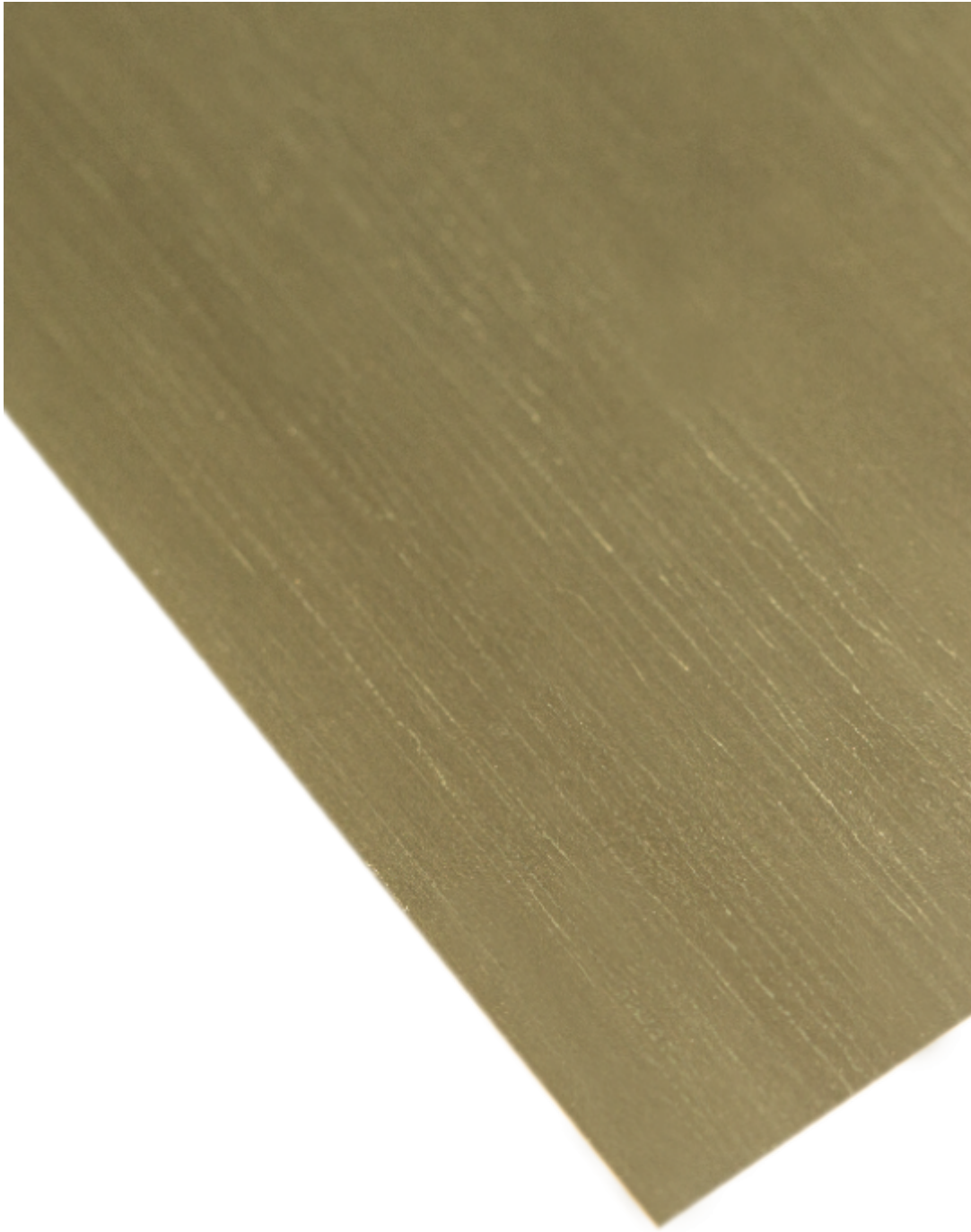


## **| Bronze sheets**



Informatii produs:

They are semi-fabricated obtained by cold lamination, having very good cold processing properties, soldering, wear and corrosion resistance and at the same time high hardness.

#### **COMMON AREAS OF USE FOR BRONZE SHEETS**

Connectors, contact springs, flexible electrical contact blades, terminals, switch parts, fuses, clamps,

electronic connectors, electromechanical spring components, parts for switches, parts for precision electronic instruments, high resistance elements, switching elements, fixed contacts.

