

BUILDER'S HARDWARE



VANGUARD STEEL LTD.



This is

VANGUARD STEEL LTD.

at your service



Since 1960, Vanguard Steel Ltd., a sister Company of Ringball Corporation, has been supplying specialty steels and steel products to North American Industries.

By representing some of the most reputable manufacturers around the Globe, Vanguard's various Product Divisions offer a wide range of North American, European and Asian products, many of which are being manufactured to Vanguard's own specifications and often exceed Industry Standards.

Besides office and warehousing facilities throughout Canada, Vanguard Steel relies on a vast network of Canadian and U.S. Distributors to assure local product availability and best possible service.

VANGUARD'S PRODUCT DIVISIONS:

- **SPECIALTY STEELS**
 - **WIRE ROPES, CABLES AND RELATED HARDWARE**
 - **CHAINS AND ACCESSORIES**
 - **BUILDER'S HARDWARE**
 - **INDUSTRIAL KNIVES**
 - **ABRASIVES**
 - **WELDING CONSUMABLES**
- 

WAREHOUSE LOCATIONS

VANGUARD'S OFFICE & WAREHOUSE LOCATIONS:



TORONTO (Head Office):
2160 Meadowpine Blvd.
Mississauga, ON L5N 6H6
(905) 821-1100
Fax. (905) 821-2024
toronto@vanguardsteel.com



TORONTO (Specialty Steel Div.):
2210 Meadowpine Blvd.
Mississauga, ON L5N 6H6
(905) 821-1100
Fax. (905) 821-1102
steelsales@vanguardsteel.com



MONTREAL:
2205 de l'Aviation
Dorval, QC H9P 2X6
(514) 685-1515
Fax. (514) 685-1516
montreal@vanguardsteel.com



EDMONTON:
7606 McIntyre Rd. NW
Edmonton, AB T6E 6Z1
(780) 466-1115
Fax. (780) 469-4545
edmonton@vanguardsteel.com



WINNIPEG:
190 Omands Creek Blvd.
Winnipeg, MB R2R 1V7
(204) 694-2259
Fax. (204) 633-7230
winnipeg@vanguardsteel.com



VANCOUVER:
7880 Fraser Park Dr.
Burnaby, BC V5J 5L8
(604) 294-3191
Fax. (604) 294-8845
vancouver@vanguardsteel.com



BUILDER'S HARDWARE

• Nails	...5
• Forming Stakes	...6
• Anchor Bolts	...6
• Annealed Wire	...7
• Galvanized Rebar Tie Wire on Spools	...7
• Rebar Tie Wire	...8
• Rebar Tie Wire Dispenser	...8
• Tie Wire Loops	...9
• Straight Cut Annealed Wire	...9
• Tie Wire Twisting Tool	...10
• Automatic Twisting Tool	...10
• Hardware Cloth	...11
• Poultry Netting	...12
• Steel Strapping	...13
• Dispensers for Steel Strapping	...13
• Tools for Steel Strapping	...14
• Steel Seals for Steel Strapping	...14
• T-Posts	...15
• T-Post Pounder	...15

CONVERSION CHART



BUILDER'S HARDWARE



NAILS

Common & Spiral Nails

- Extremely versatile nails
- Common nails have a smooth shank which reduces the risk of the wood splitting
- Spiral nails have a spiral line running down the nail, giving it similar gripping features to a screw
- Widely used in the housing/framing industry, for general carpentry and the construction industry
- Bright and hot dipped galvanized nails are well suited for both interior and exterior applications
- Galvanized nails offer the benefit of greater corrosion resistance

Double Headed Nails

- Double headed nails are designed for temporary applications, where the nail has to be removed
- The primary applications are in the construction industry such as concrete forming and scaffolding
- These nails are driven in only as far as the first head. The top of the nail head remains exposed making it easy to remove when required
- Nail length is measured from under the lower head to the point.

