



## BUILD REVIEW

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

<b>University Name</b>	
<b>Team Name</b>	
<b>Solar Car #</b>	
<b>Events &amp; Year</b>	<input type="checkbox"/> Formula Sun Grand Prix _____ (year) <input type="checkbox"/> 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](http://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?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Based on a visual inspection, is the construction of the vehicle's <b>chassis</b> of sufficient quality and geometric accuracy to be consistent with the occupant space specifications justified in the Design Report?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Based on a visual inspection, is the construction of the vehicle's <b>roll cage</b> of sufficient quality and geometric accuracy to be consistent with the analysis presented in the Design Report?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are the vehicle's <b>occupant restraints</b> and their attachment/anchors to the vehicle constructed according to the design and installed consistent with the regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Based on a visual inspection, is the construction of the <b>front/rear suspension</b> systems and their attachment to the chassis of sufficient quality and geometric accuracy to be consistent with the Design Report?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Based on a visual inspection, is the construction of the <b>steering system</b> of sufficient quality and geometric accuracy to be consistent with the Design Report?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Based on a visual inspection, are the <b>fasteners</b> installed consistent with the regulations and with the design presented in the Design Report?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Based on a visual inspection, are the <b>tires and rims</b> of the types specified in the Design Report?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the <b>load rating of the tires</b> more than the maximum static load imposed by the fully-laden solar car, based on the actual as-built weights?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the as-built vehicle have two suitable, independent mechanical <b>braking systems</b> , such that if one system fails the other can still bring the solar vehicle to a stop?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Event Participation</b>		
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? 	<input type="checkbox"/> Yes <input type="checkbox"/> 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? 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Photos</b>		
Attach photographs of the solar vehicle in the state in which it was reviewed.	<input type="checkbox"/> 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.

<b>Signature</b>	
<b>Printed Name</b>	
<b>Date</b> <i>(must be within 3 months of the start of the event)</i>	
<b>Title</b>	
<b>Phone Number</b>	
<b>Email Address</b>	

**\*\*\* 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.

<b>Signature</b>	
<b>Printed Name</b>	
<b>Date</b>	
<b>Title</b>	
<b>Phone Number</b>	
<b>Email Address</b>	

Email a scanned copy of the completed document to [ascteams@americansolarchallenge.org](mailto:ascteams@americansolarchallenge.org). Teams must bring the original document with them to present at onsite registration.