



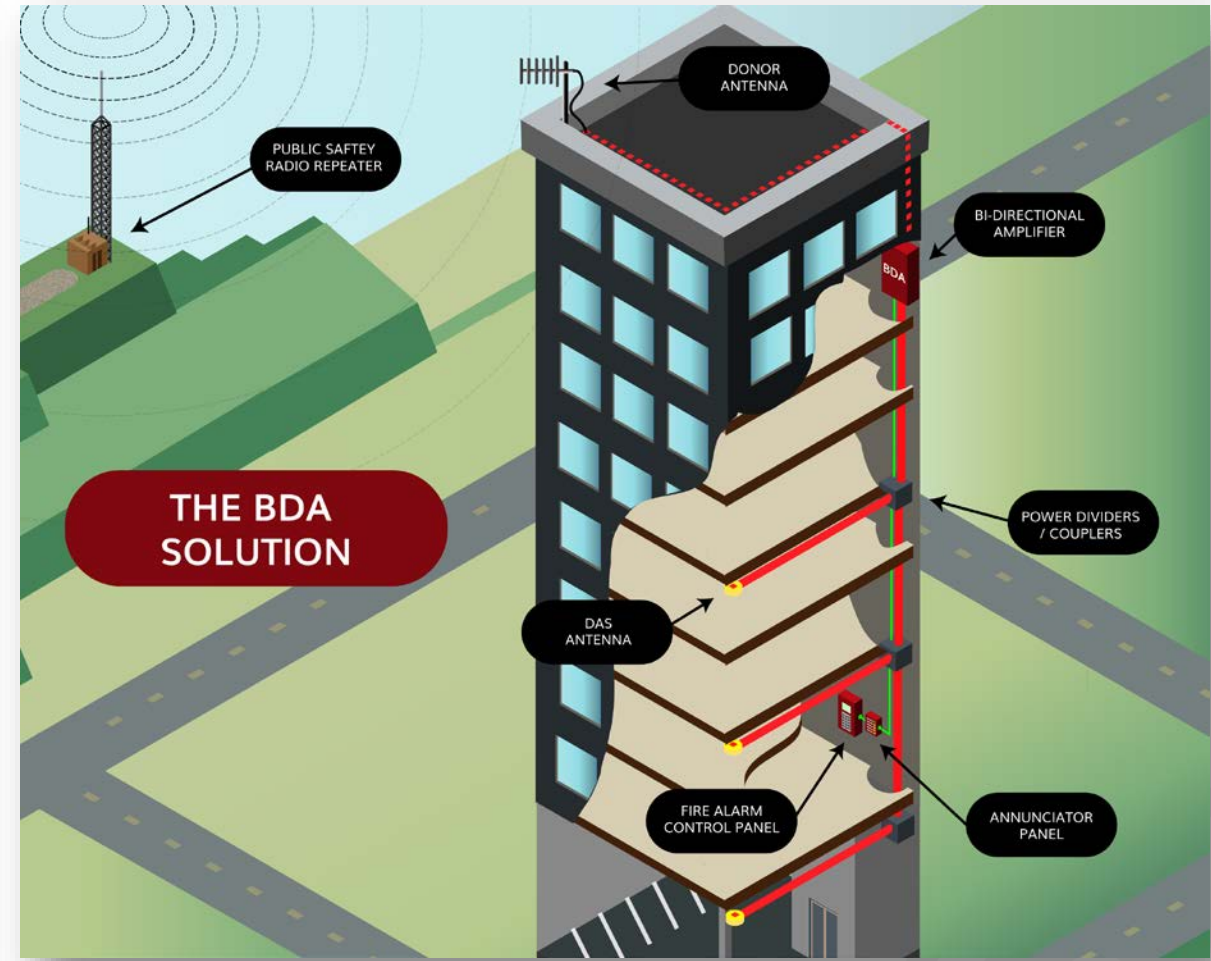
