# 2. CONCRETE ELEMENTS PROTECTION AT TUNNELS

We have previously emphasized in the section on **Tecwool® F** the importance to protect tunnels. For this purpose, **Tecwool® 825** has been tested in accordance to RWS Protocol/ Efectis "Fire resistance of coatings to protect concrete" and subject to the RWS and HCM fire curves, adapting to the more common normative requirements worldwide. During the 3 hours of testing, temperature on the concrete surface never exceeded 201 °C, well below the maximums established in the proocol: 380 °C on the surface and 250° in the steel reinforcements, resulting a **Tecwool® 825** superb insulation performance.

**Tecwool® 825** has also showed a great adhesion capacity to concrete and steel, a monolithic finish and, due to its content of mineral wool, avoids the appearance of cracks over the time.

CONSTRUCTIVE SOLUTIONS

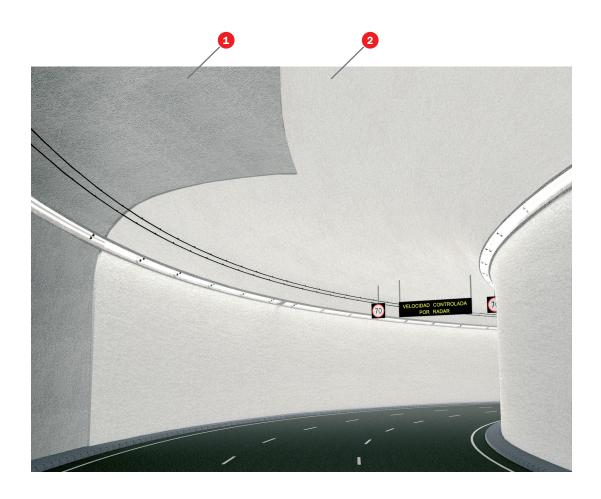
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### **TECWOOL® MORTAR**



### **CONCRETE ELEMENTS PROTECTION AT TUNNELS**

## TECWOOL® 825 MORTAR



#### **TEST**

**Standard:** RWS Protocol /Efectis Fire testing procedure for concrete tunnel **Laboratory:** Efectis Netherland **Test No:** 2010-Efectis-R0531

### **SOLUTION**

- Concrete walls or slabs
- **2 Tecwool® 825** (thickness is depending on the fire resistance required and construction characteristics)

### **APPLICATION**

**Tecwool® 825** is spread with a pneumatic machine pursuant to the following technical specifications:

The surface to be protected requires no prior primer, mesh or any other type of support for the mortar adherence.

The surface to be protected should be free from dust, oil, waste, poorly attached particles, paint leftover, etc.

It is recommended to use water with the application hose to wash dirt away from the faces. This will also help achieve a thermal balance between the mortar and the applied surface.