# D310 Taper-Lock® Standard Coupler

Rebar Splicing

# **TECHNICAL DATA SHEET**

# **DESCRIPTION**

The D310 Taper-Lock Standard Coupler is a Type 1 and Type 2 rebar coupler used to connect rebar. It consists of a coupler containing internal tapered female threads.

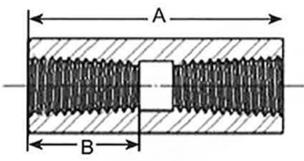
#### **APPLICATION**

The D310 Taper-Lock Standard Coupler is used to connect two pieces of rebar where at least one of the bars is free to rotate.

# PRODUCT SPECIFICATION

- Rebar sizes #4 [13mm] through #18 [57mm]
- Available made from USA melted and rolled steel.
- Compliant to the Buy America Act or import material.
- Available in plain, epoxy coated, or galvanized finish (electro or hot dip)
- Available in carbon, weldable, or 2205 stainless steel (other stainless-steel alloys available upon request)
- For use with Grade 60, 75, & 80
- For Grade 100/ChromX applications refer to D310C





#### **FEATURES**

- Couples all rebar sizes
- Eliminates lap splicing for full mechanical splice
- Taper-Lock Type 2 tapered threads
- Hand tight installation

#### **BENEFITS**

- Easier to use and up to 25% faster installation
- Versatility to meet project needs
- Complies with most jobsite specifications

#### **HOW TO SPECIFY**

# Specific:

Mechanical connections shall be Taper-Lock® Rebar Splices as manufactured by Dayton Superior Corp.

#### Generic:

The mechanical connection shall meet building code requirements of developing in tension and compression as required by \_\_\_\_\_\_\_ (insert name here). The mechanical connections shall be the positive locking, taper threaded type coupler manufactured from high quality steel. The bar ends must be taper threaded using the manufacturer's bar threading equipment to ensure proper taper and thread engagement. All couplers shall be installed per the manufacturer's approved procedures.

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## TECHNICAL DATA SHEET

# **TECHNICAL DATA**

D310 Taperlock Standard Coupler Type 2 Connection for Grade 60, 75, and 80 Rebar<sup>3</sup> (ACI 318-19 or newer code year specification)<sup>1,2</sup>

| Bar Size | Bar Size<br>[mm] | Bar Size<br>(m) | "A" (in)<br>[mm] | "B" (in)<br>[mm] | Thread Pitch<br>(in)<br>[mm] | Outside<br>Diameter (in |
|----------|------------------|-----------------|------------------|------------------|------------------------------|-------------------------|
| #4       | [13]             | [10]            | 2.36<br>[60]     | 1.02<br>[26]     | 0.078<br>[2.0]               | 0.88                    |
| #5       | [16]             | [15]            | 2.76<br>[70]     | 1.22<br>[31]     | 0.078<br>[2.0]               | 1                       |
| #6       | [19]             | [20]            | 2.87<br>[73]     | 1.28<br>[32.5]   | 0.078<br>[2.0]               | 1.13                    |
| #7       | [22]             | ((*)            | 3.19<br>[81]     | 1.40<br>[35.5]   | .098<br>[2.5]                | 1.38                    |
| #8       | [25]             | [25]            | 3.62<br>[92]     | 1.62<br>[41]     | .098<br>[2.5]                | 1.44                    |
| #9       | [29]             | [30]            | 4.02<br>[102]    | 1.81<br>[46]     | .098<br>[2.5]                | 1.63                    |
| #10      | [32]             | 853             | 4.49<br>[114]    | 2.05<br>[52]     | .098<br>[2.5]                | 1.75                    |
| #11      | [36]             | [35]            | 4.92<br>[125]    | 2.25<br>[57.5]   | .098<br>[2.5]                | 1.88                    |
| #12      | [40]             | 020             | 5.47<br>[139]    | 2.54<br>[64.5]   | .098<br>[2.5]                | 2.38                    |
| #14²     | [43]             | [45]            | 5.87<br>[148]    | 2.72<br>[69]     | .098<br>[2.5]                | 2.38                    |
| #18²     | [57]             | [55]            | 7.64<br>[194]    | 3.63<br>[92]     | .098<br>[2.5]                | 3.25                    |

<sup>1</sup>The ACI 318-19 code year references reduced ASTM A615-20 material tensile specifications which are lowered to 80 ksi and 100 ksi for grade 60 and grade 80, respectively. This aligns the minimum strength of A615 with the historical strength of A706. All standard couplers meet or exceed the strength requirement of a grade 80 type 2 splice (100 ksi) when considering the ACI 318-19 code year.

<sup>2</sup>All standard couplers, except for #14 and #18, also meet the legacy A615 strength requirements from ACI 318 code years prior to 2019. For #14 and #18 grade 80 type 2 couplers in accordance with ACI 318 prior to 2019 code year (105 ksi minimum tensile), please contact Dayton Superior for special order options.

