Designation: ~~C1756 – 11~~ C1756 – 14

Standard Guide for Comparing Sealant Behavior to Reference Photographs[1]

This standard is issued under the fixed designation C1756; 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 guide provides photographs that illustrate sealant behavior terms that have been defined by Committee C24.

1.2 When available, photographs that better illustrate these terms, or that illustrate additional terms defined by Committee C24, will be included in future editions of this standard. Photographs for consideration may be submitted to the committee using the form in Appendix X1.

1.3 The committee with jurisdiction over this standard is not aware of any comparable standards published by other organizations.

1.4 *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.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]
C717 Terminology of Building Seals and Sealants

3. Terminology

3.1 The terms used in this guide are defined in Terminology C717.

4. Significance and Use

4.1 This guide is intended to be used in evaluating sealant conditions that occur in service, along with other diagnostic techniques in failure analysis. These standard reference photographs have been selected and approved through ASTM's consensus balloting process to illustrate terms defined by Committee C24.

4.2 Not all of the terms illustrated here are failures, and there are other failure mechanisms that affect sealants that are not discussed in this guide. This guide is intended to be one of a number of sources of information used in the evaluation of sealant behavior.

5. Reference Photographs

5.1 Figs. 1-9 present a standard reference photograph for each of the terms defined in Terminology C717, reprinted with their definitions.

6. Keywords

6.1 adhesion failure; chalking; cohesion failure; crazed; dirt pick-up; elastomeric joint sealant; fluid migration; reversion; rundown; sag

[1] This guide is under the jurisdiction of ASTM Committee C24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.10 onSpecifications, Guides and Practices.

Current edition approved ~~June 15, 2011~~Jan. 1, 2014. Published ~~August 2011~~January 2014. Originally approved in 2011. Last previous edition approved in 2011 as C1756-11. DOI: ~~10.1520/C1756-11.~~10.1520/C1756-14.

[2] 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.

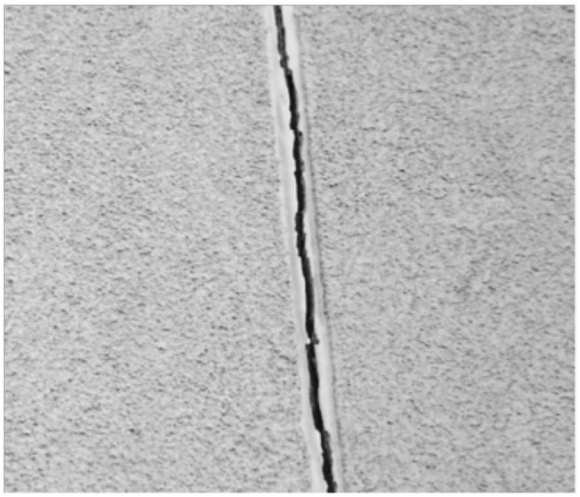
adhesion failure, *n—in building construction*, failure of the bond between a sealant and a substrate.

Discussion—This definition pertains to interfacial adhesion failure, a lack of bond at the interface between the materials. Interphasal adhesion failure, within the sealant or substrate near the interface, is less common and may appear to be inerfacial without the use of magnification.

FIG. 1 Adhesion Failure

chalking, *v—in building construction*, formation of a powder on the surface of a sealant that is caused by the disintegration of the polymer or binding medium due to weathering.

FIG. 2 Chalking



cohesive failure, *n—in building construction*, failure characterized by rupture within the sealant.

FIG. 3 Cohesive Failure

crazed, *adj—in building construction*, having a random network of cracks in a sealant surface which do not penetrate through the body of the material.

FIG. 4 Crazed