TECHNICAL SPECIFICATIONS

Advance Anti-Slip Surfaces Stair Nosings, SafePlates and Ladder Rung Covers are a Class One, ready to install, metal backed product with a durable antislip surface designed to provide firm footing and eliminate slips, trips, stumbles, tumbles and falls in pedestrian access areas.

1. STEEL FOUNDATION

The Advance Anti-Slip product range is a steel based product with either one of following types of steel used depending on the application and strength requirements.

STAIR NOSING – SAFEPLATES

GL	=	Galvabond® 1.2mm
GL3	=	Galvabond® 3.0mm
AL1.6	=	5052 Aluminium 1.6mm
AL3	=	5052 Aluminium 3.0mm
SS1.2	=	316 Stainless Steel 1.2mm
SS1.6	=	316 Stainless Steel 1.6mm

STAIR NOSINGS

SAFEPLATES

LADDER COVERS

Circular

CB	=	Colorbond® .55mm
AL.8	=	5052 Aluminium .8mm
SS.55	=	316 Stainless Steel .55mm

Square

GL	=	Galvabond® 1.2mm
AL1.6	=	5052 Aluminium 1.6mm
SS1.2	=	316 Stainless Steel 1.2mm

LADDER RUNG COVERS
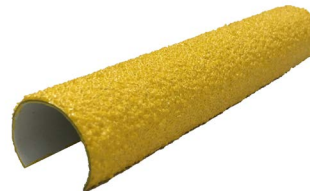
1.2mm steel should constitute the minimum gauge to avoid excessive flexing of the antislip material, which could contribute to the antislip delaminating from the foundation. This gauge also offers satisfactory resistance to impact and requires less fixing points than thinner gauges.

2. FABRIC MEDIUM

· All layers hand laminated, not sprayed
· Cured at optimum temperature and humidity – no oven use
· Resistant to all solvents, petroleum products and acid solutions

If the high build resin is applied directly to the steel foundation the bond between them may initially be adequate. However, the surface will inevitably delaminate through either impact or thermal expansion differentials between the resin and the steel. By utilising a fabric medium "floating" on the steel foundation, delamination problems are eliminated, provided that the bonding system is adequate. Once attached, Advance Anti-Slip's fabric is rolled onto the steel through a system of pinch rollers, which removes any trapped air and ensures maximum adhesion. When the first of the key coats of the resin is applied to the fabric, the fabric becomes an integral part of the resin system, dramatically increasing the tensile strength of the system while allowing for differentials in thermal expansion rates.

3. RESIN SYSTEM

· All layers hand laminated, not sprayed
· Cured at optimum temperature and humidity – no oven use
· Resistant to all solvents, petroleum products and acid solutions

The resin system must be resistant to prolonged exposure to most chemicals, particularly solvents. The resin should also be solvent free otherwise standard petroleum products may dissolve the surface over time. All Advance Anti-Slip products are individually hand laminated and cured in a controlled environment with almost zero humidity and an ambient temperature of 25 degree Celsius.

If the resin is sprayed, uniformity and consistency will not be achieved. If the resin is cured at a temperature greater than 40 degrees Celsius more products may be produced per hour. However, styrene gas is created in the curing resin and will work its way to the surface. This has negative effects on the environment as styrene gas breaks down the earth's ozone layer and it may lead to pin holes, bubbles or a brittle resin system on the product.

4. AGGREGATE

Different manufactures have different names for each of their antislip materials. To ensure that the end user receives the required coarseness of material, the following comparisons of Advance Anti-Slip grading may be used. Sizes of Advance Anti-Slip aggregate are as follows:

	Grade	ISO 86	Microns (range)
1.	Barefoot	80	212 - 180
2.	Fine	46	425 - 355
3.	Industrial	24	850 - 710
4.	Heavy Duty	20	1180 - 1000
5.	Offshore	16	1400 - 1180
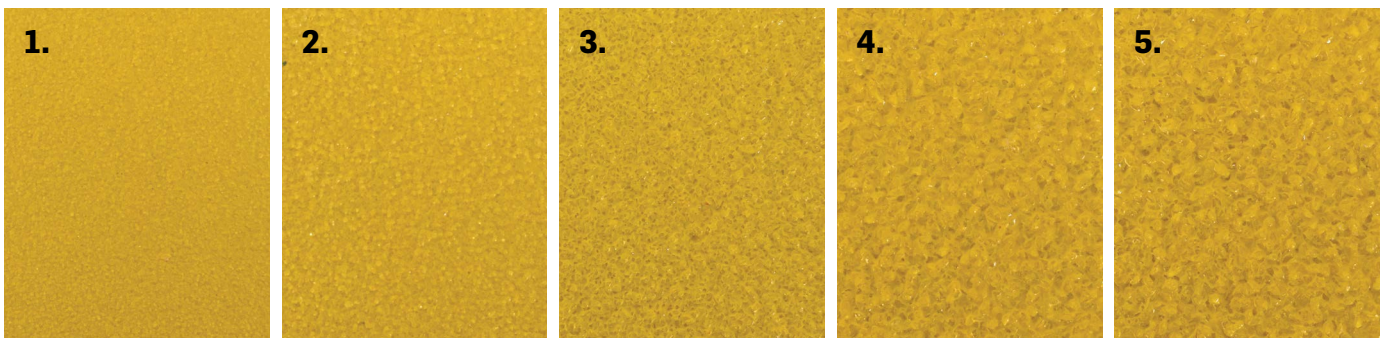
Before the final coat of resin is applied to the aggregate, the edges of all Advance Anti-Slip metal backed products are chipped to remove all excess aggregate and then all edges are sealed with the final pigmented coat of resin. If this is not done, the products edges are often chipped during transportation or installation, which leaves bare steel exposed on the edges.