HOTEL

The category "hotels" does not cover one type of building but several, such as residential hotels, transit hotels, convention hotels and resort hotels. However, all are subject to common demands and functional requirements. The air-conditioning systems used by hotels must serve the needs of guests and be easy for hotel staff to operate. Managers demand economical performance. Finally, the system must be dependable. The system must satisfy all these demands. Hotel guests want the airflow kept even to avoid draughts, with minimal variations in indoor temperature. Remote controllers should be easy to use and placed in a convenient location, and the air conditioners should function quietly. For hotel staff, flexibility is vital: climate settings must be adjustable for each room and zone, and the equipment must be easy enough to manage without calling in a specialist. Hotel management needs a system that can be maintained and upgraded at minimum cost and consumes as little energy, human and financial resources as possible. After installation, manufacturer and client contact must be friendly and enduring. Hotels operate 24 hours a day, and the air-conditioning must do the same. Finally, in the event of a rare system failure, back-up equipment must be available, along with an emergency response facility.

Daikin's VRV system has extensive features that meet the customer's needs described above.

- Indoor units to suit any type of indoor environment
- Wired and wireless control systems, as well as centralized control system with full operation management features
- Interlocks with door locks for enhanced security
- Indoor and outdoor units designed for low noise and vibration
- Extra-long piping allowing installation flexibility of outdoor units
- Low operating load for exceptionally low annual energy consumption
- No dedicated operations manager required
- Easily configurable indoor and outdoor units to fit any detailed zoning plan
- Entire system available from Daikin, for convenient "one-stop shopping"
- Comprehensive service menu
- Compatibility with new refrigerants

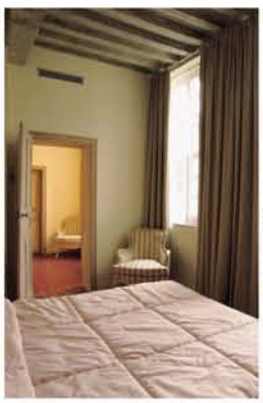
By providing a single, comprehensive, flexible and economical air-conditioning system for an entire hotel, the Daikin VRV system makes a significant contribution to modern society.

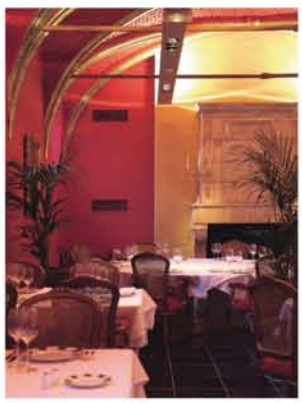
HOTEL

L'Hermitage Gantois in FRANCE

Total floor area is 6,850 m². Construction was completed in 2002. This building is in Lille.
The project was the renovation of a structure originally built in 1460. The VRV system is ideal to facilitate the technical challenges involved in providing air conditioning for such a building, part of which is listed as an historic monument. A total of 73 rooms and suites are now air-conditioned by ducted interior units interconnected by a bus.
Stringent requirements had to be met for the installation, and the reasons the consulting engineers selected the Daikin VRV system are:

- It was essential that none of the units could be seen or heard. The 60 Pa pressure capability of the VRV allowed units to be located in a services room.
- Pipes had to be concealed, leading to complex routing. The exceptional length of piping permitted by the VRV system allowed piping (in the region of 115 m) to be fed through roof spaces, with architectural devices created to conceal the ducting.
- Both cooling and heating had to be provided by the one system to reduce the amount of equipment. The VRV system is perfectly suited to satisfy such a need.
- Varying loads had to be allowed for due to limited thermal insulation in some rooms.
  The inverter control system used in the VRV system can compensate for wide load variations.
- Finally, the VRV system provides this prestige building with the level of comfort that matches its status.



