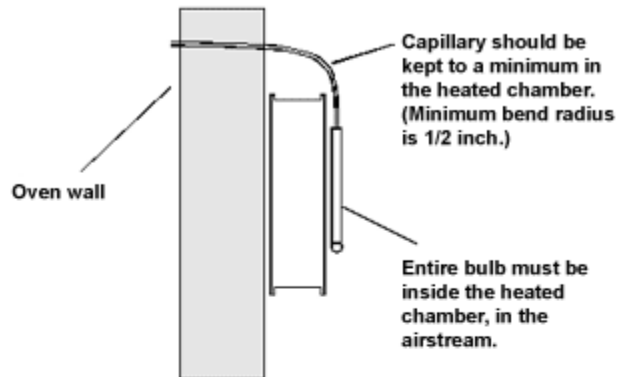


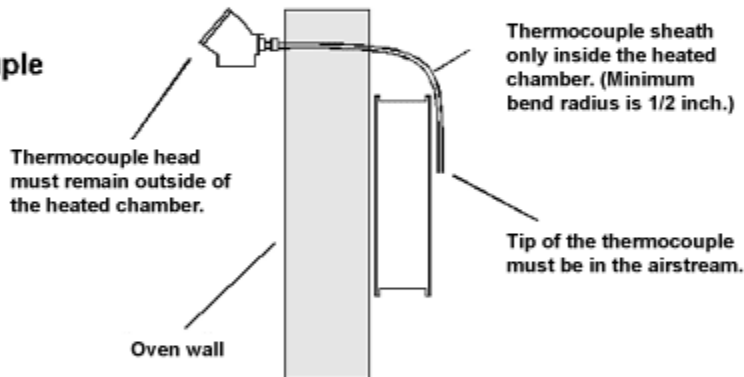
Controller Thermocouple Locations

Typical Thermocouple Mounting Locations

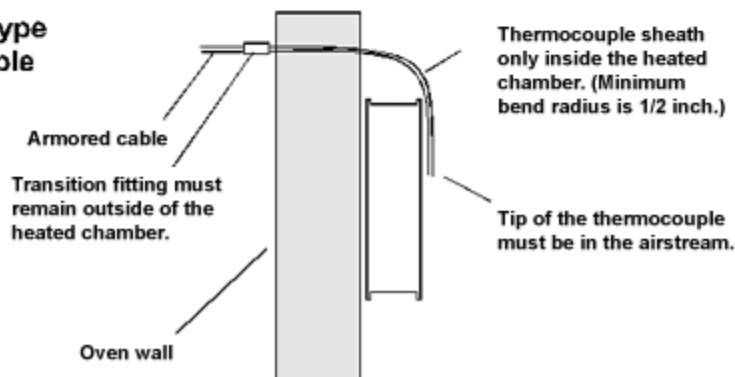
Bulb Type Sensor



Head Type Thermocouple Sensor



Transition Type Thermocouple Sensor



It has been our experience that best system controllability is obtained by placing the control sensor (*element, T/C, RTD, Etc.*) directly in front of the supply air discharge. In this configuration the control sensor is able to rapidly sense changes in the delivery air temperature. This control sensor configuration

typically will produce the smallest over and under shoot during a ramp to the setpoint temperature, the smallest control loop oscillation during the soak at setpoint temperature and best temperature uniformity.

As the control sensor is moved out of the supply air discharge into the oven work chamber it's sensitivity decreased due to a reduction of discharge air velocity, the entrainment air effect, part loading (*disturbing air flow*) and part radiation effect. This control sensor configuration typically will produce increased over and under shoot during a ramp to the setpoint temperature, increased control loop oscillation during soak at the setpoint temperature and increased oscillation and spread in a uniformity survey. Also the supply air heat temperature will increase and could exceed the equipment's maximum design.

THEREFORE DESPATCH WILL NOT BE HELD LIABLE FOR DAMAGE TO EQUIPMENT RESULTING FROM THE MISUSE OR UNAUTHORIZED CHANGES MADE TO THE EQUIPMENT.

If your requirement is to monitor or record the work zone air temperature or part temperature, it is Despatch's recommendation that you add a separate sensor(s) and the instrumentation needed to monitor or record the point(s) required without modifying the ovens current control sensor location.

We hope you will find this information useful. THANK YOU for contacting us and allowing us to be a service to you. Please contact us at 1-800-473-7373 if you have any questions.

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