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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5237.3-2017

Replacing GB/T 5237.3-2008

**Wrought aluminium alloy extruded profiles for architecture -
Part 3: Electrodeposition coating profiles**

铝合金建筑型材 第3部分：电泳涂漆型材

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	3
4 Requirements	3
5 Test methods	9
6 Conformity with standards	14
7 Marking, packaging, transporting, storing, and quality certificate	18
8 Order (or contract) content	20
Annex A (informative) Quality assurance	22
Bibliography	25

Foreword

SAC/TC 243 is in charge of this English translation. In case of any doubt about the contents of the English translation, the Chinese original shall be considered authoritative.

GB/T 5237 Wrought aluminium alloy extruded profiles for architecture consists of the following six parts under the general title:

- Part 1: Mill finish profiles;
- Part 2: Anodized profiles;
- Part 3: Electrodeposition coating profiles;
- Part 4: Powder coating profiles;
- Part 5: Paint coating profiles;
- Part 6: Thermal barrier profiles.

This is the third part of GB/T 5237.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 5237.3-2008 Wrought aluminium alloy extruded profiles for architecture - Part 3: Electrodeposition coating profiles in whole. In addition to a number of editorial changes, the following technical deviations have been made with respect to GB/T 5237.3-2008:

- deleted the statement in the foreword "In this part, subclause 4.4.4 and the local thickness

requirement of combine film in Table 2 are compulsory, other contents are recommended" (see the foreword of the 2008 edition);

- modified the application of this part (see Clause 1; Clause 1 of the 2008 edition);
- deleted the normative reference GB/T 228-2002 (see Clause 2 and subclause 5.2 of the 2008 edition);
- deleted the normative reference GB/T 8013.1 (see Clause 2 and subclause 5.4.6 of the 2008 edition);
- deleted the normative reference GB/T 9761 (see Clause 2 and subclause 5.5 of the 2008 edition);
- deleted the normative reference GB/T 9789 (see Clause 2 of the 2008 edition);
- deleted the normative reference GB/T 14952.3 (see Clause 2 and subclause 5.4.1 of the 2008 edition);
- deleted the normative reference GB/T 20975 (see Clause 2 and subclause 5.1 of the 2008 edition);
- deleted the normative reference JC/T 480 (see Clause 2 and subclause 5.4.9 of the 2008 edition);
- added the normative reference GB/T 8005.3 (see Clause 2 and Clause 3);
- added the normative reference GB/T 12967.6 (see Clause 2, subclause 5.4.2 and subclause 5.5);
- added the normative reference GB/T 14684 (see Clause 2 and subclause 5.4.9);
- added the normative reference JC/T 479 (see Clause 2 and subclause 5.4.9);
- modified the guide language of "terms and definitions" (see Clause 3; Clause 3 of the 2008 edition);
- modified the definition of "exposed surfaces" (see subclause 3.1; subclause 3.1 of the 2008 edition);
- deleted the definition of "local thickness" (see subclause 3.2 of the 2008 edition);
- added the regulations of "paint film type and paint film feature" (see subclause 4.1.2);
- in classification, the contents of each coating thickness of typical applications was modified to remarks of coating thickness of each class, and the film code is also specified (see subclause 4.1.3; subclause 4.1.2 of the 2008 edition);
- in classification, added the combined coating performance type and recommended application environment (see subclause 4.1.4);

- added the content of "quality assurance" (see subclause 4.2);
- in coating thickness, added the film thickness requirement of inner angle, fillister etc. profile surface (see subclause 4.6.1; subclause 4.4.2 of the 2008 edition);
- modified the requirement of the paint film hardness of class S (see subclause 4.6.3; subclause 4.4.3 of the 2008 edition);
- modified the requirement of the boiling water resistance (see subclause 4.6.5; subclause 4.4.5 of the 2008 edition);
- modified the requirement of the abrasion resistance (see subclause 4.6.6; subclause 4.4.6 of the 2008 edition);
- modified the requirement of the solvent resistance (see subclause 4.6.10; subclause 4.4.10 of the 2008 edition);
- modified the requirement of the salt-spray corrosion resistance (see subclause 4.6.13; subclause 4.4.12 of the 2008 edition);
- added the requirement of the resistance to cyclic corrosion/UV light (see subclause 4.6.14);
- in the requirement of accelerated weathering resistance testing result, modified the requirement of the gloss retention (see subclause 4.6.15.1; subclause 4.4.14.1 of the 2008 edition);
- in the requirement of accelerated weathering resistance testing result, "Degree of discoloration ≤ 1 " is modified to "colour change $\Delta E^*_{ab} \leq 3.0$ " (see subclause 4.6.15.1; subclause 4.4.14.1 of the 2008 edition);
- modified the requirement of the "other" coating properties (see subclause 4.6.16; subclause 4.4.15 of the 2008 edition);
- modified the requirement of the analysis method for chemical composition (see subclause 5.1; subclause 5.1 of the 2008 edition);
- modified the requirement of the mechanical properties test methods (see subclause 5.2; subclause 5.2 of the 2008 edition);
- modified the requirement of boiling water resistance test methods (see subclause 5.4.5; subclause 5.4.5 of the 2008 edition);
- modified the requirement of abrasion resistance test methods (see subclause 5.4.6; subclause 5.4.6 of the 2008 edition);
- in acid resistance test methods, "chemically pure hydrochloric acid" is modified to "analytically pure hydrochloric acid" (see subclause 5.4.7; subclause 5.4.7 of the 2008 edition);

- in mortar resistance test methods, modified the pulverized lime to architectural quicklime specified in JC/T 479, modified the standard sand to construction sand specified in GB/T 14684 (see subclause 5.4.9; subclause 5.4.9 of the 2008 edition);
- modified the requirement of solvent resistance test methods (see subclause 5.4.10; subclause 5.4.10 of the 2008 edition);
- added the requirement of resistance to cyclic corrosion/UV light test methods (see subclause 5.4.14);
- modified the requirement of accelerated weathering resistance test methods (see subclause 5.4.15.1; subclause 5.4.14.1 of the 2008 edition);
- in natural exposure resistance, the note is modified (see subclause 5.4.15.2; subclause 5.4.14.2 of the 2008 edition);
- modified the requirement of appearance test methods (see subclause 5.5; subclause 5.5 of the 2008 edition);
- modified the regulations of inspection and acceptance (see subclause 6.1; subclause 6.1 of the 2008 edition);
- modified the requirement of batch (see subclause 6.2; subclause 6.2 of the 2008 edition);
- modified the regulations of inspection items (see subclause 6.4; subclause 6.3 of the 2008 edition);
- modified the regulations of the sampling (see subclause 6.5; subclause 6.4 of the 2008 edition);
- modified the requirement of the judgment for test result (see subclause 6.6; subclause 6.5 of the 2008 edition);
- modified the regulations of the products marking (see subclause 7.1.1; subclause 7.1 of the 2008 edition);
- modified the regulations of the packaging (see subclause 7.2; subclause 7.3 of the 2008 edition);
- modified the regulations of the transporting and storing (see subclause 7.3; subclause 7.4 of the 2008 edition);
- modified the contents of the quality certificate (see subclause 7.4; subclause 7.5 of the 2008 edition);
- modified the regulations of the order (or contract) content (see Clause 8; Clause 8 of the 2008 edition);
- added the contents of the raw material quality assurance (see Annex A);