

**REACTION TO FIRE PERFORMANCE FOR CONSTRUCTION PRODUCTS**

| EuroClass | Test method                             | Classification criteria                                                                                              | Typical products                                                          |
|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| A1        | EN ISO 1182 and EN ISO 1716             | Temperature rise; Mass loss Gross calorific potential Duration of flaming                                            | Stone, Concrete                                                           |
| A2        | EN ISO 1182 or EN ISO 1716 and EN 13823 | Temperature rise, Mass loss, Gross calorific potential, Duration of flaming, FIGRA, Flame spread, Total heat release | Gypsum boards (thin paper), Mineral wool                                  |
| B         | EN 13823 and EN ISO 11925- 2            | FIGRA, Flame spread, Total heat release, Smoke production, Flaming droplets                                          | Gypsum boards (thick paper), Fire retardant wood, Fire retardant polymers |
| C         | EN 13823 and EN ISO 11925 -2            | Smoke production, Flaming droplets FIGRA, Flame spread, Total heat release                                           | Coverings on gypsum boards, Fire retardant polymers                       |
| D         | EN 13823 and EN ISO 11925 -2            | FIGRA, Flame spread, Total heat release, Smoke production, Flaming droplets                                          | Wood, Wood-based panels                                                   |
| E         | EN ISO 11925 - 2                        | Flaming droplets                                                                                                     | Some synthetic polymers                                                   |
| F         | No performance determined               |                                                                                                                      |                                                                           |

**REACTION TO FIRE PERFORMANCE FOR CABLES**

| EuroClass | Test method                 | Classification criteria                                                |
|-----------|-----------------------------|------------------------------------------------------------------------|
| Aca       | EN ISO 1716                 | Gross calorific potential                                              |
| B1ca      | FIPEC20 Scen 2 EN 60332-1-2 | Flame spread, Total heat release, FIGRA, Combusted length of the cable |
| B2ca      | FIPEC20 Scen 1 EN 60332-1-2 | Flame spread, Total heat release, FIGRA, Combusted length of the cable |
| Cca       | FIPEC20 Scen 1 EN 60332-1-2 | Flame spread, Total heat release, FIGRA, Combusted length of the cable |
| Dca       | FIPEC20 Scen 1 EN 60332-1-2 | Flame spread, Total heat release, FIGRA, Combusted length of the cable |
| Eca       | EN 60332-1-2                | Combusted length of the cable                                          |
| Fca       | No performance determined   |                                                                        |

CLASSIFICATION CRITERIA

| EU Classification | Fire Growth Rate/<br>Total Heat Release/<br>Lateral Flame Spread |    | Smoke Growth Rate/ Total<br>Smoke Release                                  |    | Flaming droplets/ particles<br>classification   |
|-------------------|------------------------------------------------------------------|----|----------------------------------------------------------------------------|----|-------------------------------------------------|
| A2 and B          | FIGRA ≤ 120W/s;<br>THR 600s ≤ 7,5 MJ<br>LFS < edge of specimen   | S1 | SMOGR ≤ 30 m <sup>2</sup> /s <sup>2</sup> TSP600s<br>≤ 50 m <sup>2</sup>   | d0 | No flaming droplets                             |
| C                 | FIGRA ≤ 250W/s;<br>THR 600s ≤ 15 MJ<br>LFS < edge of specimen    | S2 | SMOGR ≤ 180 m <sup>2</sup> /s <sup>2</sup> TSP600s<br>≤ 200 m <sup>2</sup> | d1 | No flaming droplets/ part.<br>persisting > 10 s |
| D                 | FIGRA ≤ 750W/s                                                   | S3 | -                                                                          | d2 | -                                               |

