

## Bona Traffic Anti Slip

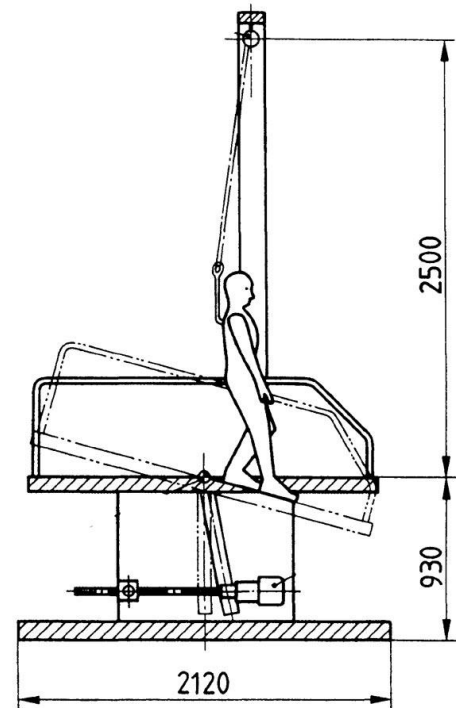
To slip usually has no fatal consequence but can be very dangerous and painful and may obstruct in work life and social activities. A British study shows that a serious slip or trip accident occurs every 3 minutes in the nation and cost to society could account for more than £750 million per year, where £360 million are directly connected to the workplace. SHE statistics suggest that most of these accidents occur when floor surfaces are contaminated with water, dust, grease etc.

In general specifiers are required to choose a flooring material that must not be so slippery that it puts people's safety at risk. In Germany (and more countries) they've gone further and regulated that certain workplaces with a risk of spill must have a flooring material with a specific slip resistance class in order to carry out certain work activities.

As we today see an increased demand for finishes with slip resistant properties, Bona has decided to use the German Industrial Norm DIN 51 130 as our reference standard for finishes aimed at public areas and workplaces with an increased risk of spill. Work is in progress for developing a similar but harmonised European standard (prEN 15673-1) but at the moment of writing this work hasn't been completed or widely implemented.

### The evaluation method

DIN 51 130 involves the use of a ramp (see pic 1) to evaluate the slip resistance. The ramp is covered with the flooring material and contaminated with motor oil. A person wearing standardized shoes steps up on the ramp and walks on the spot while the ramp is angled more and more. As soon as the person slips or feels uncomfortable the trial is halted and the obtained angle is converted into a specific slip resistance class which ranges from R9 - R13 (see table 1).



**Pic 1:** DIN 51130 Ramp test

Classification	R9	R10	R11	R12	R13
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Slip angle (°)	6-10	10-19	19-27	27-35	>35
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**Table 1:** DIN 51 130 R-value slipperiness classification

**Bona Traffic Anti Slip (AS)** has been developed to meet this standard and has received **R10** classification giving Bona the possibility of offering a product with relevant and recognized slip resistant properties making it an ideal choice for schools, nurseries, homes for the elderly, staircases, hallways, kitchens, pubs or other areas with an increased concern about slip safety. **Bona Traffic AS** has all the features of standard Bona Traffic and will offer the same exceptional durability and easiness of use as its predecessor.

#### When is it required to have R9 or R12?

German Employers Liability Insurance Association publishes guidelines concerning what slip resistance class (R-class) certain areas must fulfil (see attachment BGR 181 - recommendations). In areas where wooden floors can be found, usually class R9 or maximum R10 is required. Areas with an even higher requirement are typically such areas where wooden floors are not used e.g. slaughterhouses, cooking oil refineries and hotel kitchens etc.



**Bona Traffic AS** has been **R10** classified applied in two coats on top of a Bona Primer on an oak board sanded according to product sitework recommendations. It is important to understand that the surface treatment on top of the flooring material is not the only factor that affects the total slip resistance. The surface roughness of the substrate also plays an important role and care must be taken not to sand the floor finer than sitework recommendations. The Belt sanding should be ended with grit 120, and no finer than grit 150 screens should be used.

Apart from Germany which have regulations to fulfil, most customers are interested in something that is slip resistant and need not achieve a certain R-class. If the site conditions are deviating greatly from the testing conditions as described above, then the floor may not receive a classification but it is still true that it will leave a much more slip resistant surface compared to a standard finish. Standard finishes would typically not even receive R9 under equal testing conditions.

