



**Catchment
Sensitive
Farming**

Working together for
a healthy environment

Air Quality Challenges in Agriculture

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Catchment Sensitive Farming (CSF) is led by Natural England, in partnership with Defra and the Environment Agency.



Low Ammonia Emission Flooring



Photo: AHDB

- Urease enzyme in faeces breaks down urea in urine to release ammonia – volatilised to air
- Separate urine from faeces & rapidly remove urine using grooved, shaped, slotted or profiled sloping flooring
- Reduces ammonia emissions by 25-46%



Low Ammonia Emission Flooring

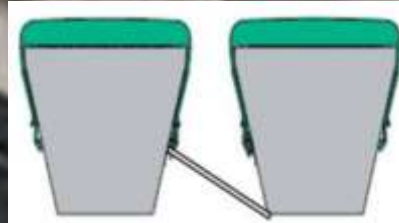


Diagram: Cafre

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Low Ammonia Emission Flooring

Concrete products for new slurry tanks or replacing slats

RAV no.	Tested product	Testing status	Emission factor	U
1.13	Anders Beton Eco-Vloer (Eco-Floor)	Final	7 kg NH ₃	W
1.14	HCL Welzijnsvloer (Wellbeing floor) W4	Final	7 kg NH ₃	N
1.14	Concretit Profielvloer (Profiled floor) C6	Final	7 kg NH ₃	N
1.21	Oostbeton Berkel D-1 Duurzaamheidsvloer (Sustainability floor)	Final	7 kg NH ₃	N
1.23	Swaans Patent Comfort Vloer (Comfort Floor) G6	Final	6 kg NH ₃	N
1.24	Anders Beton ERGO-vloer (ERGO floor)	Provisional	9.1 kg NH ₃	N
1.27	Swaans Patent Comfort Vloer (Comfort Floor) G3.1	Final	8 Kg NH ₃	N

Solid Concrete Flooring.

RAV no.	Tested product	Testing status	Emission factor	U
1.18	HCL Welzijnsvloer (Wellbeing floor) W5	Final	8 kg NH ₃	N
1.31	Den Boer Beton Sleufvloer (Slotted Floor) plus	Provisional	8.1 kg NH ₃	N

Solid rubber floors.

RAV no.	Tested product	Testing status	Emission factor	U
1.35	V17 Agro – V1 Groove Floor	Provisional	8.3 kg NH ₃	T
1.26	Opticow vloer (Opticow floor)	Final	8 kg NH ₃	N
1.34	Proflex Meadowfloor CL	Provisional	9.0 kg NH ₃	N

Slatted floors.

RAV no.	Tested product	Testing status	Emission factor	U
1.10	Groene vlag zonder klep (Green Flag without valve)	Final	7 kg NH ₃	C
1.9	Groene vlag met klep (Green Flag with valve)	Provisional	6 kg NH ₃	C
1.28	Proflex Meadowfloor	Final	6 kg NH ₃	N
1.30	HCL Easyfix rubber slats	Provisional	8 kg NH ₃	E
1.33	V17 Agro – V3 Groove Floor	Provisional	7.1 kg NH ₃	T



Low Ammonia Emission Flooring

- Standard is based on Dutch systems
- No UK system for measuring emissions from floors
- Approve a specification, not a product