



## HIGH TEMPERATURE TESTING OF CURED COATINGS

- Customer:** Adsil Inc.
- Test Specimens:** i) Adsil Inc. provided 16 Q-Panels: 8 coated with AD1000/AD2000QD and 8 with AD35  
 ii) Panels were sufficiently cured when these were received
- Requirement:** To evaluate these coated panels to affirm that these pass at 700°F
- Test Method:** ASTM D2485, Method B
- Test Equipment:** Muffle Furnace Lindberg Blue M, Model: Box Furnace BF51841 BC-1  
 Manufacturer: Thermo Electron Corporation
- Test Details:** i) AD1000/AD2000QD was assigned as system A and AD35 was assigned as system B for testing  
 ii) Each panel was also assigned a number 1-8  
 iii) Panels were heat exposed at 400°F for 16h, 500°F for 8h, 600°F for 16 h and 700°F for 8h.  
 iv) Panels were visually inspected for evidence of failure after each heat exposure.  
 v) Panel #4 of each coating system were exposed for salt spray for 24h after 700°F heat exposure per ASTM method.

Visual Inspection	System A, AD1000/AD2000QD				System B, AD35			
	400° F	500° F	600° F	700° F	400° F	500° F	600° F	700° F
Peeling	N	N	N	N	N	N	N	N
Cracking	N	N	N	N	N	N	N	N
Blisters	N	N	N	N	N	N	N	N
Discoloration	N	N	N	N	N	N	N	N
Adhesion loss	Y	Y	Y*	Y*	N	N	N	N
Gloss loss	Y	Y	Y	Y	Y 50%	Y 50%	Y 50%	Y 50%
Salt Spray				Y				N

N = No Failure, Y = failure observed, \* Appears powdery and rubbed off with finger

**Conclusion:**

AD1000/AD2000QD: No peeling, cracking, blisters and discoloration were observed up to 700°F heat exposure but evidence of gloss loss and salt spray failure were observed.

AD35: No peeling, cracking, blisters, discoloration, adhesion loss and salt spray failure were observed up to 700°F heat exposure but approx. 50% (visually) gloss loss was observed after each heat exposure of 400°F to 700°F.