

## Kerbal Space Program - Feedback #24700

### AE-FF1.5 Airstream Protective Shell (1.875m) panel mass looks wrong...

01/23/2020 01:34 AM - abc

<b>Status:</b>	New		
<b>Severity:</b>	Low		
<b>Assignee:</b>			
<b>Category:</b>	Parts		
<b>Target version:</b>			
<b>Version:</b>	1.8.1	<b>Language:</b>	English (US)
<b>Platform:</b>	Windows	<b>Mod Related:</b>	No
<b>Expansion:</b>	Making History		

#### Description

The panel cost and mass of the airstream protective shells per m<sup>2</sup> are:

size	max width	cost	mass
1.25m	1.5m	6	.01t
1.875m	2.25m	6	.015t
2.5m	3m	12	.012t
3.75m	6m	18	.016t
5m	9m	18	.03t

The 1.875m panel mass looks like it should be .011t rather than .015t. It doesn't seem reasonable to consider cost/mass tradeoffs in rocket parts since mass always has an extra cost in terms of extra fuel needed that is likely to be more than than difference in part cost. I'm guessing it might just be a mistake.

I noticed this during a closer look after being surprised that when building almost the exact same shell in 3.75m and 5m the mass of the 5m shell is about double the mass of the 3.75m shell. Since only the width is limited and it seems like the mass needed for each panel should vary based on the total size, possibly an equation where the mass of each panel varies in a uniform way for each of the airstream shells based on the total size would make more sense. A smaller change that might make sense would be to let the 5m part have the mass of the 3.75m part if the width is 6m or less since the 5m part is the only one within the max size of the previous part and the <6m range fits a lot of useful stuff that might need a bunch of fuel to get to orbit. However, since any other change would be more work it might be best to just fix the 1.875m mass and not worry about other changes.