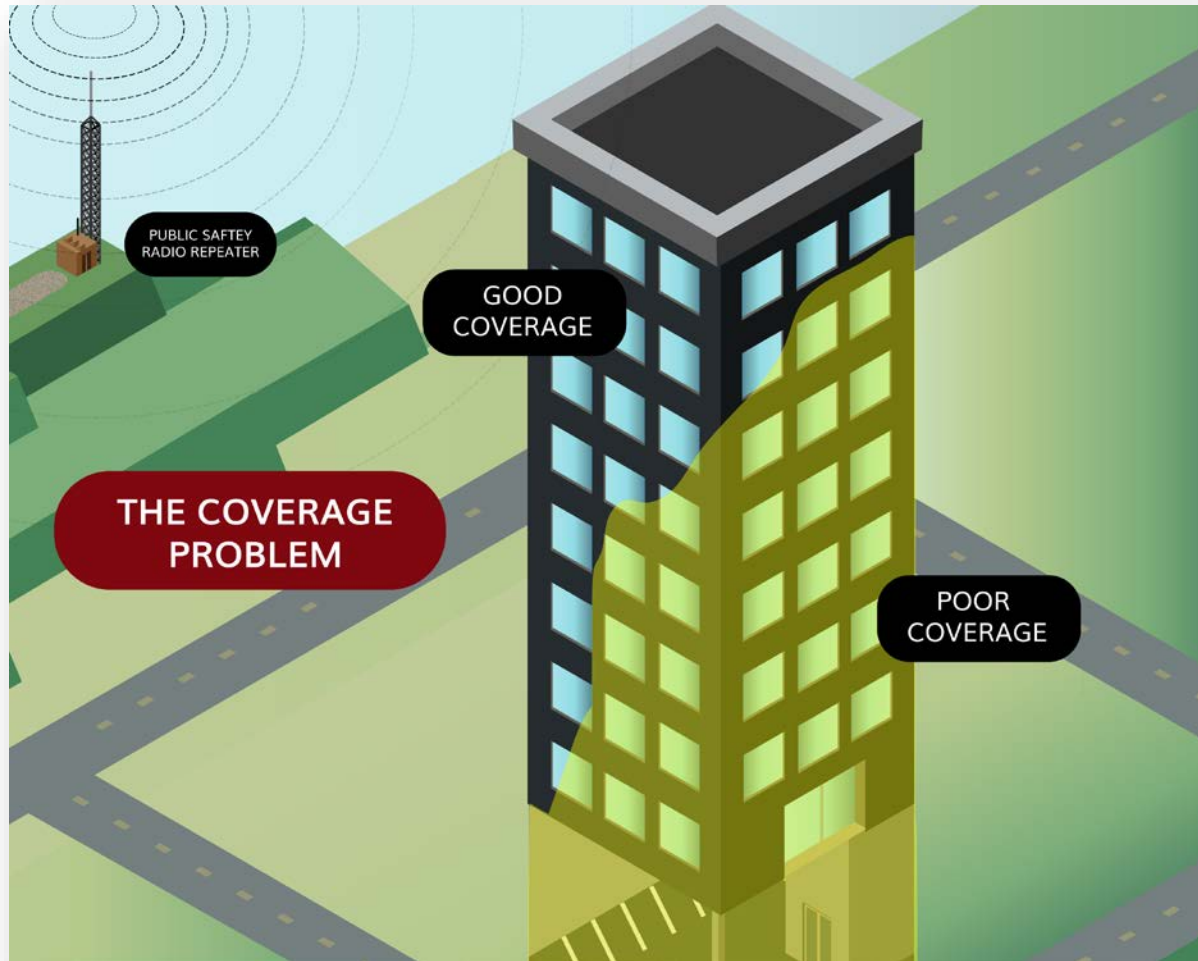
November 13, 2018

