

Aerospace series - Steel - Sheets and plates, hot rolled -
Dimensions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 2590:2017 sisaldab Euroopa standardi EN 2590:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 2590:2017 consists of the English text of the European standard EN 2590:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 49.025.10

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English Version

**Aerospace series - Steel - Sheets and plates, hot rolled -
Dimensions**

Série aérospatiale - Acier - Tôles et plaques laminées à
chaud - Dimensions

Luft- und Raumfahrt - Stahl - Bleche und Platten,
warmgewalzt - Maße

This European Standard was approved by CEN on 14 November 2016.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 2590:2017) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-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 ASD, 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of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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1 Scope

This European Standard defines the dimensions and tolerances of sheets and plates, hot rolled, in steel, used in aerospace constructions.

2 Normative references

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

EN 2209, *Aerospace series — Steel FE-PL1502 (25CrMo4) — 900 MPa ≤ R_m ≤ 1100 MPa — Sheets, strips and plates — 0,5 mm ≤ a ≤ 20 mm*¹⁾

EN 2212, *Aerospace — steel FE-PL 43 S, 670 MPa ≤ R_m ≤ 870 MPa, sheets, strips and plates 0,5 mm ≤ a ≤ 20 mm*¹⁾

EN 2215, *Aerospace — steel FE-PL 52 S, 980 MPa ≤ R_m ≤ 1180 MPa, sheets 0,5 mm ≤ a ≤ 6 mm*²⁾

EN 2216, *Aerospace — steel FE-PL 52 S, 1050 MPa ≤ R_m ≤ 1250 MPa, sheets a ≤ 2 mm*¹⁾

EN 2217, *Aerospace — steel FE-PL 52 S, 1080 MPa ≤ R_m ≤ 1250 MPa, sheets and plates 2 mm ≤ a ≤ 20 mm*¹⁾

EN 2228, *Aerospace — steel FE-PA 12, 500 MPa ≤ R_m ≤ 700 MPa, sheets 0,5 mm ≤ a ≤ 6 mm*¹⁾

EN 2246, *Steel FE-PL43S — 1150 MPa ≤ R_m ≤ 1300 MPa — Sheet strip and plate — 0,5 mm ≤ A ≤ 20 mm*²⁾

EN 2250, *Steel FE-PL52S — R_m ≥ 700 MPa — Sheets strips and plates — 0,3 mm ≤ A ≤ 12 mm*²⁾

EN 2273, *Aerospace — steel FE-PM 13 S, 1800 MPa ≤ R_m ≤ 2000 MPa — sheets and plates a ≤ 30 mm*¹⁾

EN 2276, *Aerospace — steel FE-PA 95, 1750 MPa ≤ R_m ≤ 2000 MPa — sheet and plate a ≤ 40 mm*¹⁾

EN 2280, *Aerospace — steel FE-PM 37, 900 MPa ≤ R_m ≤ 1100 MPa — sheet a ≤ 6 mm*¹⁾

EN 2467, *Aerospace series — Steel FE-PA3901 (X2CrNi18-9) — Air melted — Softened — Plate, sheet and strip — 0,4 mm ≤ a ≤ 20 mm — 520 MPa ≤ R_m ≤ 670 MPa*¹⁾

EN 2538, *Aerospace series — Steel FE-PM3801 (X5CrNiCu17-4) — Air melted — Solution treated and precipitation treated — Sheet and strip, a ≤ 6 mm, R_m ≥ 1310 MPa*¹⁾

EN 2540, *Aerospace series — Steel FE-PM3902 (X7CrNiAl17-7) air melted, solution treated and precipitation hardened — Sheet and strip, a ≤ 6 mm, 1240 MPa ≤ R_m ≤ 1450 MPa*¹⁾

¹⁾ Published as ASD-STAN pre-standard at the date of publication of this European Standard.

²⁾ In preparation at the date of publication of this European Standard.

EN 2543, *Aerospace series — Steel FE-PL1502 (25CrMo4) — Annealed — Sheet and strip — $0,3 \text{ mm} \leq a \leq 2 \text{ mm}$ — For prevailing torque nuts¹⁾*

EN 2600, *Aerospace series — Designation of metallic semi-finished products — Rules¹⁾*

EN 2770, *Steel FE-PL53S — hardened and tempered — $1050 \leq R_m \leq 1220 \text{ MPa}$ — Sheet and plate — $0,5 \leq a \leq 12 \text{ mm}$ ¹⁾*

EN 2773, *Aerospace series — Steel FE-PM3801 (X5CrNiCu17-4), consumable electrode remelted, solution treated and precipitation treated — Sheet and strip, $a \leq 6 \text{ mm}$, $R_m \geq 1310 \text{ MPa}$; Inactive for new design¹⁾*

EN 2776, *Aerospace series — Steel FE-P11 — $R_m \leq 340 \text{ MPa}$ — Sheet and strip — $a \leq 2 \text{ mm}$ ¹⁾*

3 Required characteristics

3.1 Materials

Steels EN 2209, EN 2212, EN 2215, EN 2216, EN 2217, EN 2228, EN 2246, EN 2250, EN 2273, EN 2276, EN 2280, EN 2467, EN 2538, EN 2540, EN 2543, EN 2770, EN 2773, EN 2776.

3.2 Form

In accordance with Figure 1.

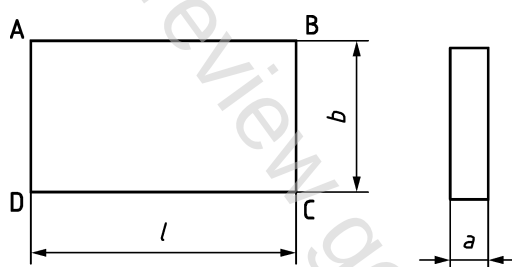


Figure 1

3.3 Dimensions

3.3.1 Thicknesses and masses

3.3.1.1 Sheets

In accordance with Table 1.