

EXELL™ 7000

Aluminum Mold Plate

ExEII™ 7000 Series Aluminum Mold Plates are aluminum alloys featuring high mechanical strength and dimensional stability. These alloys are homogenous, low porosity, uniform hardness materials that are well suited for mold building and structural applications. Supplied in the pre-hardened T condition.

CHARACTERISTICS

- · High mechanical strength
- Uniform hardness
- Dimensionally stable
- High thermal conductivity
- Good machinability
- Good polishing
- Good texturing



EXELL™ 7000 PROPERTIES		
	7021 ALLOY	7075 ALLOY
Temper	T79	T651
Tensile Strength (ksi)	46 - 55	67 - 83
Yield Strength (ksi)	42 - 49	52 - 73
Elongation	2 - 4	6 - 11
Hardness (BHN)	110 - 120	150
Density (lbs/in³)	0.101	0.102
Thermal Conductivity (BTU/ft hr F)	82	75 - 88
Electrical Conductivity (% IACS)	40	33
Corrosion Resistance	Fair	Fair

Fair

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APPLICATIONS

- Plastic injection molds
- Blow molds
- Compression molds
- RIM molds
- Resin transfer molds
- Thermoforming
- Machine bases
- Mounting plates



Weldability





PLATE SIZES			
	7021 ALLOY	7075 ALLOY	
Thickness (in)	3 - 18.5	1 - 8	
Width (in)	60.5	60.5	
Length (in)	120	120	

MOLD DESIGN

Molds designed using 7000 series aluminum should not be exposed to long-term temperatures exceeding 250 degrees F maximum and short-term temperatures of 280 degrees F maximum. This applies to mold temperature and not plastic resin temperature.

QUALITY ASSURANCE

ELLWOOD Specialty Metals - USA is committed to providing products and services that consistently meet or exceed all quality and performance expectations. We will provide customer and technical service that will ensure complete satisfaction.

ELLWOOD Specialty Metals - USA will establish product programs to fully support industry or customer requirements. Our extensive stock programs has short mill lead times of custom forged products.

Customized stock programs can be available for specific customer needs.

This information is intended to provide general data on our products, their uses and is based on our knowledge at the time of publication. No information should be construed as a guarantee of specific properties of the procedures described or suitability for a particular application. ELLWOOD Specialty Metals - USA reserves the right to make changes in practices which may render some information outdated or obsolete. ELLWOOD Specialty Metals - USA should be consulted for current information and/or capabilities.





