

SSABWeathering355® | STEEL RESISTANT TO CORROSION CAUSED BY ATMOSPHERIC EVENTS

STANDARD	EN 10025-5																																																																																		
IDENTIFICATION NUMBER	1.8959																																																																																		
CLASSIFICATION	Special structural steel																																																																																		
TYPE	Alloy steel resistant to atmospheric corrosion Steel																																																																																		
ROLLING STATE	AR - Rolling blank																																																																																		
BRIEF DESCRIPTION	High-strength weathering structural steel designed to provide excellent resistance to atmospheric corrosion. Thanks to alloying elements such as copper, chromium and phosphorus, it naturally develops a protective surface layer that reduces the corrosion rate and increases the service life of the component.																																																																																		
APPLICATIONS	Architectural facades, urban furniture, infrastructure projects and applications exposed to atmospheric conditions.																																																																																		
STANDARD COIL STOCK RANGE	<table border="1"> <thead> <tr> <th>SSABWeathering355®</th> <th>1250</th> <th>1500</th> <th colspan="9"></th> </tr> </thead> <tbody> <tr> <td>0.6</td> <td></td> <td></td> <td colspan="9"></td> </tr> <tr> <td>0.8</td> <td>•</td> <td>•</td> <td colspan="9"></td> </tr> <tr> <td>1</td> <td>•</td> <td>•</td> <td colspan="9"></td> </tr> <tr> <td>1.2</td> <td>•</td> <td>•</td> <td colspan="9"></td> </tr> <tr> <td>1.5</td> <td>•</td> <td>•</td> <td colspan="9"></td> </tr> </tbody> </table>											SSABWeathering355®	1250	1500										0.6												0.8	•	•										1	•	•										1.2	•	•										1.5	•	•									
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CHEMICAL COMPOSITION	Regulatory standard																																																																																		
	C (%)	Si (%)	Mn (%)	P (%)	S (%)	Al (%)	Nb (%)	Ti (%)	V (%)	Mo (%)	Cu (%)																																																																								
	≤ 0.16	≤ 0.50	≤ 1.50	≤ 0.035	≤ 0.03						0.25-0.55																																																																								
	Cr (%)	Ni (%)	N (%)	B (%)	Nb+Ti+V (%)	Cr+Mo+Ni (%)	Ni+Cr+Cu+Mo (%)	C.E.V. (%)																																																																											
	0.40-0.80	≤ 0.65																																																																																	
	C.E.V. (%) = $C + (Mn/6) + [(Cr+Mo+V)/5] + [(Ni+Cu)/15]$																																																																																		
MECHANICAL PROPERTIES	According to UNI EN 10025-5																																																																																		
	Mechanical characteristics		Direction		Thicknesses		Values																																																																												
	R _e (MPa)		T		≤ 3		≥ 355																																																																												
	R _m (MPa)		T		≤ 3		470-630																																																																												
	A ₈₀ (%)																																																																																		
	A ₅ (%)		T		≤ 3		≥ 20																																																																												
	Bend Test 180°																																																																																		
	KV 20°C (J)																																																																																		
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	KV -20°C (J)																																																																																		
	KV -40°C (J)																																																																																		
	KV -50°C (J)																																																																																		
	<p>* = Standard option <i>t</i> = thickness in mm of the test piece for the bend test</p> <p>L = Tensile testing carried out on longitudinal test pieces T = Bend tests carried out on cross-cut test pieces</p>																																																																																		
TOLERANCES	Dimensions and shape: EN 10051					Surface quality: EN 10163-2																																																																													
CERTIFICATIONS	EN 10204 - 3.1																																																																																		