

Core Materials and Design

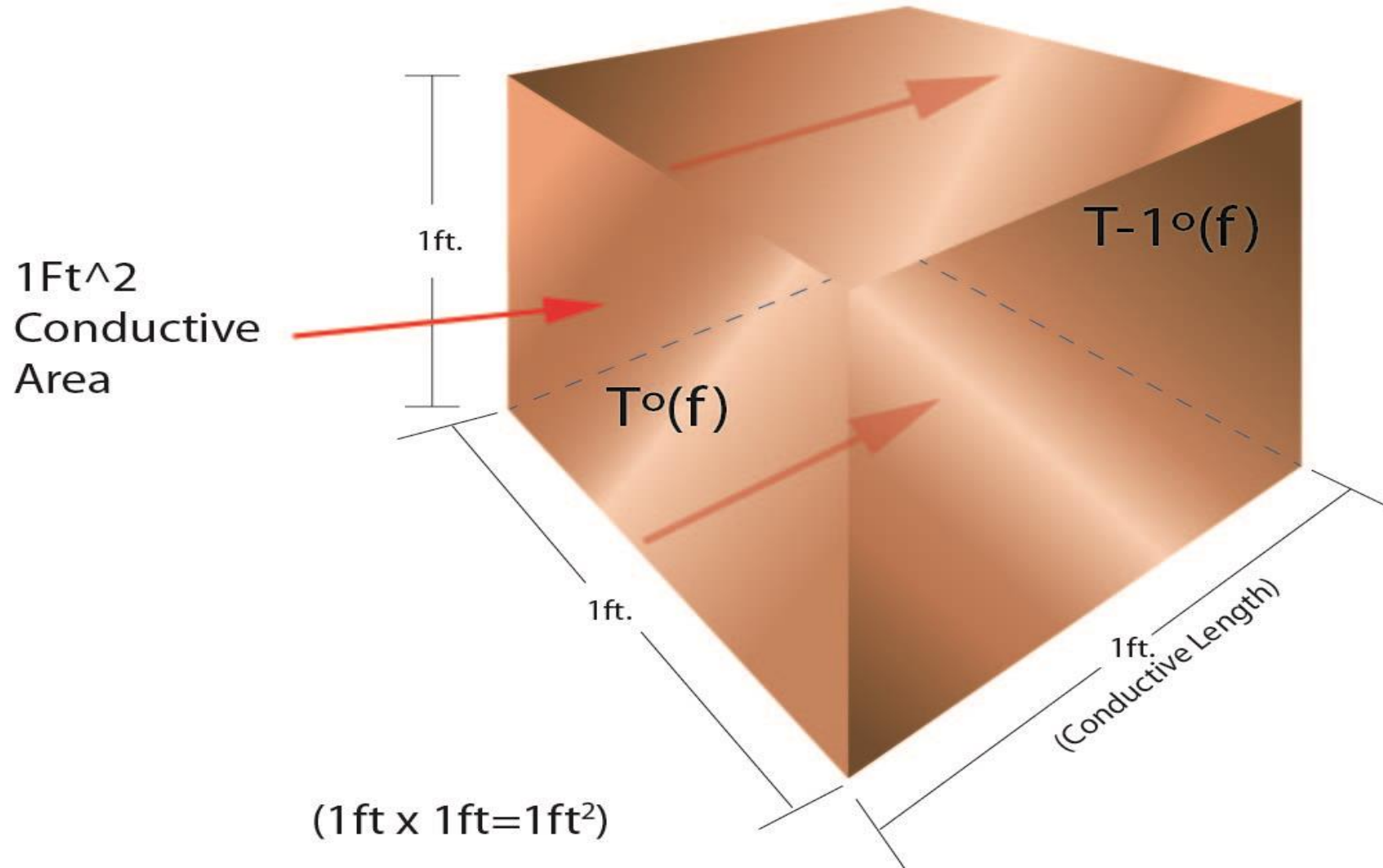
Thermal Conductivity

BTU/(HR*Deg F*Ft.) @ 68F

Silver	235
Copper	223
Aluminum	118
Brass (70/30)	64
Steel (Low Carbon)	31
Solder (lead/tin)	20 - 37

