

RedGear

MANUFACTURING



MADE IN THE USA



FIRE SUPPLY CATALOG (2015)

RedPipe
**AIR SAMPLING
PIPE & FITTINGS**

RedGear
**LINEAR HEAT
INSTALLATION
SUPPLIES**



FREE SHIPPING ENDS JULY 31st 2015

LOWEST COST ■ SINGLE SOURCE ■ FACTORY DIRECT

www.RedGearMfg.com

MAY-2015

RedGear Manufacturing

ABOUT US

Traditionally the fire industry has adapted off the shelf installation materials to install air sampling smoke and linear heat detection systems. At the request of a manufacturer and with their assistance, RedGear evaluated the installation materials for these systems, and with the assistance of the installers redesigned new, more practical installation supplies made specifically for these systems.

RedGear's new simple designs combine the best of the old with the new by eliminating the need to use multiple parts for a single mount. This results in parts that are faster and easier to install at a significantly lower cost from a single source.



MADE IN THE U.S.A

RedGear is bringing back jobs to the United States of America. We engineer, build and deliver directly from our manufacturing facility in North Carolina. We combine complex specialty chemicals to optimize the quality and performance of all of our accessories and pipe fittings.

- Affordable
- Easy to Use
- Reliable
- Single Source

CUSTOM DESIGNED FOR THE FIRE INDUSTRY

- Fire Resistant
- UL Listed
- Lowest Cost Guaranteed**
- Pipe is Approved Plenum Spaces
- Meets NFPA Standards
- Designed, Built and Shipped from North Carolina, USA



MADE IN THE USA

RedGear

Bringing Jobs Back To America

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RedGear LHD Supplies

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RedGear Manufacturing
113 Indian Trail Rd. North Bldg. 126
Indian Trail, NC 28079
Tel.: 704-839-0223

Web:RedGearMfg.com



RedPipe

Air Sampling Smoke Detection Installation Supplies

Compatible with all Aspirating Smoke Detection Systems



UL Listed for Plenum Spaces

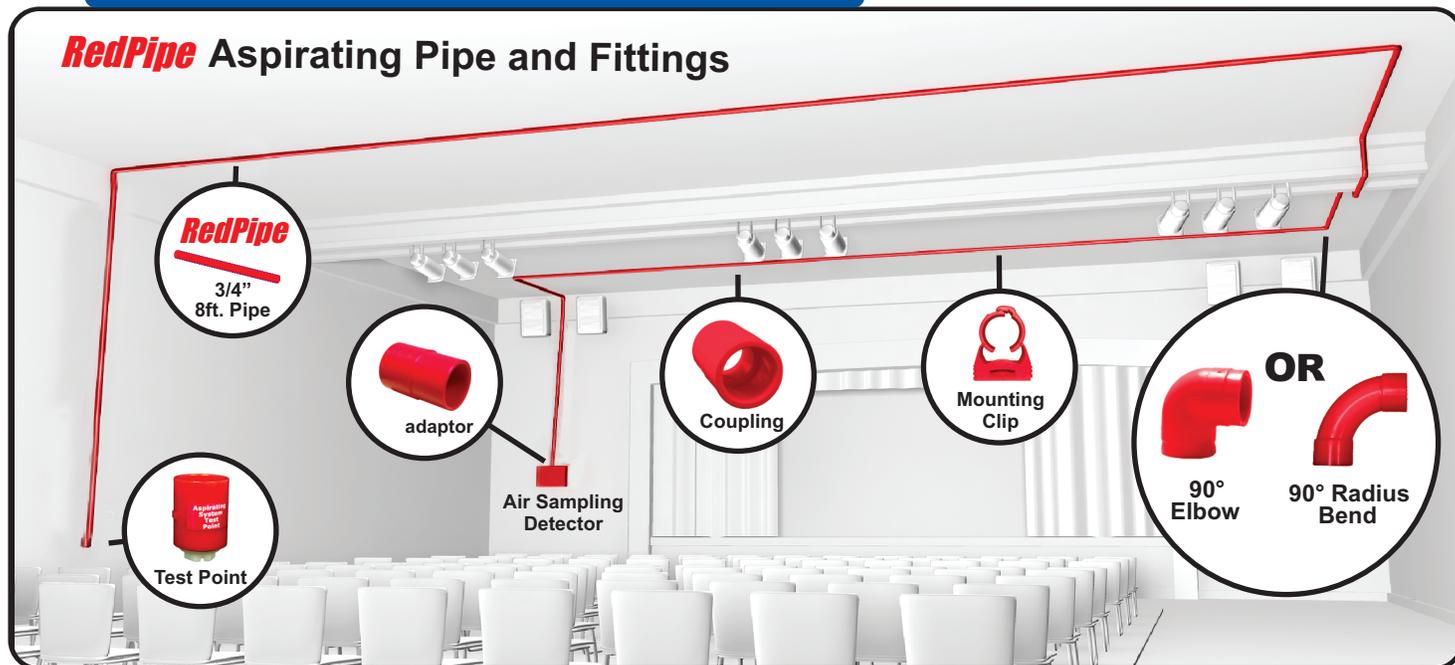
Air Sampling Smoke Detection Installation Resources:

Enclosed you will find examples of system applications along with pertinent sections of the 2013 NFPA 72 code for your reference

(Always follow all applicable federal, local and NFPA codes along with the manufacturers recommendations)

- | | | | |
|------------------|-----|-------------------------|------|
| ■ System Example | 4pg | ■ Atrium | 8pg |
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AIR SAMPLING SYSTEM EXAMPLE



RedGear Made In America



Air Sampling National Fire Codes

Below you will find portions of the NFPA 72®, 2013 National Fire Alarm and Signaling Codes pertinent to Air Sampling Smoke detection. Please refer to the specific NFPA Code publication for additional information.

Chapter 3 Definitions

3.1 General. The definitions contained in this chapter apply to the terms used in this code.

3.3.6 Air Sampling-Type Detector. see 3.3.66, Detector.

3.3.6.1 Air Sampling-Type Detector. A detector that consists of a piping or tubing distribution network that runs from the detector to the area(s) to be protected. An aspiration fan in the detector housing draws air from the protected area back to the detector through air sampling ports, piping or tubing. At the detector, the air is analyzed for fire products. (SIG-IDS)

3.3.66 Detector. A device suitable for connection to a circuit that has a sensor that responds to a physical stimulus such as heat or smoke. (SIG-IDS)

3.3.269 Smoke Detection

3.3.269.1 Cloud Chamber Smoke Detection. The principle of using an air drawn from the protected area into a high humidity chamber combined with a lowering of chamber pressure to create an environment in which the resultant moisture in the air condenses on smoke particles present, forming a cloud. The cloud density is measured by a photoelectric principle. The density signal is processed and used to convey an alarm condition when it meets preset criteria. (SIG-IDS)

3.3.269.4 Photoelectric Light-Scattering Smoke

Detection. The principle of using a light source and a photosensitive sensor arranged so that the rays from the light source do not normally fall onto the photosensitized sensor. When smoke particles enter the light path, some of the light is scattered by reflection and refraction onto the sensor. The light signal is processed and used to convey an alarm condition when it meets preset criteria. (SIG-IDS)

10.5.3 Inspection, Testing and Maintenance Personnel. (SIG-TMS)

10.5.3.3* Service personnel shall be qualified and experienced in the inspections, testing, and maintenance of systems addressed within the scope of this Code. Qualified personnel shall include, but not be limited to, one or more of the following:

(1)*Personnel who are factory trained and certified for the specific type and brand of system being serviced.

10.4 Installation and Design

10.4.1 All systems shall be installed in accordance with the specifications and standard approved by the authority having jurisdiction.

Chapter 14

14.2.2.1.1 Inspection, testing, and maintenance programs shall satisfy the requirements of this code and conform to the equipment manufacturer's published instructions.

14.2.2.1.2 Inspection, testing, and maintenance programs shall verify correct operation of the system.

14.4.2 Test Methods

(5) Air Sampling

Per method documented in the manufacturer's published instructions, detectors alarm response shall be verified through the end sampling port on each pipe run; airflow through all other ports shall be verified as well.

Chapter 17 Initiating Devices

17.5 Requirements for Smoke and Heat Detectors.

17.7 Smoke-Sensing For Detectors.

17.7.3 Location and Spacing

17.7.3.2* Spot Type Smoke Detectors.

17.7.3.2.3.1* In the absence of specific performance-based design criteria, smooth ceiling smoke detector spacing shall be a nominal 30 ft (9.1 m).

17.7.3.2.3.2 In all cases, the manufacturer's published instructions shall be followed.

17.7.3.2.3.3 Other spacing shall be permitted to be used depending on ceiling height, different conditions, or response requirements.

17.7.3.2.3.5* For smooth ceilings, all points on the ceiling shall have a detector within a distance equal to 0.7 times the selected spacing.

17.7.3.2.4.2 For level ceilings, the following shall apply:

(1) For ceilings with beam depths of less than 10 percent of the ceiling height (0.1 H), smooth ceiling shall be permitted. Spot-type smoke detectors shall be permitted to be located on ceilings or on the bottom's of beams.

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(2) For ceilings with beam depths equal to or greater than 10 percent of the ceiling height (0.1 H), the following shall apply:

(a) where beam spacing is equal to or greater than 40 percent of the ceiling height (0.4 H), spot type detectors shall be located on the ceiling in each beam pocket.

(b) where beam spacing is less than 40 percent of the ceiling height (0.4H), the following shall be permitted for spot detectors:

17.7.3.2.4.6 For sloped Ceilings with solid joists, the detectors shall be located on the bottom of the joist.

17.7.3.3* Peaked. Detectors shall first be spaced and located within 36 in. (910 mm) of the peak, measured horizontally. The number and spacing of additional detectors, if any, shall be based on the horizontal projection of the ceiling.

17.7.3.4 * Shed. Detectors shall first be spaced and located within 36 in. (910 mm) of the high side of the ceiling, measured horizontally. The number and spacing of additional detectors, if any, shall be based on the horizontal projection of the ceiling.

17.7.3.6 Air Sampling-Type Spot Smoke Detector

17.7.3.6.1 Each sampling port of an air sampling-type smoke detector shall be treated as a spot-type detector for the purpose of location and spacing.

17.7.3.6.2 Maximum air sample transport time from the farthest sampling port to the detector shall not exceed 120 seconds.

17.7.3.6.3* Sampling pipe networks shall be designed on the basis of, and be supported by sound fluid dynamic principles to ensure required performance.

17.7.3.6.4 Sampling pipe network design details shall include characteristics of the pipe network and each sample port.

17.7.3.6.5 Air Sampling detectors shall give a trouble signal if the air flow is outside the manufacturers specified range.

17.7.3.6.6* The sampling ports and in-line filter, if used, shall be kept clear in accordance with the manufacturer's published instructions.

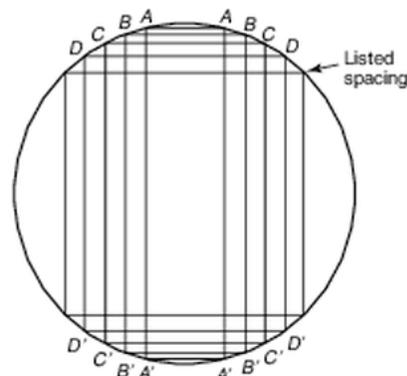
17.7.3.6.7 Air-sampling network piping and fittings shall be airtight and permanently fixed.

17.7.3.6.8 Sampling system piping shall be conspicuously identified as "SMOKE DETECTOR SAMPLING TUBE -DO NO DISTURB," as follows:

(1) At changes in direction or branches of piping
 (2) At each side of penetrations of walls, floors or other barriers.

(3) At intervals on piping that provide visibility within the space, but no greater than 20 ft. (6.1 m) So far this explanation has considered squares and circles.

17.7.6.3.3.2 Air-Sampling or projected beam smoke detectors shall be installed in accordance with the manufacturer's published instructions.



Rectangles

A = 10 ft x 41 ft = 410 ft² (3.1 m x 12.5 m = 38 m²)

B = 15 ft x 39 ft = 585 ft² (4.6 m x 11.9 m = 54 m²)

C = 20 ft x 37 ft = 740 ft² (6.1 m x 11.3 m = 69 m²)

D = 25 ft x 34 ft = 850 ft² (7.6 m x 10.4 m = 79 m²)

Listed spacing for = 30 ft x 30 ft = 900 ft² (9.1 m x 9.1 m = 84 m²) heat detectors only

Note: Smoke detectors are not listed for spacing. Use manufacturer's coverage recommendations and this figure.

FIGURE A.17.6.3.1.1.(g) Detector Spacing, Rectangular Areas.

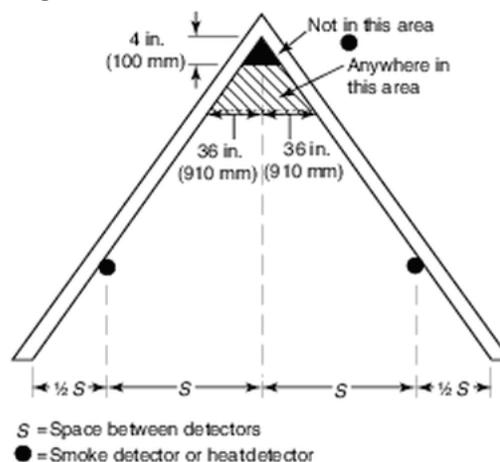


FIGURE A.17.6.3.4(a) Smoke or Heat Detector Spacing Layout, Sloped Ceilings (Peaked Type).

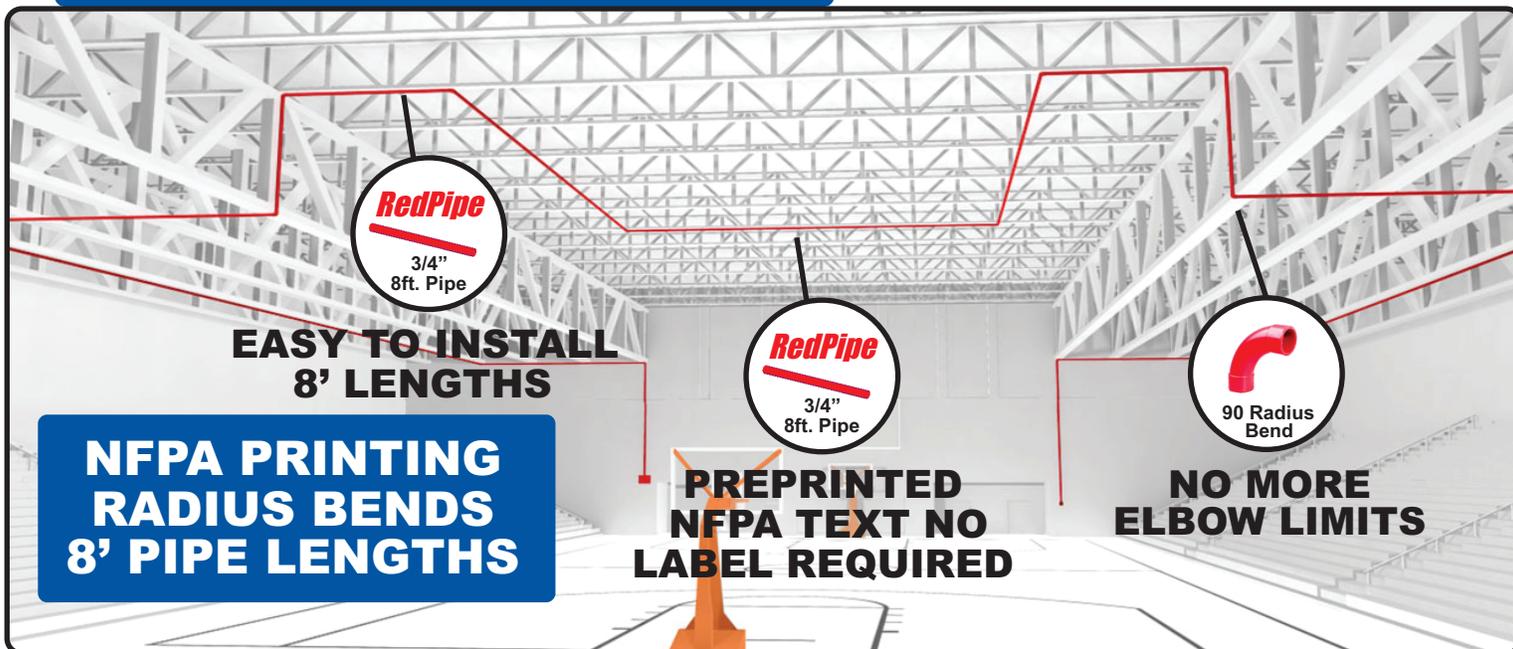


National Fire Protection Association
 The authority on fire, electrical and building safety

