



# UEFA TEST CERTIFICATE

*For all tests hereafter, refer to the UEFA-Football-Turf-Manual  
Season 2003-2005*

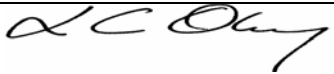
<b>Turf system producer</b>	<b>XL Generation AG</b>	
<b>Turf product (brand name)</b>	<b>XL 2 stars</b>	
<b>Turf product (code)</b>	<b>THPEDI273001134AM160EPPM2S</b>	
<b>Test applicant</b> (address, phone, e-mail)	XL Generation AG Sumpfstrasse 32 6300 Zug, CH	Tel 41 41 723 10 90 Fax 41 41 710 16 48 fvachon@xlgeneration.ch

## TURF COMPOSITION

*Product / System declaration of the turf manufacturer, refer to pages 3 to 5*

Tuft A	Pile fibre 1	Stretched pile fibre length	Number of strands	PE, fibrillated, straight	72 mm	1 strand
	Pile fibre 2				mm	strands
Tuft B	Pile fibre 3			PE, fibrillated, curly TXT	73 mm	1 strand
	Pile fibre 4				mm	strands
<b>Number of tufts per m<sup>2</sup> and total fibre weight</b>				27 300 per m <sup>2</sup>		2 395 gr./ m <sup>2</sup>
<b>Stabilisation infill</b>					mm	kg / m <sup>2</sup>
<b>Shock absorbing infill</b>				Black SBR Rubber	10 mm	3,66 kg / m <sup>2</sup>
<b>Height of fibres above infill</b>					24 mm	
<b>Total height and weight of the turf product</b>					34 mm	3,78 kg / m <sup>2</sup>
<b>Elastic pad / shock absorbing layer</b>				EPP Foam	15 mm	0,75 kg / m <sup>2</sup>

## FOOTBALLISTIC AND TECHNICAL TURF CHARACTERISTICS: LABORATORY TESTS

ACCREDITED TEST LABORATORY		UEFA TURF - PRODUCT - SYSTEM REGISTRATION	
<b>Name</b>	LABOSPORT	<b>Date</b>	2 <sup>nd</sup> August 2004
<b>Date</b>	2004/02/08	<b>Number</b>	U - 078 / 04 / XG - 03
<b>Number</b>	R04-0859	<b>Signature</b>	 Chief Executive
<b>Signature</b>	D. BOISNARD		

***The tested turf-system complies with the UEFA - laboratory requirements.  
This test certificate is only valid with all pages numbered from 1 to 5.***



## FOOTBALLISTIC CHARACTERISTICS: LABORATORY TESTS

Footballistic characteristics		Required values	Test conditions	Test results	UEFA compliance			
<b>Force reduction</b>	Studded foot	1 <sup>st</sup> impact		dry	71	<i>Recommendation</i>		
	Flat foot			wet	72			
	Studded foot			dry	70			
	Flat foot			wet	68			
	Studded foot	Mean 2 <sup>nd</sup> /3 <sup>rd</sup> impact		dry	68	<b>Pass</b>		
	Flat foot			wet	69			
	Flat foot			dry	<b>66</b>			
Studded foot	Mean 2 <sup>nd</sup> /3 <sup>rd</sup> impact	<b>&gt; 50 %</b>	minus 5°C	<b>50</b>	<b>Pass</b>			
Flat foot	1 <sup>st</sup> impact			56	<i>Recommendation</i>			
Studded foot	1 <sup>st</sup> impact			64				
<b>Vertical deformation</b>	Studded foot	1 <sup>st</sup> impact	<b>4 - 10 mm</b>	dry	11.6	<i>Recommendation</i>		
	Flat foot			wet	11.1			
	Studded foot			dry	9.4			
	Flat foot			wet	10.2			
	Studded foot	Mean 2 <sup>nd</sup> /3 <sup>rd</sup> impact	<b>4 - 8 mm</b>	dry	7.6	<b>Pass</b>		
	Flat foot			wet	7.8			
Flat foot	dry			<b>6.6</b>				
<b>Rotational resistance</b>		<b>30 – 45 Nm</b>		wet	<b>6.8</b>	<b>Pass</b>		
<b>Ball rebound</b>				<b>60 – 85 cm</b>		dry	<b>32</b>	<b>Pass</b>
<b>Football pace</b>		<b>45 - 60 %</b>				wet	<b>30</b>	<b>Pass</b>
<b>Ball roll</b>						<b>5 – 8 m</b>		dry
<b>Actual ball roll</b>		<b>5 – 8 m</b>		minus 5°C	93			<i>Recommendation</i>
<b>Ball roll</b>				<b>5 – 8 m</b>		dry	<b>56</b>	<b>Pass</b>
<b>Actual ball roll</b>		<b>5 – 8 m</b>				wet	<b>6.8</b>	<b>Pass</b>
<b>Actual ball roll</b>				<b>5 – 8 m</b>		wet	<b>7.2</b>	<b>Pass</b>

## FIELD TEST REGISTRATION AND TEST VALIDITY

Country	City			Name of the field	Installation date	
<b>Test laboratory</b>					<b><i>The tested field complies with the UEFA requirements</i></b>	
<b>Field test</b>	<b>Date</b>	<b>Number</b>	<b>Signature</b>	<b>Date</b>	<b>Number</b>	<b>Signature</b>
<b>Initial test</b>						
<b>1<sup>st</sup> renewal</b>						
<b>2<sup>nd</sup> renewal</b>						

**Note: This certificate is only valid for the above-mentioned field for a maximum period of 2 (two) years from the date of the last field test.**



INFRASTRUCTURE CHARACTERISTICS		
Base layer	Description	
Bearing layer		
Infrastructure permeability		
Soil heating		
Water irrigation system		
Slope		

FOOTBALLISTIC CHARACTERISTICS FIELD TESTS										
Footballistic characteristics			Required values	Test position					Pitch mean	UEFA compliance
				1	2	3	4	5		
Force reduction	Studded foot	1 <sup>st</sup> impact	no requirement						Recommendation	
	Flat foot									
	Studded foot	Mean 2 <sup>nd</sup> /3 <sup>rd</sup> impact	> 60 %							
	Flat foot									
Vertical deformation	Studded foot	1 <sup>st</sup> impact	4 - 10 mm						Recommendation	
	Flat foot									
	Studded foot	Mean 2 <sup>nd</sup> /3 <sup>rd</sup> impact	4 - 8 mm							
	Flat foot									
Rotational resistance		30 – 45 Nm								
Ball rebound		60 – 85 cm								
Ball roll		5 – 8 meter								
Evenness		8 mm / 4 meter								
		4 mm / 1 meter								
<p>The pitch mean result is the mean of the five test locations.                      The lowest mean value for each series of tests is shown in red.                      The highest mean value for each series of tests is shown in blue.                      Each of the lowest and the highest results at the 5 locations shall meet the UEFA requirements.</p>										
Conditioning of tests areas (cross to show if conditioning is used or not)				Yes <input type="checkbox"/>			No <input type="checkbox"/>			
Air temperature during test programme				minimum	°C	maximum	°C			
Surface temperature during test programme				minimum	°C	maximum	°C			
Humidity during test programme				minimum	% RH	maximum	% RH			
Test surfaces				dry <input type="checkbox"/>		moist <input type="checkbox"/>		wet <input type="checkbox"/>		
Wind speed				Ball roll		m / h				

***To respect the confidentiality of manufacturers and their production procedures, the product declarations (pages 4 and 5) are not included.***

***Please contact the "turf system producer" directly for the original certificate (the 5 full pages).***

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