

This form must be completed and submitted by **all teams no later than the date specified in the Action Deadlines on Formula Hybrid+Electric website**. The Formula Hybrid+Electric Technical Committee will review all submissions which deviate from the Formula Hybrid® rules and reply with a decision about the requested deviation. All requests will have a confirmation of receipt sent to the team. Impact Attenuator Data (IAD) and supporting calculations must be submitted electronically in Adobe Acrobat Format (*.pdf). The submissions must be named as follows: schoolname_IAD.pdf using the complete school name. **Submit the IAD report as instructed on the event website.**

***In the event that the Formula Hybrid Technical Committee requests additional information or calculations, teams have one week from the date of the request to submit the requested information or ask for a deadline extension.**

University Name: _____
 Team Contact: _____
 Faculty Advisor: _____

Car Number: _____
 E-mail Address: _____
 E-mail Address: _____

Material(s) Used		
Description of form/shape		
IA to Anti-Intrusion Plate mounting method		
Anti-Intrusion Plate to Front Bulkhead mounting method		
Peak deceleration (≤ 40 g's)		
Average deceleration (≤ 20 g's)		
Vehicle Mass	Amount = _____	Please Circle: Measured or Estimate

Confirm that the attenuator contains the minimum volume 200mm wide x 100mm high x 200mm long

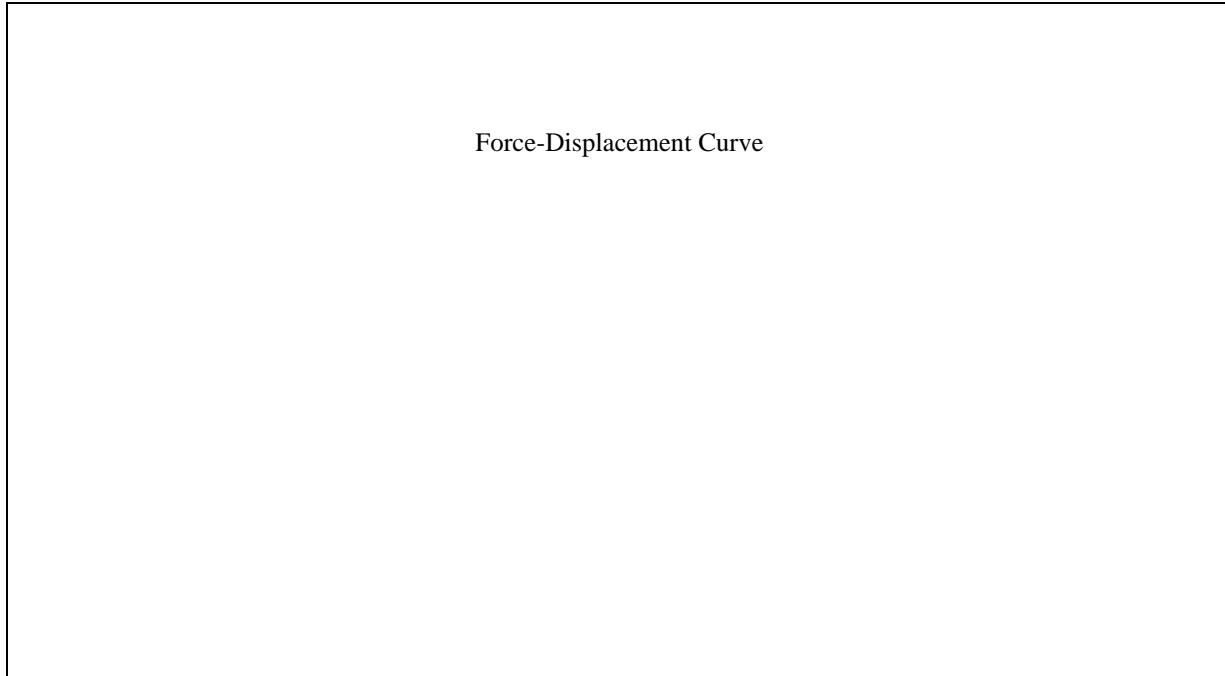


Figure 1: Force-Displacement Curve (dynamic tests must show displacement during collision and after the point $v=0$ and until force becomes = 0)