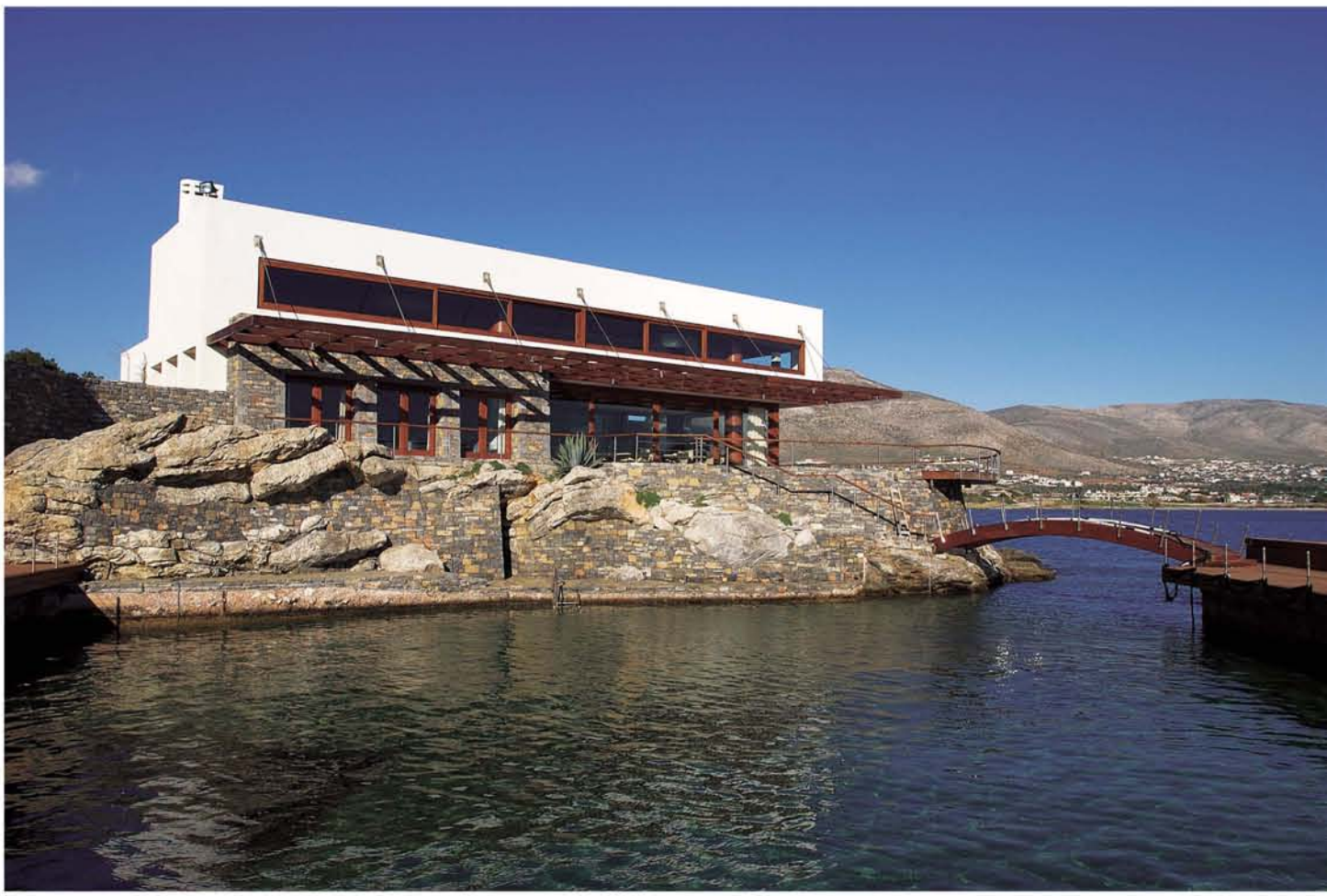
Air-conditioning capacity is 90 Hp, or 262 kW, 74 USRT.

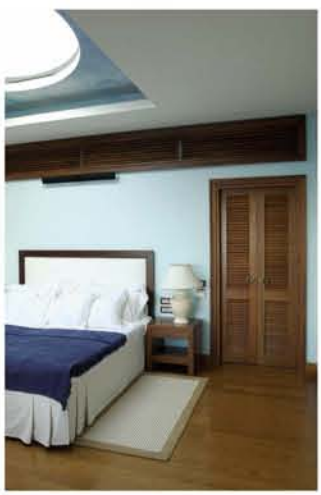
Equipment

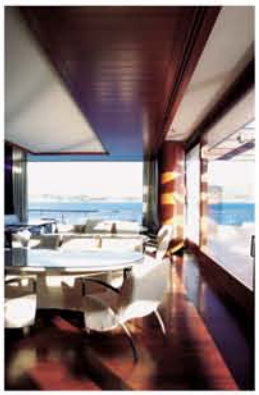
Outdoor units:	9 units of 10 Hp heat pump type
Indoor units:	17 units of Ceiling Mounted Built-in (or Concealed Ceiling Unit) Type
	52 units of Ceiling Mounted Built-in Rear Suction (or Concealed Ceiling Unit Small) Type
	2 units of Ceiling Mounted Duct (or Concealed Ceiling Unit Large) Type

Lagonissi Grand Resort in GREECE

Total floor area is 20,000 m². Construction was completed in 2002. This building is in Lagonisi, Athens. The project was the renovation of a 5-star hotel and bungalow complex originally built in 1965. The luxurious buildings stand in extensive grounds south of Athens, facing Homer's 'wine dark sea' on the enchanting Apollo Coast. Boasting more than 350 guest rooms and suites, conference rooms, several outdoor and indoor swimming pools, restaurants, bars 'et al', the main hotel block is also fully air-conditioned through concealed ceiling indoor units using VRV heat pump systems.