BDA BUSINESS OPPORTUNITIES IN FLORIDA
Derek Case

 **NOTIFIER**[®]
by Honeywell

The Coverage Problem

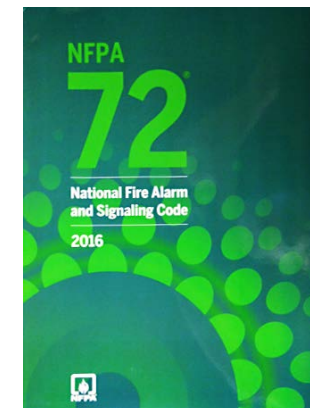
The BDA Solution



Honeywell's BDA Systems offer certainty of **100% In-Building Radio Coverage** in all Critical Areas of the Building And it's **been independently verified by UL** to meet/exceed the requirements of **NFPA1221 & UL2524**

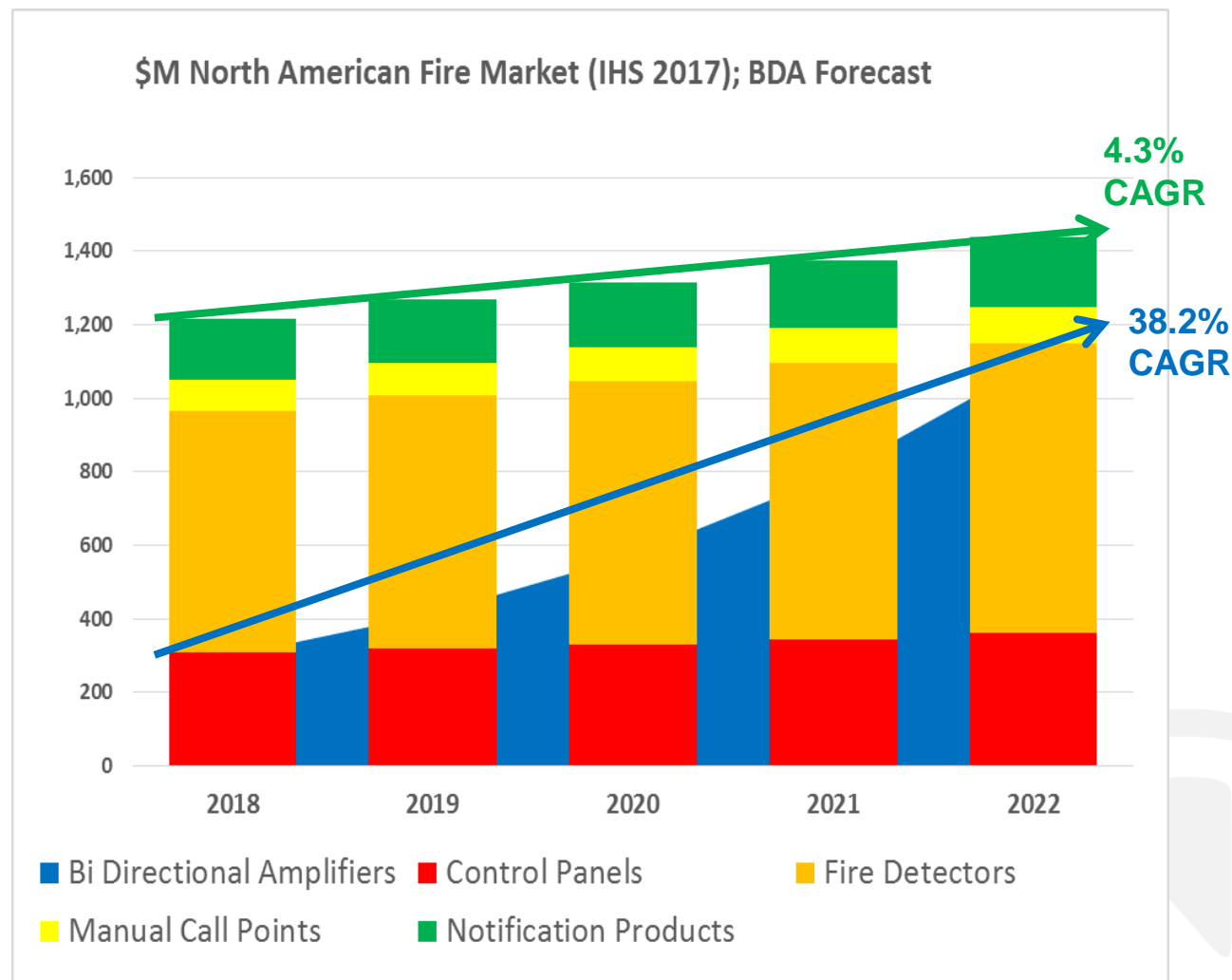
Code-Driven Requirement

- IBC 2015 - Section 916
- Refers to IFC section 510 or the state recognized fire code
- IFC Section 510 Emergency Responder Radio Coverage
- First appeared in the appendix of the 2009 IFC, the provision was moved to the body of the code in 2012
- At present 16 states have adopted the 2012 edition of the IFC and 18 states have adopted the 2015 edition of the IFC
- Section 1103.2 specifies the requirements for emergency responder radio coverage in existing buildings
- NFPA 72 National Fire Alarm and Signaling Code
- 2010 / 2013 Edition, section 24.5.2
- The 2016 edition of NFPA 72 relocated the requirements to NFPA 1221
- NFPA 1221, Section 9.6 is a Life-Safety Code



Bi-Directional Amplifier Sales Synergies with Core Fire Business

- “Current estimates of the Public Safety communications equipment market is ~\$300M in 2018, growing to ~\$1.1B by 2022.”
- These are your existing customers!
 - Building Owners
 - New Construction Architects
 - General Contractors
 - Fire Alarm / Life Safety Contractors
 - AHJs (Code & Ordinance)
