

HE

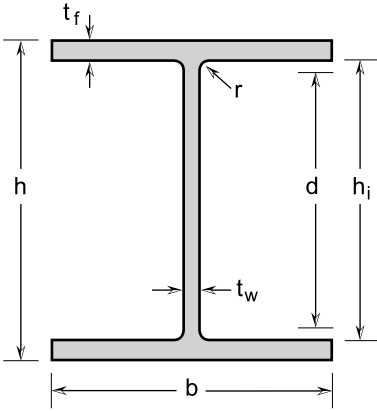
گروپی چیوه



Chiwa Group

For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | | Dimensions | | | | | | Dimensions for detailing | |
|-------------|-----------|------------|---------|----------------------|----------------------|----------|--|--------------------------|---------|
| | G kg/m | h mm | b mm | t _w mm | t _f mm | r* mm | A mm ² x10 ² | h _i mm | d mm |
| HE 100 AA | 11.5 | 91 | 100 | 4.2 | 5.5 | 2 | 14.39 | 80.0 | 76.0 |
| HE 100 A | 16.0 | 96 | 100 | 5 | 8 | 2 | 20.03 | 80.0 | 76.0 |
| HE 100 B | 19.9 | 100 | 100 | 6 | 10 | 2 | 24.83 | 80.0 | 76.0 |
| HE 100 M | 41.6 | 120 | 106 | 12 | 20 | 2 | 52.03 | 80.0 | 76.0 |
| HE 120 AA | 13.9 | 109 | 120 | 4.2 | 5.5 | 2 | 17.35 | 98.0 | 94.0 |
| HE 120 A | 19.3 | 114 | 120 | 5 | 8 | 2 | 24.13 | 98.0 | 94.0 |
| HE 120 B | 26.2 | 120 | 120 | 6.5 | 11 | 2 | 32.80 | 98.0 | 94.0 |
| HE 120 M | 52.2 | 140 | 126 | 12.5 | 21 | 2 | 65.20 | 98.0 | 94.0 |
| HE 140 AA | 17.5 | 128 | 140 | 4.3 | 6 | 2 | 21.82 | 116.0 | 112.0 |
| HE 140 A | 24.2 | 133 | 140 | 5.5 | 8.5 | 2 | 30.21 | 116.0 | 112.0 |
| HE 140 B | 33.4 | 140 | 140 | 7 | 12 | 2 | 41.75 | 116.0 | 112.0 |
| HE 140 M | 63.5 | 160 | 146 | 13 | 22 | 2 | 79.35 | 116.0 | 112.0 |
| HE 160 AA | 22.8 | 148 | 160 | 4.5 | 7 | 2 | 28.46 | 134.0 | 130.0 |
| HE 160 A | 29.5 | 152 | 160 | 6 | 9 | 2 | 36.87 | 134.0 | 130.0 |
| HE 160 B | 41.9 | 160 | 160 | 8 | 13 | 2 | 52.35 | 134.0 | 130.0 |
| HE 160 M | 76.1 | 180 | 166 | 14 | 23 | 2 | 95.15 | 134.0 | 130.0 |
| HE 180 AA | 27.7 | 167 | 180 | 5 | 7.5 | 2 | 34.63 | 152.0 | 148.0 |
| HE 180 A | 34.7 | 171 | 180 | 6 | 9.5 | 2 | 43.35 | 152.0 | 148.0 |
| HE 180 B | 50.7 | 180 | 180 | 8.5 | 14 | 2 | 63.35 | 152.0 | 148.0 |
| HE 180 M | 89.1 | 200 | 186 | 14.5 | 24 | 2 | 111.35 | 152.0 | 148.0 |
| HE 200 AA | 33.1 | 186 | 200 | 5.5 | 8 | 2 | 41.38 | 170.0 | 166.0 |
| HE 200 A | 40.9 | 190 | 200 | 6.5 | 10 | 2 | 51.08 | 170.0 | 166.0 |
| HE 200 B | 60.3 | 200 | 200 | 9 | 15 | 2 | 75.33 | 170.0 | 166.0 |
| HE 200 M | 102.8 | 220 | 206 | 15 | 25 | 2 | 128.53 | 170.0 | 166.0 |

