



[www.safefiredetection.com](http://www.safefiredetection.com)

# *RedGear & RedPipe*<sup>®</sup>

*Custom Installation Supplies*

LINEAR HEAT &  
AIR SAMPLING  
INSTALLATION  
MATERIALS



Scan QR Code  
For More  
Information

## 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.



## 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 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



MADE IN THE USA

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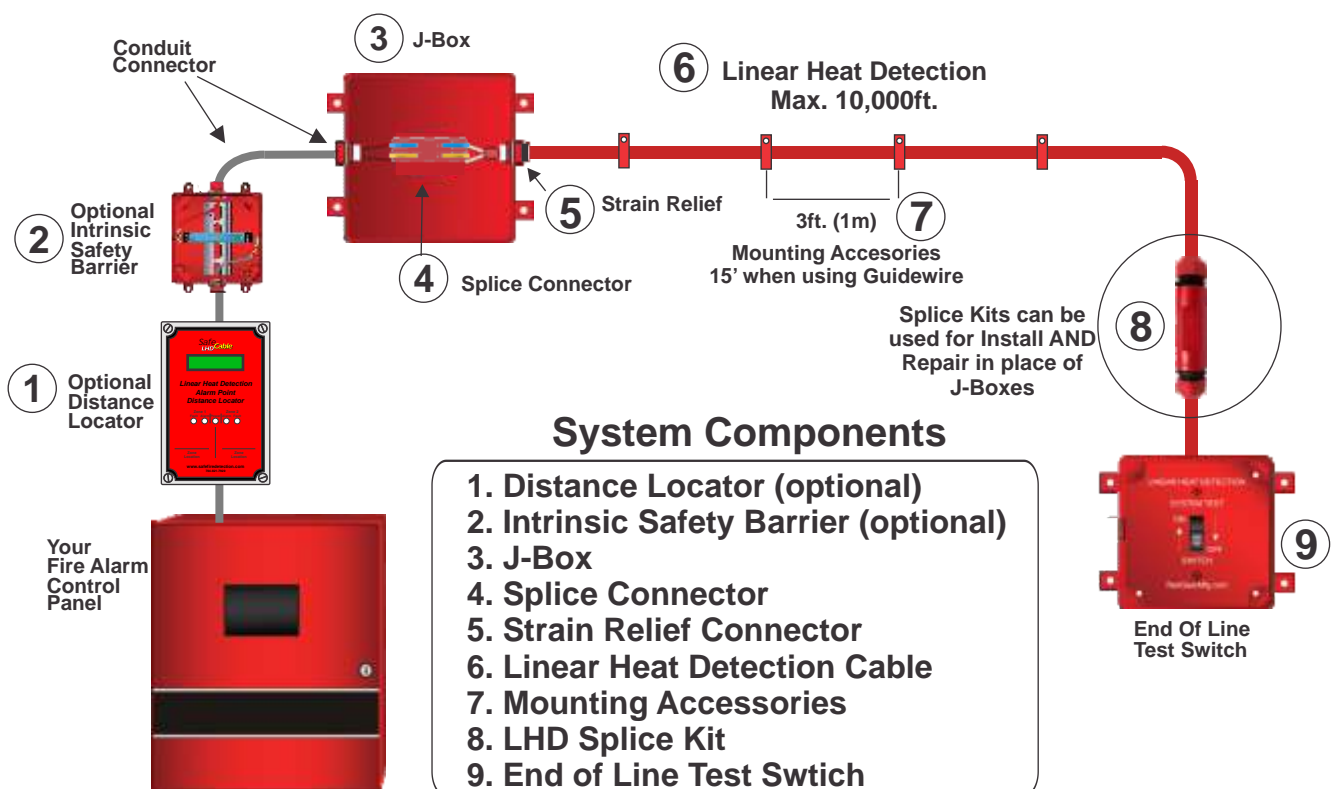


5915 Stockbridge Dr. • Monroe, NC 28110  
Tel: 704-821-7920 • Fax: 704-821-4327

# RedGear

## Linear Heat Detection System Examples:

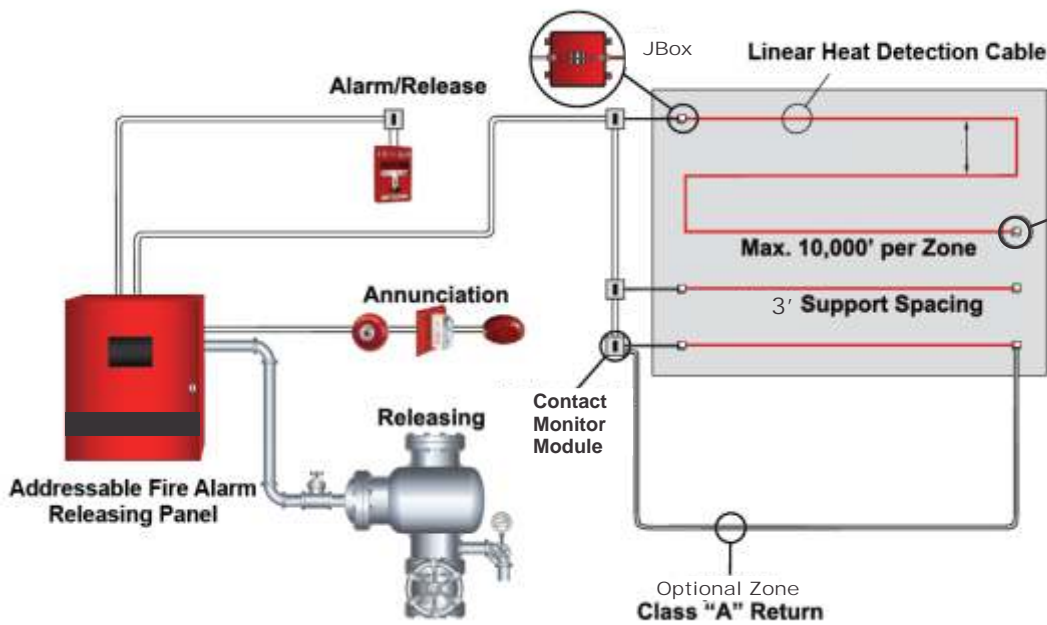
### Typical System Example



For More Information on Linear Heat Detection Systems Visit:  
[www.safefiredetection.com](http://www.safefiredetection.com)

or  
Call 704-821-7920

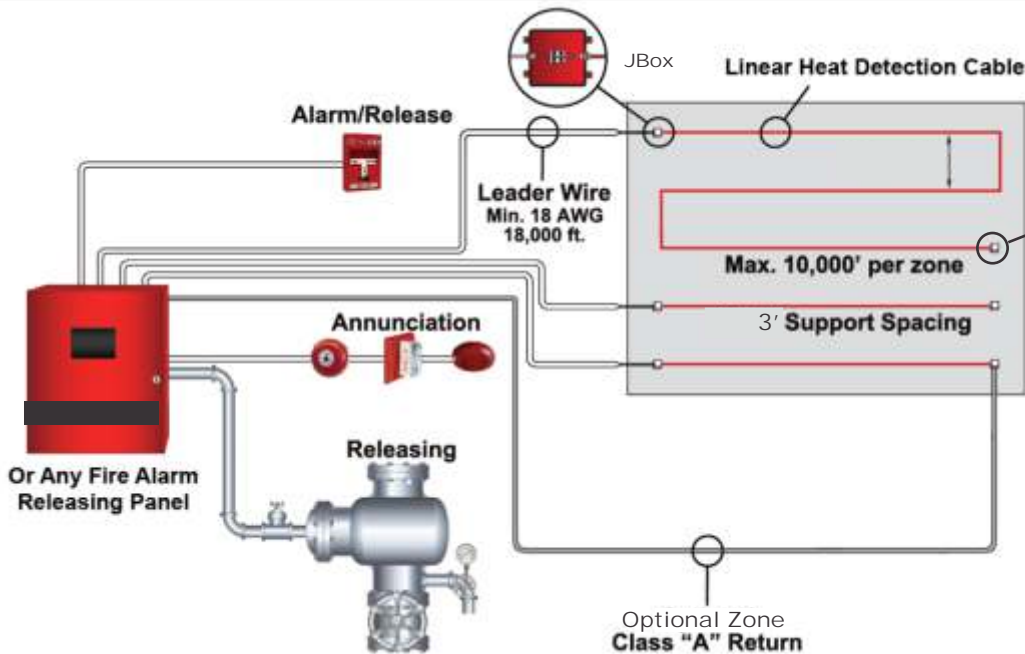
## ADDRESSABLE SYSTEM EXAMPLE



ADDRESSABLE SYSTEM

ONE LINEAR HEAT DETECTION SYSTEM PER CONTACT MONITOR MODULE

## CONVENTIONAL SYSTEM EXAMPLE



CONVENTIONAL SYSTEM

ONE LINEAR HEAT DETECTION SYSTEM PER ZONE ON PANEL

# APPLICATION EXAMPLES

## FLOATING ROOF TOP TANKS

To Determine Cable Amount:

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

*r=Radius C=Circumference*  
 Ex. (2 x 3.14 x 40 = 252ft of cable)

RedGear® JBox  
Part #: RG5222

## RACK STORAGE

Sprinkler Pipe  
LHD Cable  
FLUE

Mount Every 3' (1m)

Double Loop Cable Tie  
OR  
Freezer or Rack Mount

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

## GENERATORS

Universal Surface Mount with built in Cable Tie  
Fire Resistant

Can be mounted with screw or adhesive.

