

# Project Profile

## Anti-Fatigue Mats | Automotive Plant

*The advantages of modular matting over roll goods*



### The Challenge

A tier 1 automotive supplier was preparing to open a new 240,000 square foot state-of-the-art facility. The Senior Environmental Health & Safety Manager was tasked with finding high-performance yet cost-effective anti-fatigue matting for the 875 workers scheduled to begin work at the first of the year.

The tremendous lengths of the assembly lines, some stretching as long as 400 feet, made this challenging. The task was further complicated by the fact that this automotive supplier is a "just in time" assembler whose production lines can change as its product changes. For instance, at opening it would be assembling seats for a large SUV, but months later, they may be assembling seating for a different vehicle that requires a different production line configuration and therefore a different matting configuration.



*Production lines/workstations must be reconfigured periodically so any matting would need to be able to accommodate reconfigured lines/workstations.*

The safety manager was familiar with standard rolls of deck-plate matting, and she was ready to "cut and butt" hundreds of 75-foot rolls of Wearwell Diamond-Plate Spongecote (415). But this plan had many drawbacks:

- Cutting rolls of matting and "butting" each mat against the next to create runs long enough for each line often looks crude, and PVC matting is prone to cracking and curling, so the likelihood of creating tripping hazards, particularly at the butted areas, is high.
- When using 75-foot rolls of matting, if a mat sustains damage or extreme wear in a particular location, that entire 75-foot run must be replaced (rather than just the small area that is damaged).

### The Solution: Hog Heaven Modular Matting

The local Fastenal representative teamed up with M+A Matting to present the benefits of Hog Heaven® modular matting to the automotive suppliers Engineering and Safety departments. While modular matting had a higher initial cost than rolls of matting, **there were a number of benefits that made modular matting in general, and Hog Heaven tiles specifically, the clear choice** by both the Engineering and Safety departments:

- **Stability & Safety** - Hog Heaven III® modular tiles feature a wedge interlocking mechanism that reliably connects each tile to those around it, ensuring a solid installation with no tripping hazards at the seams.
- **Versatility** - Hog Heaven tiles can be easily lifted/unlocked, moved, and reconfigured as production line/workstation configurations change.
- **Durability & Performance** - Hog Heaven tiles/mats offer many useful features above and beyond PVC matting. Hog Heaven mats are made with durable nitrile rubber, making them:
  - Welding safe (rated for use in high heat operations up to 1800° F)
  - Grease and oil resistant, and resistant to many chemicals
  - Fully conductive (ESD rating of  $9.4 \times 10^5$ ) and less likely to cause static electricity discharge
  - More comfortable and more slip-resistant in both dry and damp conditions (see compression deflection and coefficient of friction measurements in the table on page 2)

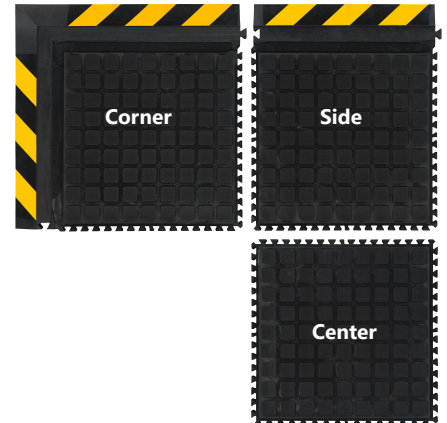
- **Longevity & Total Cost of Ownership** - Hog Heaven matting generally lasts twice as long as PVC matting, giving Hog Heaven a lower total cost of ownership. A modular matting solution also allows for the replacement of damaged or worn matting at the point of damage rather than replacing an entire run or workstation. There are **no minimum order quantities** for Hog Heaven tiles.

## The Results

The workers love the comfort and resiliency of the Hog Heaven tiles, and the managers appreciate the versatility (reconfigurability) and longevity of their investment. They also appreciate that damaged tiles can be easily and affordably replaced, but thanks to Hog Heaven's durability, they've yet to have to replace a single tile!