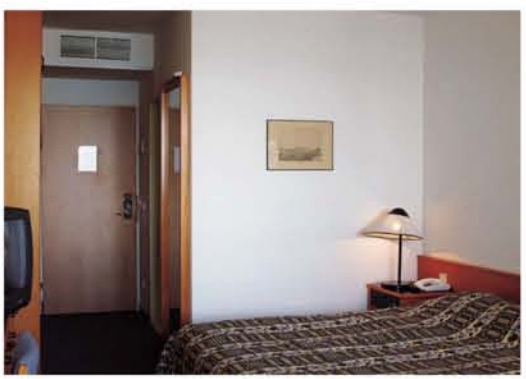
Air-conditioning capacity is 180 Hp, or 523 kW, 149 USRT.

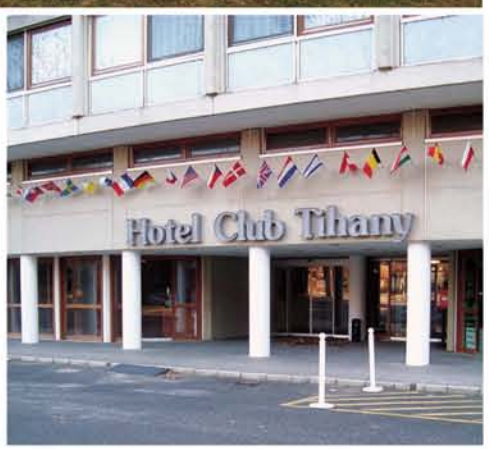
Equipment

Outdoor units:
18 units of 10 Hp heat pump type
Indoor units:
202 units of Ceiling Mounted Built-in (or Concealed Ceiling Unit) Type

Club Tihany in HUNGARY

Total floor area is 4,110 m². Construction was completed in 2001.
The key requirements in redesigning the air-conditioning system for this hotel in Tihany were low operating costs and reliability. The VRV system met these criteria easily. A further benefit was the exceptional length of piping permitted between indoor and outdoor units.
The superb level of quality of the VRV system is the last but not least bonus.



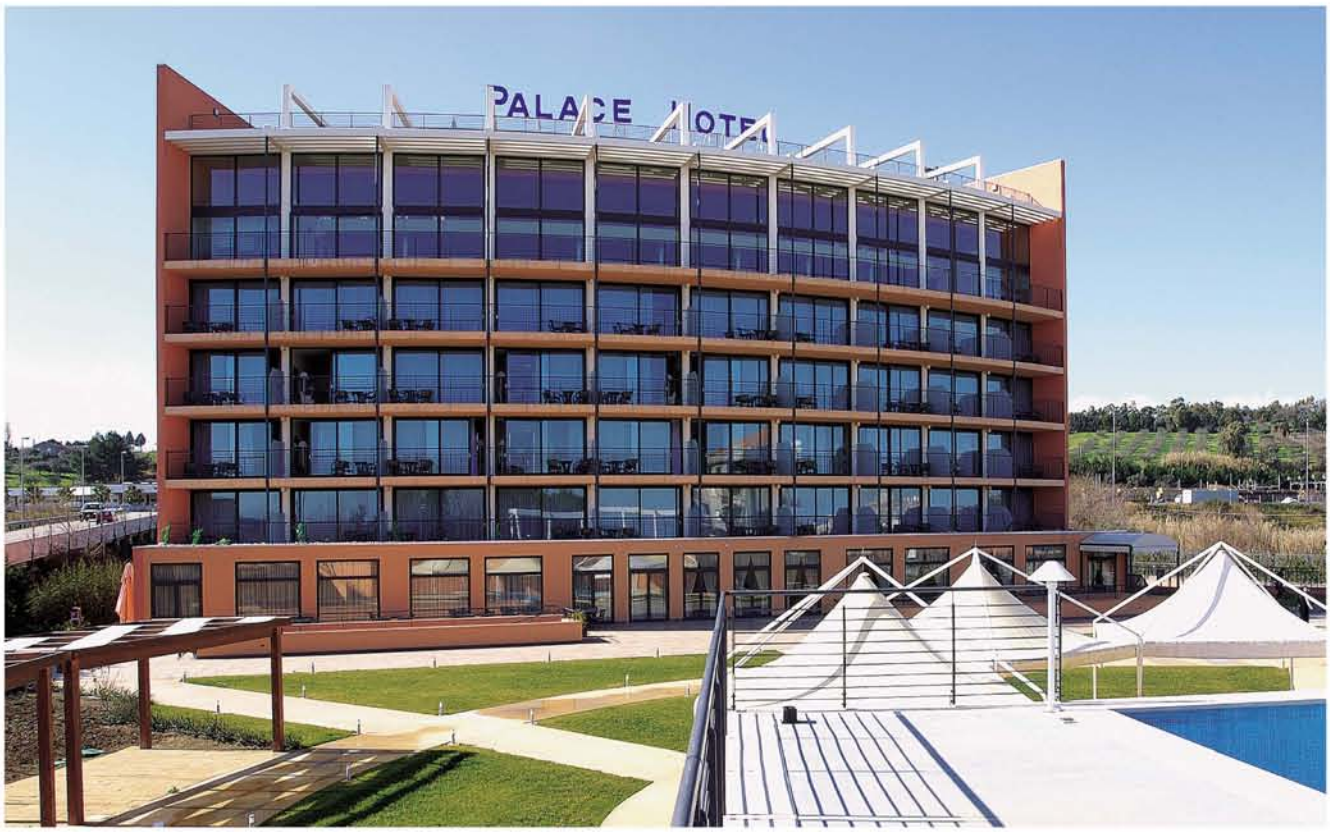


Air-conditioning capacity is 50 Hp, or 150 kW.

