

MATERIAL GUIDE

FOR FABRICATION & BENDING

		LEAD COATED COPPER	ZINC (EN 988)	ZINC COATED COPPER	STAINLESS STEEL (304 / 316)	ALUMINUM (3003 / 5052)
		16 oz 20 oz (ounces)	0.7 mm 0.8 mm 1.0 mm (millimeters)	16 oz 20 oz (ounces)	20 ga 18 ga 16 ga (gage)	.040" .050" .063" (inches)
THICKNESS CONVERSION	16 oz = 0.0216" 20 oz = 0.0270"	16 oz = 0.0216" 20 oz = 0.0270"	0.7 mm = 0.0276" 0.8 mm = 0.0315" 1.0 mm = 0.0394"	16 oz = 0.0216" 20 oz = 0.0270"	20 ga = 0.0360" 18 ga = 0.0478" 16 ga = 0.0598"	.040" = 0.040" .050" = 0.050" .063" = 0.063"
APPROX. WEIGHT (lbs per sq ft)	16 oz = 1.00 lb 20 oz = 1.25 lb	16 oz = 1.00 lb 20 oz = 1.25 lb	0.7 mm = 0.95 lb 0.8 mm = 1.08 lb 1.0 mm = 1.35 lb	16 oz = 1.00 lb 20 oz = 1.25 lb	20 ga = 1.68 lb 18 ga = 2.10 lb 16 ga = 2.67 lb	.040" = 0.70 lb .050" = 0.87 lb .063" = 1.08 lb
APPEARANCE	Bright Copper (ages to natural green)	Matte Gray (lead surface)	Blue Gray (VM Zinc)	Gray / Silver	Silver / Gray (Brushed or Mill)	Mill Finish or Powder Coated
CORROSION RESISTANCE (5 = Excellent)	★★★★★	★★★★★	★★★☆☆ (Not recommended within 1 mile of saltwater)	★★★★☆	★★★★★	★★★★☆
COASTAL USE	Excellent	Excellent	Not Recommended Within 1 Mile of Saltwater	Excellent	Excellent	Excellent
FORMABILITY	Excellent	Excellent	Excellent	Excellent	Good	Excellent
SOLDERABILITY	Excellent	Excellent (lead solder)	Excellent	Excellent	Limited	Limited
JOINING METHOD (PREFERRED)	Soldering 	Soldering 	Soldering / Mechanical Seams 	Soldering 	TIG / MIG Welding 	TIG / MIG Welding 
WELDING	Limited (not recommended for architectural copper)	Not Recommended (damages lead coating)	Not Recommended (use solder or mechanical seams)	Limited (not recommended)	Excellent	Excellent
PATINA / FINISH	Natural Green Over Time	Stable Gray Matte Gray	Natural Patina (Gray)	Controlled Weathering	No Patina	No Natural Patina (Powder Coat Optional)
LIFESPAN	75 – 100+ Years	75 – 100+ Years	50 – 100+ Years	50 – 100+ Years	50 – 100+ Years	30 – 50+ Years
IDEAL APPLICATIONS	Dormers, Finials, Cupolas, Cornices, Ornamental Work, Custom Fabrication	Roofing, Dormers, Copings, Flashings, Modern & Traditional Architecture	Roof Panels, Wall Cladding, Dormers, Flashings, Architectural Sheet Metal	High-End Restoration, Specialty Roofing, Ornamental Work, Architectural Details	Chimney Caps, Flashings, Copings, Industrial & Coastal Applications	Chimney Caps, Trim, Fascia, Copings, Flashings, Custom Fabrication
ADVANTAGES	- Timeless Beauty - Excellent Workability - Longest Life - Premium Material	- Matte Finish - Excellent Corrosion Resistance - Long Lasting	- Self-Healing Patina - Lightweight - Excellent Workability - Long Life	- Controlled Finish - Long Life - Excellent Corrosion Resistance	- High Strength - Corrosion Resistant - Modern Appearance - Low Maintenance	- Lightweight - Cost Effective - Any Color (Powder Coat) - Low Maintenance
RESTRICTIONS	- Higher Cost - Patina Changes Over Time	- Higher Cost - Handle Carefully During Fabrication	- Not For Coastal Areas (Within 1 Mile) - Requires Proper Ventilation	- Higher Cost - Limited Availability	- Harder to Form - More Difficult to Solder	- Softer Metal - Can Dent Easier - Thermal Expansion

Material availability and specifications may vary. Additional thicknesses may be available upon request.
Contact PJ Metal Craft for material recommendations for your specific project.