

QUALITY CERTIFICATE
According to ASTM B209

Serial No: 202200800003312

Date: 2022-8-10

CUSTOMER: EMPRESAS CARBONE S.A.	ORDER NO.:SH-EC20220713			CONTRACT NO.:SH-EC20220713		
	DESCRIPTION OF GOODS: ALUMINUM SHEET			STANDARD: ASTMB209		
	ALLOY AND TEMPER: 5083H112			DIMENSIONS: 4*1500*3000		
	LOT NO.:227F111300			NETWEIGHT: 1500.00kgs		
	MECHANICAL PROPERTIES	ULTIMATE STRENGTH	YIELD STRENGTH	ELONGATION	REMARKS	
	UNITS	MPa	MPa	%	-----	
	Nominal Requirement	≥275	≥125	≥12		
	Test Results	299	135	22	-----	

CHEMICAL COMPOSITION %

		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Impurities		Al
Nominal requirement	Min	--	--	--	0.4	4.0	0.05	--	--	Each	Total	Remainder
	Max	0.40	0.40	0.10	1.0	4.9	0.25	0.25	0.15	0.05	0.15	
Test Results		0.06	0.27	0.01	0.68	4.74	0.10	0.01	0.03	0.05	0.15	

QUALITY CERTIFICATE
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Serial No: 202200800003336

Date: 2022-8-10

CUSTOMER: EMPRESAS CARBONE S.A.	ORDER NO.:SH-EC20220713				CONTRACT NO.:SH-EC20220713		
	DESCRIPTION OF GOODS: ALUMINUM SHEET				STANDARD: ASTMB209		
	ALLOY AND TEMPER: 5083H112				DIMENSIONS: 6*1500*3000		
	LOT NO.:207K181302				NETWEIGHT: 1125.00kgs		
	MECHANICAL PROPERTIES	ULTIMATE STRENGTH	YIELD STRENGTH	ELONGATION	REMARKS		
	UNITS	MPa	MPa	%	-----		
	Nominal Requirement	≥275	≥125	≥12			
	Test Results	305	157	21	-----		

CHEMICAL COMPOSITION %

		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Impurities		Al
Nominal requirement	Min	--	--	--	0.4	4.0	0.05	--	--	Each	Total	Remainder
	Max	0.40	0.40	0.10	1.0	4.9	0.25	0.25	0.15	0.05	0.15	
Test Results		0.05	0.24	0.01	0.71	4.68	0.28	0.01	0.01	0.05	0.15	