



COMPOSITES GUREA

New Standard for Classifying the Reaction to Fire of Construction Materials (European classes)

The new standard is: **EN 13.501-1:2002**

For walls and ceilings, the new classes are as follows:

- A1: Non-combustible. No contribution to the fire, to the maximum degree.
- A2: Non-combustible. No contribution to the fire, to a lesser degree.
- B: Combustible. Very limited contribution to the fire.
- C: Combustible. Limited contribution to the fire.
- D: Combustible. Medium degree of contribution to the fire.
- E: Combustible. High degree of contribution to the fire.
- F: Unclassified.

The subscript **fl** is added for flooring materials.

Therefore, for Parlex materials (which are all combustible), the best classification for reaction to fire is **B**.

When performing product tests and classifications, the following is taken into account:

- Smoke opacity. The following are possible results:
 - o S1: low smoke opacity
 - o S2: medium smoke opacity
 - o S3: high smoke opacity
- Dripping or falling burning particles. The following are possible results:
 - o d0: no dripping or falling of burning particles
 - o d1: medium degree of dripping or burning particles
 - o d2: high degree of dripping or burning particles

The classification for dripping is not included for P2000, since the test is performed horizontally on the floor. Therefore, this classification does not apply.

The classification depends not only on the behavior of the materials in the presence of fire, but also on the way in which the materials are placed on the support.

There is no equivalence between the classifications used up to now (M) and the European classes, since the testing and classification procedures are different, although the concepts are similar.

The results obtained for our materials are as follows:

Former designation	New designation	Classification	Comment
P1000 M1	P1000 EDF	BS2d0	For thicknesses of 6 mm or more
P1000 M2	P1000 EDS	DS2d0	For thicknesses of 6 mm or more
P700 M1	P700 CGF	BS2d0	For thicknesses of 6 mm or more
P700 M2	P700 CGS	CS2d0	For thicknesses of 6 mm or more
P500 M2	P500 VDF	BS2d0	For thicknesses of 11 mm or more
P500 M4	P500 VDS	DS2d0	For thicknesses of 8 mm or more
P2000 M1	P2000 HDF	BflS1	For thicknesses of 11 mm or more

P2000 M3	P2000 HDS	BfIS1	For thicknesses of 11 mm or more
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