

Bank Saves 60 Percent on Energy Costs with VRF Zoning Technology

*Santo Domingo,
Dominican Republic*



Banco del Progreso, Santo Domingo, Dominican Republic, was founded in 1974. The bank now has more than 50 branches throughout the country, with several in the capital city of Santo Domingo. The metropolitan area is home to almost one million residents and is the commercial center of the country. Banco del Progreso's Naco branch is located in the center of the city in an area known as the financial district.

The Naco branch building was constructed in 1988. A Fluke package unit provided the cooling that was direly needed in the hot Santo Domingo climate. Mitsubishi Electric US, Inc. Cooling & Heating Division's (Mitsubishi Electric) Variable Refrigerant Flow (VRF) zoning system was the ideal solution to the bank's ongoing efficiency problem.

► Challenge

To update an inefficient HVAC system without disrupting business.

To find a new HVAC system, the bank contacted MPG y Asociados (MPG), Santo Domingo, an experienced HVAC distributor. Miguel Paiewonsky, president of MPG, said "the bank's main concern was efficiency and electricity cost. They also wanted a quiet system; the old system had "a lot of noise."

MPG provided the bank with information on products from Mitsubishi Electric. The bank also considered Toshiba, Daikin and LG systems, but chose Mitsubishi Electric due to the advanced products and warranty policy. The bank was also curious about ductless systems, which are gaining popularity in the Dominican Republic market – long dominated by ducted systems and chillers. Paiewonsky said the bank selected the system because "Mitsubishi Electric VRF systems provide the best solutions for clients

looking for the highest energy efficiency and quality in the market."

► Solution

A VRF zoning system from Mitsubishi Electric provided astounding energy savings and offered an installation that did not disrupt business.

The HVAC installation took place during a larger renovation of the entire premises, as detailed by almomento.net. The bank's officials wanted to create a more friendly and modern design for the Naco branch. They agreed that the space sorely needed more welcoming waiting and self-service areas, information booths and meeting rooms. In response to their requests, new seating and business service areas were designed. The VRF system complemented this design concept; its discreet ceiling-recessed units contributed to the open feeling and the aesthetically pleasing wall-mounted units contributed to the clean, modern look.

The HVAC installation could have been difficult because the bank had to stay open and in business during the renovation. MPG was able to meet the bank's needs by first uninstalling the bulky old system. The team then installed the new Mitsubishi Electric system. All of this happened while the bank was in operation.

The bank has been very happy since the installation. They hired Inproca Ingenieria & Proyectos, S.R.L. to conduct an energy usage study and the study revealed a 60 percent reduction in energy usage compared to the previous inefficient system. The new VRF system used only 9.5 kW

Banco del Progreso

Project Location:
Santo Domingo, Dominican Republic

Completion Date:
March 2012

Project Team

Owner:

Banco del Progreso, Santo Domingo, Dominican Republic

HVAC Contractor, Distributor:

MPG y Asociados, Santo Domingo, Dominican Republic

Mitsubishi Electric Equipment Installed:

- (1) PUHY-P200THM-A-BS Y-Series Outdoor Unit
- (4) PLFY-P125VBM-E.TH 4-Way Ceiling-recessed Cassette Indoor Units
- (3) PLFY-P08NCMU-E 4-Way Ceiling-recessed Cassette Indoor Units
- (1) PKFY-P18NHMU-E Wall-mounted Indoor Unit
- (1) PKFY-P30NKMU-E Wall-mounted Indoor Unit

over a 48-hour time period compared to the previous system that used 24 kW.

"We are very happy with our 60 percent savings in our offices," a Banco del Progreso representative said. Paiewonsky added, "The bank now has a much quieter system that gives a better distribution of cold air. The customers and employees are more comfortable now."

A bank representative said of the entire renovation, "It is a process that takes steps to conserve and sustain," and the bank is taking many new steps in that direction with the new VRF system being a particularly big one. ■