

Shod Slip Resistance

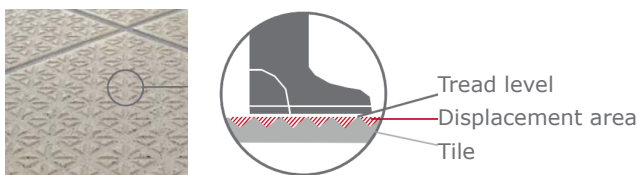
IN ACCORDANCE WITH BGR 181

Working rooms and areas are classified according to five assessment groups on the basis of the extent of the risk of slipping. Coverings belonging to group R9 are subject to the lowest requirements, while the most stringent requirements apply to group R13 coverings. Working rooms + areas where a displacement space is necessary under the tread level in order to discharge substances that are particularly conducive to slipping are indicated by 'V' in conjunction with a number specifying the minimum volume of the displacement space. V ratings are particularly important for areas where water is likely to be present, e.g. swimming pools, shower areas, reception areas and outdoor areas etc. V ratings are classified as V0 being the lowest and V10 as the highest.

TEST METHOD

DIN 51130 - Testing of floor covering; determination of slip resistance; work rooms and work areas subject to pronounced risk of slipping.

DESIGNATION OF DISPLACEMENT SPACE	MINIMUM VOLUME OF DISPLACEMENT SPACE BELOW THE WALKING AREA
V4	4cm ³ /dm ²
V6	6cm ³ /dm ²
V8	8cm ³ /dm ²
V10	10cm ³ /dm ²



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NO.	WORKING ROOMS & TRAFFIC ROUTES	SLIPPING RISK ASSESSMENT GROUP (STANDARD GUIDELINE)	DISPLACEMENT AREA WITH NUMBER SPECIFYING MIN. VOLUME
0	GENERAL WORKING ROOMS + AREAS		
0.1	Entrance areas, indoors	R9	-
0.2	Entrance areas, outdoors	R11/R10	V4
0.3	Stairs, indoors	R9	-
0.4	Stairs, outdoors	R11/R10	V4
0.5	Sloping ramps, inside (e.g. for wheelchairs, levelling slops)		
0.6	Sanitary (e.g. toilets, wash-rooms)		
0.6.1	Toilets	R9	-
0.6.2	Changing or wash-rooms	R10	-
0.7	Break rooms (e.g. canteens)	R9	-
0.8	Medical rooms	R9	-
1	MANUFACTURE OF MARGARINE, EDIBLE FATS + OILS		
1.1	Fat melting	R13	V6
1.2	Edible-oil refinery	R13	V4
1.3	Manufacture and packing of margarine	R12	-
1.4	Manufacture & packing of edible fat, bottling of edible oil	R12	-
2	MILK TREATMENT + PROCESSING, CHEESE PRODUCTION		
2.1	Processing of fresh milk, including buttery	R12	-
2.2	Cheese production storage and packaging	R11	-
2.3	Ice cream manufacture	R12	-
3	MANUFACTURE OF CHOCOLATES + CONFECTIONERY		
3.1	Sugar boiling plant	R12	-
3.2	Cocoa production	R12	-
3.3	Preparation of raw mass	R11	-
3.4	Production of slabs, hollow moulded forms & chocolate	R11	-
4	MANUFACTURE OF BREADS + PASTRIES (BAKERIES/CAKE MANUFACTURERS)		
4.1	Preparation of dough	R11	-
4.2	Areas where fats and liquid mixtures are processed	R12	-
4.3	Washing-up rooms	R12	V4

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5	SLAUGHTERING, MEAT HANDLING, MEAT PROCESSING		
5.1	Abattoir	R13	V10
5.2	Gut cleaning areas	R13	V10
5.3	Meat jointing	R13	V8
5.4	Sausage and cold meats kitchen	R13	V8
5.5	Boiled sausage area	R13	V8
5.6	Preserved sausage areas	R12	V6
5.7	Sausage drying room	R12	-
5.8	Gut storage	R12	-
5.9	Curing, smoking room	R12	-
5.10	Poultry processing	R12	V6
5.11	Slicing and packing	R12	-
5.12	Butchery with shop	R12	V8
6	HANDLING + PROCESSING OF FISH, MANUFACTURE OF DELICATESSEN		
6.1	Handling and processing of fish	R13	V10
6.2	Manufacture of delicatessen products	R13	V6
6.3	Manufacture of mayonnaise	R13	V4
7	PREPARATION + PROCESSING OF VEGETABLES		
7.1	Manufacture of sauerkraut	R13	V6
7.2	Manufacture of canned vegetables	R13	V6
7.3	Sterilisation areas	R11	-
7.4	Rooms in which vegetables are prepared for processing	R12	V4
8	WET AREAS IN FOOD + DRINK MANUFACTURE		
8.1	Storage and fermenting cellar	R10	-
8.2	Bottling, fruit juice manufacture	R11	-

