

# PRODUCT CATALOG

CHANCE® HELICAL PILES  
AND ACCESSORIES





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## BUILDING CODE

Hubbell Power Systems, Inc. maintains an ICC Evaluation Service report ESR-2794 for the U.S. and for those jurisdictions who have adopted the International Building Code (IBC). This demonstrates that our systems have been independently evaluated by a third party administrator to ensure that our products meet building code requirements. With more ICC-ES certification reports than any other helical pile brand, you can design confidently with Chance products. Building code approved products numbers are noted throughout this catalog with a +. Learn more about our building code products by visiting our website using the URL or scanning the QR code.

<https://www.hubbell.com/chancefoundationsolutions/en/resources/technical-literature/building-code-reports>



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# INTRODUCTION TO CHANCE® HELICAL PILES

A helical pile is a segmented deep foundation system with helical bearing plates welded to a central steel shaft. The load is transferred from the shaft to the soil through bearing plates. Central steel shafts are available in either type SS (Square Shaft) series or type RS (Round Shaft) series. The type SS series are available in 1-1/4" to 2-1/4" square sizes. The type RS series are available in 2-7/8" to 8-5/8" diameter sizes. The type SS/RS combinations are also available for compression applications in soil conditions where dense/hard soils must be penetrated with softer/loose soils above the bearing strata. The Helical Pulldown® Micropile (HPM) series is also used in applications similar to those requiring the use of the type SS/RS combinations.

Please refer to the most recent edition of the Chance Technical Design Manual for:

- Complete list of mechanical rating and section properties of the central steel shafts
- Product feasibility
- Installation methodology for guidelines on the proper shaft section based on application, soil conditions, site accessibility, etc.

Segments or sections are joined with bolted couplings. Installation depth is limited only by soil density and practicality based on economics. A helical bearing plate or helix is one pitch of a screw thread. All helices, regardless of their diameter, have a standard 3" pitch. Being a true helical shape, the helices do not auger into the soil but rather screw into it with minimal soil disturbance. Helical plates are spaced at distances far enough apart that they function independently as individual bearing elements; consequently, the capacity of a particular helix on a helical pile shaft is not influenced by the helix above or below it.

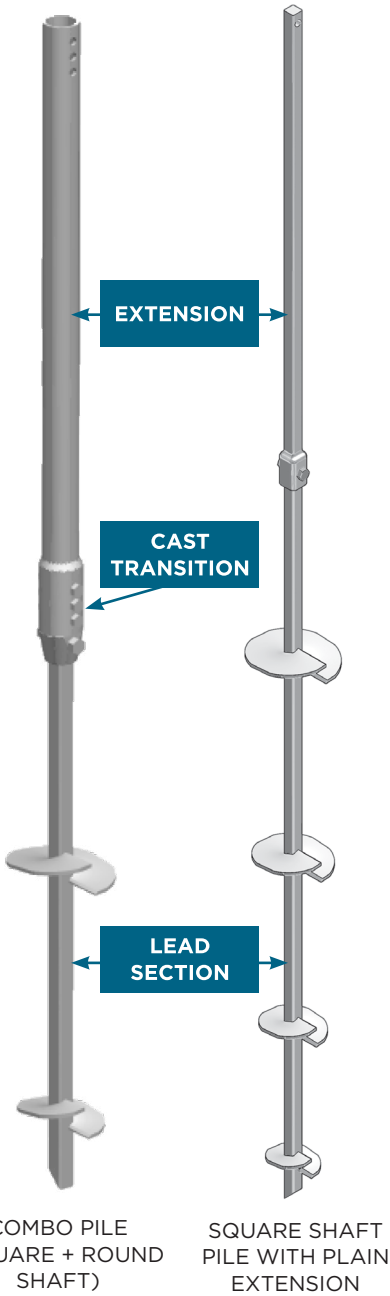
## Lead Section and Extensions

The first section or lead section contains the helical plates. This lead section can consist of a single helix or up to four helices. Additional helices can be added, if required, with the use of a helical extension. Standard helix sizes are shown in Table 1. The helices are arranged on the shaft such that their diameters increase as they get farther from the pilot point. The practical limits on the number of helices per pile is four to five if placed in a cohesive soil and six if placed in a cohesionless or granular soil.

Plain extensions are then added in standard lengths of 3.5, 5, 7, and 10 feet until the lead section penetrates into the bearing strata. Standard helix configurations are provided in the product series tables in this section. Note that lead time will be significantly reduced if a standard helix configuration is selected.

**STANDARD HELIX SIZES - LEAD SECTIONS & EXTENSIONS, TABLE 1**

| HELIX DIAMETER<br>in (cm)                  | 6<br>(15)   | 8<br>(20)   | 10<br>(25)  | 12<br>(30)   | 14<br>(35)   | 16<br>(40)     |
|--------------------------------------------|-------------|-------------|-------------|--------------|--------------|----------------|
| AREA<br>in <sup>2</sup> (cm <sup>2</sup> ) | 27<br>(172) | 48<br>(312) | 76<br>(493) | 111<br>(716) | 151<br>(974) | 199<br>(1,286) |





## CHANCE® HELICAL SQUARE SHAFT PRODUCTS

PRODUCT RATINGS, TABLE 2

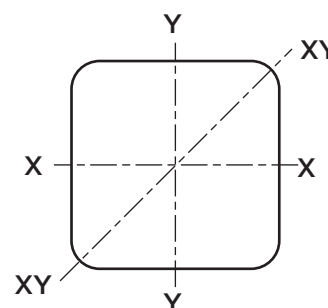
| Product Series | Torque Rating Ft-lbs (Nm) | Ultimate Tension Strength*<br>Kip (kN) | Uplift/Compression<br>Capacity Limit**<br>Kip (kN) |
|----------------|---------------------------|----------------------------------------|----------------------------------------------------|
| SS125          | 4,000 (5 400)             | 50 (222)                               | 40 (178)                                           |
| SS5            | 5,700 (7 730)             | 70 (312)                               | 57 (254)                                           |
| SS150          | 7,000 (9 500)             | 70 (312)                               | 70 (312)                                           |
| SS175          | 10,500 (14 240)           | 100 (445)                              | 105 (467)                                          |
| SS200          | 16,000 (21 700)           | 150 (668)                              | 160 (712)                                          |
| SS225          | 21,000 (28 470)           | 200 (890)                              | 210 (934)                                          |

\* Based on Mechanical Strength of Coupling

\*\* Based on Torque Rating – Uplift/Compression Capacity Limit = Torque Rating x  $K_t$   
 “Default”  $K_t$  for Type SS = 10 ft-l (33 m-l)  
 Higher Compression Capacities Available with Helical Pulldown® Micropile

SS CROSS SECTIONS, TABLE 2B

| Product Series | X<br>Shaft Size Across Flats<br>Inches (mm) | XY<br>Diagonal Length<br>Inches (mm) |
|----------------|---------------------------------------------|--------------------------------------|
| SS125          | 1.25" (32)                                  | 1.66 (42)                            |
| SS5            | 1.5" (38)                                   | 1.91 (49)                            |
| SS150          | 1.5" (38)                                   | 1.91 (49)                            |
| SS175          | 1.75" (44)                                  | 2.27 (58)                            |
| SS200          | 2.0" (51)                                   | 2.57 (65)                            |
| SS225          | 2.25" (57)                                  | 2.93 (74)                            |



### 1-1/4" TO 2-1/4" SQUARE SHAFT NOTES

- Included connection hardware:
  - SS125 1-1/4" material: 5/8" diameter bolt per ASTM A325 type 1 and nut.
  - SS5 and SS150 1-1/2" material: 3/4" diameter bolt per ASTM A193 Grade B7 with cold weather properties and nut.
  - SS175 1-3/4" material: 7/8" diameter bolt per ASTM A193 Grade B7 and nut.
  - SS200 2" material: 1-1/8" diameter bolt per ASTM A193 Grade B7 and nut.
  - SS225 2-1/4" material: 1-1/4" diameter bolt per ASTM A193 Grade B7 and nut.
- Catalog numbers with an \* after the number are lead sections that have been designed with a longer shaft above the top helix for the Chance® Helical Pulldown® Micropile.
- The letter "T" after the helix diameter stands for 1/2" thick helix material (otherwise common thickness is 3/8").
- All helices spaced three times the diameter of the preceding helix unless otherwise specified by customer.
- The standard helix has a sharpened leading edge.
- All products are hot dip galvanized per ASTM A153.
- For plain steel and/or special order items contact your area Chance distributor for availability.

### SS125 (1-1/4") LEAD SECTIONS, TABLE 3

| Catalog No. | Plate Diameter (in) |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade | Coating |
|-------------|---------------------|----|----|---------------------|------------------------|--------------|-------------|---------|
|             | A                   | B  | C  |                     |                        |              |             |         |
| C1500564    | 8                   | -  | -  | 1                   | 5.9                    | 9            | 50          | GALV    |
| C1500545    | 8                   | -  | -  | 5                   | 60.0                   | 33           | 50          | GALV    |
| C1500548    | 8                   | 10 | -  | 5                   | 60.0                   | 44           | 50          | GALV    |
| C1500551    | 8                   | 10 | 12 | 5                   | 60.1                   | 58           | 50          | GALV    |
| C1500565    | 10                  | -  | -  | 1                   | 5.9                    | 12           | 50          | GALV    |
| C1500546    | 10                  | -  | -  | 5                   | 60.0                   | 36           | 50          | GALV    |
| C1500549    | 10                  | 12 | -  | 5                   | 60.0                   | 53           | 50          | GALV    |
| C1500552    | 10                  | 12 | 14 | 7                   | 79.0                   | 78           | 50          | GALV    |
| C1500566    | 12                  | -  | -  | 1                   | 5.9                    | 17           | 50          | GALV    |
| C1500547    | 12                  | -  | -  | 5                   | 60.0                   | 40           | 50          | GALV    |
| C1500567    | 14                  | -  | -  | 1                   | 5.9                    | 21           | 50          | GALV    |
| C1500601    | 14                  | -  | -  | 5                   | 60.0                   | 43           | 50          | GALV    |

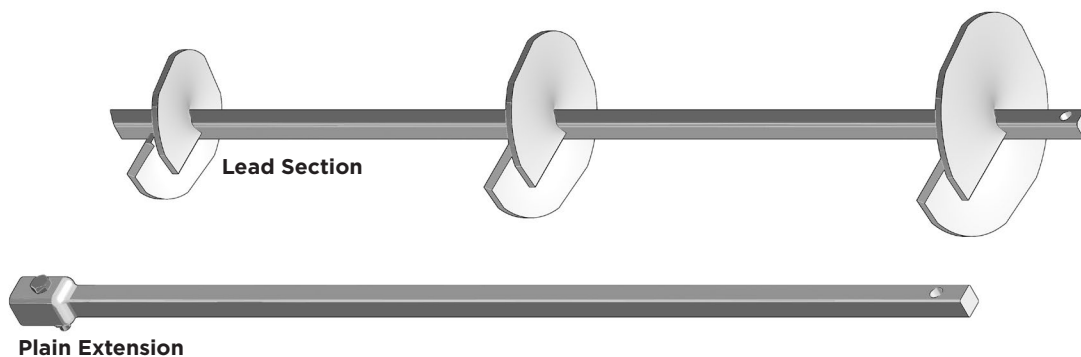
\* Effective length: from leading edge of bottom helix to center of the bolt hole.

### SS125 (1-1/4") EXTENSIONS, TABLE 4

| Catalog No. | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Coating |
|-------------|---------------------|------------------------|--------------|---------|
| C1500553    | 3.5                 | 38.0                   | 21           | GALV    |
| C1500554    | 5                   | 57.8                   | 30           | GALV    |
| C1500555    | 7                   | 80.8                   | 39           | GALV    |
| C1500556    | 10                  | 117.3                  | 54           | GALV    |

\* Effective length: from bolt hole to bolt hole. Contact your distributor for non-galvanized.

### COMMON SS125 CONFIGURATIONS



SS125 (1-1/4") SOIL NAIL LEAD SECTIONS &amp; EXTENSIONS, TABLE 5

| Type      | Catalog No. | Helix Size | Number of Helices | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade | Coating |
|-----------|-------------|------------|-------------------|---------------------|------------------------|----------------------------|--------------|-------------|---------|
| Lead      | C1500581    | 6          | 2                 | 5                   | 57.3                   | -                          | 34           | 50          | GALV    |
| Lead      | C1500582    | 8          | 2                 | 5                   | 57.3                   | -                          | 38           | 50          | GALV    |
| Lead      | C1500583    | 6          | 3                 | 7                   | 76.3                   | -                          | 48           | 50          | GALV    |
| Lead      | C1500584    | 8          | 3                 | 7                   | 76.3                   | -                          | 52           | 50          | GALV    |
| Extension | C1500585    | 6          | 2                 | 5                   | 57.8                   | 6                          | 36           | 50          | GALV    |
| Extension | C1500586    | 8          | 2                 | 5                   | 57.8                   | 6                          | 40           | 50          | GALV    |
| Extension | C1500587    | 6          | 3                 | 7                   | 80.8                   | 7                          | 50           | 50          | GALV    |
| Extension | C1500588    | 8          | 3                 | 7                   | 80.8                   | 7                          | 54           | 50          | GALV    |

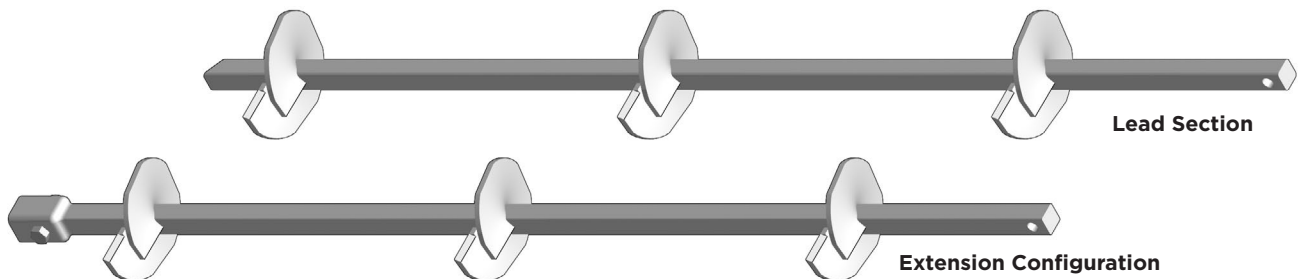
\* Effective length: from bolt hole to bolt hole. Contact your distributor for non-galvanized.

SS5 (1-1/2") SOIL NAIL LEAD SECTIONS &amp; EXTENSIONS, TABLE 8

| Type      | Catalog No. | Helix Size | Number of Helices | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade | Coating |
|-----------|-------------|------------|-------------------|---------------------|------------------------|----------------------------|--------------|-------------|---------|
| Lead      | C1100692    | 8          | 2                 | 5                   | 52.9                   | -                          | 49           | 50          | GALV    |
| Lead      | C1100691    | 8          | 3                 | 7                   | 77.9                   | -                          | 69           | 50          | GALV    |
| Extension | C1100690    | 8          | 2                 | 5                   | 57.2                   | 4-3/4"                     | 51           | 50          | GALV    |
| Extension | C1100689    | 8          | 3                 | 7                   | 80.4                   | 6-1/4"                     | 71           | 50          | GALV    |

\* Effective length: from bolt hole to bolt hole. Contact your distributor for non-galvanized.

## SS5/SS125 SOIL NAIL CONFIGURATIONS





**SS5 (1-1/2") LEAD SECTIONS, TABLE 6**

| Catalog No. | Plate Diameter (in) |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|----|---------------------|------------------------|--------------|-------------|
|             | A                   | B  | C  |                     |                        |              |             |
| T1500086    | 6                   | 6  | -  | 3                   | 29.7                   | 49           | 50          |
| C1500244    | 6                   | 8  | -  | 3                   | 29.7                   | 50           | 50          |
| C1500030    | 6                   | 8  | -  | 7                   | 76.2                   | 64           | 50          |
| C1500002 †  | 8                   | -  | -  | 5                   | 52.9                   | 44           | 50          |
| C1500001 †  | 8                   | -  | -  | 7                   | 76.2                   | 56           | 50          |
| C1500160 †  | 8                   | 10 | -  | 3                   | 32.7                   | 39           | 50          |
| C1500006 †  | 8                   | 10 | -  | 7                   | 76.2                   | 70           | 50          |
| C1500031 †  | 8                   | 10 | -  | 10                  | 116.9                  | 93           | 50          |
| C1500007 †  | 8                   | 10 | 12 | 5                   | 60.2                   | 68           | 50          |
| C1500397 †  | 8                   | 10 | 12 | 7                   | 76.2                   | 79           | 50          |
| C1500058 †  | 10                  | -  | -  | 5                   | 52.9                   | 47           | 50          |
| C1500003 †  | 10                  | -  | -  | 7                   | 76.2                   | 62           | 50          |
| C1500161 †  | 10                  | 12 | -  | 3                   | 38.9                   | 55           | 50          |
| C1500051 †  | 10                  | 12 | -  | 7                   | 76.2                   | 77           | 50          |
| C1500489 †  | 10                  | 12 | 14 | 7                   | 76.2                   | 93           | 50          |
| C1500398    | 10                  | 12 | 14 | 10                  | 116.9                  | 119          | 50          |
| C1500242 †  | 12                  | -  | -  | 5                   | 52.9                   | 52           | 50          |
| C1500004 †  | 12                  | -  | -  | 7                   | 76.2                   | 68           | 50          |
| C150030     | 12                  | 14 | 16 | 10                  | 116.9                  | 140          | 50          |
| C1500243 †  | 14                  | -  | -  | 5                   | 52.9                   | 55           | 50          |
| C1500005 †  | 14                  | -  | -  | 7                   | 76.2                   | 72           | 50          |
| T1100607 †  | 14                  | 14 | -  | 7                   | 76.2                   | 95           | 50          |

\* Effective length: from leading edge of bottom helix to center of bolt hole.

† ICC-ES Building code listed - see page 2 for more information.



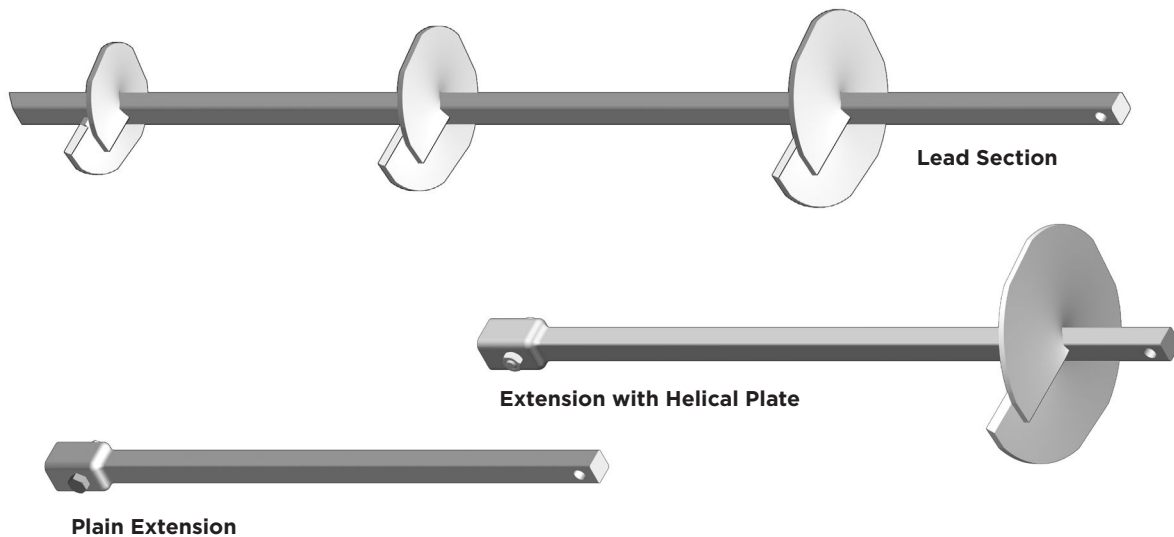
## SS5 (1-1/2") EXTENSIONS, TABLE 7

| Catalog No.  | Plate Diameter (A) | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade | Coating |
|--------------|--------------------|---------------------|------------------------|----------------------------|--------------|-------------|---------|
| C1500047 †   | -                  | 3.5                 | 37.4                   | -                          | 28           | -           | GALV    |
| C1500008 †   | -                  | 5                   | 57.2                   | -                          | 40           | -           | GALV    |
| C1500009 †   | -                  | 7                   | 80.2                   | -                          | 57           | -           | GALV    |
| C1500048 †   | -                  | 10                  | 119.7                  | -                          | 78           | -           | GALV    |
| C1500166 †   | 14                 | 3                   | 37.4                   | 47-1/4                     | 55           | 80          | GALV    |
| T1500440     | 14                 | 5                   | 57.2                   | 3-1/4                      | 60           | 80          | GALV    |
| T15004402001 | 16                 | 5                   | 57.2                   | 3-1/4                      | 88           | -           | GALV    |

\* Effective length: from bolt hole to bolt hole. Contact your distributor for non-galvanized.

