

SLIP RESISTANCE COMPLIANCE

FOR STAIRWAYS, WALKWAYS, LANDINGS & RAMPS

There is no direct reference in WHS legislation which specifically addresses safety on walkways, ladders or stairs. Both the employer and the person with management and control of a workplace have, under their general duty of care, a legal duty to ensure that the workplace is safe and without risks to health.

Slipping, tripping and falling are risks that can be associated with steps and stairs, and can lead to serious injuries. Under the WHS Act, the employer has a 'duty of care' to provide and maintain a safe and healthy workplace – all potential hazards must be identified, the associated risk assessed and then controls introduced to eliminate or reduce those risks as far as practicable.

Also under the Act, persons who 'manage or control' workplaces must ensure that the workplace and the means of entering and leaving it are safe and without risks to health.

The specific requirements for the construction of stairways, platforms and so on, however, are found **elsewhere**. Stairs

must now comply with the National Construction Code 2015 (NCC) – formerly the Building Code of Australia (BCA) – which has been given the status of **building regulation** by Australian states and territories.



Note: NCC 2016 is now available and was adopted by the states and territories on 1st May 2016

Australian stair nosing standards state the following requirements are mandatory for antislip stair nosing and are drawn from the NCC Volume 1, (BCA) To fully comply with current Australian Standards all public access stairs should;

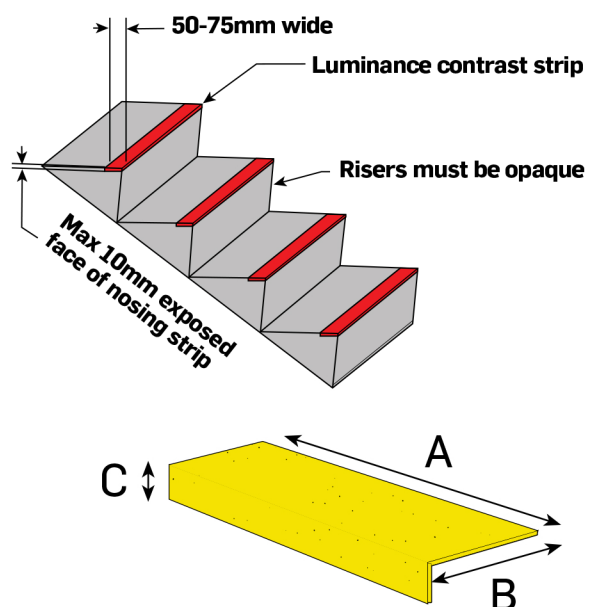
- Be fitted with stair nosing that have a fully non-slip horizontal surface,
- Have 90degree stair nosing measuring a minimum of 50mm wide by 10mm minimum deep,
- Have stair nosing's with a luminance contrast of at least 30 percent against the surface.

New construction, unless exempt, has to meet code requirements and stair nosing simply becomes necessary. You need to select a stair nosing that is durable, slip resistant, retains attractive appearance even in high traffic stairways, but the most important feature is it must meet the relevant construction code and standards. The main Australian Standard that covers safety nosing is AS1428.1 which is referenced in Volume 1 of the NCC.

In addition to the Australian Standard 1428.1, another Australian Standard has recently been updated to be consistent with the building code: AS1657:2013 Fixed Platforms, Walkways, Stairways and Ladders – Design, Construction and Installation.

The Australian Standard AS1657 contains detailed advice on stairs, landings, walkways and ladders etc.

These standards are **compulsory** in new construction, however, existing stairs in any public accessible area **should** also comply to ensure a 'duty of care' compliance is met.



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In the code and standard's, a stairway is defined as 2 or more steps used in pedestrian travel. It is compulsory for all new buildings covered under Volume 1 to comply with AS1428.1 and that all nosing must meet these minimum requirements. A stairway must have:

- Not more than 18 or less than 2 risers in each flight, between landings,
- Treads which have
 - A surface with a slip resistance classification not less than listed on table D2.14 of the code when tested in accordance with AS4586
 - A nosing strip with a slip resistance classification not less than listed on table D2.14 of the code when tested in accordance with AS4586

Standards Australia and the NCC have classified slip resistance and locations/ situations that must be met with new construction. AS4586 standards table below states that treads, landings and nosing must provide a minimum R11 or P4 wet slip resistance rating for external stairs and R10 or P3 for dry internal stairs.



APPLICATION	SURFACE CONDITIONS	
	DRY	WET
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3 or R10	P4 or R11

Table D2.14

The main points that were covered in both the original AS1428.1 and AS4586 revision dealing with stair nosing

- Contrasting strips required between 50mm and 75mm in depth, extending across the full width of each stair nosing with a minimum luminance contrast of 30% to the background in accordance with AS1428.1
- BCA 2014 clause D2.13(a)(v) require a class P4 slip resistant surface provided to each stair nosing strip or stair tread, where there is potential for the area to be wet (outside) and a rating of P3 when the stair is in dry conditions (AS4586:2013) The same ratings are applicable to the stair landings.
- When located at the front of a stair tread, the nosing cannot extend down the riser more than 10mm.

Carborundum industrial hard wearing antislip nosing in high contrast colours is available up to an R13 slip resistance rating, providing the ultimate in slip resistance. This durable nosing is suitable for industrial installations and fire escape stair applications both inside and out.

When selecting antislip stair nosing it is critical to ensure you choose the right products to meet your needs as well as the relevant codes and standards. (NCC, AS4586, AS1428, AS1657)

Advance Anti-Slip Surfaces supplies a full range of compliant non-slip stair nosing, ladder rung covers and Safeplates in a multitude of sizes, colours and profiles to suit every type of stairway, walkway, ladder and ramp.