



Testing Laboratory Approval

for Independent Laboratory

MEMO Nº: AM-LAB-001-19 Rev.1

Approval Date : 13/09/2011

SUBJECT: INDEPENDENT TESTING LABORATORY APPROVAL

Revision Date: 29/06/2023

SCOPE: See Annex 1

Element Materials Technology Seville
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ENAC Doc.

ENAC Accreditation

REMARKS:

Airbus Defense and Space does not consider as valid any deviation not expressly stated in this document.



ANNEX 1

x METALLIC . MECHANICAL TESTING

Test / Analysis	Method/ Test Procedure
Tensile test	ASTM E8/E8M / ASTM B557M / ASTM B557 / ASTM A370 / EN 2002-001 / UNE-EN ISO 6892-1 / UNE-EN ISO 6892-2
Axial fatigue (HCF)	EN 6072
Fracture toughness (K1c)	ASTM E399
Rockwell Hardness (Scales HRA, HRB, HRC y HR15T)	ASTM E18
Brinell Hardness	ASTM E10
Pin-Type Bearing T	



x COMPOSITES, ADHESIVES AND PLASTICS. MECHANICAL TESTING

Test / Analysis	Method/ Test Procedure
Tensile Test	UNE-EN 2561 / UNE-EN ISO 527-1 / UNE-EN ISO 527-4 / UNE-EN ISO 527-5 / ASTM D3039/D3039M / EN 2597 / UNE EN 2597 / AITM 1-0007 / ASTM D638 / ASTM D882 / I+D-E-026 / I+D-E-253 / I+D-P-284
Open Hole and Filled Hole Tensile Strength	AITM 1-0007 / ASTM D5766/D5766M
Compression test	UNE-EN 2850 / AITM 1-0008 / ASTM D6484/D6484M / ASTM D1621 / I+D-E-051 / UNE-EN ISO 14126
Open Hole and Filled Hole Compression Strength	AITM 1-0008 / ASTM D6484/D6484M
Interlaminar Shear Strength	ASTM D2344/D2344 / UNE-EN 2563 / UNE-EN ISO 14130 / ABT 1-0006 / I+D-E-031 / I+D-E-255 / I+D-E-352 QVA-Z10-46-09
Flexure	UNE-EN ISO 14125 / UNE-EN ISO 14125 / UNE-EN 2562 / ASTM D790
In Plane Shear Strength	ASTM D3518/D3518M / EN 6031 / AITM 1-0002 /



x COMPOSITES, ADHESIVES AND PLASTICS. MECHANICAL TESTING (Cont.)

Test / Analysis	Method/ Test Procedure
Compressive tube shear	prEN 2667-2
Determination of Pull-Out/ Pull-Through Strength on Riveted Joints	AITM 1-0066
Bearing strength of composite laminates	I+D-E-325 / ASTM D5961/D5961M
Bearing/ Bypass interaction response of Polymer Laminates Using 2-Fasteners Specimens	ASTM D7248/D7248M
Compressive Residual Strenght Properties of Damage Polymer	ASTM D7137/D7137M
Tension Fatigue of Polymer Matrix Composite Materials	ASTM D3479/D3479M
Uniaxial Fatigue Properties of Plastics	ASTM D7791
Flexural Fatigue Properties of Plastics	ASTM D7774
Open-Hole Fatigue Response of Polymer Matrix Composite Laminates	ASTM D7615/D7615M
Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials by Four-Point Bending	ASTM D6272
Flexural Properties of Polymer Matrix Composites Materials	ASTM D7264/D7264M
Fibre-Reinforced Plastic Composites. Determination of Flexural Properties	UNE-EN ISO 14125
Facesheet Properties of Sandwich Constructions by Long Beam Flexure	ASTM D7249/D7249M
Interlaminar Fracture Toughness of Unidirectional Fiber-Reinforced Polymer Matrix Composites	ASTM D5528 / ISO 15024 / ASTM D7905/D7905M / ASTM D6671/D6671M
Determination of Fatigue of Fasteners in Mechanically Fastened Joints under Constant Amplitude Loading	AITM 1-0074
Constant Amplitude Fatigue Testing on Coupons	AITM 1-0075
Measuring the Damage Resistance of a Fiber-Reinforced Polymer Matrix Composite to a Drop-Weight Impact Event	ASTM D7136/D7136M
Measuring the Fastener Pull-Through Resistance of a Fiber-Reinforced Polymer Matrix Composite	ASTM D7332/ D7332M
Determination of Curved-Beam Failure Load	AITM 1-0069
Bond or Cohesive Strength of Sheet Plastics and Electrical Insulating Materials	ASTM D952



x COMPOSITES, ADHESIVES AND PLASTICS. PHYSICAL, CHEMICAL, THERMAL AND OTHERS TESTING (Cont.)

Test / Analysis	Method/ Test Procedure
Density of Sandwich Core Materials	ASTM C271/ 271M
Determination of the Laminate Ply Thickness	I+D-E-123 / I+D-E-124 / I+D-E-243 / ISO 4593
End (Warp) and Pick (Filling) Count of Woven Fabrics	ASTM D3775
Crack propagation test	I+D-E-301

x ELECTRICAL PROCESSES

Test / Analysis	Method/ Test Procedure
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0. INDEX OF REVISIONS.

0.1 REVISIONS LOG

Rev.	Date	Revised Pages.
Signature Approval		

1	29/06/2023	New approval is issued due to a general revision.
<p>Daniel Sanchez Vivat TEPMS Certifier</p>		