

ICC-ES Evaluation Report

ESR-3074 LABC and LARC Supplement

Reissued July 2023

This report is subject to renewal July 2025.

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DIVISION: 31 00 00—EARTHWORK Section: 31 63 00—Bored Piles

REPORT HOLDER:

SUPPORTWORKS, INC.

EVALUATION SUBJECT:

SUPPORTWORKS HELICAL FOUNDATION SYSTEMS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Supportworks Helical Foundation Systems, described in ICC-ES evaluation report <u>ESR-3074</u>, have also been evaluated for compliance with the code noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2020 City of Los Angeles Building Code (LABC)
- 2020 City of Los Angeles Residential Code (LARC)

2.0 CONCLUSIONS

The Supportworks Helical Foundation Systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-3074, comply with the LABC Section 1810, and are subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The Supportworks Helical Foundation Systems described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the evaluation report <u>ESR-3074</u>.
- The design, installation, conditions of use and identification of the helical foundation systems are in accordance with the 2018 International Building Code® (IBC) provisions noted in the evaluation report ESR-3074.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, Sections 1803 and 1810.3.1.5, as applicable.
- The helical foundation system may be used in new construction and resist horizontal loads as an exception to LABC Section 1810.3.1.5, provided the following conditions are followed:
 - The helical foundation system must comply with the provisions in <u>ESR-3074</u> that apply to installation in Seismic Design Categories D, E and F.
 - A soil investigation report as required by LABC Section 1803.1 shall be submitted to the Los Angeles Department of Building and Safety Grading Division for review and approval for each site where helical piles are installed.
 - For installation of helical piles under LABC covered structures, axial and lateral (where used) capacities of helical piles shall be determined in accordance with LABC Section 1810.3.3 by at least two project specific preproduction tests for each soil profile, size and depth of helical pile. At least two percent of all production piles shall be proof tested to the design strength, determined by using load combinations in LABC Section 1605.2.
 - For installation of helical piles under LARC covered structures, axial and lateral (where used) capacities of helical piles shall be determined in accordance with LABC Section 1810.3.3 by at least one project specific preproduction tests for



each soil profile, size and depth of helical pile. At least two percent of all production piles shall be proof tested to the design strength determined by using load combinations in LABC Section 1605.2.

- Helical piles installation shall be performed under the inspection and approval of the soils engineer and the continuous inspection and approval of the deputy grading inspector. The information recorded shall include installation equipment used, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation data as required by soils engineer.
- Helical piles shall satisfy corrosion resistance requirements of AC358. In addition, all helical piles materials that are subject to corrosion shall include at least 1/16-inch corrosion allowance.
- The allowable axial design load must comply with LABC Section 1810.3.3.1.9.
- The allowable lateral load must comply with <u>ESR-3074</u>. The seismic demand force must not exceed the allowable lateral load reported in ESR-3074.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.

This supplement expires concurrently with the evaluation report, reissued July 2023.