 - Fire (Fire Chief), Police & EMS
 - Electrical Contractors



RECAP WEBINAR 1: THE BDA BUSINESS OPPORTUNITY

- 1.) What is the Technology?
- 2.) Drivers – Codes and Standards
- 3.) First to Market Advantage
- 4.) Synergies between BDA and Fire Systems
Market Size, Growth, Profitability
- 5.) Additional Income sources:
Site Surveys
BDA Systems
Mandatory Annual Maintenance Contracts
- 6.) How to Get Started



** Webinar Recording Available on your ESD Portal*

RECAP WEBINAR 2: EFFICIENT & PROFITABLE BDA BUSINESS

- 1.) Sales Requirements
- 2.) Design Requirements
- 3.) Technical Requirements
- 4.) Test Equipment and Tools
- 5.) How to Quote a BDA System
- 6.) Managing Project Risks & Exposures



** Webinar Recording Available on your ESD Portal*

RECAP WEBINAR 3: DEEP DIVE INTO BDA SYSTEM

- 1.) How Do BDA Systems Work?
- 2.) Typical Riser Diagram
- 3.) BDA System Components
- 4.) System Design Overview
- 5.) Site Surveys
- 6.) Budget Estimates / Firm Price Quotes
- 7.) Procurement Process
- 8.) Deployment Process

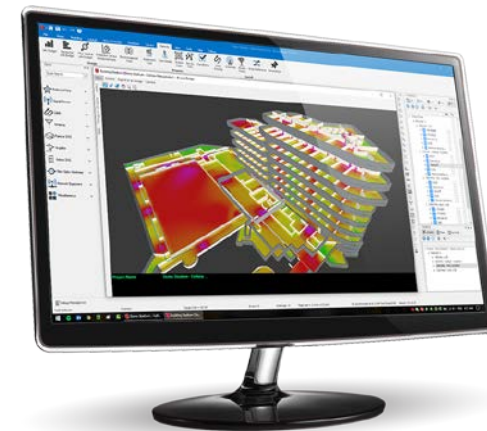
** Webinar Recording Available on your ESD Portal*



RECAP WEBINAR 4: BDA SYSTEM UPDATE

- 1.) Announcing the 1st BDA with UL2524 Listing
- 2.) “*Why is UL2524 SO Important?*”
- 3.) iBwave Design Services Now Available
- 4.) Driving Specifications with AHJs and A&Es
- 5.) Driving State & Local BDA Legislation
- 6.) Highest Priority BDA Markets: *FLORIDA*
- 7.) Budget Estimate Process at RSIBDA.com
- 8.) Class A BDAs 2Q’19 (with UL2524: 3Q’19)