<sup>3</sup>Grade 100 and ChromX Type 2 connections are also available for the D310. Please reference the "D310C" technical data sheet for more

## APPROVALS / COMPLIANCE

- ACI 318 Type 2
- IAPMO UES Listed (ER-319)
- Caltrans Service Splice
- Ministries of Transportation, Canada
- State Departments of Transportation
- AASHTO
- International Building Code (IBC)
- City of Los Angeles Department of Building and Safety

#### **INSTALLATION**

- Ensure that threads are clean, in good condition, and conform to gauge requirements as published in the Taper-Lock Machine Operations Manual before assembly.
- 2. Assemble D310 into rebar hand tight (5 footpounds).

## RELATED PRODUCTS

- D370 Threaded Bar
- D81 Taper-Lock® Male Thread Protector
- D382 Taper-Lock® Female Thread Protector

## **HOW TO ORDER**

Specify: (1) quantity, (2) name, (3) bar size, (4) finish, (5) Made in USA requirement

Example: 500, D310 Taper-Lock Standard Couplers, #5, Epoxy Coated, Made in USA required

#### ORDERING INFORMATION

# TAPER-LOCK® STANDARD COUPLER - MADE IN USA - FOR GRADE 60 THROUGH 80 REBAR

| Product Code | Description | Weight    |
|--------------|-------------|-----------|
| 127020       | #4 [13MM]   | 0.290 LB  |
| 127021       | #5 [16MM]   | 0.410 LB  |
| 127022       | #6 [19MM]   | 0.500 LB  |
| 127023       | #7 [22MM]   | 0.640 LB  |
| 127024       | #8 [25MM]   | 1.130 LB  |
| 127025       | #9 [29MM]   | 1.400 LB  |
| 127026       | #10 [32MM]  | 1.700 LB  |
| 127027       | #11 [36MM]  | 2.030 LB  |
| 127028       | #14 [43MM]  | 4.090 LB  |
| 127019       | #18 [57MM]  | 9.450 LB  |
| 100471       | #14B [43MM] | 4.210 LB  |
| 100472       | #18B [57MM] | 10.740 LB |

#### TAPER-LOCK® STANDARD COUPLER - FOR GRADE 60

#### **THROUGH 80 REBAR**

| Product Code | Description | Weight    |
|--------------|-------------|-----------|
| 126389       | #4 [13MM]   | 0.290 LB  |
| 126390       | #5 [16MM]   | 0.410 LB  |
| 126391       | #6 [19MM]   | 0.500 LB  |
| 126392       | #7 [22MM]   | 0.640 LB  |
| 126393       | #8 [25MM]   | 1.130 LB  |
| 126394       | #9 [29MM]   | 1.400 LB  |
| 126395       | #10 [32MM]  | 1.700 LB  |
| 126396       | #11 [36MM]  | 2.030 LB  |
| 145103       | #12 [40MM]  | 4.570 LB  |
| 126397       | #14 [43MM]  | 4.130 LB  |
| 126398       | #18 [57MM]  | 9.450 LB  |
| 100473       | #14B [43MM] | 4.210 LB  |
| 100474       | #18B [57MM] | 10.740 LB |
| 145102       | #12 [40MM]  | 4.306 LB  |
| 127267       | #18 [57MM]  | 9.500 LB  |

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# **MANUFACTURER**

Dayton Superior Corporation 1125 Byers Road Miamisburg, OH 45342

Customer Service: 888-977-9600 Technical Services: 877-266-7732 Website: www.daytonsuperior.com

# **WARRANTY (ACCESSORIES)**

Limited Warranty. Dayton warrants, for a period of 60 days from the date of shipment (three years from the date of shipment in the case of formwork, excluding any consumable Products included with such formwork), that Products and any associated application drawings and engineering services provided by Dayton ("Ancillary Services") will be free from defects in material and workmanship and, in the case of custom designed formwork, that the formwork will meet the specifications set forth in the design drawings approved by Dayton and Customer. Any claim under this warranty must be made in writing within such warranty period. If any Product and/or Ancillary Service covered by a timely claim are found to be defective, Dayton will, within a reasonable time, make any necessary repairs or corrections or, at Dayton's option, replace the Product. Unless pre-authorized by Dayton in writing, Dayton will not accept any charges for correcting defects or accept the return of any Product. This warranty will not apply to any Products that have been subjected to misuse, neglect, storage damage, misapplication, accident or any other damage caused by any person other than Dayton, or that have not been maintained in accordance with Dayton's specifications. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AS TO THE PRODUCTS AND ANCILLARY SERVICES. DAYTON MAKES NO OTHER WARRANTIES OR GUARANTEES. EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. THE REMEDIES SET FORTH IN THIS SECTION ARE CUSTOMER'S EXCLUSIVE REMEDY FOR BREACH OF WARRANTY.

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