Comparison of ASTM and Other Helmet Standards

Impact Test Comparisons

Drop heights for lab drops in meters

Standard *(F designates ASTM)*	**Flat Anvil**	**Hemispheric Anvil**	**Other anvils**	**Type of Other Anvil**
F429-07 Football	1.5 multiple hits on MEP	NA	NA	(NOCSAE headform)
F1045 Ice Hockey-07	1.0 multiple hits	NA	NA	
F1163 Equestrian	1.8	NA	1.3	Hoof (sharp edge)
F1447-06 Bicycle	2.0	1.2	1.0	Curbstone
F1492 Skate	1.0 two hits	1.0	1.0	Cylindrical and Triangular(90 degree)
F1849-07 Short Track Skate	2.0	NA	0.75	Skate blade anvil
F1898-08 Infant-Toddler	2.0	1.2	1.2	Curbstone
F1952-10 Downhill MBR	2.0	1.6	1.6	Curbstone
F2032- BMX Bike 2006	2.0	1.2	1.2	Curbstone
F2040 Snow	2.0	1.2	1.0	Edge
F2400-06 Pole Vault	2.0	1.2	NA	
F 2416 EPAMD	2.0	1.2	1.2	Curbstone
F 2530-11 Bull Riding	1.8	NA	1.3	Hoof (Sharp edge)
CPSC Bicycle	2.0	1.2	1.0	Curbstone
Snell B-90A Bicycle	2.2	1.3	1.2	Curbstone
Snell B-95 Bicycle	2.2	1.3	1.3	Curbstone
EN-1078 Bicycle/Skate	1.5	NA	1.0	Curbstone

Test line comparison – Coverage required

Comparison of Test Lines for J Headform
(Size 7 1/8, 570mm in circumference)

All distances in millimeters above Reference Plane

Standard	**Front**	**Middle**	**Rear**	**Notes**
F1163 Equestrian	37	12	-13	
F1045 Ice Hockey	50	25	0	
F 1447 Bicycle	41	41	25	
F 1492 Skate	50.5	50.5	-8	
F 1849 Short Track	50.5	25	0	
F 1898 Infant-Toddler	32	12.7	-16	E (small) Headform
F 1952 Downhill MBR	50.5	25	0	
F 2032 BMX Bike 2006	41	25	0	
F 2040 Snow	50	25	0	
F 2416 EPAMD	50.5	50.5	-8	
F 2530 Bull Riding	37	12.7	-13	
CPSC Bicycle (Not ASTM)	41	41	27	
Snell B-90A Bicycle	41	41	28	
Snell B-95 Bicycle	40.5	20.5	20.5	