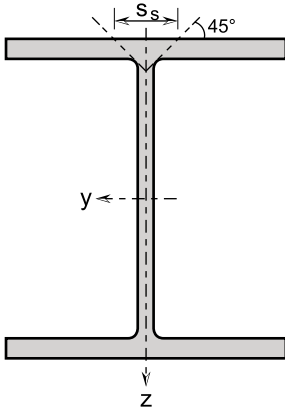
HE

گروپی چیوه



Chiwa Group
For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | Strong axis y-y | | | | | Weak axis z-z | | | | S _s mm | I _t mm ⁴ x10 ⁴ | I _w mm ⁶ x10 ⁹ |
|-------------|---|--|--|-----------------------------|--|---|--|--|-----------------------------|----------------------|---|---|
| | I _y mm ⁴ x10 ⁴ | W _{el,y} mm ³ x10 ³ | W _{pl,y} mm ³ x10 ³ | i _y mm x10 | A _{vz} mm ² x10 ² | I _z mm ⁴ x10 ⁴ | W _{el,z} mm ³ x10 ³ | W _{pl,z} mm ³ x10 ³ | i _z mm x10 | | | |
| HE 100 AA | 219.77 | 48.30 | 53.88 | 3.91 | 3.85 | 91.72 | 18.34 | 27.86 | 2.52 | 17.54 | 1.35 | 1.68 |
| HE 100 A | 332.48 | 69.27 | 78.54 | 4.07 | 4.75 | 133.42 | 26.68 | 40.51 | 2.58 | 23.34 | 3.76 | 2.58 |
| HE 100 B | 432.80 | 86.56 | 99.74 | 4.17 | 5.83 | 166.81 | 33.36 | 50.73 | 2.59 | 28.34 | 7.20 | 3.38 |
| HE 100 M | 1125.87 | 187.65 | 231.34 | 4.65 | 12.83 | 398.17 | 75.13 | 115.26 | 2.77 | 54.34 | 59.33 | 9.93 |
| HE 120 AA | 387.59 | 71.12 | 78.56 | 4.73 | 4.60 | 158.46 | 26.41 | 40.04 | 3.02 | 17.54 | 1.61 | 4.24 |
| HE 120 A | 580.38 | 101.82 | 113.93 | 4.90 | 5.65 | 230.51 | 38.42 | 58.22 | 3.09 | 23.34 | 4.52 | 6.47 |
| HE 120 B | 838.60 | 139.77 | 159.65 | 5.06 | 7.56 | 317.03 | 52.84 | 80.25 | 3.11 | 30.84 | 11.45 | 9.41 |
| HE 120 M | 1991.80 | 284.54 | 345.05 | 5.53 | 15.75 | 701.74 | 111.39 | 170.55 | 3.28 | 56.84 | 81.83 | 24.79 |
| HE 140 AA | 682.70 | 106.67 | 117.14 | 5.59 | 5.52 | 274.48 | 39.21 | 59.35 | 3.55 | 18.64 | 2.36 | 10.21 |
| HE 140 A | 996.38 | 149.83 | 166.85 | 5.74 | 7.22 | 388.90 | 55.56 | 84.19 | 3.59 | 24.84 | 6.40 | 15.06 |
| HE 140 B | 1472.48 | 210.35 | 238.79 | 5.94 | 9.47 | 549.14 | 78.45 | 119.03 | 3.63 | 33.34 | 17.29 | 22.48 |
| HE 140 M | 3254.61 | 406.83 | 487.19 | 6.40 | 18.85 | 1143.26 | 156.61 | 239.40 | 3.80 | 59.34 | 109.16 | 54.33 |
| HE 160 AA | 1206.00 | 162.97 | 178.35 | 6.51 | 6.66 | 477.97 | 59.75 | 90.29 | 4.10 | 20.84 | 4.09 | 23.75 |
| HE 160 A | 1596.10 | 210.01 | 233.08 | 6.58 | 8.97 | 614.65 | 76.83 | 116.42 | 4.08 | 26.34 | 8.78 | 31.41 |
| HE 160 B | 2415.12 | 301.89 | 341.90 | 6.79 | 12.31 | 888.05 | 111.01 | 168.56 | 4.12 | 36.34 | 25.55 | 47.94 |
| HE 160 M | 5021.39 | 557.93 | 662.50 | 7.26 | 22.93 | 1756.56 | 211.63 | 323.49 | 4.30 | 62.34 | 143.70 | 108.05 |
| HE 180 AA | 1866.77 | 223.57 | 244.46 | 7.34 | 8.31 | 729.16 | 81.02 | 122.46 | 4.59 | 22.34 | 5.73 | 46.36 |
| HE 180 A | 2410.16 | 281.89 | 311.08 | 7.46 | 10.10 | 923.68 | 102.63 | 155.28 | 4.62 | 27.34 | 11.39 | 60.21 |
| HE 180 B | 3731.00 | 414.56 | 467.68 | 7.67 | 14.70 | 1361.59 | 151.29 | 229.56 | 4.64 | 38.84 | 35.75 | 93.75 |
| HE 180 M | 7383.00 | 738.30 | 869.68 | 8.14 | 26.51 | 2577.82 | 277.19 | 423.17 | 4.81 | 64.84 | 182.86 | 199.33 |
| HE 200 AA | 2764.06 | 297.21 | 324.83 | 8.17 | 10.14 | 1066.91 | 106.69 | 161.30 | 5.08 | 23.84 | 7.82 | 84.49 |
| HE 200 A | 3511.91 | 369.67 | 407.25 | 8.29 | 12.13 | 1333.73 | 133.37 | 201.81 | 5.11 | 28.84 | 14.91 | 108.00 |
| HE 200 B | 5515.93 | 551.59 | 620.32 | 8.56 | 17.28 | 2001.04 | 200.10 | 303.46 | 5.15 | 41.34 | 48.68 | 171.13 |
| HE 200 M | 10461.66 | 951.06 | 1112.92 | 9.02 | 30.28 | 3647.23 | 354.10 | 540.04 | 5.33 | 67.34 | 228.77 | 346.26 |

