

CYC FEU 6

Main characteristics (technical specifications)

Ready-to-use product for fire protection, fire-retarding 6 hours under ISO curve. To stabilise a concrete wall or a steel structure, development of a complex behaving as a thermal shield consisting of a 40 mm-thick coat reinforced with an octagonal wire mesh with or without 3 mm-CYCETANCHFLEX (CEF) water repellent finishing.

Available in several versions: normal version 6.1, fibered version 6.2 including ceramic fibres, injectable version 6 A et version 6 HCM (tested under HCM by a private lab).

Can be washed: Low/medium/high pressure **Can be painted:**

Information on the composition

Mineral composition with hydraulic reaction, asbestos free, including high performance cements and additives.

Fire Test reports (cross the relevant boxes)

| | | |
|---|---|--|
| ISO (1050°C 2h 1160°C 4h) <input type="checkbox"/> | HC (1100°C, ref. EC1.1.2) <input type="checkbox"/> | HCM (1300°C, HC*1300/1100) <input type="checkbox"/> |
| RABT/ZTV (Germany) (1200°C) <input type="checkbox"/> | RWS (1350°C) <input type="checkbox"/> | Others : <input type="checkbox"/> |

Characteristics of the tested samples, report number and possible comments:

- Test conducted by CSTB in 1997 of a 40 mm thick protection on a 25 cm concrete support during 6 hours for both versions 6.1 et 6.2 (test reports No.43349/B)
- Test conducted by CERIB in 2003 of 3 versions of CYC Feu 6 protection during 7 hours (report No.03 DPO 292)
 - version 6.1 application by spraying
 - version 6A pourable and injectable for prefabrication
 - version 6 HCM for resistance beyond 3 hours

Application procedures **Board** **Mortar**

On soiling free supports. For concrete supports, pre-waterproofing with CYC ETANCH FLEX resin of all peculiar points (cracks, joints, chips...). Installation of a steel wire mesh (50 mm / 0,8mm meshes) and steel dowels.

Mortar proportioning 12 l water per 20 kg bag. Mortar sprayed by Putzmeister pump in two lengths (maxi 25mm) for 40 mm coat. Installation of joints to divide into 15 m² panels with ceramic or mineral fibres flange.

For weather affected parts a waterproofing type CYC ETANCH FLEX standard or SW series should be provided.

Coat surface finished with INOX float.

Present application field

Fire protection of structures: hydrocarbide storage units, chemicals, petrochemicals, car-parks, computer data storage units

Resources, territories and habitats
 Energy and climate Sustainable development
 Risk prevention Infrastructures, transports and sea

Here for the future

| Possible use in tunnels | | | | Civil engineering works references | | | |
|---|---|-------------|--|---|--|---------------------------|--|
| Tunnel vaults and sidewalls, plates and segments | | | | | | | |
| Physical and thermal data | | | | | | | |
| <u>Reaction to fire</u> (French/European classification): 0 | | | | <u>Other thermal data :</u> Reflection coefficient (adimensionnal) : or Absorption coefficient (adimensionnal) : | | | |
| <u>Main thermal data: (at 20°C and possibly variation with temperature)</u> | | | | <u>Main mechanical data:</u> E modulus (Mpa) = Compressive strength (Mpa) = | | | |
| T (°C) | Thermal conductivity λ (W.m ⁻¹ .K ⁻¹) | | Specific heat c (J. kg ⁻¹ .K ⁻¹) | | Density ρ (kg/m ³) | | |
| | 6.1 | 6.2 | 6.1 | 6.2 | 6.1 | 6.2 | |
| 23 | 0.26 | 0.33 | 880 | 935 | 850 | 993 | |
| 100 | 0.27 | 0.32 | 1010 | 1001 | 839 | 980 | |
| 200 | 0.26 | 0.34 | | | | | |
| 400 | 0.23 | 0.29 | 875 | 833 | 823 | 955 | |
| 800 | 0.20 | 0.28 | 835 | 864+/-35 | 752 | 905 +/-1 4 | |
| <ul style="list-style-type: none"> Resulting emissivity (adimensionnal) : $\epsilon_{res} =$ | | | | | | | |
| Durability | | | | | | | |
| | | | | | | | |
| Product and company identification/Commercial name/ Applicators | | | | | | | |
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| Documentation/References | | | | | | | |
| Catalogue of technical products CESA (Dec 02) | | | | | | | |

