

DO NOT PROCEED WITHOUT READING THIS WARNING!

CAUTION:

Every THERMOFLEX[™] heat detector is equipped with a fusible, non-restorable device that provides Fixed Temperature detection. If the detector is subjected to its fusing (or melting) temperature, the internal spring –loaded plunger will be released and will hold the contacts in the alarm mode permanently.

The technician <u>must</u> identify the type of detector as to whether it can be tested with a heat source or if it cannot be tested with a heat source.

Detectors with Model Numbers the begin with "**CR**", combine Rate-of-Rise operation with Fixed Temperature release. *The rate-of-rise portion can be tested* with a gentle heat source such as a hair dryer or any other equipment specifically designed to test heat sensitive detectors.



Detectors with Model Numbers that begin with "**CF**", are Fixed Temperature Only, Nonrestorable and <u>cannot be tested</u> with a heat source as they will operate permanently when the fusing temperature threshold is reached. However there are requirements for ensuring that the detector, if it does operate on its fixed temperature, will cause an alarm condition and be annunciated correctly.





Testing all Model Numbers with "CR" prefix.

CAUTION: This detector has a fusible, non-restorable link that will release if too much heat is applied. Read the following instructions carefully to avoid unnecessary replacement of the unit.

 How to identify the "CR"-type detector. The "CR" detector *does <u>not</u> have a black dot* on its heat-collecting fin.



Model CR 135 Rate-of-Rise & Fixed Temp. 135°F / 57°C No Dot on Fin



Model CR 135 W Rate-of-Rise & Fixed Temp. 135°F / 57°C No Dot on Fin



Model CR 165 Rate-of-Rise & Fixed Temp. 165°F / 71°C Grey Dot on Fin



Model CR 165 W Rate-of-Rise & Fixed Temp. 165°F / 75°C Grey Dot on Fin



Model CR 200 Rate-of-Rise & Fixed Temp. 200°F / 93°C White Dot on Fin



Model CR 200 W Rate-of-Rise & Fixed Temp. 200°F / 93°C Black Ring on Fin

- The "CR" detector combines a rate-of-rise function with a fixed temperature fusible link. The fusible link is non-restorable. The detector will respond to a source of warm air. The detector will reset as it cools.
- 3) The detector can be tested by applying a gentle heat source such as a hair dryer or other device specifically designed for testing heat sensitive detectors.(<u>www.sdifire.com</u>) A hair dryer held 6-8 inches from the detector will cause it to operate on its rate-of-rise within 8-12 seconds.



CAUTION: High temperature devices such as a PyroPen[™] or a heat gun *must not be used* as permanent damage to the detector may occur.



Testing all Model Numbers with "CF" prefix.

CAUTION: This detector has a fusible, non-restorable link that will release if heat is applied. Read the following instructions carefully to avoid unnecessary replacement of the unit.

 How to identify the "CF"-type detector. Every "CF" detector *has a black dot* on its heat-collecting fin.



Model CF 135 Fixed Temp. Only 135°F / 57°C Black Dot on Fin



Model CF 165 Fixed Temp. Only 165°F / 71°C Black & Grey Dot on Fin



Model CF 200 Fixed Temp. Only 200°F / 93°C Black & White Dot on Fin



Model CF 135 W Fixed Temp. Only 135°F / 57°C Black Dot on Fin



Model CF 165 W Fixed Temp. Only 165°F / 75°C Black & Grey Dot on Fin



Model CF 200 W Fixed Temp. Only 200°F / 93°C Black Dot & Black Ring on Fin

2) The "CF" detector Is described as "Fixed Temperature Only, non-restorable". It *cannot be tested* by applying heat as the fusible link will release holding the detector in permanent alarm.



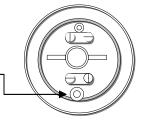
3) **Testing** *Contacts* **in Fixed Temperature Detectors**:



Currently, Annual Inspection procedures require that this type of Fixed Temperature detectors be tested at their wiring terminals, which if nothing else, confirms their connection to the control panel.

The THERMOFLEX[™] detector has been designed to allow the diaphragm to be distended slightly, enough to close the contacts, when a small amount of air pressure is introduced into the shell enclosure. Fire Detection Devices manufactures the only Fixed Temperature detector that allows you to test the integrity of the internal contacts without fusing the plunger and rendering the unit unusable.

This can be done using a small ear syringe (available at any drug store) which is put into the unsealed vent and gently squeezed to produce a small puff of air that will move the diaphragm to momentarily close the contacts.



4) Testing the circuit connection to the Fixed Temperature detector: The operation of the detector can be simulated by simply shorting across the terminals with an alligator jumper. This will confirm circuit integrity and proper zone annunciation.