

FIFA TEST REPORT

Football Turf system

Product type	Football Turf system
Product name	CCGrass Superb 60-B2
FIFA Licensee	CoCreation Grass Co., Ltd.
Test Institute	Guangzhou Labosport Co., Ltd.
Test Number	144161
External Reference No.	LSA-R25048-G1
Date of tests completion	18.03.2025
Test Result	Passed
Quality Level	FIFA Quality Pro
Test Manual	TM Football Turf 2024

INTRODUCTION

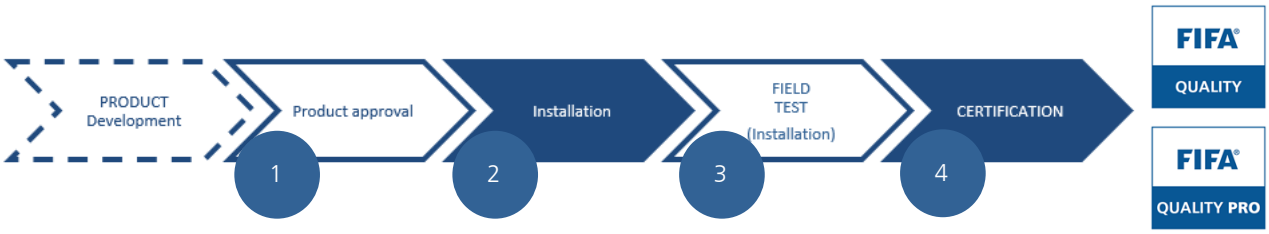
The FIFA Quality Programme for Football Turf is a certification initiative designed to ensure that artificial turf products meet rigorous test standards. This comprehensive program involves rigorous assessments of Football Turf installations (pitches) by FIFA accredited test institutes, following a standardized procedure.

Products listed under this quality programme represent technology readily available in the market. They have already demonstrated their quality, meeting international standards across various criteria such as durability, performance, safety, including player-surface interaction and ball-surface interaction. Manufacturers granted licenses within this program demonstrated their expertise in artificial turf production and field installations. To facilitate the selection of licensed manufacturers, FIFA recommends consulting the list available in our resource hub here.

The true value of this programme lies in its quality control process, which follows the complete path from the manufacturer's product declaration to the approval of the Football Turf system and ultimately the validation of the Football Turf installation. All auditing and testing processes are conducted by independent accredited test institutes. This process goes beyond a product audit report; it extends to the assessment of the installation, validated through a FIFA installation test report. By ensuring compliance and quality at every step, the FIFA Quality Programme for Football Turf guarantees top performance standards for Football Turf installations.

FIFA recommends the **FIFA Quality** certifications for recreational, community and municipal football pitches, with typically 40-60 playing hours per week.

FIFA recommends the **FIFA Quality Pro** certification for pitches that require elevated standards of performance and safety for professional football.



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Declaration of conformity		
This report details the tests carried out in accordance with the test methods of the FIFA Quality Programme for Football Turf Test Manual and lists the test results. For further information about the exact test procedure, please refer to the latest version of the Test Manual**.**		
Technician	Xiong Yihai	Olivier Ducrocq
Date	31.03.2025	31.03.2025
Signature	«#TESTINSTITUTE_ENGINEER_SIGNATURE#»	«#TESTINSTITUTE_DIRECTOR_SIGNATURE#»

TEST RESULTS SUMMARY

Name	Comment	Result
L001 - Summary		
PD - Football Turf system name	Manufacturer's Declaration :	CCGrass Superb 60-B2
Is this report an amendment to an existing report (declaration or test result update)?		No
PD - Carpet name and FIFA report reference	Manufacturer's Declaration :	CCGrass Superb 60-B2, report 143936
PD - Carpet mass per unit area (g/m²)	Manufacturer's Declaration :	3036.00
PD - Number of tufts/m²	Manufacturer's Declaration :	8820
PD - Minimum turf withdrawal force (N)	Manufacturer's Declaration :	40.00
PD - Fibre length above backing (mm)	Manufacturer's Declaration :	60.00
PD - Total Fibre weight (g/m²)	Manufacturer's Declaration :	1936.00
PD - Total detex	Manufacturer's Declaration :	17000
Does the Football Turf system contains fibres with recycled content (with valid report)?	Manufacturer's Declaration :	No
PD - Fibre thickness (µm)	Manufacturer's Declaration :	400
PD - Fibre depth (µm)	Manufacturer's Declaration :	400
PD - Fibre width (mm)	Manufacturer's Declaration :	1.24
PD - Fibre detex	Manufacturer's Declaration :	8500
PD – Fibre 2 thickness (µm)	Manufacturer's Declaration :	400.00
PD – Fibre 2 depth (µm)	Manufacturer's Declaration :	400.00
PD – Fibre 2 width (mm)	Manufacturer's Declaration :	1.240
PD – Fibre 2 detex	Manufacturer's Declaration :	8500.00
PD - Stabilising infill name and FIFA report reference	Manufacturer's Declaration :	Silica Sand, report 143938
PD – Stabilising infill Particle size (d) in mm	Manufacturer's Declaration :	0.500
PD – Stabilising infill Particle size (D) in mm	Manufacturer's Declaration :	1.000
PD – Stabilising infill Particle shape	Manufacturer's Declaration : Angular/Irregular/Rounded	Irregular

