

Build Anything,
Finish with **FINEASTRA**

SILL PROFILES

DOORS & WINDOWS SYSTEM

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COMPANY INFORMATION

I. COMPANY HISTORY

Demsaş Metal Inc. was established in 1984 with its 15.000 sqm production area and over 170 employees. Our Company is working in the field of aluminium profile production and contributing to our country's economy with its exports to more than 30 countries we have achieved to become one of the rare fully integrated aluminium plants in its sector since its establishment.

II. SERVICES

- Hosting all the production levels such as:
 - Drawing stage
 - Extrusion mold design
 - Production of extrusion molds
 - Profile extrusion
 - Surface treatments
 - A) Powder Coating
 - B) Anodising (Polished or Matte)
 - C) Brushed effects
 - D) Heat transfer printing
 - Mechanical treatment
- Professional support, consultation and adequate technical advices ensured by our experienced engineering team in profile extrusion.
- Reliable customer care processing training and technical support.
- Production of custom length profiles with high quality powder coating and anodising.

III. BASIC VALUES

● VISION

Our aim is to be a leader in the market by providing added value to our customers, shareholders, employees, business partners and society with innovative and creative solutions and to produce according to international standards with an environment- friendly approach. In addition, we aim to create high-performance human resources that are open to learning, development and sharing, adopting all corporate values, thus using all of our capabilities as our capital, creating an environment that promotes long-term relationships.

● MISSION

Demsaş has a mission of establishing direct and transparent communication with its employees, empowering them in line with their capabilities and in a way that they can demonstrate their skills in an efficient manner, take initiatives and produce innovations and create a trust-based working environment. Our company, without compromising its core values, aims to approach its employees and customers from a business ethics, honesty, quality and solution-oriented perspective and thus become the preferred business and solution partner in the market.

● CORPORATE VALUES

Our company's principle values:

- Being honest, confident and transparent company
- Contribute to the success of our customers
- Believe in innovative and dynamic development
- Social responsibility and environmental awareness
- Believe in teamwork
- To prioritize quality at all stages in marketing and production.

● QUALITY POLICY

Our quality policy consists of:

- To ensure customer satisfaction
- Maintaining quality and customer satisfaction in production, marketing, sales and after sales support stages from raw material supply until shipment
- To respect environment, our employees, our solution partners, our shareholders and our customers
- To be the most admired in the sector with managers and employees who adopt continuous improvement oriented values such as education, research and development

● QUALITY AND ENVIRONMENTAL POLICY

Demsaş Metal operates under the principles of 'Total Quality Management'

- All our production processes are carried out according to the principles of TSE (Turkish Standard Institution) and **ISO 9001: 2008 Quality Management System**.
- Our company exhibits a meticulous attitude to comply with international standards in our products and services.
- Improvements in processes that ensure efficiency and reduction of costs are implemented regularly and systematically.

In accordance with its environmental policy, Demsaş Metal has adopted a sensitive attitude to protect the external environment and natural resources.

Our company, employees and solution partners to raise awareness about social responsibility and environmental policy and environmental pollution prevention is adopted as a principle to take measures.

We have already started procedures to reduce our carbon print and achieve to 0% emissions by 2040.



GENERAL INFORMATION

CONCEPT / ADVANTAGES / CERTIFICATES

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SILL PROFILES

Build Anything, Finish with **FINEASTRA**



SILL PROFILES

Precision at the Base. Protection That Lasts.

Fineastra Sill Profiles are designed to complete your window and door installations with elegance, durability, and optimal functionality. As the finishing element at the base of openings, these profiles ensure proper water drainage, protect façades from moisture damage, and create a clean, seamless connection between structural elements.

Available in a wide variety of sizes, Fineastra sill profiles are compatible with all Fineastra aluminium systems, and can also be adapted for use with PVC and wooden windows and doors.

Manufactured using high-quality aluminium alloys and finished to perfection, each sill profile is available in a full range of RAL powder-coated, anodized, and woodgrain effect options — delivering long-term performance and visual harmony in every architectural context.

Key Features & Benefits

- Wide range of profile depths
- Effective water drainage and weather protection
- Compatible with aluminium, PVC, and wood systems
- Strong resistance to corrosion and daily wear
- Clean, aesthetic finish for modern façades
- Available in RAL, anodized, and woodgrain surface finishes
- Easy to install, with options for both new construction and renovations

Fineastra Sill Profiles combine function and design at the most critical connection point of every building — offering long-lasting protection and professional detailing that elevate the quality of any project.



