

Bank Vault Protection with WallAlert Sensors

How a regional commercial bank protected the vault rooms of its branches and cash-processing hub with WallAlert: sensor cable on vault walls and ceilings, armed around the clock, reporting as dry contacts through the existing alarm panel to the central station.



AERIAL VIEW OF A COMMERCIAL BANKING SITE. ILLUSTRATIVE IMAGERY; CUSTOMER IDENTITY WITHHELD.

24/7

VAULT ZONES ARMED

1-2

ZONES PER SITE

1

LPU-402 PER BRANCH

1,000 ft

CABLE CAPACITY PER ZONE

2-yr

WARRANTY

The Challenge

Every vault sat behind layers of security, and none of them watched the walls.

The bank operates multiple high-traffic branches and a central cash-processing hub. Each vault room already had access control, interior motion detection, cameras and a monitored burglar alarm, all watching the inside of the secure area and the doors into it.

Physical attacks have shifted toward the building fabric: drilling or breaking through a vault wall from an adjacent tenancy, a neighboring basement, the roof or the exterior. An intruder working through the wall never crosses a door contact until the wall is already open.

WHY STANDARD SENSORS FELL SHORT

- Urban buildings are noisy: traffic, construction and building services all put vibration into the walls.
- Point-type shock sensors cover only the spot they are mounted on, leaving the rest of the vault envelope unwatched.
- The bank needed the response clock to start at the first minutes of drilling, not at penetration.

The Solution, WallAlert Wall Intrusion Detection

WallAlert sensor cable runs across the vault room's walls and ceiling and senses the structure-borne vibration of an attack on the fabric itself: drilling, cutting, hammering and breaking through concrete or brick. A typical branch runs one or two zones on a single LPU-402 processor.

- **Continuous coverage:** the cable watches the whole vault envelope, not a single point on it.
- **Tuned per site:** sensitivity is commissioned against each building's own background, from street traffic to HVAC plant.
- **Existing panel:** each zone lands on the bank's burglar alarm panel as a dry contact and reports to the central station like every other alarm.
- **Always armed:** vault zones stay armed around the clock, independent of branch hours.

The Results

The alarm starts at the drilling stage, while the wall still stands.

The design intent is that an attack on the vault envelope raises an alarm with the central station during the attack, giving police response time that interior sensors cannot give.

- A drill through a party wall does not wait for closing time, and the wall coverage does not either.
- RBtec has not published measured before and after alarm or incident counts for this bank.
- The bank's security integrator completed each site in a few days with branches open throughout.
- The same cable and processor can extend to ATM and night-deposit rooms on the same panel and monitoring path.

"A vault is attacked from the side no camera can see. The sensor lives on the structure itself, so the alarm comes from the first minutes of drilling, not from the moment someone steps through the hole. And because it lands on the panel as a dry contact, nothing changed at the monitoring end."

RBtec engineering team

WallAlert at a Glance

System	WallAlert wall intrusion detection
Coverage	Vault room walls and ceiling at each site
Zones	One to two zones per site, on one LPU-402 processor
Processor capacity	LPU-402, two zones of up to 1,000 ft (305 m) of sensor cable each
Detects	Structure-borne vibration of drilling, cutting and breaking through walls
Arming	Vault zones armed around the clock
Integration	Dry contacts into the existing bank alarm panel, reporting to the central station
Installation	Security integrator, a few days per site, branches open throughout



WALLALERT SENSOR CABLE INSTALLED ALONG A BANK FACILITY PERIMETER WALL. CUSTOMER IDENTITY WITHHELD.

Protect your site with RBtec.

Trusted worldwide, with over 5,000 systems installed in 57 countries.



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