† ICC-ES Building code listed - see page 2 for more information.

## COMMON SS5 CONFIGURATIONS





**SS150 (1-1/2") LEAD SECTIONS, TABLE 9**

| Catalog No. | Plate Diameter (in) |    |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|----|----|---------------------|------------------------|--------------|-------------|
|             | A                   | B  | C  | D  |                     |                        |              |             |
| C1500400    | 6                   | 8  | 10 | -  | 7                   | 76.2                   | 70           | 80          |
| C1500168    | 8                   | 10 | -  | -  | 3                   | 29.7                   | 39           | 80          |
| C1500472    | 8                   | 10 | -  | -  | 5                   | 57.2                   | 57           | 80          |
| C1500490    | 8                   | 10 | -  | -  | 7                   | 76.2                   | 68           | 80          |
| C1500169    | 8                   | 10 | 12 | -  | 5                   | 60.2                   | 67           | 80          |
| C1501029    | 8                   | 10 | 12 | -  | 7                   | 76.2                   | 80           | 80          |
| T1100521    | 8                   | 10 | 12 | 14 | 10                  | 116.9                  | 127          | 80          |
| C1500163    | 10                  | 12 | 14 | -  | 7                   | 76.2                   | 96           | 80          |
| C1500165    | 10                  | 12 | 14 | 14 | 10                  | 116.9                  | 143          | 80          |
| C1500167    | 14                  | -  | -  | -  | 5                   | 57.2                   | 83           | 80          |
| C1500170    | 14                  | 14 | 14 | -  | 10                  | 116.9                  | 135          | 80          |

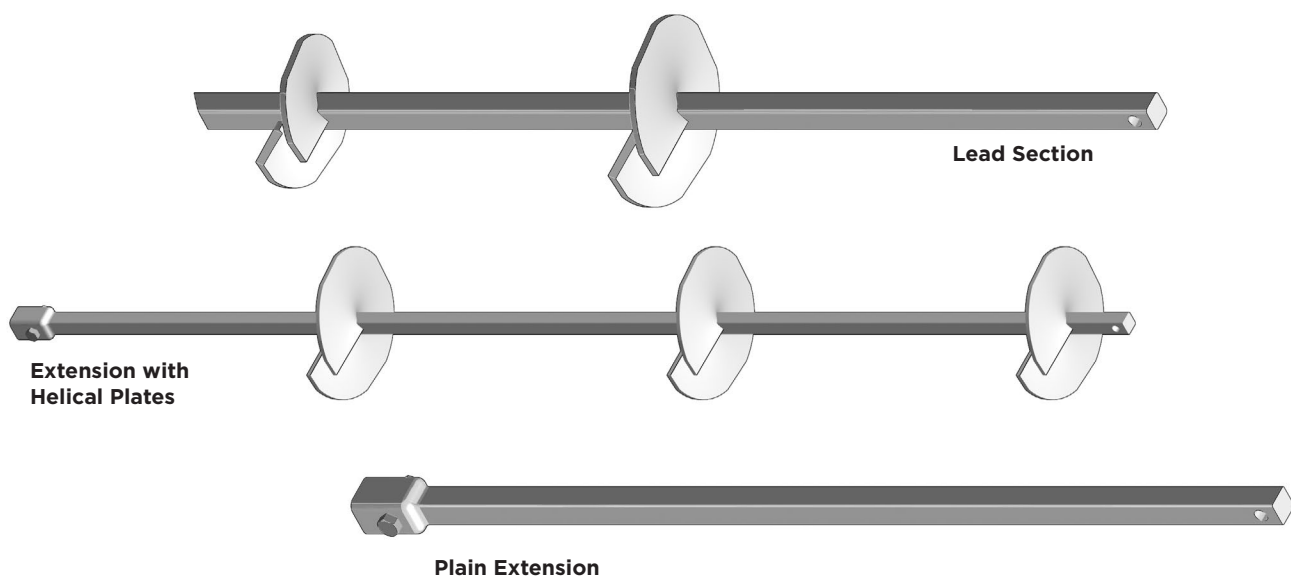
\* Effective length: from leading edge of bottom helix to center of bolt hole.

**SS150 (1-1/2") EXTENSIONS, TABLE 10**

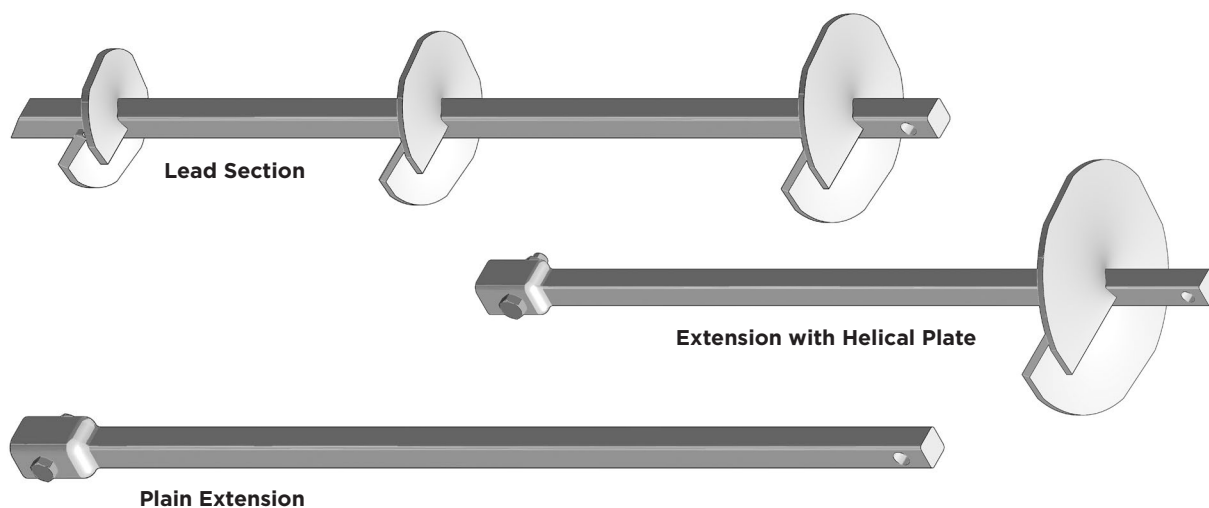
| Catalog No. | Plate Diameter (in) |    |    | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|----|---------------------|------------------------|----------------------------|--------------|-------------|
|             | A                   | B  | C  |                     |                        |                            |              |             |
| C1500144    | -                   | -  | -  | 3                   | 37.4                   | -                          | 27           | -           |
| C1500145    | -                   | -  | -  | 5                   | 57.2                   | -                          | 41           | -           |
| C1500146    | -                   | -  | -  | 7                   | 80.2                   | -                          | 64           | -           |
| C1500175    | -                   | -  | -  | 10                  | 127.2                  | -                          | 81           | -           |
| C1500176    | 14                  | -  | -  | 5                   | 44.9                   | 37                         | 28           | 80          |
| C1500177    | 14                  | 14 | -  | 7                   | 80.2                   | 37                         | 93           | 80          |
| C1500178    | 14                  | 14 | 14 | 10                  | 122.2                  | 36                         | 142          | 80          |

\* Effective length: from bolt hole to bolt hole.

## COMMON SS150 CONFIGURATIONS



## COMMON SS175 CONFIGURATIONS



**SS175 (1-3/4") LEAD SECTIONS, TABLE 11**

| Catalog No. | Plate Diameter (in) |    |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|----|----|---------------------|------------------------|--------------|-------------|
|             | A                   | B  | C  | D  |                     |                        |              |             |
| C1500010 †  | 8                   | -  | -  | -  | 5                   | 57.8                   | 60           | 80          |
| C1500179 †  | 8                   | 10 | -  | -  | 3                   | 30.1                   | 48           | 80          |
| C1500012 †  | 8                   | 10 | -  | -  | 5                   | 57.8                   | 71           | 80          |
| C1500493 †  | 8                   | 10 | -  | -  | 7                   | 76.3                   | 88           | 80          |
| C1500180 †  | 8                   | 10 | 12 | -  | 5                   | 57.8                   | 82           | 80          |
| C1500401 †  | 8                   | 10 | 12 | -  | 7                   | 76.3                   | 101          | 80          |
| C1500986    | 8                   | 10 | 12 | -  | 10                  | 122.3                  | 146          | 80          |
| C1100247 †  | 8                   | 10 | 12 | 14 | 10                  | 122.3                  | 149          | 80          |
| C1500093 †  | 10                  | 12 | -  | -  | 5                   | 57.8                   | 79           | 80          |
| C1502195 †† | 10                  | 12 | 14 | -  | 7                   | 76.3                   | 116          | 80          |
| C1500402 †  | 10                  | 12 | 14 | -  | 10                  | 122.3                  | 156          | 80          |
| C1500181 †  | 14                  | 14 | 14 | -  | 10                  | 122.3                  | 158          | 80          |

\* Effective length: from leading edge of bottom helix to center of bolt hole.

† ICC-ES Building code listed - see page 2 for more information.

†† Listed in the building code as T1100674

**SS175 (1-3/4") EXTENSIONS, TABLE 12**

| Catalog No. | Plate Diameter (in) |    | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|---------------------|------------------------|----------------------------|--------------|-------------|
|             | A                   | B  |                     |                        |                            |              |             |
| C1500183 †  | -                   | -  | 3.5                 | 36.8                   | -                          | 38           | -           |
| C1500013 †  | -                   | -  | 5                   | 58.3                   | -                          | 56           | -           |
| C1500014 †  | -                   | -  | 7                   | 79.8                   | -                          | 76           | -           |
| C1500184 †  | -                   | -  | 10                  | 123.1                  | -                          | 112          | -           |
| C1500185 †  | 14                  | -  | 3                   | 45.6                   | 37                         | 66           | 80          |
| C1500470 †  | 14                  | -  | 5                   | 58.3                   | 4                          | 80           | 80          |
| C1500186 †  | 14                  | 14 | 7                   | 79.8                   | 36                         | 116          | 80          |

\* Effective length: from bolt hole to bolt hole.

† ICC-ES Building code listed - see page 2 for more information.

SS200 (2") LEAD SECTIONS, TABLE 13

| Catalog No. | Plate Diameter (in) |     |     |     | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|-----|-----|---------------------|------------------------|--------------|-------------|
|             | A                   | B   | C   | D   |                     |                        |              |             |
| C1502196    | 6T                  | 8T  | 10T | -   | 5                   | 59.2                   | 97           | 80          |
| C1502197    | 6T                  | 8T  | 10T | 12T | 7                   | 78.9                   | 136          | 80          |
| C1502198    | 8T                  | 10T | 12T | -   | 5                   | 59.2                   | 120          | 80          |
| C1500403    | 8T                  | 10T | 12T | -   | 8                   | 78.9                   | 135          | 80          |
| C1502199    | 8T                  | 10T | 12T |     | 10                  | 125.2                  | 150          | 80          |
| C1502200    | 8T                  | 10T | 12T | 14T | 10                  | 125.2                  | 213          | 80          |
| C1502201    | 10T                 | 12T | 14T | -   | 7                   | 78.9                   | 147          | 80          |
| C1500404    | 10T                 | 12T | 14T | -   | 10                  | 125.2                  | 212          | 80          |
| C1100572    | 14T                 | 14T | 14T | -   | 10                  | 125.2                  | 228          | 80          |

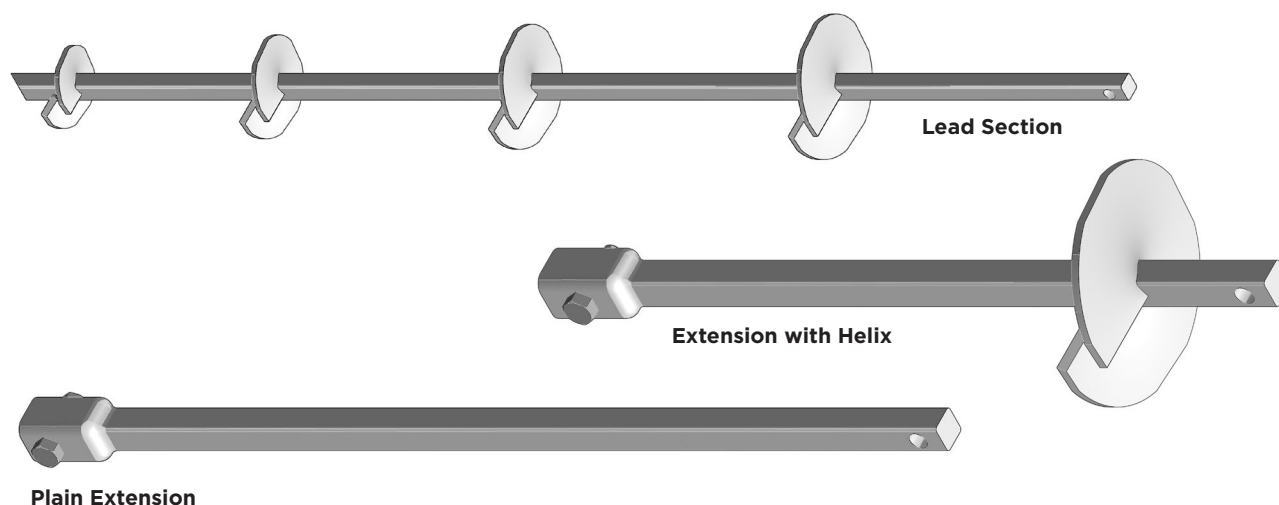
\* Effective length: from leading edge of bottom helix to center of bolt hole. "T" after plate diameter means 1/2" thick helix.

SS200 (2") EXTENSIONS, TABLE 14

| Catalog No. | Plate Diameter (in) |     |     | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|-----|---------------------|------------------------|----------------------------|--------------|-------------|
|             | A                   | B   | C   |                     |                        |                            |              |             |
| C1502203    | -                   | -   | -   | 3                   | 36.6                   | -                          | 50           | -           |
| C1502204    | -                   | -   | -   | 5                   | 58.6                   | -                          | 75           | -           |
| C1502205    | -                   | -   | -   | 7                   | 80.1                   | -                          | 100          | -           |
| C1502206    | -                   | -   | -   | 10                  | 123.2                  | -                          | 150          | -           |
| C1502207    | 14T                 | -   | -   | 3                   | 45.6                   | 35                         | 78           | 80          |
| C1502208    | 14T                 | 14T | -   | 7                   | 80.1                   | 32                         | 152          | 80          |
| C1502209    | 14T                 | 14T | 14T | 10                  | 123.1                  | 37-1/4                     | 210          | 80          |

\* Effective length: from bolt hole to bolt hole.

## COMMON SS200 CONFIGURATIONS



### SS225 (2-1/4") LEAD SECTIONS, TABLE 15

| Catalog No. | Plate Diameter (in) |     |     |     | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|-----|-----|---------------------|------------------------|--------------|-------------|
|             | A                   | B   | C   | D   |                     |                        |              |             |
| C1502210    | 6T                  | 8T  | 10T | -   | 5                   | 52.3                   | 108          | 80          |
| C1502211    | 8T                  | 10T | 12T | -   | 7                   | 72.5                   | 146          | 80          |
| C1502212    | 8T                  | 10T | 12T | 14T | 10                  | 112.8                  | 142          | 80          |
| C1502213    | 14T                 | 14T | 14T | -   | 10                  | 142.8                  | 250          | 80          |

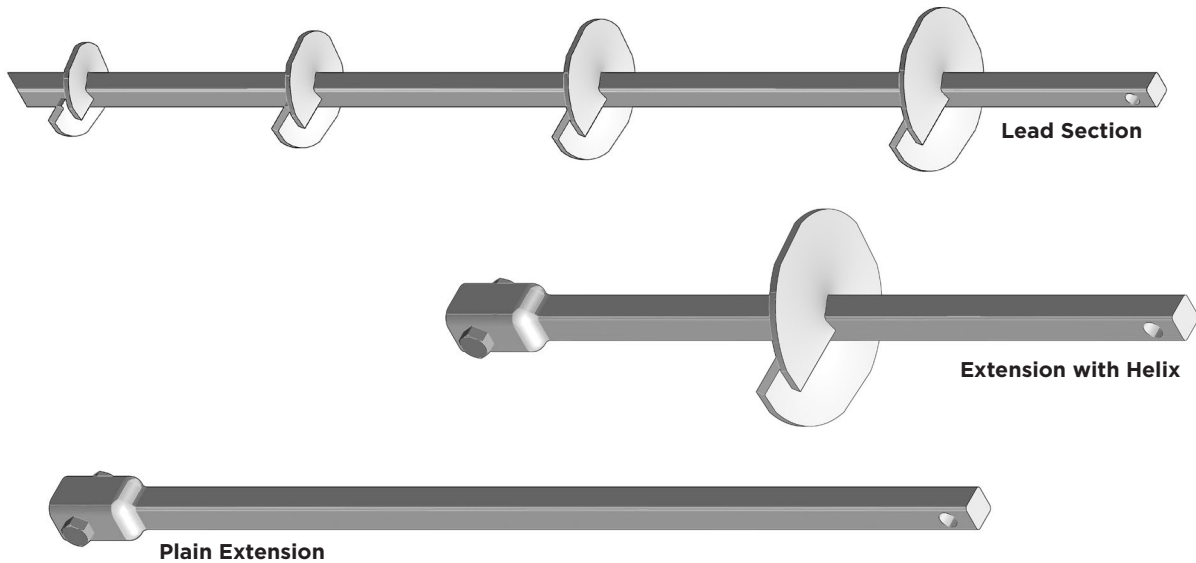
\* Effective length: from leading edge of bottom helix to center of bolt hole.  
 "T" after plate diameter means 1/2" thick helix.

### SS225 (2-1/4") EXTENSIONS, TABLE 16

| Catalog No. | Plate Diameter (in) |     | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|---------------------|------------------------|----------------------------|--------------|-------------|
|             | A                   | B   |                     |                        |                            |              |             |
| C1502214    | -                   | -   | 3                   | 31.0                   | -                          | 70           | -           |
| C1502215    | -                   | -   | 5                   | 52.1                   | -                          | 88           | -           |
| C1502216    | -                   | -   | 7                   | 72.1                   | -                          | 116          | -           |
| C1502217    | -                   | -   | 9                   | 111.0                  | -                          | 175          | -           |
| C1502218    | 14T                 | -   | 5                   | 52.1                   | 24                         | 79           | 80          |
| C1502219    | 14T                 | 14T | 7                   | 74.0                   | 35-1/4                     | 170          | 80          |

\* Effective length: from bolt hole to bolt hole.  
 "T" after plate diameter means 1/2" thick helix.