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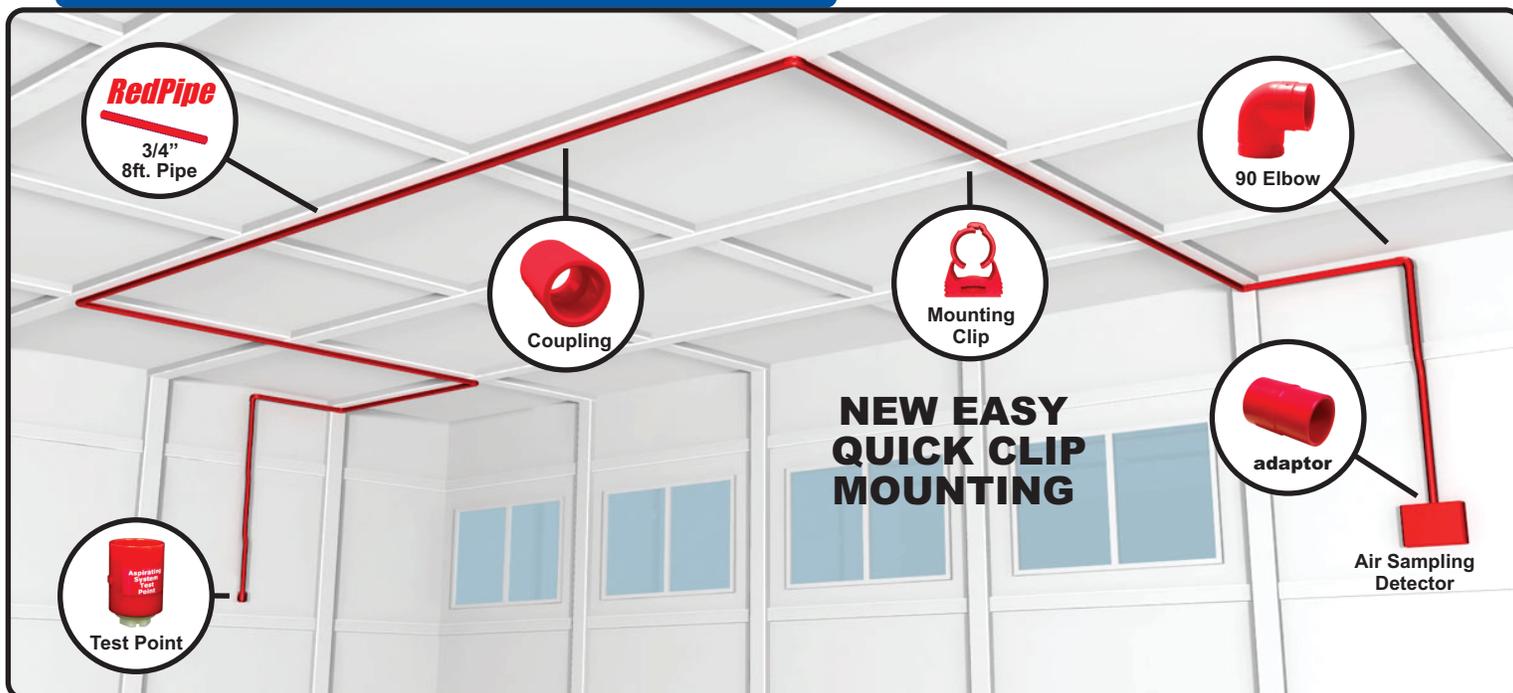


SCHOOLS



Buy Direct From
the Manufacturer

WAREHOUSE



HOTELS

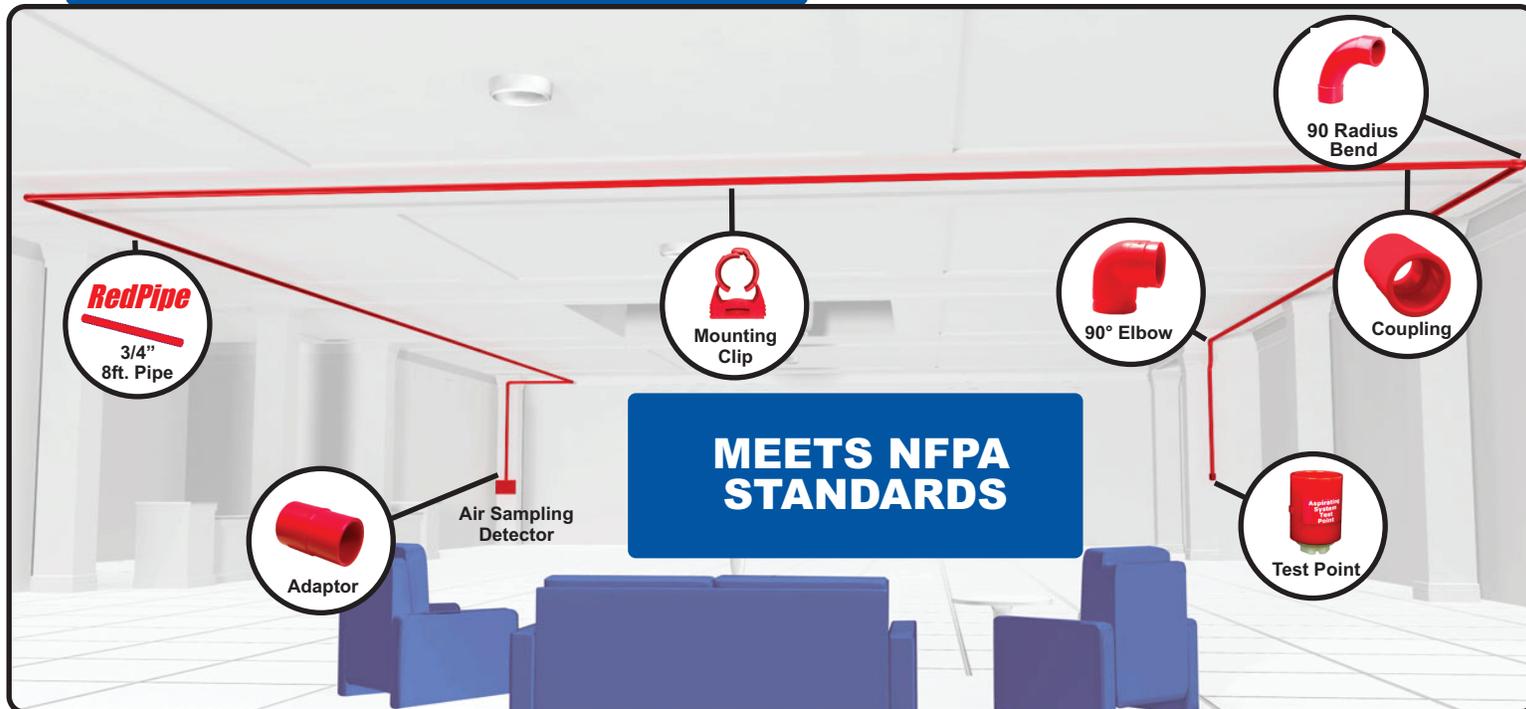
SHOPS

OFFICES



MADE IN THE USA

HOTEL LOBBY



RedGearMfg.com

ATRIUM



MUSEUMS

PRISONS

DATA & TELECOM



MADE IN THE USA

SUBWAY STATION



Buy Direct From
the Manufacturer

RACK FILLED WAREHOUSE



HOSPITALS

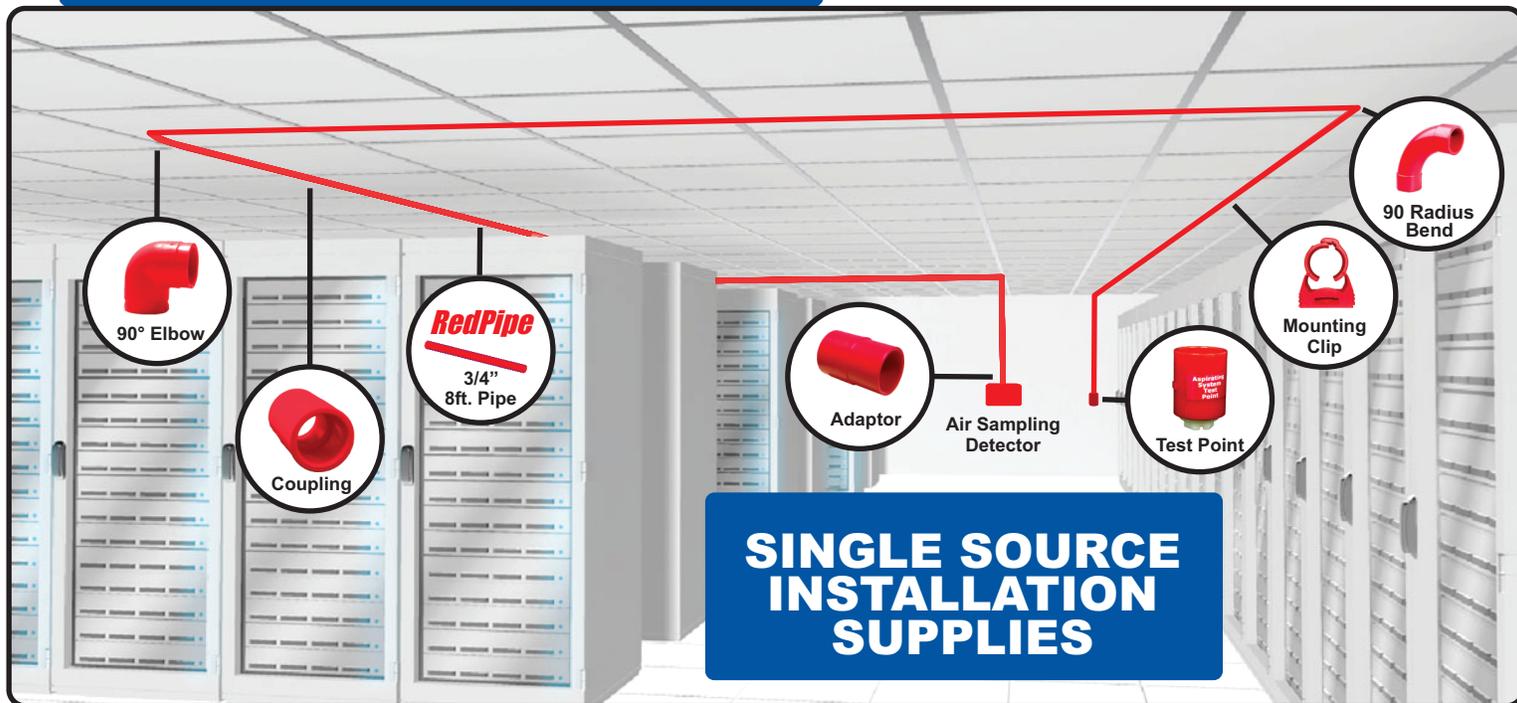
MARINE

TRANSPORTATION



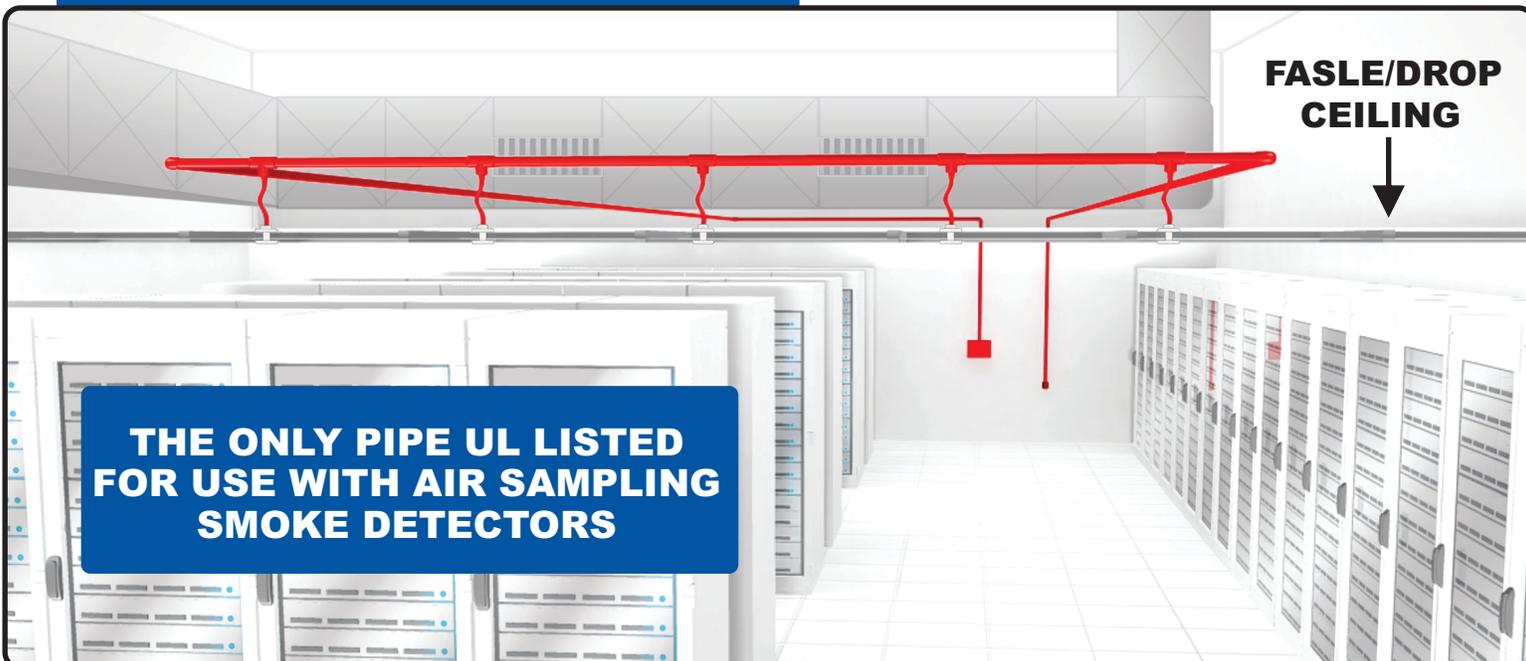
MADE IN THE USA

COMPUTER/SERVER ROOM



CAPILLARIES

RedGearMfg.com



WAREHOUSES

FREEZERS

STORAGE

RedPipe

The Only Pipe Approved Specifically For Use With Air Sampling Smoke Detection Systems

Compatible with all Aspirating Smoke Detection Systems

Price List

FEATURES

- 8ft Lengths
- Fire Resistant
- Easier to Install
- UL Listed for Plenums
- No Labels Needed
- Ships Direct to Your Site
- Lowest Cost
- Meets NFPA
- Fire System Red



15' LENGTHS
SEMI-TRUCK
 DELIVERY REQUIRED
 (Free Shipping not included)



DIRECTLY TO YOUR OFFICE OR JOB SITE
8' LENGTHS
 SHIPS FEDEX GROUND OR AIR

NOTE: Free Shipping is for domestic orders over 500USD and ends July 31st 2015.

RedPipe

RedPipe is a UL listed fire resistant 3/4" CPVC pipe UL approved specifically for use with ALL air sampling smoke detectors



NFPA PRINTING ON PIPE

Available in Spanish Part #:RP5209S

UL Listed for Plenum Areas



(No Pipe Labels Needed)



MADE IN THE USA

BUY DIRECT FROM THE MANUFACTURER



RedPipe

**8'(2.4m) OR
15ft(4.5m) Lengths**

**UL listed for
use with all air
sampling systems**

3/4" (25mm) RedPipe CPVC

FIRE RESISTANT SCH-40 (ID 0.874"/ID 22.1mm)
Approved for use in plenum areas.

(1 each) 8' Length

Part #: RP5209 English Text

Part #: RP5209S Spanish Text

(1 each) 15' Length

Part #: RP5209-15 English Text

Part #: RP5209S-15 Spanish Text



Volume Discounts Available

REDPIPE FITTINGS

UL Listed

3/4" CPVC SCH-40 (ID 0.874/22.1mm)

RedGearMfg.com

NEW 3/4" RADIUS BEND



No Elbow Limits

Change Direction Without Limitations

PIPE FITTINGS



RedPipe

3/4" 90° Elbow

(Socket/Socket)
CPVC SCH-40 (ID 0.874"/22.1mm)
90-degree elbow is made of a fire resistant CPVC.

Part #: RP5202 each
Part #: RP5202X 10/pk



RedPipe

3/4" 90° Radius Bend

(Socket/Socket)
CPVC SCH-40 (ID 0.874/22.1mm)
This new type of elbow is equivalent to a bend. You can now change the direction of the pipe without the design limitations of the 90° elbows.

Part #: RP5215 each
Part #: RP5215X 10/pk



RedPipe

3/4" 45° Elbow

(Socket/Socket)
CPVC SCH-40 (ID 0.874/22.1mm)
45-degree elbow is made of a fire resistant CPVC.

Part #: RP5203 each
Part #: RP5203X 10/pk



RedPipe

3/4" Tee

(Socket/Socket/Socket)
CPVC SCH-40 (ID 0.874/22.1mm)
Tee is made of a fire resistant CPVC.

Part #: RP5204 each
Part #: RP5204X 10/pk

PIPE FITTINGS



RedPipe

3/4" Coupling

(Socket/Socket)
CPVC SCH-40 (ID 0.874/22.1mm)
Coupling is made of a fire resistant CPVC.

Part #: RP5206 each
Part #: RP5206X 10/pk



RedPipe

Pipe to Detector Adaptor

Sold Individually

Unit to Pipe Adaptor 25mm-3/4"
CPVC SCH-40 (ID 0.874/22.1mm)
Pipe adapter pipe fitting is made of a fire resistant CPVC mixture. Must be used with an air sampling detector to connect pipe system to the detector.

Part #: RP5207



RedPipe

3/4" Union

Sold Individually

(Socket/Socket)
CPVC SCH-40 (ID 0.874/22.1mm)
Union is made of a fire resistant CPVC.

