

Bedrock 3D

Portfolio coverage, product-level engineering context and comparative public manufacturer positioning.



3DPiceland Labs
Generated with 3DPiceland Engineering Platform v70.0.4 DIRECT-IMPACT-METHODOLOGY - Izod and Charpy Methodology
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Public-data contract: portfolio statistics and positions use only explicitly allowlisted MaterialIDs and existing Verified Material Summary scores. No measurement or score is recalculated.

Public materials
13

Product lines
1

Material types
6

With results
9

Complete profiles
8

Average overall
45,1/100

Public global rank
3 of 11

Benchmark manufacturers
11

Manufacturer overview and public global position

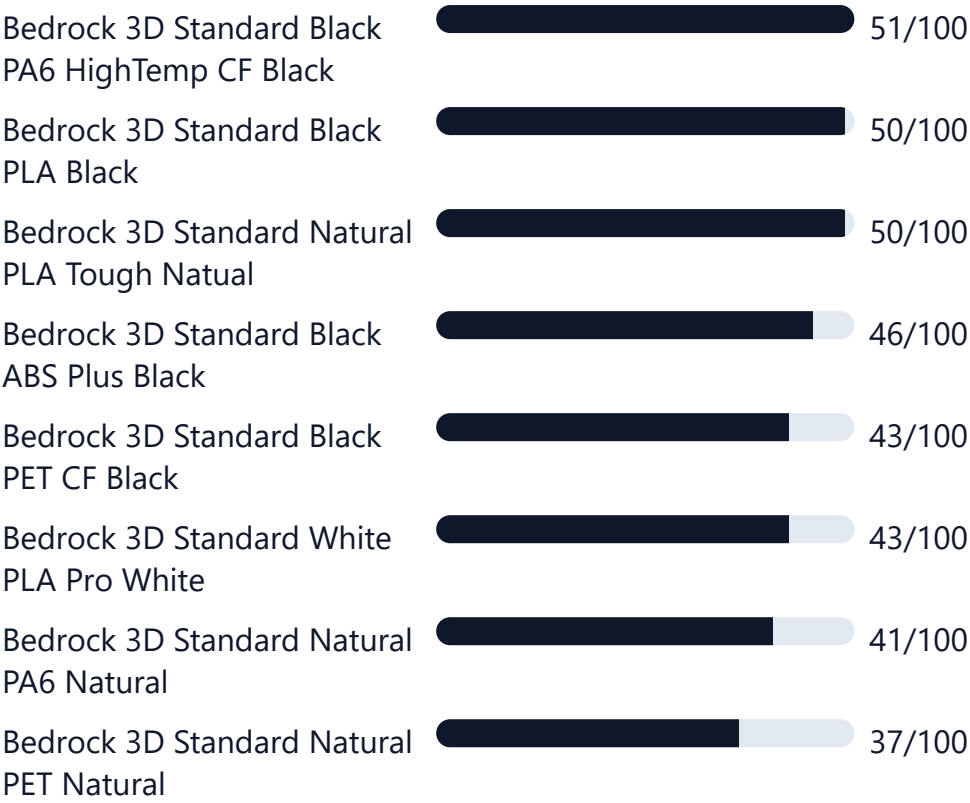
Materials	Product lines	Types	With results	Complete	Average overall	Global rank	Portfolio leader	Strongest axis	With MSRP	With video
13	1	6	9	8	45,1/100	3 of 11	Bedrock 3D Standard Black PA6 HighTemp CF Black	stiffness	13	0

Manufacturer website:
[Open manufacturer website](#)