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

Surface Adhesive

\*3ft(1m) Spacing

## CONVEYORS

RedGear®  
Guidewire/Messenger Wire Support Supplies

There are four areas you could use linear heat detection to protect a conveyor from different fire scenarios

- Protection from suspended material
- Material pile-up
- Material spill
- Material pile-up

Mount 3' (1m)

Linear Heat Detection Zone

15' (4.5m) Mounting when using Guidewire/Messenger wire

Tighten from Both Ends

New easy to use Tensioner, tighten with a drill and socket.

Splice, End of Line or Box

Box for Test Switch

## TUNNELS

Equipment Room  
LHD Cable  
Up to 70,000 ft. per Zone  
Control Room  
Fire Alarm Control Panel

CABLE CLIP TIE

EyeBolt with Guide Wire every 15'(5m)  
OR  
Cable Clip Ties every 3'(1m).

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

## CABLE TRAYS

RedGear®  
Cable Tray Clip  
One Piece with built-in Cable Tie  
Fire Resistant

Peak  
Valley

6'(1.8m) Maximum

Cable Tray Length divided by Width Coefficient = Total Length of LHD Cable

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



Don't See Your Application Listed?  
Visit: [www.safefiredetection.com](http://www.safefiredetection.com)

or

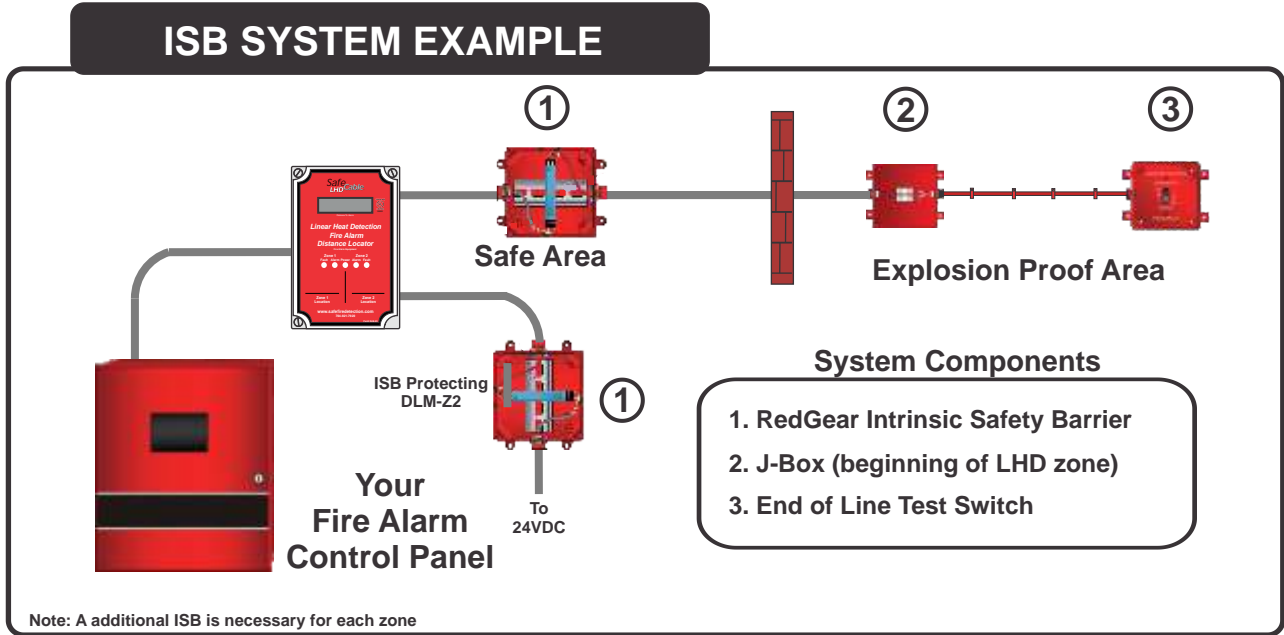
Call 704-821-7920

To See How We Can Help Protect Your Project

# INSTALLATION SUPPLIES

## ISB MODULE

*Intrinsic Safety Barriers for Explosive and Hazardous Areas*



### PRE-ASSEMBLED INTRINSIC SAFETY BARRIER

CONVENTIONAL



RedGear  
Conventional  
Intrinsic Safety  
Barrier  
Part #: RG5224

ADDRESSABLE



RedGear  
Addressable  
Intrinsic Safety  
Barrier  
Part #: RG5225

DISTANCE LOCATING\*



RedGear  
Distance Locating  
Intrinsic Safety  
Barrier  
Part #: RG5227

### REPLACEMENT SAFETY BARRIERS

ADDRESSABLE



Intrinsic  
Safety Barrier  
Part #: RS7124

CONVENTIONAL



Intrinsic  
Safety Barrier  
Part #: RS7122

DISTANCE  
LOCATING



Intrinsic  
Safety Barrier  
Part #: RS5227P01

**Note:** Intrinsic Safety Barriers are non-restorable. Once activated the Barrier will need to be replaced

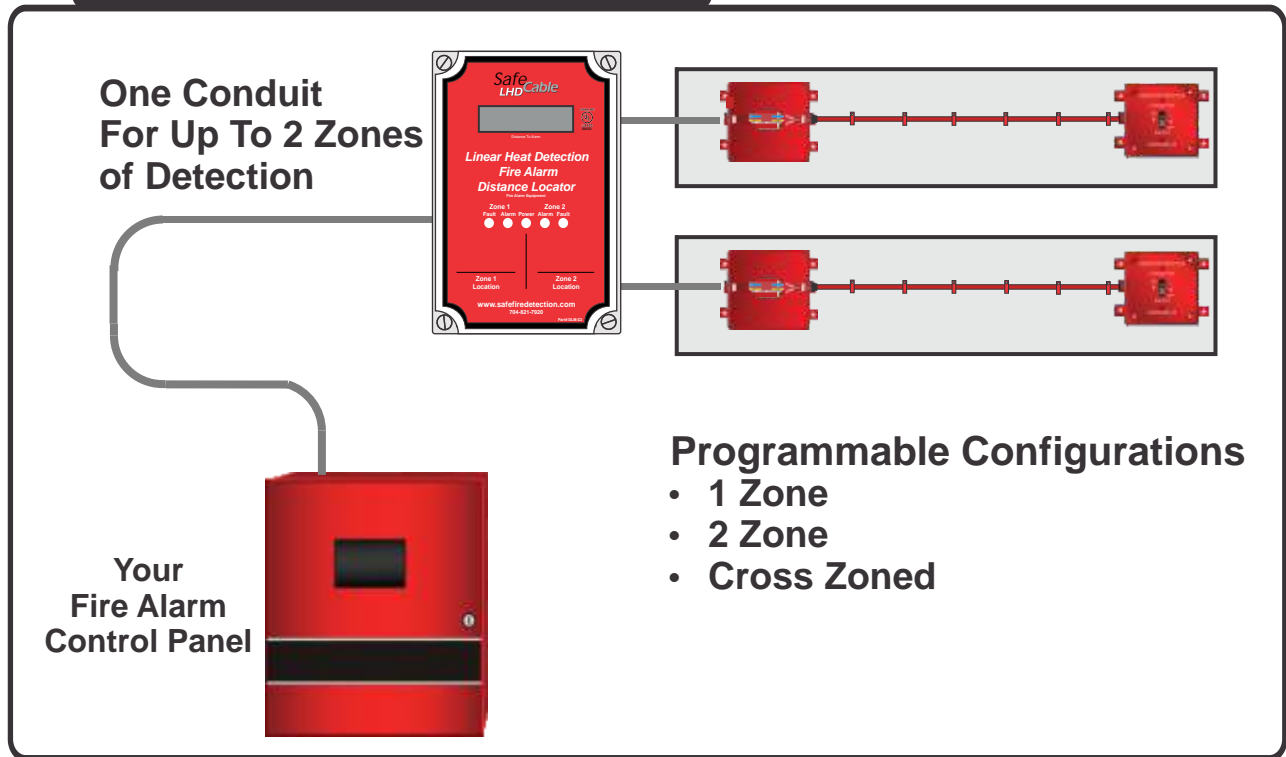
\*replaces Conventional or Addressable ISBs when Using Distance Locating