*** Webinar Recording is Available on ESD Portal**



Building an Efficient & Profitable BDA Business



You Can Build an Efficient & Profitable BDA Business

- 1. The 5-Step Plan to Build an Efficient & Profitable BDA Business
 - Step 1: Have the Best Product
 - Step 2: Build a Technical Team to Design, Install & Support BDAs in the Field
 - Step 3: Let the World Know “We Do BDA Systems” (Better Than Competition)
 - Step 4: Create Demand for the Product
 - Step 5: Operate Efficiently & Profitably
- 2. Current BDA Opportunities in Florida (from Construct Connect® database)
- 3. NOTIFIER’s Team Outreach Efforts to AHJs in Florida
- 4. Florida Fire Codes



You Can Build an Efficient & Profitable BDA Business

- **Step 1: Have the Best Product**

- ESD 2000-2016; RSI designed their OWN system in 2016; BE “THE SOURCE”
- Competitive Analyses / Battle Cards / FAQs: Key Points of Differentiation; different in every market
- Signal Strength Surveys (Radio Frequency in-building coverage analyses) are a great way to build a BDA business



You Can Build an Efficient & Profitable BDA Business

- **Step 2: Build a Technical Team to Design, Install & Support BDAs in the Field**

- Best Product Support & Service Team: project managers & technicians to install, service & support these systems
- Recruiting, Training & Developing Project Managers & Technicians; Training & Licensing Requirements
- Different Implementation Models: Including Electrical Work vs. Subcontracting for these services
- Focus on efficiency & productivity (most of BDA System Cost = installation services); Streamlined Process = Profits!



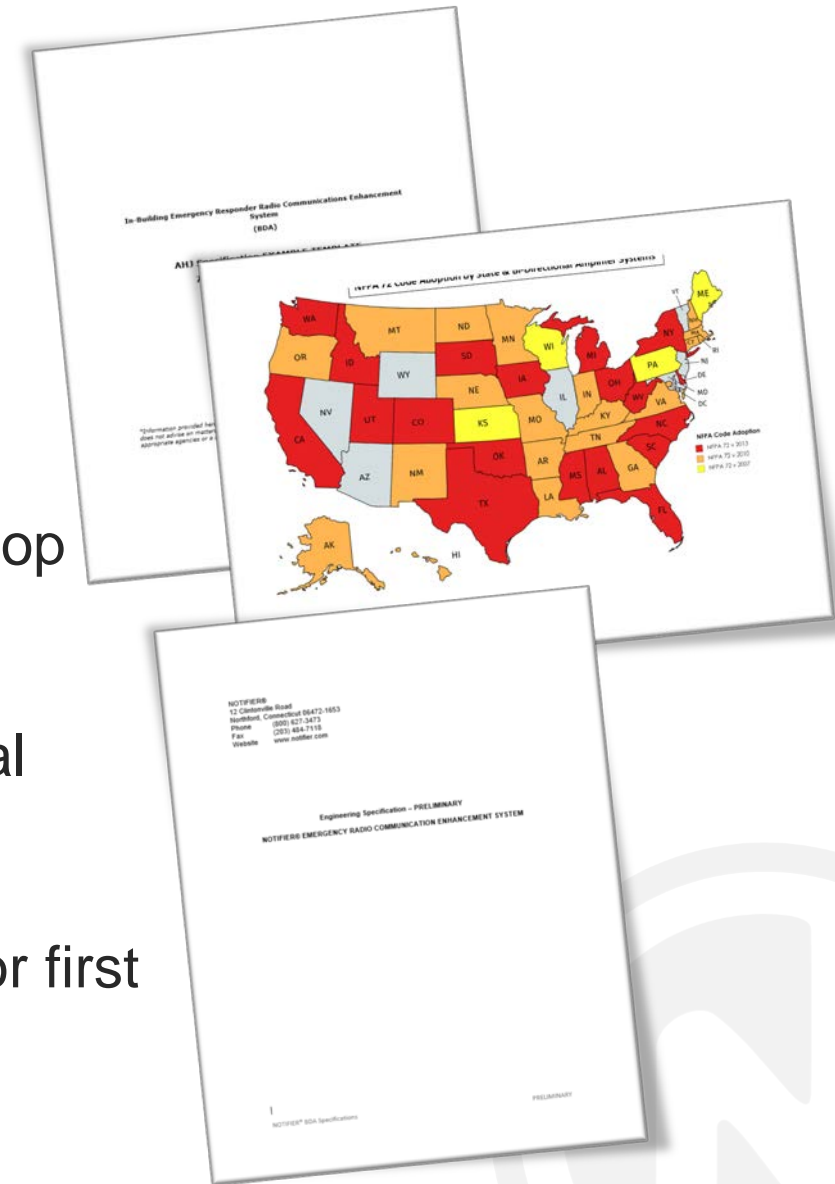
You Can Build an Efficient & Profitable BDA Business