## ALLOYS / CHARACTERISTICS OF BRONZE SHEETS

EXECUTION STANDARD EN 1652

### ALLOY SYMBOL

### CHEMICAL COMPOSITION

|              | Cu % | Zn %    | Pb %     | Fe %     | Ni %     | P %      | Sn %    |
|--------------|------|---------|----------|----------|----------|----------|---------|
| CuSn6 CW450K | rest | Max 0,2 | Max 0,02 | Max 0,10 | Max 0,30 | 0,01-0,4 | 5,5-7,0 |

Physical properties

| ALLOY SYMBOL |        | DENSITY           | COEFFICIENT OF THERMAL EXPANSION | SPECIFIC THERMAL CAPACITY | ELECTRICAL CONDUCTIVITY |       | THERMAL CONDUCTIVITY | MODULUS OF ELASTICITY |
|--------------|--------|-------------------|----------------------------------|---------------------------|-------------------------|-------|----------------------|-----------------------|
| CuSn6        | CW450K | g/cm <sup>3</sup> | 10 <sup>-6</sup> /K              | J/(g·K)                   | MS/m                    | IACS% | W/(m·K)              | GPa                   |
|              |        | 8.8               | 18                               | 0.377                     | >9                      | >15.5 | 75                   | 102                   |

Mechanical properties

| DELIVERY CONDITION | MECHANICAL RESISTANCE RM | YIELD STRENGTH RP0.2 | STANDARD ELONGATION A 50MM | OPTIMISED BENDING STRENGTH EFFICIENCY RP0.2 | ELONGATION AFTER DETENSIONING A 50MM | HARDNESS HV* * |
|--------------------|--------------------------|----------------------|----------------------------|---------------------------------------------|--------------------------------------|----------------|
|                    | MPa                      | MPa                  | Min                        | Min                                         | Min                                  | HV             |
|                    |                          |                      | %                          |                                             | %                                    |                |
| R350               | 350..420                 | <300*                | 45                         |                                             |                                      | 80..120        |
| R420               | 420..520                 | >350                 | 22                         | 350                                         | 29                                   | 120..170       |
| R500               | 500..590                 | >450                 | 15                         | 410                                         | 22                                   | 16..190        |
| R560               | 560..650                 | >520                 | 10                         | 490                                         | 15                                   | 180..210       |
| R640               | 640..730                 | >590                 | 5                          | 570                                         | 12                                   | 200..230       |
| R720               | > 720                    | <650                 | -                          | 620                                         | 4                                    | >210           |
| R850**             | > 850                    | -                    | -                          | 800                                         | 1,5                                  | >240           |

Common dimensions:

\*The specific weight is a theoretical weight and may differ from the actual weighed weight due to geometric tolerances set out in EN standards.

### THICKNESS X WIDTH X LENGTH MM

### WEIGHT kg/m

|                    |      |
|--------------------|------|
| 0,2 x 300 x 2.000  | 1,1  |
| 0,25 x 300 x 2.000 | 1,3  |
| 0,3 x 300 x 2.000  | 1,6  |
| 0,4 x 300 x 2.000  | 2,2  |
| 0,5 x 300 x 2.000  | 2,6  |
| 0,6 x 300 x 2.000  | 3,2  |
| 0,7 x 300 x 2.000  | 3,72 |

| <b>THICKNESS X WIDTH X LENGTH<br/>MM</b> | <b>WEIGHT<br/>kg/m</b> |
|------------------------------------------|------------------------|
| 0,8 x 300 x 2.000                        | 4,3                    |
| 1,0 x 300 x 2.000                        | 5,4                    |
| 1,2 x 300 x 2.000                        | 6,4                    |
| 1,5 x 300 x 2.000                        | 8,0                    |
| 2,0 x 300 x 2.000                        | 10,7                   |
| 2,0 x 600 x 2.000                        | 21,4                   |
| 2,0 x 1000 x 2.000                       | 36,6                   |
| 2,5 x 300 x 2.000                        | 13,4                   |
| 3,0 x 300 x 2.000                        | 16,0                   |
| 3,0 x 600 x 2.000                        | 32,0                   |
| 3,0 x 1000 x 2.000                       | 53,4                   |
| 4,0 x 300 x 2.000                        | 21,4                   |
| 4,0 x 600 x 2.000                        | 42,8                   |
| 4,0 x 1000 x 2.000                       | 71,2                   |
| 5,0 x 300 x 2.000                        | 26,4                   |
| 5,0 x 600 x 2.000                        | 52,8                   |
| 5,0 x 1000 x 2.000                       | 89,0                   |
| 6,0 x 300 x 2.000                        | 31,5                   |
| 6,0 x 600 x 2.000                        | 63,4                   |
| 6,0 x 1000 x 2.000                       | 106,8                  |
| 8,0 x 300 x 2.000                        | 42,3                   |

Industry Type: MACHINING,  
Category: Bronze and alubronze, BRONZE PLATES,

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URL: <https://color-metal.ro/en/bronze-sheets>