

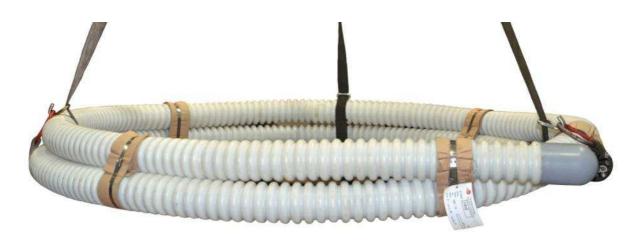
**TPE-13 PERMANENT GROUND ANCHORS** (Available in **TPE 13A** and **TPE 13B** versions)



**TPE-13 permanent anchors** are produced in compliance with the **Ministerial Decree as of 14.01.2008**, Decree **no. 12391 22.12.2011**, and with the European and Italian Standards.

The **TPE-13** anchor has a special **DDDK** sheath to allow applications at high hydrostatic pressures.

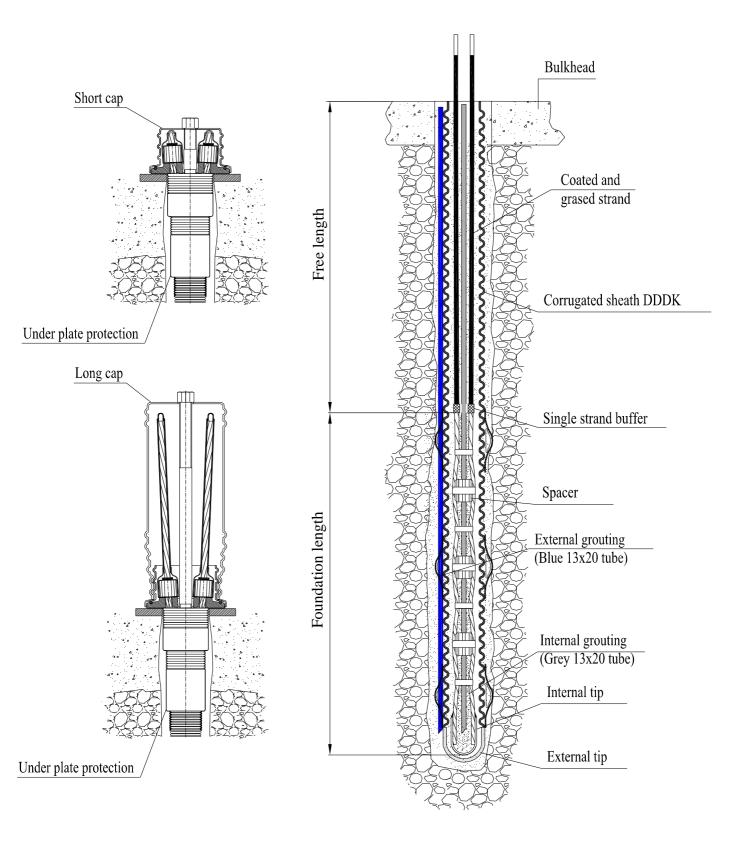
The TPE-13 ground anchors are defined permanent as their expected design life is over two years.



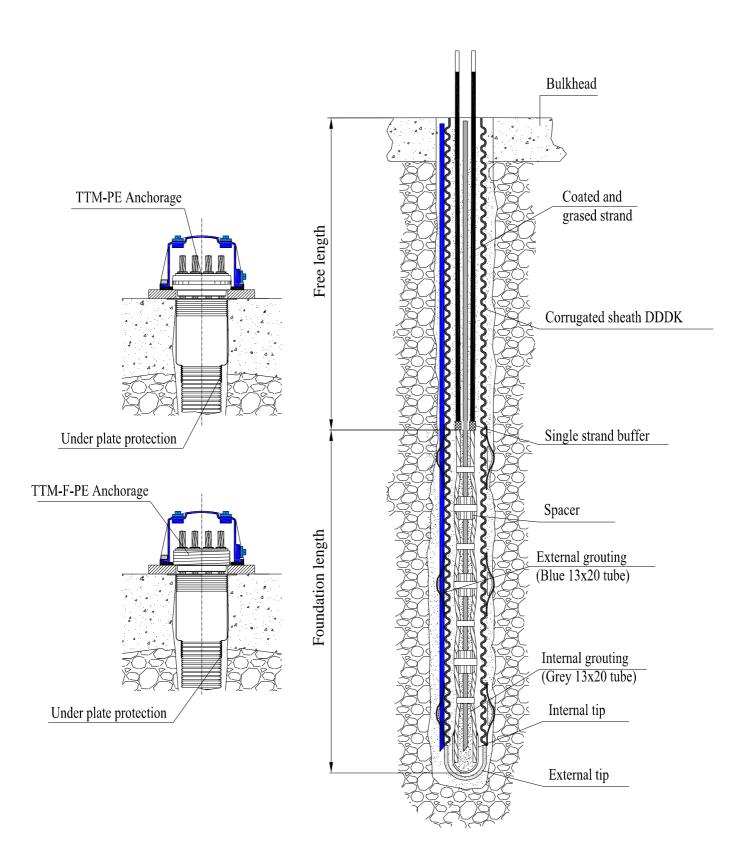
### The anchor is made as follows:

- In the active part, the strands are separated by special spacers which guarantee the tendon to maintain a sinusoidal shape. By means of suitable taping, the sinusoidal shape of the tendon increases the adherence with the foundation cement mix. Grouting takes place via 13x20 mm polyethylene/polypropylene tubes that can guarantee a max. operating grouting pressure of 40 bar at 40°C and a burst pressure of 40 bar at 40°C.
- The separation of the free length from the active part is achieved by way of elementary buffers of sealing material, which allow both parts to be perfectly hermetic and can be applied on each strand.
- The end part of the anchor is provided with a polyethylene ogive, which is electro-welded on sheath, to ease its insertion into the drilling hole and guarantee its total encapsulation.

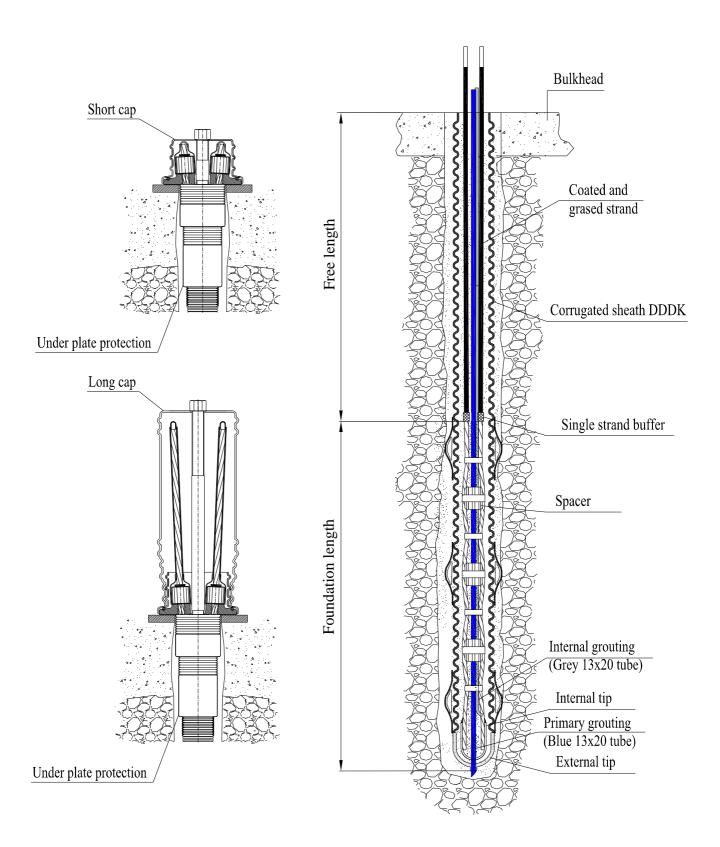
### **TPE-13A GROUND ANCHOR DIAGRAM** (Installed with **TTR-E** type anchor)



# **TPE-13A GROUND ANCHOR DIAGRAM** (Installed with **TTM** and **TTM-F** type anchor)



### **TPE-13B GROUND ANCHOR DIAGRAM** (Installed with **TTR-E** type anchor)



# **TPE-13B GROUND ANCHOR DIAGRAM** (Installed with **TTM** and **TTM-F** type anchor)