Name	Comment	Result
PD – Stabilising infill Particle sphericity	Manufacturer's Declaration : Low/Medium/High	Medium
PD – Stabilising infill Bulk density (g/cm^3)	Manufacturer's Declaration :	1.46
PD – Stabilising infill Application rate (kg/m²)	Manufacturer's Declaration :	18.00
PD – Performance infill name and FIFA report reference	Manufacturer's Declaration :	SBR, report 143937
PD – Performance infill Particle size (d) in mm	Manufacturer's Declaration :	0.800
PD – Performance infill Particle size (D) in mm	Manufacturer's Declaration :	2.500
PD – Performance infill Particle shape	Manufacturer's Declaration : Angular/Irregular/Rounded	Angular
PD – Performance infill Particle sphericity	Manufacturer's Declaration : Low/Medium/High	Medium
PD – Performance infill Bulk density (g/cm^3)	Manufacturer's Declaration :	0.45
PD – Performance infill Application rate (kg/m²)	Manufacturer's Declaration :	15.00
PD – Shockpad name and FIFA report reference	Manufacturer's Declaration :	-
PD - Shockpad Manufacturer	Manufacturer's Declaration :	-
L002 - Football Turf system characteristics		
PC – Identification tests of the carpet	Within tolerance as per the FIFA Test Manual	Passed
PC – Identification tests of the fibres	Within tolerance as per the FIFA Test Manual	Passed
PC – Identification tests of the stabilising infill	Within tolerance as per the FIFA Test Manual	Passed
PC – Identification tests of the performance infill	Within tolerance as per the FIFA Test Manual	Passed
Total infill thickness - Lisport - FIFA TM 2024-19 - dry (mm)	No requirement, intended for technical analysis purposes.	45
Total infill thickness - Lisport - FIFA TM 2024-19 - Simulated wear (mm)	No requirement, intended for technical analysis purposes.	42
PC - Vertical ball Rebound - FIFA TM 2024-01 – dry (m)	0.60-0.85m	0.82
PC - Vertical ball Rebound - FIFA TM 2024-01 – wet (m)	0.60-0.85m	0.77
PC - Vertical ball Rebound - FIFA TM 2024-01 – Simulated wear (m)	0.60-0.85m	0.84
PC - Angle ball rebound - FIFA TM 2024-14 – dry (%)	45-60%	52.40
PC - Angle ball rebound - FIFA TM 2024-14 – wet (%)	45-80%	50.20
PC - Angle ball rebound - FIFA TM 2024-14 - Relative increase dry/wet (%)	≤40% relative	4.00

Name	Comment	Result
PC - Reduced ball roll - FIFA TM 2024-02a – dry (m)	4.0-8.0m	7.30
PC - Reduced ball roll - FIFA TM 2024-02a - Simulated wear dry (m)	4.0-8.0m	7.50
PC - Reduced ball roll - FIFA TM 2024-02a - Simulated wear wet (m)	4.0-8.0m	7.70
PC - Peak shock absorption - FIFA TM 2024-03 – dry (%)	60-70%	67.10
PC - Peak shock absorption - FIFA TM 2024-03 - wet (%)	60-70%	66.70
PC - Peak shock absorption - FIFA TM 2024-03 - Simulated wear dry (%)	60-70%	60.80
PC - Peak shock absorption - FIFA TM 2024-03 – 50°C (%)	60-70%	67.40
PC - Peak shock absorption - FIFA TM 2024-03 – Frozen at – -5°C (%) (optional)	60-70%	62.80
PC - Peak deformation - FIFA TM 2024-04 – dry (mm)	≤15mm	12.70
PC - Peak deformation - FIFA TM 2024-04 – wet (mm)	≤15mm	13.40
PC - Peak deformation - FIFA TM 2024-04 - Simulated wear dry (mm)	≤15mm	10.50
PC - Peak deformation - FIFA TM 2024-04 – 50°C (mm)	≤15mm	14.50
PC - Peak deformation - FIFA TM 2024-04 – Frozen at – 5°C (mm)	≤15mm	12.80
PC - Energy returned - FIFA TM 2024-05 – dry (J)	No requirement, intended for technical analysis purposes.	3.100
PC - Energy returned - FIFA TM 2024-05 - wet (J)	No requirement, intended for technical analysis purposes.	3.680
PC - Energy returned - FIFA TM 2024-05 - Simulated wear dry (J)	No requirement, intended for technical analysis purposes.	3.110
PC - Critical Fall Height at HIC 1000 - EN 17435 Method A – dry (m)	>0.60m	1.120
PC - Critical Fall Height at HIC 1000 - EN 17435 Method A – wet (m)	>0.60m	1.170
PC - Critical Fall Height at HIC 1000 - EN 17435 Method A - Simulated wear dry (m)	>0.60m	0.970
PC - Peak torque - FIFA TM 2024-05 – dry (N)	30-45Nm	41.60
PC - Peak torque - FIFA TM 2024-05 - wet (N)	30-45Nm	40.70
PC - Peak torque - FIFA TM 2024-05 - Simulated wear dry (N)	30-45Nm	43.50

Name	Comment	Result
PC - Torque at 10° - FIFA TM 2024-05 - dry (N)	No requirement, intended for technical analysis purposes.	15.20
PC - Torque at 10° - FIFA TM 2024-05 - wet (N)	No requirement, intended for technical analysis purposes.	14.50
PC - Torque at 10° - FIFA TM 2024-05 - Simulated wear dry (N)	No requirement, intended for technical analysis purposes.	17.00
PC - Rotational Shear Stiffness - FIFA TM 2024-05 – dry (N/°)	No requirement, intended for technical analysis purposes.	0.89
PC - Rotational Shear Stiffness - FIFA TM 2024-05 – wet (N/°)	No requirement, intended for technical analysis purposes.	0.86
PC - Rotational Shear Stiffness - FIFA TM 2024-05 - Simulated wear dry (N/°)	No requirement, intended for technical analysis purposes.	1.11
PC - Skin/surface friction - FIFA TM 2024-10 - dry	0.35-0.75	0.72
PC - Skin/surface friction - FIFA TM 2024-10 - Simulated wear dry	0.35-0.75	0.73
PC - Heat Determination - FIFA TM 2024-12	Mandatory but no requirement, intended for technical analysis purposes.	2-3
PC - Infill splash - FIFA TM 2024-14	Report the exact splash percentage. Low infill splash is considered <1.5%	5.900

