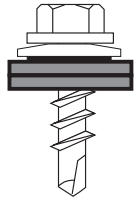




## HEX WASHER HEAD WITH NEOPRENE WASHER SELF-DRILL SCREW - #10 BODY DIAMETER

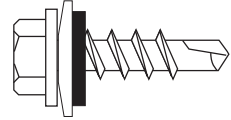
Steel to steel.

**ES** ESR 1408



HWH with 9/16" Neo. Washer

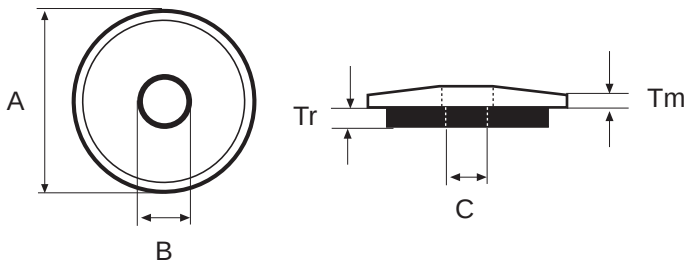
### Product Specifications



| Part #   | Dia. | Length | TPI | Bulk Qty | Finish | Corrosion         | Head      | Head Dia.   | Thread | Drill Pt. | Drill Capacity |
|----------|------|--------|-----|----------|--------|-------------------|-----------|-------------|--------|-----------|----------------|
| HDW1034  | 10   | 3/4    | 16  | 6M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 9.76-10.5mm | FULL   | 3         | .110"-.175"    |
| HDW10100 | 10   | 1      | 16  | 5M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 9.76-10.5mm | FULL   | 3         | .110"-.175"    |
| HDW10114 | 10   | 1-1/4  | 16  | 4M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 9.76-10.5mm | FULL   | 3         | .110"-.175"    |
| HDW10112 | 10   | 1-1/2  | 16  | 3M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 9.76-10.5mm | FULL   | 3         | .110"-.175"    |
| HDW10200 | 10   | 2      | 16  | 2M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 9.76-10.5mm | FULL   | 3         | .110"-.175"    |

### Pro-Twist drill screws meet or exceed ASTM C-954 and/or C-1513

#### 9/16" Neoprene Steel-Bonded Washer



| Self-Drilling Screws Ultimate Connection Value Chart |                |                           |                           |                    |
|------------------------------------------------------|----------------|---------------------------|---------------------------|--------------------|
| Dia.                                                 | Metal Gauge/lb | Tension (Pull) Lbs. 1 Pc. | Shear Lbs. Metal to Metal | Torsional Strength |
| 10                                                   | 20             | 389                       | 811                       | 61 lbs.            |
|                                                      | 18             | 554                       | 1223                      |                    |
|                                                      | 16             | 727                       | 1492                      |                    |
|                                                      | 14             | 1050                      | 1545                      |                    |
|                                                      | 12             | 1216                      | 1650                      |                    |

| Washer      | A (O.D.) +/- 0.2 | B (I.D.) +/- 0.25 | C (EPDM I.D.) +/- 0.4 | Tm +/- 0.1 | Tr +/- 0.2 |
|-------------|------------------|-------------------|-----------------------|------------|------------|
| #10 - 9/16" | 14.0             | 5.4               | 3.6                   | 0.8        | 2.0        |

mm

#### Ultimate Value Charts

Screws driven into steel were driven with three exposed threads on the off side of the connection, then pulled out with testing machine.

Note that all results were obtained in strict adherence to ASTM test protocol. These ultimate figures are offered only as a guide and are not guaranteed in any way by PrimeSource Building Products. A 4:1 safety ratio is recommended.

#### Installation Guidelines

0-2500rpm Screwgun with torque adjustment - Overdriving may result in fastener failure or stripout of the work surface. The fastener is fully seated when the head's bearing surface is flush with the steel. The fastener must penetrate beyond the metal a minimum of three threads to comply with the code.

**ALL PRIMESOURCE FASTENERS ARE MANUFACTURED IN AN ISO 9002 AND ISO 14001 CERTIFIED AND APPROVED FACTORY TO PRIMESOURCE PERFORMANCE SPECIFICATIONS AND PRINT DRAWINGS.**

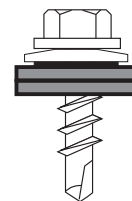


# HEX WASHER HEAD WITH NEOPRENE WASHER SELF-DRILL SCREW

#12 and 1/4" BODY DIAMETER

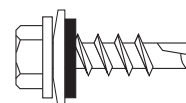
Steel to steel.