HE

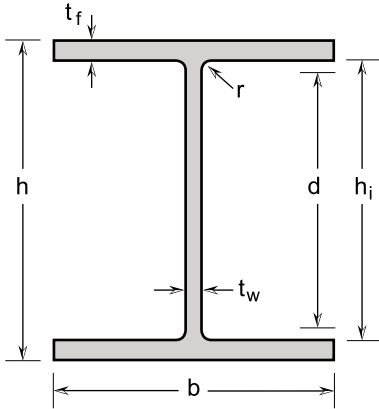
گروپی چیوه



Chiwa Group

For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | | Dimensions | | | | | | Dimensions for detailing | |
|-------------|-----------|------------|---------|----------------------|----------------------|----------|--|--------------------------|---------|
| | G kg/m | h mm | b mm | t _w mm | t _f mm | r* mm | A mm ² x10 ² | h _i mm | d mm |
| HE 220 AA | 39 | 205 | 220 | 6 | 8.5 | 2 | 48.71 | 188 | 184 |
| HE 220 A | 49.3 | 210 | 220 | 7 | 11 | 2 | 61.59 | 188 | 184 |
| HE 220 B | 70.6 | 220 | 220 | 9.5 | 16 | 2 | 88.29 | 188 | 184 |
| HE 220 M | 117.4 | 240 | 226 | 15.5 | 26 | 2 | 146.69 | 188 | 184 |
| HE 240 AA | 45.3 | 224 | 240 | 6.5 | 9 | 2 | 56.62 | 206 | 202 |
| HE 240 A | 58.5 | 230 | 240 | 7.5 | 12 | 2 | 73.08 | 206 | 202 |
| HE 240 B | 81.8 | 240 | 240 | 10 | 17 | 2 | 102.23 | 206 | 202 |
| HE 240 M | 159.7 | 270 | 248 | 18 | 32 | 21 | 199.59 | 206 | 164 |
| HE 260 AA | 51.2 | 244 | 260 | 6.5 | 9.5 | 2 | 64.06 | 225 | 221 |
| HE 260 A | 65.5 | 250 | 260 | 7.5 | 12.5 | 2 | 81.91 | 225 | 221 |
| HE 260 B | 90.8 | 260 | 260 | 10 | 17.5 | 2 | 113.53 | 225 | 221 |
| HE 260 M | 171.8 | 290 | 268 | 18 | 32.5 | 2 | 214.73 | 225 | 221 |
| HE 280 AA | 58.5 | 264 | 280 | 7 | 10 | 2 | 73.11 | 244 | 240 |
| HE 280 A | 73.9 | 270 | 280 | 8 | 13 | 2 | 92.35 | 244 | 240 |
| HE 280 B | 101.2 | 280 | 280 | 10.5 | 18 | 2 | 126.45 | 244 | 240 |
| HE 280 M | 188.2 | 310 | 288 | 18.5 | 33 | 2 | 235.25 | 244 | 240 |
| HE 300 AA | 66.1 | 283 | 300 | 7.5 | 10.5 | 2 | 82.68 | 262 | 258 |
| HE 300 A | 85 | 290 | 300 | 8.5 | 14 | 2 | 106.3 | 262 | 258 |
| HE 300 B | 114.3 | 300 | 300 | 11 | 19 | 2 | 142.85 | 262 | 258 |
| HE 300 M | 237.5 | 340 | 310 | 21 | 39 | 2 | 296.85 | 262 | 258 |
| HE 320 AA | 70.7 | 301 | 300 | 8 | 11 | 2 | 88.35 | 279 | 275 |
| HE 320 A | 94.5 | 310 | 300 | 9 | 15.5 | 2 | 118.14 | 279 | 275 |
| HE 320 B | 124.1 | 320 | 300 | 11.5 | 20.5 | 2 | 155.12 | 279 | 275 |
| HE 320 M | 244.7 | 359 | 309 | 21 | 40 | 2 | 305.82 | 279 | 275 |