- **Step 3: Let the World Know (esp. ECs) “We’re In the BDA Business”**
 - Sold, Installed, Serviced & Supported by the Distributor that they trust
 - We Have a Quick & Easy Estimating Process (competitors = weeks vs. 48 hour target)
 - Budget Estimates = FREE!
 - We make it easy to do business with us
We make electricians’ / electrical contractors’ jobs easy
 - The easiest way to sell a BDA System is AS AN ADD-ON TO FIRE ALARM SYSTEM
(advise on Code Compliance)
 - Include a BDA Estimate with every Fire Alarm Proposal; Advise your customer on code compliance requirement

You Can Build an Efficient & Profitable BDA Business

- **Step 4: Create Demand for the Product**

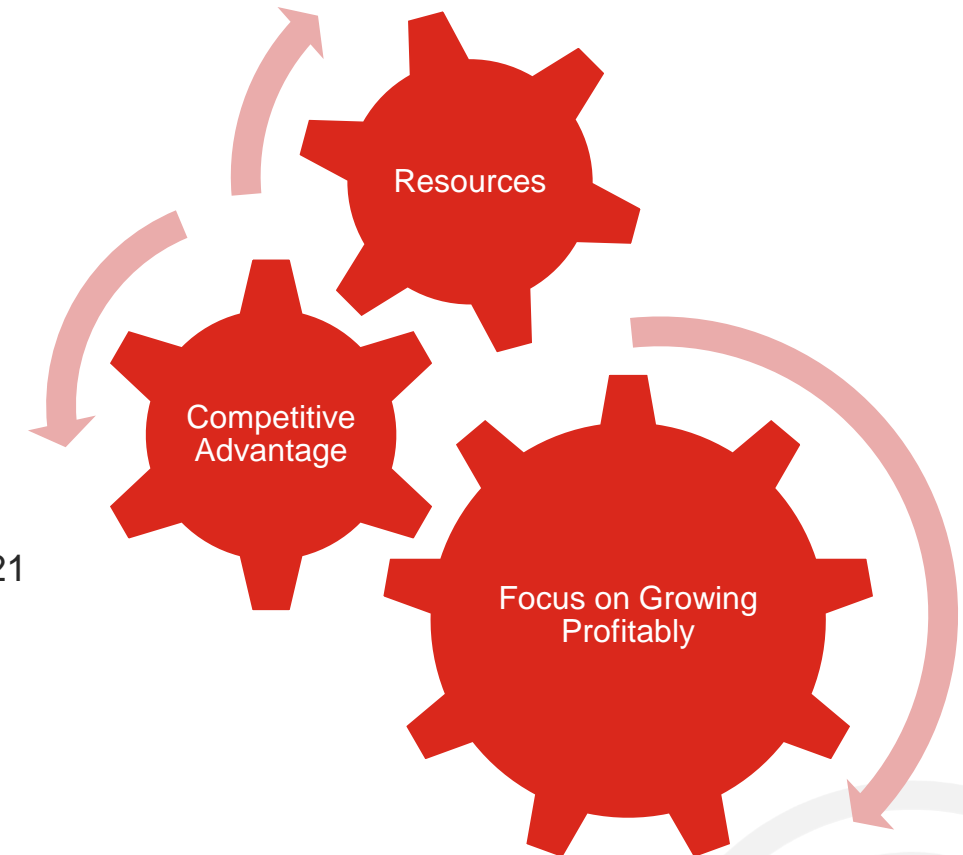
- Educate AHJs, Helping AHJs understand Life-Saving Benefits for Firefighters & Occupants
- Where BDAs are Required by Code → Help AHJs develop specification, and drive enforcement; Permit & Test
- Where BDAs NOT in code → Help AHJs introduce signal boosters INTO the CODES in their jurisdiction
- Education of A&Es, Help them develop specifications for first UL2524- Listed BDAs, Concerns / FAQs