# DISTANCE LOCATOR

*Find The Location of Your Fire Event  
Can Be Used as a One Zone, Two Zone  
Or Cross-Zoned Systems*



## DLM-Z2 Example



## DLM-Z2 DISTANCE LOCATOR

Dimensions (W x H x D):	H7.1in x W4.72in x D2.38in (H180mm x W120mm x D60.5mm)
Weight:	1 lb. (0.45kg)
Operating Temperature:	-4°F – +122°F (-20°C – +50°C)
Power Requirements:	Normal Operation: 8mA @ 24VDC Alarm Point Locating: 28mA @ 24VDC
Systems:	Addressable or Conventional
Enclosure:	NEMA 4x
Max. LHD length:	10,000 ft. (3,000m)

## DLM-Z2 DISTANCE LOCATOR



RedGear **Distance Locator**  
**Part #: DLM-Z2**

# J-BOXES

No more Hole Saws Needed

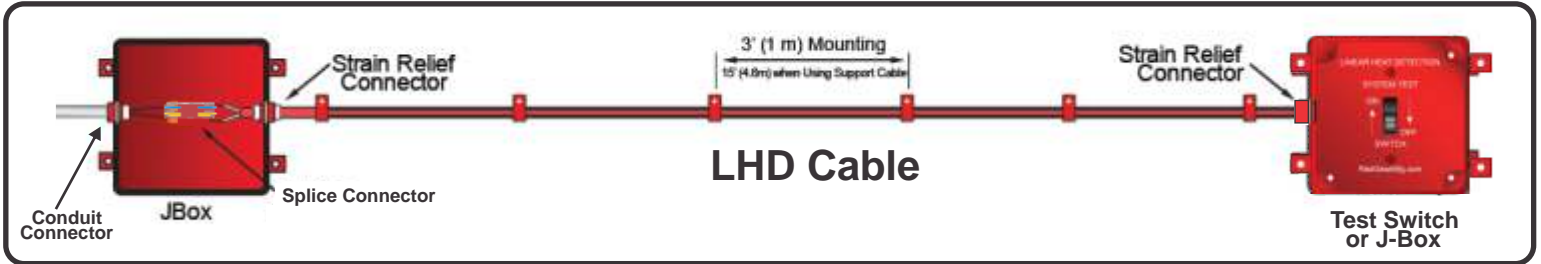
## Text Imprinted Covers



**NO MORE DRILLING**

NOTE: Text on product is not White

Spaces on cover to mark if the box is the J-Box or end of line



EASY TO USE:

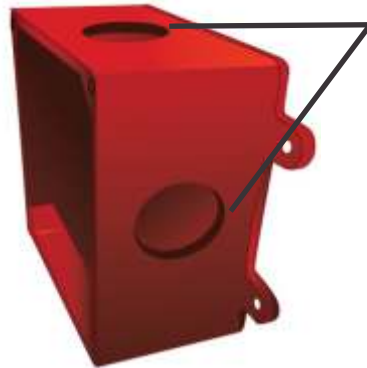
NO MORE HOLE SAWS



NOTE: Text on product is not White

NEW EZ KNOCKOUTS

NO HOLE SAWS REQUIRED



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

### ACCESSORIES

### J-BOX/EOL Box

RedGear®



**Strain Relief Connectors**

Nylon Part #: RG1110



**Strain Relief Connectors**

Zinc Part#: RS7030



**Splice Connector**

For Cable splices and connections in J/ELR-Boxes and HDJ/ELR-Boxes.  
Connector Part #: RG1136

RedGear® J-Box Part #: RG5222

FIRE RESISTANT & EZ KNOCKOUTS  
Dim.: 4" x 4" x 2" (10cm x 10cm x 5cm)  
Easy to use J-Box 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.



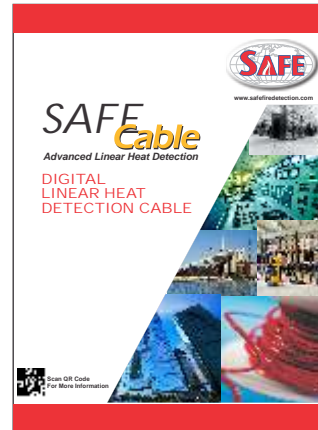
RedGear® J-Box Part #: RG5222

ALSO AVAILABLE FROM SAFE

# LINEAR HEAT DETECTION CABLE

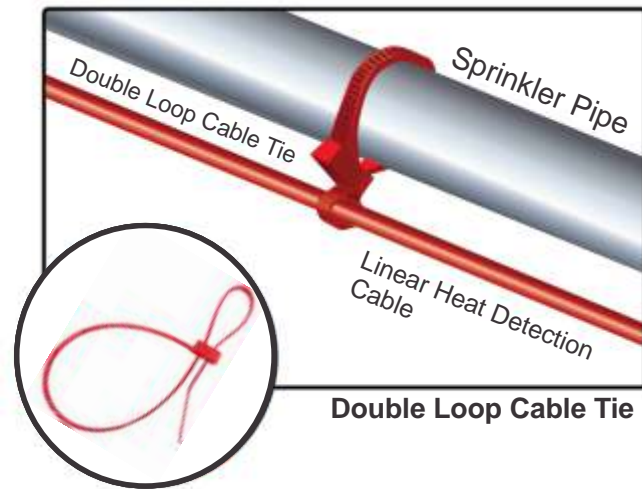
For Information on SafeCable LHD, a Catalog,  
Training, Project Assistance, Technical Support, or  
becoming a SafeCable Distributor  
visit

[www.safefiredetection.com](http://www.safefiredetection.com)



## CABLE TIES

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



### UNIVERSAL SMALL SINGLE LOOP TIE

RedGear® Small Single  
Loop Cable Ties  
Part #: RG1114C 100/pk  
Part #: RG1114M 1000/pk



### PRE-ACTION SPRINKLER PIPE DOUBLE LOOP

RedGear® Pre-Action  
Double Loop Cable Ties  
Part #: RG1112C 100/pk  
Part #: RG1112M 1000/pk

3/4" - 2"



### UNIVERSAL LARGE SINGLE LOOP TIE

Standard Extra Large  
Single Loop Cable Ties  
Part #: RS7064L 50/pk  
Note: RS7064L is black in color



### PRE-ACTION SPRINKLER PIPE DOUBLE LOOP

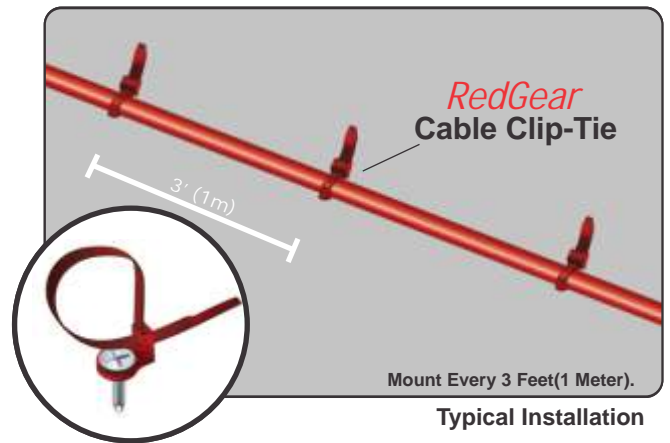
RedGear® Pre-Action  
Double Loop Cable Ties  
Part #: RG1113C 100/pk  
Part #: RG1113M 1000/pk

2 1/2" - 3 1/2"



