

# **Transforming Veterinary Care: How Bounce Safety Flooring Enhanced Onderstepoort Veterinary Clinic**

## **1. Introduction**

Bounce Safety Flooring, led by Oscar and Cameron Filen, was commissioned to design a flooring solution for Onderstepoort Veterinary Clinic (OVAH). The project required a flooring system that was waterproof, anti-bacterial, and soft enough to prevent injuries to the animals treated at the clinic. Additionally, the flooring needed to ensure that water runoff from cleaning and disinfecting areas was effectively directed towards full-bore drains throughout the facility. Sustainability, durability, and eco-friendliness were also critical requirements. OVAH treats a diverse range of animals, including bovines, equines, and rare wildlife such as wildebeest.

## **2. About Onderstepoort Veterinary Clinic**

Onderstepoort Veterinary Academic Hospital (OVAH) is South Africa's premier veterinary training facility, where all veterinary students from the University of Pretoria complete their residency. The hospital provides care for a wide range of animals, from domestic pets to wildlife. Like any large medical facility, OVAH faces daily challenges, including managing bacterial infections and animal injuries. Previously, the hospital used a rubber flooring system that had become outdated and poorly maintained, necessitating a comprehensive upgrade of their facilities, including drainage systems and concrete substrates in stables, thoroughfares, isolation wards, and specialized rooms.

## **3. The Challenge**

Bounce Safety Flooring was tasked with creating a durable, easy-to-clean system that would protect both the animals and the facility. The project required a composite flooring system capable of withstanding the specific demands of the environment, while also providing a strong return on investment. Additionally, the flooring system needed to include curbs on the walls of each stall and room to fully seal the system, preventing water and bacterial ingress during procedures and cleaning.

#### **4. The Solution: Bounce Safety Flooring**

In collaboration with the main contractor, SMT Developments, Bounce Safety Flooring designed an 8-layer composite rubber flooring system for OVAH. The process began with the pouring of new concrete slabs and the upgrading of the hospital's extensive drainage network.

- **Layer 1:** Acrylic primer to seal the concrete.
- **Layer 2:** Membrane-based waterproofing compound to protect the concrete.
- **Layer 3:** Additional waterproofing membrane and sealant.
- **Layer 4:** Polyurethane key coat to ensure adhesion between the surface and the first rubber layer.
- **Layer 5:** Proprietary rubber blend, durable enough to withstand the stress from equine and wildlife hooves.
- **Layer 6:** Top coat sealant, providing a non-slip, durable surface that spreads point loads and ensures safety.
- **Layers 7 & 8:** Custom anti-microbial/anti-bacterial paint, enhancing the flooring system's protective properties.

The finished flooring system met all of OVAH's requirements, including efficient drainage and robust impact dispersion. Notably, the system was made using 80% recycled materials, repurposing nearly 20 metric tons of waste tires.

## **5. Installation Process**

The installation at OVAH presented several challenges, including tight deadlines and a complex workspace. Bounce Safety Flooring worked around other contractors and managed the extensive volume of flooring to be installed. The small animal stalls, in particular, required meticulous handwork due to their size. However, once the small animal areas were completed, the team was able to accelerate the installation, achieving a rate of 100 square meters per day.

Custom tools were developed to shape the flooring system's curbs up onto the walls, ensuring a complete seal. The team worked in two phases to minimize disruption to the hospital's operations. Post-installation, Bounce provided on-call support for eight years, ensuring seamless integration of new equipment with the flooring system.

## **6. The Impact and Benefits**

The new flooring system not only enhanced the hospital's aesthetics but also significantly improved functionality. The system provided better water drainage and was easier to maintain and sterilize than the previous flooring. The equine patients experienced fewer injuries, thanks to the flooring's impact absorption and non-slip properties. Sister Janet Smith, the Acting Head Sister of OVAH, praised the installation process and the ongoing communication from Bounce.

## **7. Sustainability and Eco-Friendly Practices**

The installation at OVAH utilized nearly 20 metric tons of recycled tires, equivalent to 9,090 passenger tires. This substantial use of recycled materials demonstrates Bounce Safety Flooring's commitment to sustainability and innovation in large-scale projects.

## **8. Conclusion**

Bounce Safety Flooring extends its gratitude to the University of Pretoria and Onderstepoort Veterinary Hospital for their collaboration on this project and their commitment to using recycled materials. The project challenged Bounce to create a flooring system that was durable, safe, eco-friendly, and sterile, and the results exceeded expectations. This project underscores the resilience and ingenuity of South Africans in tackling complex challenges.

For those interested in learning more about how Bounce Safety Flooring can transform your facility, please contact us. Our experienced team is ready to discuss innovative solutions tailored to your needs. Follow our LinkedIn page for more success stories and updates every Wednesday evening.

If you have an equine or veterinary facility that could benefit from our solutions, or if you're interested in creating safe, engaging, and educational play areas, reach out to Bounce Safety Flooring. We welcome projects of all scales and complexities.

Thank you for your time,  
Cameron Filen