

The Most Respected Name in Infrared Asphalt Equipment



Kasi Infrared is part of Reed International, Inc. We are the leader in Asphalt Maintenance and Pavement Preservation Equipment. Encompassing the three individual brands, VSS Macropaver, Stepp Mfg., & Kasi Infrared. We have manufacturing facilities in Minnesota and California and build our infrared units in Hickman, CA



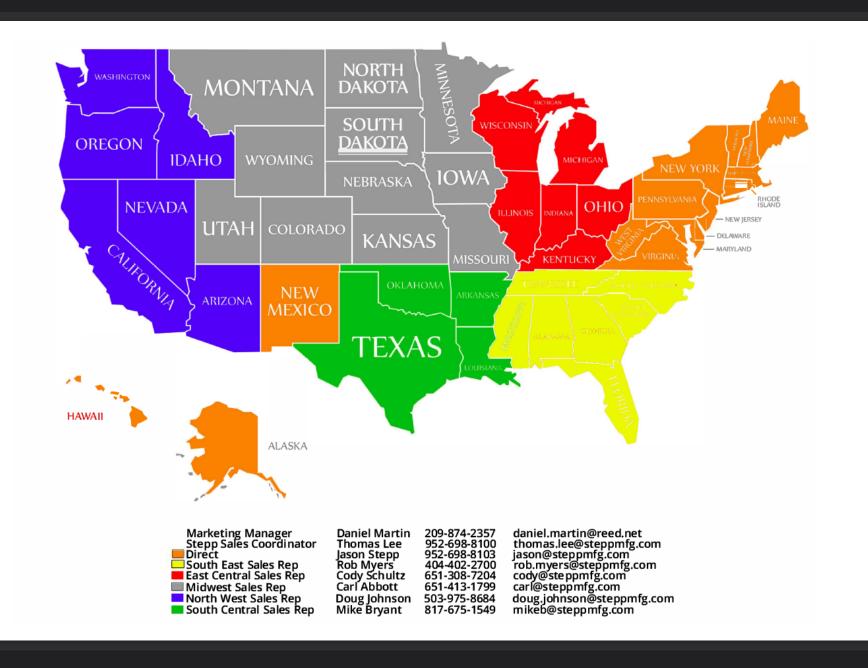






## **WHAT**

- ♦ Kasi Infrared is the leader in Infrared Asphalt Repair Equipment
- We build the top of the line infrared patcher with a patented infrared heater made of the highest quality components
- ♦ We build a quality, safe machine with the latest technology at a fair price and are continually innovating our designs.



# Benefits of Infrared Asphalt Repair





Environmentally Friendly



Efficient



Effective



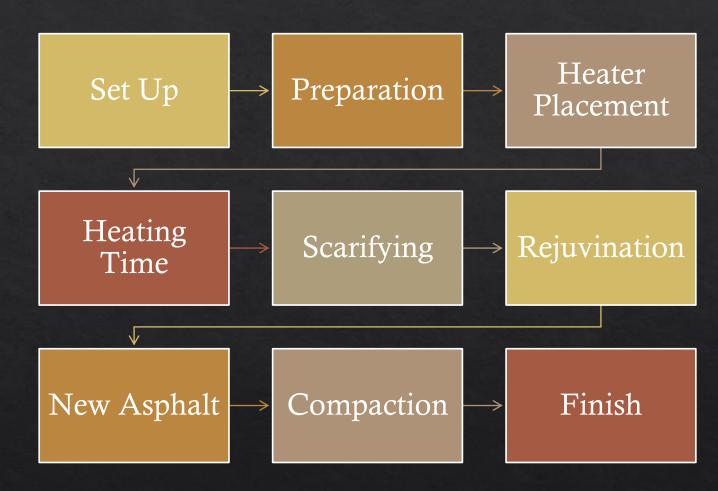
Minimal Traffic Disruption



Minimal Cost



Infrared
Asphalt
Repair
Process



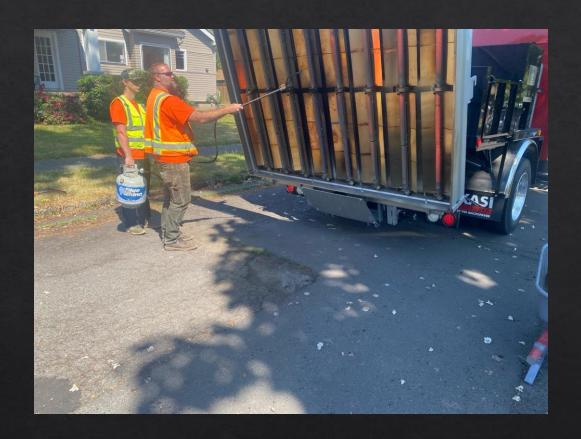
# Set Up & Preparation



Set up traffic control. Use best practice to ensure safety.
Remove any large debris from repair area. Repair area needs minimal cleaning. If necessary, blow off area to remove leaf litter and other debris.



