

PROCEDURE FOR TESTING GLASS FABRICATED ACCORDING TO TECHNOLOGY #1 (99% of Automotive Glass)



	TEST # 2	TEST # 3	TEST # 4	TEST # 5	TEST # 6	TEST # 7	TEST # 8
	CLIMATIC TEMPERATURE WITH HUMIDITY ISO 6270-2	CONSTANT CLIMATIC TEST ECE/TRANS/WP.29	HIGH TEMPERATURE EXPOSURE ECE/TRANS/WP.29	RESISTANCE TO TEMPERATURE CHANGE ISO 16750-4	HUMIDITY/TEMP CYCLE ISO 16750-4 IEC 60068-2-38	VIBRATION TEST BASED ON GM STANDARD	CONSTANT CLIMATIC HUMIDITY EN 61215
SAMPLE SIZE Minimum 30 terminals	TEMPERED PLATES TEMPERED BACKLIGHTS LAMINATED WINDSHIELDS	TEMPERED PLATES TEMPERED BACKLIGHTS LAMINATED WINDSHIELDS	TEMPERED PLATES TEMPERED BACKLIGHTS LAMINATED WINDSHIELDS	TEMPERED PLATES TEMPERED BACKLIGHTS LAMINATED WINDSHIELDS	TEMPERED PLATES TEMPERED BACKLIGHTS LAMINATED WINDSHIELDS	TEMPERED PLATES TEMPERED BACKLIGHTS LAMINATED WINDSHIELDS	TEMPERED BACKLIGHTS
TEMPERATURE	40° C +/- 3° C	49° C TO 52° C	100° C (CIRCULATING AIR)	-40° C TO 90° C	-10° C TO 65° C		85° C
HUMIDITY	100% (THERE MUST BE CONDENSATION ON TEST SPECIMENS)	95% TO 99% (NO CONDENSATION ON TEST SPECIMENS)	NONE SPECIFIED	NONE SPECIFIED	90% TO 96% HUMIDITY		85% RELATIVE HUMIDITY
TOTAL TIME	240 HOURS (10 DAYS)	336 HOURS (TWO WEEKS)	2 HOURS / 500 HOURS	60 HOURS	240 HOURS		336 HOURS
TEMPERATURE CYCLE	N/A	N/A	N/A	-40° C TO 90° C - 6 HOUR CYCLE	-10° C TO 65° C		
NUMBER OF CYCLES	1	1	1	10	10		1
ACCEPTANCE CRITERIA	25 KG AVE LOAD / 150 N MIN.	25 KG AVE LOAD / 150 N MIN.	VISUAL / PULL TEST	VISUAL	25 KG AVE LOAD		VISUAL/ PULL TEST
RESULTS	ALLOY						
TEMPERED PLATES LEAD FREE	49141-32-13-02 49141-32-13-65		ALL PASSED 680357 / 22360 (500 hrs)	ALL PASSED 6707771-1 / 21328 ALL PASSED 670587-6 / 21140	ALL PASSED 6707771-2 / 21483	ALL PASSED 22360 ALL PASSED 22360	
TEMPERED PLATES LEADED	PB		ALL PASSED 680357 / 22360 (500 hrs)	12% FAILED 670587-1 / 21140	ALL PASSED 21483	ALL PASSED 22360	ALL PASSED 22984/PENDING
TEMPERED BACKLIGHTS LEAD FREE	49141-32-13- <del>ALL PASSED 680116-2C, 21720_A</del> 49141-32-13- <del>ALL PASSED 680116-2C, 21720_A</del>	<del>ALL PASSED 680116-1B, 21720_A</del> <del>ALL PASSED 680116-1B, 21720_A</del>	ALL PASSED PENDING	ALL PASSED 680116-3C, 21720_A ALL PASSED 680116-3C, 21720_A			ALL PASSED 22984/PENDING ALL PASSED 22984/PENDING
TEMPERED BACKLIGHTS LEADED**	PB	ALL PASSED 680116-2C, 21720_A	ALL PASSED 680116-1B, 21720_A	ALL PASSED PENDING	ONE FAILED 680116-3C, 21720_A		
LAMINATED WINDSHIELDS LEAD FREE**	49141-32-13- <del>ALL PASSED 680381 / 21974</del> 49141-32-13- <del>ALL PASSED 680381 / 21974</del>	ALL PASSED 680381 / 21974 ALL PASSED 680381 / 21974	ALL PASSED 680381 / 21974 ALL PASSED 680381 / 21974	ALL PASSED 680381 / 21974 ALL PASSED 680381 / 21974	ALL PASSED 680381 / 21974 ALL PASSED 680381 / 21974		
LAMINATED WINDSHIELDS LEADED**	PB	N/A	N/A	ALL FAILED 680381 / 21974			

\*\*The laminated windshield test were conducted consecutively on the same glass. The resistance to temperature change was first, the climatic temperature with humidity was second, and the constant climatic was third. The glass was examined visually after each test and pulled to a minimum of 150 N after all three tests.  
The glass with the leaded parts failed the first test and did not continue.