

Project:

Block Party Concert



Challenge:

Our client wanted to have a traveling show, "The Block Party Concert," that could be set up in various parks around the country. HEA was asked to find the allowable wind speeds for a variety of asymmetrical truss structures. A separate failure criteria for torsion had to be created and checked due to the asymmetry of the structures.

Resolution:

Our engineering team designed a STAAD model of the standard 20 1/2" box truss to be used to analyze the various allowable forces the model was capable of handling. A previous analysis had also checked the endplates on a 20 1/2" box truss (which normally would govern if not for the addition of torsion). Using this information two distinct failure scenarios were used to check the structures. We then added the necessary ballast requirements and what wind speeds the structures needed to be disassembled at to wrap things up.

Special Thanks: Michael Cotton (Production Designer)