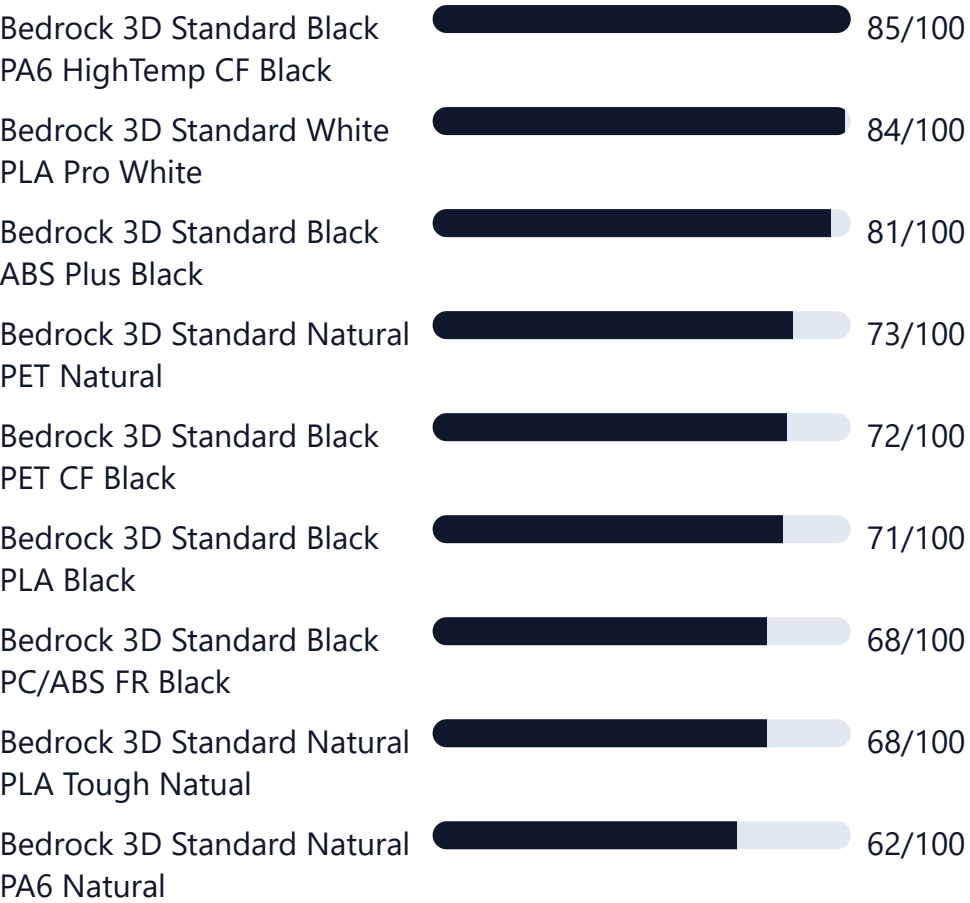
Category position by base material

Base material	Public manufacturer position	Average overall	Scored products
ABS	1 of 4	46/100	1
PA6	4 of 4	46/100	2
PC/ABS	n/a	n/a	0
PET	3 of 3	40/100	2
PLA	3 of 6	47,7/100	3
TPU	n/a	n/a	0

Overall leaders



Consistency leaders



Product-level engineering context

Material ID	Material	Product line	Type	Reinforcement	Rigid coverage	Engineering axes	Overall	Tensile	Impact	Izod	Charpy	Stiffness	Consistency	Layer adhesion	Strongest axis	MSRP USD/kg	Product	Video
MAT02 46	Bedrock 3D Standard Black ABS Plus Black	Standard	ABS		Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	46/100	14/100	—	82/100	100/100	36/100	81/100	10/100	Charpy impact resistance	\$31.81	Product page	n/a
MAT02 48	Bedrock 3D Standard Black PA6 HighTemp CF Black	Standard	PA6	CF	Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	51/100	48/100	—	12/100	11/100	100/100	85/100	11/100	stiffness	\$109.49	Product page	n/a

