

Reaction to fire

Interior decoration materials constitute a major way of preventing fire risks: the spread of fire can be delayed by the choice of appropriate materials whose performance is assessed by their reaction to fire. Tests determine a product's propensity to help a fire to spread. The qualifications range from non-combustible to easily inflammable.

Two systems of fire classification are now in force:

1- The EUROCLASS Classification (NF EN 13501) is applied at European level to all the building and layout materials subject to the EC marking system. This classification is obtained by an SBI (Single Burning Item) test, according to three assessment criteria:

The development of the fire.

From A: materials not affected by fire, to F: highly combustible materials.

A	B	C	D	E	F
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The release of smoke (s for smoke)

From s1: non-smoke producing, to s3: producing large quantities of smoke

s1	s2	s3
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Flaming droplets (d for droplet)

From d0: no drops, to d2: numerous drops

d0	d1	d2
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2- The M classification (NF P 92-501) remains applicable to all materials not subject to the EC marking system, or when tested on their own. (laminate and Compact panels < 6 mm).

Agreed classification systems (CWFT) are established for standard materials depending on their density and thickness. Any other result must be justified by a test report issued by an approved entity.

The class of reaction to fire required depends on the type of building (premises accessible to the public, residential building, etc.), the role of the product (structural, cladding) and where it is located in the construction.

Euroclass and its equivalent in the M classification system

Equivalents M classification	Euroclass	POLYREY's Product	Thickness	Description	Quality order	Certificate delivered by
M1	B- s1, d0	Compact REYSIPUR	6 to 12.5 mm	Compact Fire retardant CGF	Fire retardant	FCBA
	NA	Compact REYSIPUR	4 mm	Compact Fire retardant CGF	Fire retardant	LNE
	B- s2, d0	Compact MONOCHROM White	8 to 12.5 mm	Compact Fire retardant BCF	Fire retardant	FCBA
	B- s2, d0	Contrecollé HPL POLYPREY	19.6 / 20mm	Chipboard Fire retardant	Fire retardant	FCBA
	B- s2, d0	Contrecollé PANOMETAL	19.6 mm	Chipboard Fire retardant (standard Counterbalancing)	Fire retardant	FCBA
	B- s2, d0	Méla miné PANOPREY	12 to 19 mm	Chipboard Fire retardant	Fire retardant	FCBA
	NA	Stratifié POLYREY HPL	0.8 / 1 mm	HPL Fire retardant HGF / VGF	Fire retardant	LNE
M2	NA	Stratifié PUR METAL	0.8 / 0.9 mm	HPL metal Fire retardant MTF	Fire retardant	LNE
	C- s1, d0	Compact REYSIPUR	≥ 8 mm	Compact HPL standard CGS	Standard	FCBA
M3	-	Méla miné PANOPREY	12 to 19 mm	Chipboard standard	Standard	LNE
	D- s2, d0	Méla miné PANOPREY	≥ 12 mm	Chipboard or MDF standard	Standard	CWFT
	D- s1, d0	Contrecollé HPL POLYPREY	19.6 / 20 mm	Chipboard standard	Standard	FCBA
	D- s2, d0	Contrecollé HPL POLYPREY	19.6 / 20 mm	Chipboard Moisture resistant	Moisture resistant	CWFT
	D- s2, d0	Compact REYSIPUR	6 mm	Compact HPL standard CGS	Standard	CWFT
	NA	Compact REYSIPUR	4 mm	Compact HPL standard CGS	Standard	CWFT
NA	Stratifié POLYREY HPL / MONOCHROM	0.6 / 1 mm	HPL HGS-HGP-VGS-VGP	Standard ou Postforming	CWFT	

NA: Not applicable. CWFT: Classification Without Further Testing. FCBA: Technological Institute of Forest Wood Cellulose-build furniture.. LNE: French National Test Laboratory