Equipment

Outdoor units:
5 units of 10 Hp heat pump type
Indoor units:
78 units of Ceiling Mounted Built-in Rear Suction (or Concealed Ceiling Unit Small) Type

Palace Hotel in ITALY



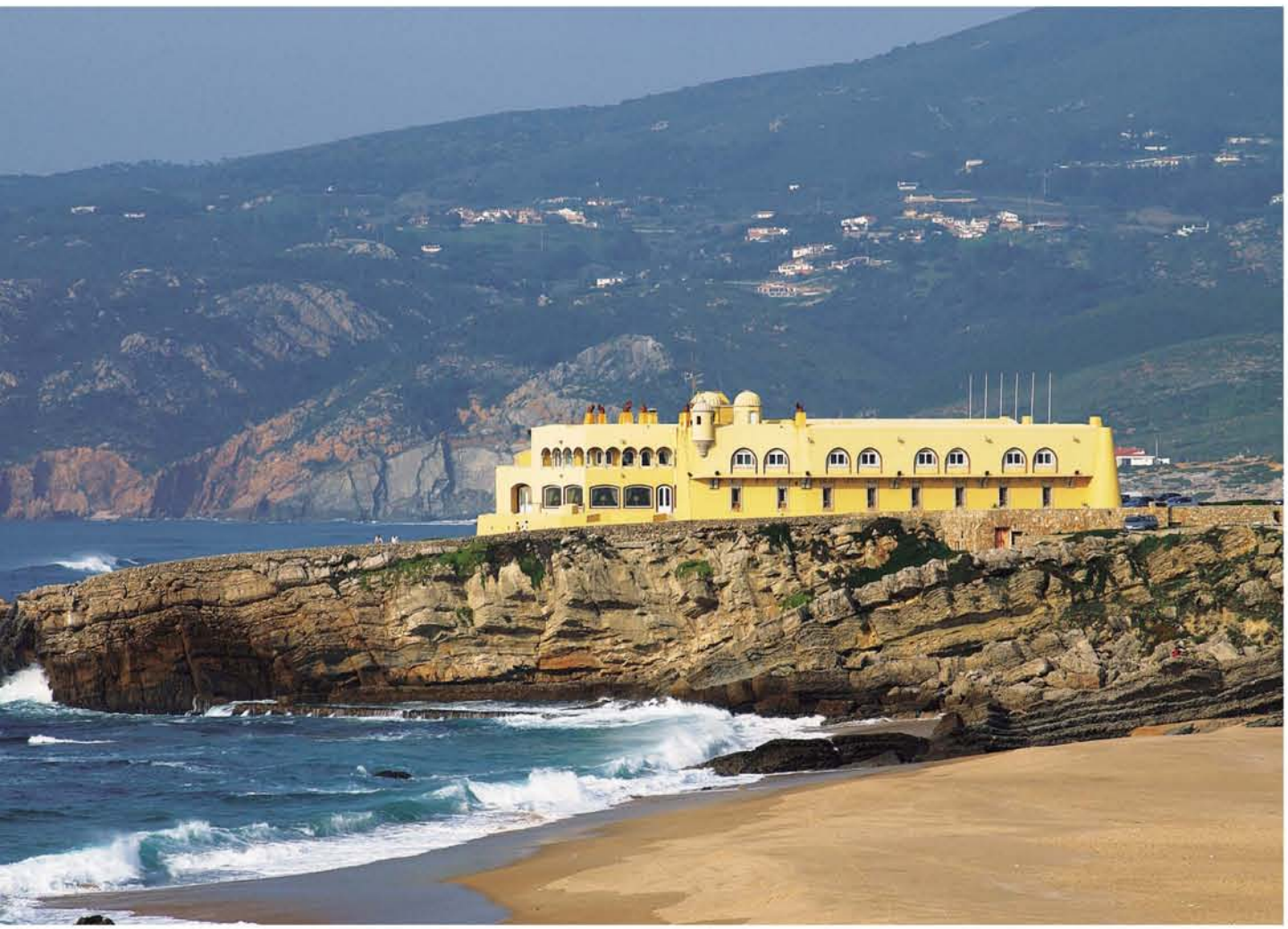
Total air-conditioned floor area is 2,600 m². This building is in Vasto, Chieti. Construction was completed in 2000.