Photos and graphs

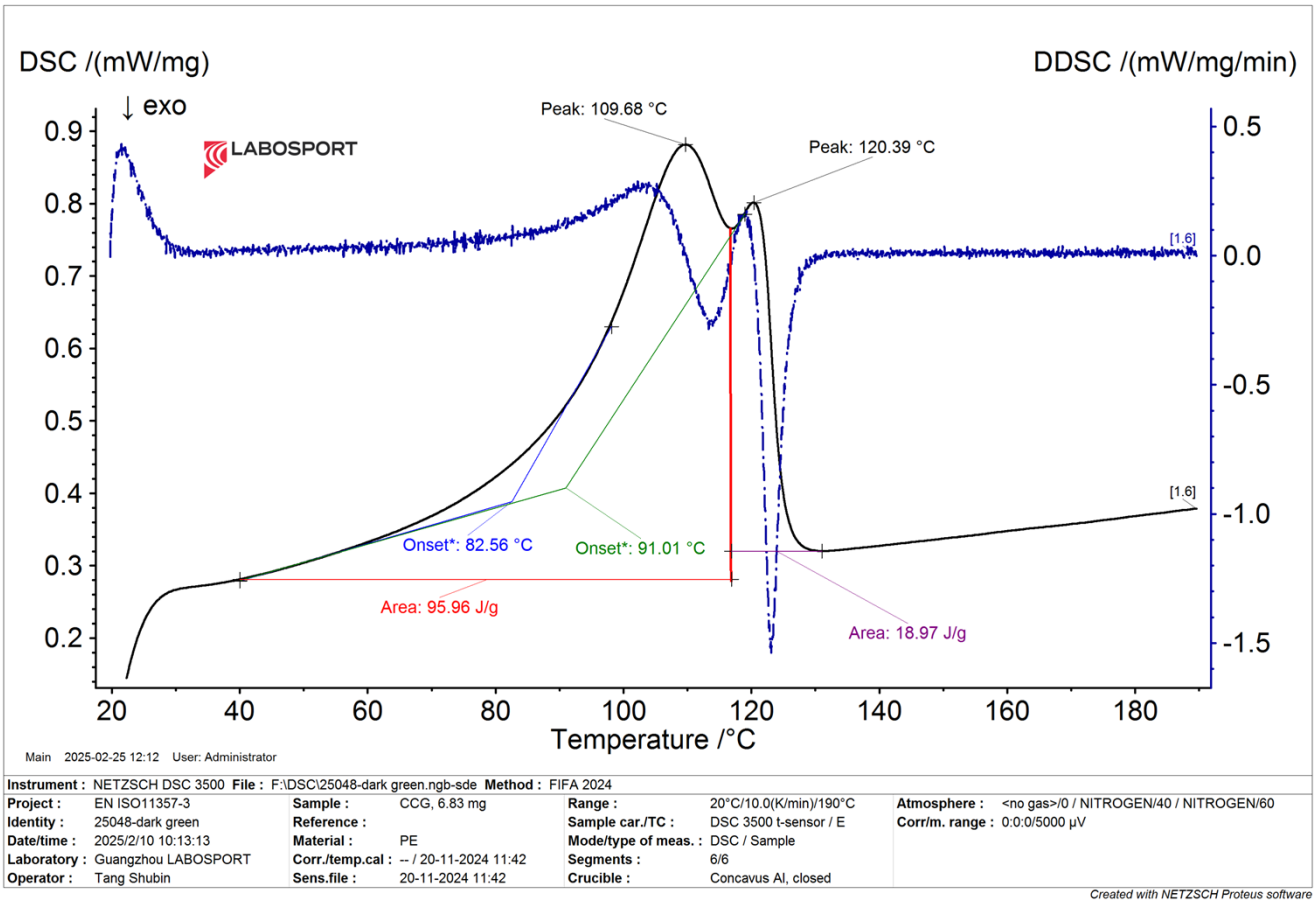
Photo of the sample after preconditioning