### COMMON SS225 CONFIGURATIONS





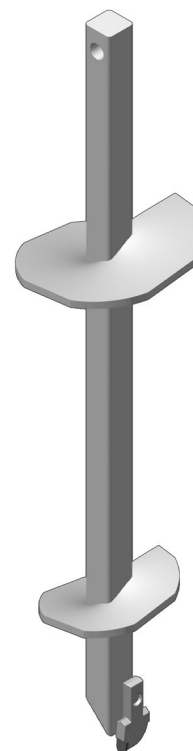
## ROCK-IT™ Lead Sections

The Chance® ROCK-IT™ lead section is an innovative solution to penetrate rocky or high blow count soils without pre-drilling or field modifications. The single carbide, patented design was developed to provide an economical, yet proven solution to reach load-bearing depths in high blow count material.

Learn more at <https://info.chancefoundationsolutions.com/rock-it>

Some features of the ROCK-IT are:

- Reduced installation time to save time and money
- Wear resistant, offset carbide tip designed to break through rocky soil
- Reduced spiking of torque and chatter during installation for a safer alternative

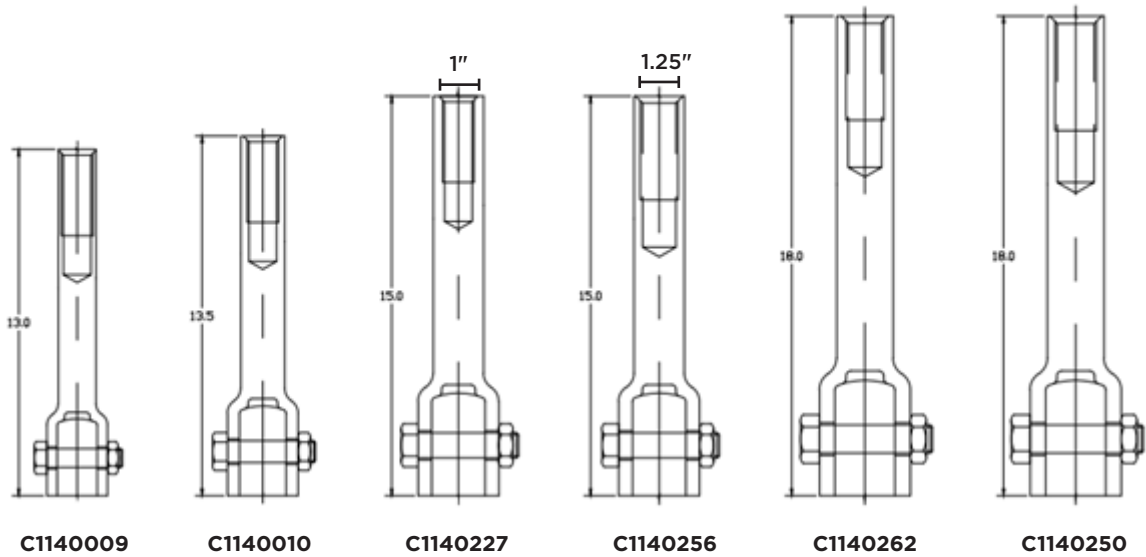


**ROCK-IT LEAD SECTIONS, TABLE 17**

| Catalog No. | Product Series | Plate Diameter (in) |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Ultimate Capacity (kip) | Helix Grade |
|-------------|----------------|---------------------|----|----|---------------------|------------------------|--------------|-------------------------|-------------|
|             |                | A                   | B  | C  |                     |                        |              |                         |             |
| C1501488    | SS150          | 6                   | 8  | -  | 3                   | 31                     | 36           | 70                      | 80          |
| C1501489    | SS150          | 8                   | 10 | -  | 3                   | 31                     | 43           | 70                      | 80          |
| C1501505    | SS150          | 8                   | 10 | -  | 5                   | 59                     | 60           | 70                      | 80          |
| C1501511    | SS175          | 6                   | 8  | -  | 3                   | 31                     | 46           | 105                     | 80          |
| C1501513    | SS175          | 8                   | 10 | -  | 3                   | 31                     | 54           | 105                     | 80          |
| C1501507    | SS175          | 8                   | 10 | -  | 5                   | 59                     | 76           | 105                     | 80          |
| C1501509    | SS175          | 8                   | 10 | 12 | 5                   | 59                     | 94           | 105                     | 80          |
| C1501532    | SS200          | 8                   | 10 | 12 | 7                   | 81.3                   | 131          | 150                     | 80          |
| C1501544    | SS225          | 8                   | 10 | 12 | 7                   | 74.7                   | 140          | 200                     | 80          |

\* Effective length: from bolt hole to bolt hole.

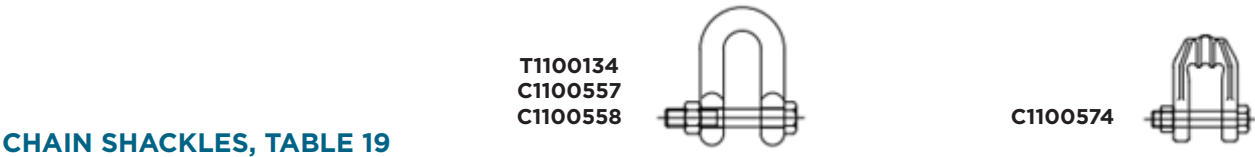
# Threaded Dywidag Adapters, Chain Shackles and Adapters



THREADED DYWIDAG ADAPTERS (WITH BOLTS AND NUTS), TABLE 18

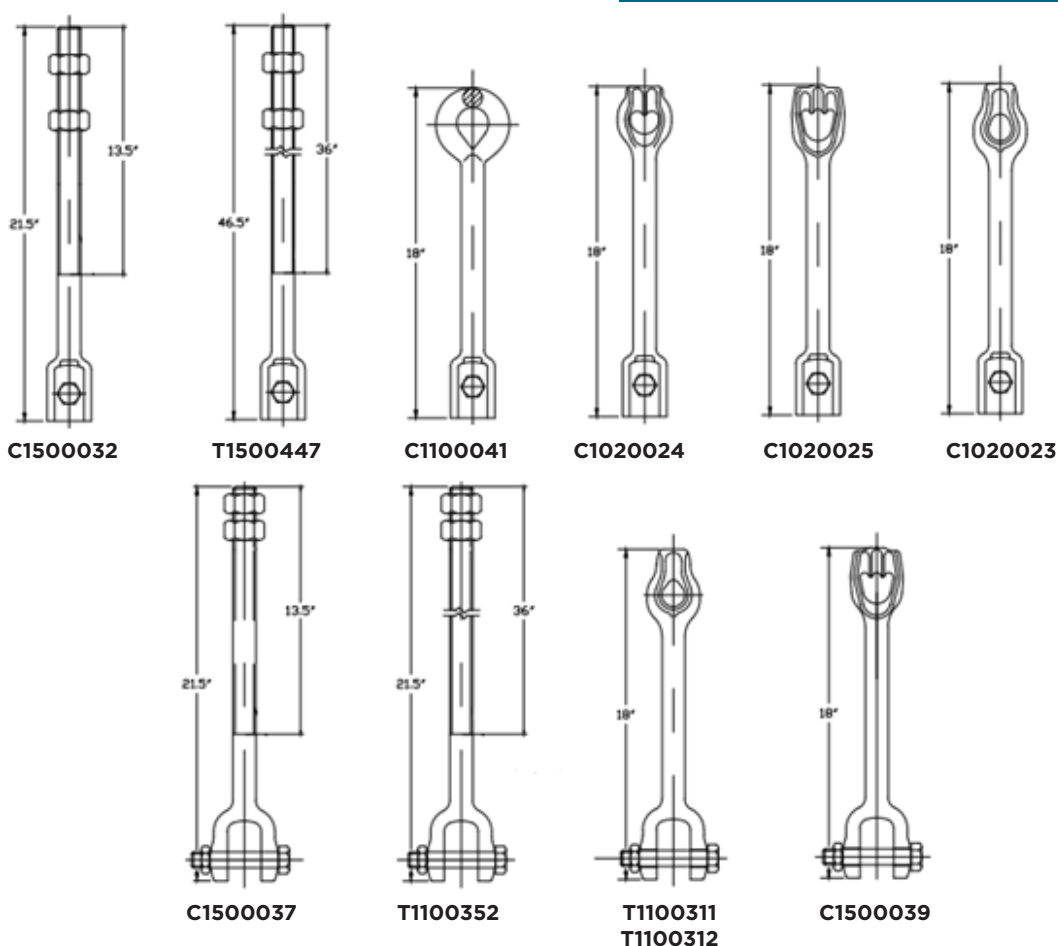
| Catalog No. | Product Series | Overall Length (in) | Weight (lbs) | Ultimate Capacity (kip) | Coating |
|-------------|----------------|---------------------|--------------|-------------------------|---------|
| C1101078*   | SS5            | 9                   | 7            | 70                      | GALV    |
| C1140009    | SS5/SS150      | 13                  | 9            | 70                      | GALV    |
| C1140010    | SS175          | 13-1/2              | 16           | 100                     | GALV    |
| C1140227    | SS200          | 15                  | 24           | 150                     | GALV    |
| C1140256    | SS200          | 15                  | 20           | 150                     | GALV    |
| C1140262    | SS225          | 18                  | 30           | 200                     | GALV    |
| C1140250    | SS225          | 18                  | 30           | 200                     | GALV    |

\* C1101078 is used with 1" standard all thread (not Dywidag)



CHAIN SHACKLES, TABLE 19

| Catalog No. | Product Series | Description     | Overall Length (in) | Weight (lbs) | Ultimate Capacity (kip) | Coating |
|-------------|----------------|-----------------|---------------------|--------------|-------------------------|---------|
| C1100574    | SS5/SS150      | Tripeye Shackle | N/A                 | 4            | 70                      | GALV    |
| T1100134    | SS175          | Chain Shackle   | 6-5/8               | 6            | 100                     | GALV    |
| C1100557    | SS200          | Chain Shackle   | 8.2                 | 12           | 150                     | GALV    |
| C1100558    | S225           | Chain Shackle   | 9                   | 15           | 200                     | GALV    |



**ADAPTERS, TABLE 20**

| Catalog No. | Product Series | Description      | Overall Length (in) | Weight (lbs) | Ultimate Capacity (kip) | Coating |
|-------------|----------------|------------------|---------------------|--------------|-------------------------|---------|
| C1500580    | SS125          | Threaded Adapter | 20                  | 11           | 40                      | GALV    |
| C1100041    | SS5/SS150      | Ovaleye          | 18                  | 11           | 70                      | GALV    |
| C1020023    | SS5/SS150      | Thimbleye        | 18                  | 11           | 70                      | GALV    |
| C1020024    | SS5/SS150      | Twineye          | 18                  | 10           | 70                      | GALV    |
| C1020025    | SS5/SS150      | Tripleye         | 18                  | 10           | 70                      | GALV    |
| C1500032    | SS5/SS150      | Threaded Adapter | 21-1/2              | 11           | 70                      | GALV    |
| T1500447    | SS5/SS150      | Threaded Adapter | 46-1/2              | 19           | 70                      | GALV    |
| C1500039*   | SS175          | Tripleye         | 18                  | 11           | 100                     | GALV    |
| T1100311*   | SS175          | Thimbleye        | 18                  | 11           | 100                     | GALV    |
| T1100352    | SS175          | Threaded Adapter | 48                  | 24           | 100                     | GALV    |
| C1500037    | SS175          | Threaded Adapter | 21-1/2              | 12           | 100                     | GALV    |
| T1100312    | SS200          | Thimbleye        | 18                  | 11           | 150                     | GALV    |
| T1100629    | SS200          | Tripleye         | 18                  | 11           | 150                     | GALV    |

\* The 1-3/4" adapters have a clevis connection, not a forged coupling.



# CHANCE® HELICAL ROUND SHAFT PRODUCTS

PRODUCT RATINGS AND CROSS SECTION DIMENSIONS, TABLE 21

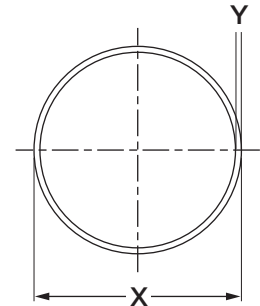
| Catalog No.  | Torque Rating Ft-lbs (Nm) | Ultimate Tension Strength* Kip (kN) | Uplift/Compression Capacity Limit** Kip (kN) | X Diameter in (mm) | Y Wall Thickness in (mm) |
|--------------|---------------------------|-------------------------------------|----------------------------------------------|--------------------|--------------------------|
| RS2875.203   | 7,000 (9,500)             | 60 (267)                            | 63 (280)                                     | 2.875 (73)         | .203 (5.16)              |
| RS2875.276   | 8,000 (10,800)            | 90 (400)                            | 72 (320)                                     | 2.875 (73)         | 0.276 (7.01)             |
| RS2875.276 † | 8,900 (12,000)            | 98 (436)                            | 80.1 (356)                                   | 2.875 (73)         | 0.276 (7.01)             |
| RS3500.300   | 13,000 (17,600)           | 120 (534)                           | 91 (405)                                     | 3.0 (76.2)         | .300 (7.62)              |
| RS3500.300 † | 12,500 (17,000)           | 120 (534)                           | 87.5 (389)                                   | 3.0 (76.2)         | .300 (7.62)              |
| RS4500.337 † | 25,000 (31,200)           | 160 (712)                           | 138 (614)                                    | 4.5 (114.3)        | .337 (8.56)              |
| RS6625.280   | 40,000 (54,200)           | 200 (890)                           | 200 (890)                                    | 6.625 (168.3)      | .280 (7.11)              |
| RS8625.250   | 60,000 (81,300)           | 300 (1,334)                         | 300 (1,334)                                  | 8.625 (219.08)     | .250 (6.35)              |

\* Based on mechanical strength of coupling

\*\* Based on torque rating - uplift/compression capacity limit = torque rating x  $K_t$   
 "Default"  $K_t$  for type RS2875 Series = 9 ft-1 (30 m-1); for type RS3500.300 = 7 ft-1 (23 m-1); for type RS4500.337 = 6 ft-1 (20 m-1); for type RS6625.280 = 5 ft-1 (13 m-1); for type RS8625.250 = 5 ft-1 (13 m-1).

\*\*\* Product evaluated per AC308 for Building Code compliance, see ICC-ES ESR-2794.

† ICC-ES Building code listed - see page 2 for more information.



## 2-7/8" TO 8-5/8" ROUND SHAFT NOTES

- Included Connection Hardware:
  - RS2875.203 2-7/8" diameter material: (2) 3/4" x 4-1/4" bolt per SAE J429 Grade 5 and nuts.
  - RS2875.276 2-7/8" diameter material: (2) 3/4" x 4-1/4" bolt per SAE J429 Grade 5 and nuts.
  - RS3500.300 3-1/2" diameter material: (3) 3/4" x 5-3/4" bolt per SAE J429 Grade 5 and nuts.
  - RS4500.337 4-1/2" diameter material: (2) 1" x 5-1/2" bolt per SAE J429 Grade 8 and nuts.
  - RS6625.280 6" diameter material: (4) 1" x 8" threaded stud and nuts.
  - RS8625.250 8" diameter material: (4) 1-1/4" x 10-1/2" threaded stud and nuts.
- The letter "T" after the helix diameter stands for 1/2" thick helix material.
- All helices are spaced three times the diameter of the preceding helix unless otherwise specified by the customer.
- All products are hot dip galvanized per ASTM A153.
- For plain steel and/or special order items contact your area Chance® distributor for availability.

## RS2875.203 (2-7/8") LEAD SECTIONS, TABLE 22

| Catalog No. | Plate Diameter (in) |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|----|---------------------|------------------------|--------------|-------------|
|             | A                   | B  | C  |                     |                        |              |             |
| C2784765 †  | 8                   | -  | -  | 7                   | 76.3                   | 44           | 50          |
| C2784512    | 8                   | 10 | -  | 5                   | 56.5                   | 45           | 50          |
| C2784513    | 8                   | 10 | -  | 7                   | 76.3                   | 57           | 50          |
| C2784514 †  | 8                   | 10 | 12 | 5                   | 56.5                   | 53           | 50          |
| C2784773 †  | 8                   | 10 | 12 | 7                   | 76.3                   | 66           | 50          |
| C2784510    | 10                  | -  | -  | 5                   | 58.5                   | 38           | 50          |
| C2784519    | 10                  | -  | -  | 7                   | 76.3                   | 48           | 50          |
| C2784767 †  | 10                  | -  | -  | 7                   | 76.3                   | 48           | 50          |
| C2784505    | 10                  | 12 | -  | 5                   | 56.5                   | 53           | 50          |
| C2784772 †  | 10                  | 12 | -  | 7                   | 76.3                   | 63           | 50          |
| C2784774 †  | 10                  | 12 | 14 | 7                   | 76.3                   | 78           | 50          |
| C2784508    | 10                  | 12 | 14 | 10                  | 188.3                  | 122          | 50          |
| C2784503    | 12                  | -  | -  | 5                   | 56.5                   | 46           | 50          |
| C2784509 †  | 12                  | -  | -  | 7                   | 76.3                   | 54           | 50          |
| C2784511 †  | 14                  | -  | -  | 7                   | 76.3                   | 57           | 50          |
| C2784515    | 14                  | -  | -  | 10                  | 118.3                  | 100          | 50          |

\* Effective length: from leading edge of bottom helix to center of the bolt hole.

† ICC-ES Building code listed - see page 2 for more information.

## RS2875.203 (2-7/8") EXTENSIONS, TABLE 23

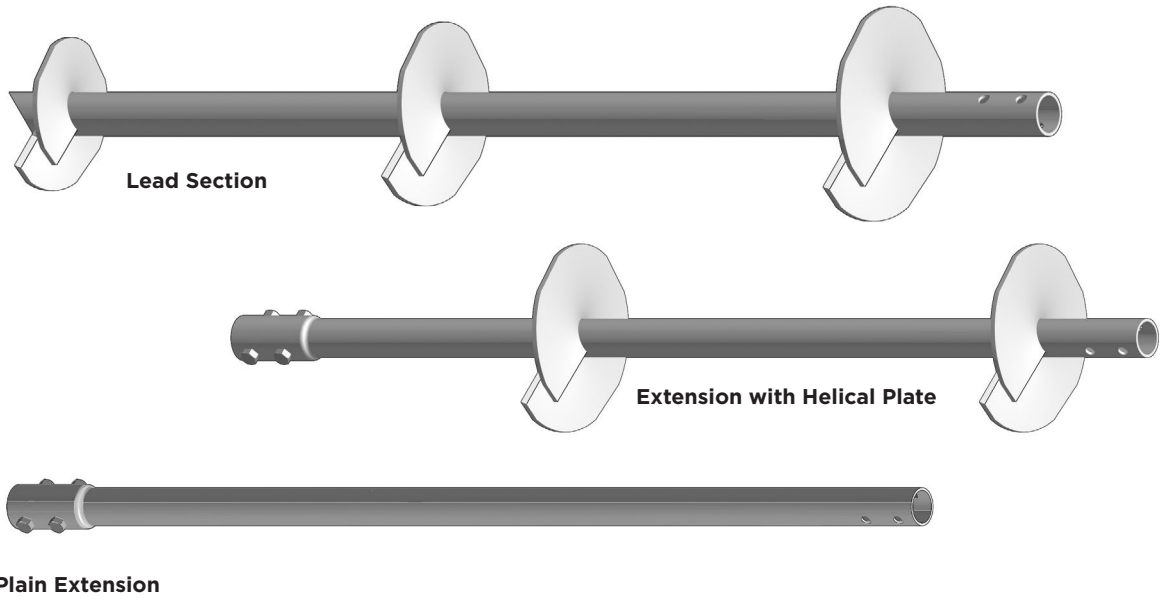
| Catalog No. | Plate Diameter (in) |    | Nominal Length (ft) | Effective Length (in)* | Length to First Helix (in) | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|---------------------|------------------------|----------------------------|--------------|-------------|
|             | A                   | B  |                     |                        |                            |              |             |
| C2784300CU  | -                   | -  | 3.5                 | 36.0                   |                            | 23           |             |
| C2784760 †  |                     |    | 3.5                 | 36.0                   |                            | 23           |             |
| C2784500CU  | -                   | -  | 5                   | 57.0                   |                            | 32           |             |
| C2784761 †  |                     |    | 5                   | 57.0                   |                            | 32           |             |
| C2784700CU  | -                   | -  | 7                   | 78.3                   |                            | 43.5         |             |
| C2784762 †  |                     |    | 7                   | 78.3                   |                            | 43.5         |             |
| C27841000CU | -                   | -  | 10                  | 120.0                  |                            | 61           |             |
| C2784763 †  |                     |    | 10                  | 120.0                  |                            | 61           |             |
| C2784782 †  | 14                  | -  | 3.5                 | 36.0                   | 24.0                       | 41           | 50          |
| C2784501CU  | 14                  | -  | 5                   | 57.0                   | 30.0                       | 70           | 50          |
| C2784502CU  | 14                  | 14 | 7                   | 78.0                   | 30.0                       | 75           | 50          |

\* Effective length: from bolt hole to bolt hole.