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9	KITCHENS, DINING ROOMS		
9.1	Gastronomic kitchens (restaurant and hotel kitchens)		
9.1.1	Up to 100 covers per day	R11	V4
9.1.2	More than 100 covers per day	R12	V4
9.2	Commercial kitchens (homes, schools, nurseries etc.)	R11	-
9.3	Commercial kitchens in hospitals and clinics	R12	-
9.4	Large-scale commercial kitchens (canteens etc.)	R12	V4
9.5	Fast food and snack bar kitchens	R12	V4
9.6	Defrosting and re-heating kitchens	R10	-
9.7	Tea and coffee kitchens, B+B kitchens, ward kitchens	R10	-
9.8	Washing-up areas		
9.8.1	Washing-up areas for 9.1, 9.4, 9.5	R12	V4
9.8.2	Washing-up areas for 9.2	R11	-
9.8.3	Washing-up areas for 9.3	R12	-
9.9	Dining rooms, guest rooms, canteens, serving areas	R9	-
10	COLD STORAGE ROOMS, DEEP FREEZE + DEPOTS		
10.1	For non-packaged goods	R12	-
10.2	For packaged goods	R11	-
11	SALES AREAS + SHOPS		
11.1	Receiving rooms for meats	R11	-
11.1.1	For non-packaged goods	R10	-
11.1.2	For packaged goods	R11	-
11.2	Receiving rooms for fish		
11.3	Serving area for meats and cold cuts		
11.3.1	For non-packaged goods	R11	-
11.3.2	For packaged goods	R10	-

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11.4	Serving area for breads & pastries, non-packaged goods	R10	-
11.5	Serving area for dairy products, non-packaged goods	R10	-
11.6	Serving area for fish		
11.6.1	For non-packaged goods	R12	-
11.6.2	For packaged goods	R11	-
11.7	Serving areas other than 11.3 – 11.6	R9	-
11.8	Meat preparation room		
11.8.1	For meat preparation other than covered in 5	R12	V8
11.8.2	For meat processing other than covered in 5	R11	-
11.9	Flower arranging rooms and areas	R11	-
11.10	Sales areas with fixed ovens		
11.10.1	For the production of breads and pastries	R11	-
11.10.2	For the baking of prepared breads and pastries	R10	-
11.11	Sales areas with fixed deep-fat fryers or grills	R12	V4
11.12	Sales areas, customer-frequented areas	R9	-
11.13	Preparation areas for food for self-service sale	R10	-
11.14	Cash till, packing areas	R9	-
11.15	Sales areas outdoors	R11/ R10	V4
12	PUBLIC HEALTH SERVICE ROOMS		
12.1	Disinfection areas (wet)	R11	-
12.2	Sterilisation areas	R10	-
12.3	Excrement areas, sink rooms, unclean nursing rooms	R10	-
12.4	Pathology rooms	R10	-
12.5	Rooms for medicinal baths, hydrotherapy, fango prep	R11	-
12.6	Wash-rooms (operating theatres, plaster casting rooms)	R10	-
12.7	Sanitary rooms, ward bathrooms	R10	-

