NAVY / Shipboard

Composite

Corrosion-Free Junction Boxes

Durable, lightweight corrosion-free EMI/RFI shielded composite junction boxes NAVSEA standard drawing 803-6983506 Rev. B

Series 316 stainless steel hardware provides long-term durability

Unlimited corrosion resistance compared to metal junction boxes reduces repair and maintenance costs.

Glass reinforced composite thermoplastic material is strong and durable, yet extremely lightweight.

Over a dozen different tooled sizes and shapes.

Extremely durable, corrosion-free, high temperature engineering composite thermoplastic

Tested and qualified to U.S. Navy, UK MOD and hundreds of commercial aircraft and marine applications

IP67 rated seals and gaskets protect equipment from moisture and dust

Example box shown: one of a series of NAVSEA-approved signal, switch, sound power, control boxes designed to eliminate corrosion damage and reduce maintenance cost on Navy ships

Rev. 10.05.20

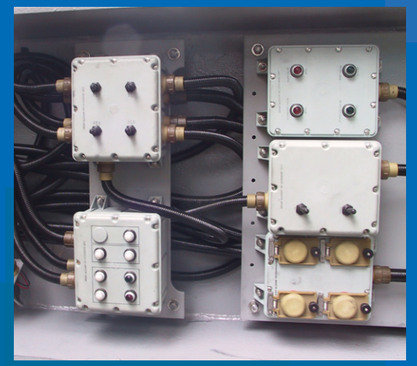
Mission-Driven Design

NAVSEA-APPROVED

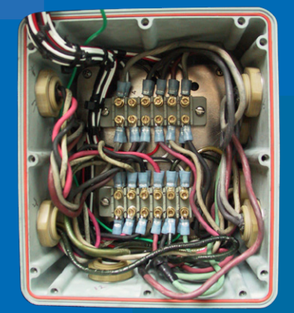
Composite Junction Boxes for Naval applications

TESTED AND QUALIFIED THROUGHOUT THE FLEET: GLENAIR CORROSION-FREE COMPOSITE BOXES

Broad range of sizes and shapes



Complex installations fully supported with feed-thru fittings and wire protection conduit



Discrete components or turnkey wired and connectorized systems

Glenair Composite Box Product Specifications

Description/Test Report	Requirement	Procedure
Plating Adhesion *Glenair #9-44-18/TN94-159*	Should not exhibit any blistering, peeling or other separation of the units plating.	Tested IAW MIL-DTL-38999.
Vibration *NTS #973-7369-2*	Should not exhibit loosening of component parts or evidence of damage.	Tested IAW MIL-STD-167 Type 1 for box units and MIL-STD-1344, Method 2004 Condition II for fittings and accessories.
Shock *MOD #BR8470 Grade C and F*	There shall be no loosening of parts or evidence of damage.	Tested IAW MOD BR 8470 Grade C and F.
Salt Spray *Glenair #9-44-18/TN94-159*	Should exhibit no exposure of underplate or base material.	Tested IAW MIL-STD-1344, Method 1001.
Dust *NTS #973-7369-1*	Should conform to required torque limits and functional requirement within 25%.	Tested IAW MIL-STD-202.
UV Light Resistance *GE RDM88050255-6042*	No degradation of the mechanical properties defined in the specification after testing.	Tested IAW ASTM D2565.
Impact *MIL-STD-1344, Method 2018*	No evidence of breaking or cracking of components or other damage that could affect the product performance.	Tested IAW MIL-STD-1344, Method 2018.
Temperature Cycling *NTS #575-9249*	No cracking, peeling or separation of plating or other functional damage.	Tested IAW MIL-STD-1344, Method 1003 at -65°C to 200°C.
Hydrolytic Stability *NTS #878-536*	No evidence of increased weight greater than 1% and no evidence of cracking, breaking or loosening of component parts.	Tested IAW ASTM D570-81.
Flammability *MIL-STD-1344, Method 1012, Smoke Index, NES 711 Issue 2, NES 713 Issue 3 and ISO 4589*	The item flame and after flow extinguishing time shall not exceed the defined limits.	Tested IAW Table II of MIL-STD-1344, Method 1012, Smoke Index, NES 711 Issue 2, NES 713 Issue 3. Burning behavior by Oxygen Index, ISO 4589.
Water Tightness *EA #0C13513-039514*	Water tightness and internal pressurization is maintained.	Tested IAW EA #0C13513-039514.
Outgassing *JPL #081892*	Maximum allowable weight loss is 10%.	Tested IAW ASTME 595.
Electromagnetic Shielding *TRW/ABQ-55C-1186-0*	Should demonstrate shielding effectiveness and transfer impedance conforming to military industry standards and specific customer requirements.	Tested IAW TRW/ABQ-55C-1186-0.