

SAFETY COMPLIANCE TESTING FOR ASTM F1952-15 HELMETS USED FOR DOWNHILL MOUNTAIN BICYCLE RACING

Brand : Not Specified
Model : Archi Deltar
Tested Size : 53-58 cm
Stock / Model Number : Not Specified
Country of Origin : China
Age Grading : Not Specified
Children's Product : Not Specified

Prepared For:

Tribe Sport Group
4 rue Condorcet,
83310 Cogolin, France



Issue Date: 06 September 2021
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Final Report: 505.0202.001Rev.1

Tested By:

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Contract File No.: 505.0202

Test File: 001

Control Document: Official ACT ASTM Helmet Report Template CN 30 July 2021 Rev.5
SharePoint/GlobalResourceLibrary/Reporting/ReportTemplates/Helmets/ASTM

Technician: Edward Wang

Test Date: 03 September 2021



HELMET DATA

HELMET BRAND NAME: Not Specified

HELMET MODEL DESIGNATION: Archi Deltar

HELMET MANUFACTURER: Tribe Sport Group

HELMET SIZE: 53-58 cm

DATE OF MANUFACTURE: 08/21

AGE GRADING: Not Specified

EPS COLOR: Black

BUCKLE TYPE: ITW Nexus/A

LOT NUMBER: Not Specified

PURCHASE ORDER #: Not Specified

HELMET COVERAGE: Partial _____ Full: _____ Complete: X

TEST HEADFORM SIZE: EN960 J

HELMET POSITIONING INDEX: 19 mm

Helmet Number:	Weight (g):	Helmet Number:	Weight (g):
1.Ambient	708	4.Wet	709
2.Hot	709	5.Ambient	709
3. Cold	709		

Conditioning Temperatures	
Lab Humidity:	57%
Ambient:	22°C
Hot:	50°C
Cold:	-15°C
Wet:	21°C

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TEST SUMMARY

Test Requirements	Pass/Fail
Peripheral Vision	Pass
Projections	Pass
Positional Stability	Pass
Dynamic Strength Retention	Pass
Impact Attenuation	Pass
Labels and Warnings	Pass
Chin Bar Deflection	Pass

Reviewed by: John Bogler

Tested By: Edward Wong

Comments:

1. All helmets were received in undamaged condition and were appropriate for testing.
2. These helmets appear to be constructed of materials that are not known to cause skin irritation or disease.
3. Weights listed above for helmets 1-5 are as tested, with no attachments included.
4. This helmet met all requirements for ASTM F1952.

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LABELING

Section	Labeling - Each helmet shall be marked with durable labeling so that the following information is legible and easily visible to the user:	Present on Helmet? Yes / No
F1446: Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear		
12.4	Each helmet shall contain labels with at least the following information, using terms and symbols commonly known and easily visible to users. The label(s) should be likely to remain on the helmet and legible throughout the intended design life of the helmet.	Yes
12.4.1	The number of the standard specification which the manufacturer certifies that it meets, including the two-digit version year appended to the number.	Yes
12.4.2	Model designation	Yes
12.4.3	Name of manufacturer	Yes
12.4.4	Month and year of manufacture	Yes
12.4.5	A label that warns the user that no helmet can protect against all possible impacts and that for maximum protection the helmet must be fitted and attached properly to the wearer's head in accordance with the manufacturer's fitting instructions.	Yes
12.4.6	A label that warns the user that the helmet may, after receiving an impact, be damaged to the point that it is no longer adequate to protect the head against further impacts, and that this damage may not be visible to the user. This label should also state that a helmet that has sustained an impact should be returned to the manufacturer for competent inspection or be destroyed and replaced.	Yes
12.4.7	A label that warns the user that the helmet can be damaged by contact with common substances (for example, certain solvents, cleaners, hair tonics, etc.) and that this damage may or may not be visible to the user. This label should also list any recommended cleaning agents or procedures, or both.	Yes
12.4.8	Any other warnings, cautions, or instructions specified in the individual standard specification.	Yes
12.4.9	Each helmet shall have accompanying fitting and positioning instructions including graphic representation of proper positioning.	Yes (In manual)
F1952 Standard Specification for Helmets Used for Downhill Mountain Bicycle Racing		
3.2	Shall have the words "For downhill mountain bicycle racing."	Yes



