Risk Assessment – Wind Tunnel

Please complete this risk assessment for your activity using the formula set out below. Please consider any hazards specific to your activity greater than every day hazards such as slipping, tripping or falling on stairs, trapping fingers in doors and cuts and bruises which are inherent in all environments.

Provider	**STEM TEAM East**		
Activity Description	**Aerodynamics and drag in vehicle design using a wind tunnel.** Students learn about the friction force drag and how it affects vehicle movement and fuel efficiency. They then make a model vehicle, test it in a wind tunnel and make an assessment of the amount of drag generated using weights. Students then redesign their vehicle to minimise drag and re-test it in the wind tunnel.		
Who will be exposed to the hazards	School Students and adults taking part in the activity.		
Hazard	Severity and Likelihood.	Control measures	Risk rating after control measures applied.
Risk of trapped fingers/hair/clothing from fan in wind tunnel. Use of mains power.	2*2=4	The wind tunnel is designed so that it is not possible to access moving parts while the fan is running. However as a precautionary measure, ties must be tucked into shirts and students with long hair will be asked to tie their hair back. The wind tunnel will be connected to a circuit breaker and is PAT tested. All adult users will be briefed on the safe use of equipment prior to the activity.	2*2=4
Trip Hazard	3*3=9	All electrical cables will be securely attached to the floor to reduce the likelihood of people tripping over.	2*2=4
Rohacell Foam		Shaping of Rohacell foam will be done in a well ventilated space. Face masks will be available to students who suffer from asthma.	
Injury from hacksaw and sandpaper	3*3=9	Students will be given advice on the safe use of hacksaws and sandpaper before the start of the activity. Students will be working under adult supervision using workbenches to ensure the blocks of Rohacell foam are securely held while they are cut.	2*2=4