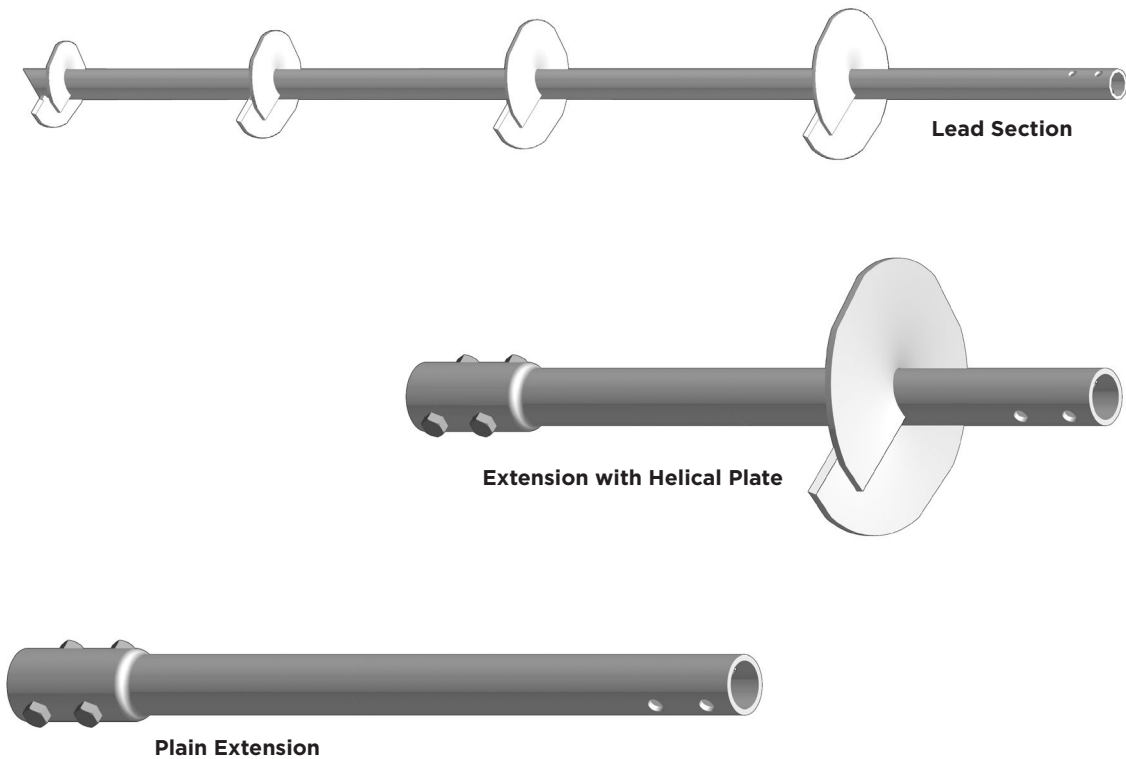
CU in catalog number indicates cold upset vs. welded coupling.

† ICC-ES Building code listed - see page 2 for more information.

**COMMON 2875.203 CONFIGURATIONS**



**COMMON RS2875.276 CONFIGURATIONS**



## RS2875.276 (2-7/8") LEAD SECTIONS, TABLE 25

| Catalog No. | Plate Diameter (in) |    |    |    | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|----|----|----|---------------------|------------------------|--------------|-------------|
|             | A                   | B  | C  | D  |                     |                        |              |             |
| C2788188    | 8                   | -  | -  | -  | 3.5                 | 34.3                   | 32           | 80          |
| C2788007 †  | 8                   | 10 | -  | -  | 5                   | 56.3                   | 50           | 80          |
| C2788002 †  | 10                  | -  | -  | -  | 5                   | 56.3                   | 48           | 80          |
| C2788003 †  | 10                  | 12 | -  | -  | 5                   | 56.3                   | 60           | 80          |
| C2788191    | 12                  | -  | -  | -  | 5                   | 56.3                   | 63           | 80          |
| C2788008    | 8                   | -  | -  | -  | 7                   | 76.3                   | 55           | 80          |
| C2788210 †  | 8                   | -  | -  | -  | 7                   | 79.0                   |              |             |
| C2788004 †  | 8                   | 10 | 12 | -  | 7                   | 76.3                   | 80           | 80          |
| C2788184    | 10                  | -  | -  | -  | 7                   | 76.3                   | 48           | 80          |
| C2788001 †  | 10                  | -  | -  | -  | 7                   | 76.3                   | 59           | 80          |
| C2788009 †  | 10                  | 12 | -  | -  | 7                   | 76.3                   | 71           | 80          |
| C2788005 †  | 10                  | 12 | 14 | -  | 7                   | 76.3                   | 83           | 80          |
| C2788221 †  | 12                  | -  | -  | -  | 7                   | 79.0                   |              |             |
| C2788222 †  | 14                  | -  | -  | -  | 7                   | 79.0                   |              |             |
| T1071312 †  | 8                   | -  | -  | -  | 10                  | 121.0                  |              |             |
| C2788006 †  | 8                   | 10 | 12 | 14 | 10                  | 118.3                  | 128          | 80          |
| C2788179 †  | 10                  | 12 | 14 | 14 | 10                  | 118.3                  | 134          | 80          |

\* Effective length: from leading edge of bottom helix to center of the bolt hole.

† ICC-ES Building code listed - see page 2 for more information.

## RS2875.276 (2-7/8") EXTENSIONS, TABLE 26

| Catalog No. | Plate Diameter (in) | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|---------------------|------------------------|--------------|-------------|
| C2788300CU  | -                   | 3.5                 | 36                     | 28           | -           |
| C2788225 †  | -                   | 3.5                 | 36                     | 28           | -           |
| C2788314CU  | 14                  | 3.5                 | 36                     | 54           | 80          |
| C2788228 †  | 14                  | 3.5                 | 36                     | 54           | 80          |
| C2788500CU  | -                   | 5                   | 57                     | 42           | -           |
| C2788218 †  | -                   | 5                   | 57                     | 43           | -           |
| C2788700CU  | -                   | 7                   | 78                     | 56           | -           |
| C2788219 †  | -                   | 7                   | 78                     | 55           | -           |
| C27881000CU | -                   | 10                  | 120                    | 79           | -           |
| C2788220 †  | -                   | 10                  | 120                    | 78           | -           |

\* Effective length: from bolt hole to bolt hole.

CU in catalog number indicates cold upset vs. welded coupling.

† ICC-ES Building code listed - see page 2 for more information.

## RS3500.300 (3-1/2") LEAD SECTIONS, TABLE 28

| Catalog No. | Plate Diameter (in) |     |     |     | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|-----|-----|---------------------|------------------------|--------------|-------------|
|             | A                   | B   | C   | D   |                     |                        |              |             |
| C1070560    | 8T                  | 10T | -   | -   | 3                   | 33.3                   | 50           | 50          |
| C1070563 †  | 8T                  | 10T | 12T | -   | 7                   | 74.5                   | 103          | 50          |
| C1070566 †  | 8T                  | 10T | 12T | 14T | 10                  | 117.3                  | 145          | 50          |
| T1070813 †  | 10T                 | -   | -   | -   | 7                   | 74.5                   | 78           | 50          |
| C1070561    | 10T                 | 12T | -   | -   | 5                   | 41.3                   | 65           | 50          |
| C1500023 †  | 10T                 | 12T | -   | -   | 7                   | 74.5                   | 97           | 50          |
| T1070812 †  | 10T                 | 12T | -   | -   | 10                  | 117.3                  | 121          | 50          |
| C1070564 †  | 10T                 | 12T | 14T | -   | 7                   | 75.5                   | 113          | 50          |
| C1070567 †  | 10T                 | 12T | 14T | 14T | 10                  | 117.3                  | 180          | 50          |
| C1500021 †  | 12T                 | -   | -   | -   | 7                   | 75.5                   | 73           | 50          |
| C1070565 †  | 12T                 | 14T | 14T | -   | 10                  | 117.3                  | 170          | 50          |
| C1070568 †  | 12T                 | 14T | 14T | 14T | 10                  | 117.3                  | 185          | 50          |
| C1500022 †  | 14T                 | -   | -   | -   | 7                   | 75.5                   | 75           | 50          |

\* Effective length: from leading edge of bottom helix to center of the bolt hole.

† ICC-ES Building code listed - see page 2 for more information.

## RS3500.300 (3-1/2") EXTENSIONS, TABLE 29

| Catalog No. | Plate Diameter (in) |     | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|---------------------|------------------------|--------------|-------------|
|             | A                   | B   |                     |                        |              |             |
| C1070573CU  | -                   | -   | 3.5                 | 35                     | 40           | -           |
| C1501291 †  | -                   | -   | 3.5                 | 38                     | 39           | -           |
| C1500025CU  | -                   | -   | 5                   | 56                     | 60           | -           |
| C1501240 †  | -                   | -   | 5                   | 56                     | 54           | -           |
| C1500026CU  | -                   | -   | 7                   | 77                     | 77           | -           |
| C1501241 †  | -                   | -   | 7                   | 80                     | 75           | -           |
| C1500216CU  | -                   | -   | 10                  | 119                    | 115          | -           |
| C1501242 †  | -                   | -   | 10                  | 116                    | 102          | -           |
| C1501293 †  | 14                  | -   | 3.5                 | 38                     | 87           | 50          |
| C1070577CU  | 14T                 | -   | 5                   | 56                     | 81.5         | 50          |
| C1501295 †  | 14                  | 14  | 7                   | 80                     | 122          | 50          |
| C1070579CU  | 14T                 | 14T | 7                   | 77                     | 122          | 50          |

\* Effective length: from bolt hole to bolt hole.

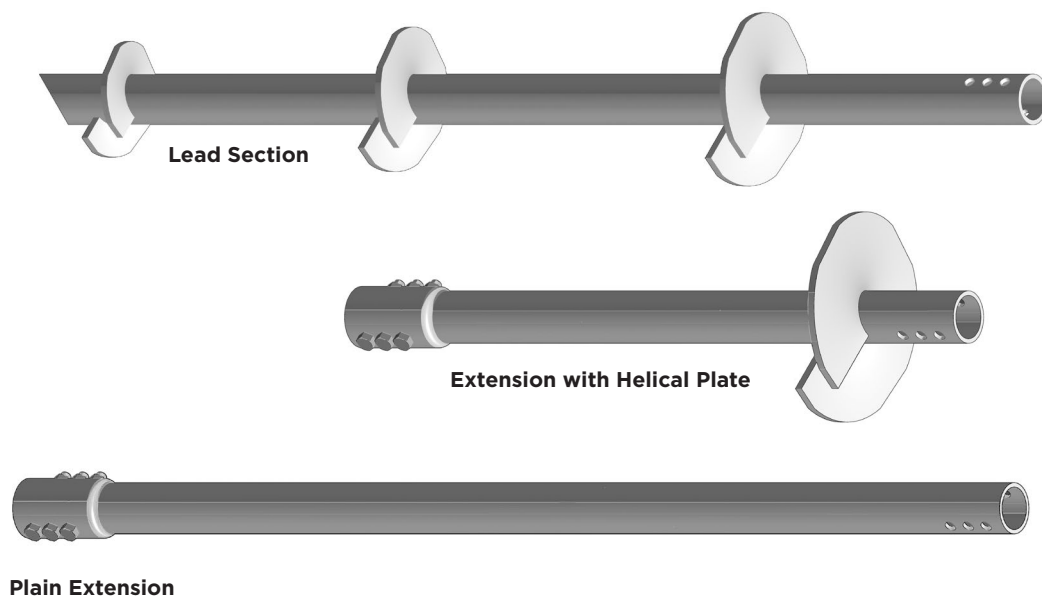
CU in catalog number indicates cold upset vs. welded coupling

"T" after plate diameter means 1/2" thick helix (otherwise common thickness is 3/8").

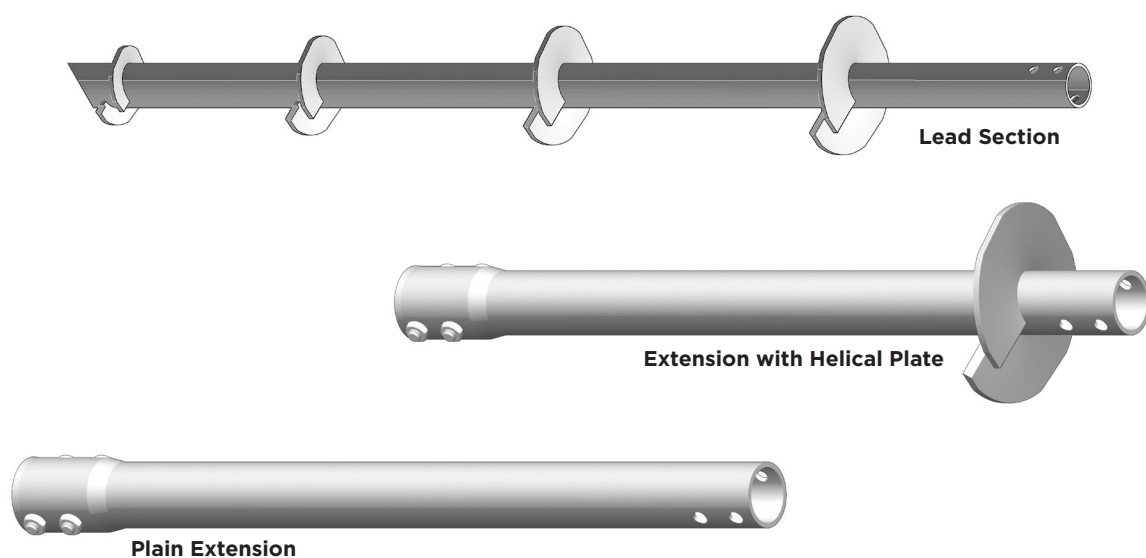
† ICC-ES Building code listed - see page 2 for more information.



## COMMON RS3500.300 CONFIGURATIONS



## COMMON RS4500.337 CONFIGURATIONS





### RS4500.337 (4-1/2") LEAD SECTIONS, TABLE 31

| Catalog No. | Plate Diameter (in) |     |     |     | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|---------------------|-----|-----|-----|---------------------|------------------------|--------------|-------------|
|             | A                   | B   | C   | D   |                     |                        |              |             |
| C1070917 †  | 8T                  | -   | -   | -   | 7                   | 74.5                   | 103          | 80          |
| C1070889 †  | 8T                  | 10T | 12T | -   | 7                   | 74.5                   | 130          | 80          |
| C1070890 †  | 8T                  | 10T | 12T | 14T | 10                  | 115.5                  | 195          | 80          |
| C1070976 †  | 10T                 | -   | -   | -   | 7                   | 74.5                   | 111          | 80          |
| C1071799 †  | 10T                 | 12T | -   | -   | 7                   | 74.5                   | 122          | 80          |
| C1070943 †  | 10T                 | 12T | 14T | -   | 7                   | 73.5                   | 158          | 80          |
| C1070892 †  | 10T                 | 12T | 14T | 14T | 10                  | 115.5                  | 204          | 80          |
| C1072703 †  | 12T                 | -   | -   | -   | 7                   | 74.5                   | 114          | 80          |
| C1071995 †  | 14T                 | -   | -   | -   | 7                   | 74.5                   | 119          | 80          |

\* Effective length: from leading edge of bottom helix to center of the bolt hole.  
 "T" after plate diameter means 1/2" thick helix (otherwise common thickness is 3/8").  
 † ICC-ES Building code listed - see page 2 for more information.

### RS4500.337 (4-1/2") EXTENSIONS, TABLE 32

| Catalog No.  | Plate Diameter (in) | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|--------------|---------------------|---------------------|------------------------|--------------|-------------|
| C1072466CU † | -                   | 3.5                 | 36                     | 77           | -           |
| C1072467CU † | -                   | 5                   | 57                     | 101          | -           |
| C1072468CU † | -                   | 7                   | 78                     | 124          | -           |
| C1072469CU † | -                   | 10                  | 120                    | 175          | -           |
| C1070886CU † | 14T                 | 5                   | 57                     | 125          | 80          |

\* Effective length: from bolt hole to bolt hole.  
 "T" after plate diameter means 1/2" thick helix (otherwise common thickness is 3/8").  
 † ICC-ES Building code listed - see page 2 for more information.

RS5500.361 HIGH CAPACITY PILES, TABLE 33

| Catalog No. | Description                              | Plate Diameter (in) |     |     |   | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|------------------------------------------|---------------------|-----|-----|---|---------------------|------------------------|--------------|-------------|
|             |                                          | A                   | B   | C   | D |                     |                        |              |             |
| C1073173    | LEAD, RS5500.361, 14 X 10FT SC HCP       | 14T                 |     |     |   | 10                  | 103                    | 216.8        | 50          |
| C1073150    | LEAD, RS5500.361, 16 X 10FT SC HCP       | 16T                 |     |     |   | 10                  | 103                    | 223.5        | 50          |
| C1073155    | LEAD, RS5500.361, 12/14 X 10FT SC HCP    | 12T                 | 14T |     |   | 10                  | 103                    | 229.4        | 50          |
| C1073156    | LEAD, RS5500.361, 14/14 X 10FT SC HCP    | 14T                 | 14T |     |   | 10                  | 103                    | 235.2        | 50          |
| C1073157    | LEAD, RS5500.361, 16/16 X 10FT SC HCP    | 16T                 | 16T |     |   | 10                  | 103                    | 248.6        | 50          |
| C1073158    | LEAD, RS5500.361, 16/18 X 10FT SC HCP    | 16T                 | 18T |     |   | 10                  | 103                    | 264.4        | 50          |
| C1073167    | LEAD, RS5500.361, 12/14/16 X 10FT SC HCP | 12T                 | 14T | 16T |   | 10                  | 103                    | 268.3        | 50          |
| C1073174    | LEAD, RS5500.361, 14/16/18 X 10FT SC HCP | 14T                 | 16T | 18F |   | 10                  | 103                    | 282.8        | 50          |
| C1073159    | EXTENSION, RS5500.361, 3.5FT, GALV HCP   |                     |     |     |   | 3.5                 | 31                     | 107.6        |             |
| C1073160    | EXTENSION, RS5500.361, 5FT, GALV HCP     |                     |     |     |   | 5                   | 49                     | 137.4        |             |
| C1073161    | EXTENSION, RS5500.361, 7FT, GALV HCP     |                     |     |     |   | 7                   | 73                     | 199          |             |
| C1073162    | EXTENSION, RS5500.361, 10FT, GALV HCP    |                     |     |     |   | 10                  | 109                    | 270.7        |             |
| C1073163    | EXTENSION, RS5500.361, 15FT, GALV HCP    |                     |     |     |   | 15                  | 169                    | 335.7        |             |
| C1073164    | EXTENSION, RS5500.361, 21FT, GALV HCP    |                     |     |     |   | 21                  | 241                    | 454.7        |             |
| C1073175    | EXTENSION, RS5500.361, 16 X 5FT 6SC HCP  | 16T                 |     |     |   | 5                   | 49                     | 192.7        | 50          |
| C1073176    | EXTENSION, RS5500.361, 18 X 5FT 6SC HCP  | 18F                 |     |     |   | 5                   | 49                     | 178.3        | 50          |

"T" after plate diameter means 1/2" thick helix

"F" after plate diameter means 5/8" thick helix

Helix Pitch for RS5500 is 6 inches.

