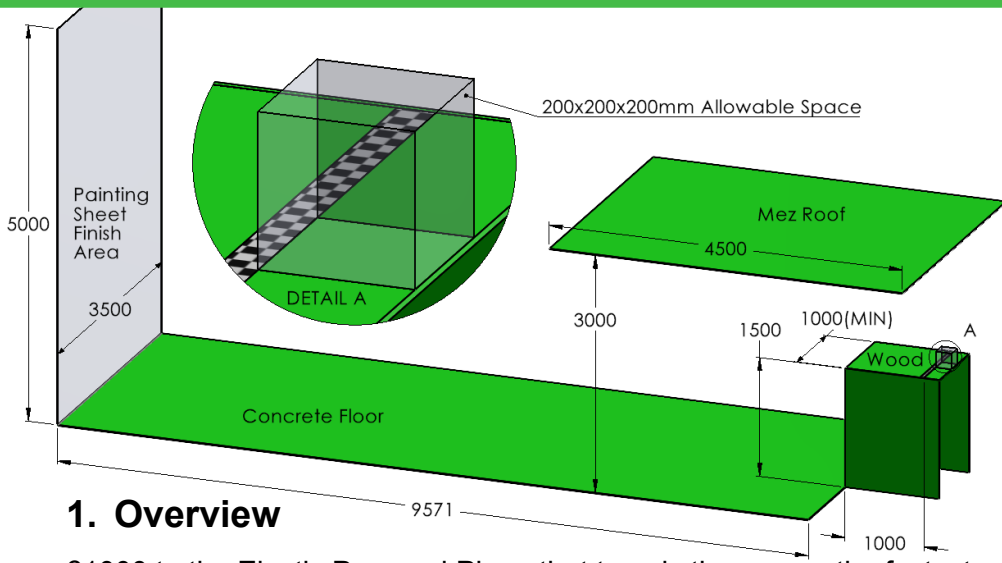


# Fieldhouse Challenge: 'Elastic Plane Race'



## 1. Overview

£1000 to the Elastic Powered Plane that travels the course the fastest.

Novel design ideas are encouraged, and we may award prizes for this too if good enough!

## 2. Details

<b>Vehicle Material</b>	Any materials can be used. (Must be safe to handle and NO EXPLOSIVES!!)
<b>Ground and Event Conditions</b>	Smooth concrete floor - It is relatively level and flat when compared to most floors, but we will not be disclosing an exact flatness value (as we do not know it!). The runway will be smooth chipboard. Event will be held indoors with the roller shutter door open, and painting sheets hung underneath it for the finish line as per diagram.
<b>Size Limit</b>	200x200x200mm
<b>Power Supply Restrictions</b>	Any nonmetallic elastic material can be used to power the vehicle (nothing else). The vehicle must arrive in a fully powered down state and be thermally stable. All the elastic used must not be under any significant tension. Energy can only be released after the vehicle is triggered. All thrust generated must be via the air, not by the runway or any other means.
<b>Race Procedure</b>	A maximum of 1 minute 'Power Up' time will be given to the entry, the procedure for this must be clear, simple, and intuitive and require only a reasonable force to carry out by one person, there must be a safe and intuitive latching system to hold the stored energy. The vehicle will then be placed on the runway behind the start line. The time will start when the vehicle is triggered, we will allow for up to a 5g object to be removed during this process. The trigger needs to be simple, accessible, and intuitive. The time will be measured from the triggered time to when the entire device crosses 200mm before the sheet. The Vehicle will get three tries.
<b>Postal Address</b>	Unit 7, Heathfield Industrial Estate, Taunton, TA2 8GR
<b>Postal Deadline</b>	Needs to arrive by the 29 <sup>th</sup> Oct 2021 to stand a chance of winning. UK: We ask for £5 if you'd like it back. International: £15 if you'd like it back.
<b>Cost to Enter</b>	Free
<b>Prize</b>	£1000.00

Note that the competition will be completely remote - all entries are to be posted to us and we will record all the entries. The full results list will be available and published as soon as possible after the deadline.

'Fieldhouse Challenges' are organised and run by **Fieldhouse Engineering Ltd**, a UK Engineering Firm