

# Comtran's VITALink®

## 2 Hour Fire Resistive CIC Cables

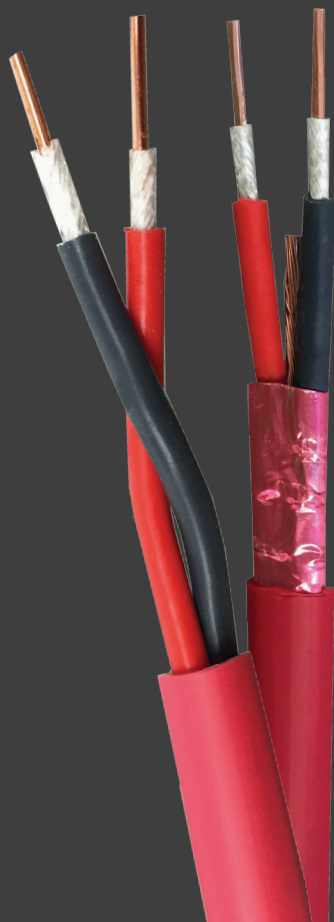
*Your trusted solution for fire safety*



# When it comes to life and fire safety, trust the experts!

Comtran has been a trusted source in the security and fire alarm market for 30 years. We have specifically designed our VITALink® 2 Hour Fire Resistive cables to support life and fire safety. After UL pulled their 2196 listing due to concerns about the presence of Zinc in conduit coatings, Comtran's engineers worked tirelessly to meet UL's new requirements. We developed a patented inner coating that hardens at high temperatures and protects the signal, thus providing a safe and reliable 2 Hour Fire Resistive solution for our customers. The cables are re-certified under the new UL 2196 guidelines for 2-hour fire resistive cables for use in FHIT 40A and FHITC 40A.

Every minute is critical in any structural fire, but firefighters may need hours to evacuate and secure a large commercial property. VITALink® Cable offers "survivability" for 2 hours in a fire when installed in accordance with installation instructions to allow evacuation system equipment to operate properly and to facilitate communication among firefighters.



## When lives and safety are on the line, choose VITALink® 2 Hour Fire Resistive cable!

- Withstands heat up to 1850°F and ensures 2 hour signal protection
- Available in shielded and unshielded constructions with solid or stranded bare copper conductors
- Approved for use in the United States and Canada
- Sunlight resistant and wet location rated
- Easy to install with a flexible construction
- Approved for installation on both concrete floors and walls
- No special tools or training required
- No termination kits, brass fittings, or stainless steel straps needed
- All required hardware components are commercially available off-the-shelf

### FEATURING:

- The best conduit fill in the industry
- The best vertical installation distance
- The best product spectrum
- The most listings and the best ratings

# About VITALink® Cable

## CONSTRUCTION:

- Conductors: 12-18 AWG Solid Copper and 12-16 AWG Stranded Copper
- Insulation: Proprietary Low Smoke, Zero Halogen Thermoset Fire-Roc™
- Core Assembly: Black and Red Wires, Nominal 2.5 twists per foot
- Drain Wire: Stranded bare copper (Shielded constructions only)
- Shield: Copper/Polyester tape (Shielded constructions only)
- Jacket: Low Smoke, Zero Halogen Polyolefin Red (Sequential Footage Marker Provided Every 2 Feet)

## HARDWARE CERTIFIED:

- ½ inch, ¾ inch, 1 inch, 1 ¼ inch, 1 ½ inch, and 2 inch EMT Conduit “E-Z Pull”  
**Allied Tube & Conduit Co. or Columbia-MBF**
- ½ inch, ¾ inch, 1 inch, 1 ¼ inch, 1 ½ inch, and 2 inch Steel Compression Couplings  
**RACO or Thomas & Betts Corp.**
- Wiegmann NEMA 1 Enclosure/Pull Box
- Amtec wire mesh support grips when exceeding specified maximum vertical length
- Supports per Comtran Cable’s installation instructions

## PART NUMBERS & CONDUIT FILL RATES:

Part Number	½" Max. Conduit Fill	¾" Max. Conduit Fill	1" Max. Conduit Fill	1 ¼" Max. Conduit Fill	1 ½" Max. Conduit Fill	2" Max. Conduit Fill
<b>Shielded</b>						
16 AWG Solid Copper (35785)	-	-	3 Cables	6 Cables	8 Cables	10 Cables
14 AWG Solid Copper (36316)	-	-	3 Cables	5 Cables	6 Cables	10 Cables
<b>Unshielded</b>						
18 AWG Solid Copper (36337)	1 Cable	2 Cables	4 Cables	7 Cables	7 Cables	7 Cables
16 AWG Solid Copper (35777)	1 Cable	2 Cables	3 Cables	6 Cables	8 Cables	10 Cables
16 AWG Stranded Copper (36341)	1 Cable	1 Cable	3 Cables	5 Cables	7 Cables	10 Cables
14 AWG Solid Copper (36338)	1 Cable	1 Cable	3 Cables	5 Cables	7 Cables	10 Cables
14 AWG Stranded Copper (36340)	1 Cable	1 Cable	2 Cables	4 Cables	6 Cables	10 Cables
12 AWG Solid Copper (36342)	1 Cable	1 Cable	2 Cables	4 Cables	6 Cables	10 Cables
12 AWG Stranded Copper (36339)	1 Cable	1 Cable	2 Cables	4 Cables	6 Cables	10 Cables



VITALink® cables are proudly made in the USA

# Cable Requirements and Testing

## COMPLETE SYSTEM REQUIREMENTS:

NFPA requires 2 hour fire rated cables to be tested and certified as a complete system.

