



## Sea Island Ocean Forest, Sea Island, GA

**Commerical** Solutions  
in Action

Solutions for Energy Recovery  
& Dehumidification

### The Project:

Known for the warm salt-tinged breezes and surrounded by the river and saltwater marshes, the Sea Island Ocean Forest sought to enhance the comfort of their guests. Prime consideration was dehumidification, in a location that experiences average humidity of 72% to almost 80%. Trane called upon Carolina Heat Pipe to assist with the HVAC renovation/addition, specifically to focus on energy savings and improved dehumidification.

### The Solution:

Carolina Heat Pipe custom designed and manufactured a 2-row controllable Thermosyphon Run Around Heat Pipe system (TRAHP®) to fit into a 3680 cfm Trane Indoor Climate Changer Air Handler, size 10.

**The TRAHP® absorbs sensible heat from the incoming outside air and then passively transfers that heat around the cooling coil. This process provides latent enhancement and improved dehumidification capacity from the air handler.**



***“The Carolina Heat Pipe Team was fantastic to work with.”***

***Josh Click, Georgia Trane***

### Performance Results:

At design conditions, the TRAHP® system provides a cooling load reduction of 3.7 tons while simultaneously providing 43.8 MBH free reheat for improved dehumidification.

The incorporation of Carolina Heat Pipe TRAHP® system typically provides a 2–3-year payback period.

*The heat pipe requires only simple maintenance of periodic coil cleaning for the life of the air handler.*

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