Summary of Substantive Changes between the 2012 and the 2017 editions of ASTM D4551 “Poly(Vinyl Chloride) (PVC) Plastic Flexible Concealed Water-Containment Membrane”

Presented to the IAPMO Standards Review Committee on May 6, 2019

General: The changes to this standard should not have an impact on currently listed products. The changes are:

- Removed the reference to ASTM D7209 guide for the recycled material definition (see Section 5.2)
- Removed the color requirements for the sheeting (see Section 6.3)
- Excluded the length and width from the dimension requirements for the sheeting (see Section 7)
- Removed the Inspection Requirements from the Standard (Removed Section 13)

Section 2, Referenced Documents: Reference documents were added, revised or deleted as follows:

- ASTM D374/D374M Test Methods for Thickness of Solid Electrical Insulation

Section 5, Materials and Manufacture: Removed the reference to ASTM D7209 guide for the recycled material definition as follows:

5.2 Recycle materials, as defined in Guide D7209, may be used in this product if shall meet all the requirements in Sections 3, 5, 6, and 9 are met by the recycle material.

Section 6, Physical Properties: Removed the color requirements for the sheeting as follows:

6.3 The sheeting shall be colored as agreed upon between the purchaser and the seller as part of the purchase contract.

6.4 6.3 The sheeting shall be monolithic and homogeneous.

Section 7, Dimensions: Excluded the length and width from the dimension requirements for the sheeting as follows:

7.1 The actual width and length of the sheeting shall be as agreed upon between the purchaser and the seller.

7.1.1 Sheet width tolerance shall be +0.5, −0.0 in. (+12.7, −0.0 mm).

7.1.2 The length of the sheeting after unrolling and relaxing for 10 min at 73 ± 3.6°F (23 ± 2°C) shall be no less than that specified in the purchase order.

7.2 Minimum thickness of Grade 30 sheeting shall be 0.03 in. (0.765 mm) and minimum thickness of Grade 40 sheeting shall be 0.04 in. (1.02 mm).

Section 11, Test Methods:

11.1 Thickness—Test five specimens obtained from locations equidistant across the width of the sheet in accordance with Method C of Test Methods D374/D374M. Report thickness of each specimen and location in sheet.
Section 13, Inspection: Removed the Inspection Requirements from the Standard as follows:

13.1 Inspection of the material shall be made as agreed upon between the purchaser and the seller as part of the purchase contract.

Mandatory Annex A1, Microorganism Resistance Test:
Annex A1.2.1, Apparatus: Changed the allowable variation in interior temperature from ± 3.6 °F to ± 4 °F as follows:

A1.2.1.1 Autoclave, capable of maintaining an interior temperature of 251 ± 3.6 °F (122 ± 2°C) at a pressure of 15.5 6 0.5 lb psig (107 6 3.5 kPa) for the purpose of sterilizing glassware and the medium.