Part #: RP5208



RedPipe

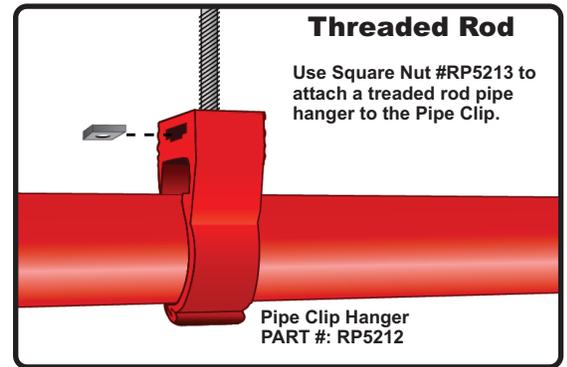
3/4" End Cap

(Socket)
CPVC SCH-40 (ID 0.874/22.1mm)
End Cap is made of a fire resistant CPVC.

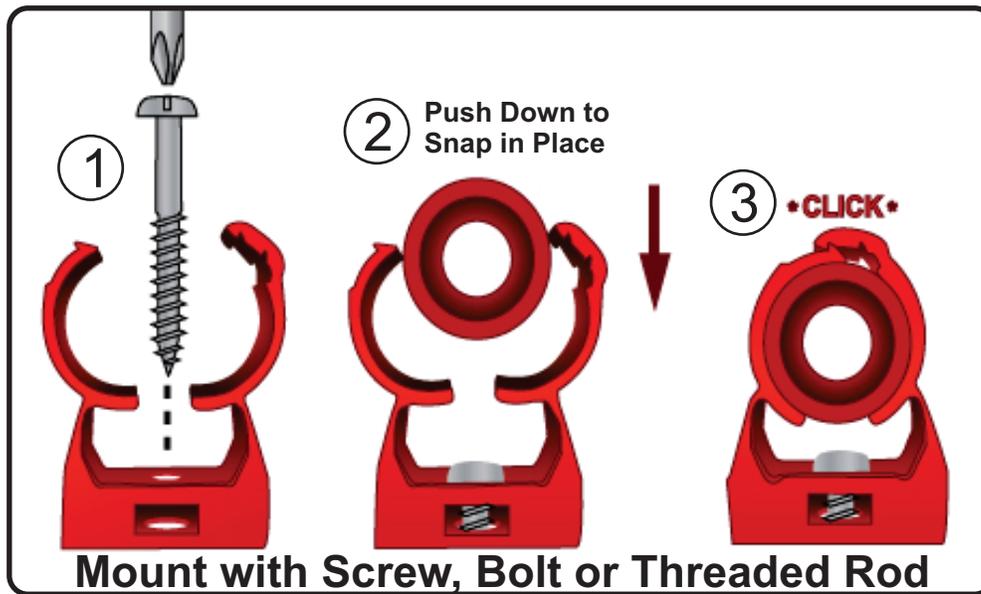
Part #: RP5205 each
Part #: RP5205X 10/pk

REDPIPE CLIP HANGERS

Now you can hang pipe easier
and faster with new **RedPipe**
clip hangers



EASY TO MOUNT TO CEILING OR DECK



**JUST
SNAP
IN PLACE**

REDGEAR PIPE CLIP HANGERS



OPEN

**JUST
SNAP
IN PLACE**



CLOSED

RedPipe 3/4" Pipe Clip Hanger

One Piece Pipe Clip, Pipe Size 3/4 In, Max Load 250 Lb, For Vertical Or Horizontal Tubing Support.

Part #: RP5212 25/pk

RedPipe Square Nut

Required with pipe clip hanger to install threaded rod.

Part #: RP5213 25/pk

PIPE HANGERS



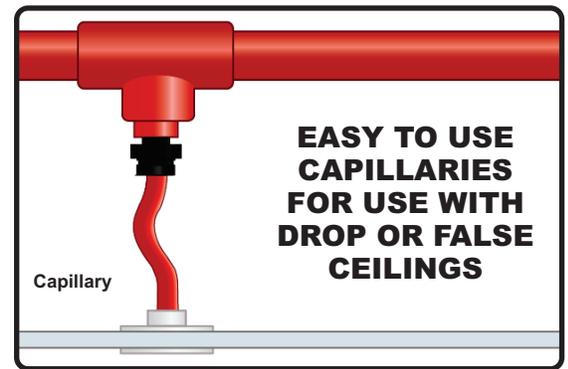
Standard Pipe Hanger- Zinc plated for 3/4" Pipe

One Piece Pipe Clip, Pipe Size 3/4 In, Max Load 250 Lb, Bolt Size 3/8 In, For Vertical Or Horizontal Tubing Support, Includes Captive Screw And Built In Nut.

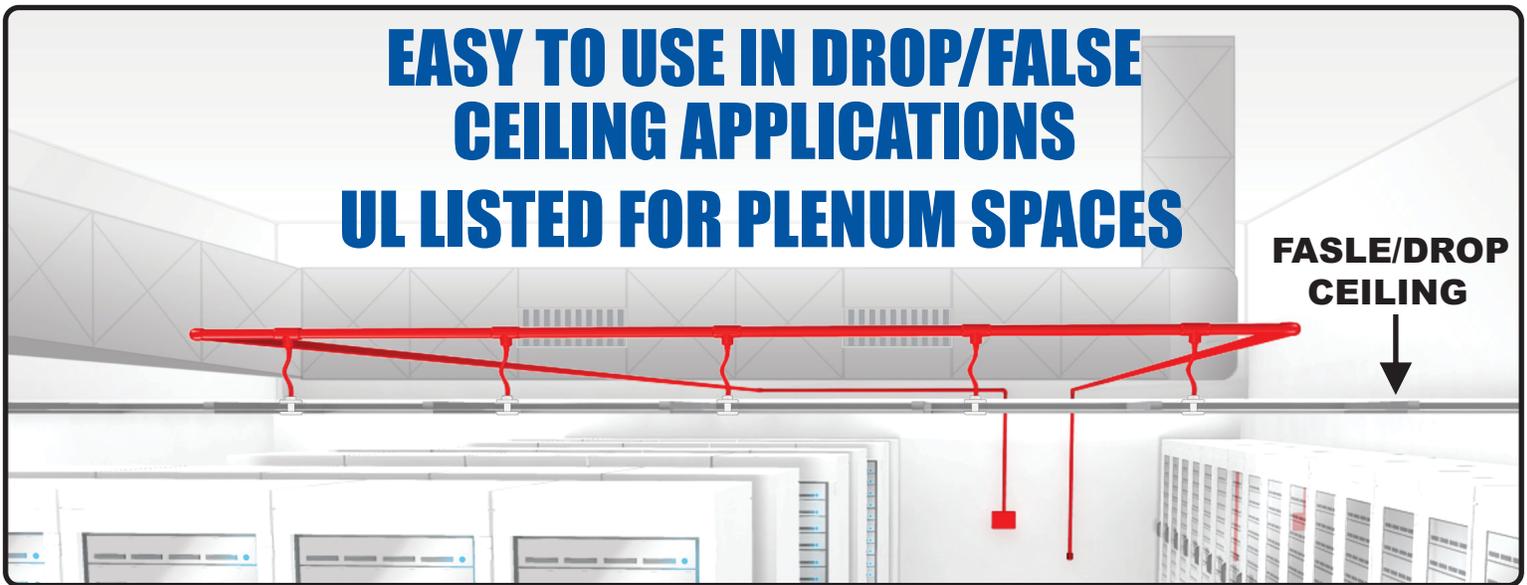
Part #: RS7073 Zinc 50/pk

REDPIPE CAPILLARIES

For use with drop/false ceiling installations the flexible tubing allows you to lift the ceiling tile out; the quick disconnect allows you to detach the capillary from the pipe



EASY TO USE IN DROP/FALSE CEILING APPLICATIONS UL LISTED FOR PLENUM SPACES



Also Great For Use with "In-Cabinet" Detection

CAPILLARY KITS



Capillary with Flush Or Conical Air Sample Point Kit

Use in drop ceiling or in-cabinet applications for air sampling smoke detection. Comes with capillary tubing, flush air sample point, sample label, Quick disconnect and 3/4" Tee.
Length: 6.4 ft (2m) 1/4"ID

Flush Air Sample Point Part #: RP5220

Conical Air Sample Point Part #: RP5221

CAPILLARY



Air Sample Points

Use in drop ceiling or in-cabinet applications for air sampling smoke detection.

A Part #: RP5216

B Part #: RP5222



3/4" Tee

CPVC SCH-40 (ID 0.874, made of fire resistant material).

Part #: RP5204

Part #: RP5204X 10/pk



Quick Disconnect

Use in drop ceiling or in-cabinet applications for air sampling smoke detection.

Part #: RP5223



Capillary Tubing

Use in drop ceiling or in-cabinet applications for air sampling smoke detection.
Length: 328ft (100m)
1/4"ID 3/8" OD

Part #: RP5219 50ft.

Part #: RP5224 328ft.

REDPIPE ACCESSORIES

Everything you need to complete your installation

RedGearMfg.com



Test Point

PIPE ACCESSORIES



3/4" Inline Air Filter

Used to filter out dust in the air going into the air sampling smoke detection system. Used in hazardous and industrial environments.

Part #: RP7125



Replacement Filter

Replacement filter for inline filter #RP7125.

Part #: RP7126



3/4" Test Point

For any air sampling smoke detection system.

Part #: RP2226

LABELS



Sample Pipe Labels

NOT Required on RedPipe.

Part #: RP5217 125/roll



Sample Point Labels

.90"/.16" hole (23mm/4mm Hole).

Note: Place a Sample label at each sample point.

Part #: RP5218 125/roll

INSTALL ACCESSORIES



Kobalt 1-5/8-in PVC Cutter

Ratcheting PVC cutter cuts CPVC pipe up to 1 Inch OD. Housing made of steel. Ratcheting feature.

Part #: RP5211



CPVC Pipe Cement

TFP-500
Oatey - 30821 All-Purpose Medium Bodied Cement Container Size: 8 oz. Use for all Air Sampling Smoke pipe systems.

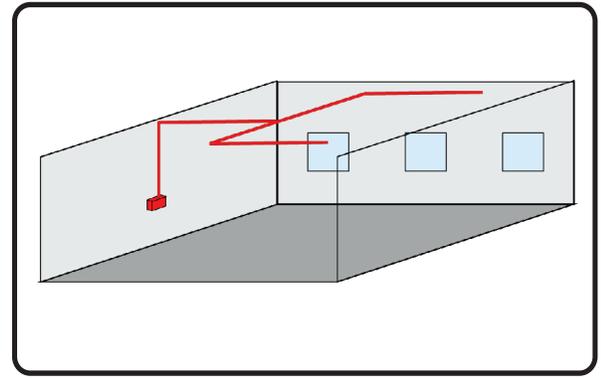
Part #: RP5214



MADE IN THE USA

INSTALLATION KIT

One kit for everything you need for
(up to) 50'x50' (15m x15m) area
or 2500ft² (225m²)



Typical System

RedGearMfg.com

PIPE KIT 50'X50' AREA



**Pipe Kit- 50'x50' (15m x 15m) Area
Plenum Rated Fire Resistant**

This Kit provides you with everything you need for 'most' 50'x50' (15m x 15m) areas. If the room is 100' (30m) x50' (15m) simply purchase two kits. (see right for exact quantities of each.)

Part #: RP5200

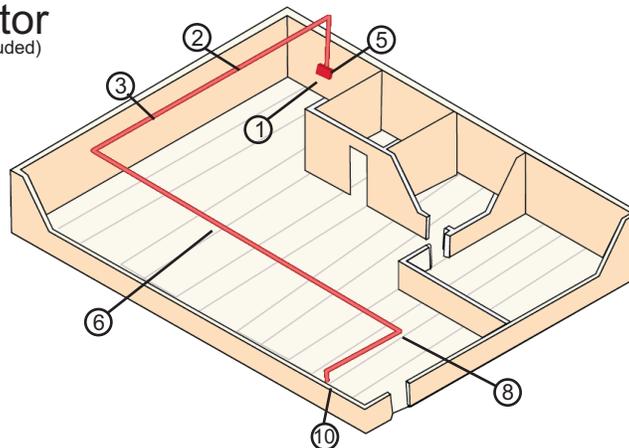
Kit Includes:

- 1 - Adaptor
- 8 - 90° Elbows
- 2 - Test Points
- 1 - Tee
- 12- Couplings

- 1 - CPVC Pipe Cement
- 1 - Pipe Cutting Tool
- 35 - Pipe Hangers
- 25 - Sample Point Labels
- 96'- RedPipe

STANDARD CONFIGURATION

- ① Air Sampling Detector
(Not Included)
- ② **RedPipe**
- ③ Pipe Clip Hangers
- ④ Pipe Cement (Not Shown)
- ⑤ Adaptor



- ⑥ Couplings
- ⑦ Tee (Not Shown)
- ⑧ 90° Elbows
- ⑨ Test Points

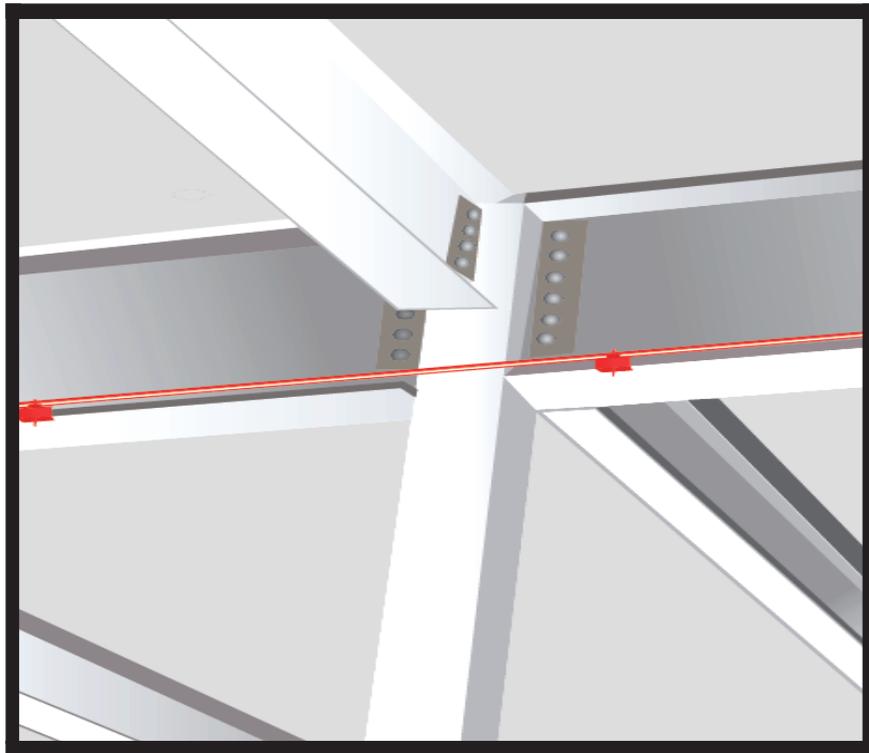


RedGear

Linear Heat Detection Installation Supplies

Compatible with all Linear Heat Detection Systems

- Analog Linear Heat
- Fiber Optic Linear Heat
- Digital Linear Heat
- Water Leak Cable



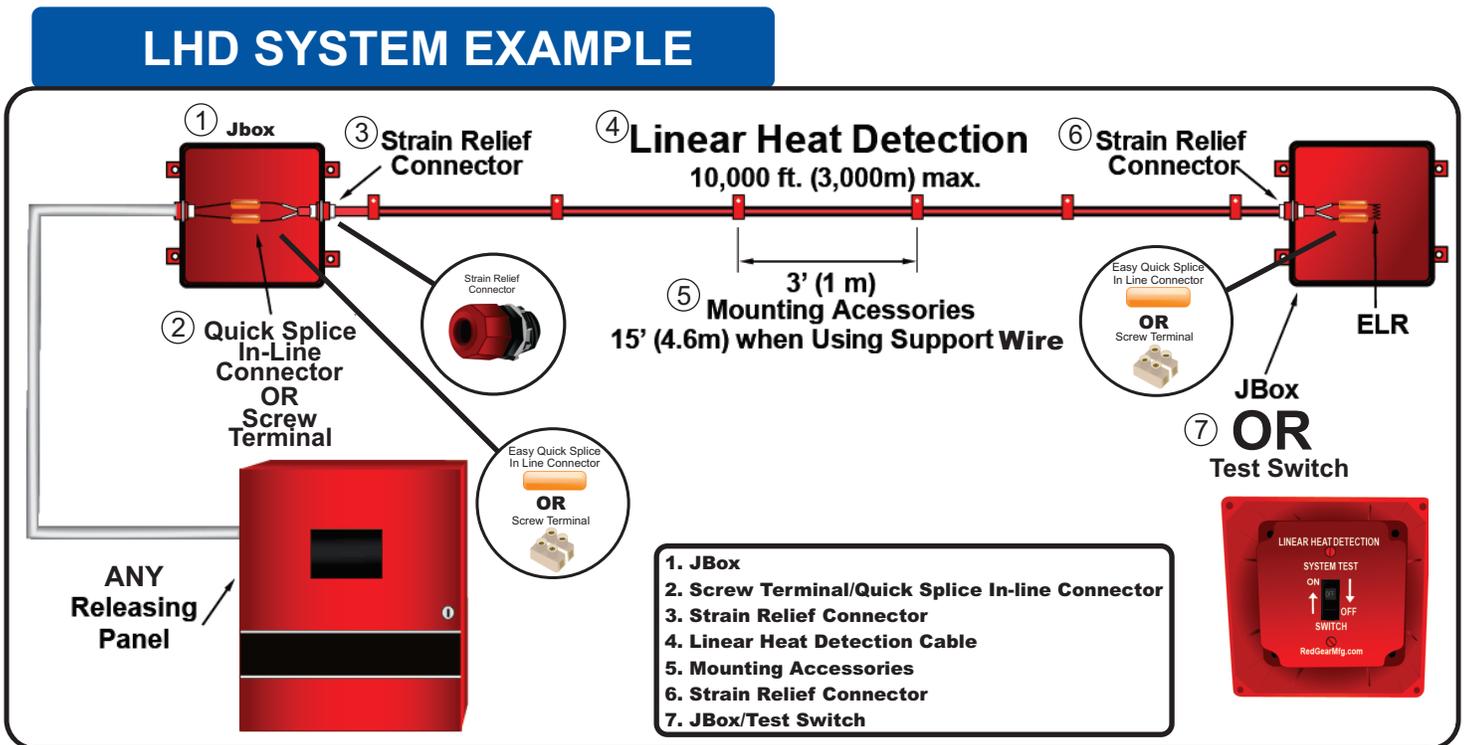
Meets **NFPA** Standards

Linear Heat Detection Installation Resources:

Enclosed you will find examples of system applications along with pertinent sections of the 2013 NFPA 72 code for your reference

(Always follow all applicable federal, local and NFPA codes along with the manufacturers recommendations)

■ System Example	19pg	■ Conveyors	23pg
■ NFPA 72 Code	20pg	■ Generators	24pg
■ Addressable System	22pg	■ Tunnels	24pg
■ Conventional System	22pg	■ Cable Trays	25pg
■ Rack Storage	23pg	■ Floating Roof Top Tanks	25pg



RedGear Made In America



Linear Heat National Fire Codes

Below you will find portions of the NFPA 72®, 2014 National Fire Alarm and Signaling Codes pertinent to Linear Heat detection. Please refer to the specific NFPA Code publication for additional information.