Concrete Nails

- Concrete nails are designed for use on uncured concrete, for use when joining wood to concrete
- Typical applications include attaching furring strips and plates

All nails come in standard 50 lb cartons (48 cartons per pallet)

Length (inches)	Vanguard Code			
	Common	Spiral	Double Headed	Concrete
Bright Finish				
3/4				4101 4034
1				4101 4100
1-1/4		4101 5125		4101 4116
1-1/2		4101 5150		4101 4132
2	4101 2200	4101 5200	4101 1200	4101 4200
2-1/4			4101 1225	
2-1/2	4101 2250	4101 5250		
2-3/4			4101 1248	
3	4101 2300	4101 5300	4101 1300	4101 4300
3-1/4	4101 2325	4101 5325	4101 1325	
3-1/2	4101 2350	4101 5350	4101 1332	
4	4101 2400	4101 5400		
5	4101 2500			
6	4101 2600	4101 5600		
8	4101 2800			
10	4101 21000	4101 5100		
12	4101 21200	4101 5120		
Hot Dipped Galvanized Finish				
1-1/4		4101 6125		
1-1/2		4101 6150		
2	4101 7200	4101 6200		
2-1/2	4101 7250	4101 6250		
3	4101 7300	4101 6300		
3-1/4	4101 7325	4101 6325		
3-1/2	4101 7350	4101 6350		
4	4101 7400	4101 6400		

**Additional lengths available upon request, minimum order quantities may apply*

Warning:

- FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage**
- **ALWAYS** make sure to wear goggles to protect your eyes when driving or extracting nails

FORMING STAKES



- Manufactured from high quality steel
- The pointed end is designed to minimize rock deflection when inserted
- Vanguard forming stakes are equipped with spiral patterned nail holes for use as form pins
- Standard pack size: 10 pcs/bundle

Dimensions (Diameter x Length)	Vanguard Code
Black Finish	
3/4" x 18"	4101 3418
3/4" x 24"	4101 3424
3/4" x 30"	4101 3430
3/4" x 36"	4101 3436
3/4" x 48"	4101 3448

**Additional diameters and lengths available upon request, minimum order quantities may apply*

ANCHOR BOLTS



- Anchor bolts are commonly used in new construction
- The anchor bolts are inserted into the concrete while it is still wet, with the threaded portion sticking up. When the concrete hardens the bolt is set in place and objects can be bolted down with the use of a nut
- This versatile product is commonly used for a variety of applications include attaching wooden frames to walls, construction of buildings, anchoring shear walls and/or paneling of walls, holding beams in position for walls or large structures
- Standard pack size: 50 pcs/carton

Description	Vanguard Code
Self Colored Finish	
1/2" x 8" with Nut and Washer	4109 3208

**Additional diameters, lengths and finishes available upon request, minimum order quantities may apply*

Warning:

- FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage**
- **ALWAYS** make sure to wear goggles to protect your eyes when driving or extracting forming stakes

ANNEALED WIRE

- Soft annealed wire offer excellent flexibility making them easier to use
- These types of wire are widely used in construction and agricultural applications
- Typical agricultural applications include bailing of hay
- Black annealed wire is sometimes referred to as “burnt wire”
- Galvanized annealed wires offer the benefits of greater corrosion resistance
- Galvanized High Tensile (HT) wires are widely used in the vineyard industry
- Standard pack size: Each or 10 coils/bundle

Dimensions (Diameter x Package Size)	Approx. Length (feet)	Vanguard Code
Black Annealed Finish		
9 G x 10 lb Coil	170	4102 1009
12 G x 10 lb Coil	336	4102 1012
14 G x 10 lb Coil	580	4102 1014
16G x 10 lb Coil	949	4102 1016
Hot Dipped Galvanized Annealed Wire		
9 G x 10 lb Coil	170	4103 1009
12 G x 10 lb Coil	336	4103 1012
14 G x 10 lb Coil	580	4103 1014
Hot Dipped Galvanized - High Tensile (HT) Annealed Wire		
12.5 G HT x 2000' Coil	2,000	4103 0125



