

Construction products

General information

Date of test 01/05/2023
Report identification number/file ENL-23-000302_5.xls
Operator EDM

Specimen

Description Thermo Treated Ayous shiplap

Standard used EN 13823:2020

Fire attack

Start of test [s] 300
Burner exposure time [s] 1200
Burner exposure level [kW] 32.0 Std 0.27

Results

Heat release related

	[kW]	t-10 [s]	t [s]
Peak HRR _{av} (t<t ₀ +600s)	8.3	390	690
Peak HRR _{av} (t<t ₀ +900s)	8.3	390	690
Peak HRR _{av} (t<t ₀ +1200s)	8.3	390	690
(t ₀ = 300s)			

Figra0.2 MJ [W/s] 29 **B or better**
Figra0.4 MJ [W/s] 29

Figra [W/s] 29 B or better

Figra0.2 MJ: Corresponding HRR_{av} [kW] 6.8 234 534

Figra0.4 MJ: Corresponding HRR_{av} [kW] 6.8 234 534

t(HRR_{av} >= 3 kW) 27 327

(HRR_{av} + t(THR_{ta})) >= 0.2 MJ [kW] 3.09 138 438

(HRR_{av} + t(THR_{ta})) >= 0.4 MJ [kW] 3.7 162 462

THR_{ta} (t₀+600s) [MJ] 3.63 B or better

THR_{ta} (t₀+900s) [MJ] 5.6

THR_{ta} (t₀+1200s) [MJ] 7.3

(t₀ = 300s) **Estimated class: B or better**

Lateral flame spread

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

Estimated class: B or better

Smoke production related

	[m ² /s]	t-10 (s)	t (s)
Peak SPR _{av} (t<t ₀ +600s)	0.14	264	564
Peak SPR _{av} (t<t ₀ +900s)	0.14	264	564
Peak SPR _{av} (t<t ₀ +1200s)	0.14	264	564
(t ₀ = 300s)			

Smogra max [m²/s²] 14.1 s1

at SPR_{av} [m²/s] 0.11 81 381

t(SPR_{av} >= 0.1 m²/s) 51 361

t(TSP_{ta} >= 6 m²) 81 381

TSP_{ta} (t₀+600s) [m²] 67 s2

TSP_{ta} (t₀+900s) [m²] 97

TSP_{ta} (t₀+1200s) [m²] 129

(t₀ = 300s) **Estimated class: s2**

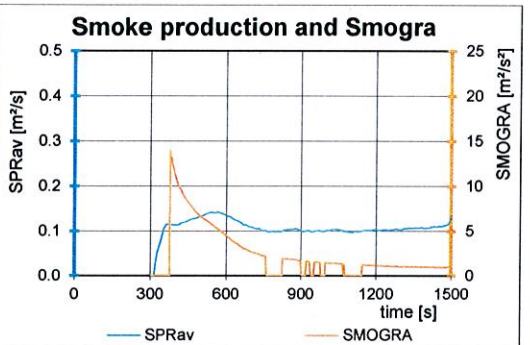
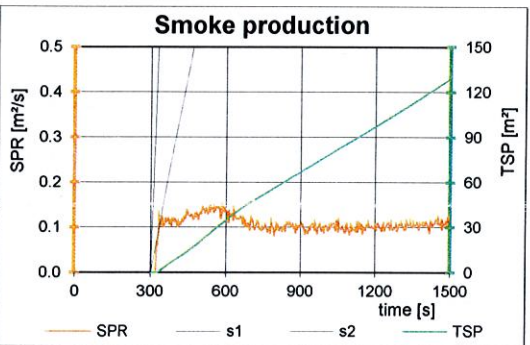
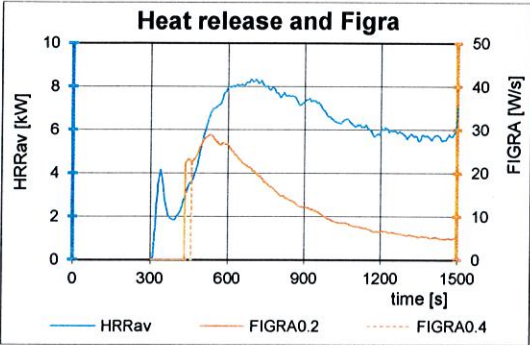
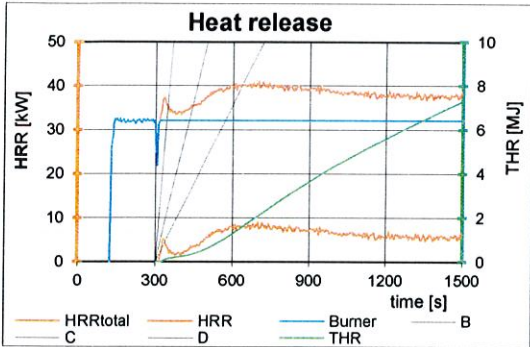
Flaming droplets/particles related

Flaming droplets/particles

FDP (t₀+600s) No No = no flaming droplets/particles

FDP (t₀+600s) F>10s No No = no flaming droplets/particles F>10s

(not d0 or d1) **Estimated class: d0**



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 [m ² /s ²] <=		30	180	not s1/s2
TSP _{600s} [m ²] <=		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