Material ID	Material	Product line	Type	Reinforcement	Rigid coverage	Engineering axes	Overall	Tensile	Impact	Izod	Charpy	Stiffness	Consistency	Layer adhesion	Strongest axis	MSRP USD/kg	Product	Video
MAT02 47	Bedrock 3D Standard Natural PA6 Natural	Standard	PA6		Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	41/100	48/100	—	2/100	2/100	66/100	62/100	28/100	stiffness	\$72.96	Product page	n/a
MAT02 45	Bedrock 3D Standard Black PC/ABS FR Black	Standard	PC/ABS		Partial; 4/5 score families; Izod/Charpy 0/2 measured, 0/2 scored; Overall unavailable: missing measurements or references; policy engineering-score-v70-1	5/8	—	30/100	—	—	—	77/100	68/100	4/100	stiffness	\$72.96	Product page	n/a
MAT02 51	Bedrock 3D Standard Black PET CF Black	Standard	PET	CF	Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	43/100	24/100	—	10/100	11/100	100/100	72/100	7/100	stiffness	\$97.31	Product page	n/a
MAT02 52	Bedrock 3D Standard Natural PET Natural	Standard	PET		Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	37/100	20/100	—	2/100	1/100	86/100	73/100	4/100	stiffness	\$30.49	Product page	n/a
MAT02 49	Bedrock 3D Standard Black PLA Black	Standard	PLA		Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	50/100	38/100	—	11/100	32/100	100/100	71/100	21/100	stiffness	\$22.96	Product page	n/a
MAT02 44	Bedrock 3D Standard Natural PLA Tough Natural	Standard	PLA		Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	50/100	33/100	—	8/100	30/100	88/100	68/100	40/100	stiffness	\$35.83	Product page	n/a
MAT02 50	Bedrock 3D Standard White PLA Pro White	Standard	PLA		Complete; 5/5 score families; Izod/Charpy 2/2 measured, 2/2 scored; Overall eligible; policy engineering-score-v70-1	7/8	43/100	28/100	—	5/100	3/100	76/100	84/100	21/100	consistency	\$48.55	Product page	n/a
MAT02 53	Bedrock 3D Standard Black TPU 64D Black	Standard	TPU		No native results; 0/5 score families; Izod/Charpy 0/2 measured, 0/2 scored; Overall unavailable: missing measurements or references; policy engineering-score-v70-1	0/8	—	—	—	—	—	—	—	—	mechanical profile	\$42.39	Product page	n/a
MAT02 56	Bedrock 3D Standard Black TPU Foaming Black	Standard	TPU		No native results; 0/5 score families; Izod/Charpy 0/2 measured, 0/2 scored; Overall unavailable: missing measurements or references; policy engineering-score-v70-1	0/8	—	—	—	—	—	—	—	—	mechanical profile	\$94.20	Product page	n/a
MAT02 55	Bedrock 3D Standard Natural TPU 85A Natural	Standard	TPU		No native results; 0/5 score families; Izod/Charpy 0/2 measured, 0/2 scored; Overall unavailable: missing measurements or references; policy engineering-score-v70-1	0/8	—	—	—	—	—	—	—	—	mechanical profile	\$48.85	Product page	n/a
MAT02 54	Bedrock 3D Standard White TPU 95A White	Standard	TPU		No native results; 0/5 score families; Izod/Charpy 0/2 measured, 0/2 scored; Overall unavailable: missing measurements or references; policy engineering-score-v70-1	0/8	—	—	—	—	—	—	—	—	mechanical profile	\$48.85	Product page	n/a

Results are comparative 3DPIceland measurements and do not replace manufacturer datasheets or accredited laboratory testing.

[Testing methodology](#) · [Engineering methodology whitepaper](#) · [Download PDF](#)

Bedrock 3D Standard Black ABS Plus Black

Izod and Charpy Impact Strength

Izod Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 65.708 kJ/m²; Std. Dev 9.686 kJ/m²; CV 14.741%; Samples 9; Confidence 9
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Charpy Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 123.714 kJ/m²; Std. Dev 9.88 kJ/m²; CV 7.986%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Black PA6 HighTemp CF Black

Izod and Charpy Impact Strength

Charpy Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 8.43 kJ/m²; Std. Dev 0.595 kJ/m²; CV 7.053%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Izod Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 9.935 kJ/m²; Std. Dev 0.655 kJ/m²; CV 6.594%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Natural PA6 Natural

Izod and Charpy Impact Strength

Charpy Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 1.667 kJ/m²; Std. Dev 0.676 kJ/m²; CV 40.568%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Izod Impact Strength · 2026-09-29

Instrument readings in kJ/m²

Mean 1.965 kJ/m²; Std. Dev 0.697 kJ/m²; CV 35.483%; Samples 9; Confidence 9

No break 0; invalid 0; excluded 0.

Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Black PET CF Black

Izod and Charpy Impact Strength

Charpy Impact Strength · 2026-09-28

Instrument readings in kJ/m²

Mean 8.932 kJ/m²; Std. Dev 1.51 kJ/m²; CV 16.904%; Samples 9; Confidence 9

No break 0; invalid 0; excluded 0.

Comparative measurements; standard conformity unverified.

Izod Impact Strength · 2026-09-29

Instrument readings in kJ/m²

Mean 7.8 kJ/m²; Std. Dev 1.24 kJ/m²; CV 15.892%; Samples 10; Confidence 10

No break 0; invalid 0; excluded 0.

Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Natural PET Natural

Izod and Charpy Impact Strength

Izod Impact Strength · 2026-09-29

Instrument readings in kJ/m²

Mean 1.648 kJ/m²; Std. Dev 0.132 kJ/m²; CV 7.992%; Samples 10; Confidence 10

No break 0; invalid 0; excluded 0.

Comparative measurements; standard conformity unverified.