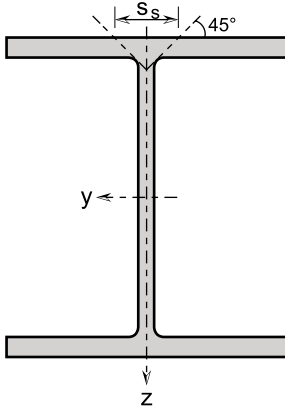
HE

گروپی چیوه



Chiwa Group
For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | Strong axis y-y | | | | | Weak axis z-z | | | | | S _s mm | I _t mm ⁴ x10 ⁴ | I _w mm ⁶ x10 ⁹ |
|-------------|---|--|--|-----------------------------|--|---|--|--|-----------------------------|--------|----------------------|---|---|
| | I _y mm ⁴ x10 ⁴ | W _{el,y} mm ³ x10 ³ | W _{pl,y} mm ³ x10 ³ | i _y mm x10 | A _{vz} mm ² x10 ² | I _z mm ⁴ x10 ⁴ | W _{el,z} mm ³ x10 ³ | W _{pl,z} mm ³ x10 ³ | i _z mm x10 | | | | |
| HE 220 AA | 3947.74 | 385.15 | 420.79 | 9.00 | 12.16 | 1508.81 | 137.16 | 207.40 | 5.57 | 25.34 | 10.43 | 145.61 | |
| HE 220 A | 5187.21 | 494.02 | 543.75 | 9.18 | 14.40 | 1952.68 | 177.52 | 268.52 | 5.63 | 31.34 | 21.65 | 193.27 | |
| HE 220 B | 7868.48 | 715.32 | 802.34 | 9.44 | 20.05 | 2840.82 | 258.26 | 391.46 | 5.67 | 43.84 | 64.78 | 295.42 | |
| HE 220 M | 14382.34 | 1198.53 | 1394.74 | 9.90 | 34.24 | 5007.90 | 443.18 | 675.31 | 5.84 | 69.84 | 282.13 | 572.68 | |
| HE 240 AA | 5472.34 | 488.60 | 533.71 | 9.83 | 14.37 | 2074.08 | 172.84 | 261.39 | 6.05 | 26.84 | 13.64 | 239.63 | |
| HE 240 A | 7400.34 | 643.51 | 707.76 | 10.06 | 16.86 | 2765.53 | 230.46 | 348.51 | 6.15 | 33.84 | 30.47 | 328.49 | |
| HE 240 B | 10896.46 | 908.04 | 1016.28 | 10.32 | 23.01 | 3918.53 | 326.54 | 494.77 | 6.19 | 46.34 | 84.54 | 486.95 | |
| HE 240 M | 24299.58 | 1799.97 | 2116.95 | 11.03 | 60.07 | 8152.04 | 657.42 | 1005.93 | 6.39 | 106.60 | 627.90 | 1151.99 | |
| HE 260 AA | 7416.32 | 607.89 | 661.87 | 10.76 | 15.66 | 2783.39 | 214.11 | 323.49 | 6.59 | 27.84 | 16.98 | 382.58 | |
| HE 260 A | 9890.71 | 791.26 | 867.18 | 10.99 | 18.35 | 3662.46 | 281.73 | 425.68 | 6.69 | 34.84 | 36.85 | 516.35 | |
| HE 260 B | 14355.18 | 1104.24 | 1230.32 | 11.24 | 24.98 | 5128.22 | 394.48 | 597.14 | 6.72 | 47.34 | 99.19 | 753.65 | |
| HE 260 M | 30742.61 | 2120.18 | 2471.02 | 11.97 | 47.68 | 10437.42 | 778.91 | 1185.40 | 6.97 | 85.34 | 637.76 | 1728.35 | |
| HE 280 AA | 9889.38 | 749.20 | 815.81 | 11.63 | 18.21 | 3659.37 | 261.38 | 395.00 | 7.07 | 29.34 | 21.54 | 590.11 | |
| HE 280 A | 13004.70 | 963.31 | 1054.97 | 11.87 | 21.11 | 4757.31 | 339.81 | 513.52 | 7.18 | 36.34 | 45.01 | 785.37 | |
| HE 280 B | 18601.67 | 1328.69 | 1477.18 | 12.13 | 28.26 | 6587.96 | 470.57 | 712.34 | 7.22 | 48.84 | 117.02 | 1130.15 | |
| HE 280 M | 38878.74 | 2508.31 | 2908.38 | 12.86 | 52.60 | 13151.24 | 913.28 | 1389.49 | 7.48 | 86.84 | 721.48 | 2520.23 | |
| HE 300 AA | 12831.05 | 906.79 | 987.53 | 12.46 | 20.89 | 4725.93 | 315.06 | 476.20 | 7.56 | 30.84 | 26.95 | 877.15 | |
| HE 300 A | 17290.45 | 1192.44 | 1305.52 | 12.75 | 24.05 | 6301.35 | 420.09 | 634.75 | 7.70 | 38.84 | 59.95 | 1199.77 | |
| HE 300 B | 24192.63 | 1612.84 | 1790.92 | 13.01 | 31.70 | 8552.92 | 570.19 | 862.95 | 7.74 | 51.34 | 147.14 | 1687.79 | |
| HE 300 M | 58227.97 | 3425.17 | 3999.92 | 14.01 | 64.80 | 19384.41 | 1250.61 | 1902.87 | 8.08 | 101.34 | 1263.06 | 4386.03 | |
| HE 320 AA | 15337.64 | 1019.11 | 1113.16 | 13.18 | 23.67 | 4951.20 | 330.08 | 499.48 | 7.49 | 32.34 | 31.53 | 1040.74 | |
| HE 320 A | 21818.87 | 1407.67 | 1545.04 | 13.59 | 27.16 | 6976.70 | 465.11 | 703.17 | 7.68 | 42.34 | 80.62 | 1512.36 | |
| HE 320 B | 29713.82 | 1857.11 | 2066.20 | 13.84 | 35.30 | 9228.55 | 615.24 | 931.75 | 7.71 | 54.84 | 183.85 | 2068.71 | |
| HE 320 M | 67025.12 | 3733.99 | 4351.98 | 14.80 | 68.62 | 19690.66 | 1274.48 | 1940.42 | 8.02 | 103.34 | 1353.67 | 5003.86 | |