# UNIVERSAL CABLE CLIP-TIE AND BEAM CLAMPS

*For use in all applications*



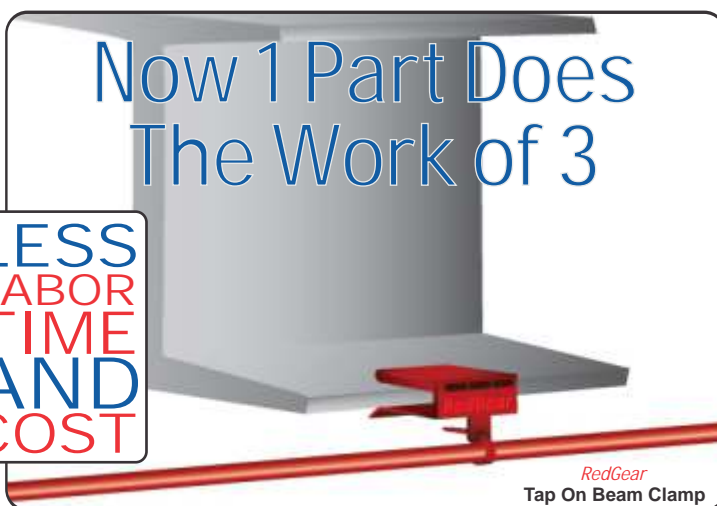
## 1 Piece Cable Clip-Tie

LESS  
LABOR  
TIME  
AND  
COST



Now 1 Part Does  
The Work of 3

LESS  
LABOR  
TIME  
AND  
COST



## 2 IN 1 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



## NEW 3 IN 1 BEAM CLAMP

RedGear®  
MADE IN AMERICA



### RedGear Beam Clamp (with Built-in Cable Tie)

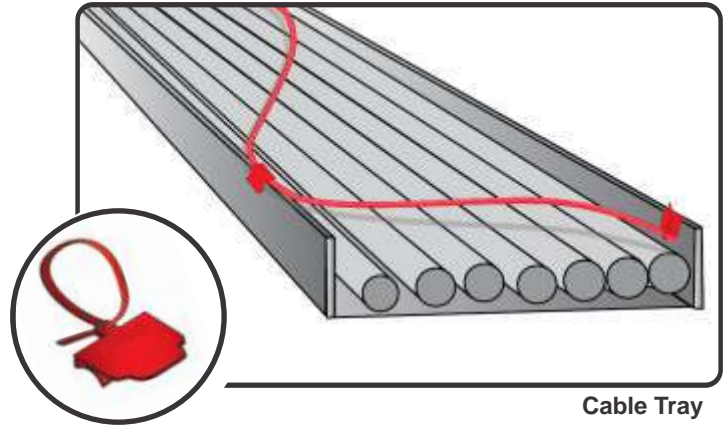
Fire Resistant Nylon 6.6  
Combines a beam clamp and cable tie all in one for easy use. Rated from  
-100°F to 392°F (-73°C to 200°C).

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

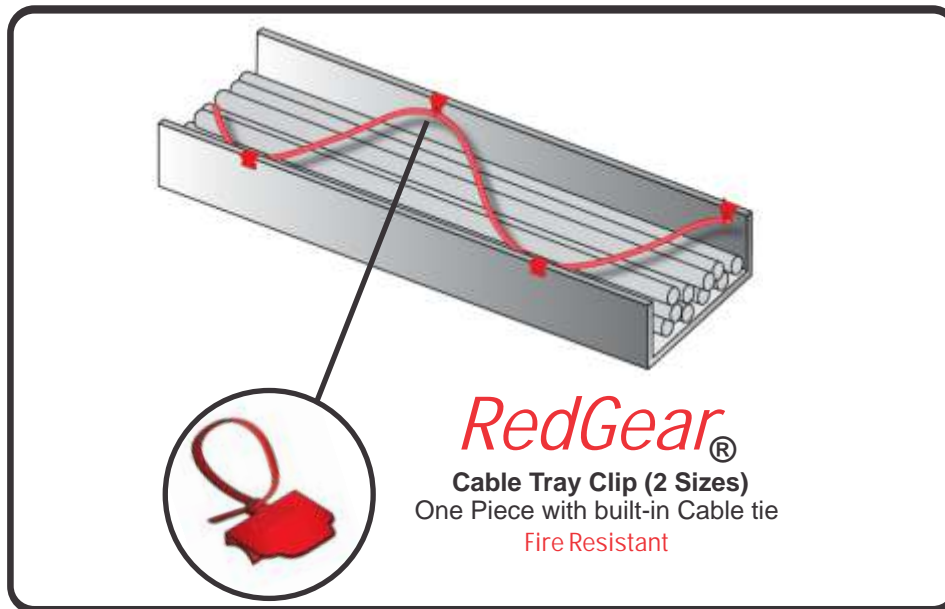
Size: 7/16", 1/2"  
Part #: RG1118L 50/pk  
Part #: RG1118C 100/pk

# CABLE TRAY CLIPS

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



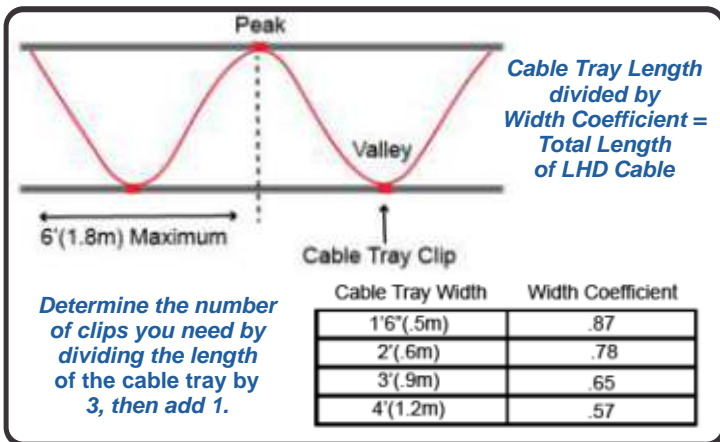
Cable Tray



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

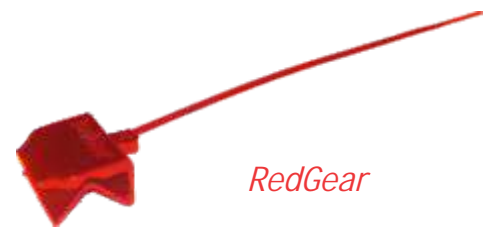
Cable Tray Clip

## CABLE TRAY CLIP SPACING



Sine Wave Calculation for Cable Tray

## CABLE TRAY CLIP



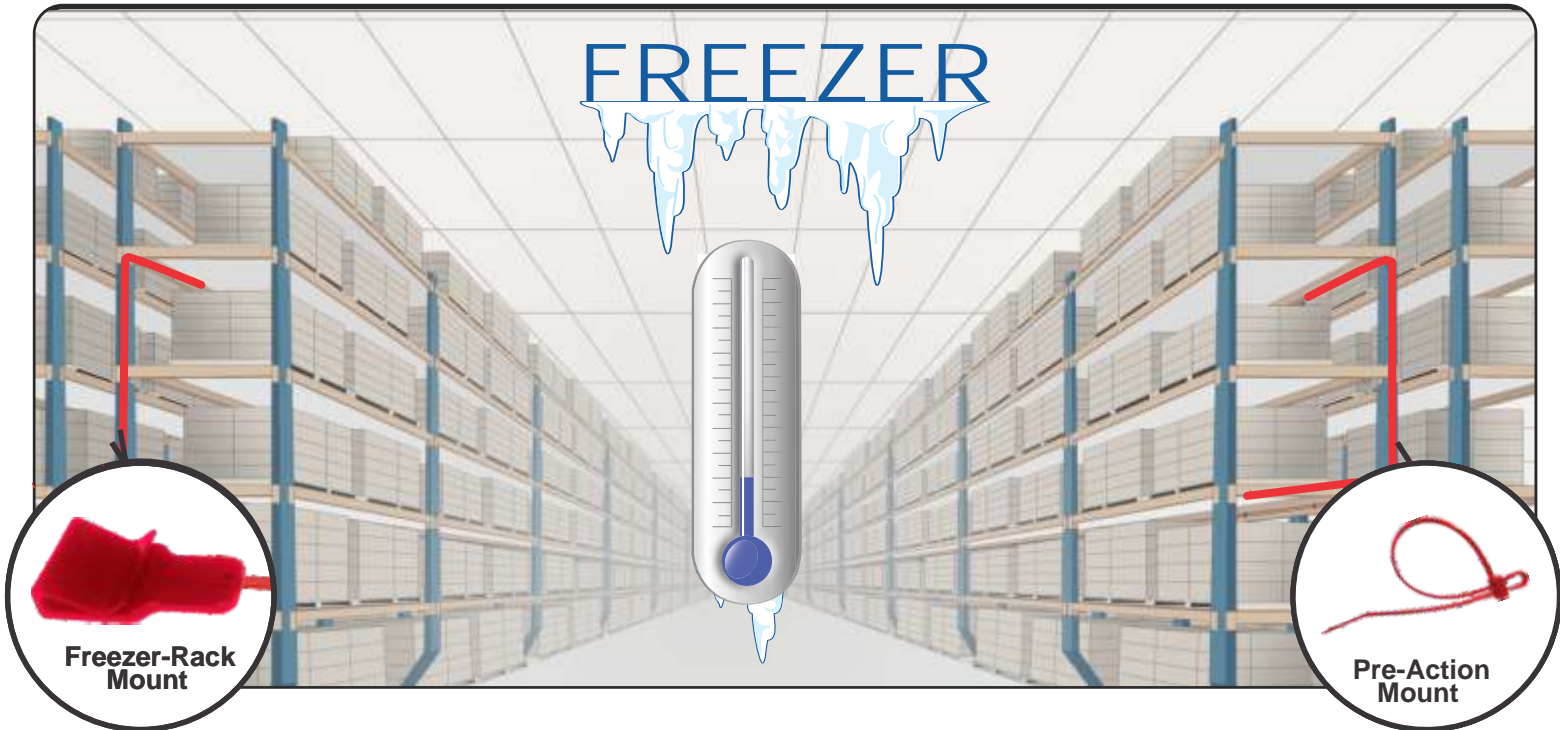
RedGear Cable Tray Clip

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).