**Additional diameters and lengths available upon request, minimum order quantities may apply*

GALVANIZED REBAR TIE WIRE ON SPOOLS

- Fits most automatic rebar tie wire machines
- Galvanized for greater corrosion resistance
- Rohs Compliant

Diameter		Length		Vanguard Code
mm	Gauge	Metres	Feet	
0.8	21	95	312	4104 6021

50 spools/carton, 50 cartons/pallet / Sold in full box quantities



Warning:

- FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage**
- **ALWAYS** make sure to wear goggles to protect your eyes when working with wire products

REBAR TIE WIRE

- Rebar tie wire is used as binding wires
- Manufactured from soft annealed wire, which ensures the wire consistently forms the perfect tie every time
- Typical uses include bundling construction material together, securing rebar in the correct position to achieve the required strength of the complete concrete structure
- Galvanized rebar tie wire offers the benefits of greater corrosion resistance
- PVC coated tie wires offer a longer service life when compared to bright and hot dipped galvanized rebar tie wire
- Standard pack size: Each or 16 Coils/Box



Dimensions (Diameter x Package Size)	Approx. Length (feet)	Vanguard Code
Bright Finish		
16 G x 3-1/8 lb Coil	340	4104 0016
16.5 G x 3-1/8 lb Coil	400	4104 00165
Hot Dipped Galvanized Finish		
16 G x 3-1/8 lb Coil	340	4104 00161
Green PVC Finish		
16 G x 2-1/2 lb Coil	170	4104 1016

**Additional diameters and lengths available upon request, minimum order quantities may apply*

REBAR TIE WIRE DISPENSER

- This tool offers a light weight, reliable means of carrying large volume of tie wire
- It is designed to be worn on the users utility belt
- The tie wire fits neatly inside the dispenser protecting the user's eyes from flying wire ends
- New coils of wire can be loaded in a minimum amount of time
- Standard pack size: Each or 5 Pcs/Carton



Description	Vanguard Code
Aluminum Rebar Tie Wire Dispenser	4104 9001

Warning:

- FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage**
- **ALWAYS** make sure to wear goggles to protect your eyes when working with wire products

TIE WIRE LOOPS

- Tie wire loops are used as a binding wire
- Manufactured from soft annealed wire, ensuring excellent quality and performance
- These wires are widely used in the construction, industrial and agricultural industries
- Typical uses include bundling construction material together, securing rebar before pouring concrete, bundling recycled materials such as cardboard, and as a bag sealing/packaging product
- Galvanized tie wire loops offer the benefits of greater corrosion resistance
- Standard pack size: 2500 Pcs/Bundle

Dimensions (Diameter x Length)	Vanguard Code		
	Bright Finish	Hot Dipped Galvanized Finish	PVC Green
16 G x 3-1/2"	4104 0003	4104 1003	4104 4003
16 G x 4"	4104 0004	4104 1004	4104 4004
16 G x 5"	4104 0005	4104 1005	4104 4005
16 G x 6"	4104 0006	4104 1006	4104 4006
16 G x 7"	4104 0007	4104 1007	4104 4007
16 G x 8"	4104 0008	4104 1008	4104 4008
16 G x 9"	4104 0009	4104 1009	4104 4009
16 G x 10"	4104 0010	4104 1010	4104 4010
16 G x 12"	4104 0012	4104 1012	4104 4012



**Additional diameters and lengths available upon request, minimum order quantities may apply*

STRAIGHT CUT ANNEALED WIRE

- Soft annealed wires offer excellent flexibility making the wires easier to use
- The galvanizing offers greater corrosion resistance than bright finish wires
- This type of wire is widely used in the industrial and construction industries
- Typical industrial/construction uses include the hanging of suspended ceilings
- Standard pack size: 25 Lbs/Carton

Dimensions (Diameter x Length)	Vanguard Code
Hot Dipped Galvanized Finish	
18 G x 27" Straight Cut	4103 1827