Chapter 3 Definitions

3.1 General. The definitions contained in this chapter apply to the terms used in this code.

3.3.66.11 Line-Type Detector. A device in which detection is continuous along a path. Typical examples are rate-of-rise pneumatics tubing detectors, projected beam smoke detectors, and heat-sensitive cable. (SIGOIDS).

10.5.3 Inspection, Testing and Maintenance Personnel. (SIG-TMS)

10.5.3.3* Service personnel shall be qualified and experienced in the inspections, testing, and maintenance of systems addressed within the scope of this Code. Qualified personnel shall include, but not be limited to, one or more of the following:

(1)*Personnel who are factory trained and certified for the specific type and brand of system being serviced.

10.4 Installation and Design

10.4.1 All systems shall be installed with in accordance with the specifications and standard approved by the authority having jurisdiction.

Chapter 14 Inspection, Testing and Maintenance

14.2.2.1.1 Inspection, testing, and maintenance programs shall satisfy the requirements of this code and conform to the equipment manufacturer's published instructions.

14.2.2.1.2 Inspection, testing, and maintenance programs shall verify correct operation of the system.

14.4.2 Test Methods

Heat test shall be preformed with a heat source per the manufacturer's published instructions. A test method shall be used that is specified in the manufacturer published instructions for the installed equipment, or other method shall be used that will not damage the non-restorable fixed temperature element.

Chapter 17 Initiating Devices

17.5 Requirements for Smoke and Heat Detectors

17.6 Heat-Sensing Fire Detectors

(d) Heat detectors

(1) Fixed Temperature, rate of rise, rate of compensation, restorable line, spot type (excluding pneumatic tube type)

17.6.2 Temperature

17.6.2.1 Classification. Heat-sensing fire detectors of fixed-temperature or rate-compensated, spot type shall be classified as to the temperature of operation in accordance with Table 17.6.2.1.

Table 17.6.2.1 Temperature Classification and Color Code for Heat Sensing Fire Detectors

Temperature Classification	Temperature Rating Range		Maximum Ceiling Temperature		Color Code
	°F	°C	°F	°C	
Low*	100-134	39-57	80	28	Uncolored
Ordinary	135-174	58-79	115	47	Uncolored
Intermediate	175-249	80-121	155	69	White
High	250-324	122-162	230	111	Blue
Extra high	325-399	163-204	305	152	Red
Very extra high	400-499	205-259	380	194	Green
Ultra high	500-575	260-302	480	249	Orange

*Intended only for installation in controlled ambient areas. Units shall be marked to indicate maximum ambient installation temperature.

17.6.3 Location and Spacing

17.6.3.1 Smooth Ceiling

17.6.3.1.1* Spacing. One of the following requirements shall apply:

(1) The distance between detectors shall not exceed their listed spacing and there shall be detectors within a distance of one-half the listed spacing, measured at right angles from all walls or partitions extending upward to within the top 15 percent of the ceiling height.

(2) All points on the ceiling shall have a detector within a distance equal to or less than 0.7 times the listed spacing (0.7S).

17.6.3.1.3.1* Unless otherwise modified by 17.6.3.2.2, 17.6.3.3.2, or 17.6.3.7, spot-type heat-sensing fire detectors shall be located on the ceiling not less than 4 in. (100 mm) from the sidewall or on the sidewalls between 4in and 12 in. (100 and 300 mm) from the ceiling.

17.6.3.3. Beam Construction

17.6.3.3.1 Spacing

17.6.3.3.1.1 A ceiling shall be treated as a smooth ceiling if the beams project no more than 4 in (100 mm) below the ceiling.

17.6.3.3.1.2 Where the beam project more than 4 in. (100 mm) below the ceiling, the spacing, the spacing of spot-type heat detectors at right angles to the direction of beam travels shall be not more than two thirds of the listed spacing.

17.6.3.3.1.3 Where the beams project more than 18 in. (460 mm) and are not more than 96 in (2.44 m) on center each bay formed by the beams shall be treated as a separate area.

17.6.3.3.2 Location. Where the beams are less than 12 in. (300 m) in depth and less that 96 in (2.44 m) on center, detectors shall be permitted to be installed on the bottoms of beams.

17.6.3.4* Sloping Ceilings (Peaked and Shed).

17.6.3.4.1 Spacing.

17.6.3.4.1.1 Ceiling Slope Less Than 30 Degrees. For a ceiling slope of less than 30 degrees, all detectors shall be spaced using the height at the peak.

17.6.3.4.1.3 Spacing shall be measured along a horizontal projection of the ceiling in accordance with the type of ceiling construction.

17.6.3.4.2 Location.

17.6.3.4.2.1 A row of detector shall first be located at or within 36 in. (910 mm) of the peak of the ceiling.

17.6.3.4.2.2 Additional detectors shall be located as determined in 17.6.3.4.1.

17.6.3.5 High Ceilings.

17.6.3.5.1* On ceilings 10 ft to 30 ft (3.0 m to 9.1 m) high, heat detector spacing shall be reduced in accordance with Table 17.6.3.5.1 prior to any additional reductions for beams, joists, or slope, where applicable.

Exception: Table 17.6.3.5.1 shall not apply to the follow detectors, which rely on the integration effect:

(1) Line-Type electrical conductivity detectors (see 3.3.66.11)

In these cases, the manufacturer's published instructions shall be followed for appropriate alarm point and spacing.

Table 17.6.3.5.1 Heat Detector Spacing Reduction Based on Ceiling Height

Ceiling Height Greater than (>)		Up to and Including		Multiply Listed Spacing by
ft	m	ft	m	
0	0	10	3.0	1.00
10	3.0	12	3.7	0.91
12	3.7	14	4.3	0.84
14	4.3	16	4.9	0.77
16	4.9	18	5.5	0.71
18	5.5	20	6.1	0.64
20	6.1	22	6.7	0.58
22	6.7	24	7.3	0.52
24	7.3	26	7.9	0.46
26	7.9	28	8.5	0.40
28	8.5	30	9.1	0.34

17.6.3.5.2* Spacing Minimum. The minimum spacing of heat detectors shall not be required to be less than 0.4 times the height of the ceiling.

Annex A Explanatory Material.

FIGURE A 17.6.3.1.1 (b) Line-Type Detector - Spacing Layouts, Smooth Ceiling.

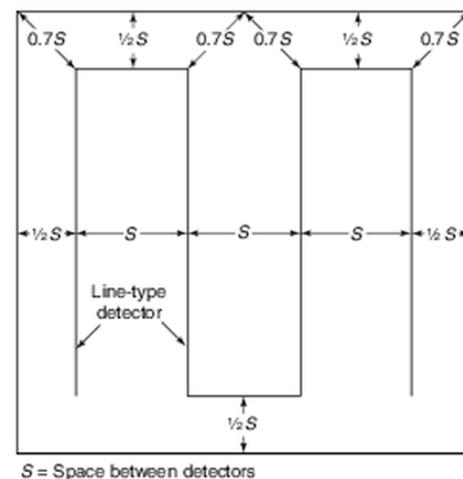


FIGURE A. 17.6.3.1.1(b) Line-Type Detectors — Spacing Layouts, Smooth Ceiling.

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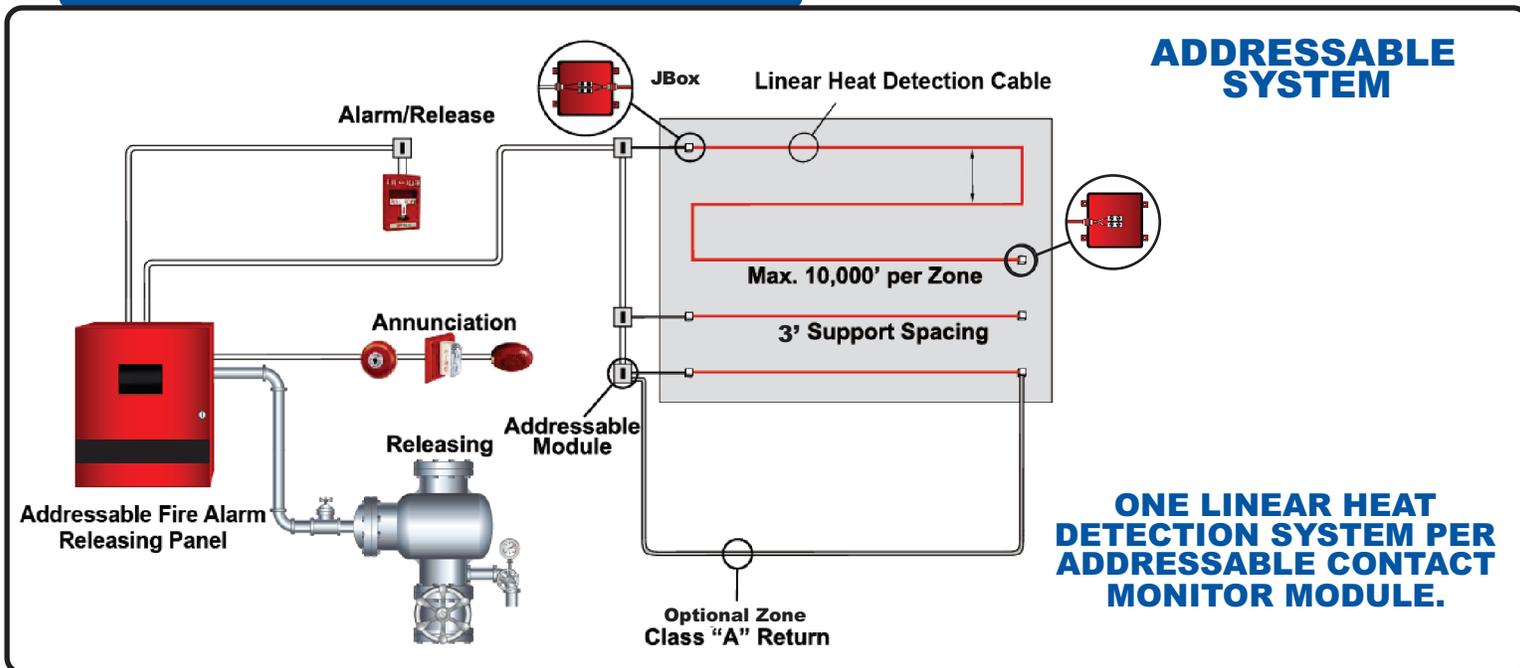


National Fire Protection Association
The authority on fire, electrical and building safety

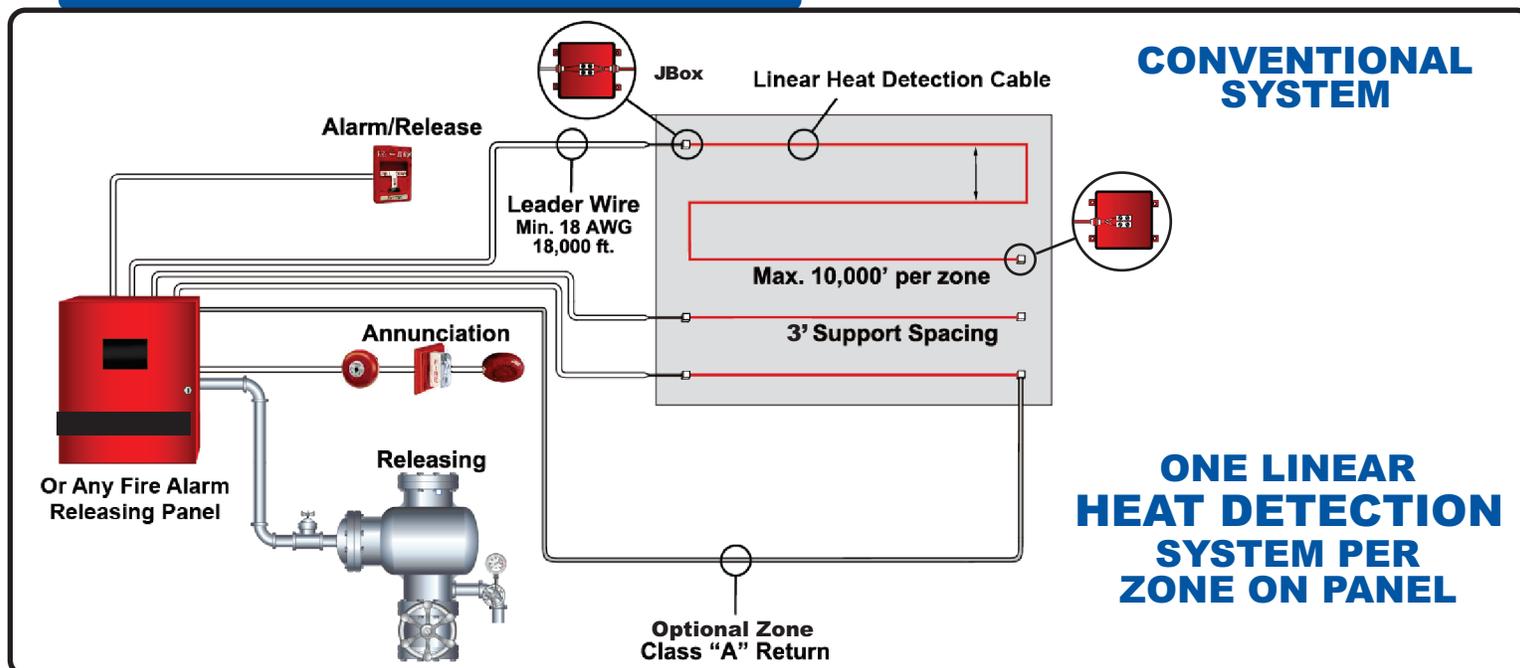


MADE IN THE USA

ADDRESSABLE SYSTEM



CONVENTIONAL SYSTEM



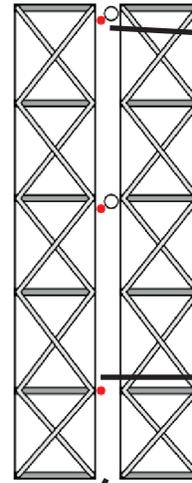


RACK STORAGE

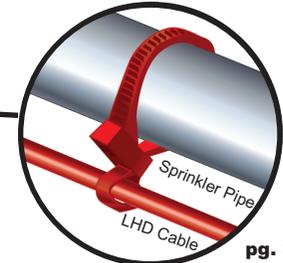
Sprinkler Pipe



LHD Cable



FLUE



pg. 30

OR Mount 3' (1m)
Attach to sprinkler pipe mounting
attaching cable every 3' (1m).



