



Designation: E 2094 – 002

An American National Standard

Standard Practice for Evaluating the Service Life of Chromogenic Glazings¹

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1. Scope

1.1 This practice is intended to provide guidance to architects, specifiers, manufacturers, and other parties who have an interest in evaluating the service life of chromogenic glazings.

1.2 This practice is intended to cover the main factors about service life that must be considered when evaluating glazings for performance until the failure time is reached. However, users of this practice must be aware that other factors must be considered, such as the effect of the interaction of materials, the use of the glazings, and to the environment in which a chromogenic glazing is exposed over its service life. Users of this practice are specifically cautioned to be aware that failure of the plastic polyurethane thermal barrier in an aluminum window containing a chromogenic glazing can cause a spreading or outward rotation of the glazing legs, called “hinging” or “clamming,” which reduces the edge pressure on an insulated glazing (IG) unit, causing edge seal failure of the IG unit and allowing water to enter the IG unit and the glazing pocket.

1.3 The test methods referenced herein are laboratory tests conducted under specified conditions. These test methods are intended to simulate and, in some cases, to also accelerate actual in-service use of the chromogenic glazings. Results from these test methods cannot be used to predict the performance with time of units in the field unless actual corresponding field tests have been conducted and appropriate analyses have been conducted to show performance can be predicted from accelerated aging test methods.

2. Referenced Documents

2.1 ASTM Standards:

C 168 Terminology Relating to Thermal Insulating Materials²

¹ This practice is under the jurisdiction of ASTM Committee E-6 E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.22 on Durability Performance

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