### RS6625.280 (6-5/8") LEAD SECTIONS, TABLE 35

| Catalog No. | Coupling | Plate Diameter (in) |    |    | Nominal Length (ft) | Effective Length (in)* | Helix Grade | Pitch (in) | Coating |
|-------------|----------|---------------------|----|----|---------------------|------------------------|-------------|------------|---------|
|             |          | A                   | B  | C  |                     |                        |             |            |         |
| T1071365    | Box      | 14                  | 16 | -  | 10                  | 274                    | 50          | 3          | GALV    |
| T1072037    | Box      | 14                  | 16 | -  | 10                  | 274                    | 50          | 6          | GALV    |
| T1072038    | Box      | 14                  | 16 | 18 | 10                  | 313                    | 50          | 3          | GALV    |
| T1072039    | Box      | 14                  | 16 | 18 | 10                  | 313                    | 50          | 6          | GALV    |
| T1071568    | Plate    | 14                  | 16 | -  | 10                  | 274                    | 50          | 3          | GALV    |
| T1072048    | Plate    | 14                  | 16 | -  | 10                  | 274                    | 50          | 6          | GALV    |
| T1072049    | Plate    | 14                  | 16 | 18 | 10                  | 313                    | 50          | 3          | GALV    |
| T1072050    | Plate    | 14                  | 16 | 18 | 10                  | 313                    | 50          | 6          | GALV    |

\* Effective length: from leading edge of bottom helix to center of the bolt hole.

### RS6625.280 (6-5/8") EXTENSIONS, TABLE 36

| Catalog No. | Coupling | Pitch Diameter (in) | Nominal Length (ft) | Weight (lbs) | Helix Grade | Pitch (in) | Coating |
|-------------|----------|---------------------|---------------------|--------------|-------------|------------|---------|
| T1072044    | Box      | 18                  | 10                  | 285          | 50          | 3          | GALV    |
| T1072045    | Box      | 18                  | 10                  | 285          | 50          | 6          | GALV    |
| C1070969    | Box      | -                   | 5                   | 141          | 50          | -          | GALV    |
| C1070973    | Box      | -                   | 10                  | 246          | 50          | -          | GALV    |
| T1072054    | Plate    | 18                  | 10                  | 285          | 50          | 3          | GALV    |
| T1072055    | Plate    | 18                  | 10                  | 285          | 50          | 6          | GALV    |
| T1071537    | Plate    | -                   | 5                   | 141          | 50          | -          | GALV    |
| T1071536    | Plate    | -                   | 10                  | 246          | 50          | -          | GALV    |

\* Effective length: from bolt hole to bolt hole.

RS7000.362 (7") HIGH CAPACITY PILES, TABLE 34

| Catalog No. | Description                               | Plate Diameter (in) |     |     | Nominal Length (ft) | Effective Length (in)* | Weight (lbs) | Helix Grade |
|-------------|-------------------------------------------|---------------------|-----|-----|---------------------|------------------------|--------------|-------------|
|             |                                           | A                   | B   | C   |                     |                        |              |             |
| C1073128    | LEAD, RS7000.362, 16 X 10FT SC HCP        | 16T                 |     |     | 10                  | 107.5                  | 285.9        | 50          |
| C1073129    | LEAD, RS7000.362, 18 X 10FT SC HCP        | 18F                 |     |     | 10                  | 107.5                  | 295.5        | 50          |
| C1073130    | LEAD, RS7000.362, 24 X 10FT SC HCP        | 24F                 |     |     | 10                  | 107.5                  | 330.8        | 50          |
| C1073117    | LEAD, RS7000.362, 16/16 X 10FT SC HCP     | 16T                 | 16T |     | 10                  | 107.5                  | 325.3        | 50          |
| C1073131    | LEAD, RS7000.362, 18/18 X 10FT SC HCP     | 18F                 | 18F |     | 10                  | 107.5                  | 334.1        | 50          |
| C1073132    | LEAD, RS7000.362, 24/24 X 10FT SC HCP     | 24F                 | 24F |     | 10                  | 107.5                  | 404.8        | 50          |
| C1073133    | LEAD, RS7000.362, 16/18 X 10FT SC HCP     | 16T                 | 18F |     | 10                  | 107.5                  | 324.5        | 50          |
| C1073134    | LEAD, RS7000.362, 16/24 X 10FT SC HCP     | 16T                 | 24F |     | 10                  | 107.5                  | 359.9        | 50          |
| C1073136    | LEAD, RS7000.362, 16/20 X 10FT SC HCP     | 16T                 | 20F |     | 10                  | 107.5                  | 335.2        | 50          |
| C1073140    | LEAD, RS7000.362, 16/20 X 21FT SC HCP     | 16T                 | 20F |     | 21                  | 239.5                  | 617.7        | 50          |
| C1073181    | LEAD, RS7000.362, 18/20 X 10FT SC HCP     | 18F                 | 20F |     | 10                  | 107.5                  |              | 50          |
| C1073182    | LEAD, RS7000.362, 16/18/20 X 10FT SC HCP  | 16T                 | 18F | 20F | 10                  | 107.5                  |              | 50          |
| C1073124    | EXTENSION, RS7000.362, 3.5FT, GALV HCP    |                     |     |     | 3.5                 | 42                     | 138.9        |             |
| C1073125    | EXTENSION, RS7000.362, 5FT, GALV HCP      |                     |     |     | 5                   | 60                     | 178.5        |             |
| C1073126    | EXTENSION, RS7000.362, 7FT, GALV HCP      |                     |     |     | 7                   | 84                     | 211.3        |             |
| C1073118    | EXTENSION, RS7000.362, 10FT, GALV HCP     |                     |     |     | 10                  | 120                    | 303.8        |             |
| C1073127    | EXTENSION, RS7000.362, 15FT, GALV HCP     |                     |     |     | 15                  | 15                     | 440.8        |             |
| C1073138    | EXTENSION, RS7000.362, 21FT, GALV HCP     |                     |     |     | 21                  | 252                    | 612.9        |             |
| C1073177    | EXTENSION, RS7000.362, 20 X 5FT, GALV HCP | 20F                 |     |     | 5                   | 60                     |              | 50          |
| C1073178    | EXTENSION, RS7000.362, 22 X 7FT, GALV HCP | 22F                 |     |     | 7                   | 84                     |              | 50          |
| C1073179    | EXTENSION, RS7000.362, 24 X 7FT, GALV HCP | 24F                 |     |     | 7                   | 84                     |              | 50          |
| C107315     | EXTENSION, RS7000.362, 26 X 7FT, GALV HCP | 26F                 |     |     | 7                   | 84                     |              | 50          |

"T" after plate diameter means 1/2" thick helix  
 "F" after plate diameter means 5/8" thick helix  
 Helix Pitch for RS7000 is 6 inches

### RS8625.250 (8-5/8") LEAD SECTIONS, TABLE 37

| Catalog No. | Coupling | Plate Diameter (in) |    |    | Nominal Length (ft) | Weight (lbs) | Helix Grade | Pitch (in) | Coating |
|-------------|----------|---------------------|----|----|---------------------|--------------|-------------|------------|---------|
|             |          | A                   | B  | C  |                     |              |             |            |         |
| T1072040    | Box      | 16                  | 18 | -  | 10                  | 326          | 50          | 3          | GALV    |
| T1072041    | Box      | 16                  | 18 | -  | 10                  | 326          | 50          | 6          | GALV    |
| T1072042    | Box      | 16                  | 18 | 20 | 10                  | 371          | 50          | 3          | GALV    |
| T1072043    | Box      | 16                  | 18 | 20 | 10                  | 371          | 50          | 6          | GALV    |
| T1072051    | Plate    | 16                  | 18 | -  | 10                  | 325          | 50          | 3          | GALV    |
| T1071848    | Plate    | 16                  | 18 | -  | 10                  | 325          | 50          | 6          | GALV    |
| T1072052    | Plate    | 16                  | 18 | 20 | 10                  | 370          | 50          | 3          | GALV    |
| T1072053    | Plate    | 16                  | 18 | 20 | 10                  | 370          | 50          | 6          | GALV    |

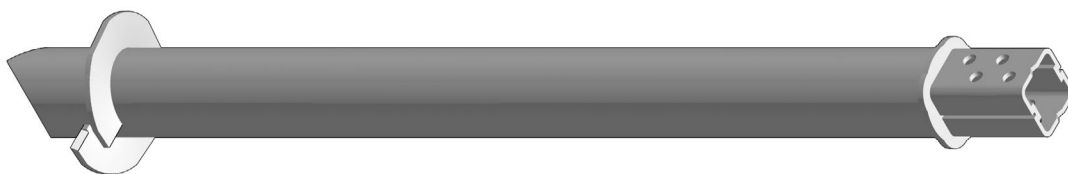
\* Effective length: from leading edge of bottom helix to center of the bolt hole.

### RS8625.250 (8-5/8") EXTENSIONS, TABLE 38

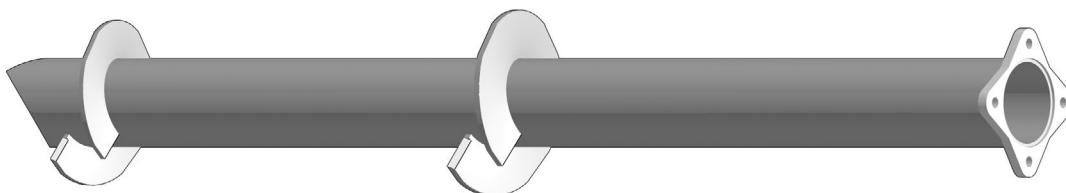
| Catalog No. | Coupling | Plate Diameter (in) | Nominal Length (ft) | Weight (lbs) | Helix Grade | Pitch (in) | Coating |
|-------------|----------|---------------------|---------------------|--------------|-------------|------------|---------|
| T1072046    | Box      | 20                  | 10                  | 341          | 50          | 3          | GALV    |
| T1072047    | Box      | 20                  | 10                  | 341          | 50          | 6          | GALV    |
| C1070956    | Box      | -                   | 5                   | 172          | -           | -          | GALV    |
| C1070906    | Box      | -                   | 10                  | 296          | -           | -          | GALV    |
| T1072056    | Plate    | 20                  | 10                  | 339          | 50          | 3          | GALV    |
| T1072057    | Plate    | 20                  | 10                  | 339          | 50          | 6          | GALV    |
| T1071564    | Plate    | -                   | 10                  | 170          | -           | -          | GALV    |
| T1071849    | Plate    | -                   | 10                  | 294          | -           | -          | GALV    |

\* Effective length: from bolt hole to bolt hole.

**COMMON RS6625.280 AND RS8628.250 COUPLING CONFIGURATIONS**



**Lead Section with Box Coupler**



**Lead Section with Plate Coupler**



**Extension Section with Box Coupler**



**Extension Section with Plate Coupler**

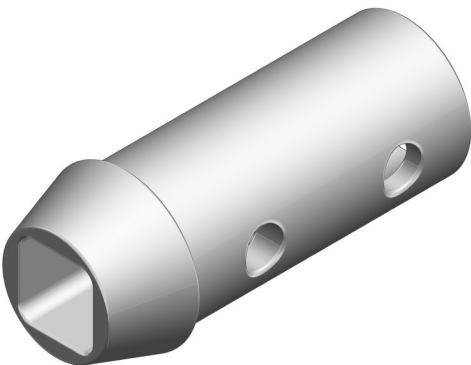
# SS/RS COMBINATION HELICAL PILES

## Helical Transition Coupler Adapts Type SS to Type RS Pile Shafts

The type SS/RS combination piles are used mainly in compression applications in areas where soft/loose soils are located above the bearing strata (hard/dense soils) for the helices. The type RS material with a much greater section modulus will resist columnar buckling in the soft/loose soil. The type SS material allows for adequate penetration of the helices into the hard/dense material without “spin-out”, i.e., loss of thrust of the helices in the soft/loose material.

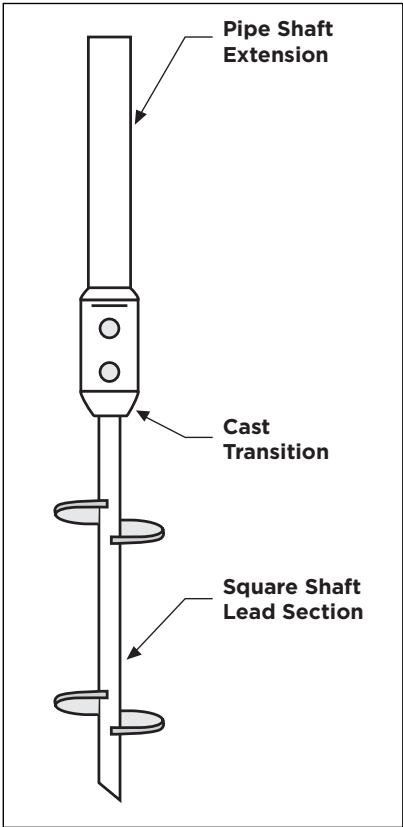
The transition section adapts type SS helical lead sections to type RS plain extensions. Installation of this combination pile is the same as a standard helical pile. Table 37 provides the various standard transition couplers that are available along with their ratings. Special transition couplers, such as RS2875 to RS4500, are also available. Please contact your Chance® distributor for availability and delivery times.

A Registered Professional Engineer with suitable soil information should prepare the design.



C1500896

### PILE ASSEMBLY WITH RS CAST TRANSITION



CAST TRANSITIONS, TABLE 39

| Catalog No. | Description<br>(SS = Square Shaft; RS = Round Shaft) |      |            | Weight | Torque Ratings    |
|-------------|------------------------------------------------------|------|------------|--------|-------------------|
| C1500896    | SS5/SS150                                            | to a | RS2875.203 | 7.8    | 7,000 ft-lbs      |
| C1500895 †  | SS175                                                | to a | RS3500.300 | 13.0   | 11,000 ft-lbs     |
| C1501365    | SS175                                                | to a | RS2875     | 10.3   | Up to 8900 ft-lbs |
| C1500937    | SS200                                                | to a | RS3500.300 | 16.3   | 13,000 ft-lbs     |
| C1101443    | SS200                                                | to a | RS4500     | 26     | 16,000 ft-lbs     |
| C1101418    | SS225                                                | to a | RS4500     | 26     | 21,000 ft-lbs     |

† ICC-ES Building code listed - see page 2 for more information.



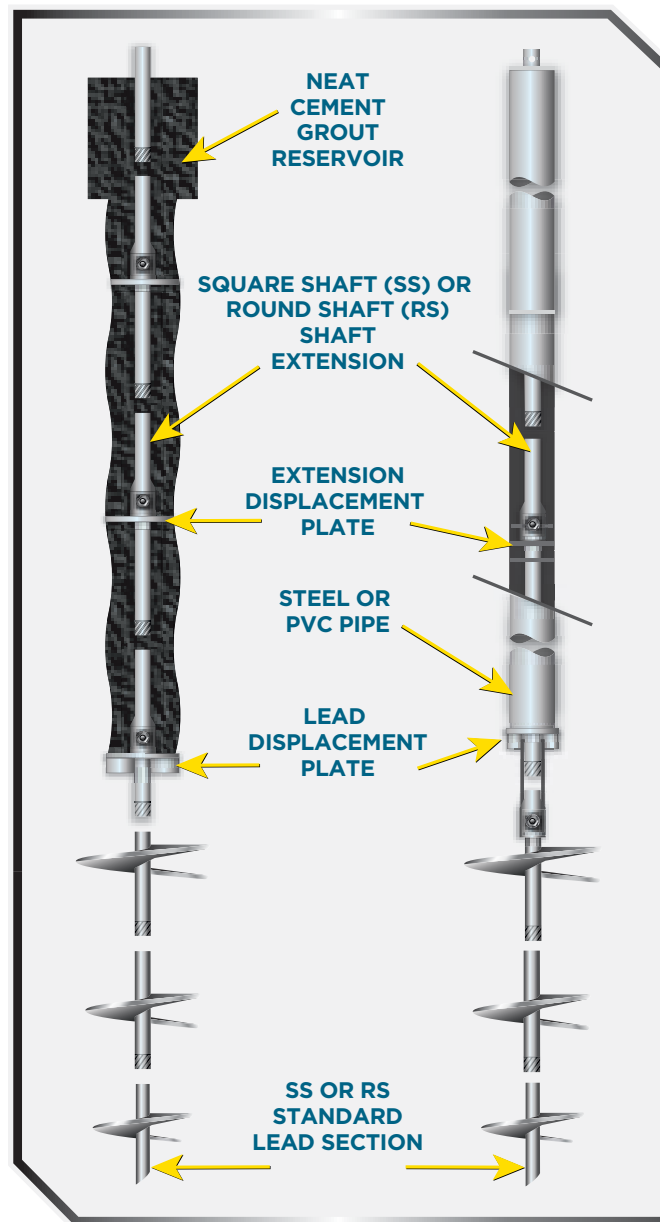
## HELICAL PULLDOWN® MICROPILE

The Chance® Helical Pulldown® Micropile (HPM) is a method used to form a grout column around the shaft of a standard helical pile. The installation process can employ grout only (see Figure 1) or grout in combination with either steel or PVC casing (see Figure 2).

To begin the process, a helical pile is placed into the soil by applying torque to the shaft. The helical shape of the bearing plates creates a significant downward force that keeps the foundation advancing into the soil. After the lead section with the helical plates penetrates the soil, a lead displacement plate and extension plates are placed onto the shaft. Resuming torque on the assembly advances the helical plates and pulls the displacement plate downward, forcing soil outward to create a cylindrical void around the shaft. From a reservoir at the surface, a flowable grout immediately fills this void surrounding the shaft. Additional extensions and displacement plates are added until the helical bearing plates reach the minimum depth required or competent load-bearing soil. This displacement pile system does not require removing spoils from the site.