**Additional diameters and lengths and finishes available upon request, minimum order quantities may apply*

Warning:

- FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage**
- **ALWAYS** make sure to wear goggles to protect your eyes when working with wire products

TIE WIRE TWISTING TOOL

- Tie wire twisting tools are designed to twist looped rebar tie wire, using a minimum amount of effort
- The compact design allows this tool to be used in tight spaces
- The plastic handle will not rot, increasing the tools service life
- Standard pack size: Each or 5 Pcs/Carton

Description	Vanguard Code
Tie Wire Twisting Tool	4104 9000



AUTOMATIC TWISTING TOOL

- This tool allows the user to tie wire faster, saving time and increasing efficiency
- The automatic wire twisting tool features include heavy-duty, galvanized-steel construction and a unique spring-return action that requires very little effort
- The rubber handle cover provides a secure gripping surface when in use, and the bright red color makes this tool easy to find if dropped
- Standard pack size: Each or 50 Pcs/Carton

Description	Vanguard Code
Automatic Wire Twisting Tool	4104 9002



Warning:

FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage

- **ALWAYS** make sure to wear goggles to protect your eyes when working with wire products

HARDWARE CLOTH

- Hardware cloth is welded into uniform sizes
- It is galvanized after welding, which provides the greatest corrosion resistance
- The end product has a smooth surface finish which is level and flat, offering even strength throughout the roll
- The wire shows no signs of wear and tear when cut into smaller sections
- This material is widely used for industrial, construction, agricultural and residential applications
- Standard pack size: 1 Roll

Dimensions (Mesh Size x Roll Height x Length)	Wire Gauge	Vanguard Code
Hot Dipped Galvanized Finish		
1/8" x 36" x 25'	23	4107 0362
1/8" x 36" x 50'	23	4107 0365
1/8" x 36" x 100'	23	4107 0361
1/8" x 48" x 50'	23	4107 0485
1/8" x 48" x 100'	23	4107 0481
1/4" x 24" x 50'	23	4107 1245
1/4" x 30" x 50'	23	4107 1305
1/4" x 36" x 6'	23	4107 1366
1/4" x 36" x 25'	23	4107 1362
1/4" x 36" x 50'	23	4107 1365
1/4" x 36" x 100'	23	4107 1361
1/4" x 48" x 50'	23	4107 1485
3/8" x 36" x 50'		4107 2365
1/2" x 24" x 50'	19	4107 3245
1/2" x 36" x 6'	19	4107 3366
1/2" x 36" x 25'	19	4107 3362
1/2" x 36" x 50'	19	4107 3365
1/2" x 36" x 100'	19	4107 3361
1/2" x 48" x 50'	19	4107 3485
3/4" x 36" x 6'		4107 4366
3/4" x 36" x 25'		4107 4362
3/4" x 36" x 50'		4107 4365
3/4" x 36" x 100'		4107 4361
1" x 36" x 25'		4107 5362
1" x 36" x 50'		4107 5365
1" x 36" x 100'		4107 5361



**Additional mesh sizes, roll heights, lengths and coatings/finishes available upon request, minimum order quantities may apply*

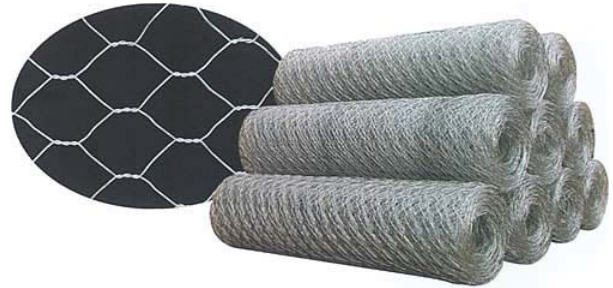
Warning:

- FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage**
- **ALWAYS** make sure to wear goggles to protect your eyes when working with wire products

