



Standard Test Method for Turner and Newall (T and N) Wet-Length Classification of Asbestos¹

This standard is issued under the fixed designation C1121/C1121M; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This test method covers the operation of the Turner and Newall (T and N) wet sieving classifier for asbestos,² and a procedure for the determination of fiber length distribution and fines (defined in Terminology [D2946](#)) content of milled asbestos fiber ($-74\text{ }\mu\text{m}$ [200 mesh]) sieve described in Specification [E11](#).

1.2 For purposes of estimating length distribution, the test is limited to samples free from excessive quantities of non-fibrous particles or contaminants. Quantities exceeding 0.05 g retained in any given length fractions are considered excessive.

1.3 For comparisons between different fiber grades, only those specimens which have approximately the same degree of fiberization as determined by Test Methods [D2752/D2752M](#) will give completely meaningful results.

1.4 This test method is not applicable to ultrafine grades of asbestos powders which contain little or no fibers retained on a $74\text{-}\mu\text{m}$ [200 mesh] sieve. This method is restricted to Quebec Standard³ grades 4A to 7D inclusive as determined by Test Method [D3639/D3639M](#).

NOTE 1—This is an alternative procedure to Test Method [D2589/D2589M](#).

1.5 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.6 **Warning**—Breathing of asbestos dust is hazardous. Asbestos and asbestos products present demonstrated health

risks for users and for those with whom they come into contact. In addition to other precautions, when working with asbestos-cement products, minimize the dust that results. For information on the safe use of chrysotile asbestos, refer to “Safe Use of Chrysotile Asbestos: A Manual on Preventive and Control Measures.”⁴

1.7 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* For a specific hazard statement, see [1.6](#).

2. Referenced Documents

2.1 ASTM Standards:⁵

[D2589/D2589M](#) Test Method for McNett Wet Classification of Dual Asbestos Fiber

[D2590/D2590M](#) Test Method for Sampling Chrysotile Asbestos

[D2752/D2752M](#) Test Methods for Air Permeability of Asbestos Fibers

[D2946](#) Terminology for Asbestos and Asbestos-Cement Products

[D3639/D3639M](#) Test Method for Classification of Asbestos by Quebec Standard Test

[D3879](#) Test Method for Sampling Amphibole Asbestos (Withdrawn 2009)⁶

[E11](#) Specification for Woven Wire Test Sieve Cloth and Test Sieves

[E177](#) Practice for Use of the Terms Precision and Bias in ASTM Test Methods

2.2 Other Standard:

Quebec Asbestos Mining Association (QAMA) Standard Designation of Chrysotile Asbestos Grades³

¹ This test method is under the jurisdiction of ASTM Committee [C17](#) on Fiber-Reinforced Cement Products and is the direct responsibility of Subcommittee [C17.03](#) on Asbestos - Cement Sheet Products and Accessories.

Current edition approved July 1, 2015. Published July 2015. Originally approved in 1989. Last previous edition approved in 2009 as C1121 – 04(2009)^{e1}. DOI: 10.1520/C1121_C1121M-04R15.

² The apparatus is supplied, on a non-profit basis, as a service to the asbestos industry by TAF International, Bowdon House, Ashburton Rd. W, Trafford Park, Manchester M170RQ, England.

³ Available from the Asbestos Institute, 1300 Sherbrooke St. West, Suite 412, Montreal QC, Canada H3A 2M8.

⁴ Available from The Asbestos Institute, http://www.chrysotile.com/en/sr_use/manual.htm.

⁵ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

⁶ The last approved version of this historical standard is referenced on www.astm.org.