## **Heater Placement**





Light the Infrared Chamber and position the heater over the repair area



## **Heating Time**



Heating time is typically 5 – 7 minutes but is effected by the 3 "M's"

- 1. Materials the more oxidized the existing asphalt is the longer the heating time
- **2. Moisture** moisture on the pavement will also increase heat time
- **3. Mother Nature** –temperatures will also effect <u>heat time</u>.



# Scarifying



Once the existing asphalt has been adequately heated, begin to scarify the repair area.

- It is best to start around the edges and push the material towards the repair area.
- Be sure to cut a clean outside edge as the repair will be much more aesthetically pleasing.
- Start about 3" inside where you have heated.



# Rejuvenator



Adding a rejuvenator can help bring back the oils in the asphalt for a longer lasting repair. Many different types are available throughout the country. Typically an asphalt emulsion based rejuvenator will work the best, but other options work well too.



# **Adding New Asphalt & Luting**



Once you have finished scarifying and adding rejuvenator – it is time to add new asphalt from the hotbox on the truck. The amount of new asphalt that you add will be dependent on the type of repair you are completing. Bigger holes require more asphalt. Make sure to lute the fresh mix out smoothly and leave a  $\frac{1}{4}$ " –  $\frac{1}{2}$ " above grade around the edges for compaction.



## **Finished Product**



The finished product should look very similar to a saw cut and replace patch. Attention to your edge details, proper luting, and proper compaction are all key elements that effect the aesthetics and look of the final patch.



