

# AL OMRANIYA TRADING CO. L.L.C.

# RED LABEL EN 1057

formerly BS2871 Part 1 Table Z

#### INTRODUCTION

The British Standard EN 1057 : (brand name Red Label), specifies the requirements for copper tube in straight lengths to hard temper. The tube is manufactured from phosphorus deoxidised (non arsenical) copper alloy CW024A. Due to the tube's hard temper it is intended to be used when straight runs are required and fittings used for change of direction. Tube, complying to this table, is suitable for hot or cold water services, gas services, sanitation and central heating. Red Label tube, when buried, should be plastic coated.



#### Nominal dimensions and max working pressure

#### Tolerance on outside diameter

#### Tolerance on wall thickness

| Nominal<br>outside<br>diameter<br>Ø mm | Wall<br>thick-<br>ness<br>mm | Max<br>working<br>pressure<br>bar | Nominal<br>outside diameter<br>Ø mm                        |                          | Tolerance on nominal<br>diameter (mm)<br>Applicable<br>to mean to any |  | Nominal<br>outside<br>diameter<br>Ømm | Tolerances<br>wall thickness e ')<br>e< 1 mm e ≥ 1 mm<br>% %                    |     |  |  |
|--|------------------------------|-----------------------------------|--|--------------------------|---|--|---------------------------------------|---|-----|--|--|
| 15                                     | 0,5                          | 50                                |  |                          | diameter  | diameter <sup>2</sup> )  | <18                                   | ±10   | ±13 |  |  |
| 22                                     | 0,6                          | 41                                |  | up to and                |   |  | R250<br>(half hard)                   |   |     |  |  |
|  |                              |                                   | over   | including                | all tempers   | temper   | ≥18                                   | ±10   | ±15 |  |  |
| 28                                     | 0,6                          | 32                                | 6 <sup>2)</sup>  | 18                       | ±0,04   | ±0,09  |                                       | tion from concentricity<br>(half hard) tubes of 35mm,<br>m diameter with a wall |     |  |  |
| 35                                     | 0,7                          | 30                                | 18   | 28                       | ±0,05   | ±0,10  | 42mm and 54                           |   |     |  |  |
| 42                                     | 0,8                          | 28                                | 28   | 54                       | ±0,06   | ±0,11  | thickness of 1,2 mm                   |   |     |  |  |
| 54                                     | 0,9                          | 25                                | <sup>1</sup> ) Including 6n<br><sup>2</sup> ) Including de | nm<br>eviation from circ | ular form   | Concentricity (uniformity of wall thickness) is controlled by tolerance on wall thickness. |                                       |   |     |  |  |

#### Mechanical properties

|      | terial<br>nper<br>Common<br>term | Nominal<br>outside<br>diameter<br>Ø<br>mm<br>min. max. |    | Tensile<br>Strength<br>Rm<br>MPA<br>min | Elongation<br>A<br>%<br>min | Hardness<br>(indicative)<br>HV5<br>VPN |
|------|----------------------------------|--|----|---|-----------------------------|--|
| R290 | hard                             | 6  | 54 | 290                                     | 3                           | (min. 100)                             |

Note 1: Hardness figures in parentheses are not requirements of this standard but are given for guidance purposes only. Note 2: MPa is equivalent to 1N/mm<sup>-2</sup>

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### MARKING

Tube from 15mm to 54mm inclusive is permanently die stamped 'STREAMLINE GB EN 1057 Red Label Wednesbury and date of manufacture' at intervals of not more than 600mm.

### JOINTING

This tube is suitable for connecting by means of capillary or compression fittings to BS EN 1254, silver brazing, bronze or autogenous welding.

## BENDING

Red Label tube cannot be bent, due to the hard temper of the tube.

| Size of<br>Tube<br>mm | No of<br>Tubes per<br>Hand Bundle M | Bundles<br>Tubes per J<br>Aaster Bundle 5.8 | Bundles<br>per tonne<br>m lengths | Kg per<br>Metre |  |  |  |  |  |  |  |
|-----------------------|-------------------------------------|---|-----------------------------------|-----------------|--|--|--|--|--|--|--|
| 15                    | 10                                  | 600   | 85                                | 0,203           |  |  |  |  |  |  |  |
| 22                    | 10                                  | 300   | 48                                | 0,359           |  |  |  |  |  |  |  |
| 28                    | 10                                  | 200   | 37                                | 0,460           |  |  |  |  |  |  |  |
| 35                    | 5                                   | 100   | 51                                | 0,671           |  |  |  |  |  |  |  |
| 42                    | 5                                   | 100   | 37                                | 0,922           |  |  |  |  |  |  |  |
| 54                    | 3                                   | 60  | 43                                | 1,336           |  |  |  |  |  |  |  |
| Based on theoreti     | Based on theoretical weights        |   |                                   |                 |  |  |  |  |  |  |  |

## Lengths & packaging

| SPECIAL FINISHES  | 15 | 22 | 28 | 35 | 42 | 54 |  |  |  |
|-------------------|----|----|----|----|----|----|--|--|--|
| Protec Blue       | •  | •  | •  | •  | •  | •  |  |  |  |
| Protec Green      | •  | •  | •  | •  | •  | •  |  |  |  |
| Protec Yellow     | •  | •  | •  | •  | •  | •  |  |  |  |
| Protec White      | •  | •  | •  | •  | •  | •  |  |  |  |
| Protec 2000 White | •  | •  | •  |    |    |    |  |  |  |
| Chrome Plated     | •  | •  | •  | •  | •  | •  |  |  |  |
| Degreased         | •  | •  | •  | •  | •  | •  |  |  |  |