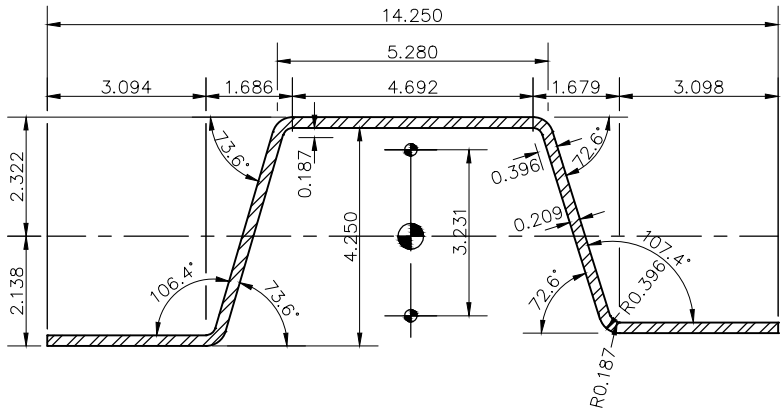


------ 4.25X12x5 GAGE (0.209") FULL SECTION ------

Area: 4.2110 sq in
Perimeter: 40.6768 in

Bounding box: X: −7.0880 -- 7.1620 in
Y: −2.1377 -- 2.3215 in

Centroid: X: 0.0000 in
Y: 0.0000 in

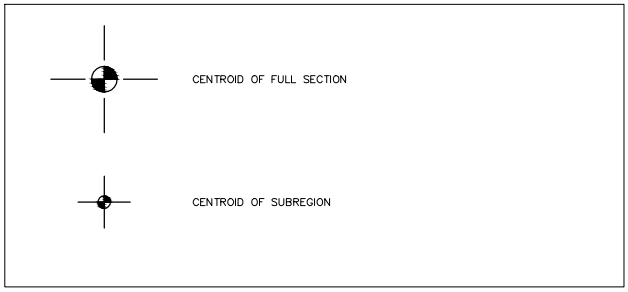
Moments of inertia: X: 12.7381 in4
Y: 63.0901 in4

Section Modulus: Sxt = 5.486 in3
Sxb = 5.958 in3

Product of inertia: XY: 1.3142 sq in sq in

Radii of gyration: X: 1.7392 in
Y: 3.8707 in

Principal moments (sq in sq in) and X−Y directions about centroid:
I: 12.7038 along [0.9997 0.0261]
J: 63.1244 along [−0.0261 0.9997]



---------- 4.25x12x5 GA. UPPER REGION ----------

Area: 2.0162 sq in
Perimeter: 19.7125 in

Bounding box: X: −3.3328 -- 3.3557 in
Y: −1.6838 -- 0.6377 in

Centroid: X: 0.0000 in
Y: 0.0000 in

Moments of inertia: X: 1.0188 sq in sq in
Y: 10.3662 sq in sq in

Plastic Section Modulus: Zxt: 6.514 in3

Product of inertia: XY: −0.0129 sq in sq in
Radii of gyration: X: 0.7108 in
Y: 2.2675 in

Principal moments (sq in sq in) and X−Y directions about centroid:
I: 1.0187 along [1.0000 −0.0014]
J: 10.3662 along [0.0014 1.0000]

---------- 4.25x12x5 GA. LOWER REGION ----------

Area: 2.1948 sq in
Perimeter: 21.8388 in

Bounding box: X: −7.0455 -- 7.2045 in
Y: −0.5909 -- 1.5468 in

Centroid: X: 0.0000 in
Y: 0.0000 in

Moments of inertia: X: 0.7522 sq in sq in
Y: 52.7157 sq in sq in

Plastic Section Modulus: Zxb: 7.091 in3

Product of inertia: XY: 1.0261 sq in sq in
Radii of gyration: X: 0.5854 in
Y: 4.9008 in

Principal moments (sq in sq in) and X−Y directions about centroid:
I: 0.7320 along [0.9998 0.0197]
J: 52.7360 along [−0.0197 0.9998]

U.S. BRIDGE® BRIDGING AMERICA SINCE 1936	BRIDGE FLOORING SECTION PROPERTIES 4.25X12X5 GAGE (0.209")	DRAWN BY: DLG / CHK BY: DLM	SHEET 1 OF
		DATE: 5/21/10 / JOB NO: STD	