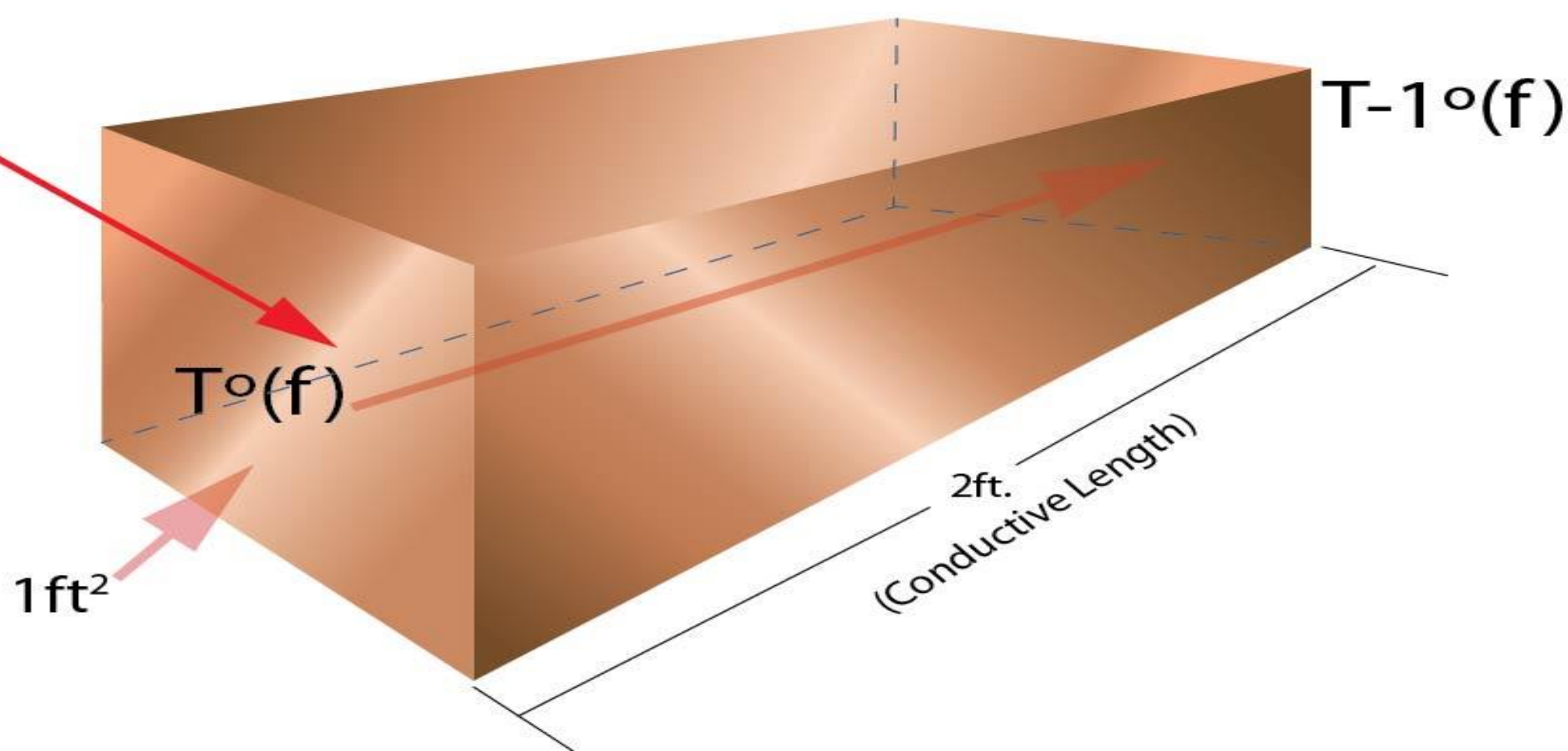
Block of Copper Will Conduct 223btu/hr

BTU/(HR °f)



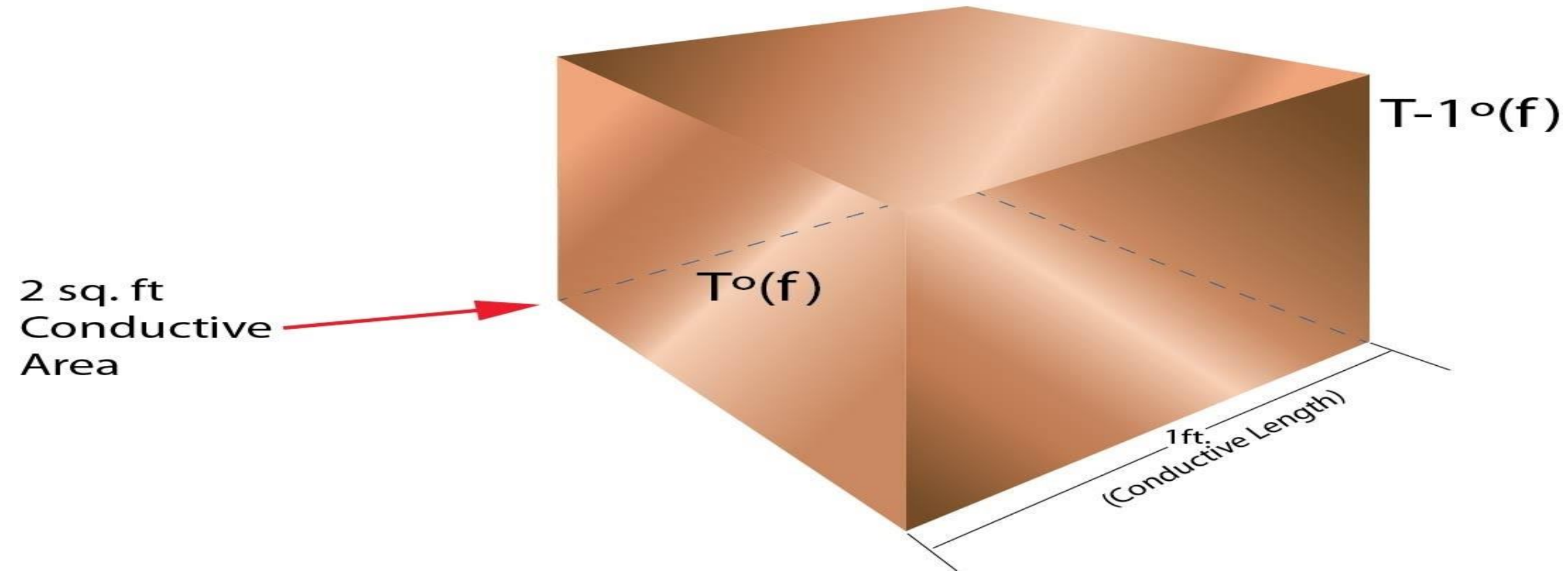
Block of Copper Will Conduct 111.5 BTU/Hr

1 ft² Conductive Area



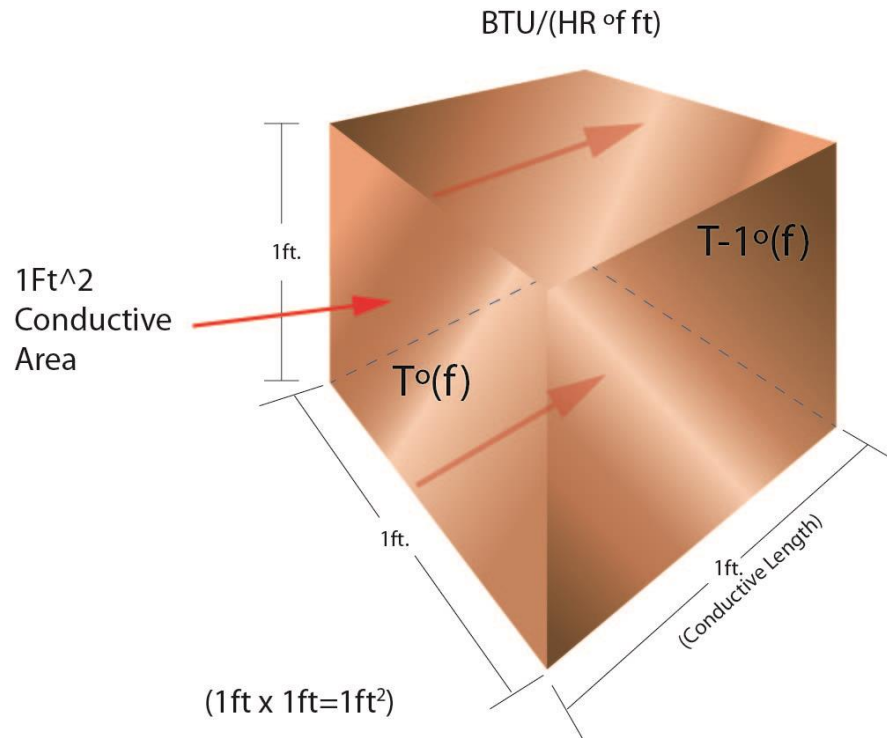
**A Block of Copper as Described Would Conduct
446 BTU/Hr**