Charpy Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 0.841 kJ/m²; Std. Dev 0.28 kJ/m²; CV 33.34%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Black PLA Black

Izod and Charpy Impact Strength

Izod Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 8.999 kJ/m²; Std. Dev 3.793 kJ/m²; CV 42.147%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Charpy Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 25.357 kJ/m²; Std. Dev 4.877 kJ/m²; CV 19.234%; Samples 9; Confidence 9
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Natural PLA Tough Natual

Izod and Charpy Impact Strength

Izod Impact Strength · 2026-09-21
Instrument readings in kJ/m²
Mean 6.434 kJ/m²; Std. Dev 1.01 kJ/m²; CV 15.698%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Charpy Impact Strength · 2026-09-21
Instrument readings in kJ/m²
Mean 24.329 kJ/m²; Std. Dev 16.382 kJ/m²; CV 67.333%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Bedrock 3D Standard White PLA Pro White

Izod and Charpy Impact Strength

Izod Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 3.934 kJ/m²; Std. Dev 0.268 kJ/m²; CV 6.802%; Samples 9; Confidence 9
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Charpy Impact Strength · 2026-09-29
Instrument readings in kJ/m²
Mean 2.6 kJ/m²; Std. Dev 0.123 kJ/m²; CV 4.741%; Samples 10; Confidence 10
No break 0; invalid 0; excluded 0.
Comparative measurements; standard conformity unverified.

Bedrock 3D Standard Black TPU 64D Black

Flexible Material Testing

Comparative in-house measurements; n = independent specimens. Separate test groups; Overall unchanged.

Method	Result	Condition	Mean	n	SD	CV %	Range	Not reached
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	10 s hold · 2 mm displacement · cycle 1	6.885	9	0.133	1.934	6.728–7.074	0

Method	Result	Condition	Mean	n	SD	CV %	Range	Not reached
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	30 s hold · 2 mm displacement · cycle 1	6.352	9	0.128	2.016	6.193–6.571	0
eaacea91	Compression Force at 20% Strain (N)	10 s hold · 2 mm displacement · cycle 1	438	9	8.471	1.934	428–450	0
eaacea91	Compression Force at 20% Strain (N)	30 s hold · 2 mm displacement · cycle 1	404.111	9	8.146	2.016	394–418	0
eaacea91	Force reduction from 10 s to 30 s at 20% Strain (%)	first compression only · 2 mm displacement	7.738	9	0.443	5.731	7.111–8.372	0
eaacea91	Force retention at 20% Strain (%)	10–30 s · 2 mm displacement · cycle 1	92.262	9	0.443	0.481	91.628–92.889	0
eaacea91	Residual height loss after recovery (%)	20% compression · 30 s compressed hold · 60 s rest · 10 mm initial height · cycle 1	1.956	9	0.124	6.321	1.8–2.2	0
ed381ba8	Shore A Hardness (Shore A)	10 s reading · 8 mm	91.9	1	—	—	91.9–91.9	0

Shore location statistics

Within each specimen; specimen numbers are local to each test group. SD uses the sample formula. These readings do not increase independent n.

Method	Scale	Condition	Specimen	Readings	Mean	Location SD	Location CV %
ed381ba8	Shore A Hardness	10 s reading · 8 mm	1	5	91.9	4.561	4.963

Bedrock 3D Standard Black TPU Foaming Black

Flexible Material Testing

Comparative in-house measurements; n = independent specimens. Separate test groups; Overall unchanged.

Method	Result	Condition	Mean	n	SD	CV %	Range	Not reached
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	10 s hold · 2 mm displacement · cycle 1	0.357	10	0.011	2.973	0.346–0.377	0
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	30 s hold · 2 mm displacement · cycle 1	0.329	10	0.012	3.53	0.314–0.346	0
eaacea91	Compression Force at 20% Strain (N)	10 s hold · 2 mm displacement · cycle 1	22.7	10	0.675	2.973	22–24	0
eaacea91	Compression Force at 20% Strain (N)	30 s hold · 2 mm displacement · cycle 1	20.9	10	0.738	3.53	20–22	0
eaacea91	Force reduction from 10 s to 30 s at 20% Strain (%)	first compression only · 2 mm displacement	7.928	10	1.851	23.348	4.348–9.091	0
eaacea91	Force retention at 20% Strain (%)	10–30 s · 2 mm displacement · cycle 1	92.072	10	1.851	2.01	90.909–95.652	0
eaacea91	Residual height loss after recovery (%)	20% compression · 30 s compressed hold · 60 s rest · 10 mm initial height · cycle 1	2.96	10	0.615	20.777	2.2–4.1	0
ed381ba8	Shore A Hardness (Shore A)	10 s reading · 8 mm	54	1	—	—	54–54	0

Shore location statistics

Within each specimen; specimen numbers are local to each test group. SD uses the sample formula. These readings do not increase independent n.

