



## 2021 Brookhaven National Laboratory Bridge Building Contest, Inspection Report

<b>Student School</b>		<b>Load at Failure*</b>	
<b>Student Name</b>		<b>Mass</b>	
<b>Bridge Number</b>		<b>Efficiency</b>	
<b>*(If &gt; 50 kg, 50 kg used in efficiency calculation)</b>		<b>DQ?</b>	

LOC	ITEM	CRITERIA	Q	DQ
1a	Materials	Only 3/32" (2.4 mm) square basswood and any commonly available adhesive		
2a	Mass	Max 30 grams		
2b	Span (G)	Min 300 mm (11.8 in)		
2b	Length (L)	Max 400 mm (15.75 in)		
2b	Height (H)	Max 180 mm above the support surface		
2b	Width (W)	40 mm ≤ Width ≤ 70 mm		
2b	Load plane height (P)	Max 80 mm (3.15 in) above the support surface		
2b	Lower Extension	No part of the bridge extends below the support surface		
2c	Level	Loading plane is level (visual)		
2c	Load application vertical clearance	Loading plate and rod clearance at all load points from above and below		
2d	Symmetry	Bridge is symmetrical (visual)		
2e (&3d)	Load application points	Center, 60 mm (2.36 in) to the right of center, 60 mm (2.36 in) to the left of center		
2e	Load plane length (R)	Min 160 mm (centered)		
2f	Clearance (C)	60 mm x 160 mm block passes cleanly under bridge		

FOR REFERENCE ONLY.

This sheet does not replace the official rules and regulations, which can be found at: <https://www.bnl.gov/bridgebuilding/>