## Hog Heaven III Modular Tiles

Hog Heaven III tiles are available in 18" and 36" sizes, and center, side, and corner tiles. In combination, these three tiles can be configured and reconfigured to create virtually any right-angled workstation floor.



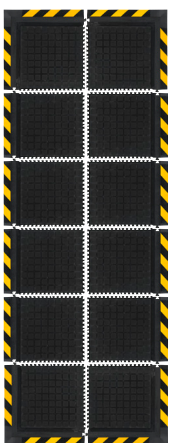
## Hog Heaven Tiles vs PVC Tiles

See how the specifications and cost of M+A Matting's Hog Heaven III (HH) Comfort tiles compare to PVC tiles\*.

PVC Tiles		Hog Heaven III
PVC (vinyl)	<i>Surface</i>	Nitrile rubber
7/8"	<i>Thickness</i>	3/4"
4.84% - 14.5%	<i>Compression Deflection</i>	43.9% at 20 psi
0.65	<i>Coefficient of Friction - Dry</i>	0.74
0.42	<i>Coefficient of Friction - Wet</i>	0.77
0 - 120° F	<i>Temperature Use Range</i>	0 - 1800° F
Not rated	<i>ESD Rating</i>	9.4 x 10 <sup>5</sup>
Not certified	<i>NFSI Certified</i>	Certified high traction

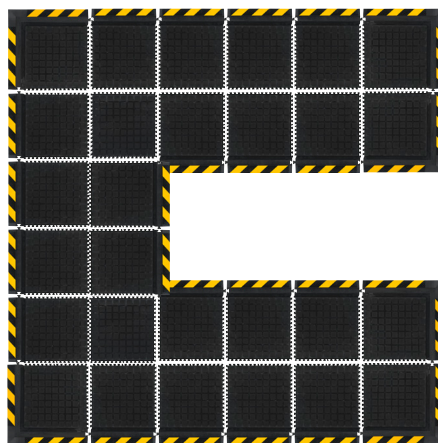
For center, side, and corner tiles, Fastenal's cost for Hog Heaven is \$19.78, \$26.11, and \$32.45 respectively. Fastenal's cost for PVC tiles\* is \$18.00 for center tiles and the additional cost of edging makes side and corner tiles cost an average of \$35.00 each.

3' x 9' Run



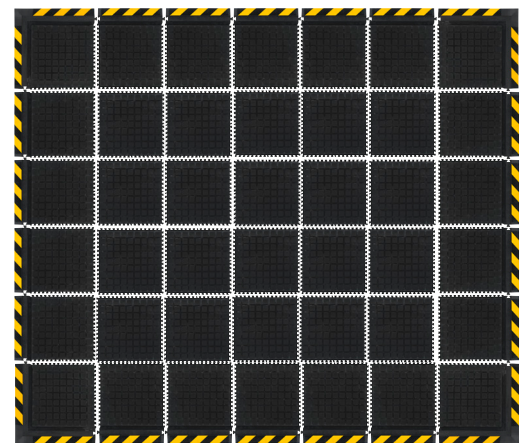
HH		PVC	
0	Center	0	
8	Side	8	
4	Corner	4	
<b>\$339</b>	<b>TOTAL</b>	<b>\$420</b>	

9' x 9' C-Shaped Workstation



HH		PVC	
2	Center	2	
20	Side	20	
6	Corner	6	
<b>\$717</b>	<b>TOTAL</b>	<b>\$910</b>	

9' x 10.5' Square Workstation



HH		PVC	
20	Center	20	
18	Side	18	
4	Corner	4	
<b>\$600</b>	<b>TOTAL</b>	<b>\$770</b>	

\*For the sake of a direct comparison, the costs and specifications used for "PVC tiles" were for Wearwell ErgoDeck tiles.