You Can Build an Efficient & Profitable BDA Business

- **Step 5: Operate Efficiently & Profitably**

- Respond to Request for Quotes in Timely Manner
- Leverage the Resources that Honeywell Brings You
 - Design Services using iBwave predictive RF modeling
 - Standardized training, test equipment, installation procedures, based on most-reliable practices
- Understand the Competitive Advantages:
 - Turnkey All-Inclusive Systems = Easier to Install, Troubleshoot & Support
 - Assurance of UL2524-Listing (independent 3rd party verification NFPA1221 compliance)
 - Only Available through Mfg-Trained ESDs = Assurance
- Focus on Growing Your Business Profitably
 - We've taken care of all the little decisions for you
 - No need to reinvent the wheel
- When you're ready to invest in your own design
 - Must be in iBwave, based on actual signal surveys
 - Developed a process for RSI to accredit your designs



Current BDA Opportunities in Florida



Construct Connect® Insights: Current BDA Opportunities*

<u>Project Title</u>	<u>Street Address</u>	<u>City</u>
<u>East San Marco Retail Development</u>	1532 Atlantic Blvd.	Jacksonville
<u>Shell Point Retirement Community - Health Center Skilled Nursing Facility</u>	18000 Shell Point Plaza	Fort Myers
<u>Home2 Suites by Hilton / Kissimmee</u>	5840 W Irlo Bronson Memorial Hwy	Kissimmee
<u>Coral Gables Public Safety Complex</u>	2151 Salzedo Street	Coral Gables
<u>Marco Island Executive Airport (MKY) New Terminal and Associated Improvements - Collier County</u>	2005 Mainsail Dr.	Naples
<u>Terminal 4 Federal Inspection Services Facility Expansion</u>	100 Terminal Dr.	Fort Lauderdale
<u>Marco Island Executive Airport New Terminal and Associated Amenities / Collier County</u>	2005 Mainsail Dr.	Naples

* Weekly Updates Available from your RSM

NOTIFIER's Team Outreach to AHJs in Florida



Florida AHJ Outreach

Our team has presented our 'UL2524 BDA System' Solution to AHJs in:

- Florida State Fire Marshal
- City of Miami
- Miami-Dade County
- Broward County
- City of Miami Beach
- Key Biscayne
- Coral Gables
- City of Oviedo
- Pinellas Park
- Kissimmee
- Saint Cloud
- Palm Beach
- Brevard County
- Hollywood
- Bahama Fire Marshal
- Tampa
- City of Sunrise
- Fort Walton Beach
- Orlando
- Reedey Creek
- Hyaleah
- City of Northport, FL
- Brevard County
- City of Panama Beach
- City of Melbourne
- City of Titusville
- Cocoa Beach
- Fort Lauderdale
- BC ORCAT



What are the Code Requirements in Florida for Bi-Directional Amplifiers?

a.k.a. Public Safety Signal Boosters
a.k.a. Emergency Services Communications Systems



