

Proton Energy Budget

Basket	Density g/cc	L mm	de/dx (200MeV)	Ei MeV	del E MeV	Ef MeV	Factor
							1
Be	1.848	0.3048	3.679	202.5	0.207227	202.2928	0.995625
Be	1.848	0.3048	3.679	202.2928	0.206321	202.0865	0.996001
Al	2.7	0.3048	3.54	202.0865	0.290163	201.7963	0.996536
SS	7.93	0.787	3.16	201.7963	1.965297	199.831	1.000339
water	1	1.59	4.53	199.831	0.720514	199.1105	1.001811
1						199.1105	1.001811
SS	7.93	0.508	3.16	199.1105	1.275292	197.8352	1.004517
Water	1	1.59	4.53	197.8352	0.723524	197.1117	1.00611
Al	2.7	0.76	3.54	197.1117	0.730847	196.3808	1.007762
Vasco.	8.08	3	3.14	196.3808	7.670442	188.7104	1.027677
Water	1	1	4.53	188.7104	0.465538	188.2448	1.029038
Vasco.	8.08	3	3.14	188.2448	7.832376	180.4125	1.054522
Water	1	1	4.53	180.4125	0.477698	179.9348	1.056235
TiALV	4.51	3	3.24	179.9348	4.630239	175.3045	1.073786
Water	1	1	4.53	175.3045	0.486425	174.8181	1.075729
TiALV	4.51	3	3.24	174.8181	4.715694	170.1024	1.09555
Water	1	1	4.53	170.1024	0.496284	169.6061	1.097739
Be	1.848	3	3.52	169.6061	2.142225	167.4639	1.107416
Al	2.7	0.76	3.54	167.4639	0.804436	166.6595	1.111145
Water	1	1.59	4.53	166.6595	0.800324	165.8591	1.114906
SS	7.93	0.508	3.16	165.8591	1.41926	164.4399	1.121701
Water	1	1.588	4.53	164.4399	0.806911	163.633	1.125637
2						163.633	1.125637
SS	7.93	0.508	3.16	163.633	1.432921	162.2	1.132753
Water	1	1.59	4.53	162.2	0.815888	161.3842	1.136879
Al	2.7	0.76	3.54	161.3842	0.825838	160.5583	1.141109
Ti Gum	5.62	3	3.04	160.5583	5.848687	154.7096	1.172629
Water	1	1	4.53	154.7096	0.531201	154.1784	1.175628
Ti Gum	5.62	3	3.04	154.1784	6.02561	148.1528	1.21122
Water	1	1	4.53	148.1528	0.548682	147.6041	1.214605
AlBeMet	2.1	3	3.62	147.6041	2.770028	144.8341	1.232063
Water	1	1	4.53	144.8341	0.558124	144.276	1.235655
IG-43	1.82	6	4	144.276	5.39734	138.8786	1.271676
Water	1	1	4.53	138.8786	0.576069	138.3026	1.275658
Al	2.7	0.76	3.54	138.3026	0.926648	137.3759	1.282119
Water	1	1.59	4.53	137.3759	0.923472	136.4525	1.288627
SS	7.93	0.508	3.16	136.4525	1.640405	134.812	1.300355
Water	1	1.588	4.53	134.812	0.935428	133.8766	1.307139

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						133.8766	1.307139
SS	7.93	0.508	3.16	133.8766	1.663971	132.2127	1.31938
Water	1	1.59	4.53	132.2127	0.95031	131.2623	1.32647
Al	2.7	0.76	3.54	131.2623	0.963558	130.2988	1.333733
CC-XYZ	2.1	6	4	130.2988	6.722013	123.5768	1.386467
Water	1	1	4.53	123.5768	0.628069	122.9487	1.391579
CC-UV	2.1	6	4	122.9487	7.013557	115.9351	1.450806
Water	1	2.75	4.53	115.9351	1.807341	114.1278	1.466706
Al	2.7	3.25	3.54	114.1278	4.556101	109.5717	1.507948
Al	2.7	0.76	3.54	109.5717	1.095385	108.4763	1.518111
Water	1	1.59	4.53	108.4763	1.09345	107.3829	1.528352
SS	7.93	0.508	3.16	107.3829	1.945572	105.4373	1.54681
Water	1	1.588	4.53	105.4373	1.112719	104.3246	1.557502

vacuum window  
vacuum window  
vacuum window  
water window