



Comparison of Certification Tests

	CBA (ASTM E773 / 774)	CGSB CAN 12.8 - 97	HIGS (ASTM E2188 / E2189 / E2190)
High Humidity Chamber Test	60C (140F) and 95+ % RH Class C: 14 days Class B: 14 days Class A: 14 days Total 42 days	22C to 55C (72F to 132F) 224 cycles Each cycle = 3 hours Total 28 days	60C (140F) and 95+ % RH Initial 14 days Last 28 days Total 42 days
Weather Cycle Test	Room to -30C (-20F) in 1 hour Hold at -30C (-20F) for 1 hour -30C (-20F) to Room in 1 hour Turn on water spray and UV Room to 57C (135F) in 1 hour Turn off water spray after first half hour Hold at 57C (135F) for 1 hour 57C (135F) to Room Temp in 1 hour Turn off UV Total of 6 hours for each cycle	Room to -32C (-25F) in 1 hour -32C (-25F) to 50C (122F) in 90 minutes Air circulation for 25 minutes Water spray for 5 minutes Water temperature is 24C (75F) Air circulation for 60 minutes Total of 4 hours for each cycle	Room to -29C (-20F) in 1 hour Hold at -29C (-20F) for 1 hour -29C (-20F) to Room in 1 hour Turn on water spray and UV Room to 60C (140F) in 1 hour Hold at 60C (140F) for 1 hour 60C (140F) to Room Temp in 1 hour Turn off water spray and UV Total of 6 hours for each cycle
Weather Cycles Specified	Class C: 140 cycles Class B: Class C + 56 cycles Class A: Class B + 56 cycles Total 252 cycles at 6 hours each Class C: 2 wks HH + 5 wks Weather cycle Class B: Class C + 2 wks HH + 2 wks weather cycle Class A: Class C + Class B + 2 wks HH + 2 wks weather cycle	Total 320 cycles at 4 hours each Total 54 days	Total 252 cycles at 6 hours each 2 wks HH + 9 wks weather cycle + 4 wks HH
Dew Point Requirement	Class C: -34C (-30F) Class B: -29C (-20F) Class A: -29C (-20F)	-40C (-40F) or less at the end of high humidity test and weathering test	Measure initial, intermediate (after weather cycle) and final (after high humidity test) dew pt. taken after 24 hours but not later than 7 days Final dew pt required to be less than -40F (-40C)
Volatile Fog Test	Mount specimens in a vertically positioned frame. Glass surface temperature: 65C (150F) maintained by positioning a UV light source Cooling plate of 5 sq.in: 21C (70F) Test Duration: 1 week Result: Remove specimen from frame. Condition for 24 hours. Examine for fog by holding at arms length with light behind specimen. For a thorough check, move the specimen to view from different angles.	Mount specimens in a volatile fog box Box temperature: 60C (140F) maintained by UV lamp and cooling fan Cooling plate of 150mm dia: 22C (72F) Test Duration: 1 week Result: Remove specimen from fog box. Mount in specified viewing box. Stand about 2m directly in front of the test unit and look for any evidence of fogging or any other residue on the interior glass surface.	Mount specimens in a volatile fog box Box temperature: 50C (122F) maintained by UV lamp and cooling fan Cooling plate of 150mm dia: 21C (70F) Test Duration: 1 week Result: Remove specimen from fog box. Examine for fog by holding at arm's length from the eyes with a light behind the specimen. For a thorough check, move the specimen to view from different angles. If fog is observed, repeat same procedure after 24 hours If fog is still observed, repeat same procedure after an additional 6 days.