Florida Fire Prevention Code 633.202

- All existing high-rise buildings & newly-constructed buildings are required to have a Radio Frequency Signal Strength Survey by December 31st, 2019.
- This provides a 24-month window (until January 1st, 2022) to complete the signal strength surveys for EVERY existing building in the state.
- Existing Apartment Buildings must comply by January 2022
- In the Future: possibly require FASA Electrical Fire Alarm License or Electrical Contractor License for BDA Installation state-wide
- 603.202 was intended to amend NFPA 1 section 11.10 which calls for all existing buildings to have survey. Intent of 603.202 was to replace “all existing building” with “all existing High Rise Buildings”

Miami-Dade Fire Rescue

- Base on NFPA 72 2013 Edition; NFPA 1221 2016 Edition; NFPA 1 2015 Edition
- [MDFR-BDA-Plans-Processing-Guidesheet-Revised-01-2016.pdf](#)
- Oscillation Detection & Prevention (our BDA does not shut down; steps down @5dB increments & sends alarm to FACP)
 - “Icon on the Bay” shut down because of BDA Oscillation: Gain was set too high
 - Our BDA would have preempted that!
- Require 3-D Radio Coverage predictive modeling (like iBwave)
- Zero Noise Squelch is a HUGE factor here (not adding to the noise floor on frequency)



Broward County Will Require UL 2524 Listed BDAs April 29, 2019

- NFPA 72, 2013 Edition; NFPA 70, 2014. Section 118, May 21, 2018: IFC Section 510, 2015
- [BROWARD AHJ BDA.pdf](#)
- Broward Requires Elevator Car Signal at 99%
- Oscillation Detection & Prevention (our BDA does not shut down; steps down @5dB increments & sends alarm to FACP)
- Require 3-D Radio Coverage predictive modeling (like iBwave)
- Zero Noise Squelch is a HUGE factor here (not adding to the noise floor on frequency)
- >2,000 High Rises need Radio Signal Strength Survey by Dec 2019 (~150 BDAs installed)
- Significant Revenue Opportunity

Coral Gables

- 18-page spec, -95 dBm with a DAQ of 3.4 or better; 100% Critical Areas, 95% General Areas
- [CGFD BDA \(New Version\).docx](#)
- Critical Areas are defined as:
 - Elevator cabs
 - Generator rooms
 - Fire pump rooms
 - Mechanical rooms
 - Elevator rooms
 - Electrical rooms
 - Stair enclosures
 - Underground garages
 - Underground rooms
 - Fire command centers
 - Corridors
 - There may be other areas deemed as “important” by other AHJ’s (Police Dept., Building Official), depending on the project.

Tampa

- 39-page spec, -95 dBm with a DAQ of 3.4 or better; 100% Critical Areas, 95% General Areas
- NPFA 72 2013 Edition, NFPA 1 2015 Edition
- Antenna Mast must withstand 120mph winds
- 700 & 800 MHz Class B BDAs
- Annual Testing is Required (RMR opportunity)
- Certificate of Radio Coverage Compliance (CORCC) posted near FACP



Other Useful Codes & Standards Information

- Orange County: uses NFPA 72 2013 edition & NFPA 1221 2013 edition
- Pasco County: uses NFPA 1 2015 Edition
- City of Saint Petersburg: Uses NFPA 1 6th Edition, NFPA 72 and NFPA 70.
- Seminole County: uses NFPA 72 and NFPA 1221 “latest edition”
- City of Winter Springs: uses codes identical to Seminole County
- Polk County: Uses the 6th Edition of FL Fire Prevention Code, which references NFPA 1 & 101
- City of Miami Beach: NFPA 72 2010 edition
- City of Orlando: NFPA 1 & 101 2015 edition



Q&A

For over 60 years, NOTIFIER has been a leader in the fire alarm industry

By selecting NOTIFIER, be confident that you will not only receive the very best in fire alarm and emergency communication systems, but also the knowledge, expertise, and service from NOTIFIER distributors that will exceed your expectations.



NOTIFIER[®]
by Honeywell