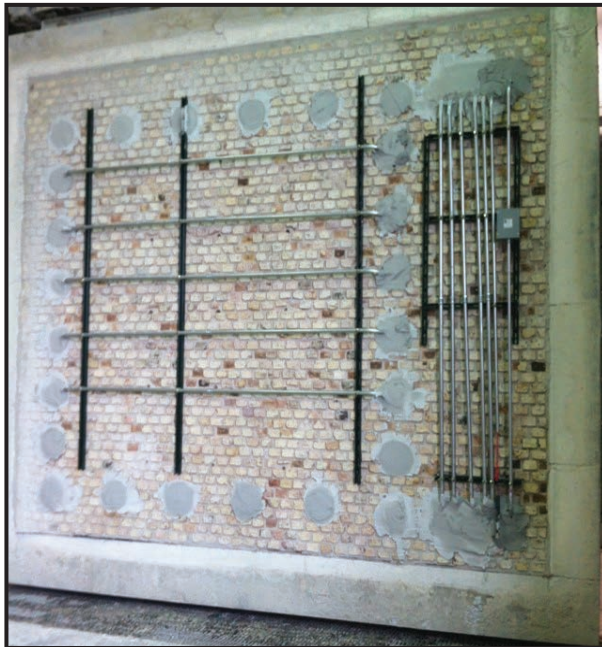
A complete system includes:

- Cable
- Conduit
- Couplings
- Straps/hangers
- Unistrut - gage and anchors
- Pulling lubricant

## TESTING:

Underwriters Laboratories Standard 2196 requires 5 out of 5 system tests to pass for a full 2 hours of burn time at 1850° F and then to withstand a direct fire hose stream without loss of signal. Cable installed in a curved conduit must pass the same testing in order to meet ULC-S139, the circuit integrity listing in Canada.

NFPA 130 / NFPA 502 requires testing in conformance with UL 2196 for one hour of burn time and a direct hose stream.



Before and after UL burn testing. VITALink® cables are pulled into conduit, secured to a wall, and terminated. The wall slides into a furnace for 2 hours, while circuits are monitored closely for leakage current. After 2 hours, the wall is removed and exposed to a pressurized hose stream.

# Applications and Standards

## CRITICAL SYSTEMS SUPPORTED:

- EVAC - Emergency Voice-Alarm Communication and Smoke and Fire Alarm Systems
- Fireman's Telephone and Area of Refuge Communication Systems
- Visible Notification Appliances
- Fan/Damper Pressurization Systems
- Fuel Leak Detection Systems
- Fire Pump - Feeder/Controls
- Smoke Control & Management Equipment
- Command Center Critical Systems
- Pressurized Stairway Systems
- Electrical Equipment Rooms
- Emergency Generator and Standby Power Systems

## COMMON APPLICATIONS:

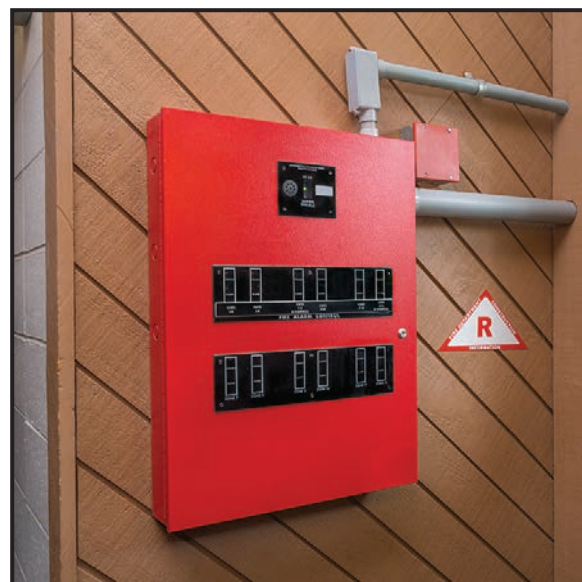
- Manufacturing, Commercial, and Industrial locations
- High-rise Buildings
- Universities and Stadiums
- Hotels and Airports
- Health Care Facilities
- Tunnels and Subways for Emergency Communications

## PERFORMANCE STANDARDS:

- NEC Type FPL, CMG/CM, CL3, and PLTC for use in Electrical Circuit Integrity System FHIT 40A
- c(UL) Listed CMG/CM
- CEC and CSA Listed FAS90 to C22.2 No. 208-14
- UL Certified to ANSI/UL 2196 2-Hour fire rating for use in FHIT System 40A (See UL Fire Directory R27557)
- CAN/ULC-S139 Certified with Hose Stream Test for use in FHITC System 40A
- UL 1424 Listed FPL-LS for Power-Limited Fire Alarm Cables; 300V / 105°C
- UL 13 Listed CL3 & PLTC for Power-Limited Circuit Cables; 300V / 105°C
- UL 444 Listed CMG/CM for Communication Cable; 300V / 105°C
- Fire certified for power-limited system use at 72V phase-to-phase utilization voltage



Protect critical systems and ensure occupants get to safety!



# Wire & Cable for Specialized Needs



Want to learn more?

Contact us:  
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Email: [sales@comtrancorp.com](mailto:sales@comtrancorp.com)  
[www.comtrancorp.com](http://www.comtrancorp.com)

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