

BUILD REVIEW

For participation in the Formula Sun Grand Prix/American Solar Challenge

University/College Name	
Team Name	
Team/Car Number	
Events & Year	 Formula Sun Grand Prix (year) American Solar Challenge (year)

This documents the review of the **solar vehicle** by a practitioner or an academic in an engineering field appropriate for this application that the as-built vehicle is a sufficiently representative embodiment of the previously-reviewed design that meets the regulations for the Formula Sun Grand Prix/American Solar Challenge events.

Per the event regulations, each university/team is responsible for the roadworthiness of its solar car. All solar vehicles must be maintained in a safe, roadworthy condition and be operated safely and within the law at all times. All solar vehicles are operated and driven at the team's own risk.

Each university/team is responsible for the safety of its members, and any minimum criteria specified by the Organizers via the regulations and/or correspondence between the teams and the Organizers should not be construed as design specifications for the construction of a "safe" solar vehicle. In addition, passing this build review does not guarantee that the solar vehicle will pass scrutineering.

Current event regulations are available at americansolarchallenge.org.

Item Reviewed	Review	Comments
Does the vehicle that has been built align with the description and analysis included in the Mechanical Vehicle Design Report?	🗆 Yes 🛛 No	
Based on a visual inspection, is the construction of the vehicle's chassis of sufficient quality and geometric accuracy to be consistent with the occupant space specifications justified in the Design Report?	🗆 Yes 🗆 No	
Based on a visual inspection, is the construction of the vehicle's roll cage of sufficient quality and geometric accuracy to be consistent with the analysis presented in the Design Report?	🗆 Yes 🗆 No	

Based on a visual inspection, is the construction of the vehicle consistent with the design features that, in the event of a collision, will deflect parts of the vehicle (especially the array and body panels) away from the occupant space?	□ Yes	□ No			
Are the vehicle's occupant restraints and their attachment/anchors to the vehicle constructed according to the design and installed consistent with the regulations?	□ Yes	□ No			
Based on a visual inspection, is the construction of the front/rear suspension systems and their attachment to the chassis of sufficient quality and geometric accuracy to be consistent with the Design Report?	□ Yes	□ No			
Based on a visual inspection, is the construction of the steering system of sufficient quality and geometric accuracy to be consistent with the Design Report?	□ Yes	🗆 No			
Based on a visual inspection, are the fasteners installed consistent with the regulations and with the design presented in the Design Report?	□ Yes	🗆 No			
Based on a visual inspection, are the tires and rims of the types specified in the Design Report?	□ Yes	□ No			
Is the load rating of the tires more than the maximum static load imposed by the fully-laden solar car, based on the actual as-built weights?	□ Yes	□ No			
Does the as-built vehicle have two suitable, independent mechanical braking systems , such that if one system fails the other can still bring the solar vehicle to a stop?	□ Yes	🗆 No			
Event Participation					
Does the vehicle, as-built, meet the regulations for the Formula Sun Grand Prix, a 3- day (8 hours per day) closed, road-course track event?	□ Yes	□ No			
Does the vehicle, as-built, meet the regulations for the American Solar Challenge, a road-rally style, open road event of 1500-2000+ miles?	□ Yes	□ No			
Photos					
Attach photographs of the solar vehicle in the state in which it was reviewed.	Photos	Attached			

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I have visually inspected the solar vehicle specified on page 1, its associated Mechanical Vehicle Design Report, and the applicable regulations.

- The solar vehicle has been constructed with sufficient quality to be adequately represented by the design report.
- The vehicle is compliant with the regulations.
- The vehicle is in a form sufficient (with at most minor modifications) to pass the inspections required for participation in the Formula Sun Grand Prix/American Solar Challenge.

Signature	
Printed Name	
Date	
Title	
Phone Number	
Email Address	

*** THE ABOVE REVIEWER MUST BE AUTHORIZED BY EITHER (1) THE TEAM ADVISOR IDENTIFIED ON THE TEAM PARTICIPATION AGREEMENT OR (2) THE UNIVERSITY OFFICER THAT SIGNED THE TEAM PARTICIPATION AGREEMENT ***

I give authorization to the above person to complete this review on behalf of the university.

Signature	
Printed Name	
Date	
Title	
Phone Number	
Email Address	

Email a scanned copy of the completed document to <u>ascteams@americansolarchallenge.org</u>. Teams must bring the original document with them to present at onsite registration.