**While a Block of Aluminum as Described
Would Conduct 236 BTU/Hr**



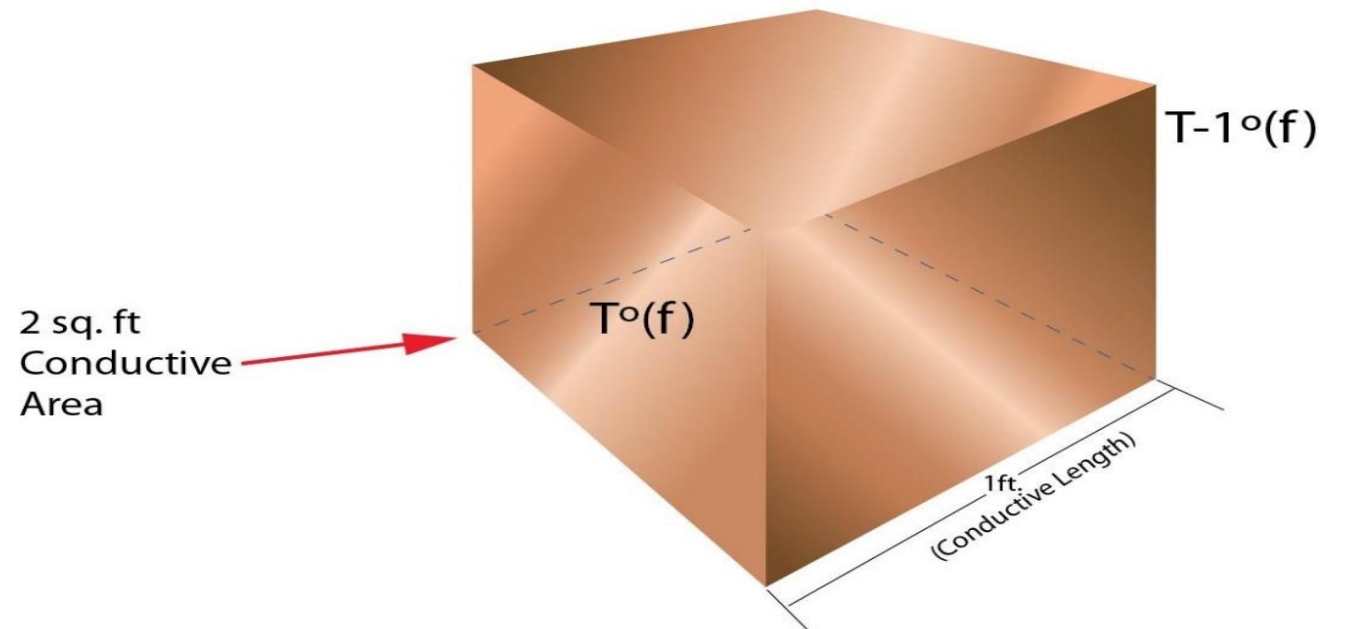
Effect of doubling the area we conduct through (conductive area)

