

# ZAPPONE COPPER SHINGLES

## Specification Sheet

**Normal Composition:** Material is CDA 110 copper with a minimum purity of 99.9 + % copper, and approximately 0.04% oxygen present as a cuprous oxide. When exposed to weather it produces a relatively impervious protective film, which eventually forms the familiar patina of weathered copper. It is certified that no free mercury came into contact with the material at any point of its process.

**Design:** The shingle contains a concealed nailing flange and a four-way interlocking mechanism which provides increased stability, resists wind-lift and forms a weather tight seal. The shadow-cup, tapered channels and smooth pure copper finish provide a distinctive profile and rich appearance.

<b>Mechanical:</b>	ASTM B152
<b>Chemical:</b>	ASTM B370
<b>Size:</b>	Total - 15" X 9 1/* ", Exposed To Weather- 14 1/2" X 8 1/8"
<b>Weight:</b>	1.24 lb/sq.ft. - 124 lb/100 sq. ft.
<b>Thickness:</b>	.018" (+/- Commercial tolerance)
<b>Density:</b>	0.376 lb/cu.in.
<b>Temper:</b>	3/4 Hard H03
<b>Tensile Strength:</b>	48,000 psi.
<b>Yield Strength:</b>	46,000 psi. at 0.5% Extension Under Load
<b>Elongation:</b>	6 (% in 2 in.)
<b>Rockwell Hardness:</b>	77/78 Scale 15T

<b>Melting Point:</b>	1981 Degrees F. Thermal Conductivity, BTU/sq.ft./hr./degree F.
<b>@ 68 Degrees F:</b>	226
<b>Wind Rating:</b>	110 MPH
<b>Fire Rating:</b>	Class A,B,C
<b>ICBO Approval #:</b>	4995
<b>Recycled Content:</b>	85% + (50% Post Consumer)
<b>Accessories:</b>	(All accessories are crafted from 99.96% pure copper)
<b>Copper Coil Stock:</b>	16" width, 50ft. length.
<b>Starter Strip:</b>	One piece formed unit, 8' length, 2" deck apron, with "S" interlock and fascia guard with drip edge.
<b>Gable End:</b>	One piece formed unit, 8' length with fascia guard, drip edge and anti-capillary ridge.
<b>Hip/Ridge Cap:</b>	Exposed dimensions - 9 1/2" X 7 1/4", with "S" interlock, concealed nailing flange and adjustable to roof angle.
<b>End Wall, Side Wall, and Continuous Valley:</b>	All pieces are one-piece formed units, 8' length with anti-capillary ridge and interlock.
<b>Fasteners:</b>	Silicone bronze nails, ring barb shank, minimum head size of 3/16" diameter. Sizes: 1", 1 1/4", 1 3/4", 2 1/2".