m²/s] 0.31 99 399

t(SPRav ≥ 0.1 m²/s) 66 366

t(TSPta ≥ 6 m²) 96 396

TSPta (t0_t0+600s) [m²] 57 s2

TSPta (t0_t0+900s) [m²] 70

TSPta (t0_t0+1200s) [m²] 86

(t0 = 300s) **Estimated class: s2**

Flaming droplets/particles related

Flaming droplets/particles

FDP (t0_t0+600s) No No = no flaming droplets/particles
FDP (t0_t0+600s) F>10s No No = no flaming droplets/particles F>10s (not d0 or d1)

Estimated class: d0