

## ALOT

### Material Specifications | Malzeme Seçenekleri

## BASE | GÖVDE

### Steel | Çelik



**BRUSHED STAINLESS STEEL**  
SATİNE PASLANMAZ ÇELİK

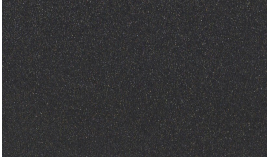


**GLOSSY STAINLESS STEEL**  
PARLAK PASLANMAZ ÇELİK



**CORTEN STEEL**  
KORTEN ÇELİK

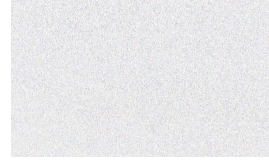
### Powder Coated Aluminium & Metal | Elektrostatik Toz Boyalı Alüminyum & Metal



**COBALT GREY**  
KOBALT GRİ



**METALIC GREY**  
METALİK GRİ



**WHITE**  
BEYAZ

## SURFACE | YÜZEY

### Wood | Ahşap



**TEAK**  
TİK



**IROKO**  
İROKO



**ASH**  
DIŞBUDAK

**Steel | Çelik**

Property data given in this document is typical for bar products covered by EN 10269:2013. ASTM, EN or other standards may cover products sold. It is reasonable to expect specifications in these standards to be similar but not necessarily identical to those given in this datasheet.

TABLE 1. CHEMICAL COMPOSITION FOR 304 STAINLESS STEEL ALLOYS

%	304	304L	304H
C	0.0 - 0.07	0.0 - 0.03	0.04 - 0.08
Mn	0.0 - 2.0	0.0 - 2.00	0.0 - 2.0
Si	0.0 - 1.00	0.0 - 1.00	0.0 - 1.0
P	0.0 - 0.05	0.0 - 0.05	0.0 - 0.04
S	0.0 - 0.03	0.0 - 0.02	0.0 - 0.02
Cr	17.50 - 19.50	17.50 - 19.50	17.00 - 19.00
Ni	8.00 - 10.50	8.00 - 10.50	8.00 - 11.00
Fe	Balance	Balance	Balance
N	0.0-0.11	0.0-0.11	0.0 - 0.10

**MECHANICAL PROPERTIES OF STAINLESS STEEL 304**

TABLE 2A. MECHANICAL PROPERTIES FOR 304 STAINLESS STEEL ALLOYS - SHEET UP TO 8 MM THICK

Grade	304	304L	304H
Tensile Strength (MPa)	540 - 750	520 - 700	-
Proof Stress (MPa)	230 Min	220 Min	-
Elongation A50 mm	45 Min %	45 Min %	-

**ALLOY DESIGNATIONS**

STAINLESS STEEL 304 ALSO CORRESPONDS TO THE FOLLOWING STANDARD DESIGNATIONS AND SPECIFICATIONS:

Euronorm	UNS	BS	En	Grade
1.4301	S30400	304S15 304S16 304S31	58E	304
1.4306	S30403	304S11	-	304L
1.4307	-	304S11	-	304L
1.4311	-	304S11	-	304L
1.4948	S30409	304S51	-	304H

### **CORROSION RESISTANCE OF STAINLESS STEEL 304**

STAINLESS STEEL 304 HAS EXCELLENT CORROSION RESISTANCE IN A WIDE VARIETY OF ENVIRONMENTS AND WHEN IN CONTACT WITH DIFFERENT CORROSIVE MEDIA. PITTING AND CREVICE CORROSION CAN OCCUR IN ENVIRONMENTS CONTAINING CHLORIDES. STRESS CORROSION CRACKING CAN OCCUR AT TEMPERATURES OVER 60°C.

### **HEAT RESISTANCE OF STAINLESS STEEL 304**

STAINLESS STEEL 304 HAS GOOD RESISTANCE TO OXIDATION IN INTERMITTENT SERVICE UP TO 870°C AND IN CONTINUOUS SERVICE TO 925°C.

### **FABRICATION OF STAINLESS STEEL 304**

FABRICATION OF ALL STAINLESS STEELS SHOULD BE DONE ONLY WITH TOOLS DEDICATED TO STAINLESS STEEL MATERIALS. TOOLING AND WORK SURFACES MUST BE THOROUGHLY CLEANED BEFORE USE. THESE PRECAUTIONS ARE NECESSARY TO AVOID CROSS CONTAMINATION OF STAINLESS STEEL BY EASILY CORRODED METALS THAT MAY DISCOLOUR THE SURFACE OF THE FABRICATED PRODUCT.

### **COLD WORKING OF STAINLESS STEEL 304**

STAINLESS STEEL 304 READILY WORK HARDENS. FABRICATION METHODS INVOLVING COLD WORKING MAY REQUIRE AN INTERMEDIATE ANNEALING STAGE TO ALLEVIATE WORK HARDENING AND AVOID TEARING OR CRACKING. AT THE COMPLETION OF FABRICATION A FULL ANNEALING OPERATION SHOULD BE EMPLOYED TO REDUCE INTERNAL STRESSES AND OPTIMISE CORROSION RESISTANCE.

### **HOT WORKING OF STAINLESS STEEL 304**

FABRICATION METHODS, LIKE FORGING, THAT INVOLVE HOT WORKING SHOULD OCCUR AFTER UNIFORM HEATING TO 1149-1260°C. THE FABRICATED COMPONENTS SHOULD THEN BE RAPIDLY COOLED TO ENSURE MAXIMUM CORROSION RESISTANCE.

### **HEAT TREATMENT OF STAINLESS STEEL 304**

STAINLESS STEEL 304 CANNOT BE HARDENED BY HEAT TREATMENT SOLUTION TREATMENT OR ANNEALING CAN BE DONE BY RAPID COOLING AFTER HEATING TO 1010-1120°C.

