

PRODUCT SUBMITTAL

Submitted to:

Project:

Date of Submittal:

Submitted by, Contact name:

Company:

Address:

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Approved

Approved as Noted

Not Approved

Comments:

By:

Date:

List of items from Table A submitted for the project:

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Product Family S-DBF - SCORPION-Self-Drilling Bugle Head Fine Thread

TABLE A

Item Number	Screw Size (#)	Length (in.)	Head Style	Head Diameter (in.)	TPI	Point Size/Style	Coating	Maximum Total Drilling Thickness (in.)	Drive Type	Bulk Quantity
DP100	6	1-in.	Bugle	0.325-in	20	3	Phosphate	0.112-in	#2 Phillips	10,000
DPZ100	6	1-in.	Bugle	0.325-in	20	3	Clear Zinc	0.112-in	#2 Phillips	10,000
DP118	6	1-1/8-in.	Bugle	0.325-in	20	3	Phosphate	0.112-in	#2 Phillips	10,000
DPZ118	6	1-1/8-in.	Bugle	0.325-in	20	3	Clear Zinc	0.112-in	#2 Phillips	10,000
DP114	6	1-1/4-in.	Bugle	0.325-in	20	3	Phosphate	0.112-in	#2 Phillips	8,000
DPZ114	6	1-1/4-in.	Bugle	0.325-in	20	3	Clear Zinc	0.112-in	#2 Phillips	8,000
DP158	6	1-5/8-in.	Bugle	0.325-in	20	3	Phosphate	0.112-in	#2 Phillips	5,000
DPZ158	6	1-5/8-in.	Bugle	0.325-in	20	3	Clear Zinc	0.112-in	#2 Phillips	5,000
DP178	6	1-7/8-in.	Bugle	0.325-in	20	3	Phosphate	0.112-in	#2 Phillips	4,000
DPZ178	6	1-7/8-in.	Bugle	0.325-in	20	3	Clear Zinc	0.112-in	#2 Phillips	4,000
DPZ200	6	2-in.	Bugle	0.325-in	20	3	Clear Zinc	0.112-in	#2 Phillips	4,000
DPXT114	7	1-1/4-in.	Bugle	0.325-in	19	3	NanoGard®	0.112-in	#2 Phillips	8,000
DPXT178	7	1-7/8-in.	Bugle	0.325-in	19	3	NanoGard®	0.112-in	#2 Phillips	4,000
T3PB811516	8	1-15/16-in.	Bugle	0.325-in	18	3-Pilot	NanoGard®	0.140-in	#2 Phillips	4,000
DPZ38	8	2-3/8-in.	Bugle	0.325-in	18	3	Phosphate	0.140-in	#2 Phillips	3,000
DPXT238	8	2-3/8-in.	Bugle	0.325-in	18	3	NanoGard®	0.140-in	#2 Phillips	3,000
DPZ238	8	2-3/8-in.	Bugle	0.325-in	18	3	Clear Zinc	0.140-in	#2 Phillips	3,000
DP258	8	2-5/8-in.	Bugle	0.325-in	18	3	Phosphate	0.140-in	#2 Phillips	2,500
DPXT258	8	2-5/8-in.	Bugle	0.325-in	18	3	NanoGard®	0.140-in	#2 Phillips	2,500
DPZ258	8	2-5/8-in.	Bugle	0.325-in	18	3	Clear Zinc	0.140-in	#2 Phillips	2,500
DPZ300	8	3-in.	Bugle	0.325-in	18	3	Clear Zinc	0.140-in	#2 Phillips	2,000
DP300	8	3-in.	Bugle	0.325-in	18	3	Phosphate	0.140-in	#2 Phillips	2,000
DPXT300	8	3-in.	Bugle	0.325-in	18	3	NanoGard®	0.140-in	#2 Phillips	2,000
T3PB102	10	2-in.	Bugle	0.343-in	16	3.5-Pilot	NanoGard®	0.210-in	#2 Phillips	3,000
DPZ312	10	3-1/2-in.	Bugle	0.343-in	16	3	Clear Zinc	0.175-in	#2 Phillips	1,000
T3PB10358	10	3-5/8-in.	Bugle	0.343-in	16	3.5-Pilot	NanoGard®	0.210-in	#2 Phillips	1,000
DPXT334	10	3-3/4-in.	Bugle	0.343-in	16	3	NanoGard®	0.175-in	#2 Phillips	1,000
DPZ400	10	4-in.	Bugle	0.343-in	16	3	Clear Zinc	0.175-in	#2 Phillips	1,000
DPXT438	10	4-3/8-in.	Bugle	0.343-in	16	3	NanoGard®	0.175-in	#2 Phillips	800
DPZ500	10	5-in.	Bugle	0.343-in	16	3	Clear Zinc	0.175-in	#2 Phillips	1,000
DPXT512	10	5-1/2-in.	Bugle	0.343-in	16	3	NanoGard®	0.175-in	#2 Phillips	500
DPZ600	10	6-in.	Bugle	0.343-in	16	3	Clear Zinc	0.175-in	#2 Phillips	1,000
T3PB12358	12	3-5/8-in.	Bugle	0.364-in	14	3.5-Pilot	NanoGard®	0.220-in	#3 Phillips	1,000

