RubberSource INC.

Maximum Particle Size		Minimum recommended thickness for a given material free fall											
		Rolling or Sliding		3'		4'		5'		6'		8'	
		No Impact		0.9m		1.2m		1.5m		1.8m		2.4m	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1/8 -1/4	3 to 6	1/4"	6	3/8"	10	3/8"	10	1/2"	12	1/2"	12	1/2"	12
3/8 - 1/2	10 to 12	1/4"	6	3/8"	10	1/2"	12	1/2"	12	3/4"	19	3/4"	19
3/4" - 1	19 to 25	1/2"	12	1/2"	12	3/4"	19	3/4"	19	1"	25	1 1/2"	38
2	50	1/2"	12	3/4"	19	3/4"	19	1 1/4"	32	1 1/2"	38	1 3/4"	44
4	100	3/4"	19	1"	25	1 1/2"	38	1 3/4"	44	2"	50	2 1/2"	64
6	150	1"	25	1 1/2"	38	1 3/4"	44	2"	50	2 1/2"	64	3"	76
8	200	1 1/2"	38	2	50	2 1/2"	64	3"	76	Consult RubberSource			
10	250	2"	50	2 1/2"	64	3"	76	Consult RubberSource					
12	300	2 1/2"	64	3"	76	3 1/2"	89	Consult RubberSource					

This guideline is put out by RubberSource, to recommend various rubber thicknesses (the red is 40 duro; the grey portion of the chart is 60 durometer material - for increase material size. These are recommendations are for a given material size, and whether it is rolling, or falling material. The rationale as is that when the rubber is sufficiently thick to rebound the striking particle, the wear life is maximized. However, if the rubber liner is even slightly too thin, and a given size stone or strikes it in such a way that its sharp point is able to push through the rubber and contact what's behind it - either a steel backing, or just the bare metal of, say a chute, then you end up with a "cut point". That small cut point may only be a 64^{th} of an inch, but multiply that by 10,000 strikes a day, and you can see how the rubber will be chewed away, if it isn't quite thick enough.

**You can add an extra 1/4" of material in certain situations that will not add much to the overall cost of the material, but it may extend service life greatly.