## **Powder Coated Aluminium & Metal | Elektrostatik Toz Boyalı Alüminyum & Metal**

Powder coating exceeds the requirements of AAMA2604-10 and surpasses the performance of all leading architectural powder coatings, designed to offer significantly higher gloss retention and resistance to colour change combined with maximum film integrity to ensure long term cosmetic and functional protection.

CHEMICAL TYPE: SUITABLE FOR ELECTROSTATIC SPRAYS  
SPECIFIC GRAVITY

10 MINS AT 200°C 8 MINS AT 210°C

MECHANICAL AND CHEMICAL TESTS CARRIED OUT ON CHROMATED ALUMINIUM PANELS. ALL TESTS ARE PERFORMED ON PANELS COATED WITH 60 TO 80 MICRONS OF A GLOSS FINISH POWDER COATING STOVED FOR 10 MINUTES AT 200°C (METAL TEMPERATURE). POWDER COATINGS ARE DESIGNED TO EXCEED THE REQUIREMENTS OF AAMA2604-10.

POLYESTER

DRY ADHESION IMPACT RESISTANCE

DRY FILM HARDNESS ABRASION RESISTANCE

SALT SPRAY

CONSTANT HUMIDITY RESISTANCE PERMEABILITY SULPHUR DIOXIDE

CHEMICAL RESISTANCE EXTERIOR DURABILITY

COLOUR STABILITY AT ELEVATED TEMPERATURES

AAMA2604 CLAUSE 7.4 AAMA2604 CLAUSE 7.5

ISO2815 (BUCHHOLZ) AAMA2604 CLAUSE 7.6

AAMA2604 CLAUSE 7.8.2 ASTM B117 AT 35°C D1654

AAMA2604 CLAUSE 7.8.1 ASTM D2247, ASTM D714 AS3715 2002

ISO3231 (KESTERNICH)

5 YEARS FLORIDA EXPOSURE AAMA 2604-10  
 PASS NO REMOVAL OF FILM  
 PASS-NO TAPE REMOVAL OF FILM TO SUBSTRATE FOLLOWING 0.1" DEFORMATION PASS  
 PASS-ABRASION COEFFICIENT >20  
 PASS AT 3000 HRS - NO CORROSION MORE THAN 1.0-2.0 MM FROM SCRIBE MINIMUM BLISTER RATING 8  
 PASS AT 3000 HRS – BLISTER FORMATION LESS THAN "FEW" SIZE NO 8.  
 PASS - NO BLISTERING, LOSS OF GLOSS OR DISCOLOURATION.  
 GENERALLY GOOD RESISTANCE TO ACIDS, ALKALIS AND OILS AT NORMAL TEMPERATURES  
 EXCELLENT PERFORMANCE, COLOUR CHANGE ΔE LESS THAN 5, GLOSSRETENTION >30%.  
 CHALKING - NONE IN EXCESS OF NO.8 ASTM D4214 - D659  
 EXCELLENT FOR CONTINUOUS EXPOSURE UP TO 1200C

### **PRE-TREATMENT**

FOR MAXIMUM PROTECTION IT IS ESSENTIAL TO PRETREAT COMPONENTS PRIOR TO THE APPLICATION OF INTERPON D2015 ULTRIVATM SABLÉ IN ACCORDANCE WITH THE INTERPON D APPROVED APPLICATORS MANUAL. ALUMINIUM COMPONENTS MUST RECEIVE A FULL MULTI-STAGE CHROMATE CONVERSION COATING TO CLEAN AND CONDITIONS THE SUBSTRATE. DETAILED ADVICE SHOULD BE SOUGHT FROM THE PRETREATMENT SUPPLIER.

APPLICATION

ADDITIONAL INFORMATION

UNUSED OR OVER-SPRAYED POWDER COATING CAN BE RECLAIMED UP TO A MAXIMUM OF 30% USING SUITABLE EQUIPMENT AND RECYCLED THROUGH THE COATING SYSTEM.

A 20-YEAR FILM INTEGRITY / 15-YEAR COLOUR WARRANTY

NO ORGANIC SOLVENTS AND CAN CONTRIBUTE TOWARD SATISFYING THE IEQ CREDITS IN THE FOLLOWING GREEN STAR® RATING TOOLS:

SAFETY PRECAUTIONS NOTE: PRODUCTS ARE NOT REVIEWED OR CERTIFIED UNDER THE GREEN STAR® RATING SYSTEM. GREEN STAR® CREDIT REQUIREMENTS COVER THE PERFORMANCE OF MATERIALS IN AGGREGATE, NOT THE PERFORMANCE OF INDIVIDUAL PRODUCTS OR BRANDS. FOR MORE INFORMATION ON GREEN STAR®, VISIT [WWW.GBCA.ORG.AU](http://WWW.GBCA.ORG.AU)

### **Wood | Ahşap**

TIC / IROKO OPERATION IS CARRIED OUT ACCORDING TO THE PRINCIPLES OF TIK / IROKO ASSOCIATION AND ACCORDING TO DIN CEN / TS 15679: 2008-03 / EUROPEAN NORMS.

Iroko Deck and Teak materials are flawless materials purified from the stem.

MATERIAL TOLERANCES

LENGTH: +/- 2 MM (DIN EN 14519)

WIDTH: +/- 1 MM (DIN EN 4074-5)

THICKNESS: +/- 1 MM (DIN EN 4074-5)

TICK / IROKO MATERIALS ARE NAMED AS STRENGTH CLASS 1 ACCORDING TO DIN EN 335-2 AND DIN EN 350-2 NORMS.

TICK / IROKO MATERIALS ARE HONEY-COLORED AND NATURAL COLOR DIFFERENCES MAY OCCUR.