POULTRY NETTING

- The wire is galvanized prior to welding
- The galvanized wire is then welded into uniform hexagon mesh, which provides a smooth finish to the wire surface
- The horizontal shape helps to keep the fence straight and upright
- Typical applications for this material include the construction of poultry and pet pens, barriers for garden pests
- Standard pack size: 1 Roll

Dimensions (Mesh Size x Roll Height x Length)	Wire Gauge	Vanguard Code
Hot Dipped Galvanized Finish		
1/2" x 24" x 50'	22	4106 0245
1/2" x 30" x 50'	22	4106 0305
1/2" x 36" x 25'	22	4106 0362
1/2" x 36" x 50'	22	4106 0365
1/2" x 48" x 50'	22	4106 0485
1" x 24" x 25'	20	4106 1242
1" x 24" x 50'	20	4106 1245
1" x 24" x 100'	20	4106 1241
1" x 30" x 50'	20	4106 1305
1" x 36" x 25'	20	4106 1362
1" x 36" x 50'	20	4106 1365
1" x 36" x 100'	20	4106 1361
1" x 48" x 25'	20	4106 1482
1" x 48" x 50'	20	4106 1485
1" x 48" x 100'	20	4106 1481
1" x 60" x 50'	20	4106 1605
1" x 72" x 50'	20	4106 1725
2" x 24" x 25'	20	4106 2242
2" x 24" x 50'	20	4106 2245
2" x 24" x 100'	20	4106 2241
2" x 30" x 50'	20	4106 2305
2" x 36" x 25'	20	4106 2362
2" x 36" x 50'	20	4106 2365
2" x 36" x 100'	20	4106 2361
2" x 48" x 25'	20	4106 2482
2" x 48" x 50'	20	4106 2485
2" x 48" x 100'	20	4106 2481
2" x 60" x 50'	20	4106 2605
2" x 60" x 100'	20	4106 2601
2" x 72" x 50'	20	4106 2725



**Additional mesh sizes, roll heights, lengths and coatings/finishes available upon request, minimum order quantities may apply*

Warning:

FAILURE TO OBSERVE these warnings may result in serious injury and/or property damage

- **ALWAYS** make sure to wear goggles to protect your eyes when working with wire products

STEEL STRAPPING

- Painted black and waxed
- Elongation 5.2 to 6.5%
- Packaged in coils of 45 kgs / 12 coils per skid



Width (inches)	Thickness (inches)	Average Strength (lbs)	Coil Winding	Vanguard Code
1/2	0.020	1,230	oscillated	4201 2032
5/8	0.020	1,550	oscillated	4201 2040
3/4	0.023	2,200	oscillated	4201 2348
1-1/4	0.025	4,060	ribbon	4201 25116

DISPENSERS FOR STEEL STRAPPING



4203 30112



4203 30200



Automatic brake



Trolley brake

Strapping Width (inches)	Description	Weight (lbs/ea)	Vanguard Code
3/8 - 1-1/2	AUTOMATIC BRAKE, 10" DIAMETER WHEELS VGD720HS TROLLEY TYPE WITH TOOL BOX, OUTER STEEL DISC 25" IN DIAMETER	59	4203 30112
3/8 - 2	TROLLER BRAKE, 8" DIAMETER WHEELS, VGD430HS TROLLEY TYPE WITH TOOL BOX, OUTER STEEL DISC 28" IN DIAMETER	75	4203 30200

Note:

These products are suitable for all general strapping and packaging applications.

TOOLS FOR STEEL STRAPPING

Strapping Width (inches)	Description	Weight (lbs/ea)	Vanguard Code
Tensioning Tools			
3/8 - 3/4	Feed Wheel Tensioner VGD290	4.50	4203 02448
5/8 - 1-1/4	Superior Push Tensioner VGD247	7.10	4203 040116
Sealing Tools			
1/2	Sealer Double Notched VGD3104	2.00	4203 10032
5/8	Sealer Double Notched VGD3105	2.00	4203 10040
3/4	Sealer Double Notched H.D. VGD3226	3.36	4203 10048
1-1/4	Sealer Double Notched Side Action VGD3180	7.10	4203 10116
1-1/4	Sealer Single Notched Side Action H.D. VGD3173	6.70	4203 11116
Cutting Tools			
3/8 - 3/4	Cutter Drop Forged VGD100	1.31	4203 22448
3/8 - 1-1/4	Cutter Heavy Duty VGD230	1.91	4203 224116


