

# HILL HOUSE

PHILADELPHIA, PA, USA

RESIDENTIAL

## MACH-PRO HOUSE

*Hill House is an 11-storey apartment building located in suburban Philadelphia's stylish urban community of Chestnut Hill. The property features views of downtown and has an onsite pool and library.*

### PROJECT DETAILS

The Reliable Controls® MACH-System installed at Hill House consists primarily of multiple MACH-ProCom™ controllers hosting nearly 500 MACH-Stat™ controllers.

The goal of the retrofit project was to provide better energy performance and improve the indoor climate of the apartments by installing new HVAC systems. The new equipment consists of a central heating and cooling plant that serves fan coils in the apartments and a central fresh air ventilation unit that serves the common areas. A heat pump also provides re-heat for summer dehumidification.

De-humidification was a major component in meeting the project's environmental goals. The key to achieving dehumidification was in the fan coils, or more precisely, the ECM fan motors. The MACH-Stat™ controllers slow the ECM motors when the relative humidity rises above a high limit. Slowing the fan allows the cooling coil to draw more moisture from the air.

The challenge of installing the system in an occupied building was greatly minimized because the MACH-Stat™ controller bases were factory wired, allowing for a very quick installation.

To learn more about projects using Reliable Controls® visit [www.reliablecontrols.com/projects/overview](http://www.reliablecontrols.com/projects/overview)



#### PROJECT TYPE:

**Retrofit**

#### INSTALLATION TYPE:

**Boiler, Chiller, Fan Coil Unit,  
Heat Pump, VAV**

#### TOTAL AREA:

**700,000 m<sup>2</sup> (2,296,587 ft<sup>2</sup>)**

#### EQUIPMENT INSTALLED:

**1 MACH-ProSys™  
1 MACH-Zone™  
4 MACH-ProCom™  
495 MACH-Stat™**

#### NETWORK:

**EIA-485, Ethernet**

#### TOTAL SYSTEM POINTS:

**2,500 points**

#### RELIABLE CONTROLS® DEALER:

**Phillips McDade Controls**

www.reliablecontrols.com