UNCASED HPM

CASED HPM  
Figure 2



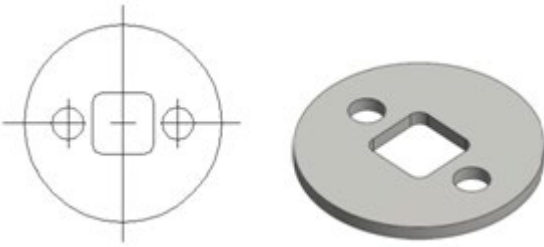
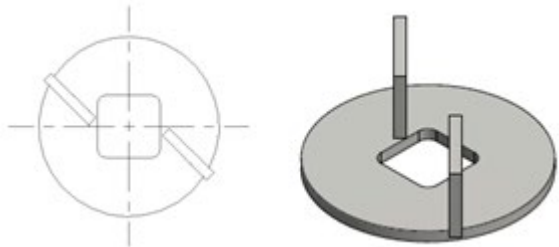
# Displacement Plates for Uncased Grout Columns

**LEAD DISPLACEMENT PLATES, TABLE 40**

| Catalog No. | Plate Dia. (in) | Product Series |
|-------------|-----------------|----------------|
| T1500334    | 5               | SS5/SS150      |
| T1500335    | 7               | SS5/SS150      |
| C1501353    | 4               | SS175          |
| C1500383    | 5               | SS175          |
| C1500387    | 7               | SS175          |
| C1500389    | 8.5             | SS175          |
| C1500405    | 10              | SS175          |
| C1500391    | 7               | SS200          |
| C1500393    | 8.5             | SS200          |
| C1500395    | 10              | SS200          |

**EXTENSION DISPLACEMENT PLATES, TABLE 41**

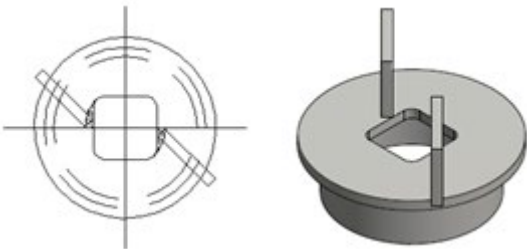
| Catalog No. | Plate Dia. (in) | Product Series |
|-------------|-----------------|----------------|
| C1500382    | 3.9             | SS5/SS150      |
| T1500330    | 5               | SS5/SS150      |
| T1500331    | 7               | SS5/SS150      |
| C1500384    | 5               | SS175          |
| C1500386    | 5.9             | SS175          |
| C1500388    | 7               | SS175          |
| C1500390    | 7.9             | SS175          |
| C1500406    | 10              | SS175          |
| C1500392    | 5.9             | SS200          |
| C1500394    | 7.9             | SS200          |



# Displacement Plates for Cased Grout Columns

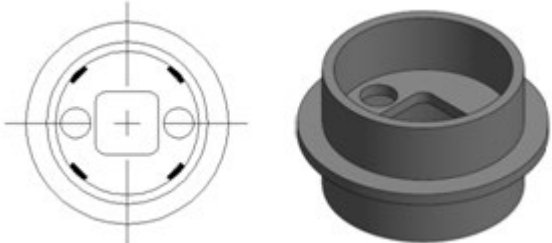
**LEAD DISPLACEMENT PLATES, TABLE 42**

| Catalog No. | Plate Dia (in) | Casing Dia (in) | Product Series |
|-------------|----------------|-----------------|----------------|
| T1500339    | 5              | 4               | SS5/SS150      |
| C1500424    | 7              | 6               | SS175          |
| C1500425    | 7              | 6               | SS200          |



**EXTENSION DISPLACEMENT PLATES, TABLE 43**

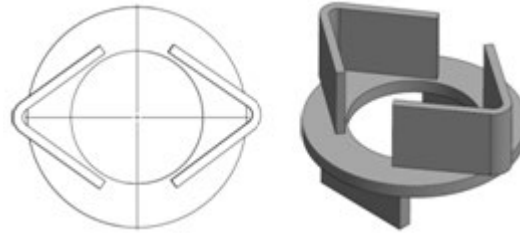
| Catalog No. | Plate Dia (in) | Casing Dia (in) | Product Series |
|-------------|----------------|-----------------|----------------|
| T1500338    | 5              | 4               | SS5/SS150      |
| C1500426    | 7              | 6               | SS175          |
| C1500427    | 7              | 6               | SS200          |



## HPM Lead and Extension Displacement Assemblies for RS Helical Piles

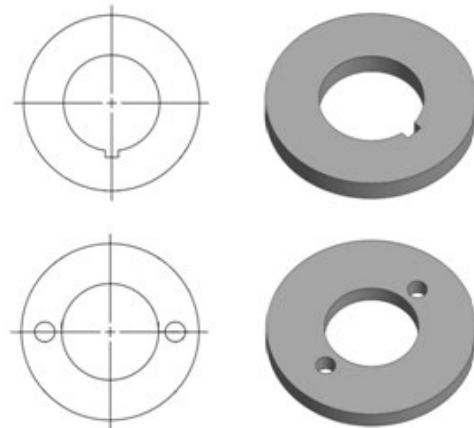
**LEAD DISPLACEMENT PLATES, TABLE 44**

| Catalog No. | Plate Dia (in) | Product Series |
|-------------|----------------|----------------|
| C1500966    | 6              | RS2875         |
| C1500967    | 6              | RS3500         |
| C1500972    | 8              | RS3500         |
| C1500980    | 6              | RS4500         |
| C1500981    | 8              | RS4500         |



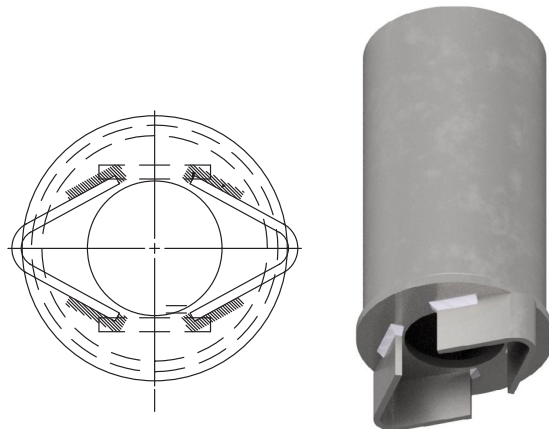
**EXTENSION DISPLACEMENT PLATES, TABLE 45**

| Catalog No. | Plate Dia (in) | Product Series |
|-------------|----------------|----------------|
| C1500961    | 5.9            | RS2875         |
| C1500962    | 5.9            | RS3500         |
| C1500963    | 7.9            | RS3500         |
| C1500964    | 5.9            | RS4500         |
| C1500965    | 7.9            | RS4500         |



**STEEL PIG DISPLACEMENT PLATES, TABLE 46**

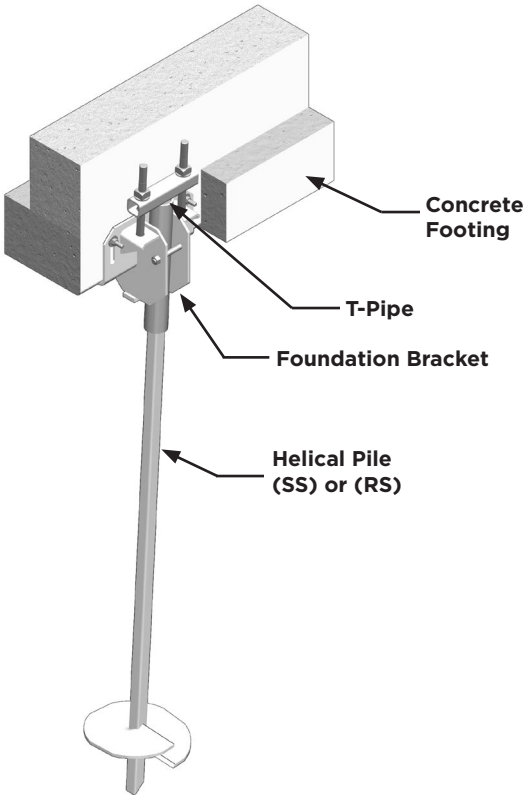
| Catalog No. | Plate Dia (in) | Product Series |
|-------------|----------------|----------------|
| C1500989    | 7.13           | RS2875         |
| C1500993    | 7.13           | RS3500         |
| C1500994    | 9.13           | RS3500         |
| C1500995    | 7.13           | RS4500         |
| C1500996    | 9.13           | RS4500         |



# REMEDIAL REPAIR BRACKETS

## C1500121 Standard Bracket and T-Pipe System

- Used with Chance® type SS5 & SS150, type RS2875.203, and type RS2875.276
- Use for lifts up to 4" (10 cm)
- System includes:
  - Foundation bracket
  - T-pipe
  - Hardware
- Order separately: two 5/8" (16 mm) diameter anchor bolts per pile as required.
- Standard finish is hot dip galvanized per ASTM A153.
- Ultimate mechanical strength of bracket body is 80,000 lbs (356 kN).
- Working mechanical strength of bracket body is 40,000 lbs (178 kN).



**C1500121 + STANDARD BRACKET AND T-PIPE RATINGS, TABLE 47**

| Catalog No. | Ultimate Mechanical Strength <sup>1,3</sup><br>lbs (kN) | Pile Size<br>in (mm) | Product Series | Max Working Capacity <sup>2,3</sup> per<br>Product Series lbs (kN) | Features                             |
|-------------|---------------------------------------------------------|----------------------|----------------|--------------------------------------------------------------------|--------------------------------------|
| C1500486 †  | 40,000 (178)                                            | 1-1/2 (38) Square    | SS5/SS150      | 20,000 (89)                                                        | Lowest cost with square shaft        |
| C1500487 †  | 80,000 (356)                                            | 1-1/2 (38) Square    | SS5/SS150      | 20,000 (89)<br>25,000 (111)                                        | Higher capacity with SS150           |
| C2780001 †  | 40,000 (178)                                            | 2-7/8 (73) Round     | RS2875.203     | 20,000 (89)                                                        | Lowest cost with round shaft         |
| C2780002 †  | 80,000 (356)                                            | 2-7/8 (73) Round     | RS2875.203     | 25,000 (111)                                                       | Higher capacity with stronger T-pipe |
| C2788011 †  | 80,000 (356)                                            | 2-7/8 (73) Round     | RS2875.276     | 30,000 (133)                                                       | Higher capacity with RS2875.276      |
| C2788012 †  | 40,000 (178)                                            | 2-7/8 (73) Round     | RS2875.276     | 20,000 (89)                                                        | Higher capacity with RS2875.203      |

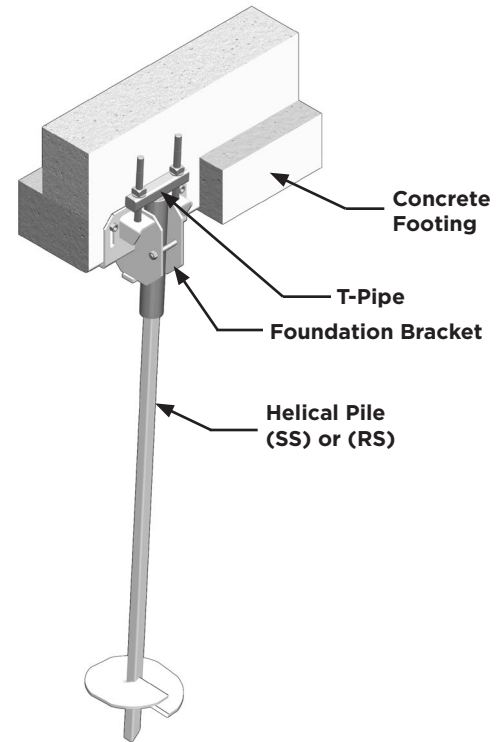
**Notes:**

1. Ultimate mechanical strength is for the bracket body and T-pipe combination.
2. The capacity of Chance helical pile systems is a function of many individual elements, including the capacity of the foundation, bracket, pile shaft, helix plate and bearing stratum, as well as the strength of the foundation-to-bracket connection, and the quality of the helical pile installation. The fifth column shows typical working capacities of the Chance helical pile system based upon maximum shaft exposure of 2 feet and soil strength having a minimum Standard Penetration Test (SPT) blow count "N" of 4. Actual capacities could be higher or lower depending on the above factors.
3. The ultimate capacity of the system, i.e., bracket, T-pipe, and pile shaft, can be increased to the pile shaft compression capacity limit as shown in the Technical Design Manual, provided the pile shaft is reinforced using a pipe sleeve or grout column. The maximum working capacity shall not be greater than one-half of the ultimate mechanical strength of the bracket and T-pipe combination given above.

† ICC-ES Building code listed - see page 2 for more information.

## C1500299 Standard Bracket and T-Pipe System

- Used with Chance® type SS175
- Use for lifts up to 4" (10 cm)
- System includes:
  - Foundation bracket
  - T-pipe
  - Hardware
- Order separately: two 5/8" (16 mm) diameter anchor bolts per pile as required.
- Standard finish is hot dip galvanized per ASTM A153.
- Ultimate mechanical strength of bracket body is 80,000 lbs (356 kN).
- Working mechanical strength of bracket body is 40,000 lbs (178 kN).



### C1500299 + STANDARD BRACKET AND T-PIPE RATINGS, TABLE 48

| Catalog No. | Ultimate Mechanical Strength <sup>1,3</sup> lbs (kN) | Pile Size in (mm) | Product Series | Max Working Capacity <sup>2,3</sup> per Product Series lbs (kN) | Features                                   |
|-------------|------------------------------------------------------|-------------------|----------------|-----------------------------------------------------------------|--------------------------------------------|
| C1500488 †  | 80,000 (356)                                         | 1-3/4 (38) Square | SS175          | 30,000 (133)                                                    | Lowest cost with Type SS175 product series |

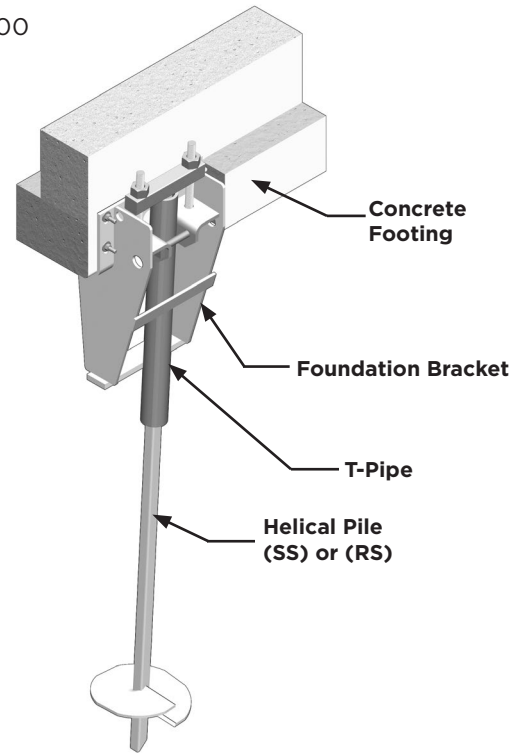
**Notes:**

1. Ultimate mechanical strength is for the bracket body and T-pipe combination.
2. The capacity of Chance helical pile systems is a function of many individual elements, including the capacity of the foundation, bracket, pile shaft, helix plate and bearing stratum, as well as the strength of the foundation-to-bracket connection, and the quality of the helical pile installation. The fifth column shows typical working capacities of the Chance helical pile system based upon maximum shaft exposure of 2 feet and soil strength having a minimum Standard Penetration Test (SPT) blow count "N" of 4. Actual capacities could be higher or lower depending on the above factors.
3. The ultimate capacity of the system, i.e., bracket, T-pipe, and pile shaft, can be increased to the pile shaft compression capacity limit as shown in the Technical Design Manual, provided the pile shaft is reinforced using a pipe sleeve or grout column. The maximum working capacity shall not be greater than one-half of the ultimate mechanical strength of the bracket and T-pipe combination given above.

† ICC-ES Building code listed - see page 2 for more information.

## C1500147 Standard Bracket and T-Pipe System

- Used with Chance® type SS175, type SS200, and type RS3500.300
- Use for lifts up to 4" (10 cm)
- System includes:
  - Foundation bracket
  - T-pipe
  - Hardware
- Order separately: four 5/8" (16 mm) diameter anchor bolts per pile as required.
- Standard finish is hot dip galvanized per ASTM A153.
- Ultimate mechanical strength of bracket body is 120,000 lbs (534 kN).
- Working mechanical strength of bracket body is 60,000 lbs (267 kN).



### C1500147 + STANDARD BRACKET AND T-PIPE RATINGS, TABLE 49

| Catalog No. | Ultimate Mechanical Strength <sup>1,3</sup><br>lbs (kN) | Pile Size<br>in (mm) | Product Series | Max Working Capacity <sup>2,3</sup> per<br>Product Series lbs (kN) | Features                           |
|-------------|---------------------------------------------------------|----------------------|----------------|--------------------------------------------------------------------|------------------------------------|
| C1500474 †  | 120,000 (534)                                           | 1-3/4 (44) Square    | SS175          | 40,000 (178)                                                       | Lowest cost with square shaft      |
| C1500508    | 120,000 (534)                                           | 2 (51) Square        | SS200          | 50,000 (222)                                                       | Highest capacity with square shaft |
| C1500475 †  | 120,000 (534)                                           | 3-1/2 (89) Round     | RS3500.300     | 50,000 (222)                                                       | Higher capacity with RS3500.300    |

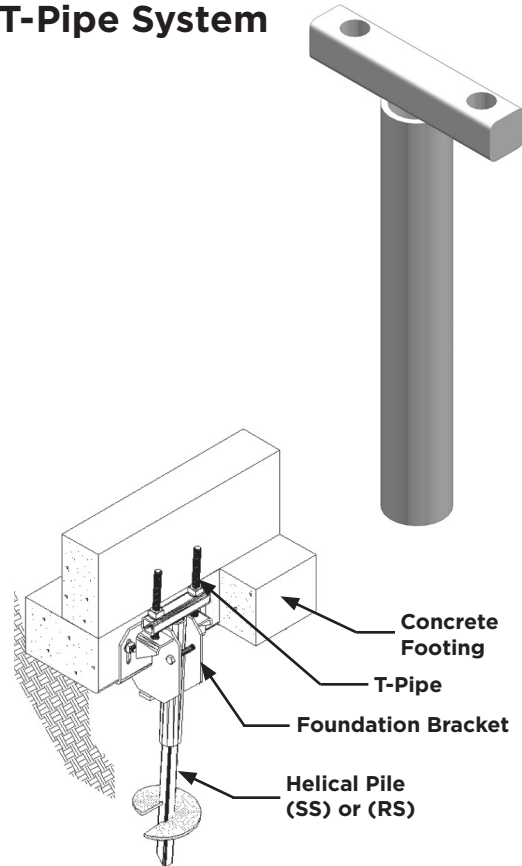
**Notes:**

1. Ultimate mechanical strength is for the bracket body and T-pipe combination.
2. The capacity of Chance helical pile systems is a function of many individual elements, including the capacity of the foundation, bracket, pile shaft, helix plate and bearing stratum, as well as the strength of the foundation-to-bracket connection, and the quality of the helical pile installation. The fifth column shows typical working capacities of the Chance helical pile system based upon maximum shaft exposure of 2 feet and soil strength having a minimum Standard Penetration Test (SPT) blow count "N" of 4. Actual capacities could be higher or lower depending on the above factors.
3. The ultimate capacity of the system, i.e., bracket, T-pipe, and pile shaft, can be increased to the pile shaft compression capacity limit as shown in the Technical Design Manual, provided the pile shaft is reinforced using a pipe sleeve or grout column. The maximum working capacity shall not be greater than one-half of the ultimate mechanical strength of the bracket and T-pipe combination given above.

† ICC-ES Building code listed - see page 2 for more information.

## PSAC1500499 Low Profile Bracket and T-Pipe System

- Used with Chance® type SS5 & SS150, type RS2875.203, and type RS2875.276
- Use for lifts up to 4" (10 cm)
- System includes:
  - Foundation bracket
  - T-pipe
  - Hardware
- Order separately: two 1/2" (13 mm) diameter anchor bolts per pile as required.
- Standard finish is hot dip galvanized per ASTM A153.
- Ultimate mechanical strength of bracket body is 30,000 lbs (133 kN).
- Working mechanical strength of bracket body is 15,000 lbs (67 kN).



