



Quick Reference Guide

Utilities Available in	Tape Type	Sizes Available	Model #	Minimum Order Quantity	Page Number
Telecommunications					
"Caution Fiber Optic Cable Below"	MAGNATEC® Premium Detectable Tape	3" x 1,000'	31-150	4 rolls	5
"Caution Fiber Optic Cable Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	6" x 1,000'	31-151	2 rolls	5
"Caution Fiber Optic Cable Buried Below"	DURATEC® Reinforced Non-Detectable Tape	3" x 1,000'	22-435	8 rolls	5
"Caution Fiber Optic Cable Buried Below"	DURATEC® Reinforced Non-Detectable Tape	3" x 6,000'	28-031	1 roll	5
Electrical					
"Caution Electric Line Below"	MAGNATEC® Premium Detectable Tape	3" x 1,000'	31-107	4 rolls	6
"Caution Electric Line Buried Below" - Yellow	SHIELDTEC® Standard Non-Detectable Tape	6" x 1,000'	31-109	2 rolls	6
"Caution Electric Line Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	3" x 1,000'	22-202	8 rolls	6
"Caution Electric Line Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	6" x 1,000'	22-205	4 rolls	6
"Caution Electric Line Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	3" x 1,000'	22-126	8 rolls	6
"Caution Electric Line Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	6" x 1,000'	22-130	4 rolls	6
"Caution Electric Line Buried Below"	DURATEC® Reinforced Non-Detectable Tape	6" x 1,000' (Dispenser Box)	22-130DB	1 roll	6
"Caution Electric Line Buried Below"	DURATEC® Reinforced Non-Detectable Tape	3" x 1,000'	71-061	1 roll	6
Gas					
"Caution Gas Line Below"	MAGNATEC® Premium Detectable Tape	2" x 1,000'	31-140	6 rolls	7
"Caution Gas Line Below"	MAGNATEC® Premium Detectable Tape	3" x 1,000'	31-141	4 rolls	7
"Caution Gas Line Below"	MAGNATEC® Premium Detectable Tape	6" x 1,000'	31-143	2 rolls	7
"Caution Gas Line Buried Below"	THORTEC™ Reinforced Detectable Tape	2" x 1,000'	38-027	6 rolls	7
"Caution Gas Line Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	3" x 1,000'	22-211	8 rolls	7
"Caution Gas Line Buried Below"	SHIELDTEC® Standard Non-Detectable Tape	6" x 1,000'	22-214	4 rolls	7
"Caution Gas Line Buried Below"	DURATEC® Reinforced Non-Detectable Tape	3" x 1,000'	71-070	4 rolls	7
Water					
"Caution Water Line Below"	MAGNATEC® Premium Detectable Tape	2" x 1,000'	31-021	6 rolls	Not Shown
"Caution Water Line Below"	MAGNATEC® Premium Detectable Tape	3" x 1,000'	31-022	4 rolls	Not Shown
"Caution Water Line Below"	MAGNATEC® Premium Detectable Tape	6" x 1,000'	31-024	2 rolls	Not Shown
Sewer					
"Caution Sewer Line Below"	MAGNATEC® Premium Detectable Tape	2" x 1,000'	31-052	6 rolls	Not Shown
"Caution Sewer Line Below"	MAGNATEC® Premium Detectable Tape	3" x 1,000'	31-053	4 rolls	Not Shown
"Caution Sewer Line Below"	MAGNATEC® Premium Detectable Tape	6" x 1,000'	31-055	2 rolls	Not Shown
Joint Trench					
"Caution Joint Trench Buried Utilities"	SHIELDTEC® Standard Non-Detectable Tape	8" x 1,000'	22-753	1 roll	Not Shown

Underground Utility Tape



www.empirelevel.com

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Empire® Detectable Tape Specifications Pg. 3

Empire® Non-Detectable Tape Specifications Pg. 4

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Electrical Utilities Pg. 6

Gas Utilities Pg. 7

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PROTECT | IDENTIFY | DETECT

Underground Warning Tape is the **last line of defense** for your underground utility. Underground Tape helps **prevent accidental dig-ins** that result in loss of revenue, repair expense, or damage to life and property. It **alerts workers** of buried cables, pipes, and utilities buried below.