Item Number Code: XT - Exterior (NanoGard), PP = 1-lb, FP = 5-lb, CP = Count Pack

Description: Self-Drilling Bugle head screw used in heavy-gauge (see TABLE A - Maximum Total Drilling Thickness) gypsum board-to-metal applications. Self tapping screws with drill point or pilot point are designed for penetration into heavy-gauge steel.

Directions: Use a standard screwgun with a depth sensitive nose piece. Suggested screwgun specification for optimal performance - Size #6 - #10, up to 2,500 RPM, size #12 up to 1,800 RPM. For gypsum board, the Bugle head is fully seated when the screw is below the surface of the wallboard in accordance with Section 11.6.3 of ASTM C954. Overdriving may result in failure of the fastener, or failure of the gypsum board.

Corrosion: For Corrosion Resistance Testing Results, see TABLE B.

Certifications: S-DBF fasteners are used for gypsum board-to-heavy-gauge steel applications and comply with ASTM C954 requirements.

Self-Drilling Screw Selection Guide

DRILL POINT SELECTION

Top Material to be drilled
Bottom Material to be drilled

Total Drilling Thickness

Top Material to be drilled
Void or insulation
Bottom Material to be drilled

Total Drilling Thickness

Pre-drilled or punched hole with diameter Larger than screw threads
Pre-drilled or punched top material
Void or insulation
Bottom Material to be drilled

Total Drilling Thickness

Drill Flute (Point Length)
The length of the drill flute determines the metal thickness that can be drilled. The flute itself provides a channel for chip removal during drilling action. If it becomes completely embedded in material, drill chips will be trapped in the flute and cutting action will cease. This will cause the point to burn up or break.

Pilot Point Length
The un-threaded section from the point to the first thread should be long enough to assure the drilling action is complete before the first thread engages the drilled metal. Screw threads advance at a rate of up to ten times faster than the drill flute can remove metal. All drilling therefore should be complete before threads begin to form.

Drilling Through Wood To Metal
If your application calls for drilling through wood over 1/2-in. thick, a clearance hole is required. Select a fastener with break away wings for this type of job. The wings will ream a clearance hole and break-off when in contact with metal surface (minimum metal thickness .040-in.) to be drilled.

S-DBF - SCORPION-Self-Drilling Bugle Head Fine Thread

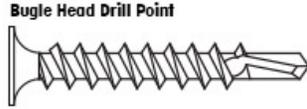


TABLE B

CORROSION RESISTANCE TESTING RESULTS			
Finish	Test	Standard/Protocol	Results (minimum)
Phosphate	Salt Spray	ASTM B117	24 hours, no red rust
Clear Zinc	Salt Spray	ASTM B117	12 hours, no red rust
NanoGard®	Salt Spray	ASTM B117	1000 hours, no red rust

NOTE: Salt Spray Testing (SST) results are not intended to predict corrosion resistance in real-world environments. The ASTM B117 standard for SST is recognized industry-wide as an effective tool to compare different metals and different metal coatings in a tightly controlled highly corrosive environment for specific periods of time. For more information about corrosion resistance, see the *Grabber Guide to Corrosion Resistance for Fasteners*.

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