

**Lennunduse ja kosmonautika seeria.
Alumiinium AL-P1050A H 14. Leht ja
riba $0,4 \text{ mm} < \text{või } = a < \text{või } 6 \text{ mm}$**

Aerospace series - Aluminium AL-P1050A - H14 -
Sheet and strip - $0,4 \text{ mm} \leq a \leq 6 \text{ mm}$

EESTI STANDARDI EESSÖNA**NATIONAL FOREWORD**

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| Käesolev Eesti standard EVS-EN 2072:2005 sisaldb Euroopa standardi EN 2072:2005 ingliskeelset teksti. | This Estonian standard EVS-EN 2072:2005 consists of the English text of the European standard EN 2072:2005. |
| Käesolev dokument on jõustatud 28.12.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. | This document is endorsed on 28.12.2005 with the notification being published in the official publication of the Estonian national standardisation organisation. |
| Standard on kättesaadav Eesti standardiorganisatsioonist. | The standard is available from Estonian standardisation organisation. |

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|---|---|
| Käsitlusala: Standard määrab kindlaks nõuded alumiiniumist AL-P1050A valmistatud lehtede ja ribade kohta (lehtede ja ribade paksus on $0,4 \text{ mm} < \text{või} = a < \text{või} = 6 \text{ mm}$), mida kasutatakse lennunduses ja kosmonautikas H14 tingimustes. | Scope: This standard specifies the requirements relating to Aluminium AL-P1050A H14 Sheet and strip $0,4 \text{ mm} \leq a \leq 6 \text{ mm}$ for aerospace applications. |
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ICS 49.025.20**Võtmesõnad:** alumiinium, lennukitööstus, metallplaatid, mõõtmned, tehnilised andmed, terasribad

EUROPEAN STANDARD

EN 2072

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2005

ICS 49.025.20

Supersedes EN 2072:1993

English Version

**Aerospace series - Aluminium AL-P1050A - H14 - Sheet and
strip - $0,4 \text{ mm} \leq a \leq 6 \text{ mm}$**

Série aérospatiale - Aluminium AL-P1050A - H14 - Tôles et
bandes - $0,4 \text{ mm} \leq a \leq 6 \text{ mm}$

Luft- und Raumfahrt - Aluminium AL-P1050A - H14 - Bleche
und Bänder - $0,4 \text{ mm} \leq a \leq 6 \text{ mm}$

This European Standard was approved by CEN on 26 September 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This European Standard (EN 2072:2005) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2006, and conflicting national standards shall be withdrawn at the latest by April 2006.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This European Standard supersedes EN 2072:1993.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This standard is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.

This standard has been prepared in accordance with EN 4500-2.

1 Scope

This standard specifies the requirements relating to:

Aluminium AL-P1050A
H14
Sheet and strip
 $0,4 \text{ mm} \leq a \leq 6 \text{ mm}$

for aerospace applications.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 4258, *Aerospace series — Metallic materials — General organization of standardization — Links between types of EN standards and their use*.

EN 4400-2, *Aerospace series — Aluminium and aluminium alloy wrought products — Technical specification — Part 2: Sheet and strip*.¹⁾

EN 4500-2, *Aerospace series — Metallic materials — Rules for drafting and presentation of material standards — Part 2: Specific rules for aluminium, aluminium alloys and magnesium alloys*.¹⁾

1) Published as AECMA Prestandard at the date of publication of this standard.

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|-----|-------------------------|---------|-------------|---------------------|------|------|------|------|------|------|--------|--|--|
| 1 | Material designation | | | Aluminium AL-P1050A | | | | | | | | | |
| 2 | Chemical composition % | Element | | Si | Fe | Cu | Mn | Mg | Zn | Ti | Others | | |
| | | min. | | – | – | – | – | – | – | – | Each | | |
| | | max. | | 0,25 | 0,40 | 0,05 | 0,05 | 0,05 | 0,07 | 0,05 | Total | | |
| 3 | Method of melting | | | – | | | | | | | | | |
| 4.1 | Form | | | Sheet and strip | | | | | | | | | |
| 4.2 | Method of production | | | Rolled | | | | | | | | | |
| 4.3 | Limit dimension(s) | mm | 0,4 ≤ a ≤ 6 | | | | | | | | | | |
| 5 | Technical specification | | | EN 4400-2 | | | | | | | | | |

| | | | | |
|-----|-------------------------|--|--|-----|
| 6.1 | Delivery condition | | | H14 |
| | Heat treatment | | | – |
| 6.2 | Delivery condition code | | | U |
| 7 | Use condition | | | H14 |
| | Heat treatment | | | – |

Characteristics

| | | | | |
|-----|------------------------------------|-----------------------|----------------|----------------|
| 8.1 | Test sample(s) | | | See EN 4400-2. |
| 8.2 | Test piece(s) | | | See EN 4400-2. |
| 8.3 | Heat treatment | | | Use condition. |
| 9 | Dimensions concerned | mm | 0,4 ≤ a ≤ 6 | |
| 10 | Thickness of cladding on each face | % | – | |
| 11 | Direction of test piece | | | LT |
| 12 | Temperature | θ | °C | Ambient |
| 13 | Proof stress | R _{p0,2} | MPa | ≥ 80 |
| 14 | T | Strength | R _m | MPa |
| 15 | | Elongation | A | % |
| 16 | Reduction of area | Z | % | – |
| 17 | Hardness | | | – |
| 18 | Shear strength | R _c | MPa | – |
| 19 | Bending | k | – | – |
| 20 | Impact strength | | | – |
| 21 | C | Temperature | θ | °C |
| 22 | | Time | | h |
| 23 | | Stress | σ _a | MPa |
| 24 | | Elongation | a | % |
| 25 | | Rupture stress | σ _R | MPa |
| 26 | | Elongation at rupture | A | % |
| 27 | Notes (see line 98) | | | – |