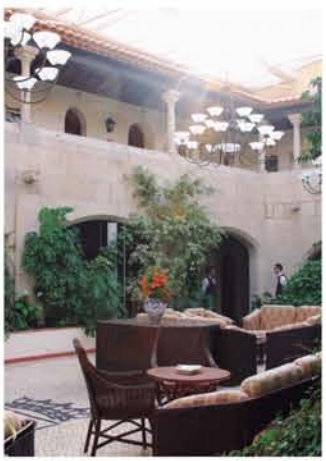
Air-conditioning capacity is 154 Hp, or 448 kW, 127 USRT.

Equipment

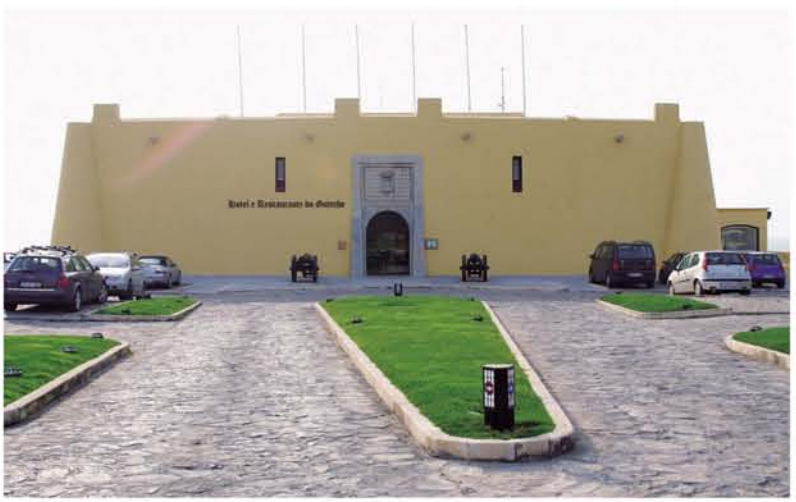
Outdoor units:
13 units of 10 Hp heat pump type
3 units of 8 Hp heat pump type
Indoor units:
12 units of Ceiling Mounted Cassette Type <Multi (4) way flow>
60 units of Ceiling Mounted Built-in (or Concealed Ceiling Unit) Type
6 units of Ceiling Mounted Built-in Rear Suction
(or Concealed Ceiling Unit Small) Type
70 units of Floor Standing Unit Type

Hotel Do Guincho in PORTUGAL





Total floor area is 2,240 m². Construction was completed in 1999.
When this hotel in Cascais was refurbished, the design office was impressed by the flexibility of the VRV system. The installers noted that it was very easy to work with and was admirably suited to the refurbishment of this 200-year-old hotel.

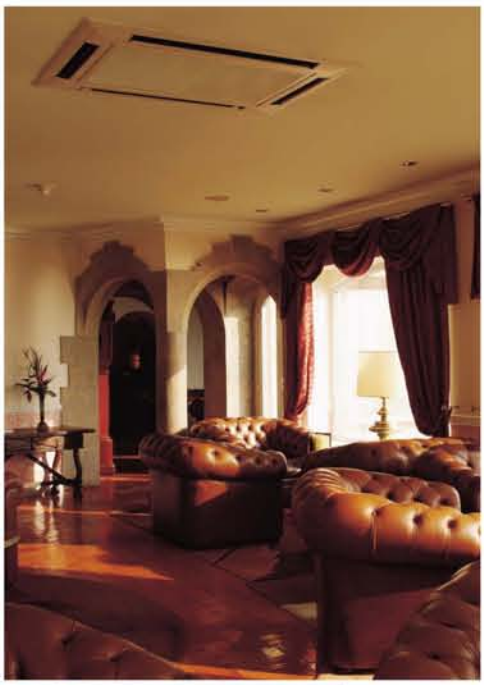


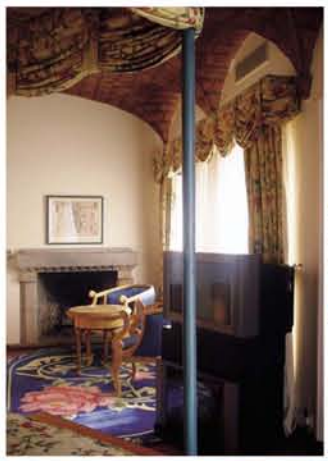
Air-conditioning capacity is 72 Hp, or 209 kW, 60 USRT.