505.0202.001 – Archi Deltar

Model: Archi Deltar SIZE: 53-58CM
Weight: 770g
Date of Manf: 08/2021
Made In China By Tribe Sport Group
4 rue condorcet,
83310, Cogolin, France

MEETS ASTM F1952-15 Standard Specification for helmets Used for downhill mountain bicycle racing
WARNING! - No helmet can prevent all head injuries. Even in very low speed accidents, serious injury or death can occur. - For best protection, follow manual fitting instructions: Helmet must fit snugly. Wear chin strap comfortably tight against throat. Fasten buckle securely. - Destroy and replace helmet after impact. Protection may not be adequate in future impacts. Damage can be invisible. - Do not clean with solvents, bleaches and strong detergents. They can damage helmet, Sometimes Invisibly. Use mild soap and water only. Read manual before using or cleaning helmet. Made in China by Tribe Sport Group, 4 rue condorcet 83310 Cogolin France.
Date:2021/08

505.0202.001 – Labels



SUMMARY REPORT

<u>HELMET ID</u>	<u>Condition</u>	<u>Brand Name</u>	<u>Model</u>	<u>Date of Manufacture</u>	<u>Helmet Size</u>	<u>Headform Size</u>
1	Ambient	Not Specified	Archi Deltar	08/21	53-58 cm	EN960 J
2	Hot	Not Specified	Archi Deltar	08/21	53-58 cm	EN960 J
3	Cold	Not Specified	Archi Deltar	08/21	53-58 cm	EN960 J
4	Wet	Not Specified	Archi Deltar	08/21	53-58 cm	EN960 J
5	Ambient	Not Specified	Archi Deltar	08/21	53-58 cm	EN960 J

RETENTION SYSTEM STRENGTH TEST

<u>HELMET ID</u>	<u>Model</u>	<u>Headform Size</u>	<u>Condition</u>	<u>Maximum Elongation (mm)</u>	<u>Residual Elongation (mm)</u>	<u>Pass/Fail</u>
2	Archi Deltar	EN960 J	Hot	16.4	1.3	Pass
3	Archi Deltar	EN960 J	Cold	17.7	5.6	Pass
4	Archi Deltar	EN960 J	Wet	16.3	7.0	Pass

Comment:

1. Test Criteria: The retention system shall remain intact without elongating more than 30 mm.

CHIN BAR RIGIDITY TEST

<u>HELMET ID</u>	<u>Model</u>	<u>Condition</u>	<u>Maximum Elongation (mm)</u>	<u>Residual Elongation (mm)</u>	<u>Pass/Fail</u>
5	Archi Deltar	Ambient	25.9	25.6	Pass

Comment:

1. Test Criteria: The maximum deflection of the chin bar shall not exceed 60 mm.



SYSTEM CHECK – IMPACT ATTENUATION

SYSTEMS CHECK	TEST RECORD	HEADFORM POSITION	DROP (meters)	VEL. (m/s)	PEAK (g)
PRETEST	Pre 1	Crown	1.68	5.5357	385.9
	Pre 2	Crown	1.68	5.5080	382.0
	Pre 3	Crown	1.68	5.5134	382.5
PRETEST AVERAGE		XXXX	XXXX	XXXX	383.5
POSTTEST	Post 1	Crown	1.68	5.5216	383.4
	Post 2	Crown	1.68	5.4994	382.5
	Post 3	Crown	1.68	5.5339	384.4
POSTTEST AVERAGE		XXXX	XXXX	XXXX	383.4

