

LAB 6: DESIGN FOR BLAST
Due at the end of the lab session.

NAMES: _____

CHECK SHEET

Check for each task completed:

PRELIMINARY INVESTIGATION

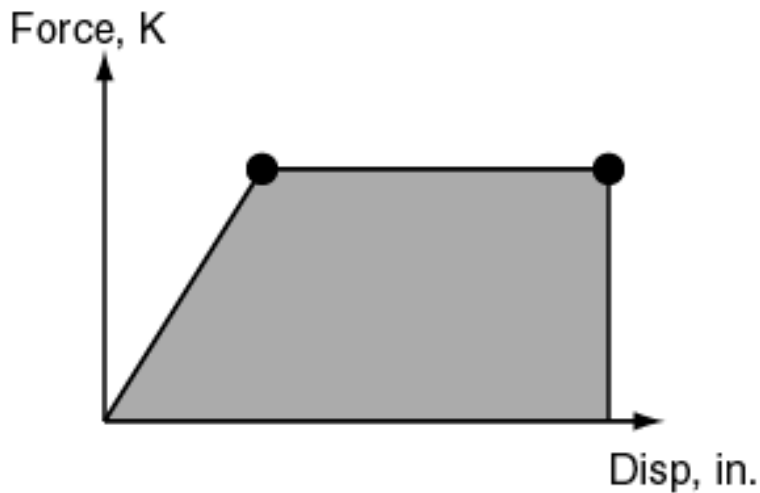
- q Copied the starter file.
- q Downloaded the latest version of Arcade.
- q Calculated the kinetic energy induced by the blast pressure.

$$I = \underline{\hspace{2cm}}$$

$$\Delta v = \underline{\hspace{2cm}}$$

$$E_k = (1/2)mv^2 = \underline{\hspace{2cm}}$$

- q Ran the simulation of the initial model.
- q Recorded force and displacement at key values to approximate the trapezoidal area under the force-displacement curve.



- q Calculated the area of the trapezoid representing the energy absorbed by the structure (E_s).

E_s _____

- q Compared the percentage difference between E_s and E_k with respect to E_k .

DESIGN EXPLORATION

- q Tested different configurations of the model and compared the performance with the criteria.

DESIGN CONCLUSION

Briefly describe your conclusion on the question of whether the design criteria can be met within the constraints described.