

# Comparison of paved / concrete flooring systems for ammonia reduction



## Advantages

Dry claws	✓	✓	✓
Urine drains off very quickly	✓	✓	✓
Slip resistance	✓ due to optiGrip surface very good despite slope		✓ due to optiGrip surface
Soft walking	✓ due to rubber material	✓ due to rubber material – especially the high edge area is extra soft	✓ due to rubber material
Better claw abrasion	✓ due to corundum in the optiGrip surface		
No slurry lake when scraping	✓	✓	
Urine surface very small, therefore very dry	✓	✓	
Separate collection and storage of urine possible	✓	✓	
Area behind the cubicles is drier	✓ liquid drains off to the centre (fewer wet tails and claws)		
Central scraper guide is sufficient as a urine-collecting gutter	✓	✓	
Easy cleaning	✓	✓	
Other		largely compensates uneven surfaces	suitable for every walking alley width
	reduced risk of smear layer formation due to optiGrip surface (compared to 3 % slope on concrete or plain rubber mat)		

## Disadvantages

Most relevant	complex concreting required	only possible up to max. 410 cm walking alley width	- a lot of urine stands in the drain channels - urine and faeces are mixed again when they are scraped! – danger of NH <sub>3</sub> formation - slurry lake remains
Uneven surfaces	are hardly compensated	are not completely compensated	cleaning is more difficult with uneven floors
For unroofed area	rainwater must also be removed via the urine-collecting gutter (dimensioning! – constructional effort)		higher scraper frequency required
Scraper adaption	once on the 3 % slope	once on the 3 % slope	comb scraper + scraper lip must be adjusted very precisely and fit to the floor
Other			slurry splashes when defecating in or stepping on the drain channels (quality of the workplace and hygiene/cleanliness of the animals)

## Note

Interaction between scraper and floor must be correct!	!	!	!
Other		height differences of the crossing passages, to the feeding table and to the cubicle edges must be taken into account, as the walking alley is higher at the sides due to the 3 % slope of the mat	how can I get the drain channel really clean?