HE

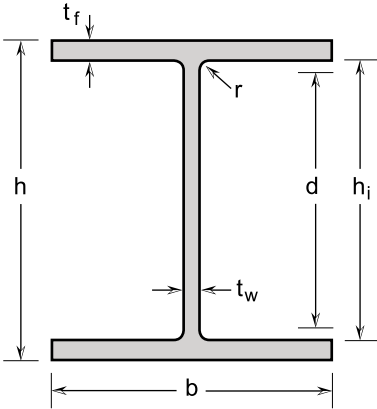
گروپی چیوه



Chiwa Group

For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | | Dimensions | | | | | | Dimensions for detailing | |
|-------------|-----------|------------|---------|----------------------|----------------------|----------|--|--------------------------|---------|
| | G kg/m | h mm | b mm | t _w mm | t _f mm | r* mm | A mm ² x10 ² | h _i mm | d mm |
| HE 340 AA | 75.4 | 320 | 300 | 8.5 | 11.5 | 2 | 94.28 | 297.0 | 293.0 |
| HE 340 A | 101.8 | 330 | 300 | 9.5 | 16.5 | 2 | 127.25 | 297.0 | 293.0 |
| HE 340 B | 131.7 | 340 | 300 | 12 | 21.5 | 2 | 164.67 | 297.0 | 293.0 |
| HE 340 M | 247.7 | 377 | 309 | 21 | 40 | 2 | 309.60 | 297.0 | 293.0 |
| HE 360 AA | 80.3 | 339 | 300 | 9 | 12 | 2 | 100.38 | 315.0 | 311.0 |
| HE 360 A | 109.2 | 350 | 300 | 10 | 17.5 | 2 | 136.53 | 315 | 311 |
| HE 360 B | 139.5 | 360 | 300 | 12.5 | 22.5 | 2 | 174.41 | 315 | 311 |
| HE 360 M | 250.1 | 395 | 308 | 21 | 40 | 2 | 312.58 | 315.0 | 311.0 |
| HE 400 AA | 89.2 | 378 | 300 | 9.5 | 13 | 2 | 111.47 | 352.0 | 348.0 |
| HE 400 A | 122.2 | 390 | 300 | 11 | 19 | 2 | 152.75 | 352.0 | 348.0 |
| HE 400 B | 153.2 | 400 | 300 | 13.5 | 24 | 2 | 191.55 | 352.0 | 348.0 |
| HE 400 M | 255.6 | 432 | 307 | 21 | 40 | 2 | 319.55 | 352.0 | 348.0 |
| HE 450 AA | 96.7 | 425 | 300 | 10 | 13.5 | 2 | 120.83 | 398.0 | 394.0 |
| HE 450 A | 137.4 | 440 | 300 | 11.5 | 21 | 2 | 171.8 | 398 | 394 |
| HE 450 B | 169.4 | 450 | 300 | 14 | 26 | 2 | 211.75 | 398 | 394 |
| HE 450 M | 263.4 | 478 | 307 | 21 | 40 | 2 | 329.21 | 398.0 | 394.0 |
| HE 500 AA | 104.5 | 472 | 300 | 10.5 | 14 | 2 | 130.65 | 444.0 | 440.0 |
| HE 500 A | 153.1 | 490 | 300 | 12 | 23 | 2 | 191.31 | 444.0 | 440.0 |
| HE 500 B | 185.9 | 500 | 300 | 14.5 | 28 | 2 | 232.41 | 444.0 | 440.0 |
| HE 500 M | 270.5 | 524 | 306 | 21 | 40 | 2 | 338.07 | 444.0 | 440.0 |
| HE 550 AA | 117.3 | 522 | 300 | 11.5 | 15 | 2 | 146.61 | 492.0 | 488.0 |
| HE 550 A | 164.4 | 540 | 300 | 12.5 | 24 | 2 | 205.53 | 492 | 488 |
| HE 550 B | 198.3 | 550 | 300 | 15 | 29 | 2 | 247.83 | 492 | 488 |
| HE 550 M | 278.5 | 572 | 306 | 21 | 40 | 2 | 348.15 | 492.0 | 488.0 |

