

Comtran's VITALink® 2 Hour Fire Resistive CIC & CI Free Air Cables *Your trusted solution for fire safety*



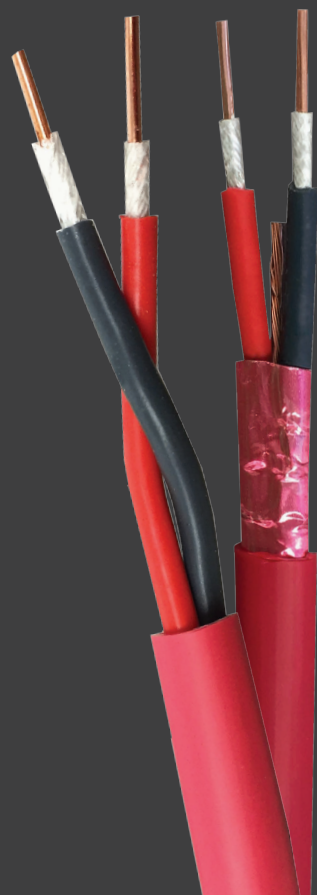
When it comes to life and fire safety, trust the experts!

Comtran has been a trusted source in the security and fire alarm market for over 30 years. Relying on this history and experience helped us to develop the most comprehensive circuit integrity cables on the market. Our VITALink® 2 Hour Fire Resistive cables are the only dual listed CI/CIC cable, offering a versatile fire resistive solution for our customers.

The CI rating allows the cable to be installed in "free air," or without conduit, in riser and non-plenum airspace horizontal installations per NEC code.

The CIC (Circuit Integrity in Conduit) rating requires use of specified hardware and installation instructions. The cable must be installed as a complete system as outlined in UL system FHIT.40A or FHIT7.40A.

With either installation, VITALink® CI/CIC cable will continue to operate for at least 2 hours in a fire, supporting critical life safety applications where evacuation times are beyond the capabilities of standard fire alarm cabling or when partial evacuation or relocation is required.



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
- Dual listed as CI/CIC - the same cable can be installed with or without conduit
- Available in shielded and unshielded constructions
- Solid or stranded bare copper conductors available
- Shielded & unshielded cables can be used within the same conduit
- Approved for use in the United States (CI/CIC) and Canada (In Conduit only)
- Sunlight resistant and wet location rated
- Easy to install with a flexible construction
- 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

Construction and Standards

CONSTRUCTION:

- Conductors: 18-12 AWG Solid OFHC Copper and 16-12 AWG Stranded OFHC Copper
- Insulation: Proprietary Low Smoke, Zero Halogen Thermoset Fire-Roc™
- Core Assembly: Twisted Pair consisting of black and red wires
- 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 (In Conduit only):

- EMT Conduit:
 - ½ inch, ¾ inch, 1 inch, 1 ¼ inch, 1 ½ inch, and 2 inch EMT Conduit
Allied Tube & Conduit Corp. E-Z Pull® Brand, Columbia-MBF E-Z Pull® Brand, or Wheatland/Western Tube Co.
 - Steel Compression Couplings (Trade size to correspond with the raceway size)
RACO or Thomas & Betts Corp.
 - Set Screw Couplings (Trade size to correspond with the raceway size)
RACO
- IMC Conduit:
 - ¾ inch, 1 inch, 1 ¼ inch, 1 ½ inch, and 2 inch IMC Conduit
Allied Tube & Conduit Corp. or Wheatland/Western Tube Co.
 - Steel Threaded Couplings (Trade size to correspond with the raceway size)
Allied Tube & Conduit Corp. or Wheatland/Western Tube Co.
- Wiegmann NEMA-1 Enclosure/Pull Box with steel EMT compression connectors or set screw connectors (**RACO or Thomas & Betts Corp.**) or steel IMC threaded or set screw connectors (**RACO**)
- Amtec wire mesh support grips when exceeding specified maximum vertical length
- Supports per Comtran Cable's installation instructions

PERFORMANCE STANDARDS:

- UL Certified to ANSI/UL 2196 2 hour fire rating for use in FHIT System 40A (See UL Fire Directory R27557)
- NEC Type FPLR-CI-LS, CMR-CI-LS, and CL3R-CI-LS
- c(UL) Listed CMR-LS
- CEC and CSA Listed FAS 105 to C22.2 No. 208-14
- CAN/ULC-S139 Certified with Hose Stream Test for use in FHIT7 System 40A
- UL 1424 Listed FPLR-CI-LS for Power-Limited Fire Alarm Cables; 300V / 105°C
- UL 13 Listed CL3R-CI-LS for Power-Limited Circuit Cables; 300V / 105°C
- UL 444 Listed CMR-CI-LS for Communication Cable; 300V / 105°C
- Fire certified for power-limited system use at 72V phase-to-phase utilization voltage
- Sunlight Resistant
- For use in Wet Locations
- NYC Electrical Advisory Board approval #54502, April 2017
- California State Fire Marshal Approved



VITALink® cables are proudly made in the USA

Dual Rating: CI vs. CIC

Comtran's VITALink® cables are the most versatile on the market, with the only dual CI/CIC rating. All VITALink® cables are rated as both Circuit Integrity (CI) and Circuit Integrity in Conduit (CIC). The same cable can be installed either with or without conduit, depending on the application and code requirements.