Block of Copper Will Conduct 223btu/hr

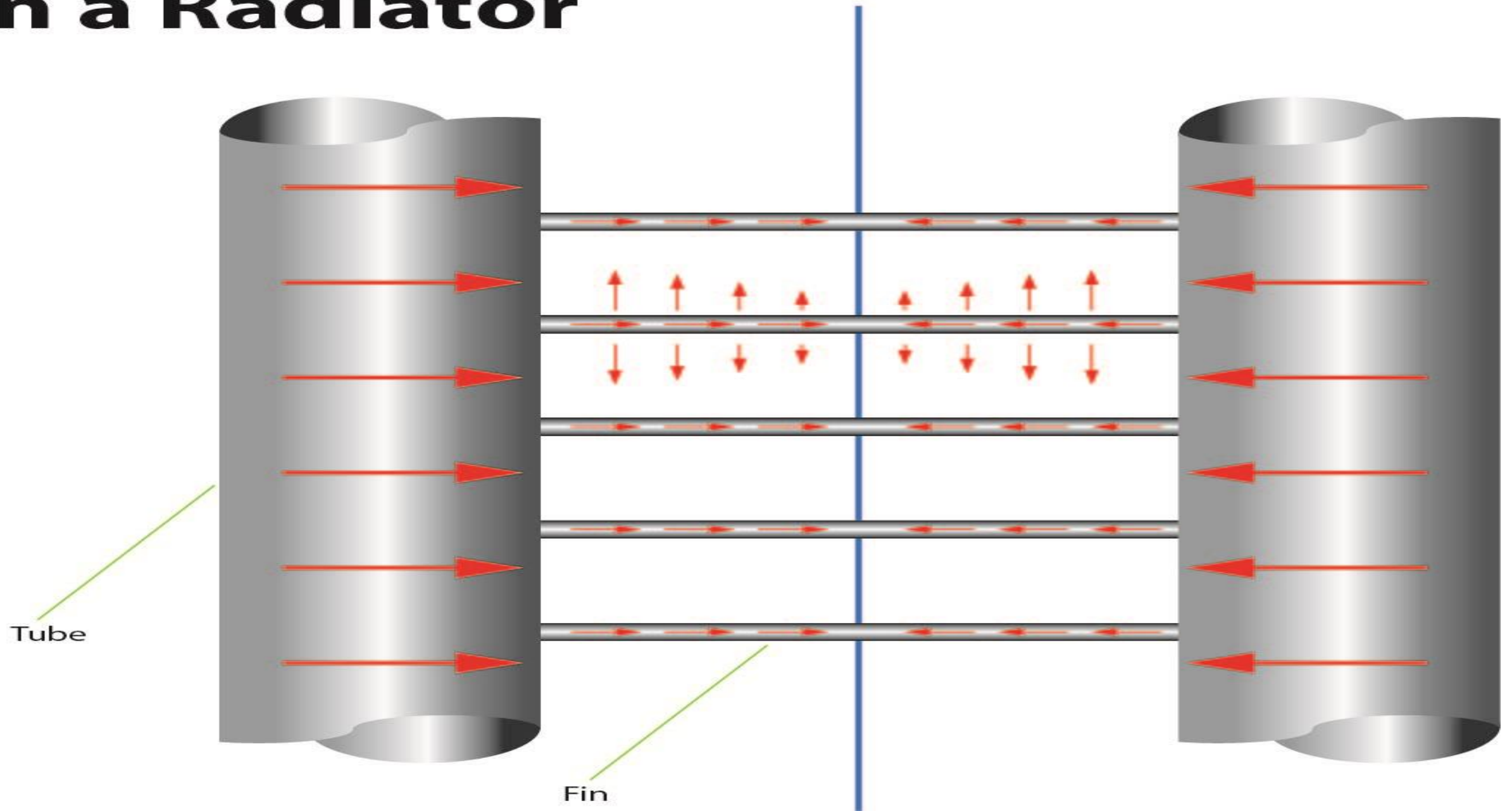


A Block of Copper as Described Would Conduct 446 BTU/Hr

While a Block of Aluminum as Described Would Conduct 236 BTU/Hr



