

APPLICATION STORY



FLIR PROVIDES ULTIMATE PEACE OF MIND TO RESIDENTS OF EXCLUSIVE SOUTH AFRICAN ESTATE

68 FLIR thermal cameras monitor 14 km perimeter around exclusive residential and business area.

Thermal cameras have a much longer detection range than visual cameras, and don't need additional lighting to operate.

If you are looking for luxury, exclusivity and security around the area of Johannesburg and Midrand, South Africa, then Waterfall Estates is the place to be for you. The new, exquisite residential and business area offers uniquely South African architecture, indigenous landscaping and state-of-the-art security provided by advanced thermal security cameras from FLIR Systems.

The residential Waterfall Estate was completed in May 2015 by Century Property Developments. Next to providing its residents the ultimate luxury lifestyle, the Estate was intended first and foremost to provide its residents with a sense of security. Nick Crow of Century Property Developments elaborates; "the intention is to commission high specification security systems such as this across all Century Estates. One thing that sets our developments apart from others is the high level of security we offer. Our mission is to keep our residents secure, which is something we're proud to say we're achieving thanks to state-of-the-art security installations such as this."

ADVANCED SECURITY SOLUTION

To ensure the security of its residents, the developers focused on securing

the premises which comprises a number of access gatehouses as well as a substantial perimeter around the estate. To secure the residential sections, security integration company 4C Technology was asked to design a reliable security monitoring solution for the 14 km perimeter as well as for the eight entry/exit gatehouses. According to Paul Frewen, CEO of 4C Technology, the 14 km perimeter presented many challenges, the most critical being the Jukskei River that runs through the estate. Securing the river ingress and exit from the estate was especially challenging and required added measures to ensure the areas were secured. 4C opted for 98 perimeter cameras, a combination of thermal imaging cameras and analogue cameras with infrared lighting. A total of 68 FLIR thermal cameras and 30 analogue



Securing the 14 km perimeter around Waterfall Estates was a challenge which the FLIR thermal imaging cameras were up to.

cameras were installed. The thermal and analogue cameras were used to monitor the perimeter, while visual cameras and access control serve as additional means of verification at the entries and exits. All the perimeter cameras are equipped with advanced video analytics and are linked back to a central command control room where

operators are able to view events and take the appropriate course of action. All the recording and analytics are done on the edge i.e. at the camera, so that only relevant information needs to be transmitted to the command center in order not to overload the IP network. South African FLIR distributor Timeless Technologies, supplied the FLIR thermal cameras and video analytics. When an incident or event is detected by the thermal cameras, the control room operator can assess the situation and implement the appropriate action.

COST-EFFECTIVE PERIMETER SECURITY

Tinus Diedericks, CEO at Timeless Technologies, comments on the selection of thermal imaging cameras for Waterfall Estates. "Protecting a perimeter of this size presented a significant challenge. The developer considered several options, including visible-light CCTV cameras, but that would have meant placing a camera every 70 meters. That is why they opted for thermal imaging cameras from FLIR."

Thermal cameras indeed have a much longer detection range than visual cameras, and they don't need additional lighting and concomitant installation works to operate. Thermal cameras provide an image based on heat coming off the environment,

and thus allow you to see intruders at night, during the day and in bad weather conditions like thunderstorms. Thanks to the smaller number of cameras required and the absence of additional lighting installations, thermal imaging cameras proved to be the most sensible and most cost effective choice for perimeter security and intrusion detection. Paul Frewen, MD of 4C Technology, elaborates: "The installation of the thermal cameras from FLIR was the most effective means to detect possible intrusions and enable the control room operators to make correct and speedy decisions to prevent any breach of security."

RELIABLE DETECTION IN ALL CONDITIONS

With the FLIR FC-Series S and SR-Series cameras, 4C Technology opted for FLIR's top of the range cameras, providing the best image detail and quality for optimal intrusion detection in challenging imaging environments. "At the time of selection, these FLIR cameras provided the most advanced and reliable perimeter protection solution. They also trialed other cameras, but FLIR was the best performer. The product's massive install base and 10-year warranty also proved that this was the right camera for the job," says Tinus Diedericks. To meet the specifics of the perimeter outline, various lenses were chosen. To efficiently monitor the



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entry and exit to Waterfall Estates via the Jukse River, a wideangle lens was chosen, so the entire width of the entry was covered.

REFERENCE SITE

"What is striking about this project is that the Waterfall Estates developers immediately opted for the top of the range quality of FLIR. This was not a case of upgrading from visual CCTV to thermal imaging," says Anel Steyn, National Marketing Brand Manager at Timeless Technologies. "This underpins the importance of quality that the developers attach to this project. As for Timeless Technologies, Waterfall Estates has already served as a valuable reference for other perimeter security projects we have deployed across South Africa."



David Montague from FLIR Systems, Tinus Diedericks and Quintin Smith from Timeless Technologies and Paul Frewen from 4C Technology: "The installation of the thermal cameras from FLIR was the most effective means to detect possible intrusions and enable the control room operators to make correct and speedy decisions to prevent any breach of security."

For more information about thermal imaging cameras or about this application, please visit:

www.flir.com/security

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