

## Minimum bend radius for Aluminium Alloys

| Alloy and temper       | Approximate sheet thickness [t] (inches) |         |         |           |           |         |
|------------------------|--|---------|---------|-----------|-----------|---------|
|                        | 0.016                                    | 0.032   | 0.064   | 0.128     | 0.182     | 0.258   |
| 2024.O <sup>1</sup>    | 0  | 0-1t    | 0-1t    | 0-1t      | 0-1t      | 0-1t    |
| 2024.T3 <sup>1,2</sup> | 1.5-3t                                   | 2t-4t   | 3t-5t   | 4t-6t     | 4t-6t     | 5t-7t   |
| 2024.T6 <sup>1</sup>   | 2t-4t                                    | 3t-5t   | 3t-5t   | 4t-6t     | 5t-7t     | 6t-10t  |
| 5052.O                 | 0  | 0       | 0-1t    | 0-1t      | 0-1t      | 0-1t    |
| 5052.H32               | 0  | 0       | .5t-1t  | .5-1.5t   | .5-1.5t   | .5-1.5t |
| 5052.H34               | 0  | 0       | .5-1.5t | 1.5t-2.5t | 1.5t-2.5t | 2t-3t   |
| 5052.H36               | 0-1t                                     | .5-1.5t | 1t-2t   | 1.5t-3t   | 2t-4t     | 2t-4t   |
| 5052.H38               | .5-1.5t                                  | 1t-2t   | 1.5t-3t | 2t-4t     | 3t-5t     | 4t-6t   |
| 6061.O                 | 0  | 0-1t    | 0-1t    | 0-1t      | 0-1t      | 0-1t    |
| 6061.T4                | 0-1t                                     | 0-1t    | .5-1.5t | 1t-2t     | 1.5t-3t   | 2.5t-4t |
| 6061.T6                | 0-1t                                     | .5-1.5t | 1t-2t   | 1.5t-3t   | 2t-4t     | 3t-4t   |
| 7075.O                 | 0  | 0-1t    | 0-1t    | .5-1.5t   | 1t-2t     | 1.5t-3t |
| 7075.T6 <sup>1</sup>   | 2t-4t                                    | 3t-5t   | 4t-6t   | 5t-7t     | 5t-7t     | 6t-10t  |

1. Clad sheet may be bent over slightly smaller radii than the corresponding tempers of uncoated alloy.

2. Immediately after quenching this alloy may be formed over appreciably smaller radii

## Sheetmetal gauges – equivalent for Imperial and metric sheets

| Imperial Gauge | Imperial in mm | Metric Sheet mm |
|----------------|----------------|-----------------|
| 10             | 3.25           | 3.0             |
| 12             | 2.64           | 2.5             |
| 14             | 2.03           | 2.0             |
| 16             | 1.63           | 1.5             |
| 18             | 1.22           | 1.2             |
| 20             | 0.91           | 0.9             |
| 22             | 0.71           | 0.7             |
| 24             | 0.56           | 0.6             |
| 26             | 0.46           | 0.5             |

## Recycling Limits

| <b>GAUGE NUMBER</b> | <b>NOMINAL THICKNESS (Inches)</b> | <b>NOMINAL THICKNESS (Millimeters)</b> | <b>MINIMUM THICKNESS (Inches )</b> | <b>MINIMUM THICKNESS (Millimeters)</b> |
|---------------------|-----------------------------------|--|------------------------------------|--|
| 12                  | 0.1046                            | 2.6568                                 | 0.0946                             | 2.4028                                 |
| 14                  | 0.0747                            | 1.8974                                 | 0.0677                             | 1.7196                                 |
| 16                  | 0.0598                            | 1.5189                                 | 0.0533                             | 1.3538                                 |
| 18                  | 0.0478                            | 1.2141                                 | 0.0428                             | 1.0871                                 |
| 19                  | 0.0418                            | 1.0617                                 | 0.0378                             | 0.9601                                 |
| 20                  | 0.0359                            | 0.9119                                 | 0.0324                             | 0.8230                                 |
| 22                  | 0.0299                            | 0.7595                                 | 0.0269                             | 0.6833                                 |
| 24                  | 0.0239                            | 0.6071                                 | 0.0209                             | 0.5309                                 |
| 26                  | 0.0179                            | 0.4547                                 | 0.0159                             | 0.4039                                 |
| 28                  | 0.0149                            | 0.3785                                 | 0.0129                             | 0.3277                                 |

## Standards for American Sheets

| <b>Gauge (ga)</b> | <b>Standard Steel Thickness (inches)</b> | <b>Galvanized Steel Thickness (inches)</b> | <b>Aluminum Thickness (inches)</b> |
|-------------------|--|--|------------------------------------|
| 3                 | 0.2391                                   |  | 0.2294                             |
| 4                 | 0.2242                                   |  | 0.2043                             |
| 5                 | 0.2092                                   |  | 0.1819                             |
| 6                 | 0.1943                                   |  | 0.1620                             |
| 7                 | 0.1793                                   |  | 0.1443                             |

|    |        |        |        |
|----|--------|--------|--------|
| 8  | 0.1644 |        | 0.1285 |
| 9  | 0.1495 | 0.1532 | 0.1144 |
| 10 | 0.1345 | 0.1382 | 0.1019 |
| 11 | 0.1196 | 0.1233 | 0.0907 |
| 12 | 0.1046 | 0.1084 | 0.0808 |
| 13 | 0.0897 | 0.0934 | 0.0720 |
| 14 | 0.0747 | 0.0785 | 0.0641 |
| 15 | 0.0673 | 0.0710 | 0.0571 |
| 16 | 0.0598 | 0.0635 | 0.0508 |
| 17 | 0.0538 | 0.0575 | 0.0453 |
| 18 | 0.0478 | 0.0516 | 0.0403 |
| 19 | 0.0418 | 0.0456 | 0.0359 |
| 20 | 0.0359 | 0.0396 | 0.0320 |
| 21 | 0.0329 | 0.0366 | 0.0285 |
| 22 | 0.0299 | 0.0336 | 0.0253 |
| 23 | 0.0269 | 0.0306 | 0.0226 |
| 24 | 0.0239 | 0.0276 | 0.0201 |
| 25 | 0.0209 | 0.0247 | 0.0179 |
| 26 | 0.0179 | 0.0217 | 0.0159 |
| 27 | 0.0164 | 0.0202 | 0.0142 |
| 28 | 0.0149 | 0.0187 | 0.0126 |

|    |        |        |        |
|----|--------|--------|--------|
| 29 | 0.0135 | 0.0172 | 0.0113 |
| 30 | 0.0120 | 0.0157 | 0.0100 |
| 31 | 0.0105 | 0.0142 | 0.0089 |
| 32 | 0.0097 | 0.0134 | 0.0080 |
| 33 | 0.0090 |        | 0.0071 |
| 34 | 0.0082 |        | 0.0063 |
| 35 | 0.0075 |        | 0.0056 |
| 36 | 0.0067 |        |        |