

Materials & Finishes Cheat Sheet

Metal Types:

- Mild Steel: Strength + cost-effective; needs protective finish
- Stainless Steel (304/316): Corrosion-resistant; premium cost
- Aluminum: Lightweight, corrosion-proof; softer
- Brass/Zinc: Decorative, patinas over time; premium finish

Surface Treatments:

- Powder Coating: Thick, uniform, color variety
- Electroplating: Chrome/Nickel/Zinc, reflective finish
- Anodizing (Aluminum): Dyeable, corrosion-resistant
- Galvanization: Heavy-duty rust protection
- Polishing/Brushing: Aesthetic grain or mirror shine
- Painting/Lacquering: Color or clear coat on decorative metals

Recommended Combos:

- High Moisture: SS316 + mirror polish or chrome plating
- High Traffic: Mild Steel + textured powder coat
- Premium Decor: Brass/Zinc + nickel plating + clear lacquer
- Outdoor/Industrial: Galvanized Steel (hot-dip)

QC & Buyer Checklist:

- Adhesion Test: Cross-hatch tape
- Thickness: Gauge measurement (μm)
- Corrosion: Salt-spray test specs
- Visual: Consistent color/coverage
- Certificates: Material & compliance docs