Freezer or Rack
Mount

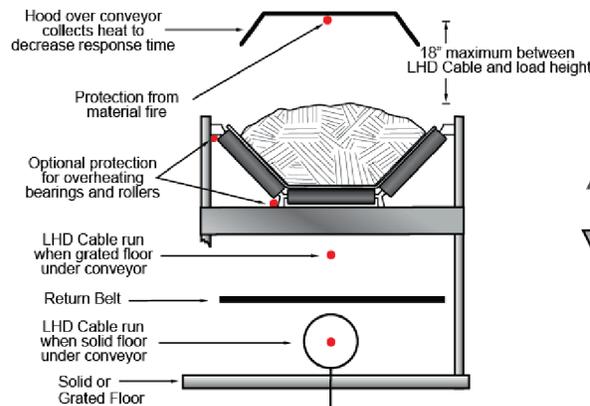
pg. 33

CONVEYORS

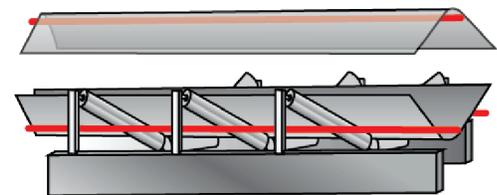
RedGear
Made In America

RedGear

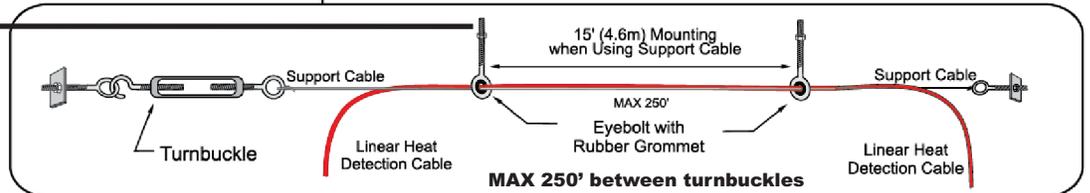
Guidewire/Messenger Wire
Support Supplies



Mount 3' (1m)



EyeBolt
pg. 39



POWER GENERATION

COOLING TOWERS



GENERATORS

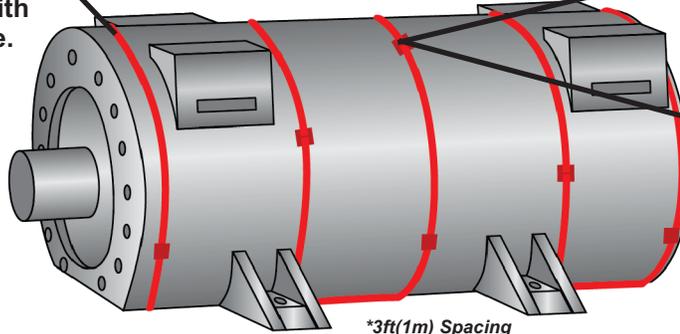


pg. 38

Can be mounted with screw or adhesive.

RedGear

Universal Surface Mount
with built in Cable Tie
Fire Resistant



*3ft(1m) Spacing



pg. 38

Mount every 3ft(1m) and at every change with direction

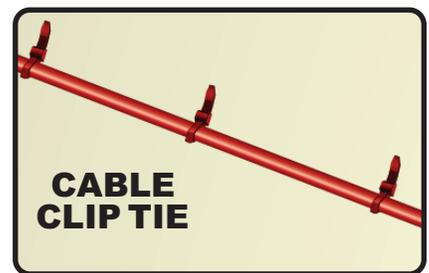
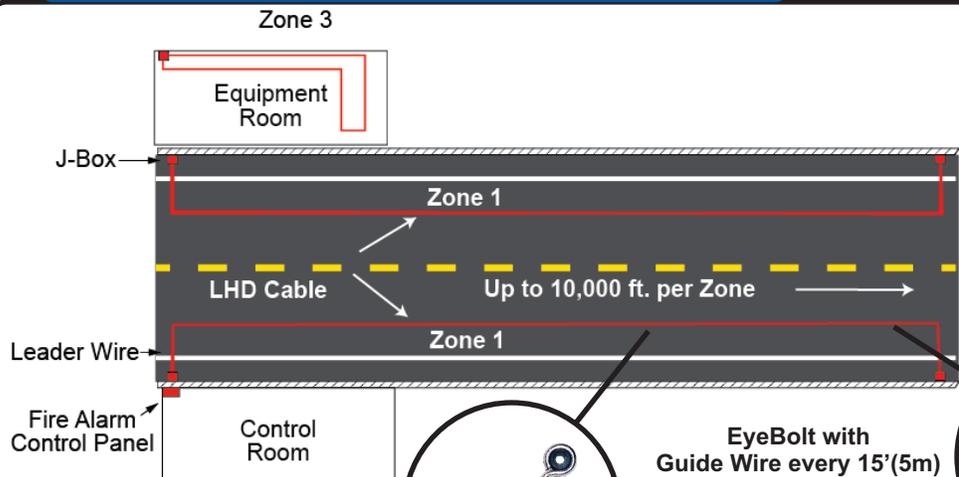


pg. 38

Surface Adhesive

TUNNELS

RedGear
Made In America



CABLE CLIP TIE



EyeBolt
pg. 39

EyeBolt with Guide Wire every 15'(5m)

OR

Cable Clip Ties every 3'(1m).



pg. 31

RedGear

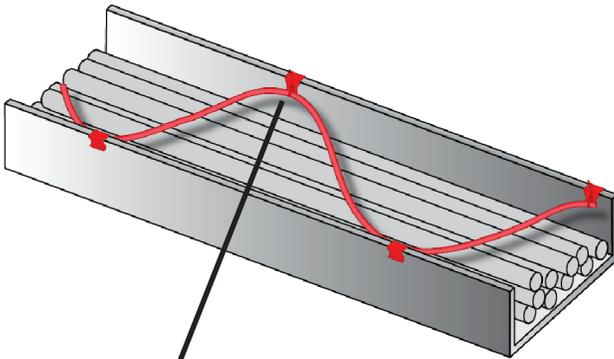
Cable Clip Tie
One Piece Cable Clip, All in one Design.
Fire Resistant

■ BRIDGES

■ PARKING GARAGES



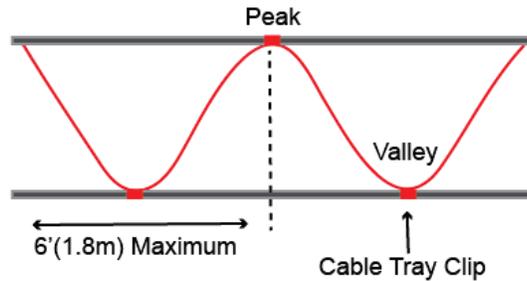
CABLE TRAYS



RedGear

Cable Tray Clip (2 Sizes)
One Piece with built-in Cable tie
Fire Resistant

pg. 34



Determine the number of clips you need by dividing the length of the cable tray by 3, then add 1.

Cable Tray Width	Width Coefficient
1'6" (.5m)	.87
2' (.6m)	.78
3' (.9m)	.65
4' (1.2m)	.57

Sine Wave Calculation for Cable Tray to determine amount of cable required

FLOATING ROOF TOP TANKS

RedGear
Made In America

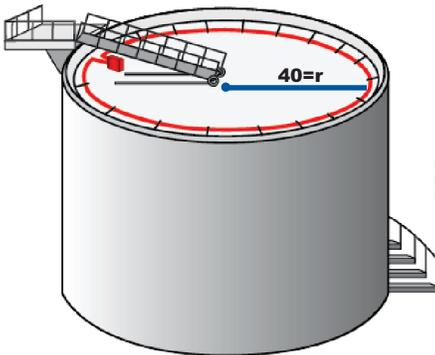
To Determine Cable Amount:

$$2\pi r$$

$$2 \times 3.14 \times r = C$$

r=Radius C=Circumference

Ex. (2 x 3.14 x 40 =252ft of cable)

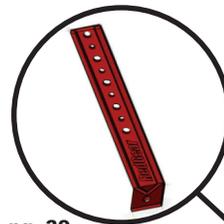


RedGear

L-Bracket
Fire Resistant

L-Bracket and Cable Tie used to secure LHD Cable

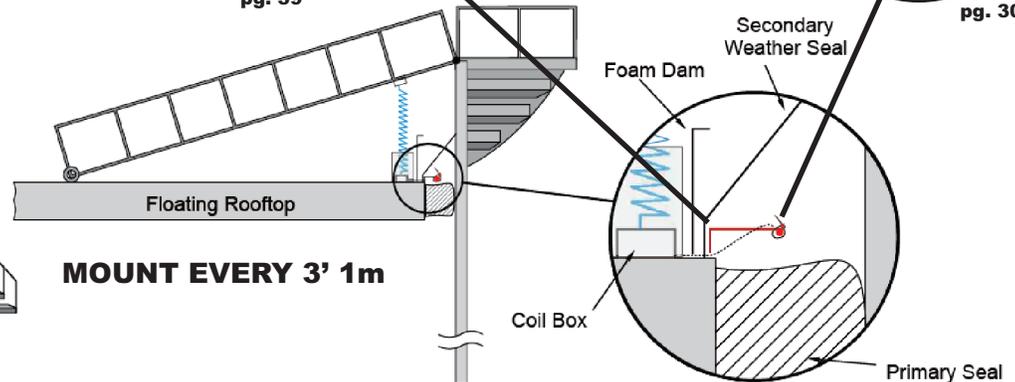
pg. 39



RedGear

Cable Tie
Fire Resistant

pg. 30



RAILWAYS

OIL STORAGE



RedGear

Linear Heat Detection Installation Supplies



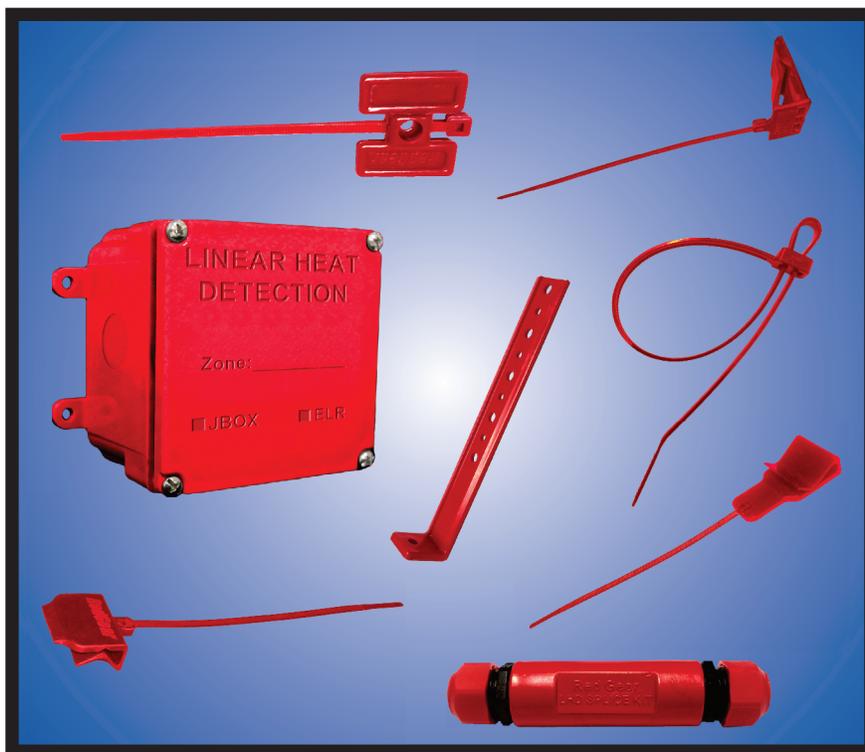
MADE IN THE USA

Compatible with all Linear Heat Detection Systems

FEATURES

- UL Listed
- Fire Resistant
- Easier to Install
- Direct from Manufacturer
- Free Shipping Over \$500.00
- New "All in One" Designs
- Low Cost Guarantee
- Ships FedEx
- Higher Quality

Price List



Meets **NFPA** Standards

JBOXES

No more Hole Saws Needed
New **EZ Knockouts**

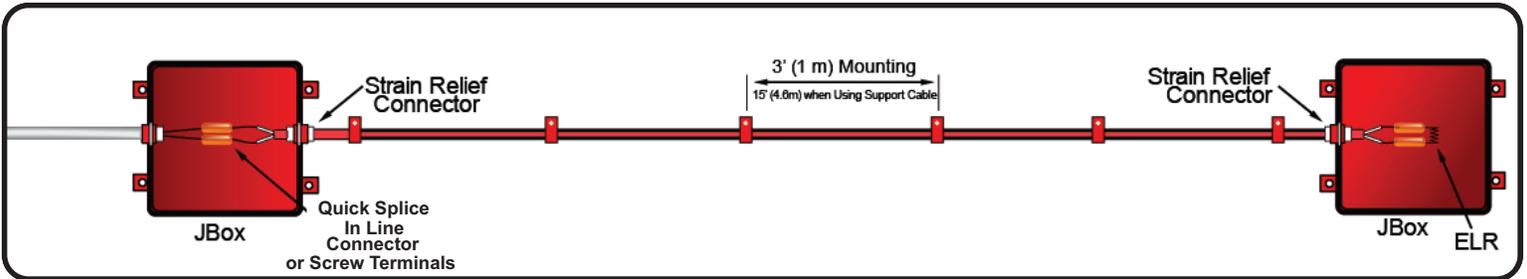
Text Imprinted Covers




NO MORE DRILLING

NOTE: Text on product is not White

Spaces on cover to mark if the box is the JBox or end of line



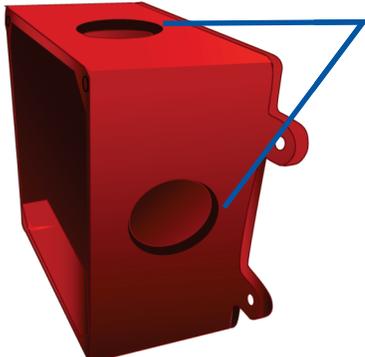
EASY TO USE:





NO MORE HOLE SAWS

NEW EZ KNOCKOUTS



NO HOLE SAWS REQUIRED

NEMA 4 (IP66)
NEMA 6P (IP68)
NEMA 4X (IP67)

JBOXES

ACCESSORIES



RedGear JBox

FIRE RESISTANT EZ KNOCKOUTS
Dim.: 4" x 4" x 2" (10cm x 10cm x 5cm)
Easy to use JBox requires Screw Terminal or in line connectors and Strain Relief Connectors for installation. Has 1/2" and 3/4" knockouts. Use at the beginning and end of line of LHD systems.

Part #: RG5222



Standard JBox

7/8" HOLE SAW REQUIRED
Dim.: 4" x 4" x 2" (10cm x 10cm x 5cm)
Requires Screw Terminal or in line connectors and Strain Relief Connectors, and 7/8" hole saw required for installation. Use at the beginning and end of line of LHD system.

Part #: RS7040



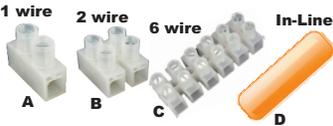
RedGear Strain Relief Connectors

FIRE RESISTANT
Nylon 6.6
1/2" Strain relief connector is designed to secure wire entering or exiting a JBox.

Nylon Part #: RG1110



Zinc Part#: RS7030



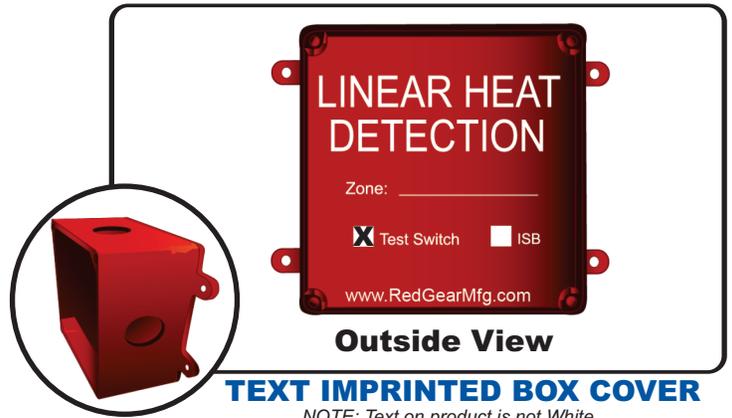
Connectors
For Cable splices and connections in J/ELR-Boxes and HDJ/ELR-Boxes.
A. One Terminal Part #: RS7072
B. Two Terminal Part #: RS7041
C. Six Terminal Part #: RS7047
D. Quick Splice In-Line Connector Part #: RG1127

NOTE: Used in both RedGear and Standard JBoxes

TEST SWITCH

New easy to use test switch, no more complicated hard wired boxes
Now just flick of a switch

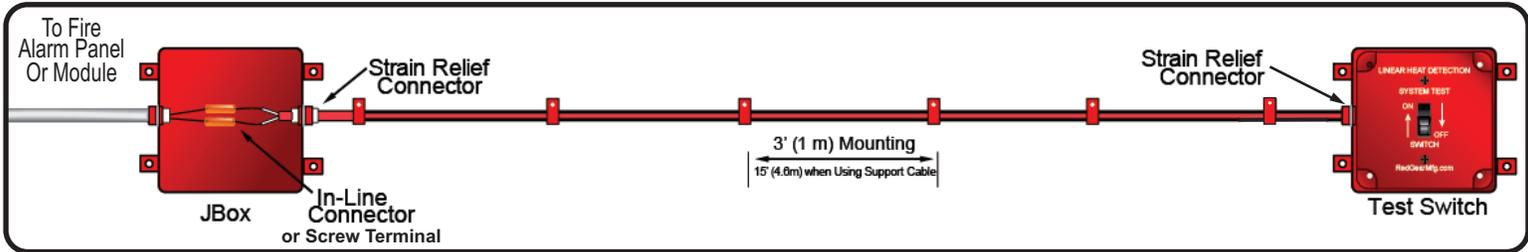
New EZ Knockouts



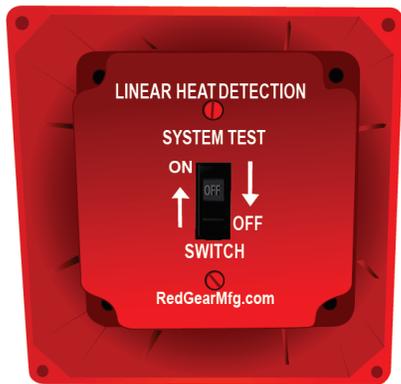
Outside View

TEXT IMPRINTED BOX COVER

NOTE: Text on product is not White



NEW EZ To Use Test Switch



INSIDE VIEW

IMPRINTED METAL SWITCH PLATE WITH NEW IMPRINTED LID

RedGear

NEMA 4 (IP66)

END OF LINE TEST SWITCH

Outside View



RedGear HD/ELR-Test Box

Inside View



FIRE RESISTANT EZ KNOCKOUTS

Easy to use, Test Box with Test switch have 1/2" and 3/4" knockouts. Test Switches are placed at the end of a LHD run and are used for commissioning, system inspections, and testing of the system. Used at the end of an LHD system instead of a J/ELR-box.