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12.8	Rooms for medical diagnosis & therapy, massaging room	R9	-
12.9	Operating theatres	R9	-
12.10	Wards with hospital rooms and corridors	R9	-
12.11	Medical practices, day clinics	R9	-
12.12	Dispensing chemists	R9	-
12.13	Laboratories	R9	-
12.14	Hairdressers	R9	-
13	LAUNDRIES		
13.1	Rooms with centrifugal/continuous-run washing machines	R9	-
13.2	Rooms where laundry is removed from the machine wet	R11	-
13.3	Rooms for ironing and pressing	R9	-
14	FEED CONCENTRATE PRODUCTION		
14.1	Dry feed production	R11	-
14.2	Feed concentrate production using fat and water	R11	V4
15	MANUFACTURE OF LEATHER GOODS, TEXTILES		
15.1	Water workshops in tanneries	R13	-
15.2	Areas with fleshing machines	R13	V10
15.3	Areas where glued leather occurs	R13	V10
15.4	Grease rooms for the manufacture of seals	R12	-
15.5	Dye works for textiles	R11	-
16	PAINT-SHOPS		
16.1	Wet rubbing down areas	R12	V10
17	CERAMICS INDUSTRY		
17.1	Wet-grinding (for ceramic material)	R11	-
17.2	Mixers, working with material e.g. tar, pitch, graphite	R11	V6
17.3	Presses (forming), e.g. working with (tar, pitch, graphite)	R11	V6
17.4	Casting areas	R12	-
17.5	Glazing areas	R11	-

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18	TREATMENT + PROCESSING OF GLASS + STONE		
18.1	Stone cutting, stone grinding areas	R11	-
18.2	Glass moulding of hollow/container/structural glass	R11	-
18.3	Grinding areas for hollow glass, sheet glass	R11	-
18.4	Processing of insulating glass, working with desiccants	R11	V6
18.5	Packaging/dispatch of sheet glass, anti-blocking agents	R11	V6
18.6	Etching and acid polishing units for glass	R11	-
19	CEMENT WORKS		
19.1	Cement washing area	R11	-
20	Storage rooms		
20.1	Storage rooms for oils and fats	R12	V6
20.2	Storage rooms for packaged foods	R10	-
20.3	Storage rooms outdoors	R10/R11	V4
21	CHEMICAL + THERMAL TREATMENT OF IRON, METAL + GLASS		
21.1	Pickling shops	R12	-
21.2	Hardening shops	R12	-
21.3	Laboratories	R11	-
22	METAL WORKSHOPS		
22.1	Electroplating rooms	R12	-
22.2	Grey iron processing	R11	V4
22.3	Mechanical processing areas, punching department, press-room, drawing mill + areas with increased use of oil and lubricating materials.	R11	V4
22.4	Part cleaning areas, steaming areas	R12	-

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23	VEHICLE MAINTENANCE WORKSHOP		
23.1	Repair and maintenance shops	R11	-
23.2	Repair and inspection pit	R12	V4
23.3	Car wash, washing areas	R11	V4
24	AIRCRAFT MAINTENANCE WORKSHOPS		
24.1	Hangars	R11	-
24.2	Repair hangars	R12	-
24.3	Washing areas	R11	V4
25	SEWAGE WORKS		
25.1	Pumping rooms	R12	-
25.2	Rooms for sludge de-watering facilities	R12	-
25.3	Rooms for raking facilities	R12	-
25.4	Standing areas, working and maintenance platforms	R12	-
26	FIRE STATIONS		
26.1	Vehicle standing areas	R12	-
26.2	Rooms for hose servicing equipment	R12	-
27	BANKS		
27.1	Reception areas	R9	
28	PARKING		
28.1	Garages, multi-storey/underground car parks not subject to the effects of weather	R10	-
28.2	Garages, multi-storey/underground car parks subject to the effects of the weather	R10/R11	V4
28.3	Park areas outdoors	R10/R11	V4

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29	SCHOOLS + KINDER-GARDENS		
29.1	Entrance areas, corridors, recreation halls	R9	-
29.2	Classrooms, group rooms	R9	-
29.3	Stairs	R9	-
29.4	Toilets, wash-rooms	R10	-
29.5	Cookery rooms in schools	R10	-
29.6	Kitchens in kinder-gardens	R10	-
29.7	Machine rooms for woodwork	R10	-
29.8	Special rooms for woodwork etc.	R10	-
29.9	Playgrounds	R10/R11	V4
30	OUTSIDE TRAFFIC ROUTES		
30.1	Paths	R10/R11	V4
30.2	Loading ramps		
30.2.1	Covered	R10/R11	V4
30.2.2	Not covered	R12	V4
30.3	Sloping ramps (e.g. for wheelchairs, loading bridges)	R12	-
30.4.1	Refuelling areas	R12	-
30.4.2	Refuelling areas, covered	R11	-