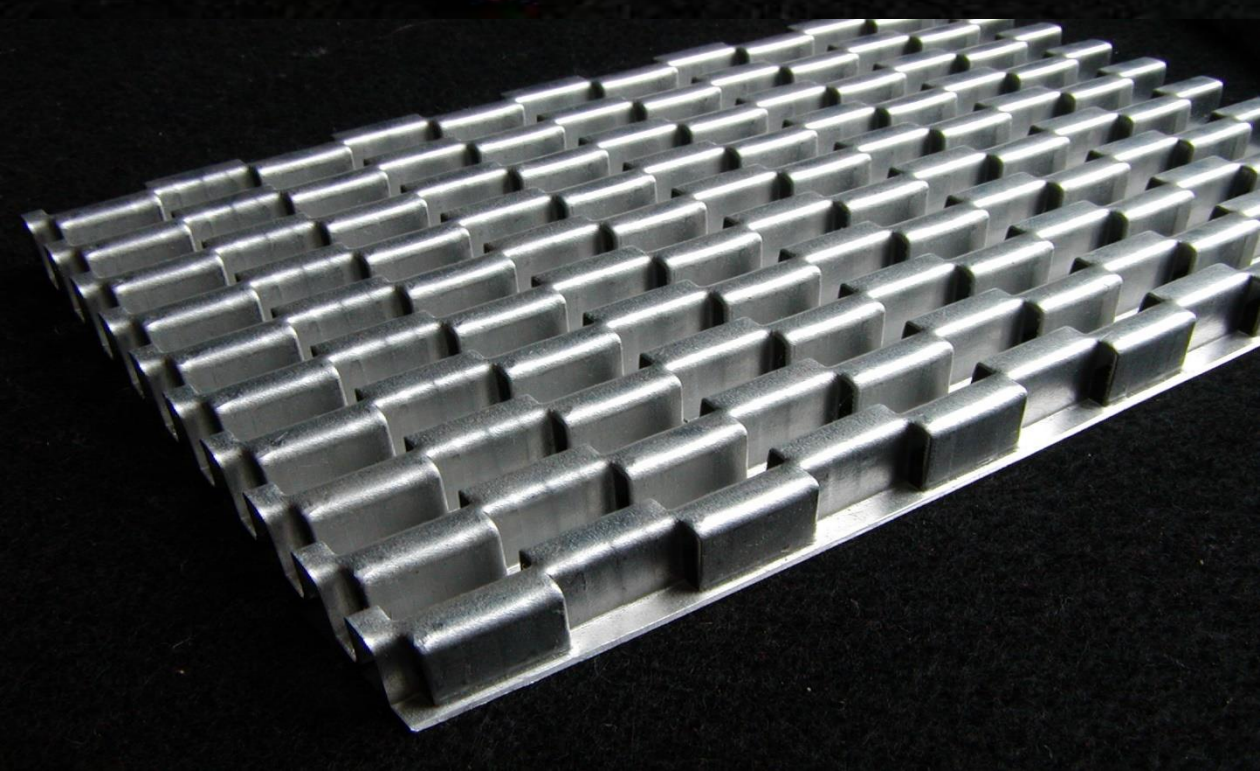
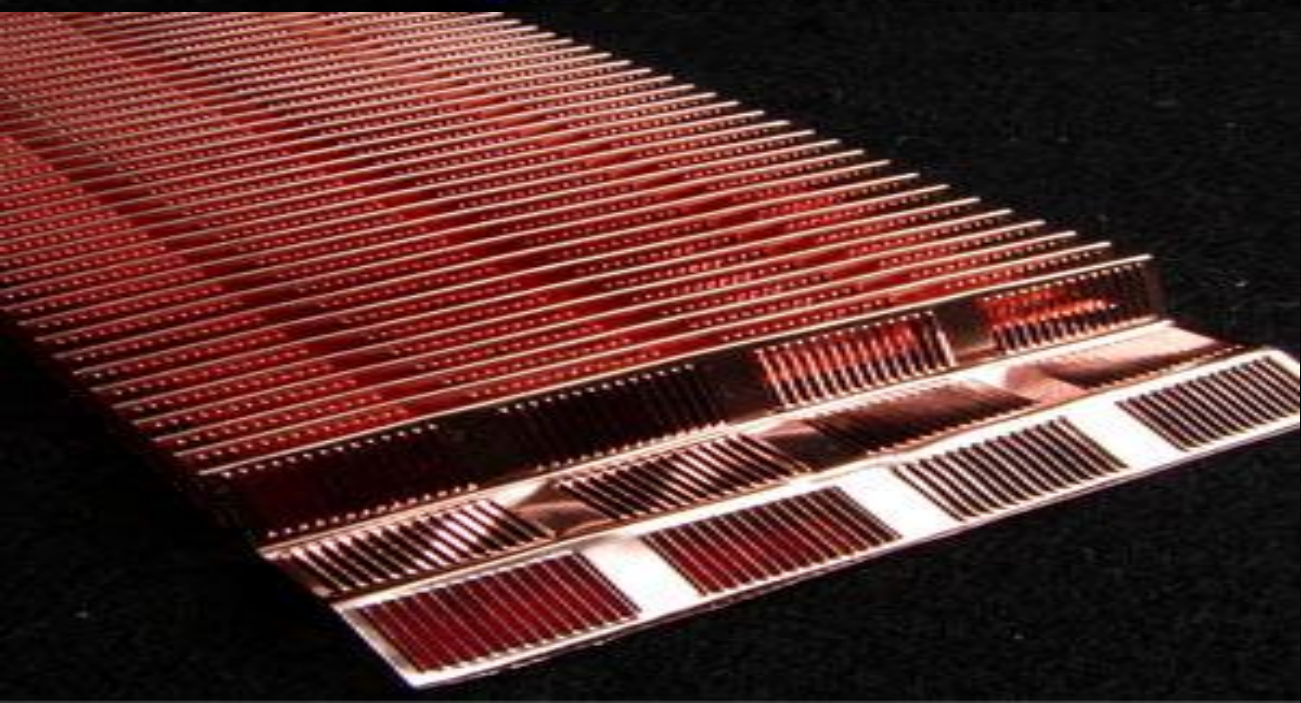
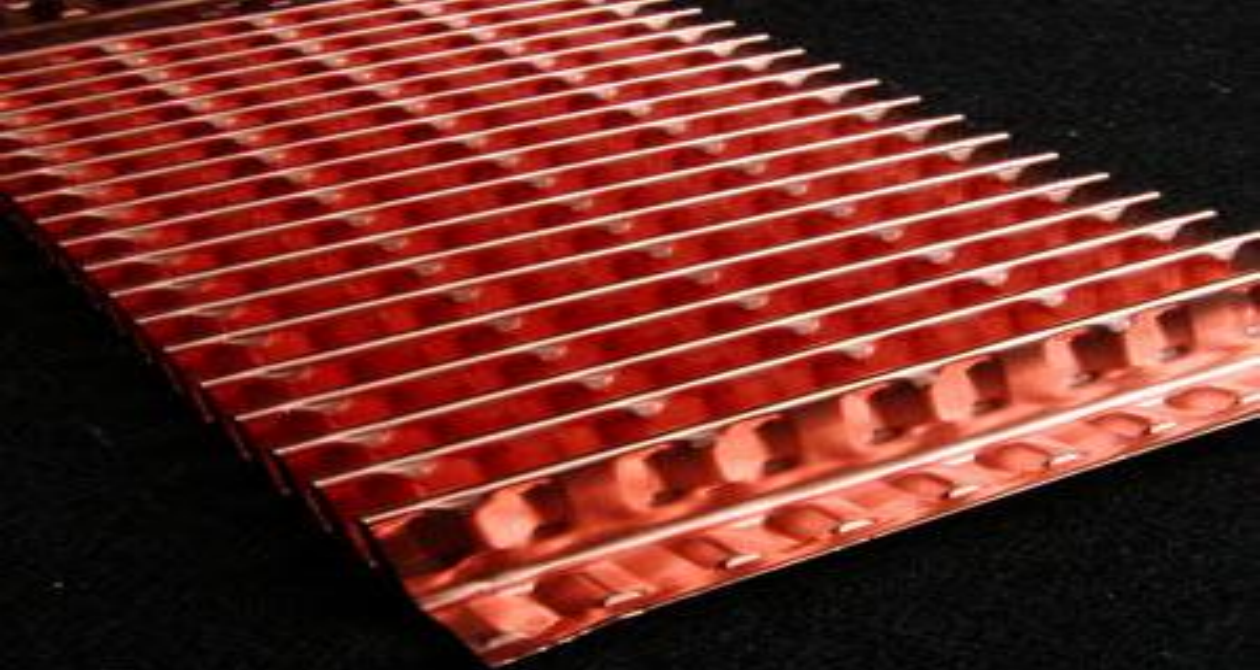
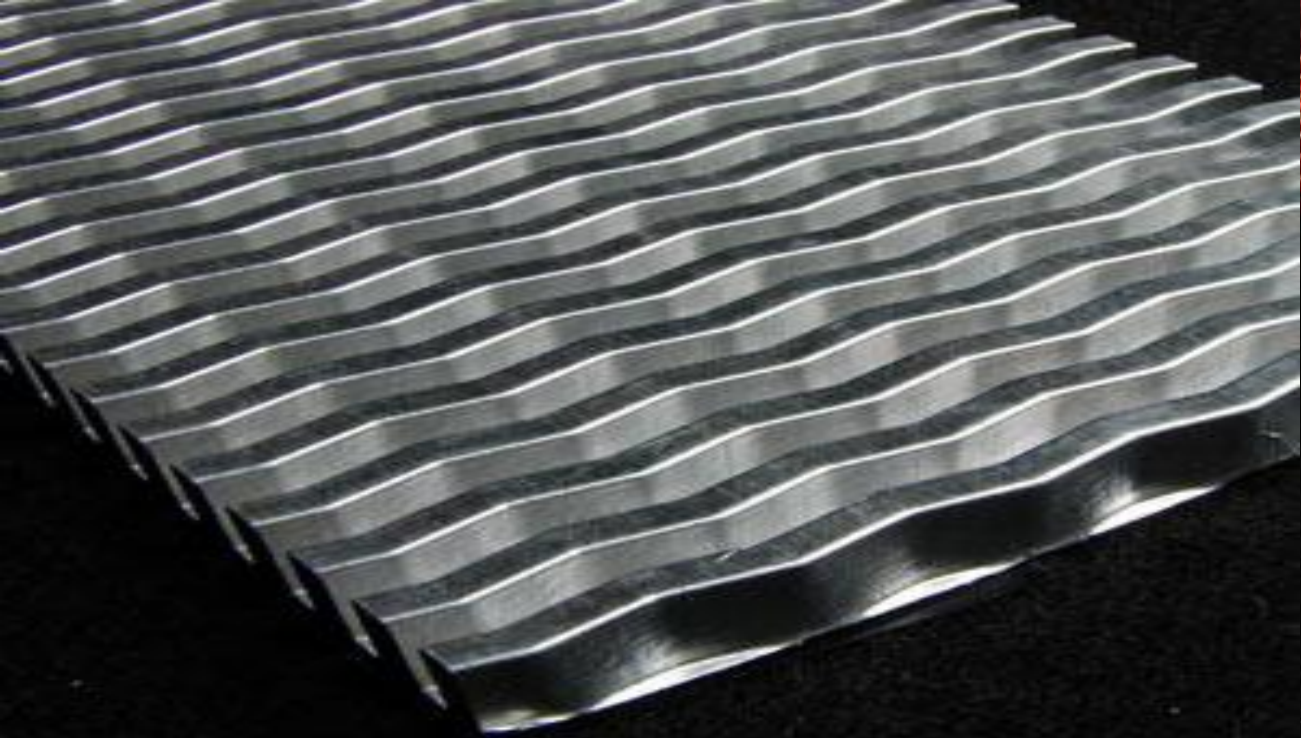
Heat Flow Path in a Radiator