BUILDING PHYSICS

DIMENSIONING / FORMULAS / EXAMPLES

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SILL PROFILES

ALUMINIUM AS MATERIAL

ALUMINIUM IS VERY YOUNG METAL, EXTRACTED FOR THE FIRST TIME IN 1854. COMMERCIALY PRODUCED AS A PRECIOUS METAL FROM 1886, ITS INDUSTRIAL PRODUCTION FOR CIVIL APPLICATIONS ONLY ACHIEVED WIDE USE IN THE 1950's.

NOW ALUMINIUM PLAYS A KEY ROLE FOR THE SUSTAINABILITY OF NEW BUILDINGS AND THE RENOVATION OF EXISTING ONES. THANKS TO ITS PERFORMANCE, SAFETY AND COMFORT OF NEW BUILDINGS.

ADVANTAGES

DESIGN FLEXIBILITY

The extrusion process offers an almost infinite range of forms and sections, allowing designers to integrate numerous functions into one profile.

LONG SERVICE LIFE

Aluminium building products are made from alloys that are weatherproof, corrosion-resistant and immune to the harmful effects of UV rays, ensuring optimal performance over a very long period of time.

HIGH STRENGTH-TO-WEIGHT RATIO

Thanks to the metal's inherent strength and stiffness, aluminium window and curtain wall frames can be very narrow. Material's light weight makes it easier to transport and handle on-site, reducing the risk of work-related injury.

HIGH-REFLECTIVITY

This characteristic feature makes aluminium a very efficient material for light management. Aluminium shading devices can be used to reduce the need for air conditioning in summer.

FIRE SAFETY

Aluminium does not burn and therefore is classified as a non-combustible construction material (European Fire Class A1). Aluminium alloys will nevertheless melt at around 6500 C, but without releasing harmful gases.

NO RELEASE OF DANGEROUS SUBSTANCES

Several studies have proved that aluminium building products do not prevent a hazard to occupants or the surrounding environment. Aluminium building products have no negative impact, either on indoor air quality or on soil, surface and groundwater.

OPTIMAL SECURITY

Where high security is required, specially designed, strengthened aluminium frames can be used. While the glass for such applications may well be heavy, the overall weight of the structure remains manageable, thanks to the light weight of the aluminium frames.

ALLOYS

Aluminium in its pure form is a very soft metal. Thanks to the addition of alloying elements such as copper, manganese, magnesium, zinc, etc. and thanks to suitable production processes, the physical and mechanical properties can be varied in a wide range to satisfy the requirements of a large number of different applications.

DEMSAŞ profiles are extruded from the following alloys:

EN AW-1050 (Al 99.5)
EN AW-6060 (Al Mg Si)
EN AW-6063 (Al Mg_{0,7} Si)
EN AW-6061 (Al Mg₁ Si Cu)
EN AW-6005 (Al Si Mg)
EN AW-6082 (Al Si₁ Mg Mn)

The most common aluminium alloy which is used by DEMSAŞ is EN AW 6063. Here are the properties of this alloy:

MATERIAL PROPERTIES

Aluminium alloy	EN AW 6063 F22
Ultimate tensile strength	$R_m = 210 \text{ N/mm}^2$
Yield strength	$R_{p0.2} = 160 \text{ N/mm}^2$
Modulus of elasticity	$E_{al} = 70\,000 \text{ N/mm}^2 = 7 \cdot 10^9 \text{ kg/m}^2$
Coefficient of thermal expansion	$\alpha = 0.023 \text{ mm/m} \cdot \text{K}$ (up to 1.2 mm/m for difference up to 50°C)

EXTRUSION PROCESS

DEMSAŞ profiles are obtained through extrusion process, which consists of pushing a hot cylindrical bullet of aluminium through a shaped die. The extrusion process offers almost infinite range of forms and sections, allowing our designers to integrate numerous functions into one single profile.

FINISHING

POWDER COATING

It is a type of paint that is applied as a dry powder. Coating is applied on DEMSAŞ profiles electrostatically and then is cured under heat to allow it to flow and form a "skin". DEMSAŞ is authorized to use the quality sign **QUALICOAT SEASIDE** for powder coatings on aluminium for architectural applications. A wide range of colours and gloss levels can be achieved. DEMSAŞ also offers timber imitations painting, in addition to all RAL colors. The technology EZY provides the following colors: Golden Oak, Acero, Betulla, Mogano, Verde Scuro, Wenge, Noce Fiammato, Noce Chiaro, Ciliegio Rosso, Acacia Scuro, Ciliegio Antico, Noce Reale, Ciliegio Reale.

