

# Bennett Bolt Works, Inc.

Technical Data Sheet: ASTM F844

Jordan, NY  
(315)689-3981

This specification covers round and miscellaneous shape steel plain (flat) washers furnished in an unhardened condition. The washers are intended for general use bolt, nut, and stud applications to provide increased bearing surface, spacing, and to prevent galling. The washers shall be punched from hot-rolled, hot-rolled and pickled, or cold-rolled steel; or shall be machined from bar stock or tubing; or shall be forged. The washers shall also be tumbled, vibrated, or otherwise processed to minimize burrs. These washers may be zinc-coated, hot-dip-coated, cadmium-plated, or zinc-plated by using hot dipping, mechanical deposition, and electroplating processes. Chemical analysis may be conducted in order to determine the composition of washers and a hardness test may also be performed.

## 1. Scope

**1.2** - The washers are intended for general use bolt, nut, and stud applications to provide increased bearing surface, spacing, and to prevent galling.

**1.3** - Unless otherwise specified, the washers are furnished with dimensions conforming to B18.22.1, Type A, Tables 1A and Tables 1B.

**1.4** - Hardened washers for use with heat-treated structural bolts are covered by Specifications F436 and F436M.

	A	B	C	Weight (lbs.)
Bolt Size	Inside Diameter	Outside Diameter	Thickness	Per 100 Pieces
1/2	9/16	1-3/8	0.109	4
5/8	11/16	1-3/4	0.134	8
3/4	13/16	2	0.148	11
7/8	15/16	2-1/4	0.165	15
1	11/16	2-1/2	0.165	19
1-1/8	1-1/4	2-3/4	0.165	22
1-1/4	1-3/8	3	0.165	26
1-3/8	1-1/2	3-1/4	0.18	33
1-1/2	1-5/8	3-1/2	0.18	38
1-5/8	1-3/4	3-3/4	0.18	43
1-3/4	1-7/8	4	0.18	50
1-7/8	2	4-1/4	0.18	57
2	2-1/8	4-1/2	0.18	63

2-1/4	2-3/8	4-3/4	0.22	83
2-1/2	2-5/8	5	0.238	96
2-3/4	2-7/8	5-1/4	0.259	110
3	3-1/8	5-1/2	0.284	130

*Dimensions per ASME B18.22.1*