1. SCOPE

a. This specification covers the basic requirements for a corrosion resistant non-electrolytically applied inorganic zinc/aluminum dispersion base coat with topcoat (sealer) applied for fasteners.

b. These coatings are applied by conventional dip-spin or dip-drain or spray methods which can be handled through a cleaning, coating and baking operation per coating manufacturer's specified requirements.

c. Coatings shall be approved per C.1000.ECO.S

2. COATING REQUIREMENTS

a. Coatings shall comply with the designation requirements of Table 1.

Table 1 Requirements

Product Description and Size	Minimum Salt Spray Hours	ASTM F3393 Designation	ISO 10683 Designation
Hex Cap Screws, Hex Bolts, Flange Bolts, Carriage Bolts, Nuts, ½ -in. (M12) diameter and larger, and all washers	1000	G(1000 h)1N	flZn/nc/TL/1000h/C
Socket Head including socket, flat and button head socket cap screws of all sizes and hex head cap screws, hex bolts, flange bolts, carriage bolts, nuts, and machine screws less than 1/2. (M12) diameter	720	D1N	flZn/nc/TL/720h/C

3. THREAD GAGING

a. For thread gaging requirements, See Table 2
b. Screws, bolts and nuts with thread fit 2B, 2A , 3A and 6g with nominal thread diameters smaller than ¼" (m6) having coarse threads, and all diameters of 2B, 2A, 3Aand 6G fine thread, may not conform to the gaging practice of Table 2

Table 2 Thread Gaging Requirements

ASME B1.1 Thread Class Designation	Thread Condition Prior to Coating Application	Thread Acceptance Inspection After Coating Application [1]
2B	Shall gage 2B	Shall be accepted if the nut screws onto a standard 2A, Hex Cap Screw. (plain finish), until 4 threads emerge through the nut
2A	Shall gage 2A	Shall be inspected with 3A Go and 2A nogo gages
3A	Shall gage 3A	Shall be accepted if the full length of threads turns into a standard 2B Finished Hex Nut (plain finish)
ISO 965-1 Thread Class Designation	Thread Condition Prior to Coating Application	Thread Acceptance Inspection After Coating Application
6g	Shall gage 6g	Shall be accepted if the full length of threads turns into a standard 6H Finished Hex Nut (plain finish)
5g6g	Shall gage 5g6g	
4g6g	Shall gage 4g6g	
6H	Shall gage 6H	Shall be accepted if the nut screws onto a standard 6g, Hex Cap Screw, (plain finish), until 4 threads emerge through the nut

[1] Torque values not exceeding those of ASTM F788, Table 1, may be used to facilitate the thread acceptance

Revision Level Changes to this Document

Document Name	Revision Level	Revision Date	Rationale for Revision
C.1000.ECO	17	7/21/2021	Clarified thread gaging acceptance in Table 2 for the bolts. In addition, a general update was issued to reference the applicable requirements to ASTM F3393 and ISO 10683. Redundant information was removed.

The rationale above may not include all of the changes within each revision. A complete review of the Fastenal Product Standard is required.