Method	Scale	Condition	Specimen	Readings	Mean	Location SD	Location CV %
ed381ba8	Shore A Hardness	10 s reading · 8 mm	1	5	54	1.225	2.268

Bedrock 3D Standard Natural TPU 85A Natural

Flexible Material Testing

Comparative in-house measurements; n = independent specimens. Separate test groups; Overall unchanged.

Method	Result	Condition	Mean	n	SD	CV %	Range	Not reached
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	10 s hold · 2 mm displacement · cycle 1	2.977	10	0.072	2.416	2.861–3.097	0
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	30 s hold · 2 mm displacement · cycle 1	2.848	10	0.067	2.353	2.735–2.955	0
eaacea91	Compression Force at 20% Strain (N)	10 s hold · 2 mm displacement · cycle 1	189.4	10	4.575	2.416	182–197	0
eaacea91	Compression Force at 20% Strain (N)	30 s hold · 2 mm displacement · cycle 1	181.2	10	4.264	2.353	174–188	0
eaacea91	Force reduction from 10 s to 30 s at 20% Strain (%)	first compression only · 2 mm displacement	4.328	10	0.38	8.778	3.684–4.813	0
eaacea91	Force retention at 20% Strain (%)	10–30 s · 2 mm displacement · cycle 1	95.672	10	0.38	0.397	95.187–96.316	0
eaacea91	Residual height loss after recovery (%)	20% compression · 30 s compressed hold · 60 s rest · 10 mm initial height · cycle 1	1.2	10	0.2	16.667	0.9–1.6	0
ed381ba8	Shore A Hardness (Shore A)	10 s reading · 8 mm	84.8	1	—	—	84.8–84.8	0

Shore location statistics

Within each specimen; specimen numbers are local to each test group. SD uses the sample formula. These readings do not increase independent n.

Method	Scale	Condition	Specimen	Readings	Mean	Location SD	Location CV %
ed381ba8	Shore A Hardness	10 s reading · 8 mm	1	5	84.8	1.304	1.538

Bedrock 3D Standard White TPU 95A White

Flexible Material Testing

Comparative in-house measurements; n = independent specimens. Separate test groups; Overall unchanged.

Method	Result	Condition	Mean	n	SD	CV %	Range	Not reached
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	10 s hold · 2 mm displacement · cycle 1	3.067	10	0.083	2.706	2.892–3.16	0
eaacea91	Apparent Compressive Stress at 20% Strain (MPa)	30 s hold · 2 mm displacement · cycle 1	2.93	10	0.075	2.569	2.767–3.018	0
eaacea91	Compression Force at 20% Strain (N)	10 s hold · 2 mm displacement · cycle 1	195.1	10	5.28	2.706	184–201	0
eaacea91	Compression Force at 20% Strain (N)	30 s hold · 2 mm displacement · cycle 1	186.4	10	4.789	2.569	176–192	0
eaacea91	Force reduction from 10 s to 30 s at 20% Strain (%)	first compression only · 2 mm displacement	4.452	10	0.91	20.429	2.105–5.208	0
eaacea91	Force retention at 20% Strain (%)	10–30 s · 2 mm displacement · cycle 1	95.548	10	0.91	0.952	94.792–97.895	0
eaacea91	Residual height loss after recovery (%)	20% compression · 30 s compressed hold · 60 s rest · 10 mm initial height · cycle 1	1.09	10	0.208	19.073	0.8–1.4	0
ed381ba8	Shore A Hardness (Shore A)	10 s reading · 8 mm	86.5	1	—	—	86.5–86.5	0

Shore location statistics

Within each specimen; specimen numbers are local to each test group. SD uses the sample formula. These readings do not increase independent n.

Method	Scale	Condition	Specimen	Readings	Mean	Location SD	Location CV %
ed381ba8	Shore A Hardness	10 s reading · 8 mm	1	5	86.5	1.732	2.002

Stable public path: reports/manufacturers/bedrock-3d/

Score policy engineering-score-v70-1: Overall requires tensile, stiffness, consistency, layer adhesion and the Izod/Charpy impact family, each with equal weight. Both impact methods and configured versioned references are required. Missing results and unconfigured scores remain n/a. Legacy Impact is historical only; thermal remains separate. Engineering-axis counts describe displayed evidence, not Overall completeness.