

## 8 - Tunnels

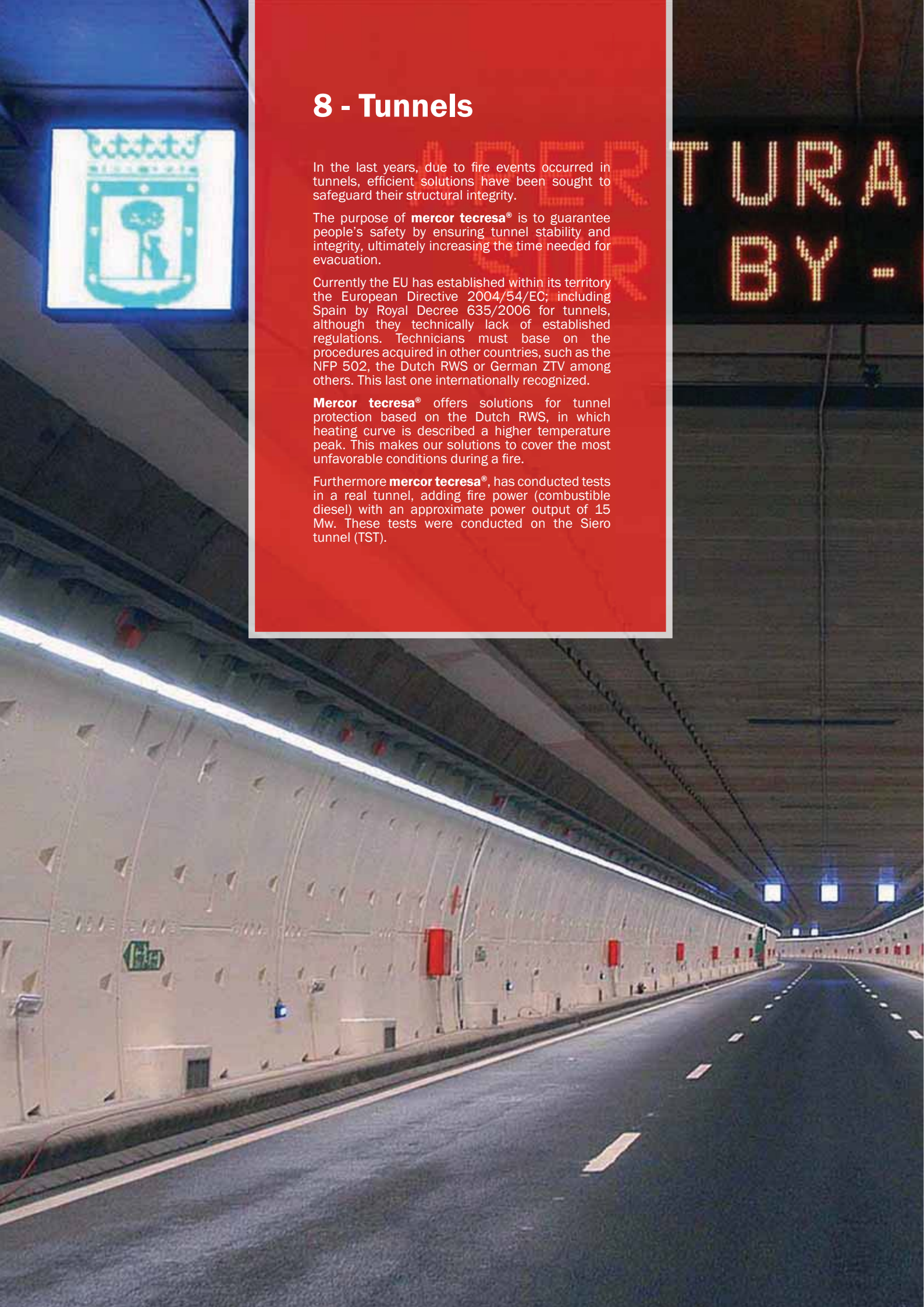
In the last years, due to fire events occurred in tunnels, efficient solutions have been sought to safeguard their structural integrity.

The purpose of **mercortecresa**<sup>®</sup> is to guarantee people's safety by ensuring tunnel stability and integrity, ultimately increasing the time needed for evacuation.

Currently the EU has established within its territory the European Directive 2004/54/EC; including Spain by Royal Decree 635/2006 for tunnels, although they technically lack of established regulations. Technicians must base on the procedures acquired in other countries, such as the NFP 502, the Dutch RWS or German ZTV among others. This last one internationally recognized.

**Mercortecresa**<sup>®</sup> offers solutions for tunnel protection based on the Dutch RWS, in which heating curve is described a higher temperature peak. This makes our solutions to cover the most unfavorable conditions during a fire.

Furthermore **mercortecresa**<sup>®</sup>, has conducted tests in a real tunnel, adding fire power (combustible diesel) with an approximate power output of 15 Mw. These tests were conducted on the Siero tunnel (TST).



## 8.4 TECBOR® 23 - RWS-120 TUNNEL SUSPENDED CEILING



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TECBOR®



Tunnels

### TEST

**Standard:** RWS.

**Laboratory:** TECNALIA

**Test N°:** 050632-002

### SOLUTION

- 1 Tecbor® 23 mm boards
- 2 120 mm slab
- 3 HLC-H 8x70 mm metal plug

### DESCRIPTION OF ASSEMBLY

Fix the **Tecbor® B** 23 mm board directly into the concrete slab with 10x60 mm metal plug.

This system does not need any type of joint paste, although sealing with **Tecsel® mastic** is recommended for holes bigger than 3 mm.

Contact our technical department for further information.