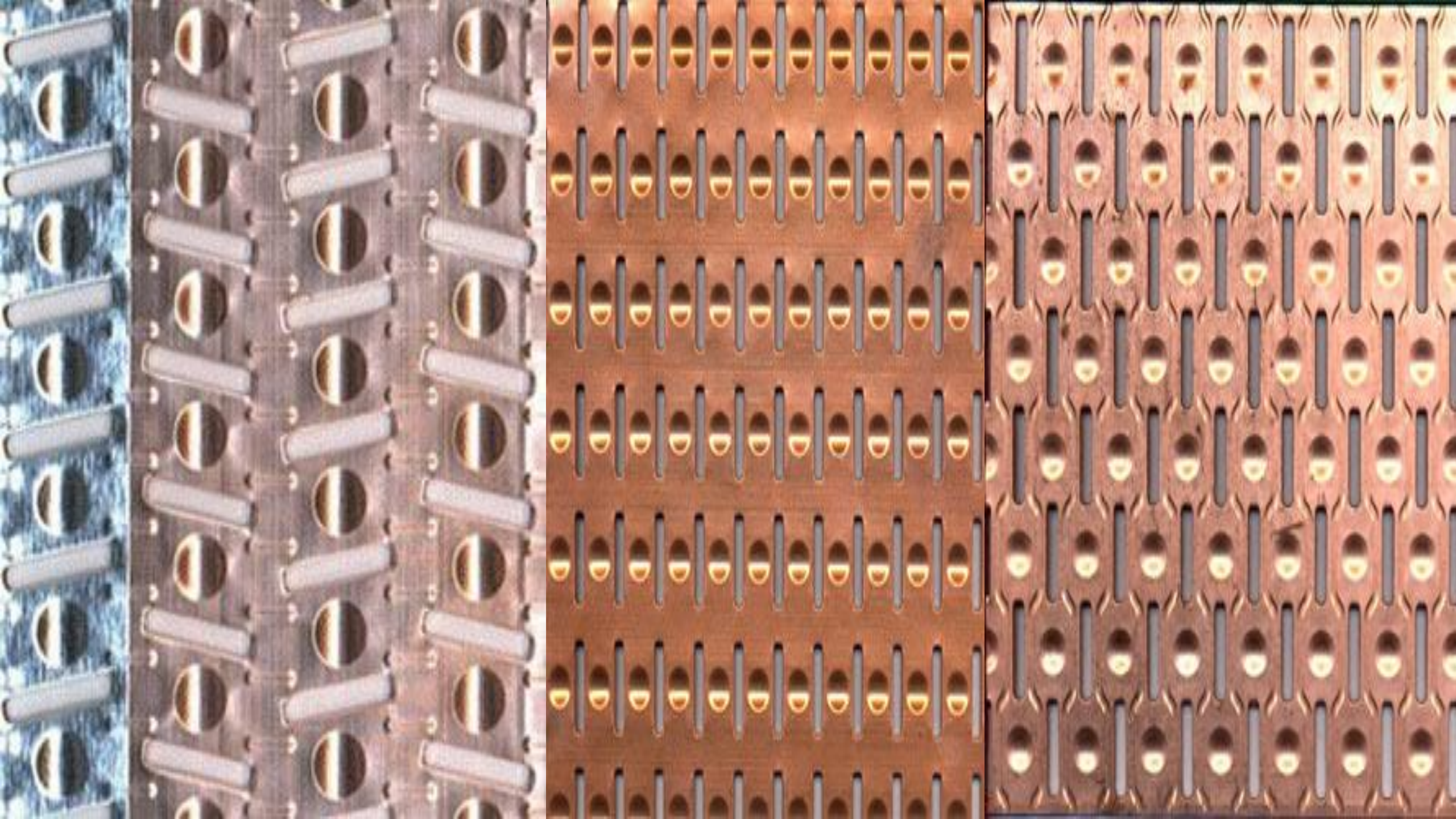


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