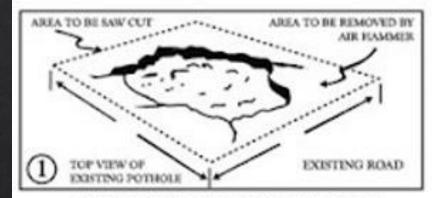




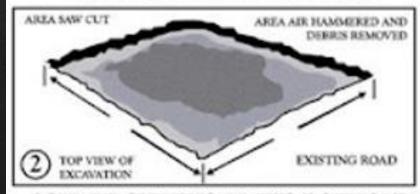


## Infrared v. Traditional Method

#### CONVENTIONAL

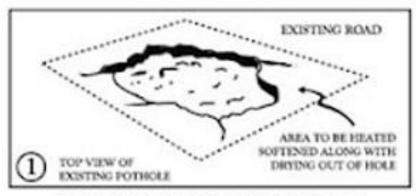


#### OVERALL VIEW OF POTHOLE

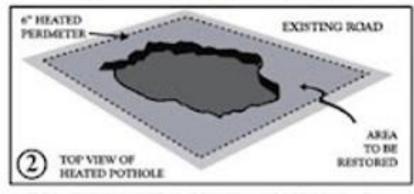


SQUARE CUT EXCAVATED POTHOLE

#### INFRARED



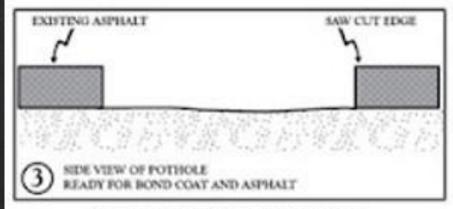
#### OVERALL VIEW OF POTHOLE



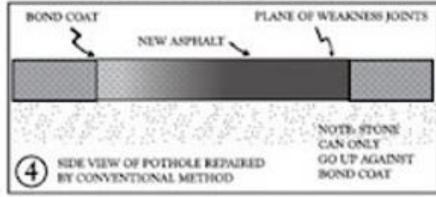
HEATED AND SOFTENED SURFACE



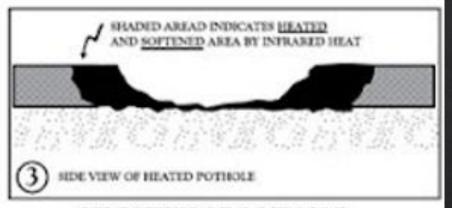
## Infrared v. Traditional Method



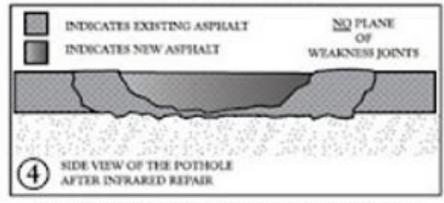
#### SIDE VIEW OF POTHOLE



REPAIRED BY CONVENTIONAL METHOD



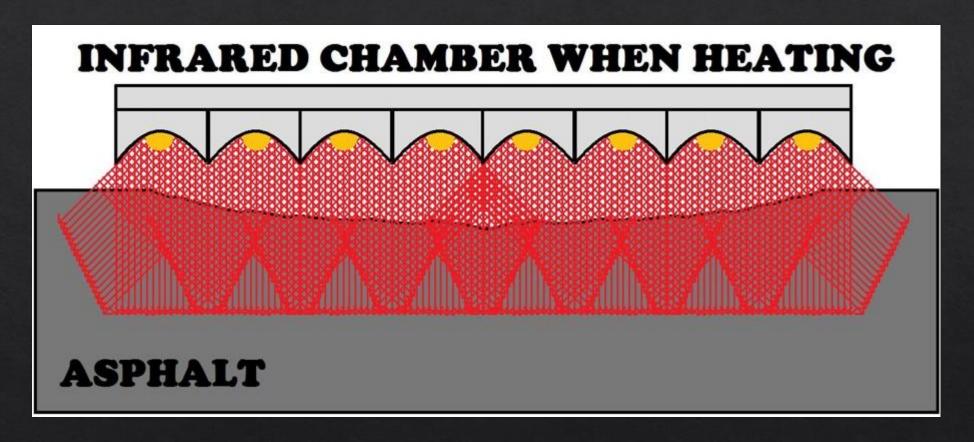
#### SIDE VIEW OF POTHOLE



REPAIRED BY INFRARED METHOD



## **Infrared Chamber**



Our Patented Infrared Chamber features 8 rows of converters for even heating. No other manufacturer has this style of heater. Many use ceramic blankets, inserts, or an insufficient number of converters.



## **Infrared Chamber**



The chamber is hydraulically operated on our truck and trailer mount units – no cables or winches are used on Kasi machines ensuring safety.



## **Infrared Chamber**



Our converter grids are made of Inconel.
Inconel alloys are oxidation and corrosion resistant materials well suited for service in extreme environments. When heated, Inconel forms a thick, stable, passivating oxide layer protecting the surface from further attack. Inconel retains strength over a wide temperature range.





## **Kasi Patriot Features**

Pavement Heater: Boasting eight 6' long stainless steel UltraGlow infrared converters, this system ensures efficient asphalt heating without causing damage. With a softening depth of 2-3 inches achieved within a mere 5-7 minutes, it offers unparalleled performance.

Reclaimer: The system incorporates a precisely controlled infrared heating mechanism, utilizing DuraGlo infrared heaters to maintain asphalt at optimal plant mix temperature regardless of weather conditions. Furthermore, it is adept at reclaiming stockpiled asphalt, offering versatility and efficiency.

Temperature Control: With a maximum interior skin temperature of 325°F and a holding temperature ranging between 275-300°F, the system ensures precise temperature regulation, crucial for effective pavement maintenance.

Hydraulics: All hydraulic controls from the dump box to the chamber and reclaimer doors are seamlessly integrated, enhancing operational efficiency. No cables or winches.

On-Board Storage: Equipped with an extra-low storage area, the system facilitates the storage of various tools and equipment, including shovels, rakes, wheelbarrows, fuel cans, signs, cones, and more.

Patriot 3 Ton model is NON – CDL!







## **Kasi IR-480 Features**

Pavement Heater: Boasting eight 6' long stainless steel UltraGlow infrared converters, this system ensures efficient asphalt heating without causing damage. With a softening depth of 2-3 inches achieved within a mere 5-7 minutes, it offers unparalleled performance.

Perfect for Agencies and Contractors alike. Tow behind any ¾ Ton truck and add an Infrared Heater to your fleet.

Great for punch list items for a paving crew or a smaller parking lot maintenance contractor who might already have a hot box

Hydraulics: All hydraulic controls from the dump box to the chamber and reclaimer doors are seamlessly integrated, enhancing operational efficiency. No cables or winches.

On-Board Storage: Equipped with an extra-low storage area, the system facilitates the storage of various tools and equipment, including shovels, rakes, wheelbarrows, fuel cans, signs, cones, and more.

NON – CDL and no Hazmat placarding necessary.





## **Kasi IR-120 Features**

Pavement Heater: Boasting four 3' long stainless steel UltraGlow infrared converters, this system ensures efficient asphalt heating without causing damage. With a softening depth of 2-3 inches achieved within a mere 5-7 minutes, it offers unparalleled performance.

Perfect for Agencies and Contractors alike. Perfect walk behind Infrared Heater to your fleet.

Great for a smaller parking lot maintenance contractor or seal-coater.

Great entry-level unit.





Thank You!

www.kasiinfrared.com