**ES** ESR 1408



HWH with 5/8" Neo. Washer

## Product Specifications

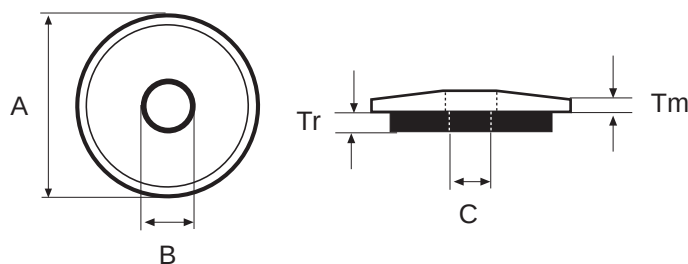


| Part #   | Dia. | Length | TPI | Bulk Qty | Finish | Corrosion         | Head      | Head Dia.   | Thread | Drill Pt. | Drill Capacity |
|----------|------|--------|-----|----------|--------|-------------------|-----------|-------------|--------|-----------|----------------|
| HDW1234  | 12   | 3/4    | 14  | 5M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 10.1-11.0mm | FULL   | 3         | .110"-.210"    |
| HDW12100 | 12   | 1      | 14  | 3M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 10.1-11.0mm | FULL   | 3         | .110"-.210"    |
| HDW12114 | 12   | 1-1/4  | 14  | 3M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 10.1-11.0mm | FULL   | 3         | .110"-.210"    |
| HDW12112 | 12   | 1-1/2  | 14  | 3M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 10.1-11.0mm | FULL   | 3         | .110"-.210"    |
| HDW12200 | 12   | 2      | 14  | 2M       | Zinc   | 24 hr. min. B-117 | 5/16" A/F | 10.1-11.0mm | FULL   | 3         | .110"-.210"    |
| HDW1434  | 14   | 3/4    | 14  | 4M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |
| HDW14100 | 14   | 1      | 14  | 3M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |
| HDW14114 | 14   | 1-1/4  | 14  | 2M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |
| HDW14112 | 14   | 1-1/2  | 14  | 2M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |
| HDW14200 | 14   | 2      | 14  | 1M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |
| HDW14212 | 14   | 2-1/2  | 14  | 1M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |
| HDW14300 | 14   | 3      | 14  | 1M       | Zinc   | 24 hr. min. B-117 | 3/8" A/F  | 12.2-13.2mm | FULL   | 3         | .110"-.250"    |

## Pro-Twist drill screws meet or exceed ASTM C-954 and/or C-1513

| Self-Drilling Screws Ultimate Connection Value Chart |                         |                    |                         |                           |                                 |
|------------------------------------------------------|-------------------------|--------------------|-------------------------|---------------------------|---------------------------------|
| Dia.                                                 | Nominal Screw Dia. (in) | Metal Gauge 1 (Lb) | Tension (Pull) Lbs 1 pc | Shear Lbs. Metal to metal | Minimum Torsional Strength (Lb) |
| 12                                                   | 0.216                   | 20                 | 314                     | 698                       | 92                              |
|                                                      |                         | 18                 | 472                     | 983                       |                                 |
|                                                      |                         | 16                 | 735                     | 1556                      |                                 |
|                                                      |                         | 14                 | 1057                    | 2072                      |                                 |
|                                                      |                         | 12                 | 1242                    | 2210                      |                                 |
|                                                      |                         | .156 in.           | 2685                    |                           |                                 |
| 14                                                   | 0.250                   | .187 in.           | 3394                    |                           | 150                             |
|                                                      |                         | 20                 | 300                     | 797                       |                                 |
|                                                      |                         | 18                 | 402                     | 1083                      |                                 |
|                                                      |                         | 16                 | 776                     | 1942                      |                                 |
|                                                      |                         | 14                 | 1057                    | 2300                      |                                 |
|                                                      |                         | 12                 | 1477                    | 2754                      |                                 |
|                                                      |                         | .156 in.           | 3217                    |                           |                                 |
|                                                      |                         | .187 in.           | 3941                    |                           |                                 |
|                                                      |                         | .218 in.           | 4645                    |                           |                                 |

### 5/8" Neoprene Steel-Bonded Washer



| Washer     | A (O.D.) +/- 0.2 | B (I.D.) +/- 0.25 | C (EPDM I.D.) +/- 0.3 | Tm +/- 0.1 | Tr +/- 0.2 |
|------------|------------------|-------------------|-----------------------|------------|------------|
| #14 - 5/8" | 16.0             | 7.0               | 5.3                   | 0.8        | 2.0        |

mm

### Ultimate Value Charts

Screws driven into steel were driven with three exposed threads on the off side of the connection, then pulled out with testing machine.

Note that all results were obtained in strict adherence to ASTM test protocol. These ultimate figures are offered only as a guide and are not guaranteed in any way by PrimeSource Building Products. A 4:1 safety ratio is recommended.

### Installation Guidelines

0-2500rpm Screwgun with torque adjustment - Overdriving may result in fastener failure or stripout of the work surface

The fastener is fully seated when the head's bearing surface is flush with the steel.

The fastener must penetrate beyond the metal a minimum of three threads to comply with the code.

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