Empire warning tape, available in APWA standard colors, carries the **specific warning message needed to identify** the valuable cable or pipe buried beneath.



MAGNATEC® PREMIUM DETECTABLE TAPE



Feature	Method	Value (English)	Value (SI)
Overall Thickness	ASTM D-2103	5.0 mil (Nominal)	0.125 mm (Nominal)
Weight	ASTM D-2103	25.6 lbs / 1,000 ft ²	11.61 kg / 100 m ²
Elongation	ASTM D-882	Length: 89%	Length: 89%

Available in: Blue, Green, Orange, Yellow, Red

- Environmentally Safe: Prop 65, TSCA, REACH Compliant
- Maximum Tensile Strength
- Wear Resistant
- Detectable by Conductive and Inductive Methods

THORTEC™ PREMIUM REINFORCED DETECTABLE TAPE



Feature	Method	Value (English)	Value (SI)
Overall Thickness	ASTM D-2103	7.0 mil (Nominal)	0.175 mm (Nominal)
Weight	ASTM D-2103	34.21 lbs / 1,000 ft ²	16.70 kg / 100 m ²
Elongation	ASTM D-882	Length: 24%	Length: 24%

Available in: Yellow

- Environmentally Safe: Prop 65, TSCA, REACH Compliant
- Maximum Tensile Strength
- Wear Resistant
- Detectable by Conductive and Inductive Methods

Empire® Non-Detectable Tape Specifications

SHIELDTEC® STANDARD NON-DETECTABLE TAPE



Feature	Method	Value (English)	Value (SI)
Overall Thickness	ASTM D-2103	4.0 mil (Nominal)	0.1 mm (Nominal)
Weight	ASTM D-2103	17.04 lbs / 1,000 ft ²	8.32 kg / 100 m ²
Tensile Strength	ASTM D-882	Length: 2,565 psi	Length: 17.7 Mpa
Elongation	ASTM D-882	Length: 492%	Length: 492%
Printability	ASTM D-2578		> 40 dynes
Plastic Density	ASTM D-792-08		.951 g/cc

Available in: Blue, Green, Orange, Yellow, Red, Purple

- Environmentally Safe
- Lead Free
- Wear Resistant
- Permanent Messaging

DURATEC® PREMIUM REINFORCED NON-DETECTABLE TAPE



Feature	Method	Value (English)	Value (SI)
Overall Thickness	ASTM D-2103	7.0 mil (Nominal)	0.175 mm
Weight	ASTM D-2103	22.46 lbs / 1,000 ft ²	10.97 kg / 100 m ²
Tensile Strength	ASTM D-882	Length: 10,620 psi	Length:
Elongation	ASTM D-882	Length: 38%	Length: 38%
Printability	ASTM D-2578		> 40 dynes
Plastic Density	ASTM D-792-08		.692 g/cc

Available in: Orange, Yellow, Red

- Environmentally Safe
- Lead Free
- Wear Resistant
- Permanent Messaging

Telecommunication Utility Options

MAGNATEC® PREMIUM DETECTABLE TAPE



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	5.0 mil (Nominal)	0.125 mm (Nominal)
Weight	D-2103	25.6 lbs / 1,000 ft ²	11.61 kg / 100 m ²
Elongation	D-882	Length: 89%	Length: 89%

"Caution Fiber Optic Cable Below"	
Sizes Available	Model Number
3" x 1,000'	31-150
6" x 1,000'	31-151

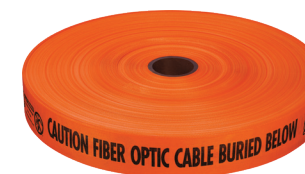
SHIELDTEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	4.0 mil (Nominal)	0.1 mm (Nominal)
Weight	D-2103	17.04 lbs / 1,000 ft ²	8.32 kg / 100 m ²
Tensile Strength	D-882	Length: 2,565 psi	Length: 17.7 Mpa
Elongation	D-882	Length: 492%	Length: 492%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.951 g/cc

"Caution Fiber Optic Cable Buried Below"	
Sizes Available	Model Number
3" x 1,000'	22-435

DURATEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	7.0 mil (Nominal)	0.175 mm (Nominal)
Weight	D-2103	22.46 lbs / 1,000 ft ²	10.97 kg / 100 m ²
Tensile Strength	D-882	Length: 10,620 psi	Length: 73.22 Mpa
Elongation	D-882	Length: 38%	Length: 38%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.692 g/cc

