



## JOB FACT SHEET

**Facility:**

Horry County Schools

**Location:**

Horry County, SC

**Project Type:**

Off Site Construction – Penthouse

**Duration:**

Eight (8) Months

### PROJECT OVERVIEW

The project consists of five new energy positive schools in Horry County, SC. Each state-of-the-art facility is a high -performance, safe and secure learning environment with classrooms, signature core spaces, and feature energy positive building systems. Each building features on-site renewable energy generation to produce more energy than the annual operation each school requires. The buildings are equipped with roof-mounted photovoltaic solar panels, thermal energy storage, centralized geothermal HVAC, LED lighting, indoor air quality monitoring, an enhanced building automation system and a superior building envelope.

EAS was contracted to manufacture (4) penthouses and (1) superskid for this project. The project schedule was eight months from concept to delivery.

### PROJECT HIGHLIGHTS

- Each middle school was provided in (8) sections. The elementary school superskid was provided in (5) sections.
- 80 Mil TPO roof material
- Architectural doors designed to match existing doors within the building.
- Each unit designed to support field installed architectural metal panel with no additional structure required for support.
- EAS included bracing within penthouse as required to meet strict seismic requirements and 150 mph wind load requirements.
- Designed to be set around elevator shaft. The building elevator will stop on EAS penthouse floor.

### TECHNICAL DETAILS

- Each penthouse has (3) custom EAS AHUs with supply and return fans, electrostatic filters, hot and chilled water coils.
- Middle schools AHUs (2) 26,000 CFM and (1) 8,000 CFM and Elementary School (1) 26,000 CFM and (1) 7,000 CFM
- (1) Multistack geothermal modular chiller with simultaneous heating and cooling per penthouse. 270 tons of cooling, 100 tons of heating and 81 tons simultaneously.
- Hot water pumps, chilled water pumps, condenser pumps and Borefield pumps.
- Each penthouse was provided pre-piped using schedule 40 all welded carbon steel pipe.
- Piping systems included all necessary air separators, expansion tanks, valves and fittings.
- Outside air plenum and relief plenum with Miami Dade wind rated intake louvers.
- Cooling provided by AHU relief air supplemented by fan coil unit.
- Galvanized steel duct work provided for outside air distribution in penthouse. Fully insulated at EAS factory during manufacturing.
- Each penthouse provided with 1000 amp switchgear for power distribution complete with stepdown transformer for all 120 volt loads.
- Individual VFDs provided for each fan and pump motor.
- Full turnkey installation including crane and rigging, reconnect, start-up and testing.





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### JOB PHOTOS



**For More Information: [www.easinc.net](http://www.easinc.net)**