Dim.: 4 5/8" x 4 5/8" x 4 1/8" (11.74cm x 11.74cm x 10.47 cm)

Part #: RG5223

END OF LINE TEST BOX

Outside View



Inside View



Standard HD/ELR-Test Box

HOLE SAW REQUIRED

Test Box with Test Button, Screw Terminal and Backplate. Test Switches are placed at the end of a LHD run and are used for commissioning, system inspections, and testing of the system. Use at the end of an LHD system instead of a J/ELR box.

Dim.: 6" x 6" x 4" (15cm x 15cm x 10cm)

Part #: RS7071



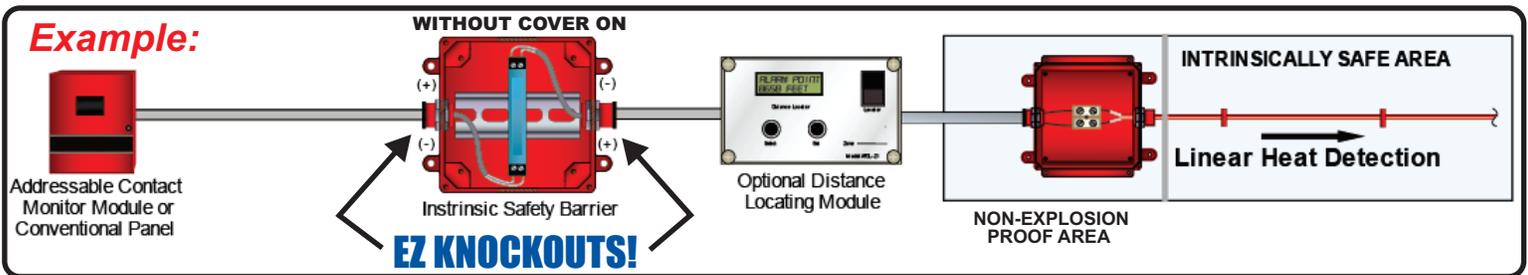
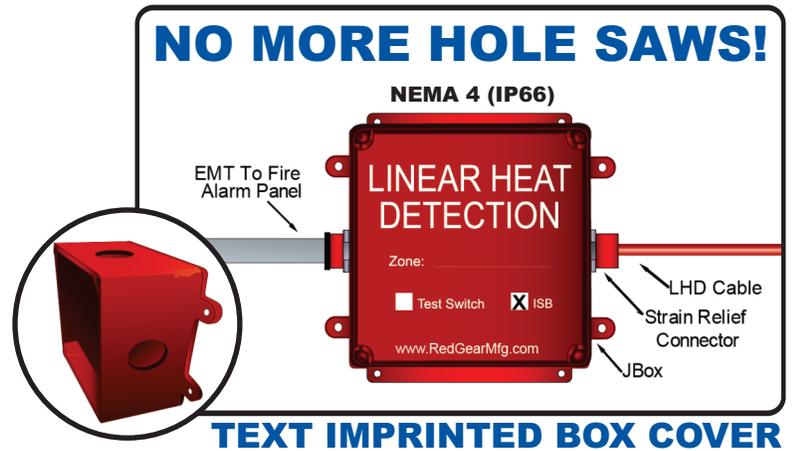
INSIDE VIEW

STANDARD TEST BUTTON

ISB MODULE

Pre-assembled Intrinsic Safety Barriers, for use with LHD, fire alarm, flame detectors, and system in hazardous areas

EZ Knockouts



NOTE: Box cover must be on during operation

PRE-ASSEMBLED INTRINSIC SAFETY BARRIER

CONVENTIONAL



RedGear Conventional Intrinsic Safety Barrier

Fire Resistant

NEMA 4 (IP66)
Includes ISB and DIN rail.
Ready to Use.
For Explosive Hazard applications;
1 per zone.
Dim.: 4 5/8" x 4 5/8" x 4 1/8" (11.74cm x 11.74cm x 10.47 cm)

Part #: RG5224

ADDRESSABLE

**RedGear
EZ KNOCKOUTS**



RedGear Addressable Intrinsic Safety Barrier

Fire Resistant

NEMA 4 (IP66)
Includes ISB and DIN rail.
Ready to Use.
For Explosive Hazard applications;
1 per zone.
Dim.: 4 5/8" x 4 5/8" x 4 1/8" (11.74cm x 11.74cm x 10.47 cm)

Part #: RG5225

BUILD IT YOURSELF ISB

CONVENTIONAL

ADDRESSABLE



① **Standard Intrinsic Safety Barrier Box**

Heavy Duty 6"x6"x4"
For Explosive Hazard applications
1 per zone.
35mm DIN rail mounting
Requires Intrinsic Safety Barrier and DIN rail, not included.

Part #: RS7039



② **Standard Intrinsic Safety Barrier**

For Explosive Hazard applications
1 per zone 35mm DIN rail mounting
Requires enclosure, and DIN rail, not included.

Addressable Part #: RS7124

Conventional Part #: RS7122



③ **DIN rail Part #: RG1125**



Pre-Assembled VS



+



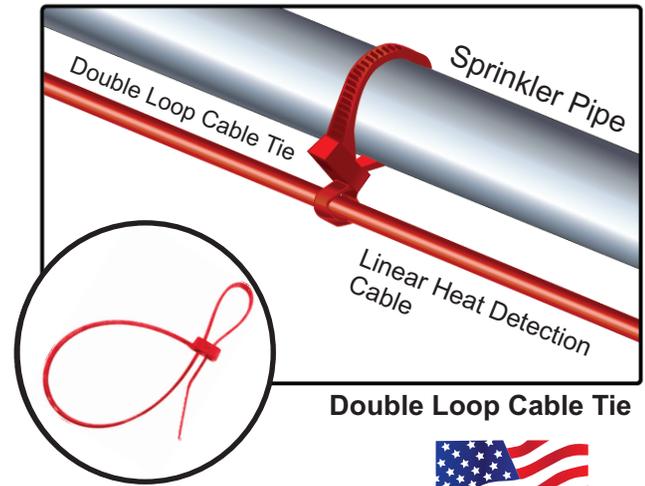
+



CABLE TIES

New **RED** nylon 6.6 fire resistant cable ties; multiple sizes for use with pre-action sprinkler systems and other applications

Higher Quality ■ Lower Cost



PRE ACTION SPRINKLER PIPE DOUBLE LOOP

PRE ACTION SPRINKLER PIPE DOUBLE LOOP



RedGear Pre Action Double Loop Cable Ties

Fire Resistant Nylon 6.6
Very durable, highly reliable cable ties, use to mount LHD cable on Pre-Action Sprinkler Systems
Fits 3/4\"/>

Part #: RG1112C 100/pk
Part #: RG1112M 1000/pk



Standard Pre Action Double Loop Cable Ties

Nylon
Fits 3/4\"/>

Part #: RS7062C 100/pk
Part #: RS7062M 1000/pk



RedGear Pre Action Double Loop Cable Ties

Fire Resistant Nylon 6.6
Fits 2 1/2\"/>

Part #: RG1113C 100/pk
Part #: RG1113M 1000/pk



Standard Pre Action Double Loop Cable Ties

Nylon
Fits 2 1/2\"/>

Part #: RS7063M 1000/pk

UNIVERSAL SMALL SINGLE LOOP

UNIVERSAL ACCESSORIES



RedGear Small Single Loop Cable Ties

Fire Resistant Nylon 6.6
Used to fasten LHD Cable to a Surface Mount Part#: RS7054C or a Large Single Loop Cable Tie Part#:RS7064L.
For cold and warm environments. Rated from -100°F to 392°F(-73°C to 200°C).
Length: 5 1/5\"/>

Part #: RG1114C 100/pk
Part #: RG1114M 1000/pk



Standard Small Single Loop Cable Ties

Nylon
Used to fasten LHD Cable to a Surface Mount Part#: RS7054C or a Large Single Loop Cable Tie Part#: RS7064L. For cold and warm environments. Rated from -7°F to 185°F(-60°C to 85°C).
Length: 5 1/5\"/>

Part #: RS7055C 100/pk
Part #: RS7055M 1000/pk



Standard Extra Large Single Loop Cable Ties

Nylon
Fits 4\"/>

Part #: RS7064L 50/pk



Standard Cable Tie Tool

Use to tighten cable tie onto object.

Part #: RG1115

New **UNIVERSAL CABLE CLIP-TIE**

For use in all applications,

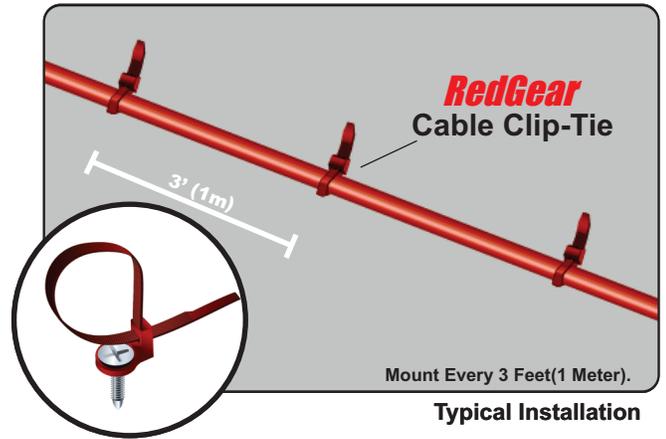
No More Need to Buy Multiple Parts

1 Piece Cable Clip-Tie

LESS LABOR TIME AND COST



ONE SIZE FITS ALL



NEW 2 IN 1 MOUNTING CLIP

Cable Clip and Cable Tie All In One!

FIRE RESISTANT
As low as **20¢** each



No More Need to Buy Multiple Parts!

CABLE CLIP-TIE



RedGear Cable Clip-Tie

Fire Resistant Nylon 6.6
Rated from -100°F to 392°F (-73°C to 200°C). 3/16" (4.8mm) mounting hole. Used for most ceiling or wall mount applications.

Part #: RG1116C 100/pk
Part #: RG1116M 1000/pk

CABLE CLIPS AND MISCELLANEOUS



Standard Cable Clip

Black Nylon 6.6 rated from -7°F to 185°F (-60°C to 85°C) 3/16" (4.8mm) mounting hole. Cable clips may be used for ceiling or wall mount applications, as well as at corners.

Part #: RS7049C 100/pk
Part #: RS7049M 1000/pk



Standard Cable Clip

Zinc plated steel cable clip. 1/4" (6.4mm) mounting hole. For all temperatures.

Part #: RS7050C 100/pk



Standard Push Pin

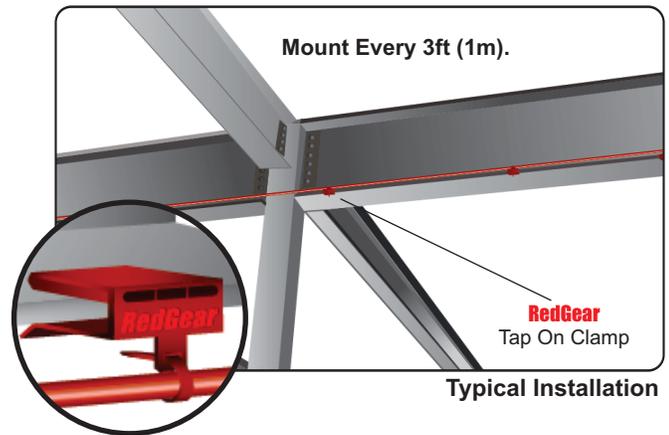
Black Nylon 6.6 rated from -7°F to 185°F (-60°C to 85°C) 3/16" mounting hole. Secures cable clip to Beam Clamps, Cable Tray Mounting Clips and L-Brackets through 3/16" mounting hole.

Part #: RS7070 25/pk

BEAM CLAMPS

The first tap on beam clamp that does the job of three parts

Built-in Cable Tie



**Now 1 Part Does
The Work of 3**

**LESS
LABOR
TIME
AND
COST**



RedGear Tap On Beam Clamp

NEW 3 IN 1 BEAM CLAMP



RedGear
MADE IN AMERICA

RedGear Beam Clamp (with Built-in Cable Tie)

Fire Resistant Nylon 6.6
Combines a beam clamp and cable tie all in one for easy use. Rated from -100°F to 392°F (-73°C to 200°C).

Size: 1/4", 5/16", 3/8"
Part #: RG1117L 50/pk
Part #: RG1117C 100/pk

Size: 7/16", 1/2"
Part #: RG1118L 50/pk
Part #: RG1118C 100/pk

The **RedGear** Tap on Beam Clamp is a Beam Clamp, Cable Tie, Cable Clip and Push Pin All In One



STANDARD BEAM CLAMPS



Standard Beam Clamp Zinc Plated Steel

For material thickness up to 7/8" (22.2mm.) Must use with Cable Clip #RS7049C and Push Pin #RS7070 as shown, but not included.

Part #: RS7052L 50/pk



Standard Beam Clamp Spring Steel

For material thickness up to 1/2" (12.7mm.) Must use with Cable Clip #RS7049C and Push Pin #RS7070 as shown, but not included.

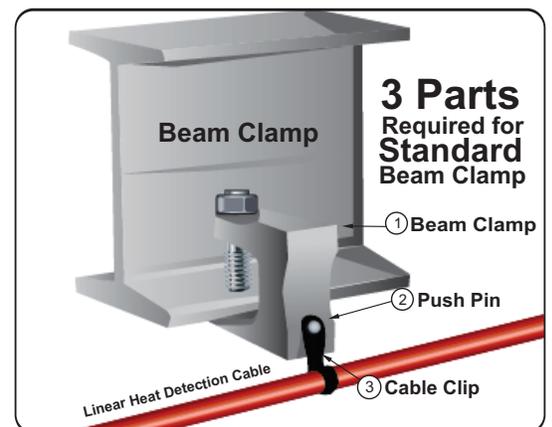
Part #: RS7051C 100/pk



Standard Hammer on Beam Clamp

Spring Steel
1/8" to 1/4" (3.2 - 6.4mm) material thickness 5/16" to 1/2" (7.9 - 12.7mm) material thickness
Must use with Cable Clip #RS7049C and Push Pin #RS7070 as shown, but not included.

Part #: RS7060C (1/8"-1/4") 100/pk
Part #: RS7061C (5/16"-1/2") 100/pk



**3 Parts
Required for
Standard
Beam Clamp**

① Beam Clamp
② Push Pin
③ Cable Clip

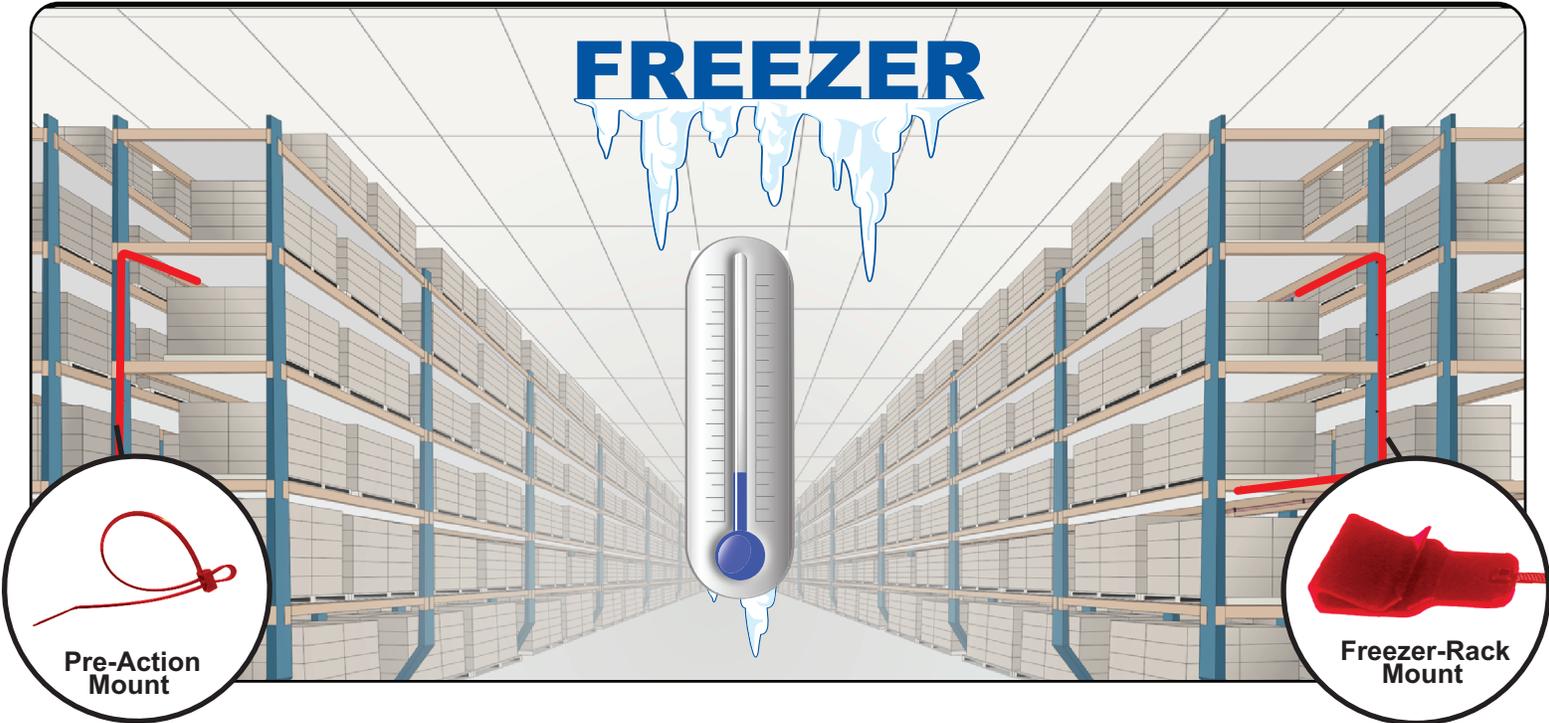
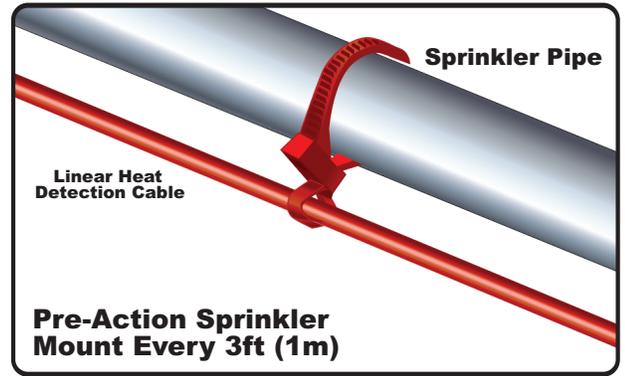
Linear Heat Detection Cable

NOTE: Standard beam clamps require push pin #RS7070 pg. 31 and cable clip #RS7049C pg 31

FREEZER MOUNTS

New push on rack mount with built-in cable tie and double loop pre-action sprinkler pipe cable ties

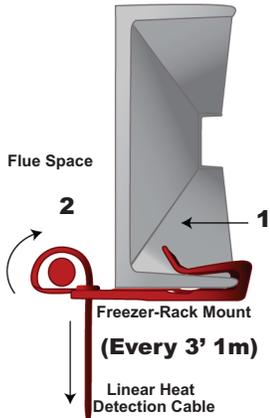
Reduce Installation Time



FREEZER MOUNTS

3" C Channel Rack Mount:

- 1 Push mount on rack.
- 2 Secure Linear heat detection cable with built-in cable tie.



