



## Fabrication & Metalworking: Grills, Railings, and Decorative Metalwork

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### Steel Bright Bars That Combine Strength with Style

When it comes to **grills, railings, and decorative metalwork**, aesthetics and structural integrity go hand in hand. These applications demand **materials that are not only strong and durable but also visually appealing and easy to fabricate**. Steelmet Industriesâ?? cold drawn steel bright bars offer the **ideal surface finish, machinability, and dimensional accuracy** required for architectural and decorative applicationsâ??indoors or outdoors.

## Why Steel Bright Bars Are Ideal for Architectural Metalwork

â?? **Smooth, Bright Surface Finish** â?? Reduces the need for polishing and surface prep  
â?? **Superior Weldability & Bendability** â?? Makes fabrication faster and easier  
â?? **Excellent Dimensional Accuracy** â?? Ideal for CNC-based or modular metal art and fabrication  
â?? **Available in Special Profiles** â?? Such as **rounds, squares, hexes, flats, half-rounds, and even custom shapes** to match artistic and design requirements

## Key Applications

### 1. Window Grills and Security Grilles

Grills must provide **both security and visual appeal**, especially in residential and commercial construction.

ð??¹ **Uniformity in shape and size** ensures consistent designs  
ð??¹ **Surface-ready finish** accepts **coatings, paints, or powder coatings** directly  
ð??¹ **Long life** with **minimal maintenance** when coated or galvanized

ð??? **Recommended Steel Grades:**

- **EN3B (070M20, AISI 1020)** â?? Low-carbon, easy-to-bend and fabricate
- **EN8 (C45, AISI 1045)** â?? For stronger, more robust security grills
- **SS304 / SS202** â?? For rust-free, polished decorative applications

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## 2. Stair & Balcony Railings

Railings are exposed to frequent handling, moisture, and sometimes harsh weather. They need to be:

• **Structurally sound** â?? To support weight and stress

• **Visually refined** â?? For residential and commercial elegance

• **Corrosion-resistant (when treated)** â?? For longevity in outdoor installations

• **Recommended Steel Grades:**

- **EN8 or EN9** â?? For robust, long-lasting interior railings
- **SS304 / SS316** â?? For premium, corrosion-resistant outdoor installations
- **EN3B** â?? For easy fabrication of ornamental and custom railings

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## 3. Decorative Metal Elements

Used in **gates, fences, signage, wall panels, and art installations**, decorative metalwork must offer:

• **Ease of forming into intricate designs**

• **Good surface adaptability** for engraving, laser cutting, or embossing

• **Availability in unique shapes** like **half-rounds, flats with beveled edges, or custom contours**

• **Recommended Steel Grades:**

- **EN3B / EN1A (Free-cutting steel)** â?? For intricate, decorative turning or engraving
- **SS304** â?? For luxury design installations requiring long-term shine and corrosion resistance
- **Custom Bright Bars** â?? Designed to match specific architectural profiles

