



# *MEMO*

June 11, 2019

TO: Evaluation Criteria Committee

FROM: Bart Berneche, PE

RE: **Proposed changes to EC027, the Evaluation Criteria for Helical Foundations for use under the International Residential Code - seeking approval**

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Evaluations following the requirements of Evaluation Criteria EC027 have been successfully completed for 2 years. Additional manufacturers would now like to move forward with reports on their products. Since these manufacturers have product specifications that differ from those covered by the scope of EC027, the proposal broadens the criteria to accommodate these applicants. The proposed draft criteria expands on the provisions of EC027 includes editorials and modifications aimed at clarifying the requirements.

We are bringing EC027 before the committee to request approval for the following changes:

- Section 1 - The term “pile” was removed throughout to reduce any possible entanglements with requirements for piles in other standards.
- Section 1.1 - The criteria was broadened to include the 2018 IRC, as requested by report holders.
- Section 1.2 - The criteria scope was broadened included multiple helix plates and increased maximum shaft sizes up to 4 ½ inches, nominal.
- Section 1.3.1 - The definition for the subject was changed. Helical foundation is now defined and used to make the subject more precise.
- Section 2.3 - References to the IBC were removed because this criteria is strictly for use with the IRC only.
- Section 4.2 - The retrofit bracket was added to the list of items required to be tested and the requirements were clarified.
- Section 4.2.4 - The test specifications were changed to allow more types of installation systems. Installation systems must be representative of the systems tested. Also, final determination of the maximum working capacity was put it in the hands of design professionals analyzing the testing results.



- Section 4.2.5 – The maximum helical foundation shaft size was increased and more specifics concerning the Torque Correlation Factor were added for clarification.
- Section 4.2.6 - Multi-helix foundations were added to the criteria scope and allowance for a test plan was added for use with systems that do not conform to the standard provisions.
- Section 7.11 – The proposal changes the restriction against use of systems in high seismic areas to an out-of-scope statement, to allow this use under the supervision of a design professional.
- General –Certain sections were moved around, and several editorial changes were made to clarify the criteria.

We believe that the proposed changes improve the criteria and we are requesting approval so we can evaluate and issue reports based on the revised criteria.