IMPACT TEST SUMMARY

Helmet ID	Impact Site #	Impact Location	Anvil	Condition	Velocity (m/sec)	Peak Acc. (g)	Pass/Fail
1	1	LF Side	Flat	Ambient	6.1072	190.0	Pass
1	2	Rear	Flat	Ambient	6.1159	201.8	Pass
1	3	Front	Hemi	Ambient	5.6214	144.2	Pass
1	4	RT Side	Curb	Ambient	5.5534	153.6	Pass
2	1	LF Side	Flat	Hot	6.1034	177.7	Pass
2	2	Rear	Flat	Hot	6.1662	199.8	Pass
2	3	Front	Hemi	Hot	5.6165	190.5	Pass
2	4	RT Side	Curb	Hot	5.5866	140.8	Pass
3	1	LF Side	Flat	Cold	6.1156	183.6	Pass
3	2	Rear	Flat	Cold	6.0967	201.8	Pass
3	3	Front	Hemi	Cold	5.6135	227.4	Pass
3	4	RT Side	Curb	Cold	5.6116	161.4	Pass
4	1	LF Side	Flat	Wet	6.1175	181.1	Pass
4	2	Rear	Flat	Wet	6.1536	195.9	Pass
4	3	Front	Hemi	Wet	5.6044	189.0	Pass
4	4	RT Side	Curb	Wet	5.6075	153.6	Pass

Comment:

