This form must be completed and submitted by **all teams no later than the date specified in the Action Deadlines on specific event website**. The FSAE Technical Committee will review all submissions which deviate from the FSAE® rulesand reply with a decision about the requested deviation.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 FSAE 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: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Car Number(s) & Event(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ E-mail Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Faculty Advisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 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) |  |

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

|  |
| --- |
| Force-Displacement Curve |

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 AT EVERY FORMULA SAE EVENT ENTERED**

University Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Car Number(s) & Event(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| Energy Displacement Curve. |

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

|  |  |  |
| --- | --- | --- |
| Insert Picture of IA, Anti-Intrusion Plate which also shows the method of spacing it at least 50mm from any rigid structure |  | Insert Picture of IA, Anti-Intrusion Plate which shows the deflection was less than 25.4mm |

Figure 3: Attenuator as Constructed Figure 4: Attenuator after Impact

|  |  |  |  |
| --- | --- | --- | --- |
| Energy Absorbed (J):Must be >= 7350 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:  |  |

University Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Car Number(s) & Event(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insert Required Calculation T3.21.3 note 2 and T3.21.4

University Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Car Number(s) & Event(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insert Technical Drawings

Length (fore/aft direction): \_\_\_\_\_\_\_\_ mm (>=200mm)

Width (lateral direction): \_\_\_\_\_\_\_\_ mm (>=200mm)

Height (vertical direction): \_\_\_\_\_\_\_\_ mm (>=100mm)

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.