

# UniPile 5.0 Release History

## **v.5.0.0.59 (June 24, 2019)**

- Fix input forms freezing caused by C1.Win Components previous update

## **v.5.0.0.58 (May 17, 2019)**

- Update activation code algorithm to handle foreign cultures

## **v.5.0.0.57 (June 2, 2017)**

- Correct calculation precision of pile resistance transition height

## **v.5.0.0.56 (April 12, 2017)**

- Correct conversion of cell location during bidirectional (O-Cell) test simulation

## **v.5.0.0.55 (January 29, 2017)**

- Correct SI/US conversion and importing for culture using comma as a decimal separator

## **v.5.0.0.54 (January 9, 2017)**

- Disregard water pressure acting on lower cell in bidirectional loading test

## **v.5.0.0.53 (November 22, 2016)**

- Improve connection to dataset

## **v.5.0.0.52 (September 26, 2016)**

- Adjust network activation for Dropbox, OneDrive, and Google Drives

## **v.5.0.0.51 (July 23, 2016)**

- Improve activation procedure when using Map drive letter

## **v.5.0.0.50 (June 23, 2016)**

- Improve activation procedure for network license

#### **v.5.0.0.43 (March 1, 2016)**

- Validate length of "Name" field to 50 characters

#### **v.5.0.0.42 (February 25, 2016)**

- Update EXE executable to include latest License.licx
- Correct CDBL conversion error for Chin-Kondner, Hansen, and Zhang t-z/q-z functions for European culture

#### **v.5.0.0.40 (October 7, 2015)**

- Update Setup for Windows 10 install
- Add Project Name to all graphs
- Correct Project Name entry when printing data and results
- Improve taper effect calculation for SPT methods
- Chin-Kondner Hyperbolic: Decrease minimum accepted value for C1 from 0.005 to 0,000001
- t-z/q-z Functions: revise "ultimate resistance" term to "target resistance"
- Increase maximum load from 1,000,000 kN to 10,000,000 kN (~2,248,090 kips)

#### **v.5.0.0.39 (April 12, 2015)**

- Correct calculation of transition height/drag force for when unit shaft resistance decreases with depth
- Correct display of drag force in design summary when neutral plane is at the toe
- Override neutral plane to match equivalent raft in pile group settlement analysis
- Improve precision of 2:1 stress distribution under elongated footings

#### **v.5.0.0.38 (February 11, 2015)**

- Improve head-down loading test simulation precision
- Check for Zhang  $\Gamma < 0$
- Add Network Users Management

#### **v.5.0.0.37 (December 6, 2014)**

- Update grid control for compatibility with Chinese Windows 7/8 interface

#### **v.5.0.0.36 (November 2, 2014)**

- Correct soil settlement calculation below pile neutral plane for swelling soils

### **v.5.0.0.35 (October 6, 2014)**

- Update User manual to 5.04
- Update Examples manual to 5.07
- Add Demo Examples 11 and 12

### **v.5.0.0.34 (October 3, 2014)**

- Add Decourt (SPT) and O'Neill & Reese (SPT) methods
- Add Sandy Silt and Clayey Silt soil type to accommodate Decourt (SPT) method
- Include water pressure acting on lower cell in bidirectional loading test
- Improve accuracy of buoyancy in bidirectional loading test
- Correct validation of Shoulder Area Ratio,  $a$ , for Eslami-Fellenius method
- Revise unit shaft resistance in pile resistance result
- Adjust unit shaft resistance at soil layer boundaries
- Correct file format when exporting CPT/CPTu data to text file
- Revise "Check for Latest Release" feature
- Educational Version: Increase allowable pile embedment length to 50m (165 ft)
- Add Demo Example 10

### **v.5.0.0.33 (March 3, 2014)**

- Correct calculations of submerged excavations with negative GWT (i.e. lake condition)
- Improve exporting of soil data to XMLU

### **v.5.0.0.32 (February 10, 2014)**

- Update examples manual and demo examples
- Add "Convert To Static Method" feature
- Revise calculation of equivalent Beta
- Add resistance method and pile embedment to status bar
- Rename O-Cell to Bidirectional
- Rename Drag Load to Drag Force
- Add records capture option when importing SPT and CPT data
- Correct Eslami-Fellenius toe resistance calculation of Infinity
- Update tool bar for 125% fonts

### **v.5.0.0.31 (November 21, 2013)**

- Update for setup on Windows R8.1
- Add online registration and activation
- Improve user validation for CPT and SPT methods
- Improve toe resistance calculations for Bustamente-LCPC (CPT) method for CPT records with spread larger than  $0.75 \times \text{Pile Diameter}$

### **v.5.0.0.30 (October 7, 2013)**

- Improve user defined ultimate movement limit in T-Z/Q-Z graph
- Improve t-z/q-z graph synchronization in Ratio Function
- Remove  $0.5 < b < 3$  limit on exponent coefficient, b (t-z/q-z Exponential function)
- Remove  $0 < a < 0.01$  limit on Zhang Coefficient, a (t-z/q-z Zhang function)

### **v.5.0.0.29 (September 30, 2013)**

- Correct and improve importing of CPT/CPTu data for other cultures and regions
- Correct movement scale in T-Z/Q-Z graph
- Add user defined movement limit to T-Z/Q-Z graph
- Update examples manual and add Examples 8 and 9

### **v.5.0.0.28 (July 23, 2013)**

- Improve validation of Zhang Coefficient, a
- Correct scaling of t-z/q-z functions graph under when using US units
- Add residual load status to loading test simulation graphs
- Update Examples Manual (V.5.04)

### **v.5.0.0.27 (July 5, 2013)**

- Correct effective stresses at ground surface when loads with negative elevation are specified
- Update Examples Manual (v.5.02)

### **v.5.0.0.26 (June 27, 2013)**

- Correct calculation of loading test simulation for US Customary units

### **v.5.0.0.25 (June 24, 2013)**

- UniPile 5.0 Official Release