

WESTIN PLAYA BONITA

Driving smart, green development
in Panamas' hotel industry



ThermaSmart@ PRO



Flexalen PB Pipes



Certificates



PROJECT INTRODUCTION

The beautiful Westin Playa Bonita oceanfront oasis is situated just outside the city of Panama, right in front of the Panama Canal.

Its breathtaking location on the golden sands of the Veracruz Beach and blue waters of the Pacific Ocean offers a sunny escape for leisure and business travelers to delight in infinity-edge pools, various restaurants and a relaxing spa as well as harnessing a productive work environment with plentiful meeting spaces executive lounges.

In order to minimize the cost of ownership of such energy-intensive facilities, engineering an **efficient** and **sustainable solution** was crucial for maximizing the return on investment, and serving as a reference for the Panamanian hospitality industry.

GOALS

The goal for the project developer was not only to establish a top class hotel in Panama, but also to develop a leading example for innovative green building in the industry. A **smart, innovative** and **sustainable solution** for the resort's energy needs, would stand key in ensuring a full-proof guarantee to that goal. Through earlier small-scale projects, the project development group got to identify Thermaflex as an ideal solutions provider for their needs.

Due to the reliance on unspecialized labor for the network installation and operation, **ease of installation** and **low operating cost** were also key considerations for this reference project, and further secured by our technical support.

PROJECT INFORMATION

- 📍 Panamá, Panama
- Duration: **2 years** for the whole construction
- 6 auditoriums and 4 restaurants supplied with sustainable cooling and heating, chilled and hot potable water
- 620 rooms on 23 floors
- 0 incidents recorded since project completion

APPLICATIONS

- Heating & Cooling Networks
- Chilled Water

🌐 www.thermaflex.com

✉️ international@thermaflex.com



WESTIN PLAYA BONITA

Driving smart, green development
in Panamas' hotel industry



ThermaSmart® PRO



Flexalen PB Pipes



Certificates



PROJECT PROCESS

The construction of the project started in 2008, initiated by a large group of real estate developers in cooperation with the Westin hotel chain. The resort harbors 620 rooms on 23 floors, 6 auditoriums, 4 restaurants, a club house, shopping areas, swimming pools and a furnace room. Both indoor and outdoor solutions could be met with a total of 16 km of our Flexalen pre-insulated piping system for domestic heating and cooling, and 17 km of our technical ThermaSmart Pro insulation for the chilled water lines. The construction of the project was finalized in 2010.

The design and installation took place in 4 phases:

1. **Network design** and installation preparation for optimal routes, significantly saving time for phase 2.
2. **Implementation of pre-assembled and pre-insulated pipe sections;** due to the light weight, long diameters and flexibility of the Flexalen PB pipes (on coil) we were able to make elongated lengths of 25m pipes, as required. Whereas, with traditional pipe materials such as steel pipes there are always length limitations of 5.8 to 11.6 meters.
3. **Connections on-site** to system units.
4. **Final pressure testing** of the system.

RESULTS

Since the end of the project in 2010, Westin's thermal energy networks have been operating smoothly, without any need for repair or corrections. With all factors taken into account, including material, installation and operational costs, investment reached a similar level compared to that of traditional steel/PUR systems, yet with a much stronger return in savings and headache-free ownership. Return temperatures of the chilled water turned out much lower than previously accounted for in the engineering design. **This means less chiller capacity is needed, resulting in even more energy savings than expected.**