RedGear Freezer-Rack Mount

Fire Resistant Nylon 6.6
Very Durable, cold resistant mount for use in freezers. Mount on C channel in the back of flue space as shown. Rated from -100°F to 392°F (-73°C to 200°C).

Part #: RG1128C 100/pk
Part #: RG1128M 1000/pk



RedGear Pre Action Double Loop Cable Ties

Fire Resistant Nylon 6.6
Very durable, highly reliable cable ties, use to mount LHD cable on Pre-Action Sprinkler Systems
Fits 3/4"-2" (2cm-5cm) Pipe.
For cold and warm environments. Rated from -100°F to 392°F (-73°C to 200°C).
Length: 11 7/8" (30.16cm)

Part #: RG1112C 100/pk
Part #: RG1112M 1000/pk



RedGear Pre Action Double Loop Cable Ties

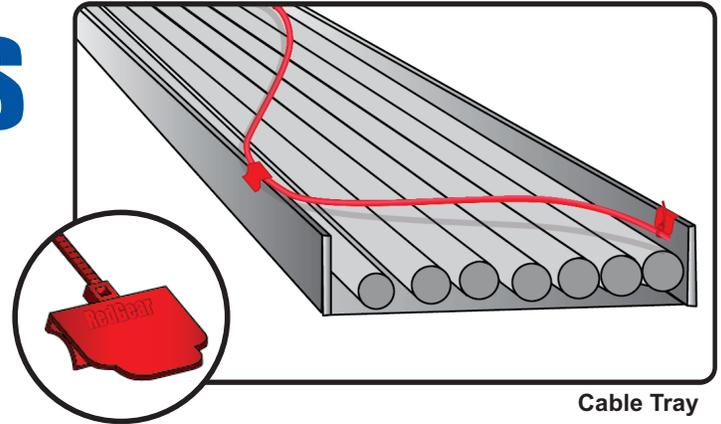
Fire Resistant Nylon 6.6
Fits 2 1/2" - 3 1/2" (6cm - 8.9cm) Pipe
Very durable, highly reliable cable ties use for cable ties, to mount LHD cable on Pre-Action Sprinkler Systems. For cold and warm environments. Rated from -100°F to 392°F (-73°C to 200°C).
Length: 14 7/8" (37.78 cm)

Part #: RG1113C 100/pk
Part #: RG1113M 1000/pk

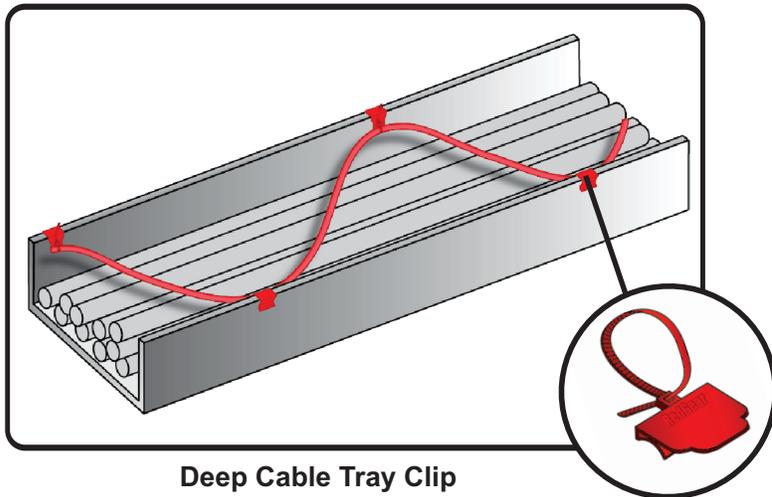
CABLE TRAY CLIPS

New all in one clip does the job of what used to take three parts

One Part Does it All



Cable Tray



Deep Cable Tray Clip

Don't Buy Three Parts When You Only Need One!

CABLE TRAY CLIP



Standard Deep Cable Tray Mounting Clip

Steel. Must use with Cable Clip #RS7049C and Push Pin #RS7070 as shown, but not included.

Size: 1/16" to 5/32" (1.6 - 4mm)
Part #: RS7058 100/pk

Size: 5/32" to 1/4" (4 - 6.4mm)
Part #: RS7059 100/pk



Standard Cable Tray Mounting Clip

Zinc Plated Steel. Use with standard cable trays.

Size: 1/16" to 1/4" (1.6 - 6.4mm)
Part #: RS7057 100/pk

NOTE: Standard cable tray mounting clips require push pin #RS7070 pg. 31 and cable clip #RS7049C pg. 31



CABLE TRAY CLIP



RedGear

RedGear Cable Tray Clip

Fire Resistant Nylon 6.6

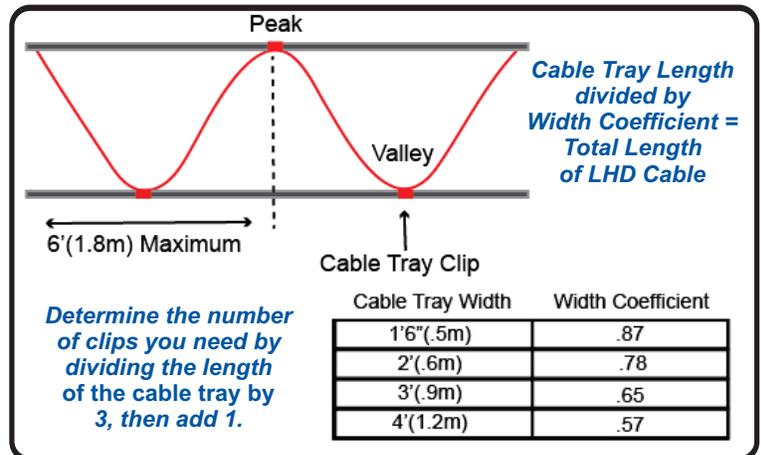
Used in cable trays to mount LHD cable. Rated from -100°F to 392°F(-73°C to 200°C).

Cable Tray

Size: 1/16"-1/4"(1.6 - 4mm)

Part #: RG1120C 100/pk

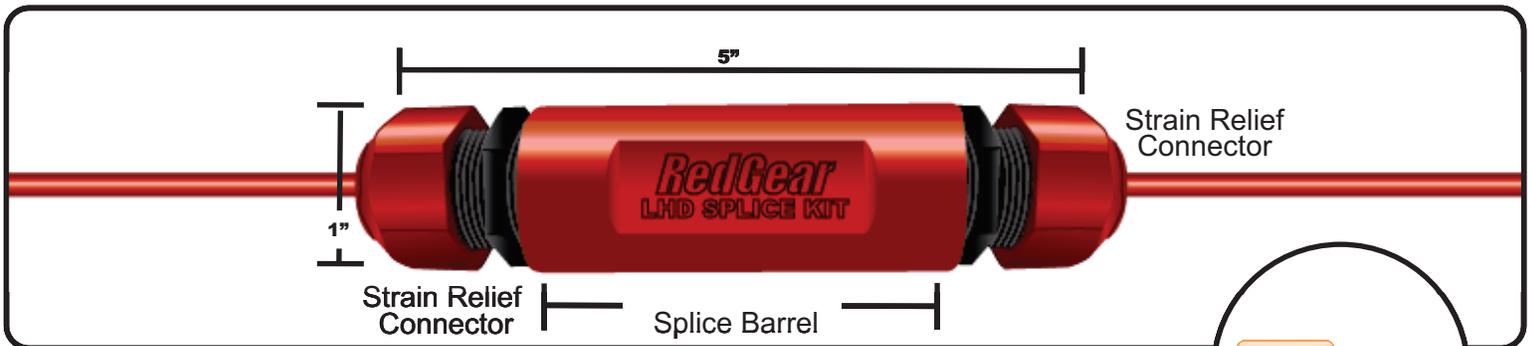
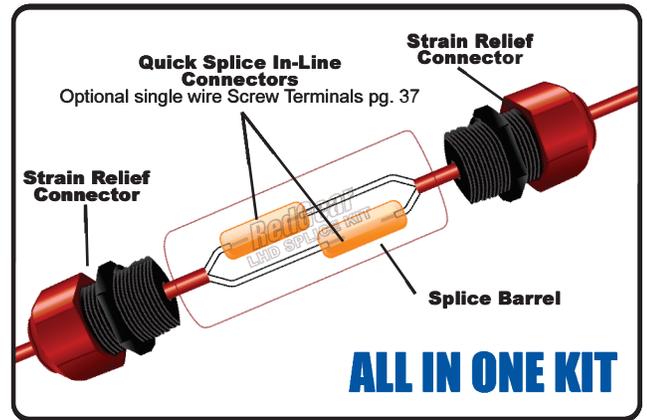
Part #: RG1120M 1000/pk



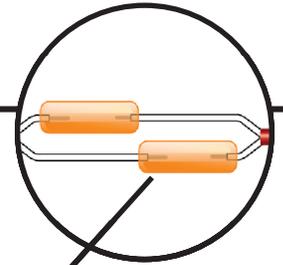
Sine Wave Calculation for Cable Tray

RedGear SPLICE KIT

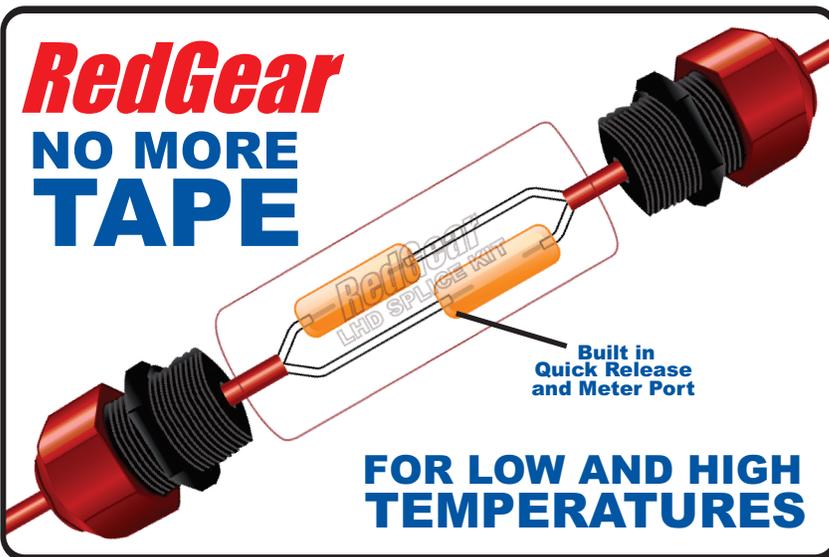
No need to replace entire cable,
no more tape or screws needed



NEW WEATHERPROOF SPLICE FOR LHD
USE WITH QUICK SPLICE IN-LINE CONNECTOR



FAST & EASY TO INSTALL
IN DIFFICULT INSTALLATIONS



SPLICE KIT

RedGear



RedGear Splice Kit

Fire Resistant

New engineered weatherproof splice kit for LHD cables. Comes with two strain relief connectors, barrel and two Quick Splice In-line Connectors. Rated from -100°F to 392°F (-73°C to 200°C).

Part #: RG1126

NOTE: Optional Single Wire Screw Terminal pg. 37
Due to offset, two point screw Terminals WILL NOT FIT.



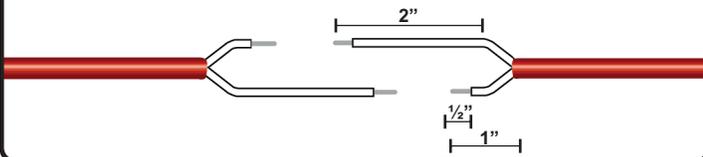
REDGEAR SPLICE KIT INSTRUCTIONS

TYPICAL SPLICE EXAMPLE: NEW REDGEAR SPLICE KIT NO MORE TAPE, NO MORE LEAKS

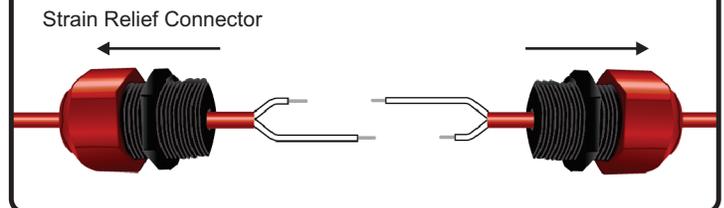


INSTRUCTIONS

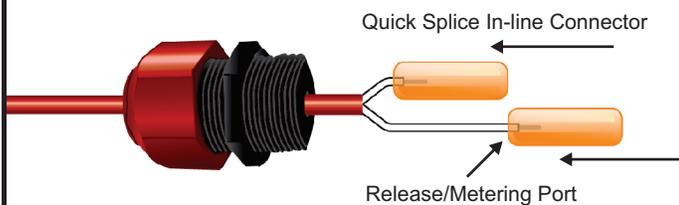
1. Strip outer LHD jacket back 2" on 1st end of LHD to be spliced. Cut one of the inner conductors 1" shorter than the other. Strip the inner conductors back 1/2". Repeat on the other LHD cable to be spliced.



2. Slide a Strain Relief connector on the end of each LHD cable. As illustrated.



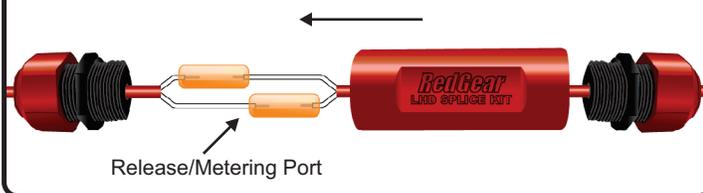
3. Quick Splice In-Line connector on two of the inner conductors on one of the LHD cable ends until it stops.



4. Slide the splice barrel onto one of the LHD cable ends.



5. Attach the other LHD cable to the opposite end of the Quick Splice In-line connectors to complete the splice.



6. Screw the two strain relief connectors onto the splice barrel and tighten. You have completed your splice.

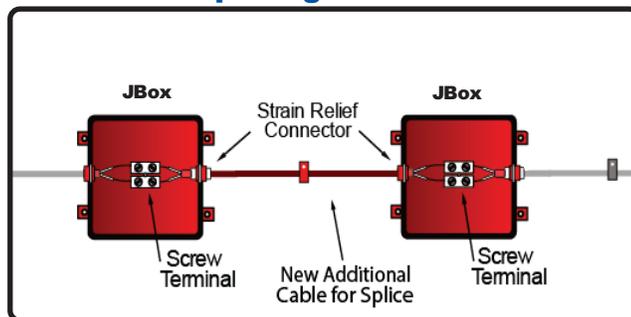


• Note: The Quick Splice In-Line Connectors have a release and metering port for easy service.