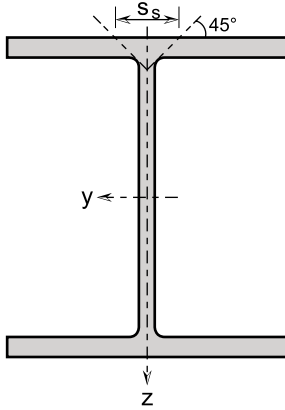
HE

گروپی چیوه



Chiwa Group
For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | Strong axis y-y | | | | | Weak axis z-z | | | | | S _s mm | I _t mm ⁴ x10 ⁴ | I _w mm ⁶ x10 ⁹ |
|-------------|---|--|--|-----------------------------|--|---|--|--|-----------------------------|--------|----------------------|---|---|
| | I _y mm ⁴ x10 ⁴ | W _{el,y} mm ³ x10 ³ | W _{pl,y} mm ³ x10 ³ | i _y mm x10 | A _{vz} mm ² x10 ² | I _z mm ⁴ x10 ⁴ | W _{el,z} mm ³ x10 ³ | W _{pl,z} mm ³ x10 ³ | i _z mm x10 | | | | |
| HE 340 AA | 18288.04 | 1143.00 | 1252.28 | 13.93 | 26.72 | 5176.53 | 345.10 | 522.88 | 7.41 | 33.84 | 36.69 | 1231.29 | |
| HE 340 A | 26428.86 | 1601.75 | 1761.83 | 14.41 | 30.48 | 7427.13 | 495.14 | 749.22 | 7.64 | 44.84 | 97.44 | 1824.36 | |
| HE 340 B | 35392.15 | 2081.89 | 2319.46 | 14.66 | 39.11 | 9679.29 | 645.29 | 978.21 | 7.67 | 57.34 | 212.62 | 2453.63 | |
| HE 340 M | 75107.43 | 3984.48 | 4628.93 | 15.58 | 72.40 | 19692.05 | 1274.57 | 1942.40 | 7.98 | 103.34 | 1359.22 | 5584.50 | |
| HE 360 AA | 21608.52 | 1274.84 | 1401.00 | 14.67 | 29.94 | 5401.92 | 360.13 | 546.40 | 7.34 | 35.34 | 42.46 | 1443.54 | |
| HE 360 A | 31660.94 | 1809.20 | 1994.23 | 15.23 | 33.98 | 7877.64 | 525.18 | 795.39 | 7.60 | 47.34 | 116.48 | 2176.58 | |
| HE 360 B | 41764.60 | 2320.26 | 2588.74 | 15.47 | 43.12 | 10130.14 | 675.34 | 1024.83 | 7.62 | 59.84 | 244.31 | 2883.25 | |
| HE 360 M | 83438.18 | 4224.72 | 4895.07 | 16.34 | 76.18 | 19503.09 | 1266.43 | 1932.05 | 7.90 | 103.34 | 1360.51 | 6137.02 | |
| HE 400 AA | 29453.23 | 1558.37 | 1718.37 | 16.25 | 35.23 | 5852.52 | 390.17 | 592.96 | 7.25 | 37.84 | 54.22 | 1948.42 | |
| HE 400 A | 43270.53 | 2219.00 | 2456.04 | 16.83 | 41.60 | 8553.92 | 570.26 | 865.67 | 7.48 | 51.34 | 151.13 | 2942.08 | |
| HE 400 B | 55881.66 | 2794.08 | 3125.98 | 17.08 | 51.75 | 10807.23 | 720.48 | 1096.06 | 7.51 | 63.84 | 300.23 | 3817.15 | |
| HE 400 M | 102320.23 | 4737.05 | 5464.86 | 17.89 | 83.95 | 19316.84 | 1258.43 | 1923.83 | 7.77 | 103.34 | 1367.67 | 7410.30 | |
| HE 450 AA | 39569.35 | 1862.09 | 2063.27 | 18.10 | 41.72 | 6078.33 | 405.22 | 617.47 | 7.09 | 39.34 | 62.75 | 2571.73 | |
| HE 450 A | 61403.35 | 2791.06 | 3095.79 | 18.91 | 49.06 | 9455.06 | 630.34 | 958.18 | 7.42 | 55.84 | 202.31 | 4147.63 | |
| HE 450 B | 77569.28 | 3447.52 | 3862.30 | 19.14 | 60.43 | 11709.12 | 780.61 | 1189.53 | 7.44 | 68.34 | 379.89 | 5258.45 | |
| HE 450 M | 129166.06 | 5404.44 | 6210.94 | 19.81 | 93.61 | 19320.39 | 1258.66 | 1928.90 | 7.66 | 103.34 | 1381.87 | 9251.50 | |
| HE 500 AA | 51739.75 | 2192.36 | 2441.84 | 19.90 | 48.68 | 6304.29 | 420.29 | 642.26 | 6.95 | 40.84 | 72.36 | 3303.78 | |
| HE 500 A | 84071.23 | 3431.48 | 3814.47 | 20.96 | 56.99 | 10356.41 | 690.43 | 1051.01 | 7.36 | 60.34 | 263.81 | 5643.05 | |
| HE 500 B | 104272.24 | 4170.89 | 4680.18 | 21.18 | 69.59 | 12611.30 | 840.75 | 1283.36 | 7.37 | 72.84 | 472.29 | 7017.70 | |
| HE 500 M | 159025.39 | 6069.67 | 6959.88 | 21.69 | 103.27 | 19136.05 | 1250.72 | 1921.71 | 7.52 | 103.34 | 1391.80 | 11186.75 | |
| HE 550 AA | 69286.92 | 2654.67 | 2978.28 | 21.74 | 58.94 | 6756.25 | 450.42 | 691.29 | 6.79 | 43.84 | 92.96 | 4337.70 | |
| HE 550 A | 108347.76 | 4012.88 | 4472.49 | 22.96 | 65.49 | 10808.02 | 720.53 | 1099.24 | 7.25 | 62.84 | 302.37 | 7188.91 | |
| HE 550 B | 133106.42 | 4840.23 | 5441.28 | 23.17 | 79.34 | 13063.86 | 870.92 | 1332.70 | 7.26 | 75.34 | 529.36 | 8855.76 | |
| HE 550 M | 194399.50 | 6797.19 | 7783.36 | 23.63 | 113.35 | 19139.76 | 1250.96 | 1927.00 | 7.41 | 103.34 | 1406.62 | 13515.63 | |