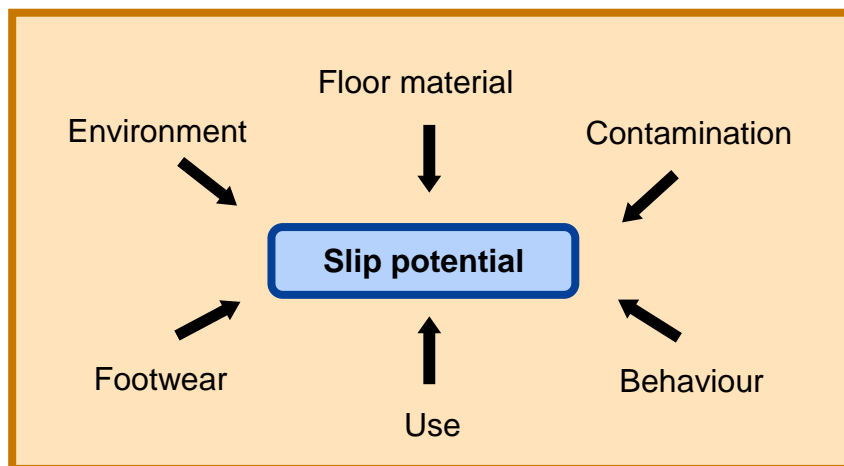
Floor construction examples:

<p><b>Example 1</b>                  Bona Traffic Anti Slip                  Bona Traffic Anti Slip                  Prime Classic                  Oak floor</p> <p>R10 classified? YES                  Slip resistant? YES</p>	<p><b>Example 2</b>                  Bona Traffic Anti Slip                  Bona Traffic Anti Slip                  Prime Intense                  Beech floor</p> <p>R10 classified? YES                  Slip resistant? YES</p>
<p><b>Example 3</b>                  Bona Traffic Anti Slip                  Bona Traffic Anti Slip                  Pre-finished floor</p> <p>R10 classified? NO                  Slip resistant? YES</p>	<p><b>Example 4</b>                  Bona Traffic Anti Slip                  Pre-finished floor</p> <p>R10 classified? NO                  Slip resistant? - *</p>

\* For best results it is recommended that the initial treatment with Bona Traffic Anti Slip is always made with two layers of finish.

**Can Bona Traffic Anti Slip guarantee that nobody will slip?**

No, the risk of slipping depends on a number of factors where most of them are outside Bona's control (see table 2). By taking control over one of these factors - the floor surface - site conditions are improved and the risk of slipping is reduced but not completely removed.



*Table 2: Slip potential model*

**Would it be desirable to have an even higher R-classification?**

No, firstly, few areas where wooden floors can be found are required to have a higher classification than R10. It must also be appreciated that the increased surface roughness of an anti-slip product also makes it more susceptible to picking up dirt. A higher R-class would i.e. not only bring advantages with it.

### Maintenance

Bona Traffic Anti Slip should be used as is and cleaned as often as required using Bona Cleaner and a microfibre pad. Aggressive cleaning methods such as buffing the floor with a red pad should be avoided due to the polishing effect on the surface which may lower the friction prematurely.

Fortunately, by using the Bona System for the treatment and maintenance of the floor, a worn surface can always be renewed with additional coats of finish after first preparing the surface for overcoating with Bona Prep.

The floor should be evaluated annually or as required to make sure that cleaning methods are keeping the floor in good shape and that correct friction values are maintained.

### Overcoating/compatibility

**Bona Traffic Anti Slip** has the same exceptional adhesion properties as Bona Traffic and can be applied to many pre-finished surfaces and previously on-site finished floors after first making an adhesion test. Bona Traffic AS can be used with all Bona waterborne primers.

### Article data

	<b>WT153946001</b>
	<b>Bona Traffic Anti Slip</b>
Each bottle contains (litre)	4,95
Each box contains (pcs)	3
Each pallet contains (pcs)	54
EAN code - bottle	7 31279 001941 8
EAN code - box	37 31279 001941 9
EAN code - pallet	87 31279 001941 4
Gross price (per litre)	€ 28,10
<b>Available at DC1</b>	From week 27

Bona Traffic Anti Slip will be available in one gloss version, matt (25% at 60°).

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