

alloy specifications

Mechanical Property Limits - Rolled

| Tensile Strength (MPa) | | | | | | | |
|------------------------|----------------|-------|----------|-----|-------|-----|---------------------------|
| Alloy & Temper | Thickness (mm) | | Ultimate | | Yeild | | Elongation % min. in 50mm |
| | Over | Up to | Min | Max | Min | Max | |
| 5005 H12 | 0.4 | 0.63 | 125 | 165 | 95 | | 2 |
| | 0.63 | 1.20 | 125 | 165 | 95 | | 4 |
| | 1.20 | 6.30 | 125 | 165 | 95 | | 6 |
| 5005 H34 | 0.3 | 0.8 | 137 | 180 | 105 | | 3 |
| | 0.8 | 1.3 | 137 | 180 | 105 | | 4 |
| | 1.3 | 3.0 | 137 | 180 | 105 | | 5 |
| | 3.0 | 4.0 | 137 | 180 | 105 | | 6 |
| | 4.0 | 6.0 | 137 | 180 | 105 | | 7 |
| 5052 H32 | 0.5 | 1.3 | 213 | 263 | 158 | | 5 |
| | 1.3 | 3.0 | 213 | 263 | 158 | | 7 |
| | 3.0 | 6.0 | 213 | 263 | 158 | | 9 |
| | 6.0 | 12.0 | 213 | 263 | 158 | | 11 |
| 5052 H34 | 0.5 | 1.3 | 234 | 283 | 179 | | 4 |
| | 1.3 | 3.0 | 234 | 283 | 179 | | 6 |
| | 3.0 | 6.0 | 234 | 283 | 179 | | 7 |
| | 6.0 | 12.0 | 234 | 283 | 179 | | 8 |
| 5052 H36 | 0.2 | 0.8 | 255 | 304 | 199 | | 3 |
| | 0.8 | 4.0 | 255 | 304 | 199 | | 4 |
| 5052 H38 | 0.63 | 3.20 | 270 | | 220 | | 4 |
| 5083 H321 | 5.0 | 40.0 | 303 | 387 | 213 | 297 | 10 |
| 5083 H112 | 6.30 | 12.50 | 275 | | 125 | | 12 |
| | 12.50 | 40.0 | 275 | | 125 | | 10 |
| | 40.0 | 80.0 | 270 | | 115 | | 10 |
| 5083 H116 | 3.0 | 30.0 | 305 | | 215 | | 10 |
| 6061 T651 | 12.5 | 40.0 | 290 | | 240 | | 8 |
| | 40.0 | 80.0 | 290 | | 240 | | 6 |
| | 80.0 | 100.0 | 290 | | 240 | | 5 |
| | 100.0 | 150.0 | 275 | | 240 | | 5 |
| | 150.0 | 175.0 | 265 | | 230 | | 4 |

These are the minimum mechanical properties for the alloys listed. (Data obtained from AA and ADC)

alloy specifications continued...

Mechanical Property Limits – Extruded

| Tensile Strength (MPa) | | | | | | | |
|------------------------|----------------|-------|----------|-----|-------|-----|------------------------------|
| Alloy & Temper | Thickness (mm) | | Ultimate | | Yield | | Elongation % min. in 50mm |
| | Over | Up to | Min | Max | Min | Max | 5005 5050A |
| 6060 T5 | | 12.0 | 150 | | 110 | | 8 |
| | 12.0 | 25.0 | 145 | | 105 | | 6 |
| 6063 T5 | | 12.0 | 151 | | 110 | | 8 |
| | 12.0 | 25.0 | 144 | | 103 | | 6 |
| 6063 T6 | | 25.0 | 205 | | 170 | | 8 |
| | 25.0 | 150.0 | 185 | | 160 | | 10 |
| 6106 T6 | | 10.0 | 235 | | 210 | | 8 |
| | 10.0 | 25.0 | 205 | | 170 | | 8 |
| | 25.0 | 150.0 | 185 | | 160 | | 10 |
| 6261 T5 or T6 | | All | 295 | | 255 | | 7 |
| 6061 T6 | | All | 262 | | 241 | | 8 |
| 6061 T6511 | 175 | All | 260 | | 240 | | 10 |
| 6082 T6511 | 5.0 | 150 | 310 | | 260 | | 8 |

These are the minimum mechanical properties for the alloys listed. (Data obtained from AA and ADC)