



**INNOVATIVE. FIRE. SYSTEMS**  
**PASSIVE. FIRE. PROTECTION**

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**FIRE PROTECTION for SAFETY TUNNEL**

APRR, the tunnel owner, assisted by the prime contractor, SCETAUROUTE, and Bonnard et Gardel, wanted to provide extra fire resistance to the stale air duct slab. FIRE BARRIER 135 was selected as the product which met both the N2 and N3 requirement at 28 mm thick. Starting in January 07, spray applied FIRE BARRIER 135, is being installed to protect seven kilometres of concrete slab of the new air gallery. The decision to employ FIRE BARRIER 135 was taken by following the evaluation of a wide selection of products and systems. FIRE BARRIER 135 was the only material that fully satisfied the rigorous fire performance RWS, HCM, ISO, strength, adhesion, wash ability performance requirements specified for the project.

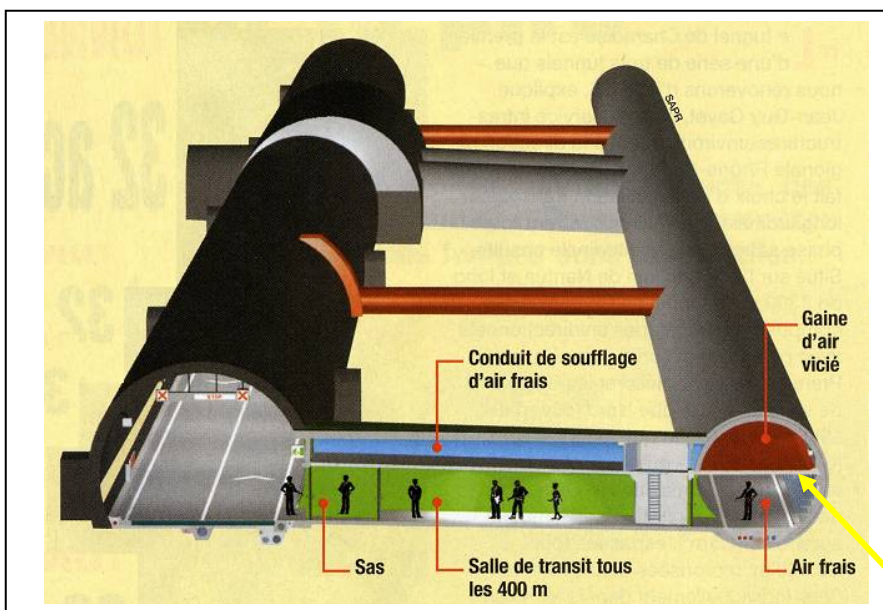
## INNOVATIVE. FIRE. SYSTEMS

### PASSIVE FIRE. PROTECTION

FIRE BARRIER 135 will insulate the concrete structure from the effects of fire and ensure that the structure does not reach temperatures that would cause the concrete to spall, or the steel reinforcement bars to buckle and collapse.

FIRE BARRIER can justify a dozen of fire test made in four EGOLF laboratories, in different thicknesses to match various interface temperatures.

FIRE BARRIER 135 has a proven track record of protecting tunnel linings and a dozen of tunnels have been treated in Europe those last two years, making it the most widely installed system in Europe.



FIRE BARRIER 135 will be installed in the new ventilation gallery; in 28 mm thick. This job is due to be completed in 4 month time along the seven kilometres long. The unexposed face of concrete will be below 60 degrees after two hours HCM fire curve