1. Impact Attenuation: The peak acceleration of any impact shall not exceed 300 g.

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EQUIPMENT LIST AND CALIBRATION SCHEDULES

EQUIPMENT LIST						
Asset Tag	Location	Description of part	Model Number	Serial Number	Verification Interval	Last Verified On
H1001	Helmet Room	Instrument	Yellow tower - 1000_00_MIMAT	NA	NA	NA
H1002	Helmet Room	Instrument	Green tower - Series 2000	NA	NA	NA
H1010	Helmet Room	Instrument	Control Center System - Pc4300	CCS120090331-1	NA	NA
H1011	Helmet Room	Instrument	Impact Machine System - DX3000	NA	NA	NA
H1013	Helmet Room	Instrument	Charge Amplifier - ATA2001	J72863	NA	NA
H1015	Helmet Room	Instrument	Positional Stability CPSC/ASTM	NA	6 months	4/11/2021
H1017	Helmet Room	Instrument	Retention Machine DOT - SB033	NA	NA	NA
H1019	Helmet Room	Instrument	Chin Bar Deflection ASTM/SNELL	NA	NA	NA
H1026	Helmet Room	Instrument	Laser table - SB005	TLTV2KB-	NA	NA
H1034	Helmet Room	Environmental	Water Container	NA	NA	NA
H1043	Helmet Room	Headform	Impact ISO A	4272	1 year	10/19/2020
H1044	Helmet Room	Headform	Impact ASTM F2220 C	6938	1 year	10/19/2020
H1045	Helmet Room	Headform	Impact ISO E	4146	1 year	10/19/2020
H1046	Helmet Room	Headform	Impact ISO J	4148	1 year	10/19/2020
H1047	Helmet Room	Headform	Impact ISO M	4131	1 year	10/19/2020
H1048	Helmet Room	Headform	Impact ISO O	4151	1 year	10/19/2020
H1049	Helmet Room	Headform	Impact DOT Small	5178	1 year	10/19/2020
H1050	Helmet Room	Headform	Impact DOT Medium	5179	1 year	10/19/2020
H1051	Helmet Room	Headform	Impact DOT Large	5190	1 year	10/19/2020
H1052	Helmet Room	Anvil	System Check Spherical Impactor	NA	1 year	10/19/2020
H1053	Helmet Room	System Check	MEP Pad - 345_08_MP60	30051201	1 year	2019 yearly report
H1054	Helmet Room	Anvil	Chin Bar	NA	1 year	10/19/2020
H1055	Helmet Room	Anvil	Curb	NA	1 year	12/12/2020
H1056	Helmet Room	Anvil	Cylinder	NA	1 year	12/12/2020
H1059	Helmet Room	Anvil	Hazard	NA	1 year	12/12/2020
H1060	Helmet Room	Anvil	Hemispherical yellow tower	NA	1 year	12/12/2020
H1062	Helmet Room	Anvil	Flat yellow tower	NA	1 year	12/12/2020
H1064	Helmet Room	Instrument	Control Center System yellow tower -	CCS120120810-1	NA	NA
H1066	Helmet Room	Instrument	Penetration striker DOT	NA	1 year	9/11/2020
H1091	Helmet Room	Angle Measure	40°Block	NA	1 year	6/4/2020
H1092	Helmet Room	Fixture	Clamp - 119g	NA	1 year	10/19/2020
H1093	Helmet Room	Fixture	Clamp - 210g	NA	1 year	10/19/2020
H1094	Helmet Room	Fixture	Clamp - 378g	NA	1 year	10/19/2020
H1095	Helmet Room	Fixture	Clamp - 451g	NA	1 year	10/19/2020
H1096	Helmet Room	Fixture	Clamp - 505g	NA	1 year	10/19/2020
H1097	Helmet Room	Fixture	Clamp - 598g	NA	1 year	10/19/2020
H1098	Helmet Room	Fixture	Clamp - 1160g	NA	1 year	10/19/2020
H1099	Helmet Room	Anvil	Flat Green Tower	NA	1 year	12/12/2020
H1100	Helmet Room	Anvil	Hemispherical Green Tower	NA	1 year	12/12/2020
H1101	Helmet Room	Headform	DOT Retention Strength Small	NA	NA	NA
H1102	Helmet Room	Headform	DOT Retention Strength Medium	NA	NA	NA
H1103	Helmet Room	Headform	DOT Retention Strength Large	NA	NA	NA
H1105	Helmet Room	Drop Mass	Aluminum Ball Stem Green tower	NA	1 year	10/19/2020
H1106	Helmet Room	Drop Mass	Steel Ball Stem	NA	1 year	10/19/2020
H1107	Helmet Room	Drop Mass	Magnesium Ball Arm	NA	1 year	10/19/2020
H1117	Helmet Room	Instrument	Helmet Internal circumference measure	NA	NA	NA
H1123	Helmet Room	Fixture	Roll Off Headform fasten fixture	NA	NA	NA
H1126	Helmet Room	Drop Mass	Complete Pistol Grip Green tower	NA	1 year	10/19/2020
H1127	Helmet Room	Headform	Setup ASTM F2220 C	6947	1 year	12/12/2019
H1128	Helmet Room	Headform	DOT Penetration Small	NA	NA	NA
H1129	Helmet Room	Headform	DOT Penetration Medium	NA	NA	NA
H1130	Helmet Room	Headform	DOT Penetration Large	NA	NA	NA
H1143	Helmet Room	Height Measure	DOT Opening Block	NA	1 year	10/9/2020
H1144	Helmet Room	Fixture	Laser table headform base	NA	NA	NA
H1145	Helmet Room	Fixture	Penetration headform base	NA	NA	NA
H1146	Helmet Room	Fixture	Penetration height measure	NA	NA	NA
H1149	Helmet Room	Preload mass	NA	NA	1 year	10/9/2020
H1150	Helmet Room	10kg block	NA	NA	1 year	10/9/2020
H1178	Helmet Room	Drop Mass	Complete Pistol Grip	NA	1 year	6/28/2021
H1179	Helmet Room	Drop Mass	Aluminum Ball Stem	NA	1 year	6/28/2021

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CALIBRATED MEASUREMENT DEVICES