ATTACH PROOF OF EQUIVALENCY
TECHNICAL COMMITTEE DECISION/COMMENTS

Approved by _____ Date _____

NOTE: THIS FORM AND THE APPROVED COPY OF THE SUBMISSION MUST BE PRESENTED AT TECHNICAL INSPECTION

University Name: _____

Car Number _____

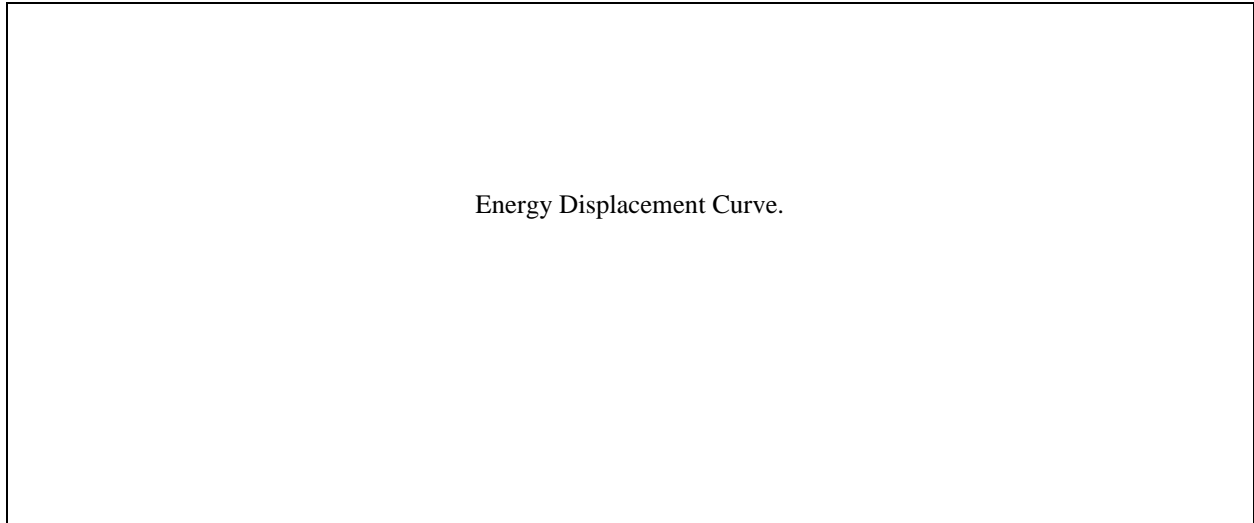


Figure 2: Energy-Displacement Curve (dynamic tests must show displacement during collision and after $v=0$)

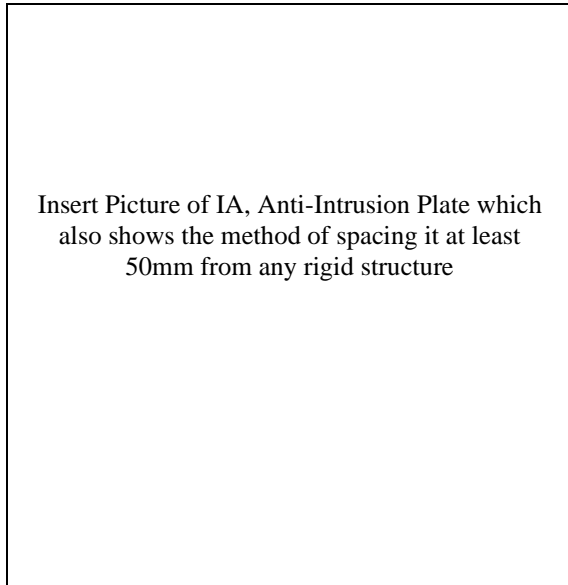


Figure 3: Attenuator as Constructed

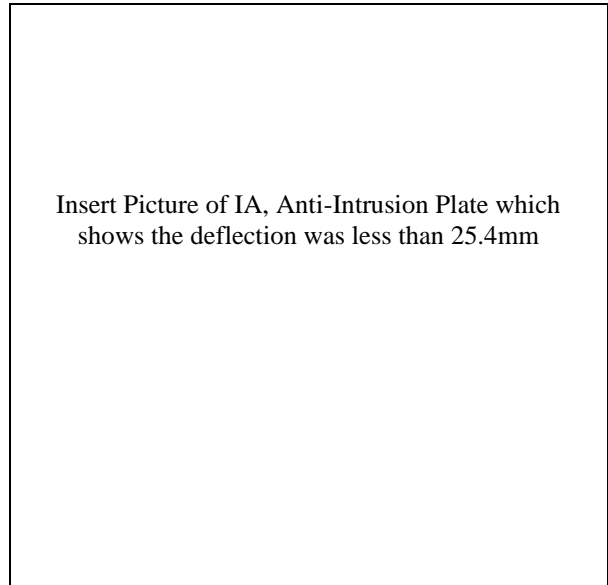


Figure 4: Attenuator after Impact

Energy Absorbed (J):		Vehicle includes front wing in front of front bulkhead?	Yes/No
IA Max. Crushed Displacement (mm):		Wing structure included in test?	Yes/No
IA Post Crush Displacement - demonstrating any return (mm):		Test Type: (e.g. barrier test, drop test, quasi-static crush)	

Anti-Intrusion Plate Deformation (mm)		Test Site: (must be from approved test site list on website for dynamic tests)	
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University Name: _____

Car Number _____

Insert Technical Drawings

Length (fore/aft direction): _____ mm (≥ 200 mm)Width (lateral direction): _____ mm (≥ 200 mm)

Height (vertical direction): _____ mm (≥ 100 mm)

Attenuator is at least 200mm wide by 100mm high for at least 200mm: Yes/No

Attach additional information below this point and/or on additional sheets

Test schematic, photos of test, design report including reasons for selection and advantages/disadvantages, etc.

Additional information shall be kept concise and relevant.

University Name: _____

Car Number _____

Insert Required Calculations Per T3.21.2

Please include:

1. Calculations of total vehicle energy prior to impact.
2. Calculations of total energy absorbed and how this value was determined.
3. Calculations of average and peak acceleration and how these values were determined.



2021 Impact Attenuator Data Report

University Name: _____

Car Number _____

Calculations for teams using the “standard” FSAE Impact Attenuator. See Rule T3.21.3

Insert Required Calculation T3.21.3

If using the "Standard" FSAE impact attenuator, please submit a detailed mass measurement spreadsheet covering all the vehicle's components here to certify that the vehicle with driver is under 300 kg. Identification of the vehicle mass from last year's competition may serve in partial or complete fulfillment of this data requirement.