

Advanz™ 6HS – e600

Novelis

Novelis Advanz™ 6HS – e600 is a heat treatable product specifically designed and optimized for high strength requirements. The product shows good formability and bake hardening response. Due to its superior in-service strength, this alloy is ideal for down-gauging skin components. This product can be used for hoods, fenders and roofs.

Mechanical Properties

The product shows good formability and bake hardening response. Due to its superior in-service strength, this alloy is ideal for down-gauging skin components. All values listed are typical.

Temper	UTS (Rm)	YS (Rp0.2)	total elongation A80
T4 Delivery (e)	≥230 MPa	≤160 MPa	≥22%
T4 Delivery (s)	≥220 MPa	≤160 MPa	≥23%
T6 2% pre-strain, 20 min @ 185 °C (e)	≥290 MPa	≤250 MPa	≥16%

e = typical for exterior applications; s = typical for structure applications

Chemical Composition (wt. %)

the composition of e600 is within the composition of AA6451. Composition below is not 100% confirm to AA6451

Si	Fe	Cu	Mn	Mg
0.60 - 1.0	≤ 0.35	≤ 0.20	0.05 - 0.20	0.40 - 0.8
Cr	Zn	Ti	Others, each	Other, total
≤ 0.10	≤ 0.15	≤ 0.05	≤ 0.05	≤ 0.15

Physical Properties

Density	2.7 x 10 ³ kg/m ³
Elastic Modulus	70,000 N/mm ²
Coefficient of Thermal Expansion	8.00 x 10 ³ kg/m ³
Thermal Conductivity	160 – 190 W/mK
Electrical Conductivity	26 – 30 m/Ωmm ²

Production Regions

Our manufacturing footprint allows us to tailor solutions for auto-makers around the world. Novelis Advanz™ 6HS – e600 is produced in the following locations:



Asia



Europe



North America

What surface treatments are available?

Acid Etch
TiZr
PT3
AlubVs
Mp-404
RP4107
E1
DC290
61-AUS/6130

Acid Etch
TiZr
PT3
AlubVS
E1
PL39SX
EDT

Acid Etch
TiZr
A951
B2 (in development)
AlubVs
Mp-404
RP4107
E1

Additional services may be available through our distributors, please contact your Novelis sales representative for more information.

What finishing processes are available?

Cut-to-length
Laser Blank

Cut-to-length
Laser Blank
Edge Trimming
Slitting

Edge Trimming
Slitting

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What gauges are available?

0.9 -3.0 mm

0.9 -3.0 mm

0.9 -3.0 mm

Please contact your Novelis sales representative for more information about available widths and gauges.

Contact Novelis

Novelis Global Automotive
novelis.com/automotive

Not just aluminum, Novelis Aluminum.™



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This document is for information purposes only and may be subject to change at any time. Shipments will be made in accordance with the specifications agreed between the parties. Please contact your Novelis Sales Representative for more information. The Novelis Advanz products are part of a wider Novelis portfolio specially designed for the automotive industry.