

## PROTECTION OF PROMENADE DES ANGLAIS IN NICE NICE, PROVENCE-ALPES-CÔTE D'AZUR, FRANCE

### Safety Barriers

#### Problem

After the fatal event happened in Nice on 14th July 2016 on the Promenade des Anglais, major French cities considered solutions to protect public spaces such as pedestrian zones, tourist sites, airports, stadiums etc. against vehicle incursions. The attack highlighted the vulnerability of certain pedestrian areas to these threats.

#### Solution

The Nice-Côte-d'Azur municipality decided to install an anti-incursion barrier on the Promenade des Anglais to guarantee the safety of pedestrians. Maccaferri has designed and developed a protection device that met the specifications required by the municipality of Nice: the designed safety device had to be able to intercept the run of a 19-ton truck travelling at 50 km/h with an impact angle of 20°. MacSafe allows a maximum deformation of less than 3 metres to protect pedestrians close to the system. Moreover, it integrates with the surrounding of Promenade des Anglais. MacSafe® consists of two longitudinal high tensile steel cables supported by steel posts with energy dissipators systems at their ends. The posts are equipped with a tamper-proof system to facilitate cable installation and tensioning. The device can be fully or partially disassembled when the alert level decreases. In Nice, on the occasion of the Ironman race in July 2017, the cables were removed temporarily to facilitate the organization of the race and were then repositioned.

**Client:** NICE-CÔTE-D'AZUR MUNICIPALITY

**Designer / Consultant:** MACCAFERRI

**Contractor:** Garelli

**Products used (Qty.)**

- MacSafe 1 km

**Date of construction:** 02/2017 - 04/2017



General view of the protection MacSafe-system



Cable passing into the poles



General view of the protection MacSafe-system



General view of the protection MacSafe-system