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RF / BDA / ERCES / Fire Alarm Glossary

Plain-language definitions of technical terms commonly used in public-safety communications and life-safety projects.

Common Terms

AHJ	Authority Having Jurisdiction - the organization or official responsible for enforcing the codes and standards that apply to a specific building, project, or facility.
BDA	Bi-Directional Amplifier - a device that receives a donor signal, amplifies it, and rebroadcasts it inside a building to improve in-building radio coverage.
ERCES	Emergency Responder Communication Enhancement System - a system of components designed to enhance in-building radio coverage for public-safety responders.
RF	Radio Frequency - the portion of the electromagnetic spectrum used for wireless communications, including public-safety radio systems.
RF Survey / RF Testing	The process of measuring and documenting radio signal strength inside a building to determine whether coverage meets applicable requirements.
In-Building Radio Coverage	The ability of public-safety radio signals to be received with adequate strength and reliability inside the building.
Donor Antenna	An antenna, typically outdoors or on a rooftop, that receives the public-safety radio signal serving the jurisdiction.
DAS	Distributed Antenna System - a network of antennas and cabling used to distribute radio coverage throughout a building.
Uplink	Radio transmission from an in-building / portable radio toward the public-safety radio network.
Downlink	Radio transmission from the public-safety radio network toward radios operating inside the building.
Signal Strength	A measurement of how strong a radio signal is at a specific location.
Coverage Area	A portion of the building where radio signals are tested or expected to meet a defined requirement.
Backup Power	Secondary power, often batteries, used to keep critical systems operational during a loss of normal power.
Supervision / Supervisory Signal	A status condition that indicates a monitored system component may require attention but is not necessarily an alarm condition.

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Fire Alarm Control Panel (FACP)	The central control unit that receives inputs from fire alarm devices and controls notification and system responses.
Notification Appliance	A device such as a horn, strobe, speaker, or combination unit used to alert building occupants.
Initiating Device	A device that starts an alarm or supervisory condition, such as a smoke detector, heat detector, or manual pull station.
Monitoring	Off-site supervision of fire alarm or life-safety signals so designated events can be received and handled by a monitoring center.
NFPA	National Fire Protection Association - an organization that develops codes and standards used for fire and life safety.
IFC	International Fire Code - a model fire code published by the International Code Council and adopted, often with amendments, by many jurisdictions.
Code Compliance	Designing, installing, testing, documenting, and maintaining systems in accordance with applicable codes, standards, and AHJ requirements.
Certificate of Occupancy (CO)	An approval issued by the appropriate authority indicating that a building may be occupied, subject to applicable code and inspection requirements.

i **Terminology and requirements can vary by jurisdiction and project. Innovative Security Solutions will confirm details with the applicable AHJ when needed.**

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