Clarification on the foundation for Passively Safe Lighting columns

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Different countries traditionally have different methods of installing lighting columns.

In the United Kingdom (UK), it is common practice to install passively safe lighting columns into a plastic 'sleeve' or tube. For example; In Denmark, a concrete prefabricated foundation is buried into the ground and the column is mounted onto it.

Currently, Annex A of the European Norm EN 12767: 2007 makes reference to 'Soil' and 'Rigid' foundations by defining it's chemical make-up or characteristics. All passively safe classified columns are tested in these normalised 'Soil' and/or 'Rigid' foundations.

The soil that is normally used in installations will not match the chemical composition of the soil specified in the EN 12767:2007 and used in crash tests.
On the contrary, the EN 12767 does not classify the types of soil normally used in column installations.
Also prefabricated or other concrete solutions will, in practice, probably not be of the same characteristics as defined in the EN 12767:2007 for Rigid.

In order to expect the column to perform in the passively safe way in which it is classified, it is recommended that the foundation used is the same as defined in the EN 12767:2007.

For UK a National Annex is added to the BS EN 12767: 2007 which states for foundations in NA.7:
"If foundations different from these used in the certified impact crash test are to be used in practice, the ground resistance to shear forces of the foundation to be used should not be less than that of the foundations used in the test."

This allows using more stable foundations for products which are only tested in Soil foundation. The common foundations used in UK tend to be more towards "Rigid" than "Soil", because of the use of concrete. Those are more stable than the Soil foundation used in the crash test of the passive safe product. Examples are:

- Concrete Spread foundations (single and wide spreads)
- Concrete Planted foundations
- Sleeved foundation in concrete or capped with concrete
- Socket foundations

Stability of these common used foundations can be calculated according to the Sign Structures Guide or programs where these methods are build in like Buchanan or Keypost (or other software that is certified by a Notified Body).
Sapa cannot be held liable for the consequences that can occur, as a result of accidents where lighting columns do not perform as tested, when the conditions during the accident are different to those described in the Norm.

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