

**HVAC DUCT
CONSTRUCTION
STANDARDS
METAL AND FLEXIBLE**



**SHEET METAL AND AIR CONDITIONING CONTRACTORS'
NATIONAL ASSOCIATION, INC.**

| Gage | Thickness in Inches | | | Weight | | | | Thickness in Millimeters | | |
|------|---------------------|-------|-------|--------------|---------------|---------------|---------------------------|--------------------------|--------|-------|
| | Min. | Max. | Nom. | Min lb/sf | Nom. lb/sf | Max. lb/sf | Nom. kg/m ² | Min. | Max. | Nom. |
| 33 | .0060 | .0120 | .0090 | .2409 | .376 | .486 | | .1524 | .3048 | .2286 |
| 32 | .0104 | .0164 | .0134 | .4204 | .563 | .665 | | .2642 | .4166 | .3404 |
| 31 | .0112 | .0172 | .0142 | .4531 | .594 | .698 | | .2845 | .4369 | .3607 |
| 30 | .0127 | .0187 | .0157 | .5143 | .656 | .759 | 3.20 | .3188 | .4783 | .3988 |
| 29 | .0142 | .020 | .0172 | .5755 | .719 | .820 | | .3569 | .5169 | .4369 |
| 28 | .0157 | .0217 | .0187 | .6367 | .781 | .881 | 3.81 | .3950 | .5550 | .4750 |
| 27 | .0172 | .0232 | .0202 | .6979 | .844 | .943 | | .4331 | .5931 | .5131 |
| 26 | .0187 | .0247 | .0217 | .7591 | .906 | 1.004 | 4.42 | .4712 | .6312 | .5512 |
| 25 | .0217 | .0287 | .0247 | .8407 | | 1.167 | | .5274 | .7274 | .6274 |
| 24 | .0236 | .0316 | .0276 | .9590 | 1.156 | 1.285 | 5.64 | .6010 | .8010 | .7010 |
| 23 | .0266 | .0346 | .0306 | 1.0814 | | 1.408 | | .6772 | .8772 | .7772 |
| 22 | .0296 | .0376 | .0336 | 1.2038 | 1.406 | 1.530 | 6.86 | .7534 | .9534 | .8534 |
| 21 | .0326 | .0406 | .0336 | 1.3263 | | 1.653 | | .8296 | 1.0296 | .9296 |
| 20 | .0356 | .0436 | .0396 | 1.4486 | 1.656 | 1.775 | 8.08 | .906 | 1.106 | 1.006 |
| 19 | .0406 | .0506 | .0456 | 1.6526 | | 2.061 | | 1.028 | 1.288 | 1.158 |
| 18 | .0466 | .0566 | .0516 | 1.8974 | 2.156 | 2.305 | 10.52 | 1.181 | 1.441 | 1.311 |
| 17 | .0525 | .0625 | .0575 | 2.1381 | | 2.546 | | 1.331 | 1.591 | 1.461 |
| 16 | .0575 | .0695 | .0635 | 2.342 | 2.656 | 2.832 | 12.96 | 1.463 | 1.763 | 1.613 |
| 15 | .0650 | .0770 | .0710 | 2.6481 | | 3.138 | | 1.653 | 1.953 | 1.803 |
| 14 | .0705 | .0865 | .0785 | 2.8725 | 3.281 | 3.525 | 16.01 | 1.784 | 2.204 | 1.994 |
| 12 | .0854 | .1014 | .0934 | 3.4804 | | 4.133 | | 2.162 | 2.5823 | 2.372 |
| 12 | .0994 | .1174 | .1084 | 4.0516 | 4.531 | 4.786 | 22.11 | 2.523 | 2.983 | 2.753 |
| 11 | .1143 | .1323 | .1233 | 4.6505 | | 5.394 | | 2.902 | 3.362 | 3.132 |
| 10 | .1292 | .1472 | .1382 | 5.2675 | 5.781 | 6.002 | 28.21 | 3.280 | 3.740 | 3.510 |
| 9 | .1442 | .1622 | .1532 | 5.8795 | | 6.614 | | 3.661 | 4.121 | 3.891 |
| 8 | .1591 | .1771 | .1681 | 6.4874 | 6.875 | 7.222 | | 4.040 | 4.500 | 4.270 |

NOTES:

- Based on ASTM A924/924M-9, Standard Specification for General Requirements for Sheet Steel, Metallic Coated by the Hot-Dip Process (formerly ASTMA525); and ASTMA653/A653M-94, Standard Specification for Sheet Steel, Zinc-Coat (Galvanized) or Zinc-Iron Alloy Coated (Galvanized) by the Hot-Dip Process.
- Tolerances are valid for 48" and 60" wide coil and cut length stock - other dimensions apply to other sheet widths and to strip.
- The lock forming grade of steel will conform to ASTM A653 (formerly ASTM A527).
- The steel producing industry recommends that steel be ordered by decimal thickness only. Thickness and zinc coating class can be stenciled on the sheet. The gage designation is retained for residual familiarity reference only.
- Minimum weight in this table is based on the following computation:
Minimum sheet thickness minus 0.001" of G60 coating times 40.8 lb per sf. per inch plus 0.0369 lb/sf of zinc.
G90 stock would be comparably calculated from:
(t - .00153") 40.8 ÷ 0.05564 = minimum weight.
However, scale weight may run 2% (or more) greater than theoretical weight. Actual weight may be near 40.82 lb. per s.f. per inch.
- G60 coating, per ASTM A653 and ASTM A90, has 0.60 oz/sf (triple spot test) total for two sides. 0.59 oz/sf of zinc equals 0.001" . 1 oz is 0.0017" and is 305.15 g/m².
G90 coating is 0.90 oz/sf (triple spot test), or 0.00153". Magnetic gage measurement of zinc coating may have 15% error.
- ASTM D2092, Practice for Preparation of Zinc-Coated Galvanized Steel Surfaces for Paint, includes mill phosphatizing.
- ASTM A755 is the Specification for Sheet Steel, Metallic Coated by the Hot-Dip Process and Prepainted by the Coating Process for Exterior Building Products. Other information is available from the National Coil Coaters Association, Philadelphia, PA.
- Much chemical and atmospheric corrosion information is available from ASM International in Metals Park, Ohio and from NACE International in Houston, TX.
- A principle international standard is ISO 3575, Continuous Hot-Dip Process, Zinc-Coated Carbon Steel Sheet of Commercial, Lock Forming and Drawing Qualities.

GALVANIZED SHEET THICKNESS TOLERANCES