4203 02448

4203 040116

4203 10032 / 40

4203 10048

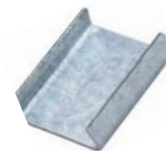
4203 22448

4203 224116

4203 10116

4203 11116
STEEL SEALS FOR STEEL STRAPPING

Width (inches)	Thickness (inches)	Packaging (pcs)	Seal Type	Vanguard Code
1/2	1.00	1,000	open	4202 0032
5/8	1.00	1,000	open	4202 0040
3/4	1.11	1,000	open	4202 0048
1-1/4	2.24	500	push	4202 1116


OPEN TYPE

PUSH TYPE

BUILDER'S HARDWARE

T-POSTS

- Features an angled stud that helps hold the fence against the post
- Green enamel finish for greater rust resistance above and below ground
- Permanent or temporary installation

Common uses include:

- Snow Fence
- Construction Fencing
- Agricultural/Farm Fencing
- Barbed Wire Fencing
- Tree Staking
- Sign Posts



Weight (ft./lbs)	Available Lengths (ft.)			
	5	6	7	8
0.95		4204 0956	4204 0957	

Packing: 5pcs/bundle, 200pcs/pallet

Studded and with spade available upon request, minimum order quantity may apply



POST POUNDER

- For driving t-posts and u-posts into the ground
- Weighted, reinforced steel head minimizes damage to post tops
- Delivers over 15 pounds of force reducing operator fatigue
- 2-3/4" Inside driver diameter
- 23-1/2" Overall length

Description	Vanguard Code
T-Post Pounder	4204 1000





CONVERSIONS

To Convert	Multiply By	To Obtain	To Convert	Multiply By	To Obtain
Miles (statute)	1.609	Kilometers	0.621		Miles (statute)
Yards	0.914	Meters	1.094		Yards
Feet	0.305	Meters	3.281		Feet
Inches	25.400	Millimeters	0.039		Inches
Short Tons	0.907	Metric Tons	1.102		Short Tons
Long Tons	1.016	Metric Tons	0.984		Long Tons
Pounds	0.454	Kilograms	2.205		Pounds
Pounds	0.00444	Kilo newtons	224.8		Pounds
Pounds per Foot	1.488	Kilos per Meter	0.672		Pounds per Foot
Pounds per sq. ft.	4.882	Kilos per sq. m	0.205		Pounds per sq. ft.
Pounds per sq. in.	0.070	Kilos per sq. cm	14.223		Pounds per sq. in.
Square Inches	645.200	Sq. Millimeters	0.002		Square Inches
Cubic Inches	16.387	Cubic Centimeters	0.061		Cubic Inches
Cubic Feet	0.028	Cubic Meters	35.310		Cubic Feet
Cubic Yards	0.765	Cubic Meters	1.308		Cubic Yards
U.S. Gallons	3.785	Liters	0.264		U.S. Gallons
Imperial Gallons	4.546	Liters	0.220		Imperial Gallons
Cubic Feet	28.320	Liters	0.035		Cubic Feet
Diameter	3.142	Circumference	0.318		Diameter
Deg. Fahrenheit	$.5556 \times (F^{\circ} - 32)$	Degrees Celsius	$(1.8 \times C^{\circ}) + 32$		Deg. Fahrenheit
1 Statute Mile -	1760 Yards -	5280 Feet -	1.60934 Km		
1 Nautical Mile -	6080 Feet -	1.85318 Km			
1 Fathom -	6 Feet -	1.82880 Meters			
1 Rod -	5.5 Yards -	16.5 Feet -	5.02919 Meters		