



Designation: B 856 – 95^{€1}

Standard Specification for Concentric-Lay-Stranded Aluminum Conductors, Coated Steel Supported (ACSS)¹

This standard is issued under the fixed designation B 856; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (€) indicates an editorial change since the last revision or reapproval.

€¹ NOTE—Editorial changes were made throughout in November 1999.

1. Scope

1.1 This specification covers round wire concentric-lay-stranded aluminum conductors, steel supported (ACSS) for use as overhead electrical conductors (see Note 1 and Note 2).

1.2 The values stated in inch-pound units are to be regarded as the standard with the exception of temperature and resistivity. The SI equivalents given in parentheses may be approximate.

NOTE 1—The aluminum and temper designations conform to ANSI Standard H 35.1. Aluminum 1350 corresponds to Unified Number System (UNS) No. A91350 in accordance with Practice E 527.

NOTE 2—In this specification only concentric-lay-stranded aluminum conductors, steel-supported are specifically designated. Conductor constructions not included in this specification should be agreed upon between the manufacturer and the purchaser when placing the order.

2. Referenced Documents

2.1 The following documents of the issue in effect on date of material purchase form part of this specification to the extent referenced herein:

2.2 ASTM Standards:

B 263 Test Method for Determination of Cross-Sectional Area of Stranded Conductors²

B 341 Specification for Aluminum-Coated (Aluminized) Steel Core Wire for Aluminum Conductors, Steel Reinforced (ACSR/AZ)²

B 354 Terminology Relating to Uninsulated Metallic Electrical Conductors²

B 498 Specification for Zinc-Coated (Galvanized) Steel Core Wire for Aluminum Conductors, Steel Reinforced (ACSR)²

B 500 Specification for Metallic Coated Stranded Steel Core for Aluminum Conductors, Steel Reinforced (ACSR)²

B 502 Specification for Aluminum-Clad Steel Core Wire for Aluminum Conductors, Aluminum-Clad Steel Reinforced²

B 606 Specification for High-Strength Zinc-Coated (Galva-

nized) Steel Core Wire for Aluminum and Aluminum-Alloy Conductors, Steel Reinforced²

B 609 Specification for Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes²

B 802 Specification for Zinc-5 % Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Aluminum Conductors, Steel Reinforced (ACSR)²

B 803 Specification for High-Strength Zinc-5 % Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Aluminum and Aluminum-Alloy Conductors, Steel Reinforced²

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications³

E 527 Practice for Numbering Metals and Alloys (UNS)⁴

2.3 Military Standard:

MIL-C-12000 Cable, Cord, and Wire, Electric: Package of⁵

2.4 Other Standards:

ANSI H35.1 American National Standard Alloy and Temper Designation Systems for Aluminum⁶

NBS *Handbook 100*—Copper Wire Tables of the National Bureau of Standards⁷

3. Terminology

3.1 Definitions:

3.1.1 *aluminized*—aluminum coated.

3.1.2 *aluminum-clad*—aluminum sheathed.

3.1.3 *galvanized*—zinc coated.

NOTE 3—For definitions of terms relating to conductors, refer to Definitions B 354.

3.2 Abbreviations:

3.2.1 ACSS—aluminum conductor, steel supported.

3.2.2 ACSS/GA—supported with galvanized steel core wire, coating Class A in accordance with Specification B 498.

3.2.3 ACSS/GB—supported with galvanized steel core wire,

³ *Annual Book of ASTM Standards*, Vol 14.02.

⁴ *Annual Book of ASTM Standards*, Vol 01.01.

⁵ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094. Attn: NPODS.

⁶ Available from the American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

⁷ Available from National Technical Information Services, 5285 Port Royal Road, Springfield, VA 22161.

¹ This specification is under the jurisdiction of ASTM Committee B-1 on Electrical Conductors and is the direct responsibility of Subcommittee B01.07 on Conductors of Light Metals.

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² *Annual Book of ASTM Standards*, Vol 02.03.