Equipment

Outdoor units:
9 units of 8 Hp heat pump type

Indoor units:
37 units of Ceiling Mounted Built-in Rear Suction
(or Concealed Ceiling Unit Small) Type
2 units of Ceiling Mounted Cassette Type <Multi (4) way flow>
6 units of Ceiling Mounted Cassette Type <Double (2) way flow>
6 units of Floor Standing Unit Type

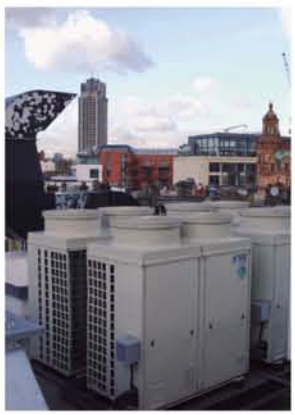




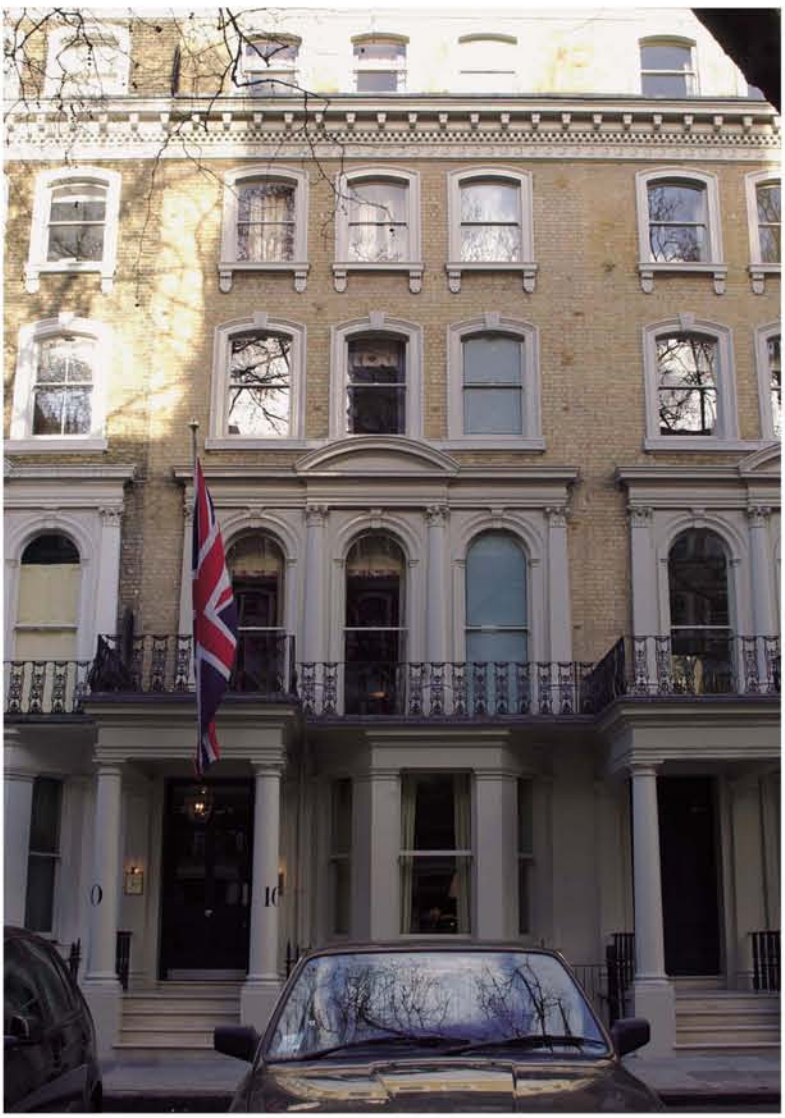
Knightsbridge Hotel in THE UK

Quiet, elegant, and tree lined Beaufort Gardens in the fashionable and sophisticated Knightsbridge area is the location of the Firmdale Hotel Group's latest contribution to the London hotel scene. Conceived as an essentially 'chic B & B,' the Knightsbridge Hotel represents a totally new departure for the group, widely known for its portfolio of luxury establishments throughout the capital.

Despite the affordable price structure of the Knightsbridge Hotel's 44 single, double, luxury double, deluxe double/twin rooms and suites, neither style nor comfort has been compromised in any way. Needless to say, considerable care has also been afforded to the provision of a perfect indoor climate. The installation of the Daikin VRV heat recovery air-conditioning system enables guests to enjoy their stay free from extraneous noise, stress and extremes of temperature.



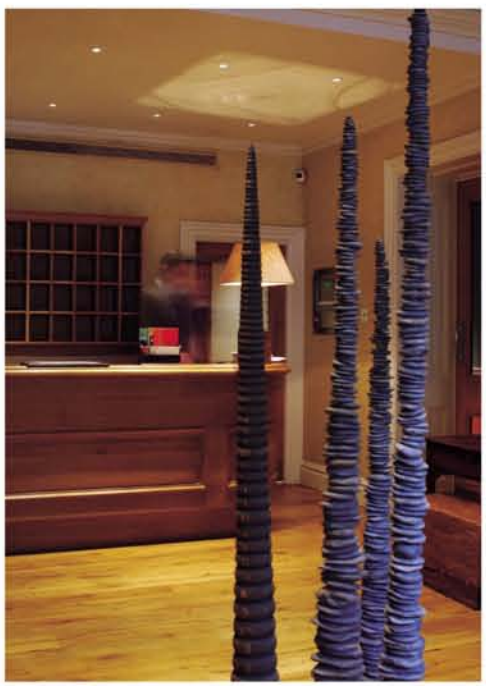
The hotel consists of seven floors — lower ground, ground, mezzanine and first to fifth floors plus the rooftop plant level. Daikin air-conditioning equipment has been installed throughout all seven floors. In all, some 45 indoor fan coil units are linked to five outdoor units on the roof. Conditioned air is supplied to the bedrooms plus lower ground floor administration and staff areas, ground floor library, offices, lounge and lobby via a combination of ducted ceiling units and floor mounted chassis units, enclosed in specially designed surrounds. Supply and extract ventilation is provided by air handling units located at the rooftop plant area.