CIRCUIT INTEGRITY (CI):

As CI, also referred to as CI Free Air, VITALink® can be used in riser or horizontal (non-plenum) installations without conduit. The cable must be installed per the NEC code and meet all national and local code requirements. Since conduit is not required, there are no fill restrictions, which also saves money, space, time, and labor.

CIRCUIT INTEGRITY IN CONDUIT (CIC):

As CIC, VITALink® cable must be installed as the UL approved FHIT.40A or FHIT7.40A system and in accordance with Comtran's installation instructions. This system requires use of specific hardware including conduit, couplings, pulling lubricant, pull boxes, and supports. In areas such as plenum airspace, VITALink® must be installed in conduit.

PART NUMBERS & CONDUIT FILL RATES (In Conduit only):

Applies to both vertical and horizontal installations

Part Number	Nom. Diameter (Inches)	Nom. Weight (Lbs./1000')	Nom. Cap. (pf/Ft.)	1/2" Max. Conduit Fill	3/4" Max. Conduit Fill	1" Max. Conduit Fill	1 1/4" Max. Conduit Fill	1 1/2" Max. Conduit Fill	2" Max. Conduit Fill
Shielded									
18/2 Solid (36397)	0.309"	49	17	1 Cable	2 Cables	4 Cables	7 Cables	7 Cables	7 Cables
16/2 Solid (35785)	0.330"	60	20	-	-	3 Cables	6 Cables	8 Cables	10 Cables
14/2 Solid (36316)	0.353"	64	25	-	-	3 Cables	5 Cables	6 Cables	10 Cables
Unshielded									
18/2 Solid (36337)	0.305"	41	17	1 Cable	2 Cables	4 Cables	7 Cables	7 Cables	7 Cables
16/2 Solid (35777)	0.321"	52	19	1 Cable	2 Cables	3 Cables	6 Cables	8 Cables	10 Cables
16/2 Stranded (36341)*	0.344"	54	19	1 Cable	1 Cable	3 Cables	5 Cables	7 Cables	10 Cables
14/2 Solid (36338)	0.352"	61	20	1 Cable	1 Cable	3 Cables	5 Cables	7 Cables	10 Cables
14/2 Stranded (36340)*	0.368"	65	20	1 Cable	1 Cable	2 Cables	4 Cables	6 Cables	10 Cables
12/2 Solid (36342)*	0.402"	90	22	1 Cable	1 Cable	2 Cables	4 Cables	6 Cables	10 Cables
12/2 Stranded (36339)*	0.416"	92	22	1 Cable	1 Cable	2 Cables	4 Cables	6 Cables	10 Cables

*Non-stock item. Lead time and MOQ may be required.

Testing and Applications

TESTING:

Underwriters Laboratories Standard 2196 requires 5 out of 5 system tests to pass for a full 2 hours of burn time at temperatures up to 1850° F and then withstand a pressurized hose stream without loss of signal. Cable installed in a 90° curved conduit must pass the same testing in order to meet ULC-S139, the circuit integrity listing in Canada.

When tested as CIC, VITALink® cables are pulled into conduit, secured to a wall, and terminated. The wall is connected to 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.

VITALink® also meets the survivability requirements in NFPA 70, NFPA 72, NFPA 130, and NFPA 502.

CRITICAL SYSTEMS SUPPORTED:

- EVAC - Emergency Voice-Alarm Communication and Smoke and Fire Alarm Systems
- Fireman's Telephone & 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

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



Before and after UL burn testing



Global Leader of Specialty Communications Cable Solutions



Want to learn more?

Contact us:
Toll Free: 800-842-7809
Email: sales@comtrancorp.com
www.comtrancorp.com

 Like us on Facebook:
facebook.com/comtrancable

 Follow us on LinkedIn:
linkedin.com/company/comtran-cable-llc

 Follow us on Twitter:
twitter.com/comtrancable

 Watch our VITALink® videos on Youtube:
youtube.com/user/comtrancable



A Marmon Wire & Cable/Berkshire Hathaway Company