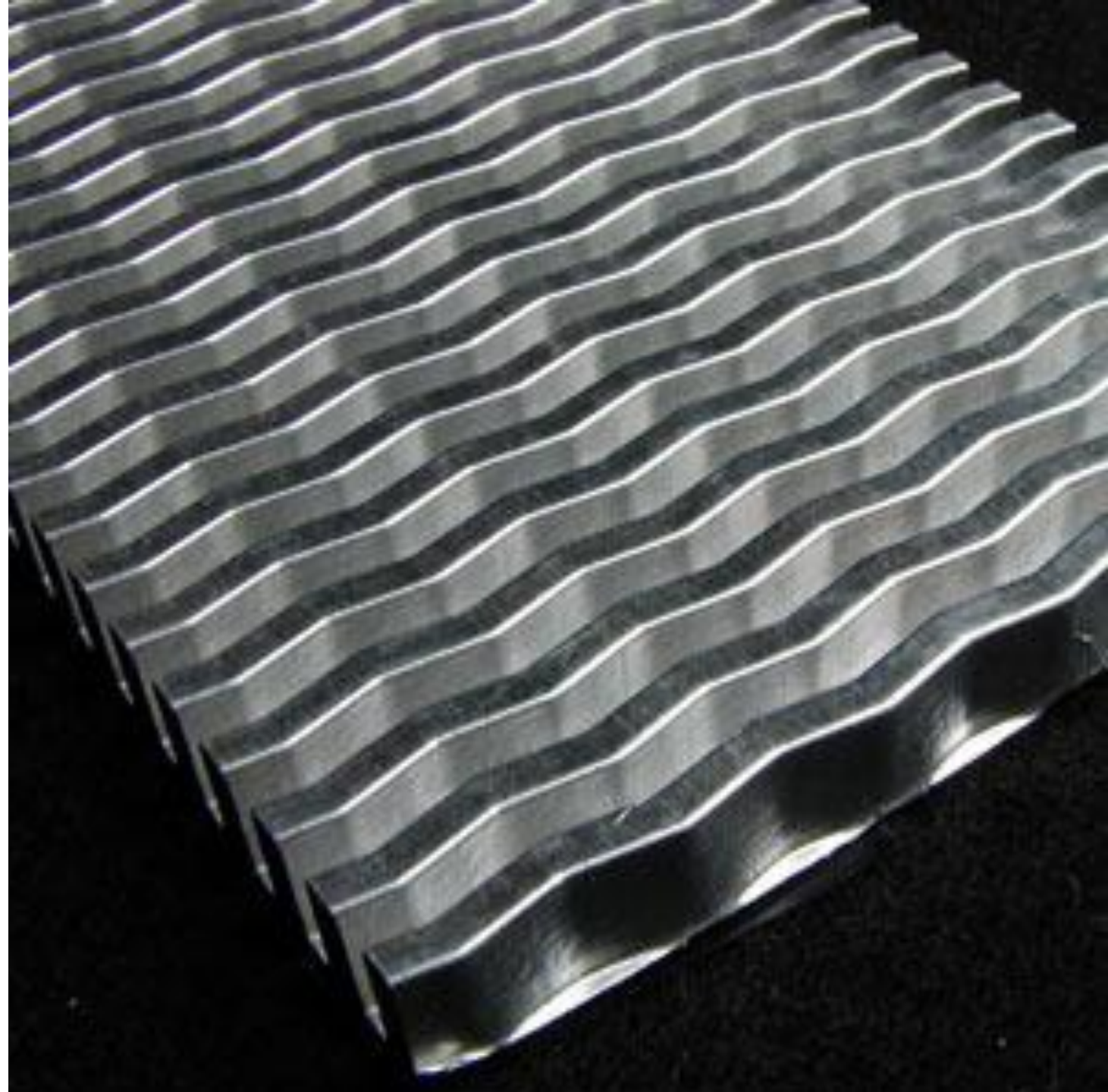
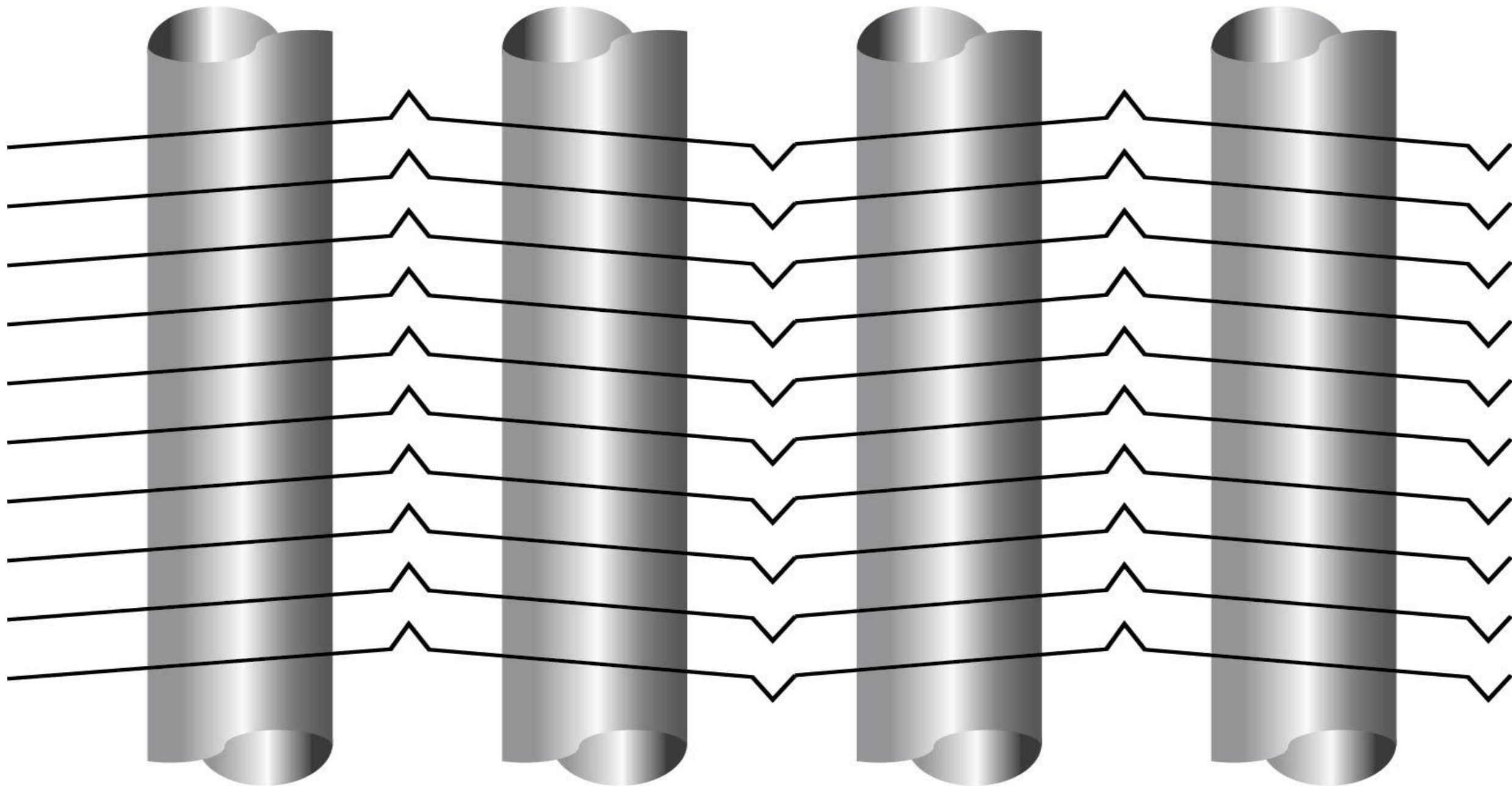
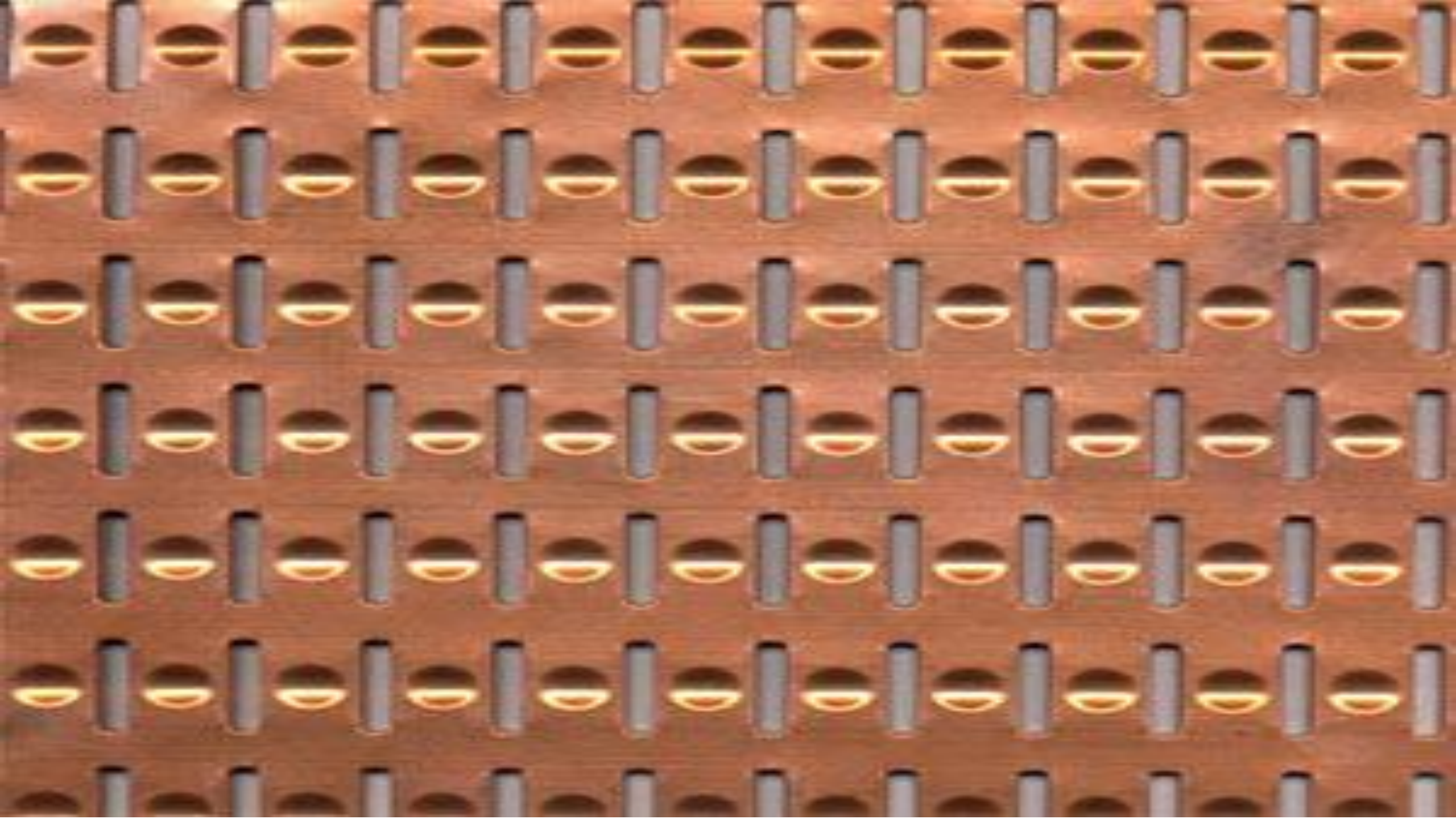