Air-conditioning capacity is 50 Hp, or 145 kW, 41 USRT.

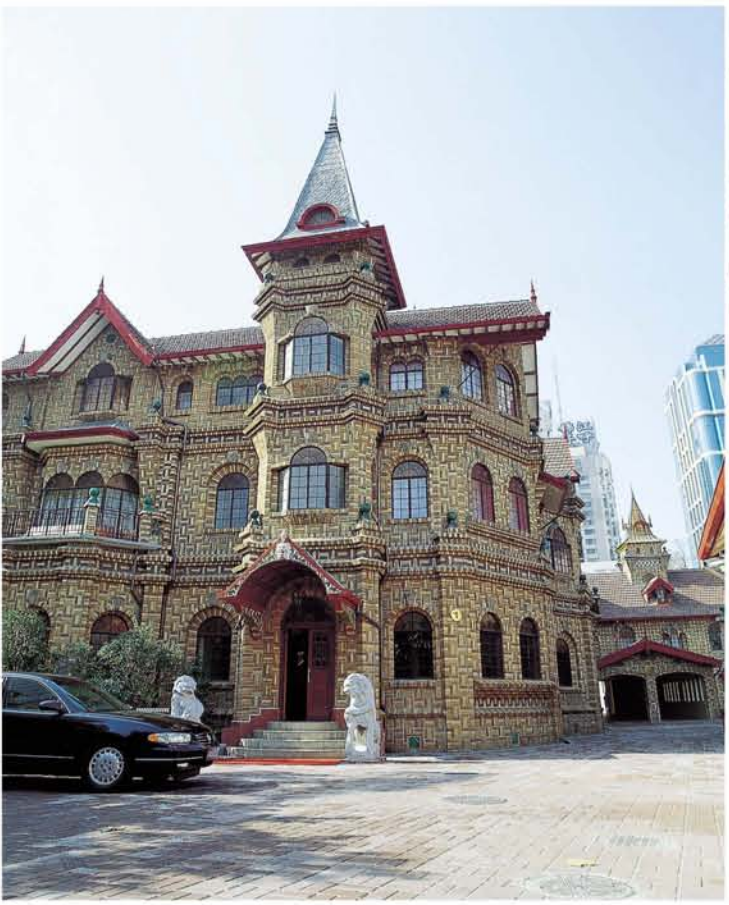
Equipment

Outdoor units:	5 units of 10 Hp heat recovery type
Indoor units:	45 units of Ceiling Mounted Built-in (or Concealed Ceiling Unit) Type & Floor Standing Unit Type



Shanghai Moller Villa in CHINA

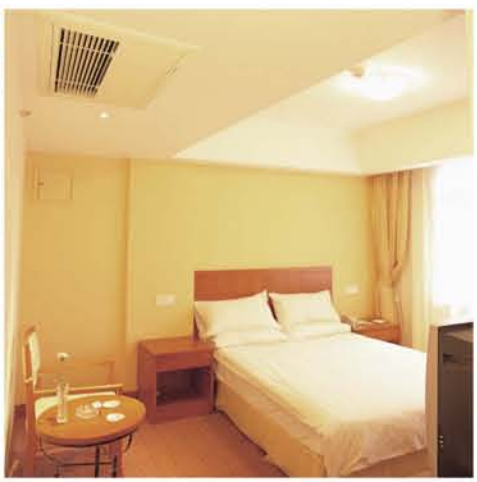
Total floor area is 4,500 m² and 6 storeys. Construction was completed in 2002.
Moller Villa is a top-quality, small-sized hotel located in the center of the city. Dating back to 1936, its architecture is in a uniquely European style from Norway.
The wide range of indoor units and slim ducts of the VRV system allowed the air-conditioning system to blend harmoniously with the old-style decoration. A number of floor standing units were concealed in quaint cabinets, quietly and unobtrusively providing a pleasing airflow in each room.
At Moller Villa, modern technology mixes sympathetically with venerable architecture.



Air-conditioning capacity is 210 Hp, or 610 kW, 174 USRT.