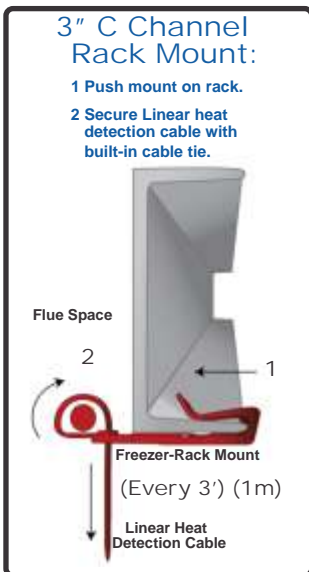
**Cable Tray**  
**Size: 1/16"-1/4" (1.6 - 4mm)**  
**Part #: RG1120C 100/pk**  
**Part #: RG1120M 1000/pk**

# FREEZER MOUNTS

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



## FREEZER RACK MOUNTS



**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**

## FREEZER PREACTION MOUNTS



**RedGear Pre Action Double Loop Cable Ties**

Fire Resistant Nylon 6.6  
Fits 3/4"-2" (2cm-5cm) Pipe.  
Very durable, highly reliable cable ties, use 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: 11 7/8" (30.16cm)

**Part #: RG1112C 100/pk**

**Part #: RG1112M 1000/pk**



**RedGear Pre Action Double Loop Cable Ties**

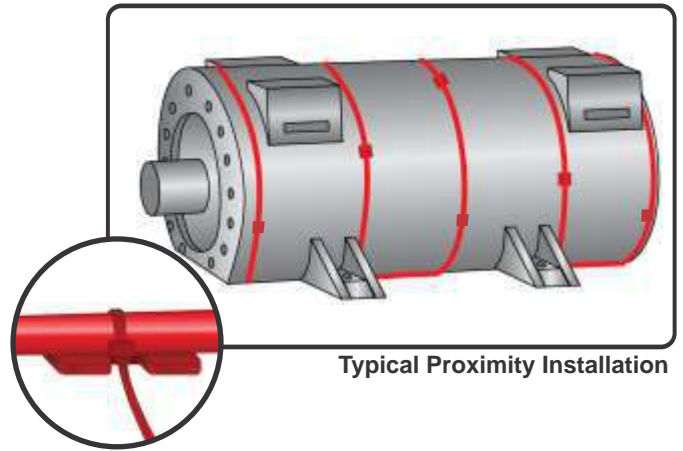
Fire Resistant Nylon 6.6  
Fits 2 1/2" - 3 1/2" (6cm - 8.9cm) Pipe  
Very durable, highly reliable cable ties use for cable ties, to mount LHD cable on Pre-Action Sprinkler Systems. For cold and warm environments. Rated from -100°F to 392°F (-73°C to 200°C).  
Length: 14 7/8" (37.78 cm)

**Part #: RG1113C 100/pk**

**Part #: RG1113M 1000/pk**

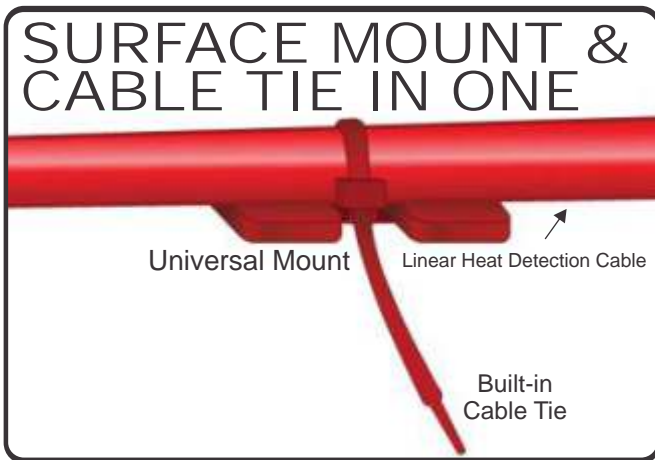
# UNIVERSAL MOUNT

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



Typical Proximity Installation

## NEW DESIGN



## TWO PARTS IN ONE

**FIRE RESISTANT**  
One Size Fits All LHD Cables

Simply Apply Surface Mount Adhesive to Back



## SURFACE MOUNT ADHESIVE or SCREW MOUNT



### Standard Surface Mount Adhesive

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

**Part #: RS7056**

## 2 IN 1 SURFACE MOUNT



### RedGear Universal Mount with Cable Tie

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**

\*Use the type, size, and length screw appropriate for your application

# TEST SWITCH

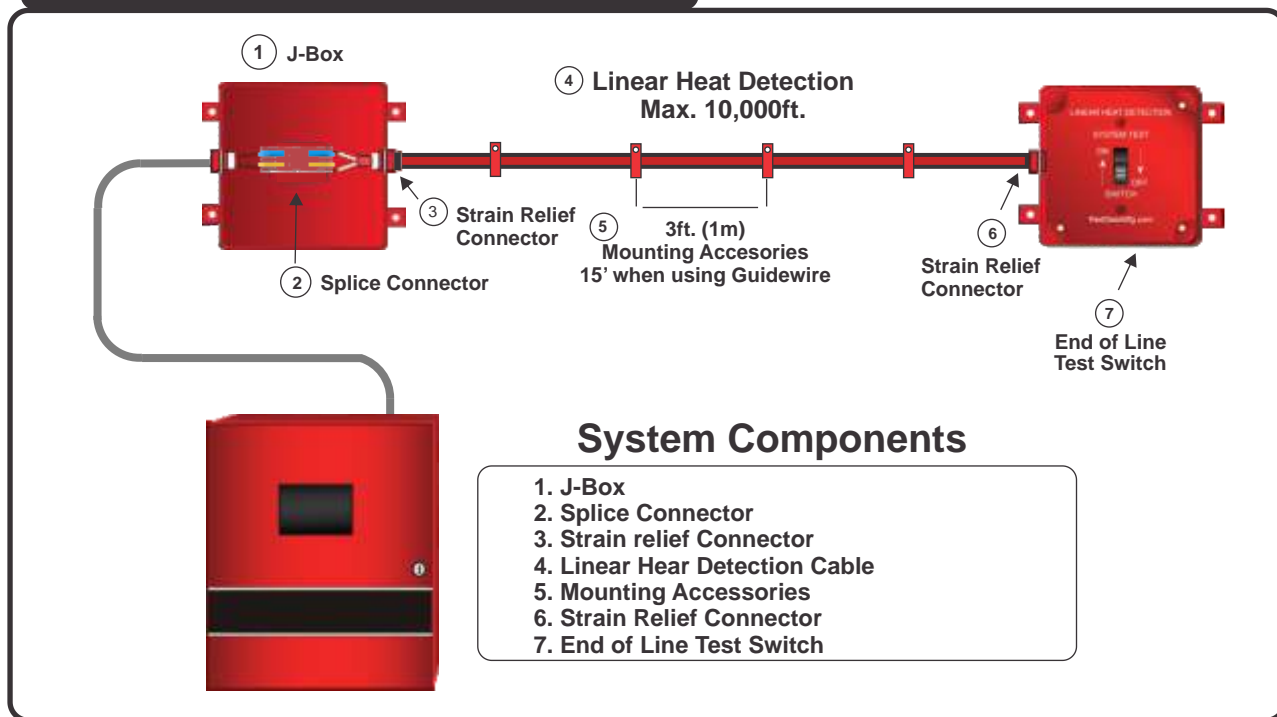
*New easy to use test switch, no more complicated hard wired boxes now just flick of a switch*