HE

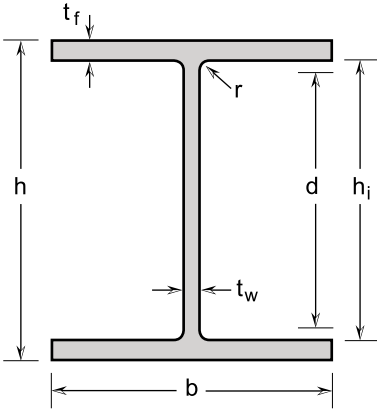
گروپی چیوه



Chiwa Group

For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | | Dimensions | | | | | | Dimensions for detailing | |
|-------------|-----------|------------|---------|----------------------|----------------------|----------|--|--------------------------|---------|
| | G kg/m | h mm | b mm | t _w mm | t _f mm | r* mm | A mm ² x10 ² | h _i mm | d mm |
| HE 600 AA | 126.3 | 571 | 300 | 12 | 15.5 | 2 | 157.83 | 540.0 | 536.0 |
| HE 600 A | 176.2 | 590 | 300 | 13 | 25 | 2 | 220.23 | 540.0 | 536.0 |
| HE 600 B | 211.0 | 600 | 300 | 15.5 | 30 | 2 | 263.73 | 540.0 | 536.0 |
| HE 600 M | 285.9 | 620 | 305 | 21 | 40 | 2 | 357.43 | 540.0 | 536.0 |
| HE 650 AA | 135.6 | 620 | 300 | 12.5 | 16 | 2 | 169.53 | 588.0 | 584.0 |
| HE 650 A | 188.3 | 640 | 300 | 13.5 | 26 | 2 | 235.41 | 588.0 | 584.0 |
| HE 650 B | 224.1 | 650 | 300 | 16 | 31 | 2 | 280.11 | 588.0 | 584.0 |
| HE 650 M | 294.0 | 668 | 305 | 21 | 40 | 2 | 367.51 | 588.0 | 584.0 |
| HE 700 AA | 147.8 | 670 | 300 | 13 | 17 | 2 | 184.71 | 636.0 | 632.0 |
| HE 700 A | 203.4 | 690 | 300 | 14.5 | 27 | 2 | 254.25 | 636.0 | 632.0 |
| HE 700 B | 240.1 | 700 | 300 | 17 | 32 | 2 | 300.15 | 636.0 | 632.0 |
| HE 700 M | 301.4 | 716 | 304 | 21 | 40 | 2 | 376.79 | 636.0 | 632.0 |
| HE 800 AA | 168.6 | 770 | 300 | 14 | 18 | 2 | 210.79 | 734.0 | 730.0 |
| HE 800 A | 222.5 | 790 | 300 | 15 | 28 | 2 | 278.13 | 734.0 | 730.0 |
| HE 800 B | 261.2 | 800 | 300 | 17.5 | 33 | 2 | 326.48 | 734.0 | 730.0 |
| HE 800 M | 317.3 | 814 | 303 | 21 | 40 | 2 | 396.57 | 734.0 | 730.0 |
| HE 900 AA | 195.6 | 870 | 300 | 15 | 20 | 2 | 244.53 | 830.0 | 826.0 |
| HE 900 A | 250.3 | 890 | 300 | 16 | 30 | 2 | 312.83 | 830.0 | 826.0 |
| HE 900 B | 290.9 | 900 | 300 | 18.5 | 35 | 2 | 363.58 | 830.0 | 826.0 |
| HE 900 M | 332.7 | 910 | 302 | 21 | 40 | 2 | 415.93 | 830.0 | 826.0 |
| HE 1000 AA | 219.6 | 970 | 300 | 16 | 21 | 2 | 274.51 | 928.0 | 924.0 |
| HE 1000 A | 271.3 | 990 | 300 | 16.5 | 31 | 2 | 339.15 | 928.0 | 924.0 |
| HE 1000 B | 313.9 | 1000 | 300 | 19 | 36 | 2 | 392.35 | 928.0 | 924.0 |
| HE 1000 M | 349.2 | 1008 | 302 | 21 | 40 | 2 | 436.51 | 928.0 | 924.0 |

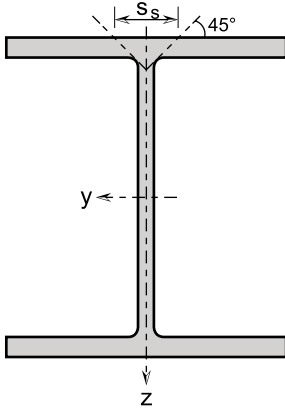
HE

گروپی چیوه



Chiwa Group
For Steel & Fence

Iraq - Kurdistan - Erbil
E-mail: aram@chiwagroup.com
Tel: 066 229 4058 / 0750 445 8512
www.chiwagroup.com



