

- (cccvii) hot-rolled steel handrail shapes, designated as A-712; the foregoing roll formed, grade C1010 ASTMA29; having the following chemical composition (percent by weight): carbon not greater than 0.19, manganese 0.300 to 1.500, phosphorus not greater than 0.050, sulfur not greater than 0.050 and silicon not greater than 0.600; yield strength not less than 235 N/mm<sup>2</sup>, tensile strength 340 to 470 N/mm<sup>2</sup>, elongation 26 percent minimum; in one of the following shapes:
- (i) between 46 mm and 55 mm wide, a flat bottom, weight between 4.22 kg/m and 5.16 kg/m, length between 5.49 m and 6.71 m, top of profile having a concave radius of between 11.5 mm and 12.5 mm, with a convex radius between 24.5 mm and 25.5 mm on each side; edges having a radius between 4.0 mm and 5.0 mm, with a total depth of between 10 mm and 20 mm;
  - (ii) between 44 mm and 54 mm wide, a channel opening on underside of between 28 mm and 38 mm wide, a weight between 3.015 kg/m and 3.685 kg/m, length between 5.80 m and 6.41 m, top of profile having a concave radius between 11 mm and 21 mm, into a convex radius on each top side radius between 17 mm and 27 mm; total depth 14 mm to 24 mm; edge concave radius between 3 mm and 8 mm into a convex radius between 4 mm and 14 mm;
  - (iii) between 50 mm and 60 mm wide, a channel opening on underside between 35 mm and 45 mm wide, a weight between 3.55 kg/m and 4.33 kg/m, length between 5.49 m and 6.71 m, top of profile having a concave radius between 61 mm and 71 mm, edge radius between 2 mm and 12 mm, a total depth of 13 mm and 23 mm; or
  - (iv) between 52 mm and 62 mm wide, a channel opening on underside of between 30 mm to 50 mm wide, a weight between 2.86 kg/m and 3.50 kg/m, length between 5.80 m and 6.71 m, top of profile having a concave radius between 16 mm and 26 mm, into a convex radius on each topside with a radius between 10 mm and 20 mm, edge radius concave between 2 mm and 7 mm, into a convex radius between 3 mm and 13 mm;
- (cccviii) bars and rods of alloy steel, not further worked than hot-rolled, designated as A-717; the foregoing of rectangular cross section, 330 mm (plus or minus 3 mm) wide and between 19 mm and 41 mm (plus or minus 1.5 mm) high, with height-to-width ratio of between 6/100 and 12/100, mass from 45.5 kg/m to 102.5 kg/m (plus or minus 2 kg/m); tapered at an angle of 22.5 degrees (plus or minus 1 degree) on each of two symmetrical corners of the rectangular cross-section, thereby having one scraping/cutting edge on each side of the rectangle; having the following chemical composition (percent by weight): carbon 0.28 to 0.32, manganese 1.1 to 1.3, sulfur not greater than 0.025, phosphorus not greater than 0.025 and boron 0.001 to 0.003;
- (cccix) bars and rods of alloy steel, not further worked than hot-rolled, designated as A-717; the foregoing of rectangular cross section, width 120 mm and 152.4 mm (plus or minus 3 mm), thicknesses 15 mm to 20 mm (plus or minus 1.5 mm), with height-to-width ratio of between 10/100 and 13/100, mass from 12.2 kg/m to 21 kg/m (plus or minus 2 kg/m); tapered at an angle of 25 degrees (plus or minus 1 degree) on each of two symmetrical corners of the rectangular cross-section, thereby having one scraping/cutting edge on each side of the rectangle; having the following chemical composition (percent by weight): carbon 0.28 to 0.32, manganese 1.1 to 1.3, sulfur not greater than 0.025, phosphorus not greater than 0.025 and boron 0.001 to 0.003;
- (cccix) bars and rods of alloy steel, not further worked than hot-rolled, designated as A-717; the foregoing of rectangular cross section, in widths of 110 mm and 150 mm (plus or minus 3 mm), thickness 12 mm to 25 mm (plus or minus 1.5 mm), with height-to-width ratio between 11/100 and 17/100, mass 9.6 kg/m to 27.6 kg/m (plus or minus 2 kg/m); tapered at an angle between 21 degrees and 26.5 degrees (plus or minus 1 degree) on one corner of the rectangular cross-section, thereby having a scraping/cutting edge on one side of the rectangle; having the following chemical composition (percent by weight): carbon 0.28 to 0.32; manganese 1.1 to 1.3, sulfur not greater than 0.025, phosphorus not greater than 0.025 and boron 0.001 to 0.003;
- (cccxi) bars and rods of alloy steel, not further worked than hot-rolled; of rectangular cross section, 406 mm wide (plus or minus 3 mm) and between 22 mm and 41 mm high (plus or minus 1.5 mm), with height-to-width ratio of between 5/100 and 10/100, mass 65.3 kg/m to 125.8 kg/m (plus or minus 2 kg/m); tapered at an angle of 22.5 degrees (plus or minus 1 degree) on each of two symmetrical corners of the rectangular cross-section, thereby having one scraping/cutting edge on each side of the rectangle; having the following chemical composition (percent by weight): carbon 0.28 to 0.32; manganese 1.1 to 1.3; sulfur not over 0.025; phosphorus not over 0.025 and boron 0.001 to 0.003; the foregoing designated as A-717;.
- (cccxi) bars and rods of alloy steel, not further worked than hot-rolled; of rectangular cross section, 330 mm wide (plus or minus 3 mm) and between 19 mm and 41 mm high (plus or minus 1.5 mm), with height-to-width ratio of between 6/100 and 12/100, mass 45.5 kg/m to 102.5 kg/m (plus or minus 2 kg/m); tapered at an angle of 22.5 degrees (plus or minus