Photo of the sample after simulated wear



DSC graph from identification test - fibre 1



DSC graph from UV test - fibre 1

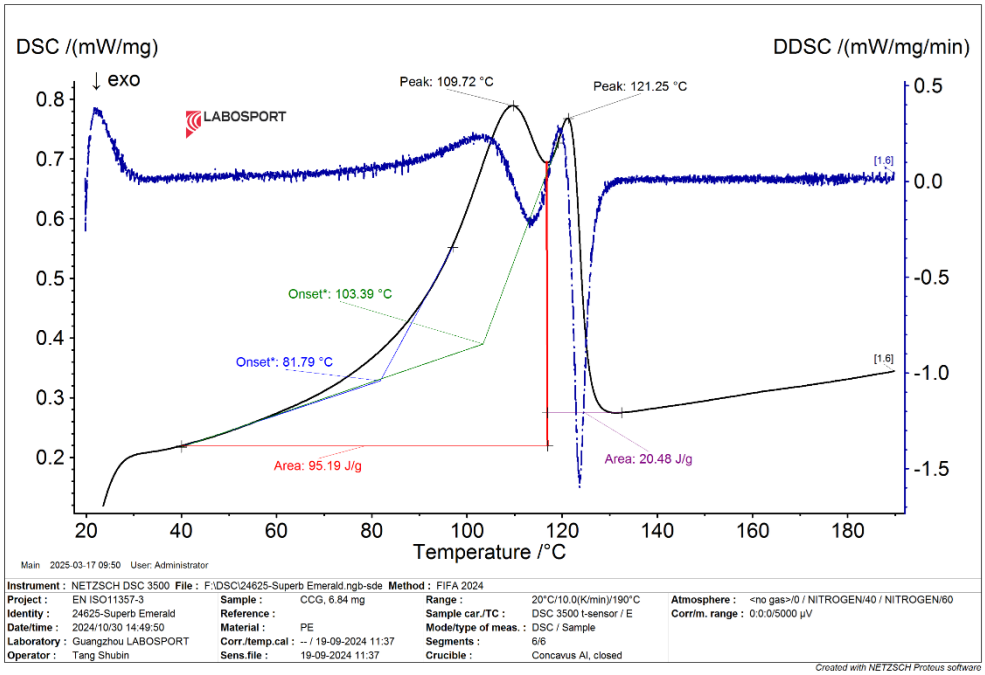
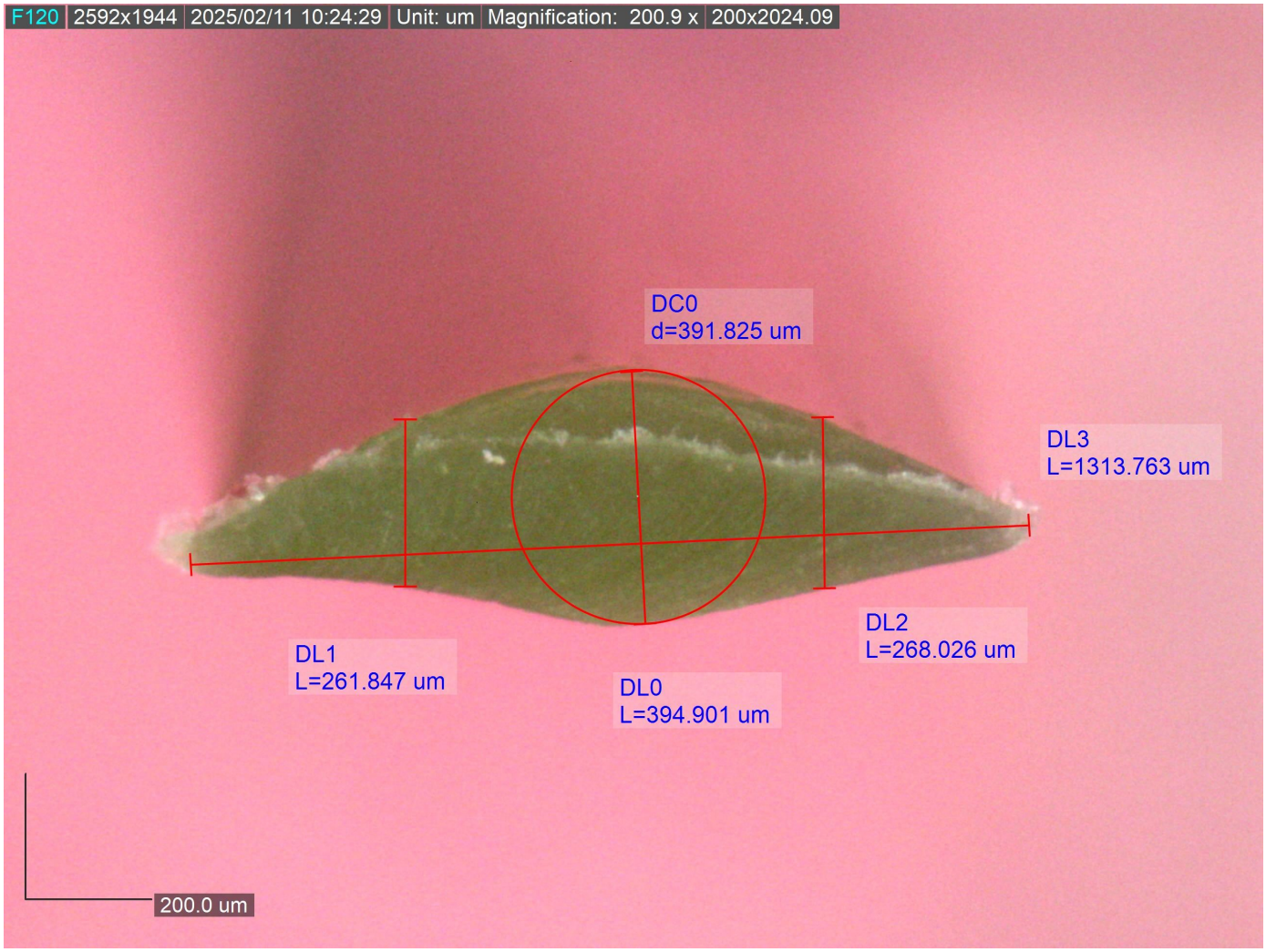
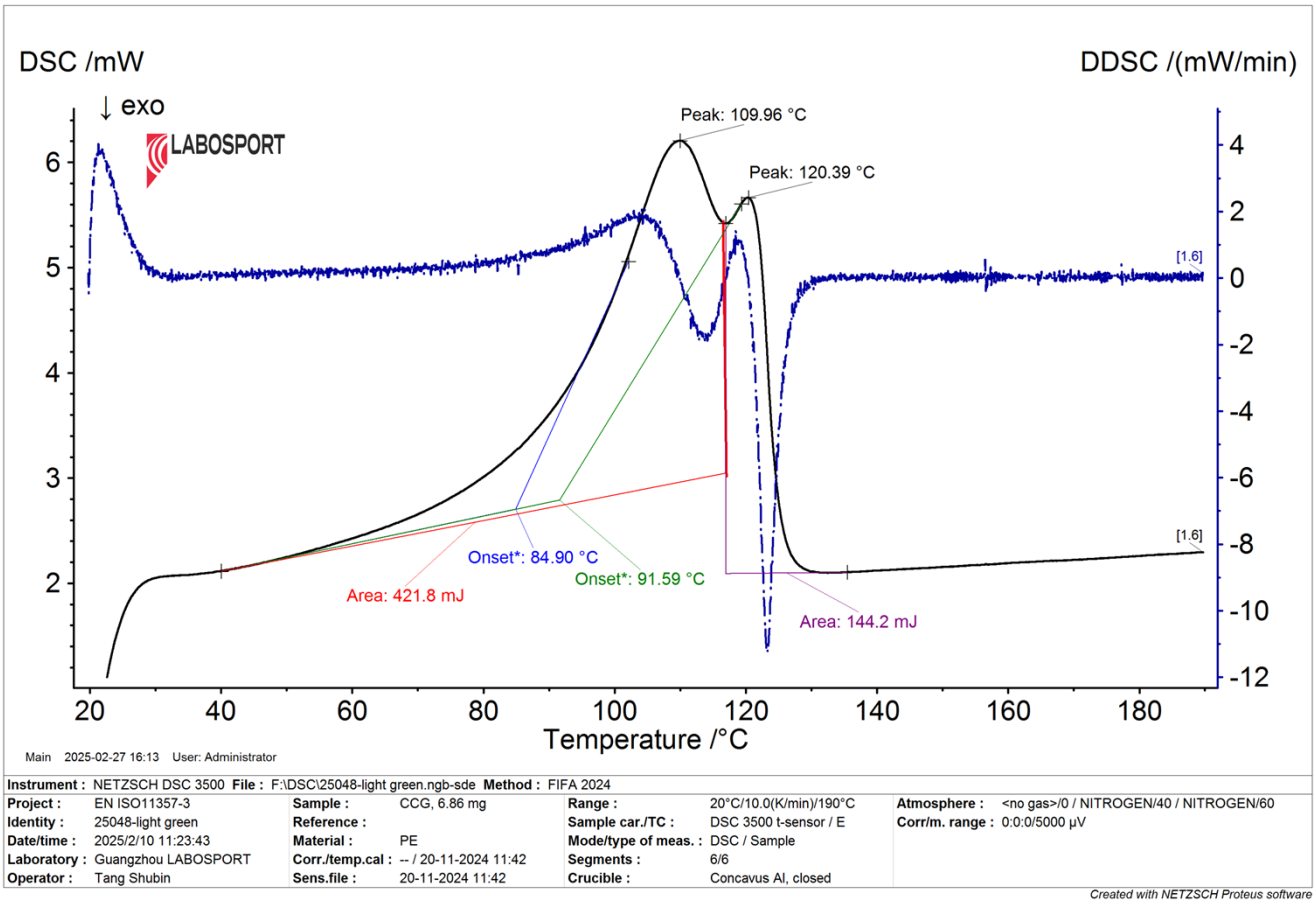