"Caution Fiber Optic Cable Buried Below"	
Sizes Available	Model Number
3" x 6,000'	28-031

Electrical Utility Options

Gas Utility Options

MAGNATEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	5.0 mil (Nominal)	0.125 mm (Nominal)
Weight	D-2103	25.6 lbs / 1,000 ft ²	11.61 kg / 100 m ²
Elongation	D-882	Length: 89%	Length: 89%

"Caution Electric Line Below"	
Sizes Available	Model Number
3" x 1,000'	31-107
6" x 1,000'	31-109

MAGNATEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	5.0 mil (Nominal)	0.125 mm (Nominal)
Foil Thickness	D-2103	.35 mil	8.89 microns
Weight	D-2103	25.6 lbs / 1,000 ft ²	11.61 kg / 100 m ²
Tensile Strength	D-882	Length: 7,651 psi	Length: 52.8 Mpa
Elongation	D-882	Length: 89%	Length: 89%

"Caution Gas Line Below"	
Sizes Available	Model Number
2" x 1,000'	31-140
3" x 1,000'	31-141
6" x 1,000'	31-143

DURATEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	7.0 mil (Nominal)	0.175 mm (Nominal)
Weight	D-2103	22.46 lbs / 1,000 ft ²	10.97 kg / 100 m ²
Tensile Strength	D-882	Length: 10,620 psi	Length: 73.22 Mpa
Elongation	D-882	Length: 38%	Length: 38%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.692 g/cc

"Caution Electric Line Buried Below"	
Sizes Available	Model Number
3" x 1,000'	71-061

SHIELDTEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	4.0 mil (Nominal)	0.1 mm (Nominal)
Weight	D-2103	17.04 lbs / 1,000 ft ²	8.32 kg / 100 m ²
Tensile Strength	D-882	Length: 2,565 psi	Length: 17.7 Mpa
Elongation	D-882	Length: 492%	Length: 492%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.951 g/cc

"Caution Gas Line Buried Below"	
Sizes Available	Model Number
3" x 1,000'	22-211
6" x 1,000'	22-214

SHIELDTEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	4.0 mil (Nominal)	0.1 mm (Nominal)
Weight	D-2103	17.04 lbs / 1,000 ft ²	8.32 kg / 100 m ²
Tensile Strength	D-882	Length: 2,565 psi	Length: 17.7 Mpa
Elongation	D-882	Length: 492%	Length: 492%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.951 g/cc

"Caution Electric Line Buried Below"	
Sizes Available	Model Number
3" x 1,000'	22-126
6" x 1,000'	22-130
6" x 1,000' dispenser box	22-130DB

THORTEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	7.0 mil (Nominal)	0.175 mm (Nominal)
Weight	D-2103	34.21 lbs / 1,000 ft ²	16.70 kg / 100 m ²
Elongation	D-882	Length: 24%	Length: 24%

"Caution Gas Line Below"	
Sizes Available	Model Number
2" x 1,000'	38-027

SHIELDTEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	4.0 mil (Nominal)	0.1 mm (Nominal)
Weight	D-2103	17.04 lbs / 1,000 ft ²	8.32 kg / 100 m ²
Tensile Strength	D-882	Length: 2,565 psi	Length: 17.7 Mpa
Elongation	D-882	Length: 492%	Length: 492%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.951 g/cc

"Caution Electric Line Buried Below"	
Sizes Available	Model Number
3" x 1,000'	22-202
6" x 1,000'	22-205

DURATEC®



Feature	Method (ASTM)	Value (English)	Value (SI)
Overall Thickness	D-2103	7.0 mil (Nominal)	0.175 mm (Nominal)
Weight	D-2103	22.46 lbs / 1,000 ft ²	10.97 kg / 100 m ²
Tensile Strength	D-882	Length: 10,620 psi	Length: 73.22 Mpa
Elongation	D-882	Length: 38%	Length: 38%
Printability	D-2578		> 40 dynes
Plastic Density	D-792-08		.692 g/cc

"Caution Gas Line Buried Below"	
Sizes Available	Model Number
3" x 1,000'	71-070