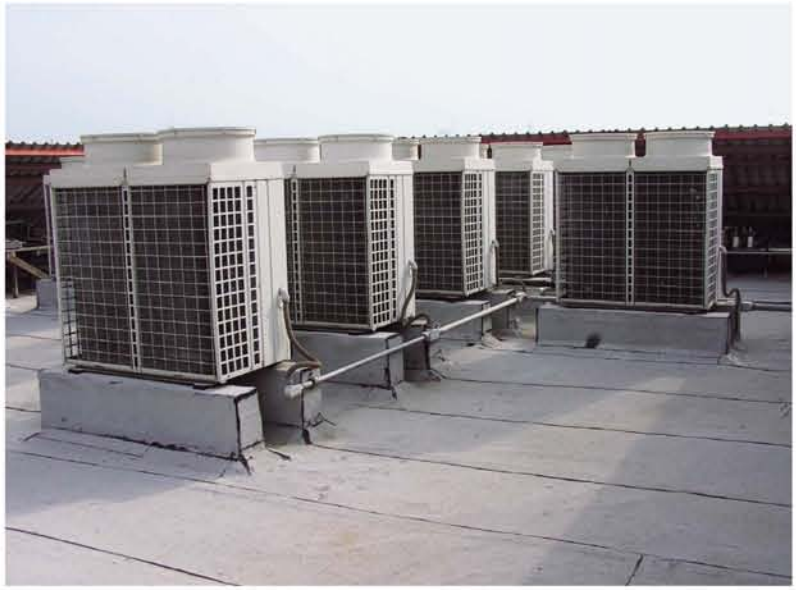
Equipment

Outdoor units:
7 units of 30 Hp heat pump type
Indoor units:
10 units of Ceiling Mounted Cassette Type <Multi (4) way flow>
85 units of Ceiling Mounted Built-in (or Concealed Ceiling Unit) Type
35 units of Floor Standing Unit Type



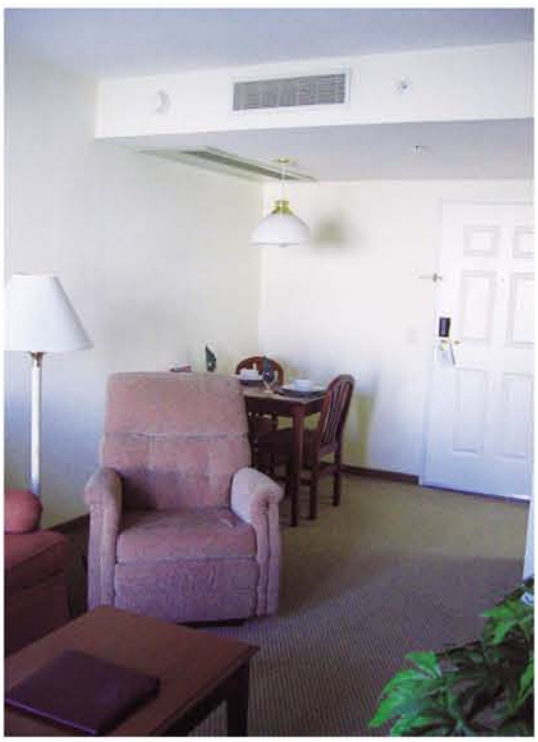
Suites San Pedro in MEXICO

This building is in Monterrey, Mexico. Total floor area is 2900 m².
Air conditioning capacity is 170 Hp.



Equipment

Outdoor units:	17 units of 10 Hp heat pump type
Indoor units:	70 units of Ceiling Mounted Duct Type (Low silhouette type)
	4 units of Ceiling Mounted Cassette Type <Multi (4) way flow>
	4 units of Ceiling Mounted Built-in Type
	2 units of Ceiling Mounted Duct Type (High static pressure)



River House in THAILAND

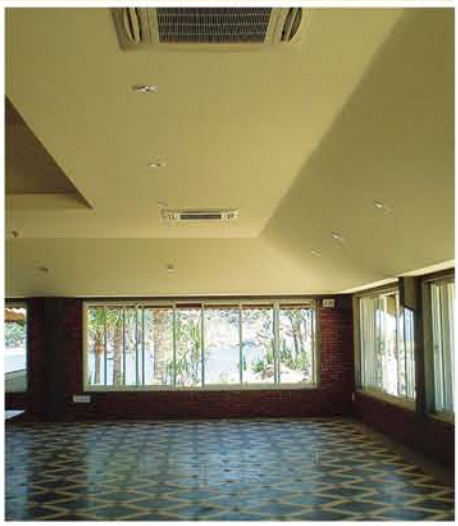
Total floor area is 1,450 m² and 4 stories.
Construction was completed in 2002.
In designing the air-conditioning system for this hotel in Chiangrai, the exceptional length of piping permitted between indoor and outdoor units combined with superb space-saving characteristics made the VRV system the logical choice.

Air-conditioning capacity is 132 Hp, or 384 kW, 109 USRT.

Equipment

Outdoor units:	10 units of 10 Hp cooling only type
	4 units of 8 Hp cooling only type
Indoor units:	3 units of Ceiling Mounted Cassette Type <Multi (4) way flow>
	53 units of Ceiling Mounted Low Silhouette Duct Type

Long Beach Resort in VIETNAM



Construction was completed in 2003.

Equipment

Outdoor units: 14 units
Indoor units: 70 units