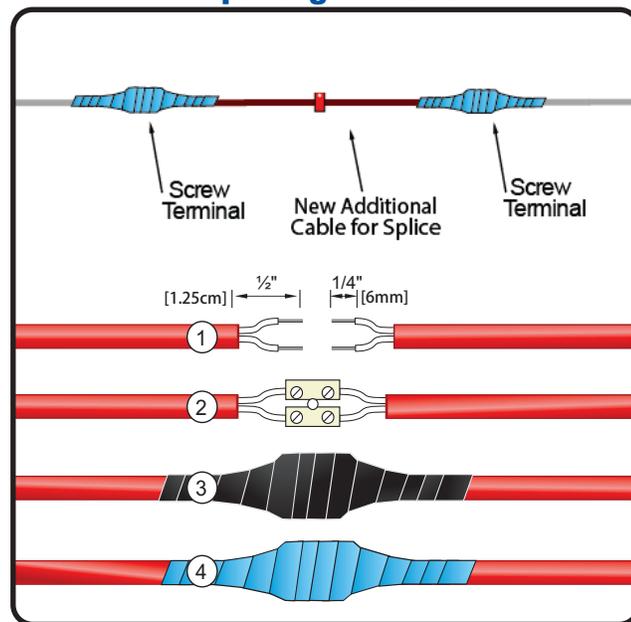
TRADITIONAL WAYS TO SPLICE

JBoxes, Screw Terminals and quick splice In Line Splice Connectors
 (SEE PAGE 35-36 FOR NEW REDGEAR SPLICE KIT)

JBox Splicing Method



Screw Terminal Splicing Method



SPLICING TAPE



Standard Splicing Tape

Use with Screw Terminal for all Indoor Splices, when not using a RedGear splice kit.

Part #: RS7044 Red
 Part #: RS7045 White
 Part #: RS7046 Blue



Sealant Tape

For splices in addition to standard splicing tape to help waterproof the splice.

Part #: RS7042



Low Temperature Splicing Tape

Use with Screw Terminal/In Line Splice Connectors for indoor splicing in low temperature applications when not using RedGear splice kit.

Part #: RS7048

EXTRA ACCESSORIES



Quick Splice In Line Splice Connector

Used as an alternative way to splice cable instead of a screw terminal (see bottom image on right.) are 18-22AWG with quick release and metering port.

Part #: RG1127



Single Wire Screw Terminal

For all Cable splices and connections in J/ELR-Boxes and HDJ/ELR-Boxes. Used as an optional way to splice cable inside of the RedGear Splice kit.

One Terminal Part #: RS7072

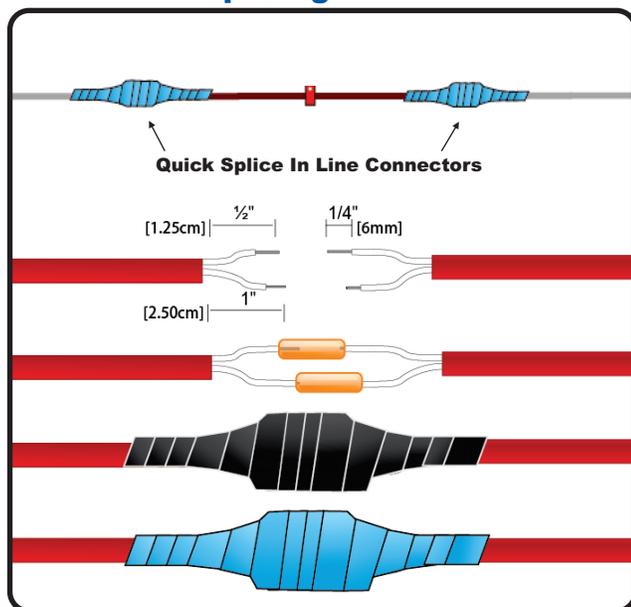


Double Wire Screw Terminals

For all Cable splices and connections in J/ELR-Boxes and HDJ/ELR-Boxes.

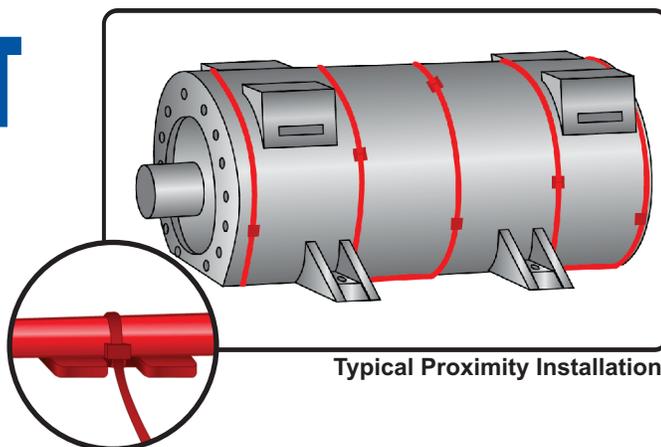
Two Terminal Part #: RS7041
 Six Terminal Part #: RS7047

In Line Splice Connectors Splicing Method



UNIVERSAL MOUNT

Surface, ceiling, racks, cabinets, walls, for use in all applications almost anywhere



Typical Proximity Installation

SURFACE MOUNT & CABLE TIE IN ONE

**LESS
LABOR
TIME
AND
COST**

Universal Mount Linear Heat Detection Cable
Built-in Cable Tie

NEW 2 IN 1 UNIVERSAL MOUNT

FIRE RESISTANT

One Size Fits All LHD Cables



No More Need to Buy Multiple Parts!



Vs.



SURFACE MOUNTS AND ADHESIVE



RedGear Universal Mount with Cable Tie



Standard Universal Surface Mount



Sold Separately



Standard Surface Mount Adhesive

Fire Resistant

Use with Surface Mount Adhesive or screws and bolts when drilling into mounting surface.

Temperature: Rated from -100°F to 392°F (-73°C to 200°C).

Part #: RG1123C 100/pk
Part #: RG1123M 1000/pk

Adhesive Backed For environments between 0°F to 180°F (-17.8°C to 82°C). Use with Surface Mount Adhesive or screws and bolts when drilling into mounting surface.

Need Cable Tie for Installation. **Sold Separately**
Part #: RS7055C Price: pg. 30

Part #: RS7054C 100/pk

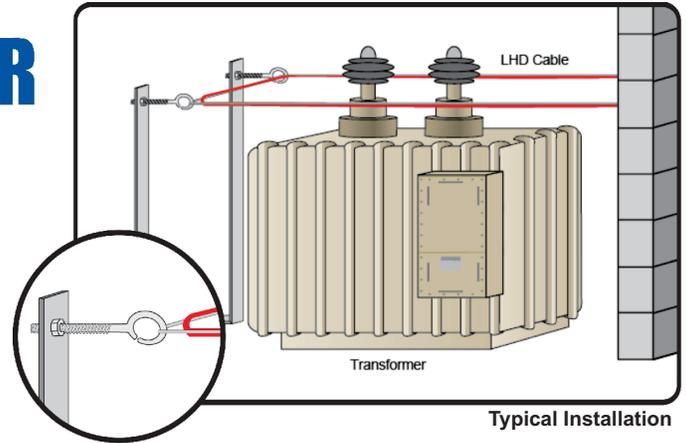
For securing Mount to surface. Used with Standard and RedGear Surface Mounts to adhere to surface that cannot be drilled into.

Part #: RS7056

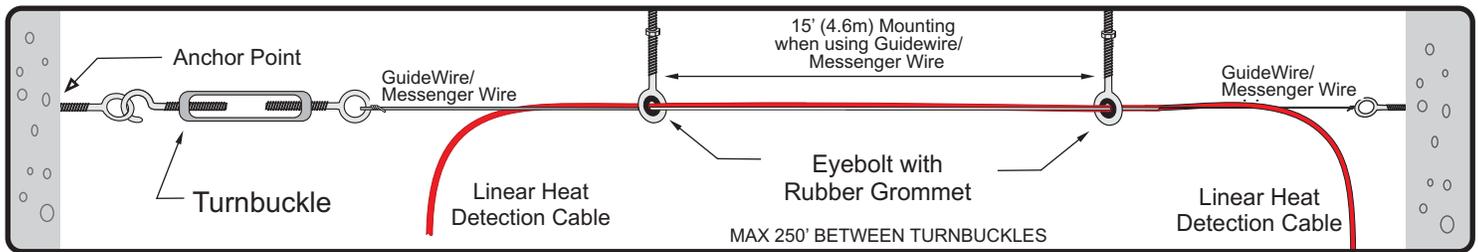
GUIDEWIRE/MESSENGER WIRE SUPPLIES

When you need to suspend LHD cable over hazards

RedGearMfg.com

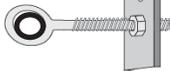


Typical Configuration of Linear Heat Detection Cable with Support Cable:



L-BRACKETS

DO NOT USE L-BRACKETS AS AN ANCHOR POINT



RedGear L-Bracket, Nylon 6.6

Fire Resistant

For suspending detection cable on or around equipment or other various uses. Rated from -100°F to 392°F (-73°C to 200°C). Length: 6 1/2"

10 HOLES

Part #: RG1122X 10/pk



L-Bracket, Zinc Plated Steel

For suspending detection cable on or around equipment or other various uses. Length: 6 1/2" Hole Size: 3/16"

6 HOLES

Part #: RS7053

EYE BOLTS AND TURNBUCKLES



Threaded Eyebolt Zinc plated or Stainless Steel

For suspending LHD Cable every 15'. Includes one 1/4" (6.4mm) nut. Second nut required to lock #RS7066Z OR #RS7066S. GROMMET REQUIRED; not included. Length: 4"

Part #: RS7065Z (ZINC) 10/pk
Part #: RS7065S (STAINLESS)



Insulating Grommet

Rubber Grommet for use in Eyebolt to insulate and prevent damage to LHD cable.

Part #: RS7067C 100/pk



Locknut Zinc plated or Stainless Steel

Use as second nut to lock Eyebolts.

Part #: RS7066ZC (ZINC) 100/pk
Part #: RS7066SC (STAINLESS) 100/pk



Turnbuckle Zinc plated or Stainless Steel

(Aluminum Body)
Used to fasten and tighten Wire attached to Cable for suspended lengths up to 250 feet (76m.) length: 4"

Part #: RS7069Z (ZINC)
Part #: RS7069S (STAINLESS)

Terms and Conditions

Manufacturer's Warranty:

RedGear Mfg.'s Accessories are made for Linear Heat and Air Sampling Detection Systems only.

Seller warrants that Accessories purchased from RedGear Mfg. will, under normal use and service, be free from defects in material and workmanship for a period of one (1) year from the date of original sale. Seller agrees, upon written notice from Buyer given no later than 30 days after the defect is discovered, to repair or replace, at the Seller's option, any part, which after examination by Seller, is disclosed to have been defective, provided that such product is returned to the Seller transportation prepaid, during the warranty period. This warranty does not apply to any item not completely assembled or damage resulting from accident, improper installation, misuse or abuse. The full extent of Seller's warranty obligations are to repair or replace any defective part. Transportation to and from RedGear is the responsibility of the buyer.

There are no other warranty obligations of seller, including any warranty of merchantability or fitness for a particular purpose, either expressed or implied. Seller is not liable for any other costs, delays, labor charges, shipping or handling charges for warranty parts, or claims, nor for any consequential or incidental damages with respect to the product.

Ordering Information:

- All orders should be placed through RedGearMfg.com or can be emailed to customerservice@RedGearMfg.com.
- All orders placed are subject to approval and acceptance by RedGear MFG.
- RedGear accepts your order on the basis of price in effect at time of shipments.
- Part numbers must be used when placing orders via email. All prices are FOB ship point.
- Most current catalog supercedes all others.

Terms:

- RedGear Guarantees that all Official RedGear Products, (does not include standard products), will be the lowest cost available. If the customer finds a lower "Published" price on a RedGear Item, RedGear will match the price of the item.
- All payments must be made in US dollars.
- Possession of any price sheets does not constitute a valid distributorship.
- A valid distributorship is defined solely by RedGear MFG.
- Customer credits will be applied to open and future orders only.
- All Non-Warranty returns are subject to a minimum 50% Restocking Charge.
- Due to offsite document storage and retrieval, credit memos not applied within the calendar year it is purchased will be forfeited.
- Terms subject to change without notice.
- For credit terms 100.00 minimum order, contact customerservice@redgearmfg.com for details.

Shipping/Freight Information:

- RedGear reserves the right to ship all orders by the shipping service of our choice.
- Free Shipping is for orders over \$500.00 US dollars or more and is for DOMESTIC customers only. Subject to change any time, if additional discounts are given free shipping does not apply.
- RedGear reserves the right to ship all orders by the shipping service of our choice.
- Same day shipping is available upon request and availability. Purchase order must be entered into our system by 2:00 PM EST.
- A \$100.00 USD expediting charge will be added to the normal shipping charges on any expedited order.
- Customer is responsible for any special shipping request charges.
- Overnight shipping is available for an additional fee, please contact customerservice@redgearmfg.com for details
- Same day shipping is available upon request (please email customerservice@redgearmfg.com for details) and availability. Purchase order must be entered into our system by 2:00PM EST, and is an additional \$100.00.
- Customer is responsible for any special shipping request charges.
- Shipments are not insured. Insurance is available for an additional fee. Contact Customer Service at Customerservice@redgearmfg.com for assistance.

Delivery Date:

Unless expressly specified to the contrary, goods in stock will be shipped without delay, and goods not in stock will be shipped as soon as possible. However, all estimates of delivery time are approximate and failure to effect shipment of an accepted order by estimated delivery date will not be considered sufficient cause of cancellation.

Delays:

Seller shall not be liable for any damage, fault or delay caused by or imposed by strikes, fires, major disasters, acts of nature, governmental action, shortage of labor, power, materials, or any other cause or condition beyond Seller's control.

Transportation Charges:

- Unless otherwise specifically provided, the price of the goods sold is FOB Indian Trail, NC.
- Freight will be added to invoice cost plus a \$12.00 USD handling fee, \$50.00 USD handling for skidding requests and \$250.00 USD handling for crating requests.
- Shipments are not insured. Insurance is available for an additional fee. Contact Customer Service at Customerservice@redgearmfg.com for assistance.
- Title to the goods sold passes to the Buyer upon delivery by RedGear to the carrier, and any claims for losses or damage in transit shall be filed by Buyer directly with the carrier, regardless of the fact that freight is prepaid by RedGear.
- Cancellation or suspension of orders will be accepted by RedGear only upon terms that will indemnify us against loss. RedGear also reserves the right to charge a cancellation or suspension fee.
- Postponement of deliveries at buyer's request, if for a period of more than thirty (30) days, will not be made without prior approval from RedGear. In the absence of such indemnification, RedGear shall be entitled to recover all damages and costs of whatever nature permitted by the Uniform Commercial Code indemnification.

Taxes:

- Prices do not include sales, use, excise or similar taxes, whether federal, state or local.
- The amount of any such taxes applicable to the goods shall be paid by the Buyer in the same manner and with the same effect as if originally included in the purchase price.

General Conditions:

- No agent, salesperson, or other party is authorized to bind RedGear by any agreement, warranty, statement, promise or understanding not herein expressed.
- The sale of the goods pursuant to this order shall be governed by the laws of North Carolina in which the order is accepted and from which the equipment is shipped; and any such sale or contract shall be deemed to be a sale and/or contract of North Carolina. In addition to the rights and remedies conferred upon RedGear by law, RedGear shall not be required to proceed with the performance of any order or contract if Buyer is in default in the performance of any order or contract with RedGear and in case if doubt as to Buyer's financial responsibility, shipments under this order may be suspended or sent sight draft with bill of lading attached by RedGear.
- Any clerical errors are subject to correction.
- By placing an order with RedGear, you accept all terms and conditions expressed herein.

Claims:

- Claims for shortages and damaged goods must be made on the delivering carrier.
- For incorrect material, contact our Customer Service Department at customerservice@redgearmfg.com
- All claims must be made to RedGear within 30 days from date of shipment.

Return Material Authorization (RMA): No RMAs are processed after 2:00 p.m. EST

Warranty RMA Procedure

1. An RMA will be generated by our Customer Service Department and emailed to you.
2. Once the part has shipped, the invoice is emailed to you.
3. You must include the RMA in the box with the returned part and a note indicating the failure.
4. When the part arrives at RedGear, the Technical Department will inspect the returned item for physical damage.
5. Pending approval from our Technical Department, Accounting will email the credit for the amount of the part, but **NOT THE FREIGHT.**

Note:

- All shipping charges are the responsibility of the customer returning the parts.
- Parts must be returned to RedGear within 30 days to receive a credit or a replacement.
- If order was prepaid with credit card, defective parts must be returned prior to replacement being shipped.

Return RMA Procedure

1. An RMA will be generated by our Customer Service Department and emailed to you.
2. You must include a copy of the RMA in the box with the returned part, and a note indicating the reason for the return.
3. When the part arrives at RedGear, the Technical Department will inspect the returned item for physical damage. Only complete part packages and assemblies as originally purchased can be returned.
4. Pending approval from our Technical Department, Accounting will credit you the amount of the part less the restocking fee and freight.
5. All Non-Warranty returns are subject to a minimum 50% Restocking Charge.

Note:

- All shipping and restocking charges are the responsibility of the customer returning the parts.

Notes:

1. No discount prices are offered, all prices are as printed in this catalog.
2. Please refer to Terms and Conditions.
3. A \$100.00 USD expediting fee will be charged on all expedited orders.
4. Subject to \$12.00 Dollar Handling Fee on all orders.
5. Prices subject to change without notice.
6. All Non-Warranty returns are subject to a minimum 50% Restocking Charge.

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The **ONLY** pipe specifically
listed for air sampling
smoke detectors

RedPipe



UL Listed for use in Plenum Spaces

Printed in the U.S.A.