ANODIZING

It is an electrochemical process whereby to reinforce the natural oxide film on the aluminium surface increasing hardness, corrosion and abrasion resistance. Anodizing gives a very decorative silver matt surface finish, and colored can also be obtained by sealing metallic dyes into the anodized layer.

MAINTENANCE

Apart from routine cleaning for aesthetic reasons, DEMSAŞ aluminium profiles do not require any maintenance which translates into a major cost and ecological advantage over lifetime of the product.

RECYCLING

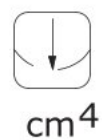
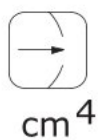
Aluminium scrap can be continuously recycled without any loss of value or properties. In many instances, aluminium is combined with other materials such as steel or plastics, which are most frequently mechanically separated from aluminium before being melted.

PROFILES OVERVIEW

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SILL PROFILES

PROFILES



7893			---		---		0,337
7446			---		---		0,412
7447			---		---		0,525
7448			---		---		0,606
7449			---		---		0,793
7450			---		---		0,887
7451			---		---		0,982
8351			---		---		1,210

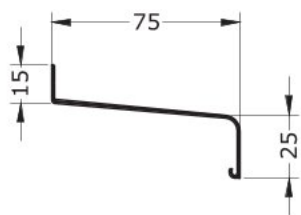


PROFILES 1 : 1

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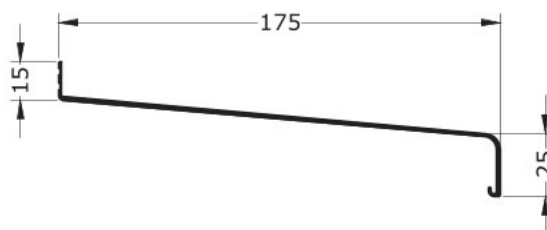
SILL
PROFILES

PROFILES 1:1



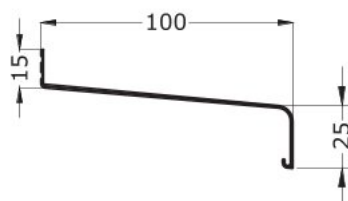
7893

0,337 kg/m



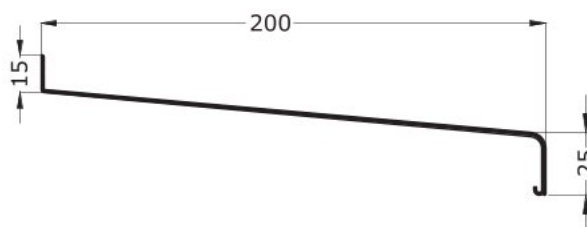
7449

0,793 kg/m



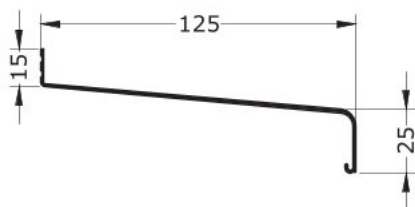
7446

0,412 kg/m



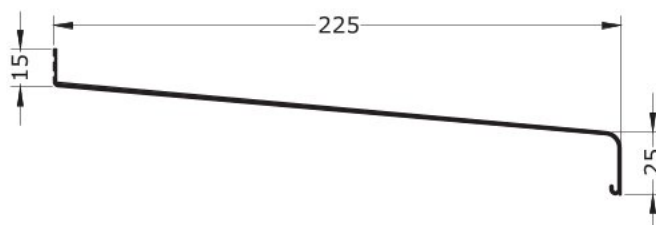
7450

0,887 kg/m



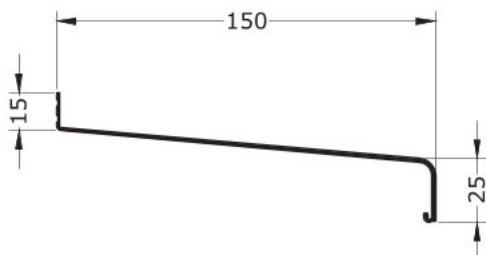
7447

0,525 kg/m



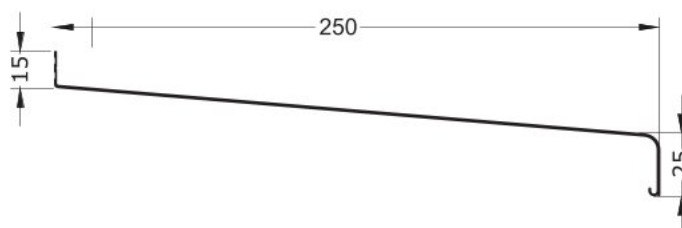
7451

0,982 kg/m



7448

0,606 kg/m



8351

1,210 kg/m