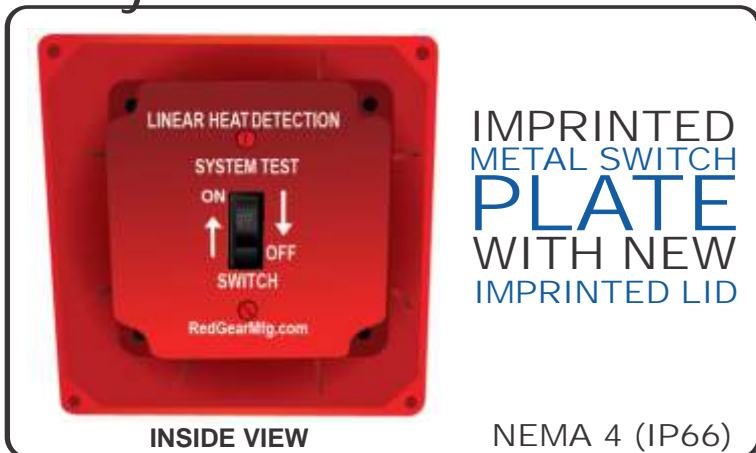
Outside View

TEXT IMPRINTED BOX COVER  
NOTE: Text on product is not White

## LHD SYSTEM EXAMPLE



## Easy To Use Test Switch



## END OF LINE TEST SWITCH

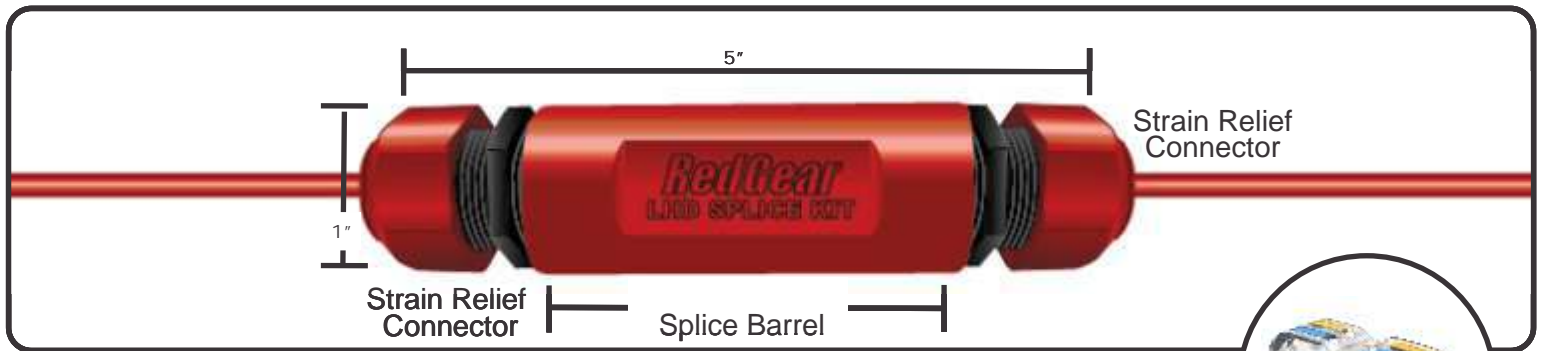
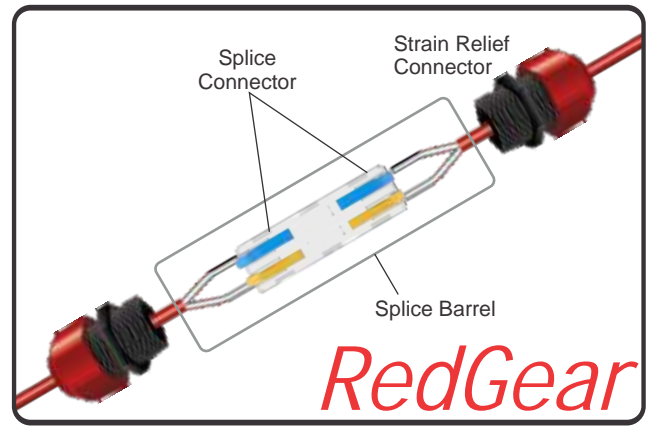


RedGear **HD/ELR-Test Switch**  
**Part #:** RG5223

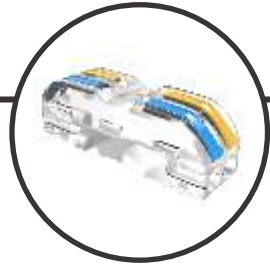
FIRE RESISTANT & EZ KNOCKOUTS

# LHD SPLICE KIT

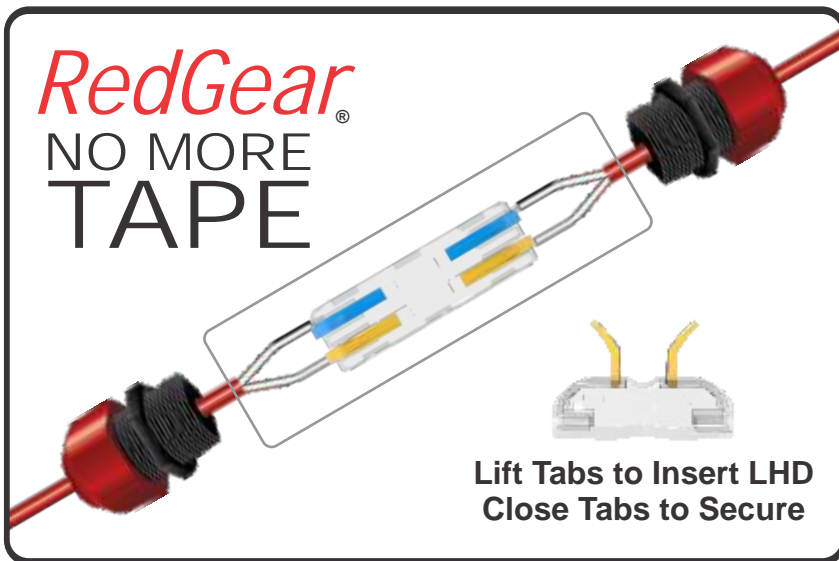
No need to replace entire cable,  
No tape or screws needed



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



FAST & EASY TO INSTALL  
IN DIFFICULT INSTALLATIONS



Lift Tabs to Insert LHD  
Close Tabs to Secure

## SPLICE KIT

RedGear



### RedGear Splice Kit

Fire Resistant  
New engineered weatherproof splice kit for LHD cables. Comes with two strain relief connectors, barrel and one SpliceConnector.  
Rated from -100°F to 392°F (-73°C to 200°C).

Part #: RG1126

## TYPICAL SPLICE EXAMPLE:

NEW REDGEAR SPLICE KIT  
NO MORE TAPE, NO MORE LEAKS

Existing Cable

Existing Cable

New Cable

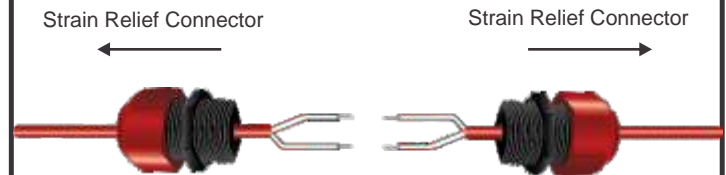
WEATHERPROOF

## INSTRUCTIONS

1. Strip outer LHD jacket back 1" on one end of LHD to be spliced. Strip the inner conductors back ½". 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. Slide the splice barrel onto one of the LHD cable ends.



4. Lift the Splice Connector's tabs up, insert one end of the LHD cable into the Splice connector. Close the tabs to secure the cable.



5. Repeat Step 4 to attach the other end of LHD cable to the opposite end of the Splice Connector, and complete the connection.

