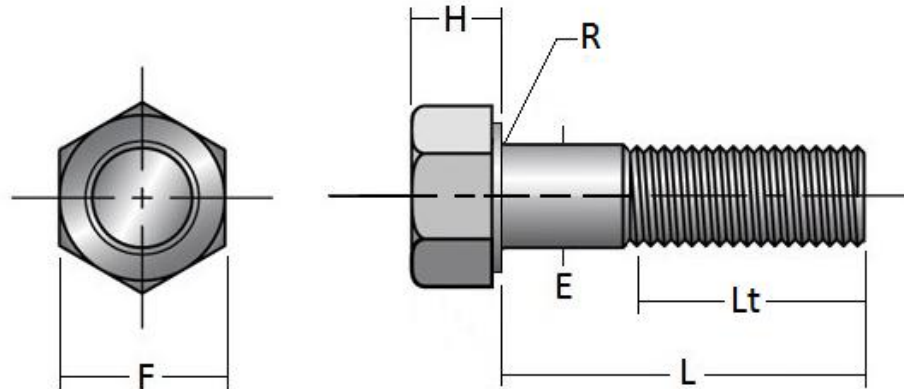


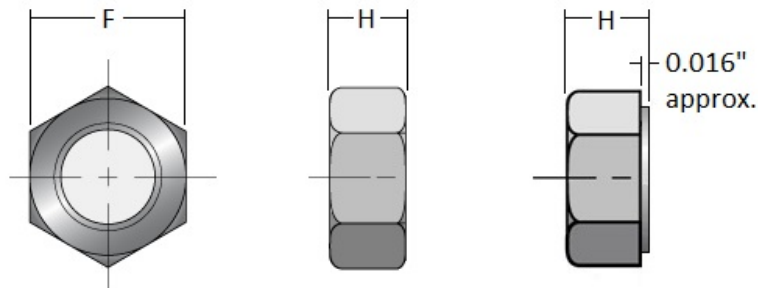
Page 1 of 3	Fastenal Product Standard	REV-10
Date: 8/28/2025	FASTENAL	HHSB.A325.1.WN.HDG

Heavy Hex Structural Bolt, A325, Type 1, ASTM A563 Grade DH Heavy Hex Nut, Hot Dip Galvanized

This product standard contains the required dimensional, mechanical, performance, and chemical characteristics of the products shown in this purchase order (as applicable to the product). Unless specified below, current revisions of national or international standards shall be applicable as of the date of Fastenal's purchase order and must be adhered to in their entirety. If the order received does not meet these requirements, corrective action may be issued which could jeopardize your status as an approved supplier to Fastenal.



Nominal Size	E		F		H		R		Lt
	Full Size Body Diameter		Width Across Flats		Head Height		Fillet Radius		Thread Length
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Basic
1/2	0.515	0.482	0.875	0.850	0.323	0.302	0.031	0.009	1.00
5/8	0.642	0.605	1.062	1.031	0.403	0.378	0.062	0.021	1.25
3/4	0.768	0.729	1.250	1.212	0.483	0.455	0.062	0.021	1.38
7/8	0.895	0.852	1.438	1.394	0.563	0.531	0.062	0.031	1.50
1	1.022	0.976	1.625	1.575	0.627	0.591	0.093	0.062	1.75
1 1/8	1.149	1.098	1.812	1.756	0.718	0.658	0.093	0.062	2.00
1 1/4	1.277	1.223	2.000	1.938	0.813	0.749	0.093	0.062	2.00
1 3/8	1.404	1.345	2.188	2.119	0.878	0.810	0.093	0.062	2.25
1 1/2	1.531	1.470	2.375	2.300	0.974	0.902	0.093	0.062	2.25



RECORD OF REVISION CHANGES TO THIS DOCUMENT ARE LOCATED ON THE LAST PAGE

Page 2 of 3	Fastenal Product Standard	REV-10
Date: 8/28/2025	FASTENAL	HHSB.A325.1.WN.HDG

Nominal Size	F		H	
	Width Across Flats		Thickness	
	Max.	Min.	Max.	Min.
1/2	0.875	0.850	0.504	0.464
5/8	1.062	1.031	0.631	0.587
3/4	1.250	1.212	0.758	0.710
7/8	1.438	1.394	0.885	0.833
1	1.625	1.575	1.012	0.956
1 1/8	1.812	1.756	1.139	1.079
1 1/4	2.000	1.938	1.251	1.187
1 3/8	2.188	2.119	1.378	1.310
1 1/2	2.375	2.300	1.505	1.433

Dimensions above are prior to coating

Specification Requirements:

- Dimensions: Bolts and Nuts: ASME B18.2.6
- Material: Heavy Hex Structural Bolt: F3125/F3125M, Grade A325, Type 1
Heavy Hex Nut: ASTM A563 Grade DH
- Mechanical: Heavy Hex Structural Bolt: F3125/F3125M, Grade A325, Type 1
Heavy Hex Nut: ASTM A563 Grade DH
- Performance: S4 Rotational Capacity per F3125/F3125M
- Threads: ASME B1.1 UNC
Bolts: Class 2A before coating
Nuts: Over tapped per ASTM A563
- Marking: Manufacturer's ID on both nut and bolt
Bolt must have A325
Nut must have DH
- Finish: Hot Dip Galvanize per A153/A153M or F2329/F2329M
Nuts must meet supplemental requirement S1 and S2 per ASTM A563
- Material Test Reports: The MTR must have documented lot traceability, dimensional results, full chemical test results and full mechanical test results to the specification(s) above. In addition, the MTR shall be in full compliance with Fastenal's MTR Requirements.

Page 3 of 3	Fastenal Product Standard	REV-10
Date: 8/28/2025	FASTENAL	HHSB.A325.1.WN.HDG

- Quality Assurance Provisions:

Final inspection per Category 3 of ASME B18.18 shall be performed by an ISO/IEC 17025 accredited laboratory with all test methods within the lab scope. The sample size for Category 3 shall be used, unless the producer has in-process records, in which case, Category 2 sample size may be used. Final inspection shall consist of the following:

- Verifying in-process inspection records for conformity
- Conducting any additional dimensional inspections to meet required sample size
- Conducting all applicable mechanical and performance tests

Resellers shall randomly select fasteners from a verifiable single lot and conduct the final inspection in a facility accredited to the requirements of ISO/IEC 17025 using the Category 3 sample size and attributes of ASME B18.18. The original producers inspection shall accompany the resellers final inspection certification.

NOTE: A194/A194M 2H heavy hex inch nuts may be used in place of A563 DH nuts on type 1 A325. When coated 2H nuts are used in place of DH, the same requirements of A563 and F3125/F3125M, including Annex A1, shall apply. These include, but are not limited to, overlap amount, coating grade, lubrication requirements, and proof load testing.

Revision Level Changes to this Document

Document Name	Revision Level	Revision Date	Rationale for Revision
HHSB.A325.1.WN.HDG	07	11/26/2018	Removed "Bolts" from finish requirement. Added correct standard designation.
HHSB.A325.1.WN.HDG	08	12/19/2019	Added QA provision requirement.
HHSB.A325.1.WN.HDG	09	5/3/2023	Corrected WAF for sizes 5/8 and 1-1/8.
HHSB.A325.1.WN.HDG	10	8/28/2025	Updated CAT 3 requirement.

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