Photo of the fibre 1 cross-section



DSC graph from identification test - fibre 2



DSC graph from UV test - fibre 2

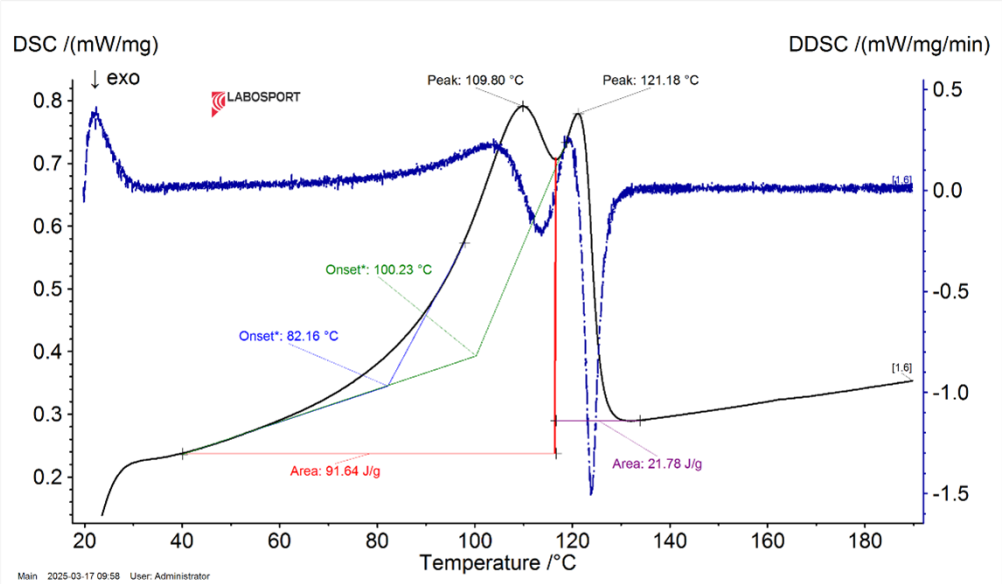


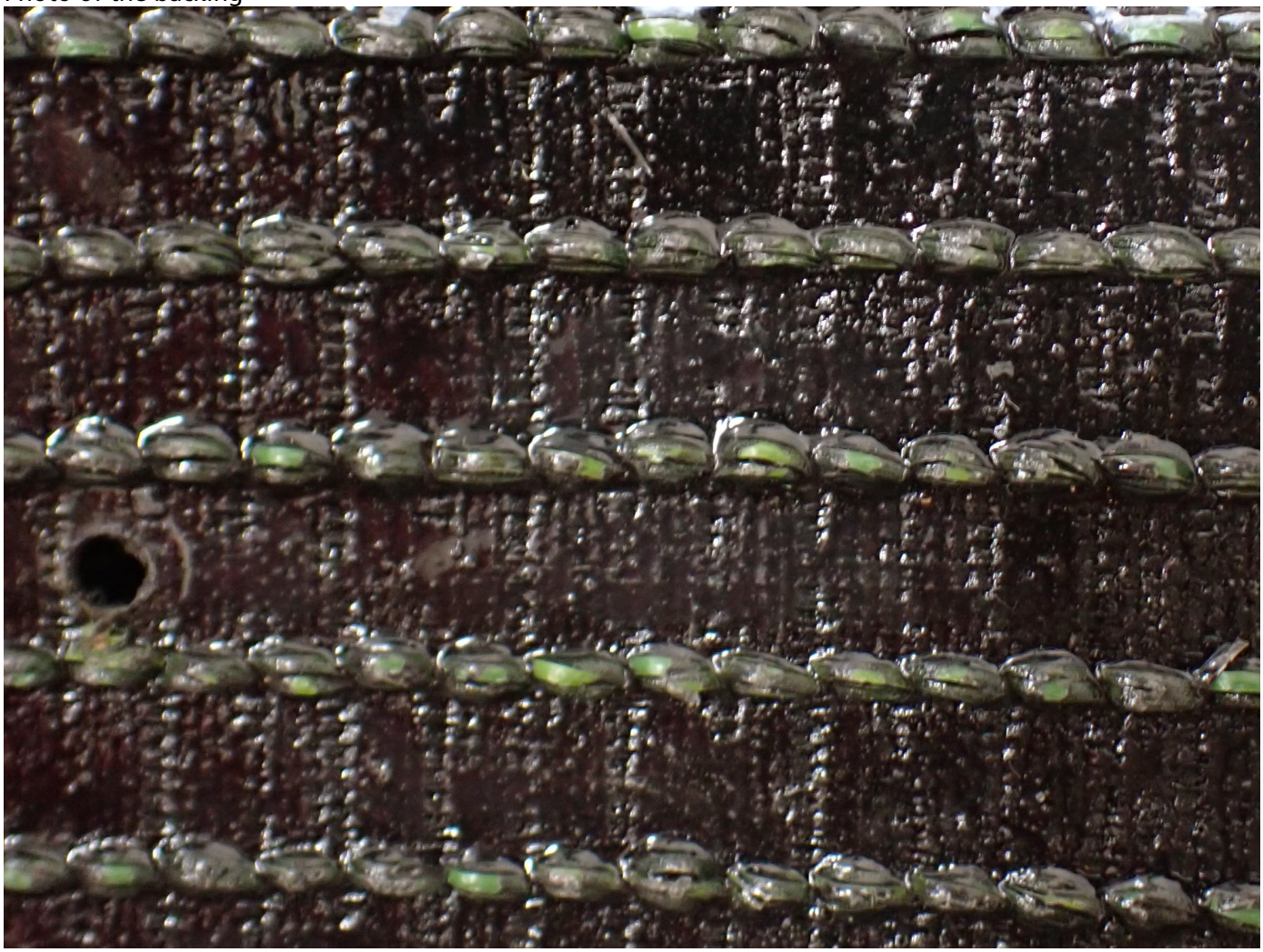
Photo of the fibre 2 cross-section



Photo carpet from above



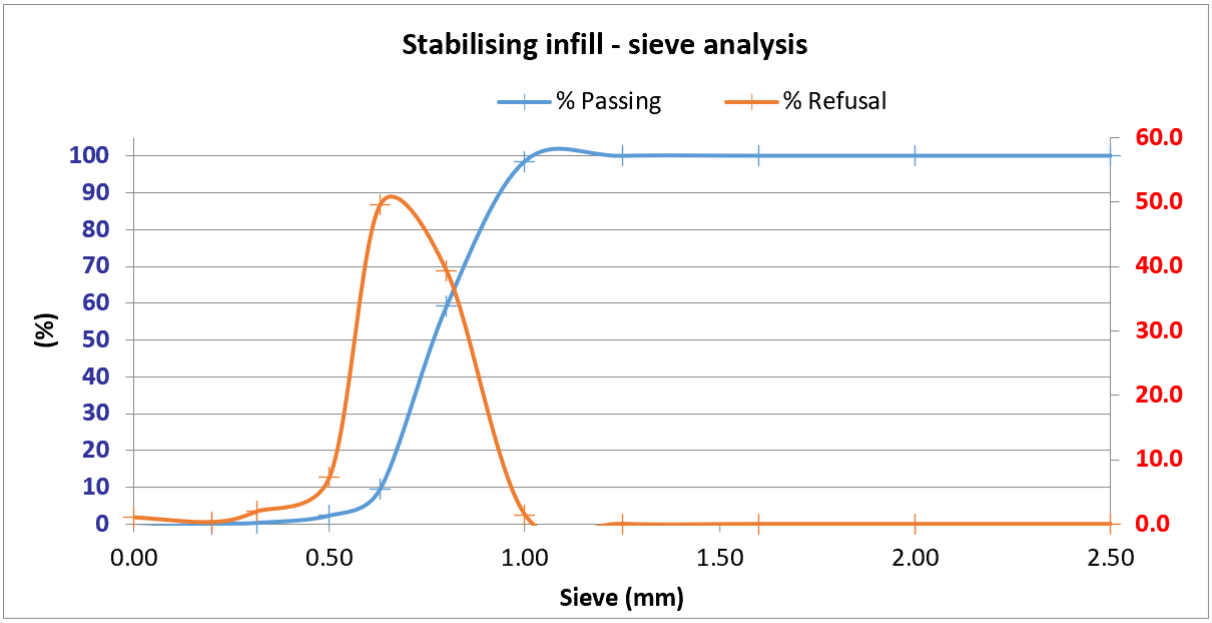
Photo of the backing



Stabilising Infill - picture



Stabilising infill particle grading curve