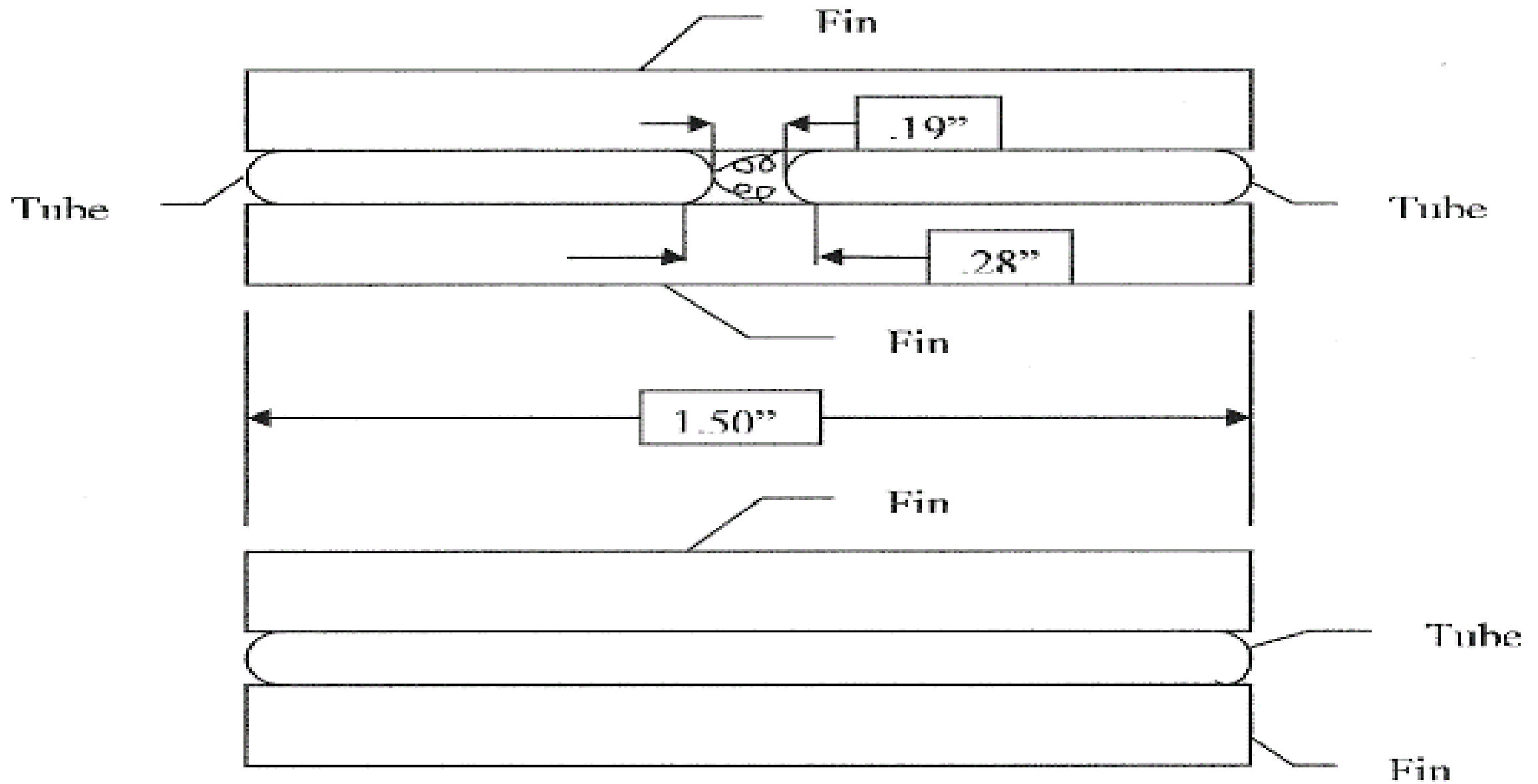


Plate Wave Fin









DEEP TUBE ONE ROW CORE VERSUS TWO ROW CORE