**PSAC150049 LOW PROFILE BRACKET AND T-PIPE RATINGS, TABLE 50**

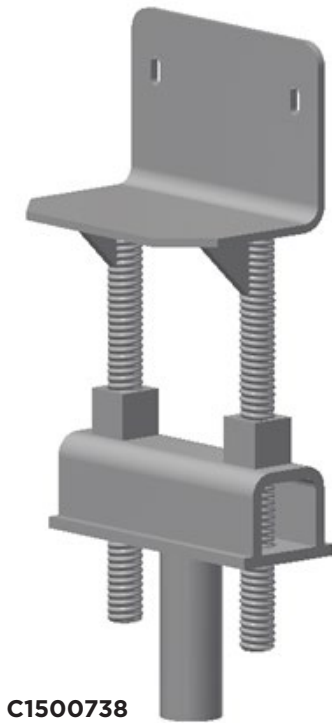
| Catalog No. | Ultimate Mechanical Strength <sup>1,3</sup> lbs (kN) | Pile Size in (mm) | Product Series | Max Working Capacity <sup>2,3</sup> per Product Series lbs (kN) | Features                                   |
|-------------|------------------------------------------------------|-------------------|----------------|-----------------------------------------------------------------|--------------------------------------------|
| PSAC1500503 | 30,000 (133)                                         | 1-1/2 (38) Square | SS5/SS150      | 15,000 (67)                                                     | Lowest cost with SS5 product series        |
| PSAC2780003 | 30,000 (133)                                         | 2-7/8 (73) Round  | RS2875.203     | 15,000 (67)                                                     | Lowest cost with RS2875.203 product series |

**Notes:**

1. Ultimate mechanical strength is for the bracket body and T-pipe combination.
2. The capacity of Chance helical pile systems is a function of many individual elements, including the capacity of the foundation, bracket, pile shaft, helix plate and bearing stratum, as well as the strength of the foundation-to-bracket connection, and the quality of the helical pile installation. The fifth column shows typical working capacities of the Chance helical pile system based upon maximum shaft exposure of 2 feet and soil strength having a minimum Standard Penetration Test (SPT) blow count "N" of 4. Actual capacities could be higher or lower depending on the above factors.
3. The ultimate capacity of the system, i.e., bracket, T-pipe, and pile shaft, can be increased to the pile shaft compression capacity limit as shown in the Technical Design Manual, provided the pile shaft is reinforced using a pipe sleeve or grout column. The maximum working capacity shall not be greater than one-half of the ultimate mechanical strength of the bracket and T-pipe combination given above.

# Direct Jack (DJ) Underpinning Bracket

- Used with Chance® type SS5 & SS150, SS175, RS2875.276, and RS3500.300
- Use for lifts up to 4" (10 cm)
- System includes:
  - Foundation bracket
  - T-pipe
  - Two thread bar nuts
- Order separately: two 1/2" (13mm) diameter concrete anchor bolts per pile as required.
- Standard finish is hot dipped galvanized per ASTM A153.
- Material specifications:
  - Bracket Body: 1/2" thick steel per ASTM A36 latest rev. T-pipe.
  - Pipe: steel pipe per ASTM A500 latest rev.
  - Lifting studs: Williams form #11 Grade 90.



**DIRECT JACK (DJ) UNDERPINNING BRACKETS, TABLE 51**

| Catalog No. | Ultimate Mechanical Strength <sup>1,3</sup><br>lbs (kN) | Pile Size<br>in (mm) | Max Working Capacity <sup>2,3</sup> per<br>Product Series<br>lbs (kN) | Features         |
|-------------|---------------------------------------------------------|----------------------|-----------------------------------------------------------------------|------------------|
| C1500738 †  | 70,000 (356)                                            | 1-1/2" (38) Square   | 35,000 (133)                                                          | Lowest cost      |
| C1500733    | 100,000 (445)                                           | 1-3/4" (44) Square   | 50,000 (222)                                                          | Highest capacity |
| C1500840 †  | 72,000 (320)                                            | 2-7/8" (73) Round    | 36,000 (160)                                                          |                  |
| C1500841 †  | 91,000 (405)                                            | 3-1/2" (89) Round    | 45,000 (202)                                                          |                  |

**Notes:**

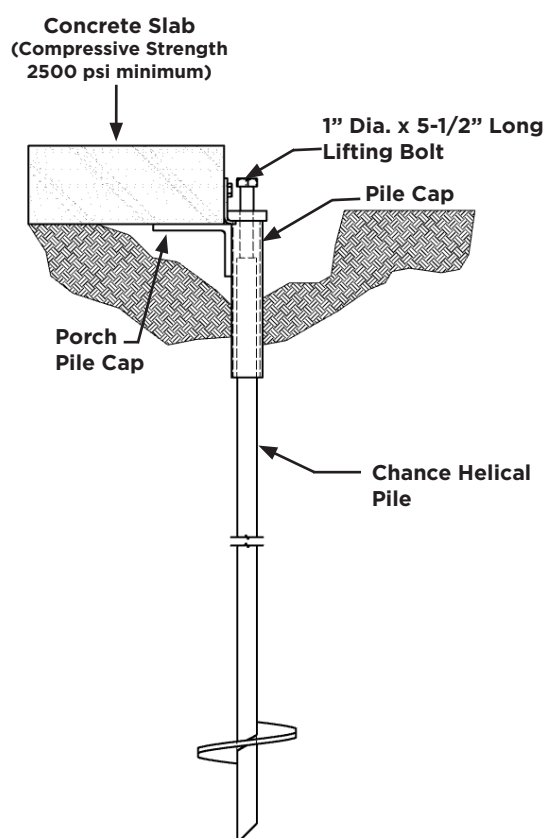
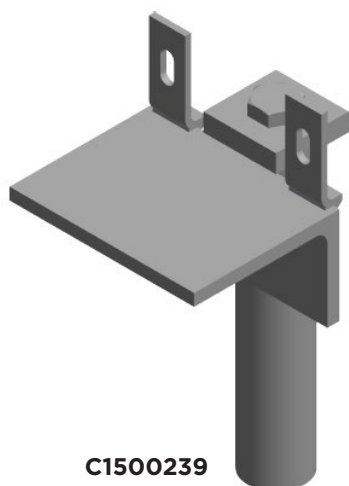
1. Ultimate mechanical strength is for the bracket body and T-pipe combination.
  2. The capacity of Chance helical pile systems is a function of many individual elements, including the capacity of the foundation, bracket, pile shaft, helix plate and bearing stratum, as well as the strength of the foundation-to-bracket connection, and the quality of the helical pile installation. The fifth column shows typical working capacities of the Chance helical pile system based upon maximum shaft exposure of 2 feet and soil strength having a minimum Standard Penetration Test (SPT) blow count "N" of 4. Actual capacities could be higher or lower depending on the above factors.
  3. The ultimate capacity of the system, i.e., bracket, T-pipe, and pile shaft, can be increased to the pile shaft compression capacity limit as shown in the Technical Design Manual, provided the pile shaft is reinforced using a pipe sleeve or grout column. The maximum working capacity shall not be greater than one-half of the ultimate mechanical strength of the bracket and T-pipe combination given above.
- † ICC-ES Building code listed - see page 2 for more information.



## C1500239 Light Duty / Porch Bracket

This bracket is used to raise the concrete slab edge or non-load bearing wall using a screw lift system. The assembly consists of the light duty porch bracket and helical pile (order helical pile separately).

- Ultimate mechanical strength = 10,000 lbs (44 kN)
- Maximum working capacity = 5,000 lbs (22 kN)
- Standard finish is hot dip galvanized per ASTM153.
- Use only with SS5 and SS150 piles



## T1500085 / C1501441 Concrete Slab Brackets

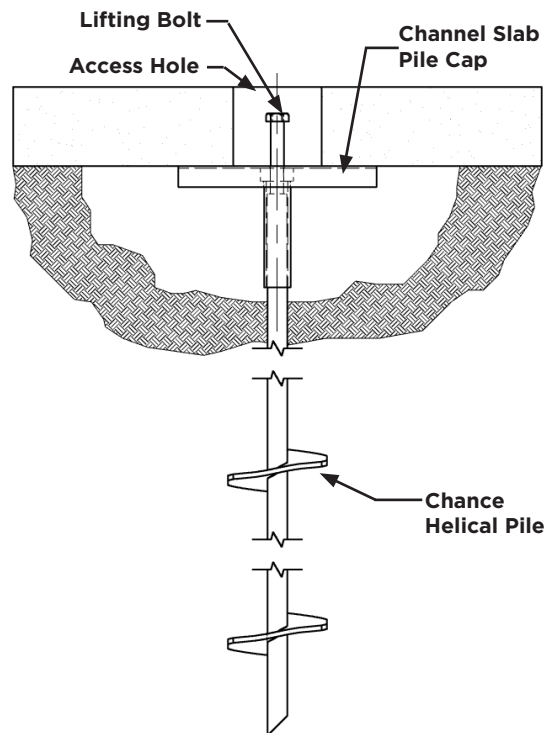
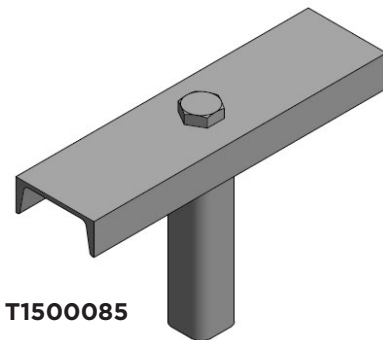
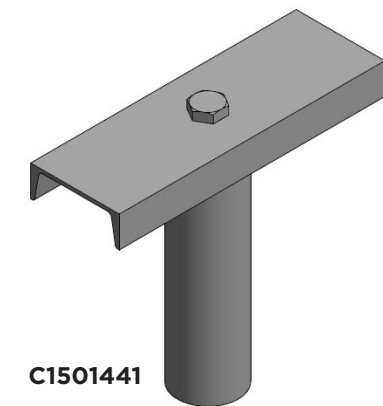
This bracket is used to raise the concrete slab using a screw lift system through the slab. The assembly consists of the screw lift slab bracket and helical pile (order helical pile separately).

- Ultimate mechanical strength = 10,000 lbs (44 kN)
- Maximum working capacity = 5,000 lbs (22 kN)
- Maximum lifting capacity = 7,500 lbs (33 kN)
- Standard finish is hot dip galvanized per ASTM153.

STANDARD PILE SIZE(S):

- **T1500085** to be used with only SS5 and SS150 piles
- **C1501441** to be used with only RS2875 piles

*NOTE: Standard access hole: 6"-8" dia. for SS piles.*



## Walkway Support Brackets

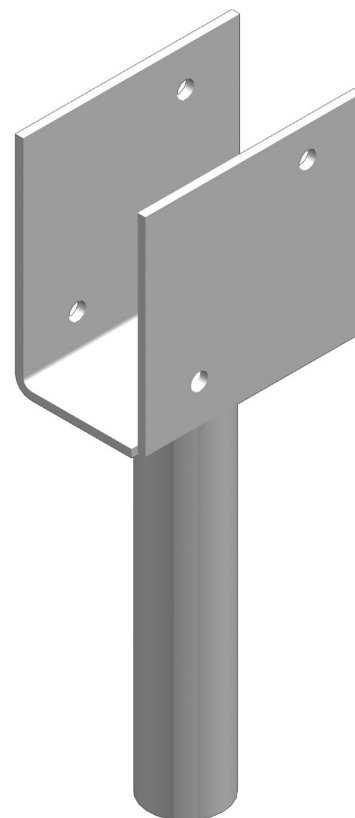
These brackets are used to connect timbers or girder beams to helical piles. The split bracket design is more universal because beam thickness or tolerance is not a problem. Both of these brackets fit over an SS5 or SS150 square shaft and inside an RS2875.203 round shaft.

Types of Walkway Brackets:

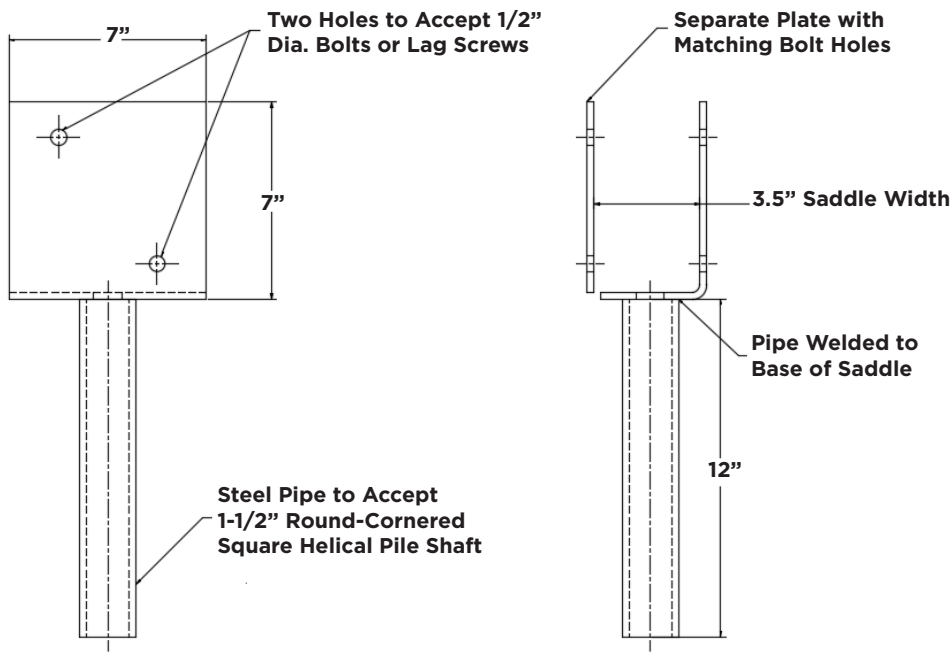
- **C1100682** and **C1100736** brackets are used only with SS5 and SS150 piles.
- **C1100936** and **C1100925** brackets are used only with RS2875 piles.

Standard finish is hot dipped galvanized per ASTM A153.

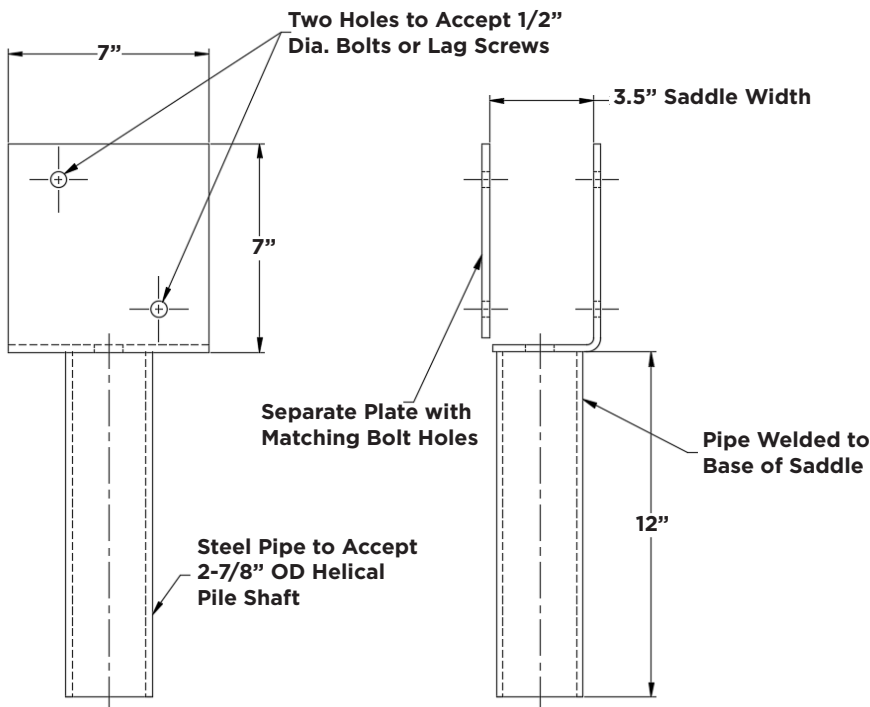
For different size shafts, mounting holes, or special finishes please contact your Chance distributor for availability.



