

SELECTED PROJECT PORTFOLIO

**Vessel:** ISLAND HOME (Martha's Vineyard Ferry)  
**Operator:** Steam Ship Authority  
**Client:** VT Halter Marine

**Services Provided:**

- Prepared noise and vibration control plans in accordance with ship specifications.
- Performed finite element analysis (FEA) of entire vessel including forced response analysis and compared with ABS Comfort Class requirements.
- Performed shipboard noise prediction using NCE's *Designer Noise*.
- Made major recommendation of isolation mounting main diesel engines based on findings of both noise and vibration predictions. Island Home was first ship with isolated EMD Propulsion Engines.
- Performed HVAC noise predictions and recommended treatments.
- Conducted shipboard noise and vibration tests during sea trials including extensive displacement tests of the isolated Main Engines.
- Performed Finite Element Analysis (FEA) model verification survey, 2 years after delivery.
- Received many complements on acoustic environment from end client (Mass SSA) and ferry riders.