Thermal Imaging Report



Thermal Imaging:

The six (6) facilities were analyzed with a thermal imaging camera at all exterior contact points to identify any and all points of air penetration. Based on the images, there are a number of dock and man doors that would benefit from improved insulation. As the building is heated, providing a tighter envelope will create savings for primarily the winter months. Exact savings are difficult to estimate due to changes in annual weather and a variety of potential solutions. In addition to the building envelope, processing equipment was also assessed and showed areas of concern. All photos, along with a detailed map showing where these photos were taken, can be found on the provided flash drive(s). Below is a collection of images that highlight possible issues.

Reading a Thermal Image:

Upper Left Reading – Temperature reading at: \Rightarrow

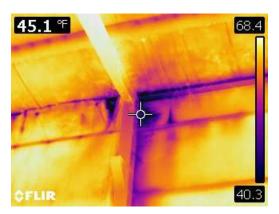
Upper Right Reading - Max. Temperature in image

Lower Right Reading – Min. Temperature in image

Note: While some of the photos may look to have "cold" spots, depending on the gradient scale the issue could be more or less severe.



The darker color is cooler air coming into the building from the outside.



There is air coming in through the seam between the roof and wall materials.





The seams of oven doors are far less insulated than the rest of the door.



The cold outdoor air comes through wall penetration points.



The darkness in the underside of the roof shows a wet spot and could point to roof insulation issues. These issues were seen in



The main points of heat loss are on the back side of the ovens. Both upper and lower access points have high heat levels.







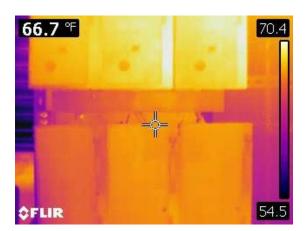
The bright breaker is more loaded than the others, but the 82F is not a concern. If breakers are above 120F, they should be investigated further.



The heating unit above the foaming area is on and generating heat. There are a number of areas in the facilities that are being heated, but also have large air leaks to the outdoors.



The motor having the exterior temperature show over 130F means the inside is even warmer. This could be a sign the motor is toward end of life, or be slipping.



More electrical boxes that are well within the healthy temperature range.