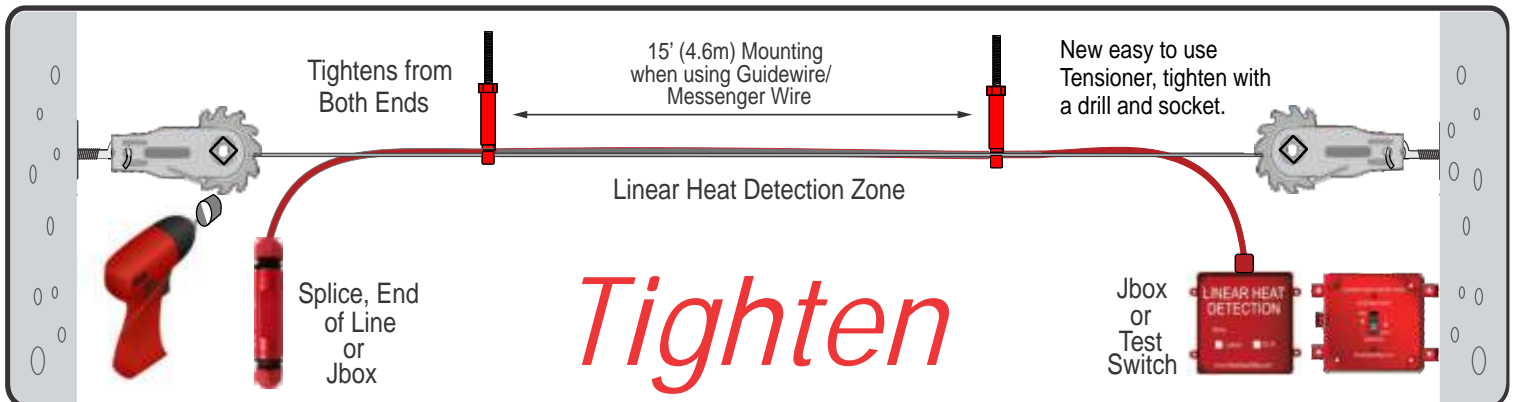
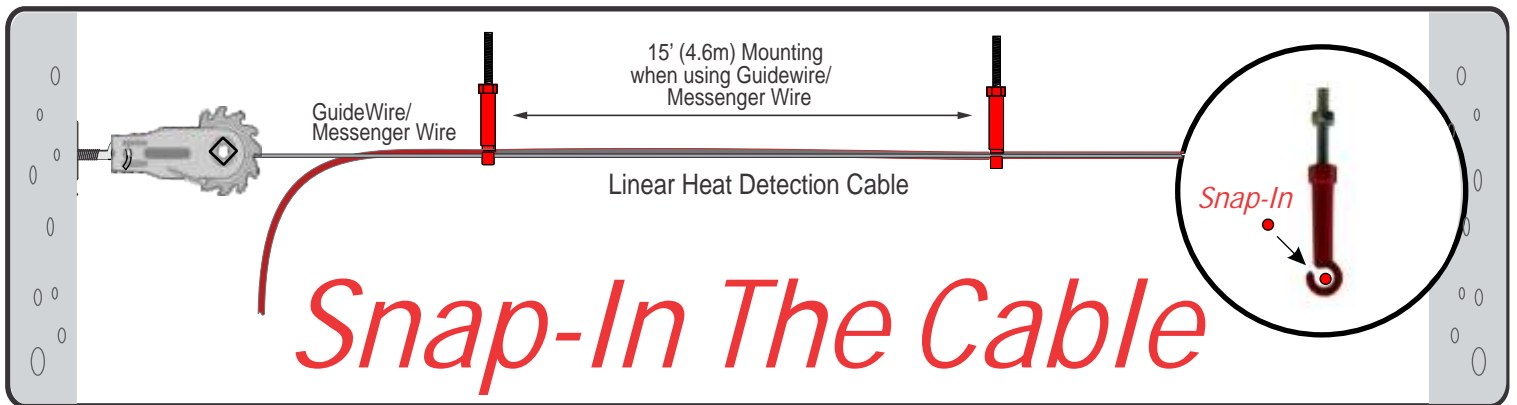
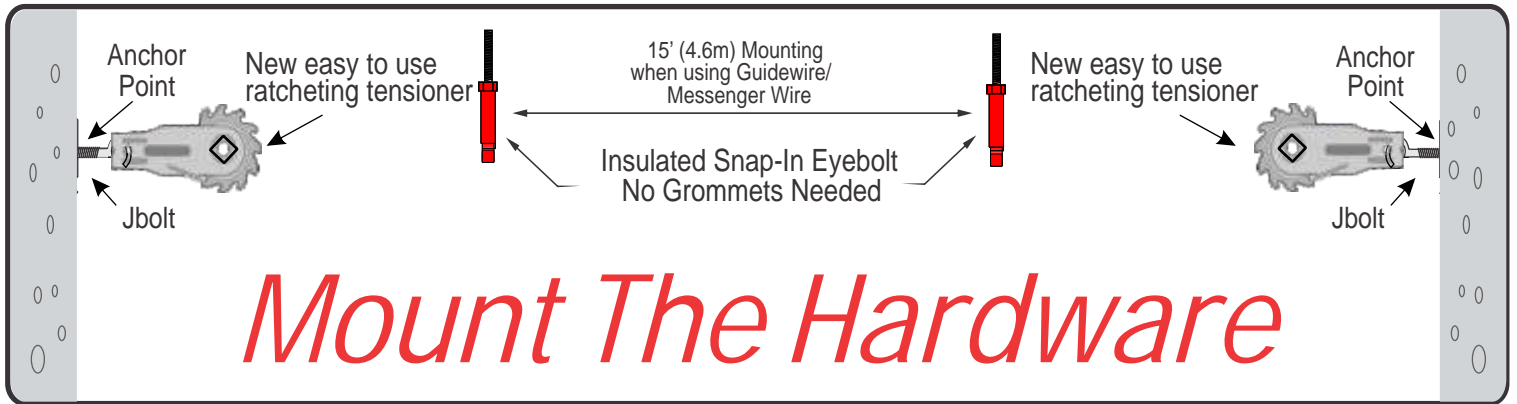
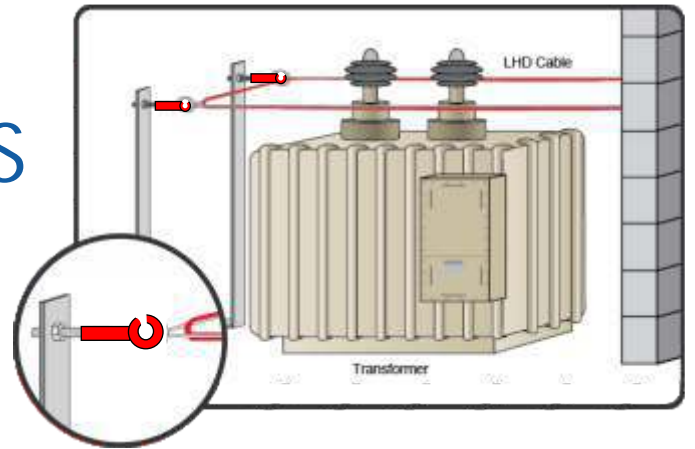


6. Slide the barrel over the connector, screw the two strain relief connectors onto the splice barrel, and tighten. You have completed your splice.



# GUIDEWIRE MOUNTING INSTRUCTIONS

## NEW Guidewire Snap-In Eyebolts



NO MORE PRE-THREADING EYE BOLTS ON CABLE

**Easy to use Tensioners • No more grommets or Turnbuckles**

## Snap-In Eyebolts



### Insulated Snap-In Eyebolt Zinc Plated or Stainless Steel No Grommets Needed

For suspending LHD Cable every 15'.  
Includes one 1/4" X 20 (6.4mm) nut. Second nut  
required to lock #RS7066ZC OR #RS7066SC.  
Length: 4.5"

Part #: RG1130X (ZINC) 10/pk  
Part #: RG1131 (STAINLESS)

Locknut Zinc Plated  
or Stainless Steel

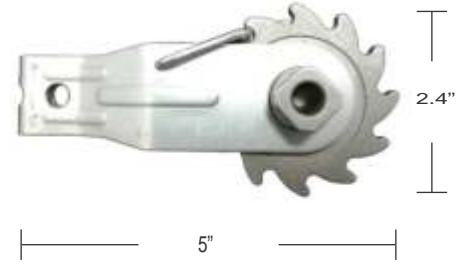
Use as second nut to lock Eyebolts.

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

# Snap-In Guidewire System



MADE IN THE USA



### Guidewire Tensioner

New Guidewire/messenger wire tensioner.  
Rated from -100°F to 1000°F(-73°C to 200°C).

