

DO-178C/ED-12C Table A-7 Verification of Verification Process Results									
DO-178C/ED-12C (Core) Annex A				DO-333 Formal Methods (FM)		DO-331 Model Based (MB)		DO-332 Object Oriented (OO)	
Objective	Description	Objective Reference	Output/Data Reference	Objective Reference	Output/Data Reference	Objective Reference	Output/Data Reference	Objective Reference	Output/Data Reference
A-7 #1	Test procedures are correct.	6.4.5.b, 6.4.5	11.14			-	MB.11.14	-	OO.11.14
A-7 #2	Test results are correct and discrepancies explained.	6.4.5.c, 6.4.5	11.14			-	MB.11.14	-	OO.11.14
A-7 #3	Test coverage of high-level requirements is achieved.	6.4.4.a, 6.4.4.1	11.14			MB.6.8.2.a	MB.11.14	-	OO.11.14
A-7 #4	Test coverage of low-level requirements is achieved.	6.4.4.b, 6.4.4.1	11.14			MB.6.7	MB.11.14	-	OO.11.14
A-7 #5	Test coverage of software structure (modified condition/decision coverage) is achieved.	6.4.4.c, 6.4.4.2.a, 6.4.4.2.b, 6.4.4.d, 6.4.4.3	11.14			MB.6.8.2.b	MB.11.14	-	OO.11.14
A-7 #6	Test coverage of software structure (decision coverage) is achieved.	6.4.4.c, 6.4.4.2.a, 6.4.4.2.b, 6.4.4.d, 6.4.4.3	11.14			MB.6.8.2.b	MB.11.14	-	OO.11.14
A-7 #7	Test coverage of software structure (statement coverage) is achieved.	6.4.4.c, 6.4.4.2.a, 6.4.4.2.b, 6.4.4.d, 6.4.4.3	11.14			MB.6.8.2.b	MB.11.14	-	OO.11.14
A-7 #8	Test coverage of software structure (data coupling and control coupling) is achieved.	6.4.4.d, 6.4.4.2.c, 6.4.4.2.d, 6.4.4.3	11.14			MB.6.8.2.b	MB.11.14	-	OO.11.14
A-7 #9	Verification of additional code, that cannot be traced to Source Code, is achieved.	6.4.4.c, 6.4.4.2.b	11.14			-	MB.11.14	-	OO.11.14
A-7 #FM1	Formal analysis cases and procedures are correct.			FM.6.7.2.a, FM.6.7.2.b, FM.6.7.2	11.4				
A-7 #FM2	Formal analysis results are correct and discrepancies explained.			FM.6.7.2.c, FM.6.7.2	11.4				
A-7 #FM3	Coverage of high-level requirements is achieved.			FM.6.7.1.a, FM.6.7.1.1	11.4				
A-7 #FM4	Coverage of low-level requirements is achieved.			FM.6.7.1.b, FM.6.7.1.1	11.4				
A-7 #FM5-8	Verification of software structure is achieved.			FM.6.7.1.c, FM.6.7.1.2, FM.6.7.1.3, FM.6.7.1.4, FM.6.7.1.5,	11.4				

A-7 #FM9	Verification of property preservation between source and object code.			FM.6.7.f, FM.6.7	11.4				
A-7 #FM10	Formal method is correctly defined, justified, and appropriate.			FM.6.2.1, FM.6.2.1.a, FM.6.2.1.b, FM.6.2.1.c	11.4				
A-7 #MB10	Simulation cases are correct.					MG.6.8.3.2.a, MB.6.8.3.2	MB.11.14		
A-7 #MB11	Simulation procedures are correct.					MG.6.8.3.2.b, MG.6.8.3.2	MB.11.14		
A-7 #MB12	Simulation results are correct and discrepancies explained.					MB.6.8.3.2.c, MB.6.8.3.2	MB.11.14		
A-7 #OO10	Verify local type consistency.							OO.6.7.1	OO.11.14
A-7 #OO11	Verify the use of dynamic memory management is robust.							OO.6.8.1	OO.11.14