



# IMPACT ATTENUATOR DATA FORM

The Impact Attenuator Data (IAD) with supporting calculations and documentation must be submitted electronically in Adobe Acrobat format (\*.pdf). This form must be completed and uploaded to the **“Impact Attenuator Data Form” Task** on the FS East website no later than the date specified in the **FS East Documentation Rules 2019**. A printed copy of this form must be presented together with the vehicle at Technical Inspection.

## Contact Details

Car Number

Team Name

University Name

## Team Contact Person

Last Name, First name

E-mail Address

## Competition Class

 CV D-CV EV D-EV

## Impact Attenuator Design

 “Standard Design” “Own Design”

## Changelog





## General Requirements of the IAD Form

- This first page of this template must always be the first page of the FS East Impact Attenuator Data Form.
- The report must be written in „engineering style“ (e.g. contents, captions, symbols and abbreviations, page numbers).
- Design of IA and pictures of positioning on the AIP (dimensions in mm) and positioning on the car.
- Design of the AIP (material, dimension in mm) and method of attachment to the front bulkhead.
- Method of attachment of the IA to the AIP (including data sheets, calculations e.g. if something is bonded together).
- Method of positive locking mechanism for critical fasteners.
- Dimensions of the front bulkhead (dimensions in mm).
- Please comply with the particular rules for front wings, if applicable.
- Receipt of the material, a packing slip or letter of donation of the IA.

## Requirements of the “Own Design” IAD Form

- FS East accepts only dynamic impact attenuator tests (e.g. sledge test or drop down) with real test data (shown in rule T3.19.1), including impact attenuator, anti intrusion plate (AIP) and front bulkhead.
- Description of the test set up (including sensor, data acquisition system).
- Table of measured results of the dynamic impact attenuator test: test speed, absorbed energy, graph of average deceleration and peak deceleration over an interval of time (  $a=f(t)$  ), permanent deflection of the AIP
- Receipt of the material, a packing slip or letter of donation of the IA.
- Pictures before / after the dynamic impact attenuator test.
- If the IA or AIP is made out of CFRP the material and layup must be documented, including datasheets.