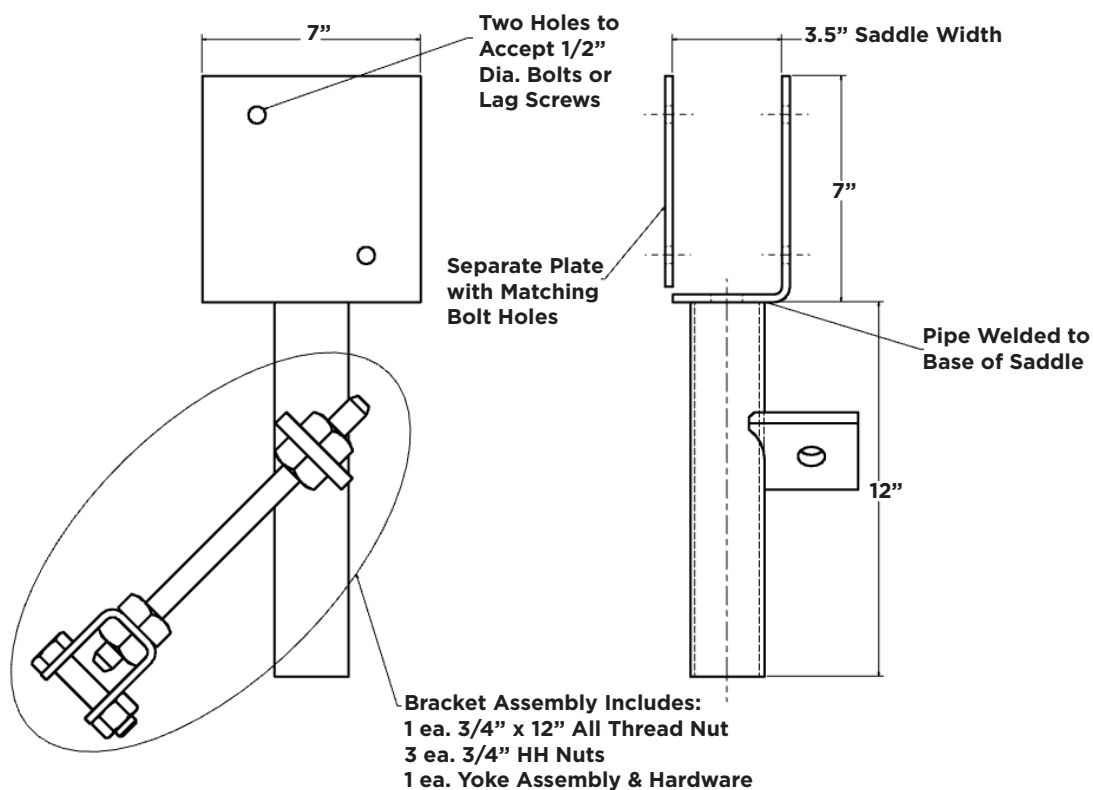
**C1100682 WALKWAY BRACKET**



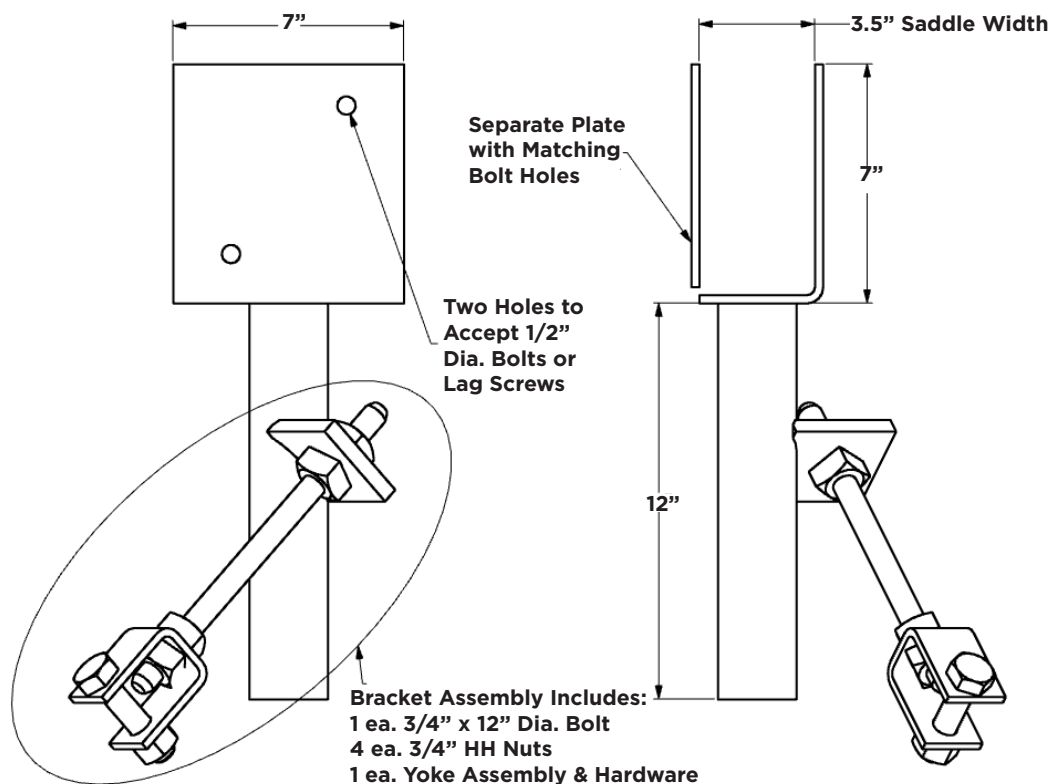
**C1100936 WALKWAY BRACKET**



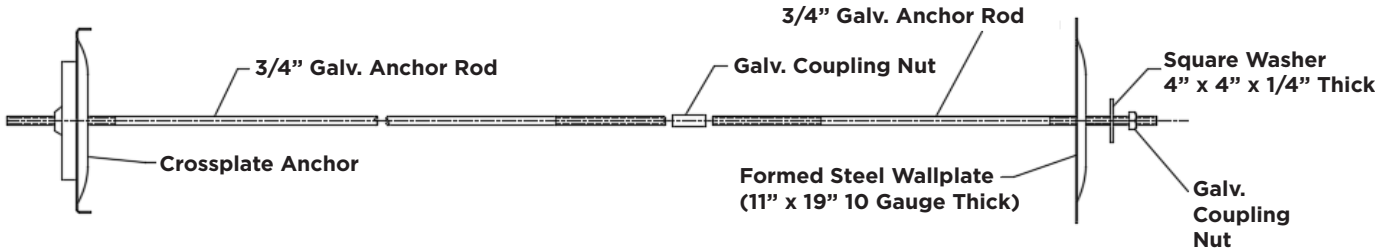
## C1100736 WALKWAY BRACKET



## C1100925 WALKWAY BRACKET



WALL ANCHOR SYSTEM



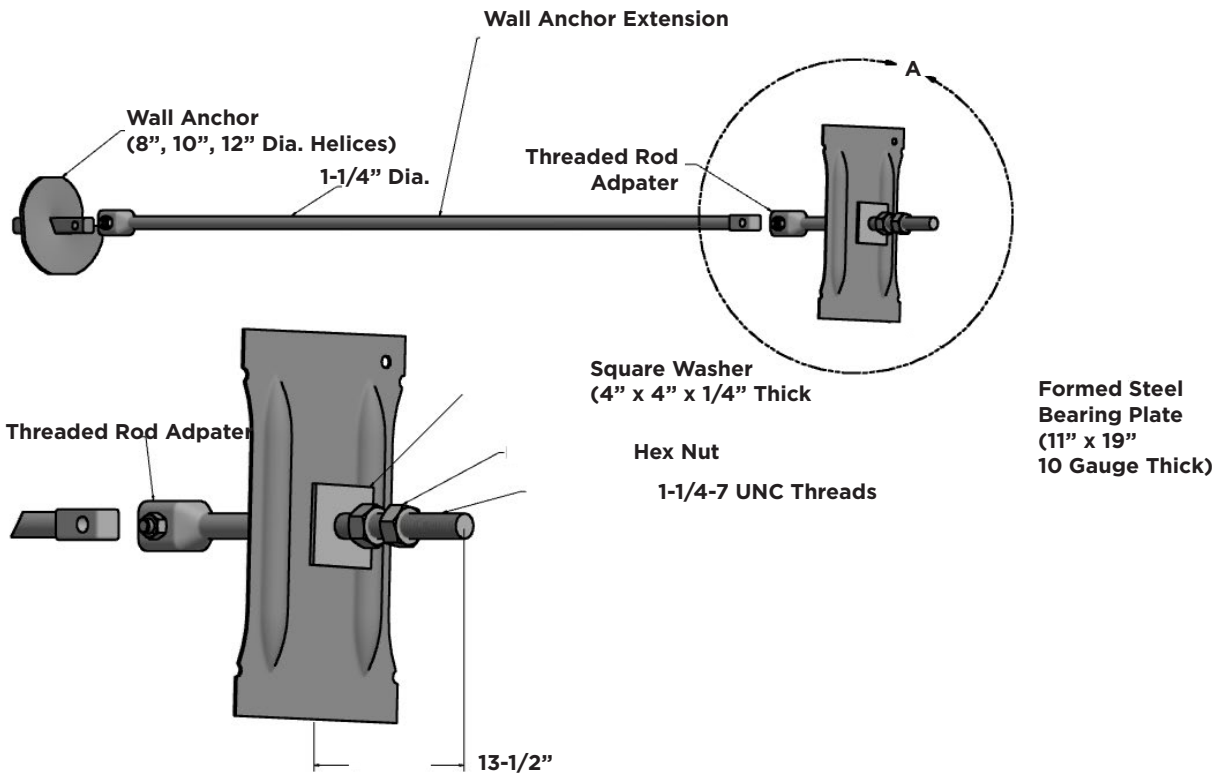
WILLIAMS FORM WALL PLATE AND TRANSITION KITS (AVAILABLE ONLY IN HDG), TABLE 52

| Catalog No. | Description                   | Weight (lbs) |
|-------------|-------------------------------|--------------|
| C1500633    | SS125 Transition Assembly Kit | 19.1         |

WALL ANCHOR KITS AND COMPONENTS, TABLE 53

| Catalog No. | Description (in) | C1500032<br>20" Threaded<br>Bar Adapter | 12698<br>7' x 1-1/4"<br>Extension | E1500088<br>Plate and Washer<br>Assembly | E1500079<br>8" Helix | E1500252<br>10" Helix | E1500254<br>12" Helix |
|-------------|------------------|-----------------------------------------|-----------------------------------|------------------------------------------|----------------------|-----------------------|-----------------------|
| T1500080    | (8) Kit          | X                                       | X                                 | X                                        | X                    |                       |                       |
| T1500253    | (10) Kit         | X                                       | X                                 | X                                        |                      | X                     |                       |
| T1500255    | (12) Kit         | X                                       | X                                 | X                                        |                      |                       | X                     |

"X" = Included in Kit.



**OPTIONAL WALL ANCHOR COMPONENTS, TABLE 54**

| Catalog No. | Description             | Weight (lbs) |
|-------------|-------------------------|--------------|
| T1500447    | 4' Threaded Adapter     | 19           |
| 12696       | 3.5' x 1-1/4" Extension | 20           |
| 12697       | 5' x 1-1/4" Extension   | 28           |

**KITS, TABLE 55**

| Catalog No. | Crossplate Anchor |             | Wallplate |                      | Anchor Rod    |                   | Weight |
|-------------|-------------------|-------------|-----------|----------------------|---------------|-------------------|--------|
|             | Size (in)         | Description | Size (in) | Description          | Rod Size      | Accessories       |        |
| T1500362    | 20                | Galvanized  | 19        | Galvanized w/ washer | 9' x 3/4"     | 2 nuts            | 39.2   |
| T1500363    | 20                | Clear-coat  | 19        | Clear-coat w/ washer | 9' x 3/4"     | 2 nuts            | 37.8   |
| T1500364    | 20                | Galvanized  | 19        | Galvanized w/ washer | 9' x 3/4"     | 2 nuts            | 46.2   |
|             |                   |             |           |                      | 4-1/2' x 3/4" | 1 Nut, 1 Coupling |        |
| T1500366    | 20                | Galvanized  | 19        | Galvanized w/ washer | 4-1/2' x 3/4" | 1 Nut, 1 Coupling | 40.2   |
|             |                   |             |           |                      | 4-1/2' x 3/4" | 1 Nut             |        |
| T1500367    | 20                | Clear-coat  | 19        | Clear-coat w/ washer | 4-1/2' x 3/4" | 1 Nut, 1 Coupling | 38.8   |
|             |                   |             |           |                      | 4-1/2' x 3/4" | 1 Nut             |        |

**ACCESSORIES, TABLE 56**

| Catalog No. | Description                                                                      | Weight (lbs) |
|-------------|----------------------------------------------------------------------------------|--------------|
| T1500348    | Four each: Galv washers, Galv square nuts, and Galv couplings (all for 3/4" rod) | 5.0          |
| T1500349    | 9' x 3/4" Galv rod w/ 18" of thread on both ends                                 | 13.5         |
| T1500350    | 4-1/2' x 3/4" Galv rod w/ 18" of thread on both ends                             | 6.5          |
| T1500351    | 4-1/2' x 3/4" Rod, all-thread                                                    | 7.4          |
| T1500372    | 25" Galv wallplate w/ galv washer                                                | 16.8         |
| T1500373    | 25" Clear-coated wallplate w/ clear-coated washer                                | 18.0         |
| T1500374    | 24" Galv crossplate anchor                                                       | 34.0         |

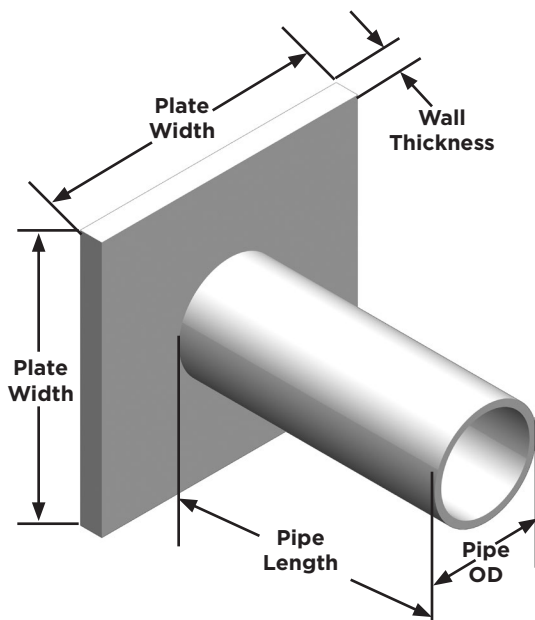
## TERMINATION DEVICES

Specifying exactly what you need is simple with Chance® helical foundation support products. A variety of standard accessories and special termination devices are offered depending on the project and application. This section illustrates some of our standard termination devices along with their mechanical ratings. If your project requires a special termination device, please contact your Chance distributor.

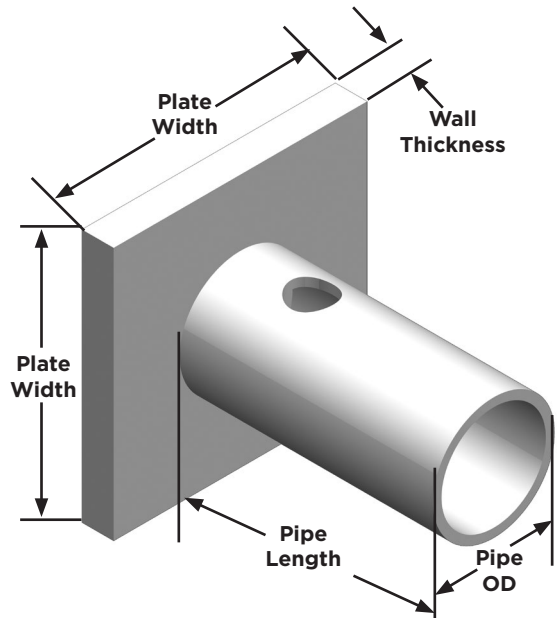
### New Construction Pile Caps

The Chance new construction pile caps are designed for use with Chance type square shaft (SS) and round shaft (RS) helical piles and for embedment in cast-in-place concrete foundations. For preliminary design, guidelines for reinforced pile caps refer to Section 4 of the Technical Design Manual, 5th Edition.

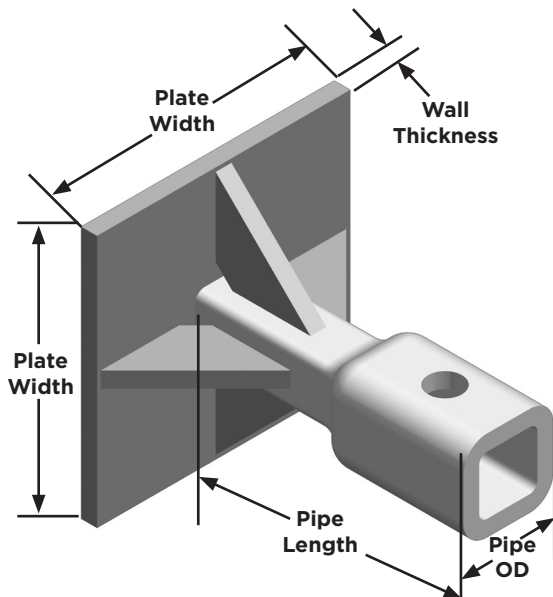
#### RS & SS SHAFT: COMPRESSION ONLY



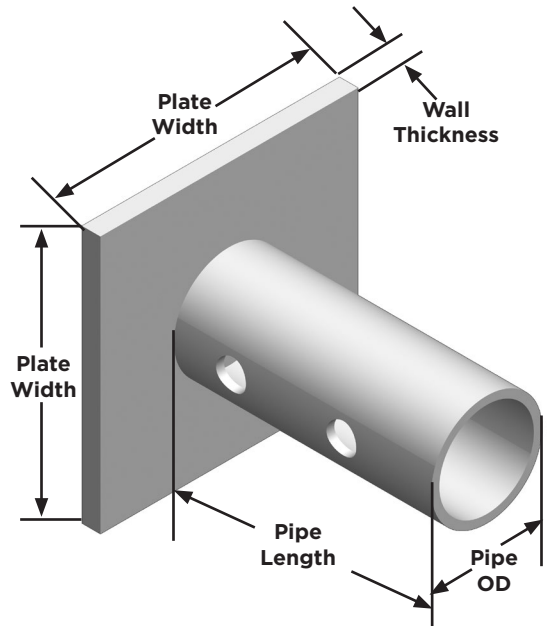
#### SS SHAFT: COMPRESSION AND UPLIFT



#### SS SHAFT: EQUAL COMPRESSION AND UPLIFT CAPACITY



#### RS SHAFT: COMPRESSION AND UPLIFT





NEW CONSTRUCTION PILE CAPS AND RATINGS, TABLE 57

| Catalog No. | Fits Shaft Size | Plate Size  |            |                | Pipe Dimensions |                     |             | # of Holes | Bolt Diameter (in) | Working Load Rating (kip) |        |
|-------------|-----------------|-------------|------------|----------------|-----------------|---------------------|-------------|------------|--------------------|---------------------------|--------|
|             |                 | Length (in) | Width (in) | Thickness (in) | OD (in)         | Wall Thickness (in) | Length (in) |            |                    | Compression               | Uplift |
| C1500781 †  | RS2875          | 7           | 7          | 1/2            | 3.5             | 0.216               | 6           | 0          | N/A                | 36                        | N/A    |
| C1500797 †  | RS2875          | 7           | 7          | 1/2            | 3.5             | 0.216               | 7           | 2          | 3/4                | 36                        | 36     |
| C1501357 †  | RS3500          | 8           | 8          | 1/2            | 4.5             | 0.337               | 7           | 3          | 3/4                | 60                        | 52     |
| C1501356 †  | RS3500          | 8           | 8          | 3/4            | 4.5             | 0.337               | 6           | 0          | N/A                | 60                        | N/A    |
| C1500782    | RS3500          | 10          | 10         | 1/2            | 4.5             | 0.337               | 6           | 0          | N/A                | 50                        | N/A    |
| C1500798    | RS3500          | 10          | 10         | 1/2            | 4.5             | 0.337               | 7           | 3          | 3/4                | 50                        | 50     |
| C1500783    | RS4500          | 12          | 12         | 1/2            | 5.56            | 0.375               | 6           | 0          | N/A                | 70                        | N/A    |
| C1500799    | RS4500          | 12          | 12         | 1/2            | 5.56            | 0.375               | 7           | 2          | 1                  | 70                        | 70     |
| C1072726 †  | RS4500          | 10          | 10         | 3/4            | 5.56            | .375                | 7           | 0          | N/A                | 97                        | N/A    |
| C1072727 †  | RS4500          | 10          | 10         | 3/4            | 5.56            | .375                | 7           | 2          | 1                  | 96.9                      | 70.5   |
| C1500458 †  | SS5/<br>SS150   | 6           | 6          | 1/2            | 2.38            | 0.154               | 6           | 0          | N/A                | 40                        | N/A    |
| *C1500465 † | SS5/<br>SS150   | 6           | 6          | 1/2            | 2.38            | 0.154               | 6           | 1          | 3/4                | 40                        | 20     |
| C1500777 †  | SS5/<br>SS150   | 7           | 7          | 1/2            | 2.5             | 0.154               | 6           | 0          | N/A                | 35                        | N/A    |
| C1500793 †  | SS5/<br>SS150   | 7           | 7          | 1/2            | 2.5             | 0.154               | 6           | 1          | 3/4                | 35                        | 23     |
| C1500821    | SS150           | 7           | 7          | 1/2            | 2.4             | 0.45                | 5.5         | 1          | 3/4                | 35                        | 35     |
| C1500459 †  | SS175           | 6           | 6          | 3/4            | 2.88            | 0.203               | 6           | 0          | N/A                | 60                        | N/A    |
| *C1500467 † | SS175           | 6           | 6          | 3/4            | 2.88            | 0.203               | 6           | 1          | 7/8                | 60                        | 30     |
| C1500822    | SS175           | 8           | 8          | 1/2            | 2.86            | 0.555               | 10          | 1          | 7/8                | 52.5                      | 50     |
| C1500778 †  | SS175           | 8           | 8          | 1/2            | 2.88            | 0.203               | 6           | 0          | N/A                | 52.5                      | N/A    |
| C1500794 †  | SS175           | 8           | 8          | 1/2            | 2.88            | 0.203               | 6           | 1          | 7/8                | 52.5                      | 37     |
| C1500823    | SS200           | 12          | 12         | 1/2            | 3.3             | 0.65                | 10          | 1          | 1 1/8              | 75                        | 75     |
| C1500779    | SS200           | 12          | 12         | 1/2            | 3.5             | 0.3                 | 6           | 0          | N/A                | 75                        | N/A    |
| C1500795    | SS200           | 12          | 12         | 1/2            | 3.5             | 0.3                 | 6           | 1          | 1 1/8              | 75                        | 45     |
| C1500780    | SS225           | 12          | 12         | 1/2            | 3.5             | 0.216               | 6           | 0          | N/A                | 100                       | N/A    |
| C1500796    | SS225           | 12          | 12         | 1/2            | 3.5             | 0.216               | 6           | 1          | 1 1/4              | 100                       | 40     |
| C1500824    | SS225           | 12          | 12         | 1/2            | 3.62            | 0.685               | 10.75       | 1          | 1 1/4              | 100                       | 100    |

NOTE: All New Construction Caps are not galvanized. Add "G" to standard catalog number to order galvanized.

\*Bolt and nut not provided.

† ICC-ES Building code listed - see page 2 for more information.



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