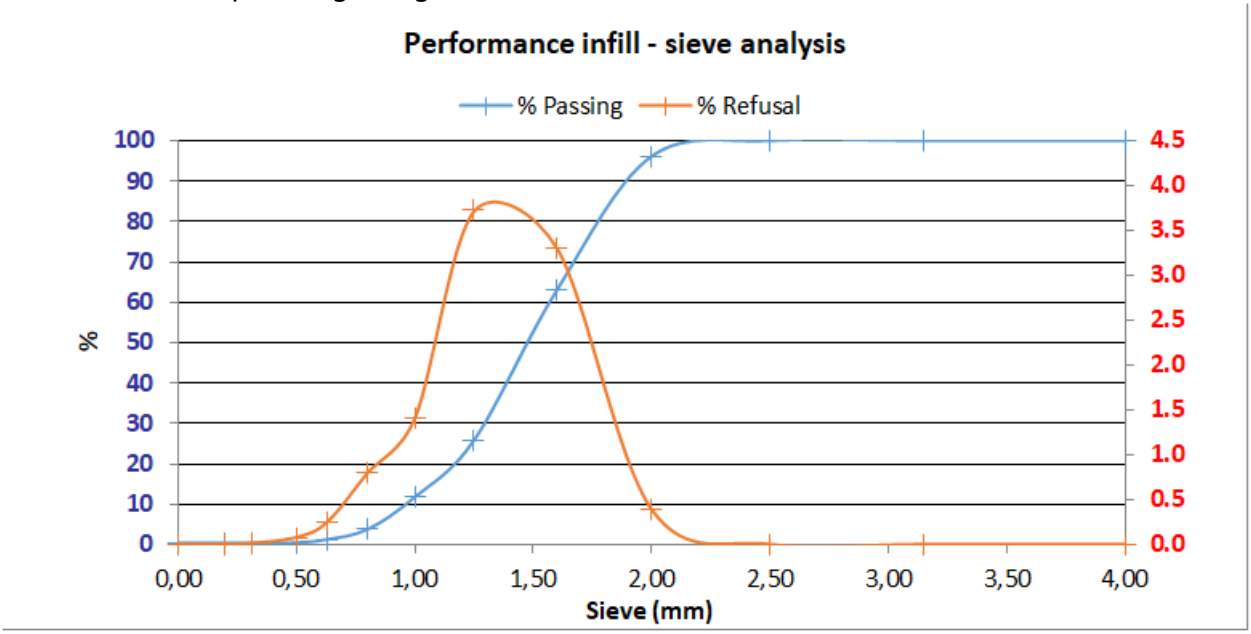


Aperature Size	0.00	0.20	0.315	0.50	0.63	0.80	1.00	1.25	1.60	2.00	2.50	3.15	4.00
% Passing	-0.9	0.1	0.4	2.4	9.6	59.2	98.5	100.0	100.0	100.0	100.0	100.0	100.0
% Refusal	1.0	0.3	2.0	7.2	49.6	39.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0

Performance Infill - picture



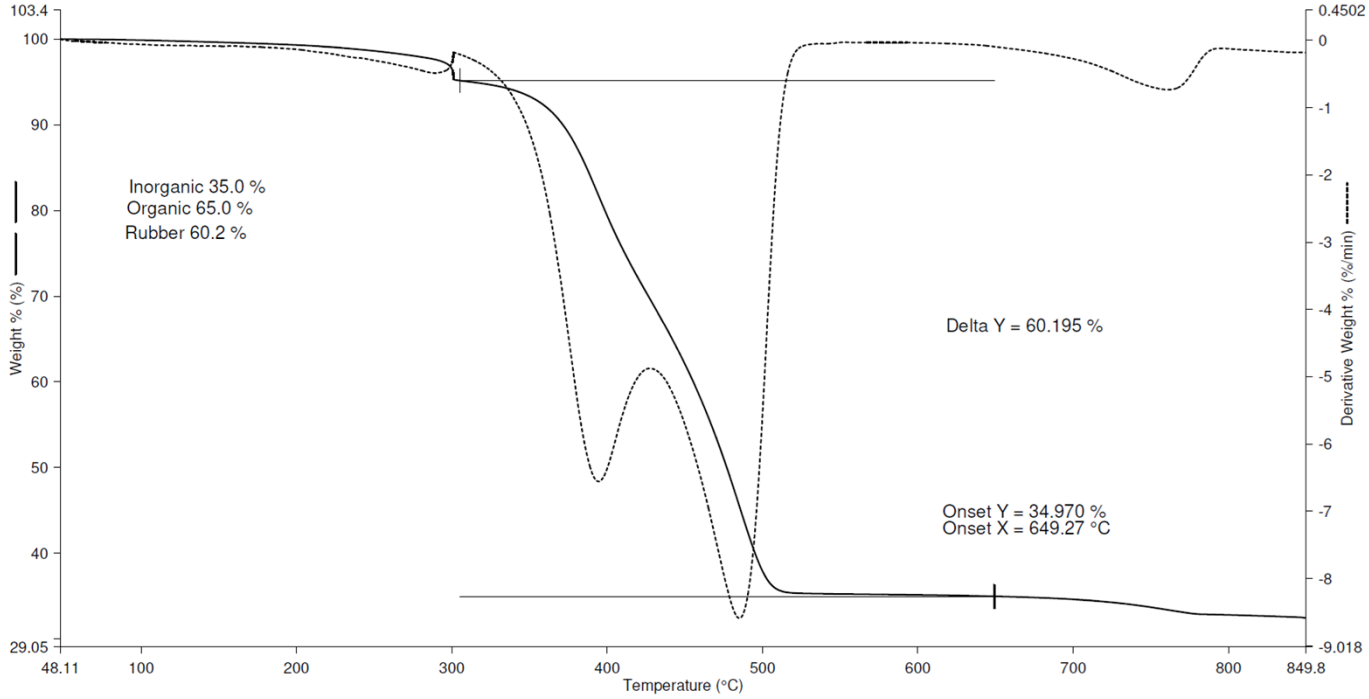
Performance infill particle grading curve



