

National Marine Manufacturers Association

Compliance Specialist Exam

Seat Structures (2022 MY)

ABYC H-31 (7/20)

1. Type A and Type B seat assemblies shall be tested as installed on the boat or:
 - a. A test substrate as described by the H-31 standard
 - b. On a test platform that at least structurally replicates the mounting surface to which the final seat assembly is attached.
 - c. $\frac{3}{4}$ " plywood
 - d. Both A and B are correct

2. Seats with a vertical adjustment feature shall be tested with the seat in its ____ height position.
 - a. Minimum
 - b. Middle-range
 - c. Maximum
 - d. Any of the above

3. Per H-31, designated occupant positions are standing or seated areas with a minimum width of ____ designed to be occupied _____.
 - a. 12 inches; at all boat speeds in excess of 5 mph
 - b. 16 inches; all boat speeds in excess of 5 mph
 - c. 12 inches; at all boat speeds
 - d. 16 inches; at all boat speeds

4. Solid wood and plywood structural members shall be selected or treated to resist decay in a marine environment and be classified to meet:
 - a. Exterior C-CPTS
 - b. ASTM B117
 - c. Salt Spray Testing
 - d. ASTM 4329

5. With the exception of an operator swivel seat, seat swivel locking mechanisms, when locked, shall not rotate relative to the seat base when subjected to a torque of 30 foot pounds.
 - a. True
 - b. False

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6. Part of the overall testing requirements for the back of multi-person seat assemblies requires that a load of 253 lbf shall be applied to the seat back for 5 minutes without any loss of function. For a two person seat this means that the force being applied is:
 - a. 150 lbf at each occupant position (253 lbf total), with the forces applied simultaneously
 - b. 253 lbf at each occupant position (506 lbf total), with the forces applied simultaneously
 - c. 150 lbf at each occupant position (253 lbf total), with the force being applied to one position at a time
 - d. 253 lbf at each occupant position (506 lbf total), with the force being applied to one position at a time

7. Type A and B seats shall withstand without failure or loss of function, a dynamic gravity load of ____ released from a ____ height. This test shall be repeated two times on the same specimen without failure or loss.
 - a. 150 lbs; 9 inch
 - b. 150 lbs, 12 inch
 - c. 400 lbs; 9 inch
 - d. 400 lbs; 12 inch

8. A seat attachment test is required to be done to determine the strength of the seat assembly's mounting surface. Regarding the fastener pullout test, which of the following is correct:
 - a. The test may be completed on either the boat or a sample representative of the mounting surface
 - b. Each fastener's installation shall be able to withstand an axial force of 750 lbf
 - c. Is not required if the other seat testing has been completed by the seat's manufacturer
 - d. Both A and B

9. Leaning posts are intended to provide body support at a standing designated occupant position while underway and may not be designed to be used as a seat, they are not covered by ABYC H-31 and thus have no testing requirements.
 - a. True
 - b. False

10. Armrests of both Type A and B seat assemblies shall be designed to withstand without failure the application of a ____ vertical static load per the specified testing requirements within H-31.
 - a. 150 lb
 - b. 200 lb
 - c. 250 lb
 - d. 350 lb