PRIMESOURCE BUILDING PRODUCTS, INC.

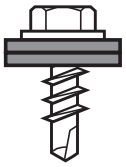
SPEC DATA *Submittal Sheet # 022*

PRO-TWIST

HEX WASHER HEAD SELF-DRILL SCREW
#12 and 1/4"BODY DIAMETER

Steel to steel.

ESR 1408



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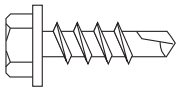
Product Specifications



Part #	Dia.	Length	TPI	Bulk Qty	Finish	Corrosion	Head	Head Dia.	Thread	Drill Pt.	Drill Capacity
HWD12034	12	3/4	14	5M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD12100	12	1	14	3M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD12114	12	1-1/4	14	3M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD12112	12	1-1/2	14	3M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD12200	12	2	14	2M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD12212	12	2-1/2	14	1M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD12300	12	3	14	1M	Zinc	24 hr. min. B-117	5/16" A/F	10.1-11.0mm	FULL	3	.110"-.210"
HWD14034	14	3/4	14	4M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14100	14	1	14	3M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14114	14	1-1/4	14	2M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14112	14	1-1/2	14	2M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14200	14	2	14	1M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14212	14	2-1/2	14	1M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14300	14	3	14	1M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14400	14	4	14	0.5M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14500	14	5	14	0.5M	Zinc	24 hr. min. B-117	3/8" A/F	12.2-13.2mm	FULL	3	.110"-.250"
HWD14600	14	6	14	0.5M	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		
		.187 in.	3394		
14	0.250	20	300	797	150
		18	402	1083	
		16	776	1942	
		14	1057	2300	
		12	1477	2754	
		.156 in.	3217		
		.187 in.	3941		
		.218 in.	4645		

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.

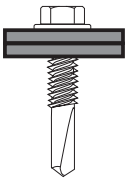
PRIMESOURCE BUILDING PRODUCTS, INC.

SPEC DATA *Submittal Sheet # 058*

INDENTED HEX WASHER HEAD SELF-DRILL SCREW
#5 POINT

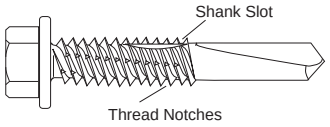
For Thicker Steel Connections.

ESR 1408



5/16" HWH

Product Specifications



Part #	Dia.	Length	TPI	Bulk Qty	Finish	Head	HWH Dia.	Drill Capacity
X512114	12	1-1/4	24	2M	PrimeGuard Plus-10	5/16" A/F	10-11 mm	.250"-.500"
X512112	12	1-1/2	24	2M	PrimeGuard Plus-10	5/16" A/F	10-11 mm	.250"-.500"
X512200	12	2	24	2M	PrimeGuard Plus-10	5/16" A/F	10-11 mm	.250"-.500"

Pro-Twist drill screws meet or exceed ASTM C-1513

PrimeGuard Plus-10		
Corrosion Resistance	Applied Via	Guarantee
1000 hr. min. B-117 12 Cycles Kesternich*	Multi-Step Proprietary Process	Lifetime

*Kesternich is an acid test protocol meeting DIN 50018, ASTM G-87

Self-Drilling Screws Ultimate Connection Value Chart					
Dia.	Nominal Screw Dia. (in)	Metal Gauge 1 (lb)	Tension (Pull) Lbs 1 pc	Shear Strength (lbs)	Minimum Torsional Strength (Lb)
12 5pt.	0.216	.156 in.	2550	1885	92
		.187 in.	3124		
		.218 in.	3695		
		.250 in.	3696		

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
0-1800rpm 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.