Zinc Part #: RG1132

Stainless Steel Part #:RG1133

Jbolt Zinc #: RG1134

Jbolt Stainless Steel #: RG1135

For More Information



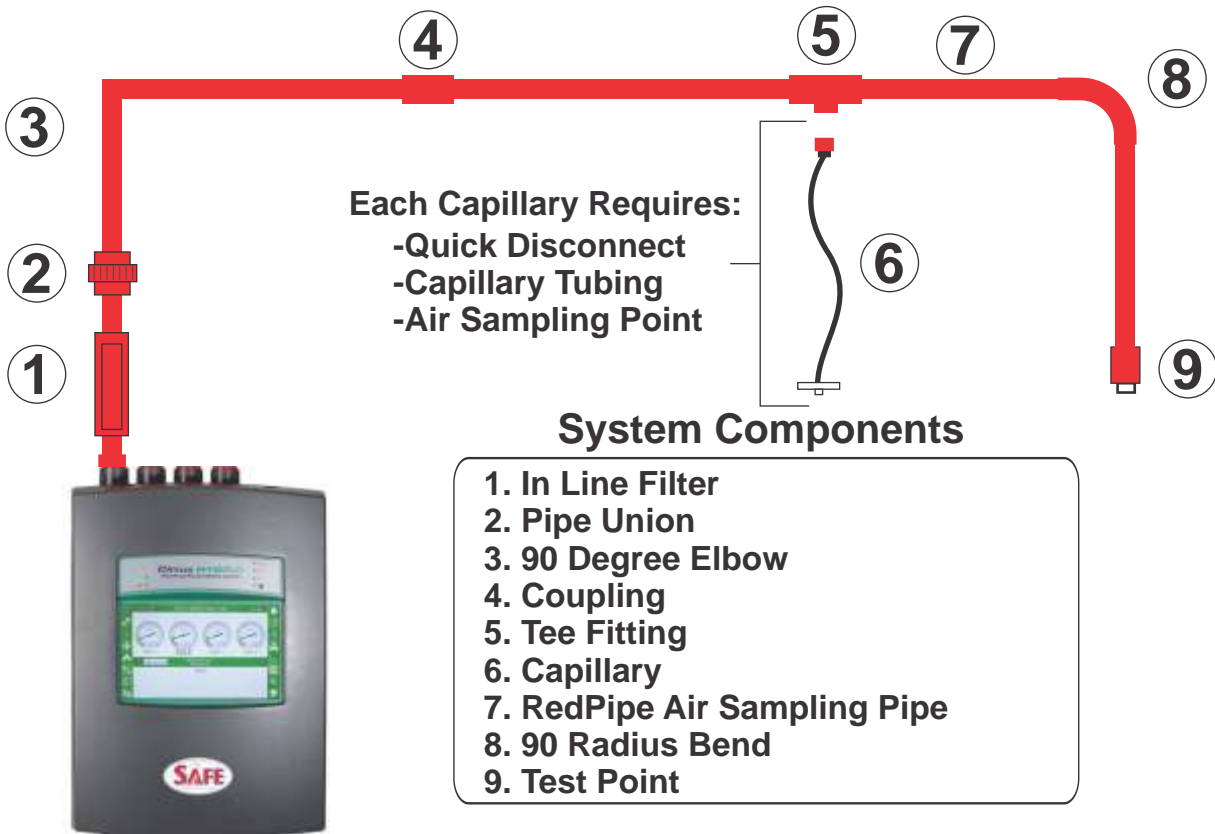
For More Information on  
Guidewire, LHD, or LHD Mounting visit  
[www.safefiredetection.com](http://www.safefiredetection.com)

or

Call 704-821-7920

# RedPipe

## Air Sampling Detection System Example:



For More Information on Air Sampling Systems Visit:  
[www.safefiredetection.com](http://www.safefiredetection.com)

or  
Call 704-821-7920

# RedPipe

RedPipe is a UL listed fire resistant 3/4" CPVC pipe, approved specifically for use with any UL Approved air sampling smoke detector

UL Approved  
For Plenum Spaces

NFPA PRINTING ON PIPE

Printed in Both English and Spanish



8' Pipe  
Lengths Can Be  
Shipped Overnight

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

8' Length 3/4" CPVC

Part #: RP5209

15' Length 3/4" CPVC

Part #: RP5209-15

Pipe Kit 3/4" CPVC

Covers a 50'x50' Area

**Contents:** 96' of RedPipe, 3-90 Degree Elbows, 8-Couplings, 1-Tee, 2-Endcaps, 32-Pipe Hangers

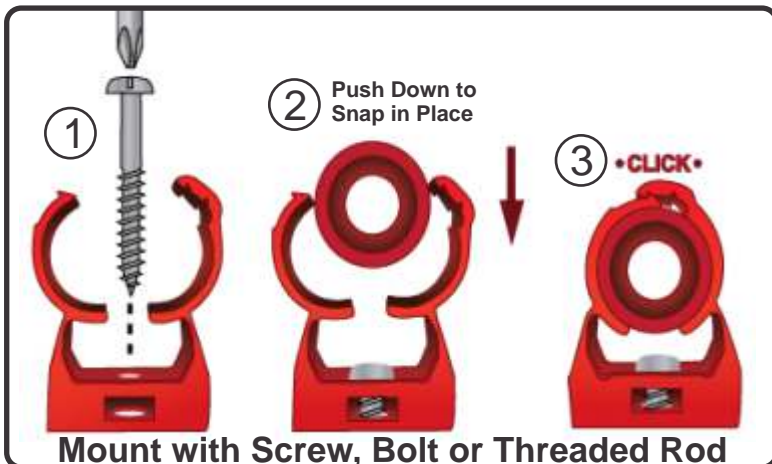
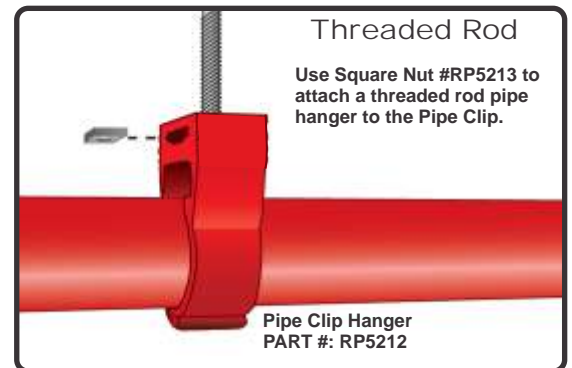
Part #: RP5240



## PIPE CLIP HANGERS

# REDPIPE CLIP HANGERS

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



## 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 50/pk

# REDPIPE FITTINGS

UL Listed

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

NEW 3/4" RADIUS BEND



*Hi-Flow*

No Elbow Limits

## PIPE FITTINGS



*RedPipe*

3/4" 90° Radius Bend

Part #: RP5215X 10/pk



*RedPipe*

3/4" Low Profile  
90° Radius Bend

Part #: RP5230X 10/pk



*RedPipe*

3/4" 90° Elbow

Part #: RP5202X 10/pk



*RedPipe*

3/4" 45° Elbow

Part #: RP5203X 10/pk

## PIPE FITTINGS



*RedPipe*

3/4" Coupling

Part #: RP5206X 10/pk



*RedPipe*

3/4" Test Point

Part #: RP2226



*RedPipe*

3/4" Tee

Part #: RP5204X 10/pk



*RedPipe*

3/4" End Cap

Part #: RP5205X 10/pk

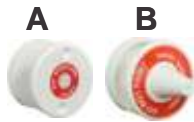
## FILTER



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



Air Sample Points

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

A Part #: RP5216

B Part #: RP5222



Quick Disconnect  
1/2" tubing

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

Part #: RP5225  
Note: 2 Required for each Capillary Drop



1/2" Capillary Tubing

Use in drop ceiling or in-cabinet applications for air sampling smoke detection.  
3/8" ID 1/2" OD

Part #: RP5227 50ft.

Part #: RP5229 100ft.



Quick Disconnect  
3/8" tubing

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

Part #: RP5223



3/8" Capillary Tubing

Use in drop ceiling or in-cabinet applications for air sampling smoke detection.  
1/4" ID 3/8" OD

Part #: RP5219 50ft.

Part #: RP5239 100ft.

# REDPIPE ACCESSORIES

Everything you need to complete your installation



TEST WITHOUT GOING TO CEILING

Test Point

## TESTING ACCESSORIES



### Smoke Testing Pen

Smoke Pen used in the testing of light scattering, laser, and cloud chamber type Air Sampling Detectors.

Part #: FA0058



### (Telescoping) Laser Smoke Detector Tester

Telescoping smoke detector tester. Used to test Laser based and hard to reach smoke detectors.

Part #: RP5228



### Blue LED Smoke Detector Tester

Aresol based smoke detector tester. used to test photoelectric and blue LED Smoke Detectors.

Part #: RP5231

## REPLACEMENT FILTERS



### Replacement Filter

Replacement filter for inline filter #RP7125.

Part #: RP7127

## PIPE 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 All-Purpose Medium Bodied Cement Container Size: 8 oz. Use for all Air Sampling Smoke pipe systems.

Part #: RP5214

## LABELS



### Sample Pipe Labels

**NOT Required on RedPipe.**

Part #: RP5217 125/roll



### Sample Point Labels

*Note: Place a Sample label at each sample point.*

Part #: RP5218 125/roll

## PIPE TO DETECTOR ADAPTOR



RedPipe

### Pipe to Detector Adaptor

Sold Individually  
Detector 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



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