

Anti-slip

TECHNICAL DATA SHEET

Safety on the floor is becoming increasingly important, especially in outdoor areas that may be **wet and slippery** or where there may be greasy agents, such as in industrial kitchens, and it is increasingly **regulated** internationally.

SPANISH REGULATIONS

The Technical Building Code regulates the basic safety requirements against the risk of falls in Spain:

"In order to limit the risk of slipping, the floors of buildings or areas for sanitary, educational, commercial, administrative, parking, and public attendance use must comply with a minimum slip resistance value according to their location."

The Pendulum Method is the one established by this regulation to measure and classify floors according to their slip resistance value (Rd).

SAFETY AGAINST THE RISK OF FALLS. SLIPPERINESS OF FLOORS.

Class required for floors depending on their location. / Recommended product.

Slip Resistance	Class	Application Location	Recommended Product	
Rd les than 15	0	Dry indoor areas without slip resistance requirements.	All LuxRaff® All CriSamar® STEP	
Between 15 and 35	1	Dry indoor areas with a slope < 6°.	All LuxRaff® All CriSamar® STEP	
Between 35 and 45	2	Dry indoor areas with a slope ≥ 6°	CriSamar® STEP - Serie S	
		Dry indoor stairs.		
		Wet indoor areas with a slope < 6° (building entrances from the outside, covered terraces, changing rooms, showers, bathrooms, toilets, kitchens, etc.).	CriSamar® STEP Codex CriSamar® STEP - Serie X	
More than 45	3	Wet indoor areas with a slope ≥ 6° (building entrances from the outside, covered terraces, changing rooms, showers, bathrooms, toilets, kitchens, etc.).		
		Wet indoor stairs.	CriSamar® STEP - Serie X LuxRaff® Grip	
		Wet and greasy indoor areas, such as industrial kitchens, parking lots, industrial use areas, slaughterhouses, etc.		
		Outdoor areas, swimming pools, and areas intended for barefoot users.		

^{*} For further details on CriSamar® STEP see certifications table.



OTHER SEVASA REFERENCE CERTIFICATIONS:

DIN 51130 Footwear

Inclination Angle	Level
Between 6° and 10°	R9
Between 10° and 19°	R10
Between 19° and 27°	R11
Between 27° and 35°	R12
More than 35°	R13

This test, also called Ramp, determines the slip resistance properties of floorings where people walk with footwear, on a slope and impregnated with a lubricating agent (engine oil). Establishing the safe tilt angle.

Areas where people walk barefoot, such as beach areas, swimming pools, dressing rooms, etc., require different characteristics from other areas where people walk with footwear. The German standard DIN 51097 is specific for

these barefoot walking areas.

The method establishes the slip resistance of wet and barefoot floors. A ramp saturated with water establishes the safe tilt angle without slipping. They are classified into 3 groups: A, B, or C.

DIN 51097 Barefoot

Category	Inclination Angle	Area
A CLASS	≥ 12°	Barefoot area (mostly dry). Changing rooms with lockers. Pool floor, where the water level exceeds 80 cm.
B CLASS	≥ 18°	Barefoot area, if not classified as A. Showers. Pool surroundings. Pool floor where the water level is less than 80 cm. Children's pools. Steps leading to the water. Steps of max. 1 meter wide with handrails leading to the water. Steps outside the pool area.
C CLASS	≥ 24°	Steps leading to the water, if not classified as B. Foot baths. Sloping pool edges.

The DIN 51130 and DIN 51097 methods are established in Germany by the official social insurance and accident prevention organization ("Berufsgenossenschaft") and have become an international reference for architects, builders, designers, and prescribing professionals in general.

SEVASA, with **CriSamar® STEP y LuxRaff®**, certifies its products with slip-resistant characteristics, surpassing the maximum safety requirements for pedestrian traffic: **UNE-EN 16165 ANNEX A, B, C, AS 4586** etc.