## Steel Strapping

## For uncompromising quality and packaging effectiveness

Consistent high quality makes Signode steel strapping the first choice among packaging professionals worldwide. Purchasing professionals also prefer Signode strapping because it's made to the most exacting tolerances, so it goes further and stretches their strapping dollars.

Signode offers two basic types of steel strapping: Apex, Apex Plus and Magnus. Each is specially formulated to meet the demands of a particular range of applications.

## Apex<sup>™</sup> and Apex Plus<sup>™</sup> strapping

A cold-rolled, low carbon steel strapping. Manufactured with superior edge conditioning and coating.

## Magnus® strapping

A cold-rolled, medium carbon steel strapping. Heat-treated with a Signode process that combines fine surface and controlled physical properties with high strength and excellent shock resistance.

The particular type of strapping best suited to a specific application generally depends on three factors:

- 1) Strapping function or purpose
- 2) Package characteristics
- 3) Shipping or handling considerations

In a specific application, strapping may perform one or more of the following functions: package reinforcement, carton closure, securement, unitization, baling, bundling, bracing, palletization, compression retention and pilferage reduction.

Package characteristics that influence strap selection are: weight, stability, rigidity, integrity and sharpness of the edges (sharp edges may demand heavier strapping or corner protection).

Shipping considerations that affect the choice of strapping include: how far the package is shipped; how it's handled by both the shipper and receiver; and where and how it's stored.

Together, these various factors tend to narrow the choice to a particular set of strap characteristics. Your sales representative can help you determine your strapping requirements, such as width, thickness, finish, type of steel and tensile strength. SIGNODE

**Strap Size** Average Coil Yield Coil Strength Width **Thickness Part** Strap Finish Weight Winding N ft/lb lhs m/kg inch mm inch Apex (regular duty) strapping Curved Edge 0.015 0.38 085012 730 3 250 54.2 35.2 Mill 105 Painted & Waxed 39.3 3/8 9.5 0.020 0.51 085003 900 4 000 26.4 Mill 105 Painted & Waxed Curved Edge Mill 105 3/8 95 0.020 0.51 085013 900 4 000 393 26.4 Painted & Waxed 1/2 12.7 0.020\*\* 0.51 085009 1.170 5 200 29.4 19.8 Mill 105 Painted & Waxed 1/2 12.7 0.023 0.58 085200 1,300 5 780 25.6 17.2 Mill 105 Painted & Waxed 5/8 15.9 0.020 0.51 085203 1,460 6 490 23.6 15.9 Mill 105 Painted & Waxed Mill 5/8 0.023 0.58 085204 1,670 7 430 20.5 Painted & Waxed 15.9 13.8 0.020 0.51 085206 1 750 3/4 190 7 780 196 132 Mill 105 Painted & Waxed 3/4 19.0 0.023 0.58 085207 1.950 8 670 17.1 105 11.5 Mill Painted & Waxed Apex Plus (regular duty high strength) strapping Curved Edge Painted & Waxed 0.017 0.43 2X1503 4 340 46.1 31.0 Mill 105 0.017\*\* 1/2 12.7 0.43 2X1504 1.275 5 670 346 23.3 Mill 105 Painted & Waxed 0.020 0.51 2X1270 Painted & Waxed 1/2 12.7 1.475 6 560 29.4 19.7 Mill 105 1/2 12.7 0.020 0.51 2X1174 1,475 19.7 Mill 105 6 560 29.4 Zinc 5/8 15.9 0.017\*\* 0.43 2X1505 1.550 6 895 27.7 18.6 Mill Painted & Waxed 5/8 15.9 0.020\*\* 0.5 2X1253 1.825 8 120 23 6 15.8 Mill 105 Painted & Waxed 3/4 19.0 0.017\*\* 0.43 2X1506 1,900 8 450 23 1 15.5 Mill 105 Painted & Waxed 0.020\*\* 3/4 19.0 0.51 2X1509 2.150 9 560 19.6 13.1 Mill Painted & Waxed 3/4 190 0.023 0.58 2X1551 2 500 11 120 171 11.5 Mill 105 Painted & Waxed Magnus (high tensile) strapping 1/2 12.7 0.020 0.51 085604 1.540 6 850 29.4 19.7 Mill Painted & Waxed 0.020\*\* 0.51 085644 1,920 Mill 5/8 15.9 8 540 23.6 15.8 105 Painted & Waxed 0.023 088432 5/8 15.9 0.58 2.200 9 790 20.5 13.7 Mill 105 Painted & Waxed 3/4 19.0 0.020 0.51 089397 2,250 10 230 19.6 13.1 Mill 105 Painted & Waxed 19 0 0.023 0.58 089370 2 600 17 1 3/4 11 740 11.5 Mill 105 Painted & Waxed 3/4 19.0 0.025\*\* 0.64 085684 2,800 12 450 15.7 10.5 Mill 105 Painted & Waxed 3/4 19.0 0.025\*\* 0.64 085680 2,800 12 450 15.7 10.5 Ribbon 75 Painted & Waxed 3/4 19.0 0.025 0.64 076310 2.800 12 450 15.7 10.5 105 Zinc 3/4 19.0 0.029 0.74 2X1424 3.350 14 900 13.5 Mill 105 Painted & Waxed 9.1 3/4 19.0 0.029\*\* 0.74 2X1295 3.400 15 125 13.5 9.1 Ribbon 75 Painted & Waxed 1-1/4 31.8 0.025 0.64 089367 4.800 21 350 9.4 6.3 Ribbon 110 Painted & Waxed 1-1/4 31.8 0.029 0.74 2X1268 5,600 24 910 8.1 5.5 Ribbon 110 Painted & Waxed 0.74 2X1296 1-1/4 31.8 0.029 5.600 25 000 8.1 5.5 Ribbon 110 1-1/4 31.8 0.031 0.79 085730 5,650 25 132 6.5 4.3 Ribbon 110 Painted & Waxed 1-1/4 31.8 0.035 0.89 0X4985 6,660 29 630 67 4.5 Ribbon 110 Painted & Waxed 1-1/4 31.8 0.044 1.12 2X1438 8,450 37 590 5.3 3.5 Ribbon 110 Painted & Waxed 2 50.8 0.044 2X1439 13,200 58 720 3.3 2.2 Ribbon Painted & Waxed 1.12 120

<sup>\*</sup> Strap break strengths are listed as averages. Always use American Society for Testing Materials (ASTM D-3953) minimum break strengths for package design/safety factor purposes. For proper strap selection, contact your Signode sales representative.

<sup>\*\* 300</sup> ft. demonstration coils are available for these sizes.