| Designation | Strong axis y-y | | | | | Weak axis z-z | | | | | S _s mm | I _t mm ⁴ x10 ⁴ | I _w mm ⁶ x10 ⁹ |
|-------------|---|--|--|-----------------------------|--|---|--|--|-----------------------------|--------|----------------------|---|---|
| | I _y mm ⁴ x10 ⁴ | W _{el,y} mm ³ x10 ³ | W _{pl,y} mm ³ x10 ³ | i _y mm x10 | A _{vz} mm ² x10 ² | I _z mm ⁴ x10 ⁴ | W _{el,z} mm ³ x10 ³ | W _{pl,z} mm ³ x10 ³ | i _z mm x10 | | | | |
| HE 600 AA | 87534.88 | 3066.02 | 3458.80 | 23.55 | 67.31 | 6982.79 | 465.52 | 716.96 | 6.65 | 45.34 | 106.20 | 5380.87 | |
| HE 600 A | 136871.05 | 4639.70 | 5186.13 | 24.93 | 74.48 | 11259.90 | 750.66 | 1147.84 | 7.15 | 65.34 | 344.73 | 8978.20 | |
| HE 600 B | 166704.05 | 5556.80 | 6260.88 | 25.14 | 89.58 | 13516.78 | 901.12 | 1382.46 | 7.16 | 77.84 | 591.14 | 10965.38 | |
| HE 600 M | 233110.48 | 7519.69 | 8607.83 | 25.54 | 123.43 | 18956.80 | 1243.07 | 1920.07 | 7.28 | 103.34 | 1417.17 | 15907.59 | |
| HE 650 AA | 108782.73 | 3509.12 | 3980.66 | 25.33 | 76.17 | 7209.59 | 480.64 | 742.99 | 6.52 | 46.84 | 120.94 | 6566.69 | |
| HE 650 A | 170016.88 | 5313.03 | 5957.09 | 26.87 | 83.96 | 11712.07 | 780.80 | 1196.82 | 7.05 | 67.84 | 391.09 | 11027.13 | |
| HE 650 B | 205454.74 | 6321.68 | 7140.68 | 27.08 | 100.31 | 13970.09 | 931.34 | 1432.66 | 7.06 | 80.34 | 657.86 | 13362.74 | |
| HE 650 M | 276506.22 | 8278.63 | 9477.76 | 27.43 | 133.51 | 18960.50 | 1243.31 | 1925.36 | 7.18 | 103.34 | 1431.99 | 18649.52 | |
| HE 700 AA | 136663.26 | 4079.50 | 4646.00 | 27.20 | 85.60 | 7661.66 | 510.78 | 791.89 | 6.44 | 49.34 | 145.51 | 8155.07 | |
| HE 700 A | 209244.00 | 6065.04 | 6837.69 | 28.69 | 97.25 | 12166.18 | 811.08 | 1248.46 | 6.92 | 70.84 | 448.81 | 13351.91 | |
| HE 700 B | 250831.07 | 7166.60 | 8133.00 | 28.91 | 114.87 | 14426.07 | 961.74 | 1485.98 | 6.93 | 83.34 | 739.76 | 16064.06 | |
| HE 700 M | 323220.70 | 9028.51 | 10344.85 | 29.29 | 143.59 | 18778.77 | 1235.45 | 1918.48 | 7.06 | 103.34 | 1442.54 | 21397.49 | |
| HE 800 AA | 198896.85 | 5166.15 | 5947.70 | 30.72 | 106.03 | 8116.80 | 541.12 | 845.99 | 6.21 | 52.34 | 184.73 | 11451.46 | |
| HE 800 A | 293457.24 | 7429.30 | 8422.39 | 32.48 | 115.45 | 12620.67 | 841.38 | 1301.31 | 6.74 | 73.34 | 510.51 | 18290.29 | |
| HE 800 B | 349098.22 | 8727.46 | 9951.62 | 32.70 | 135.58 | 14882.81 | 992.19 | 1541.23 | 6.75 | 85.84 | 827.34 | 21840.23 | |
| HE 800 M | 432612.60 | 10629.30 | 12210.61 | 33.03 | 164.17 | 18602.11 | 1227.86 | 1917.14 | 6.85 | 103.34 | 1468.53 | 27775.29 | |
| HE 900 AA | 288322.38 | 6628.10 | 7684.80 | 34.34 | 128.33 | 9023.37 | 601.56 | 946.71 | 6.07 | 57.34 | 254.07 | 16256.25 | |
| HE 900 A | 409252.28 | 9196.68 | 10497.02 | 36.17 | 138.83 | 13528.36 | 901.89 | 1403.15 | 6.58 | 78.34 | 638.35 | 24961.50 | |
| HE 900 B | 481242.00 | 10694.27 | 12270.09 | 36.38 | 161.46 | 15793.83 | 1052.92 | 1646.05 | 6.59 | 90.84 | 1003.74 | 29461.36 | |
| HE 900 M | 557611.47 | 12255.20 | 14127.75 | 36.61 | 184.33 | 18426.50 | 1220.30 | 1915.63 | 6.66 | 103.34 | 1493.89 | 34746.26 | |
| HE 1000 AA | 390366.57 | 8048.80 | 9425.03 | 37.71 | 152.71 | 9481.70 | 632.11 | 1004.42 | 5.88 | 60.34 | 312.95 | 21276.70 | |
| HE 1000 A | 537761.48 | 10863.87 | 12472.68 | 39.82 | 159.51 | 13984.77 | 932.32 | 1458.19 | 6.42 | 80.84 | 717.54 | 32073.87 | |
| HE 1000 B | 628663.54 | 12573.27 | 14503.42 | 40.03 | 184.63 | 16253.08 | 1083.54 | 1703.79 | 6.44 | 93.34 | 1112.68 | 37636.49 | |
| HE 1000 M | 706214.69 | 14012.20 | 16216.25 | 40.22 | 204.91 | 18434.06 | 1220.80 | 1926.43 | 6.50 | 103.34 | 1524.15 | 43015.04 | |