Asset Tag	Description of part	Model Number	Measuring Range	Accuracy	Serial Number	Last Calibrated On	Calibration Due On
H1003	Instrument	Velocity gate Yellow tower	(0-7.5)m/s	0.0001m/s	HVTG120120810-1	10/14/2020	10/13/2021
H1004	Instrument	Velocity gate Green tower	(0-6.4)m/s	0.0001m/s	HVTG120090331-1	2/17/2021	2/16/2022
H1006	Instrument	Uni-axial Accelerometer yellow tower - 353B18	≥1000g	≥1°	131607	10/5/2020	10/4/2021
H1007	Instrument	Uni-axial Accelerometer green tower - 353B18	≥1000g	≥1°	86079	10/5/2020	10/4/2021
H1009	Height Measure	Digital tape yellow tower - 16'	(0-5.5)m	0.1cm	5027526	10/25/2020	10/24/2021
H1012	Instrument	Displacement sensor - C20101007753	(0-50)mm	0.1mm	J72863	10/22/2020	10/21/2021
H1014	Instrument	Displacement sensor - LWE-200	(0-100)mm	0.1mm	2002572	10/22/2020	10/21/2021
H1025	Weight Measure	Electronic scale - BT-6	(40-6000)g	0.1g	12230126	6/28/2020	6/27/2021
H1027	Angle Measure	Vision scale - 7°,25°,45°,105°	7°,25°,45°,105°		H-002	10/26/2018	10/25/2021
H1030	Environmental Chamber	Oven #1 - 92*9240MBE	(0-200)°C	1°C	8285	6/28/2020	6/27/2021
H1031	Environmental Chamber	Oven #2 - DHG-9426	(0-200)°C	0.1°C	1503338018	10/22/2020	10/21/2021
H1032	Environmental Chamber	Freezer #1 - DW-25W300	(-30~-10)°C	0.1°C	BE062100N00B29578VMO	6/28/2020	6/27/2021
H1033	Environmental Chamber	Freezer #2 - DW-50W225	(-30~-10)°C	0.1°C	F8LMJ	10/22/2020	10/21/2021
H1036	Environmental Measure	Temperature and humidity #1 - TH-602F	(-30~60)°C,(0-100)%	2°C	3238	6/30/2020	6/29/2021
H1057	Anvil	Edge	NA		NA	10/27/2020	10/21/2025
H1058	Anvil	Equestrian	NA		NA	10/27/2020	10/21/2025
H1061	Anvil	Blade	NA		NA	10/27/2020	10/21/2025
H1063	Height Measure	Digital tape - 5m	(0-5)m	0.1mm	78223	10/27/2020	10/21/2021
H1070	Instrument	Load cell - 9363-B10-300-20T1	(0-136)kg	0.1kg	80310843	6/28/2020	6/27/2021
H1071	Environmental Measure	Temperature and humidity #3 - TH600B	(-20~100)°C,(0-100)%	1°C	Q/MDS001-2017-1	6/30/2020	6/29/2021
H1072	Environmental Measure	Temperature and humidity #4 - TH600B	(-20~100)°C,(0-100)%	1°C	Q/MDS001-2017-2	6/28/2020	6/27/2021
H1073	Height Measure	Height Gauge	(0-500)mm	0.01mm	8811213838273610	9/22/2020	9/21/2021
H1074	Distance Measure	Vernier caliper - SJ-455615	(0-150)mm	0.01mm	455615	10/22/2020	10/21/2021
H1076	Environmental Measure	Calorifier - CN-111	18-35°C	0.1°C	NA	10/27/2020	10/26/2021
H1077	Distance Measure	Tape	0-1.5m	1mm	NA	10/27/2020	10/26/2021
H1172	Height Measure	Height Rod #6	600±5mm	1mm	032216-02	4/13/2021	4/12/2022
H1174	System Check	MEP PAD	NA	NA	021921-01	3/5/2021	3/4/2022

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NOTICE

1. The report is not effective without the signature of the person(s) authorizing the report (ACT Lab's authorized signatory is John A. Bogler (President)).
2. The report is not valid if altered.
3. Claims have to be made within 15 days after receipt of this report.
4. The results of this test report relate only to the items tested.
5. The results apply to the samples as received.
6. For reports that contain results from external test service providers: Results from external test service providers are supplied by the customer and can affect validity of results.
7. Decision rule applied according to "ILAC-G8:03/2009 - Guidelines on the Reporting of Compliance with Specification".

END OF REPORT