

Think **future.** Think aluminium.

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TREADBRIGHT

ROLLED PRODUCTS



HULAMIN

Think Future. Think Aluminium.

TREDBRIGHT

Hulamin's Treadbright has a bright surface finish coupled with superior manufacturing properties. These attributes give designers a wide range of product applications in which they can showcase their flair for aesthetics coupled with functional performance.

TREDBRIGHT PROPERTIES

Properties and formability:

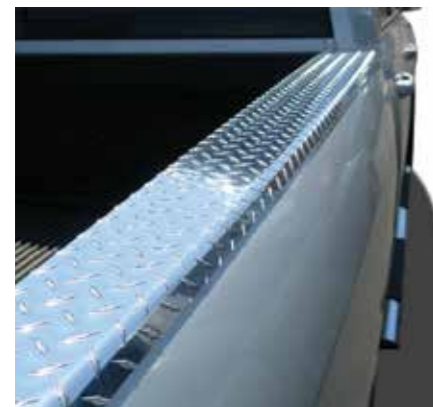
- Produced with a bright finish
- Large variety of thicknesses
- Bendable to 90 degree angle
- Maximum squareness

CHEMICAL COMPOSITION ALLOY 4017 (IN WEIGHT %)

%	Si	Fe	Cu	Mn	Mg	Zn	Other elements		Al
							Each	Total	
Min	0.6	-	0.1	0.6	0.1	-			Remainder
Max	1.6	0.7	0.5	1.2	0.5	0.5	0.05	0.15	

PHYSICAL PROPERTIES

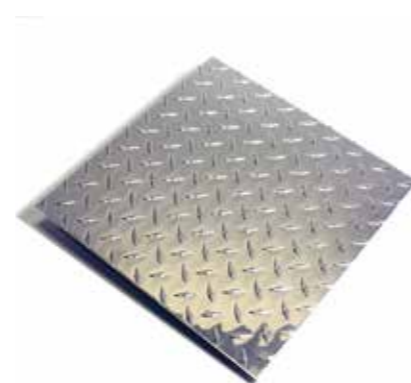
Properties	Value	Unit
Density at 20°C	2.72	g/cm ³
Melting Range	580-640	°C
Thermal Capacity	900	J/kg°C
Thermal Conductivity	200	W/m°C
Thermal Expansion	23 x 10 ⁻⁶	/°C
Resistivity at 20°C	32	nΩm
Modulus of Elasticity	70	Gpa
Modulus of Rigidity	27	Gpa



Treadbright vehicle accessory



Treadbright Flooring



Treadbright

MECHANICAL PROPERTIES

Alloy/ Temper	Proof Stress (MPa)		UTS (MPa)		Elongation percent		Tread Height (mm)		Recommended minimum bend Radius (90°)
	Min	Max	Min	Max	Min	Max	Min	Max	
4017- H22	55	-	130	170	8	-	0.7		Ot

SIZES AVAILABLE

(based on imperial dimensions)

Item	Gauge	Width (mm)	Length (mm)	1524 Coil Width (mm)
1	1.143	1219.3	2438.4	
2	1.473	1219.2	2438.4	
3	1.473	1524	3048	1219.2
4	2.032	1219.2	2438.4	1524
5	2.032	1524	3048	1219.2
6	3.175	1219.2	2438.4	1524
7	3.175	1524	3048	1219.2
TOLERANCES		+ - 2 mm	+ - 3 mm	+ - 2 mm

TREADHEIGHTS

Treadheights will be in accordance with EN 1386.

PLATE MASS

To find the nominal mass of a Treadbright sheet in kilograms per square metre, apply the following formula (where t = base thickness in mm) $2.71t + 0.22 = \text{Kg per m}^2$.

ATTRIBUTES

Corrosion Resistance

According to field tests, 4017 exhibits similar results to 3003 alloy.

Squareness

Measure the difference between the two diagonals of a sheet. The maximum allowable difference in length of diagonals is 10mm.

Surface Quality

Treadbright is produced in a bright rolled condition and free from blemishes that would affect fitness for purpose.

Fabrication

Bending

- Treadbright of up to 3.175mm thickness is capable of bending to a 90° angle with a zero bend radius and with treads on the outside of the bend.
- Slight "orange peel" effect in the area of the bend would be considered acceptable.

Welding

4017 can be joined using MIG, TIG, LASER welding techniques. It is recommended that 4043 filler alloy is used.