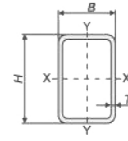


# Cold Rolled Rectangular Hollow Sections



APM S001

| Nominal Size |               | t<br>Wall<br>Thickness | Calculated<br>Weight |        | Sectional<br>Area | Moment of<br>Inertia              |                                   | Section Modulus                   |                                   | Radius of<br>Gyration |                      | Plastic Modulus                   |                                   |
|--------------|---------------|------------------------|----------------------|--------|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------|----------------------|-----------------------------------|-----------------------------------|
| mm           | in            | mm                     | kg/m                 | kg/6m  | cm <sup>2</sup>   | I <sub>x</sub><br>cm <sup>4</sup> | I <sub>y</sub><br>cm <sup>4</sup> | Z <sub>x</sub><br>cm <sup>3</sup> | Z <sub>y</sub><br>cm <sup>3</sup> | i <sub>x</sub><br>cm  | i <sub>y</sub><br>cm | S <sub>x</sub><br>cm <sup>3</sup> | S <sub>y</sub><br>cm <sup>3</sup> |
| 25 x 12      | 1 x 1/2       | 0.8                    | 0.440                | 2.409  | 0.561             | 0.444                             | 0.139                             | 0.355                             | 0.231                             | 0.889                 | 0.497                | 0.445                             | 0.264                             |
|              |               | 1.0                    | 0.543                | 3.257  | 0.691             | 0.536                             | 0.165                             | 0.429                             | 0.276                             | 0.880                 | 0.489                | 0.553                             | 0.325                             |
|              |               | 1.2                    | 0.642                | 3.853  | 0.818             | 0.621                             | 0.189                             | 0.496                             | 0.316                             | 0.871                 | 0.481                | 0.649                             | 0.379                             |
|              |               | 1.6                    | 0.832                | 4.991  | 1.060             | 0.770                             | 0.229                             | 0.616                             | 0.382                             | 0.853                 | 0.465                | 0.829                             | 0.478                             |
| 38 x 19      | 1 1/2 x 3/4   | 1.0                    | 0.857                | 5.141  | 1.091             | 2.050                             | 0.691                             | 1.080                             | 0.727                             | 1.370                 | 0.796                | 1.350                             | 0.829                             |
|              |               | 1.2                    | 1.020                | 6.114  | 1.298             | 2.400                             | 0.804                             | 1.260                             | 0.847                             | 1.360                 | 0.787                | 1.600                             | 0.977                             |
|              |               | 1.6                    | 1.330                | 8.005  | 1.700             | 3.060                             | 1.010                             | 1.610                             | 1.060                             | 1.340                 | 0.771                | 2.080                             | 1.260                             |
| 38 x 25      | 1 1/2 x 1     | 1.0                    | 0.951                | 5.706  | 1.21              | 2.46                              | 1.28                              | 1.29                              | 1.03                              | 1.42                  | 1.03                 | 1.57                              | 1.18                              |
|              |               | 1.2                    | 1.130                | 6.792  | 1.44              | 2.89                              | 1.50                              | 1.52                              | 1.20                              | 1.42                  | 1.02                 | 1.86                              | 1.39                              |
|              |               | 1.6                    | 1.490                | 8.910  | 1.89              | 3.70                              | 1.91                              | 1.95                              | 1.53                              | 1.40                  | 1.01                 | 2.42                              | 1.80                              |
| 50 x 25      | 2 x 1         | 0.8                    | 0.918                | 4.293  | 1.17              | 3.90                              | 1.33                              | 1.56                              | 1.07                              | 1.83                  | 1.07                 | 1.91                              | 1.18                              |
|              |               | 1.0                    | 1.140                | 6.836  | 1.45              | 4.79                              | 1.63                              | 1.92                              | 1.30                              | 1.82                  | 1.06                 | 2.38                              | 1.46                              |
|              |               | 1.2                    | 1.360                | 8.148  | 1.73              | 5.65                              | 1.91                              | 2.26                              | 1.53                              | 1.81                  | 1.05                 | 2.82                              | 1.73                              |
|              |               | 1.6                    | 1.790                | 10.718 | 2.28              | 7.29                              | 2.44                              | 2.91                              | 1.95                              | 1.79                  | 1.03                 | 3.69                              | 2.25                              |
| 65 x 35      | 2 1/2 x 1 3/8 | 1.2                    | 1.810                | 8.148  | 2.31              | 13.07                             | 5.04                              | 4.02                              | 2.88                              | 2.38                  | 1.48                 | 4.91                              | 3.21                              |
|              |               | 1.6                    | 2.380                | 14.280 | 3.03              | 16.87                             | 6.47                              | 5.19                              | 3.70                              | 2.36                  | 1.46                 | 6.39                              | 4.17                              |
| 65 x 38      | 2 1/2 x 1 1/2 | 1.2                    | 1.866                | 11.196 | 2.38              | 13.80                             | 6.06                              | 4.25                              | 3.19                              | 2.41                  | 1.60                 | 5.14                              | 3.56                              |
|              |               | 1.6                    | 2.490                | 14.938 | 3.17              | 18.30                             | 7.94                              | 5.63                              | 4.18                              | 2.40                  | 1.58                 | 6.91                              | 4.75                              |
| 75 x 25      | 3 x 1         | 1.2                    | 1.810                | 6.836  | 2.31              | 15.31                             | 2.73                              | 4.08                              | 2.18                              | 2.58                  | 1.09                 | 5.24                              | 2.40                              |
|              |               | 1.6                    | 2.380                | 14.279 | 3.03              | 20.10                             | 3.51                              | 5.35                              | 2.81                              | 2.55                  | 1.07                 | 7.12                              | 3.21                              |
| 75 x 38      | 3 x 1 1/2     | 1.2                    | 2.055                | 6.836  | 2.62              | 19.56                             | 6.87                              | 5.22                              | 3.61                              | 2.73                  | 1.62                 | 6.39                              | 4.00                              |
|              |               | 1.6                    | 2.710                | 16.239 | 3.45              | 25.30                             | 8.85                              | 6.76                              | 4.66                              | 2.71                  | 1.60                 | 8.59                              | 5.34                              |