Aperature Size	0.00	0.20	0.315	0.50	0.63	0.80	1.00	1.25	1.60	2.00	2.50	3.15	4.00
% Passing	0.3	0.3	0.3	0.5	1.2	3.8	11.8	25.9	63.1	96.2	100.0	100.0	100.0
% Refusal	0.0	0.0	0.1	0.8	2.5	8.0	14.1	37.3	33.0	3.8	0.0	0.0	0.0

TGA graph of the identification test

Data Collected:	26/02/2025 11:21:45	20250219 TGA: 25048-CCG-FIFA 2024-Superb (0735-03).t6d	Weight % (%) : Steps: 1-6
Operator ID:	AKI	20250219 TGA: 25048-CCG-FIFA 2024-Superb (0735-03).t6d	Derivative Weight % (%/min) (Smoothed) : Steps: 1-6
Sample ID:	20250219 TGA		
Sample Weight:	50.429 mg		
Initial Purge Gas:	Argon		
Comment:	PerkinElmer TGA4000 - Serial number 522A2092805 - calibration : alumel / perkalloy / iron		

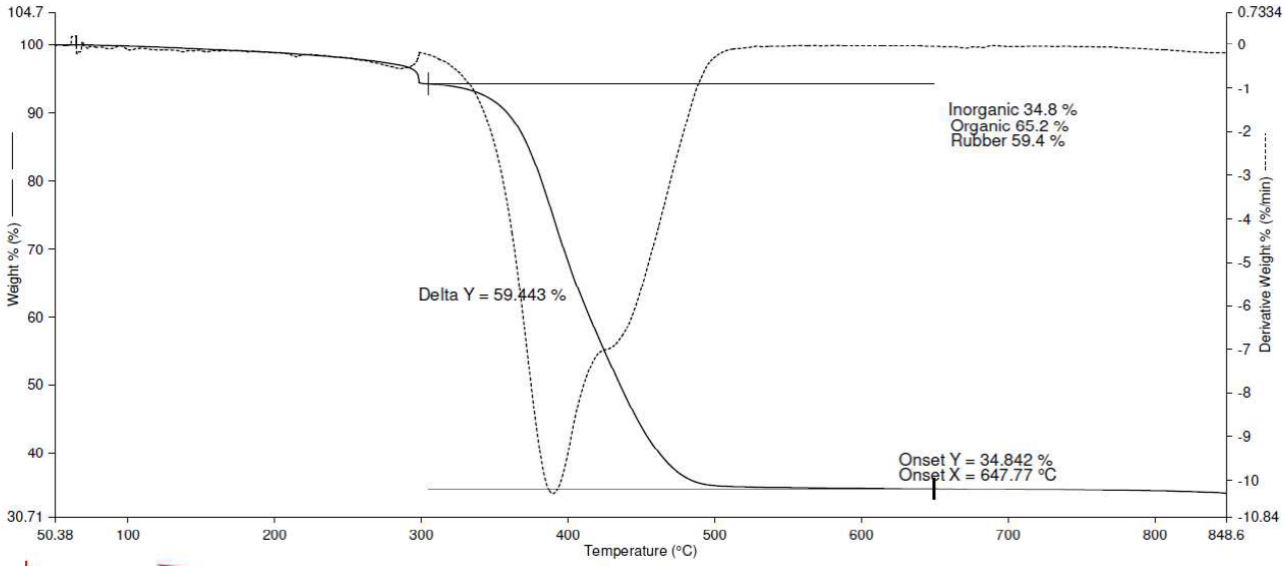


07/03/2025 14:57:31

1) Hold for 1.0 min at 50.00°C
2) Heat from 50.00°C to 300.00°C at 15.00°C/min
3) Hold for 8.0 min at 300.00°C
4) Heat from 300.00°C to 650.00°C at 15.00°C/min
5) Heat from 650.00°C to 850.00°C at 25.00°C/min
6) Hold for 1.0 min at 850.00°C

TGA graph of the UV test

Data Collected:	27/09/2018 09:53:15	———	18-1557: 024602 (5033-01).t6d
Operator ID:	AKI		Weight % (%) : Steps: 1-6
Sample ID:	18-1557	- - - - - - - - - -	18-1557: 024602 (5033-01).t6d
Sample Weight:	67.332 mg		Derivative Weight % (%/min) (Smoothed) : Steps: 1-6
Initial Purge Gas:	Argon		
Comment:	PerkinElmer TGA4000 - Serial number 522A2092805 - calibration : alumel / perkalloy / iron		



27/09/2018 10:18:36

1) Hold for 1.0 min at 50.00°C	4) Heat from 300.00°C to 650.00°C at 15.00°C/min
2) Heat from 50.00°C to 300.00°C at 15.00°C/min	5) Heat from 650.00°C to 850.00°C at 25.00°C/min
3) Hold for 8.0 min at 300.00°C	6) Hold for 1.0 min at 850.00°C

Infill Splash photo

