

Case Study

Vanderbilt University Campus



Location: Nashville, TN

Owner: Vanderbilt University Plant Operations

Mechanical Engineer: Envision Advantage, LLC

Mechanical Contractor: Anderson Piping

Manufacturer: Temtrol Custom Air Handling Units

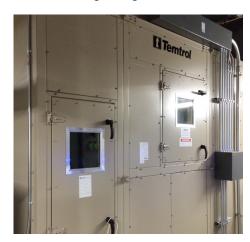
Replacing existing air handling units (AHUs) is a challenging task.

Building access to mechanical rooms is often limited by narrow entry points, freight elevators, exterior louvers located several stories above grade level, and difficult pathways around existing equipment. Mechanical rooms with complex ductwork, piping, and structural members require AHUs to be designed to specific physical dimensions, often to the nearest inch, in order to maximize performance for a given space allocation. Frequently, AHUs are upsized prior to replacement to meet new building requirements.

When the 2014 budget was approved, Vanderbilt University's Plant Operations chose Temtrol for several AHU replacement projects on campus. The projects included: VU Stevenson Center for Physics and Astronomy, VU Garland Hall, and VU Old Gym Fine Arts.

Temtrol's RAPID knock-down AHUs provided the best solution for these AHU replacement projects. The AHUs shipped assembled to the contractor's shop with minimal screws and without sealant. The contractor marked the units based on their scheme, disassembled each section down to man-

ageable components, and reassembled the units in the mechanical penthouse at the jobsite. The fully-welded base rails were hoisted up via crane and brought through an exterior louver. All wall framing members, wall panels, coils, filter racks, and FANWALL cubes were delivered to the mechanical space via the building's freight elevator.



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The contractor's previous experience with the RAPID knock-down product allowed for a smooth installation. Most contractors prefer the RAPID knock-down product offering over the traditional palletized product that ships already broken down with assembly instructions.

Expected equipment life played a key role in selecting Temtrol as the manufacturer of choice for these projects. VU Plant Operations wanted a product that would meet their AHU replacement cycle of 30+ years. Temtrol's





heavy material gauges allow for longer equipment life as compared to cataloged constructed units commonly found in the market place. The AHUs installed comprised of filters, coils, FANWALL Technology, variable frequency drives, airflow monitoring,

and custom electrical panels with touch screen user interface.

The 2014 AHU replacement projects were a huge success. Similar 2015 projects were provided.

