

Q/DQ: 

2022 Model Bridge Inspection Report

School Name		Mass	
Student Name		Load at Failure*	
Bridge Number		Efficiency	

*If load > 50 kg, 50 kg will be used in the efficiency calculation

LOC	ITEM	CRITERIA	Q	DQ
1	Materials	Only 3/32-inch (2.4 mm) square basswood and any commonly available adhesive, with no stain/paint/coating		
2a	Mass	Max 25.00 grams		
2b	Span (S)	Min 300. mm		
2b	Length (L)	Max 400. mm		
2b	Height (H)	Max 150. mm		
2b	Width (W)	Max 80. mm		
2b	Lower Extension	No part of the bridge extends below the support surface		
2b	Clearance (C1 and C2)	Clearance (C1) of 20 mm at the center of the span and for 100 mm on either side of the center for a total of 200. mm wide (C2)		
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	Load Application Horizontal Clearance	48 mm diameter, 300. mm long pipe (1.5-inch schedule 40 PVC pipe) can pass horizontally across bridge and touches all loading surfaces simultaneously		
2d (&3c)	Load Plane Height (P)	80. mm ≤ P ≤ 120. mm above the support surface		
2e	Symmetry	Bridge is symmetrical longitudinally and transversely (visual)		
3c	Loading Points	Center, 30. mm to the left of center, 40. mm to the right of center in the same horizontal plane		

FOR REFERENCE ONLY

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