PVHO-1 Case 13
Use of Finished Flat Disk Acrylic Window With Thickness Less Than 1/2 in. Under PVHO-1–2012

Approval Date: February 4, 2009
Reaffirmation Date: May 26, 2015
Expiration Date: May 26, 2021

Inquiry: Under what conditions is it permissible for a finished flat disk acrylic window to have a thickness less than 1/2 in. (13 mm)?

Reply: It is the opinion of the Committee that finished flat disk acrylic windows may have a thickness less than 1/2 in. (13 mm) provided that the windows
(a) will not be exposed to environmental conditions that might result in degradation of the acrylic properties (e.g., seawater, direct outdoor sunlight, solvent vapors, nuclear radiation)
(b) comply with all of the requirements of Section 2 of PVHO-1–2012 and the following additional conditions and limitations:
   (1) The maximum design pressure (MAWP) does not exceed 75 psig (0.52 MPa).
   (2) The finished window thickness is not less than 1/4 in. (6.35 mm).
   (3) The critical dimension for scratches is 0.005 in. (0.13 mm).
   (4) Visible inclusions are not permitted (regardless of size).
   (5) The window shall be annealed in accordance with the annealing schedule for 0.50-in. (13-mm) thick acrylic windows.