

SECURITY SOLUTIONS

Products and Accessories



Atkore[™]
Razor Ribbon

What Goes Up **Doesn't Get Over**



When it comes to perimeter protection, Razor-Ribbon® barbed tape is trusted the world over. Manufactured in Hebron, OH and engineered to meet ASTM standards, Razor-Ribbon® is the cutting-edge security solution for any fence or framework from correctional facilities to chemical and nuclear sites to military and maritime applications. Make sure that the other side isn't an option.

Stay secure at razorribbon.com

Razor-Ribbon® is a leading manufacturer of barbed tape products and a domestic manufacturer in the United States.

The Razor-Ribbon line of barbed tape products is the optimal choice for perimeter security protection. Manufactured for use in the most secure and restricted environments, Razor-Ribbon has enhanced security protection for a variety of industrial, military, and institutional facilities.

What Sets Us Apart

- Nationwide and international distribution
- Superior deterrence and security
- Manufactured from exceptionally tough, high-quality stainless steel components with full traceability
- Single or double coil spiral or concertina available
- Various diameter and deployed lengths available
- Large capacity with quick turnaround
- Product workmanship warranty
- Easy-to-install
- Unparalleled customer and technical support

Our Razor-Ribbon products are razor sharp and can create serious cuts on anyone trying to climb over the barrier. The products are not only used as a physical barrier but also work as a psychological deterrent. Razor-Ribbon is designed to deter, delay, and detect intruders.

Barbed Tape Styles

Short Barb



Medium Barb



BTC NATO Barb



Long Barb



Instabarrier® Barb



Detainer Hook® Barb



Razor Strand™ Barbed Tape 6

Helical Barbed Tape 7

Maze® Barbed Tape 8

Instabarrier® Barbed Tape..... 9

Supermaze® & Nato Barrier™ Barbed Tape 10

Detainer Hook®..... 11

BTC Barbed Tape Concertina 12

BTC NATO-22..... 13

NATO-22 Barbed Tape 14

NATO-22 Razor Strand™ Topper 15

Razor-Ribbon® Fence Pickets 16

Product Selector Guide..... 17

Rapid Deployment Units 18

Triple Strand Rapid Deployment Unit..... 20

Six-Pack Rapid Deployment Unit..... 21

Rapid Deployment Unit Trailers BTC Express Trailer..... 22

Rapid Deployment Unit (RDU) Covered Trailer 22

Covered Trailer 23

Hat Boxes & Barbless RDU..... 24

Instabox Portable Rapid Deployment Unit..... 25

Barbless Concertina Coil 26

Enhanced Security Solutions 28



Razor-Ribbon® Razor Mesh Panel29

Razor Mesh Panels30

Razor Mesh Panel Topper 32

Razor-Ribbon® Razor Cage..... 33

Razor-Ribbon® Razor Cage Applications 34

Enhanced Security 35

Flat Razor Wrap Topper Double Coil.....36

Razor Spike Topper 37

Razor-Ribbon® Sensor Clip38

Razor-Ribbon® Sensored Coil.....39

Specifications.....40

Accessories 43

Safety and Security Bollards 45

Base Plate Bollards and Decorative Covers46

Bollard Types..... 47

Crash Rated Security Bollards49

Crash Test Certified to F3016-19 Bollards.....50

Notes 51





Minimum Security Applications

- Exterior perimeter security products
- Alternative to traditional barbed wire for low-level security applications when added psychological deterrence is desired
- Can be installed in either lineal strands per barbed wire specifications or coils may be ordered as a substitute
- Standard configuration: medium barb, offset with galvanized tape, and galvanized core
- Razor strand barbed tape and core available in stainless steel

Uses: construction sites, manufacturing, other minimum security applications



Barbed Razor Strand (Wire-Reinforced)

Length		Weight	
(ft)	(m)	(lb)	(kg)
351	107	22	10


Longer lengths available upon request


Coreless Barbed Tape


Length		Weight	
(ft)	(m)	(lb)	(kg)
1000	305	63	29
1500	457	95	43


Weight shown is for long barb configuration


Barb Options

Short Barb

Medium Barb

BTC NATO Barb

Long Barb

Detainer Hook® Barb





Minimum Security Applications

- Perimeter security products
- Highly recommended for private and industrial use
- Long barb, wire-reinforced helical barrier formed without clipping
- Helical barbed tape and core available in stainless steel or galvanized

Uses: warehousing, construction sites, manufacturing, parking lots, storage, other low-level security applications



Single Coil Helical (Wire-Reinforced)

NSN	Diameter		Coil Loops	Strip Material	Core Wire	Loop Spacing		Yield		Pkg.	ASTM F 1910 Item #
	(in)	(mm)				(in)	(mm)	(ft)	(m)		
5660-01-457-9828	18	450	33	SS	SS	18	450	50	15	5/Box	#1
5660-01-457-9757	18	450	33	SS	GA	18	450	50	15	5/Box	#2
5660-01-495-6123	18	450	33	GA	GA	18	450	50	15	5/Box	-
5660-01-457-9843	24	600	33	SS	SS	18	450	50	15	5/Box	#5
5660-01-457-9842	24	600	33	SS	GA	18	450	50	15	5/Box	#6
5660-01-495-6277	24	600	33	GA	GA	18	450	50	15	5/Box	-
-	30	750	33	SS	SS	18	450	50	15	5/Box	-
-	30	750	33	SS	GA	18	450	50	15	5/Box	-
-	30	750	33	GA	GA	18	450	50	15	5/Box	-
-	36	900	33	SS	SS	18	450	50	15	4/Box	-
-	36	900	33	SS	GA	18	450	50	15	4/Box	-
-	36	900	33	GA	GA	18	450	50	15	4/Box	-

Barb Options



Short Barb



Medium Barb



BTC NATO Barb



Long Barb



Detainer Hook® Barb



Minimum to Medium* Security Applications

- Exterior perimeter security products
- The original long-barb, wire-reinforced concertina barrier that is clipped for restricted spacing
- Used in more minimum to medium security applications around the world than any other barbed tape
- Concertina barbed tape and core available in stainless steel or galvanized

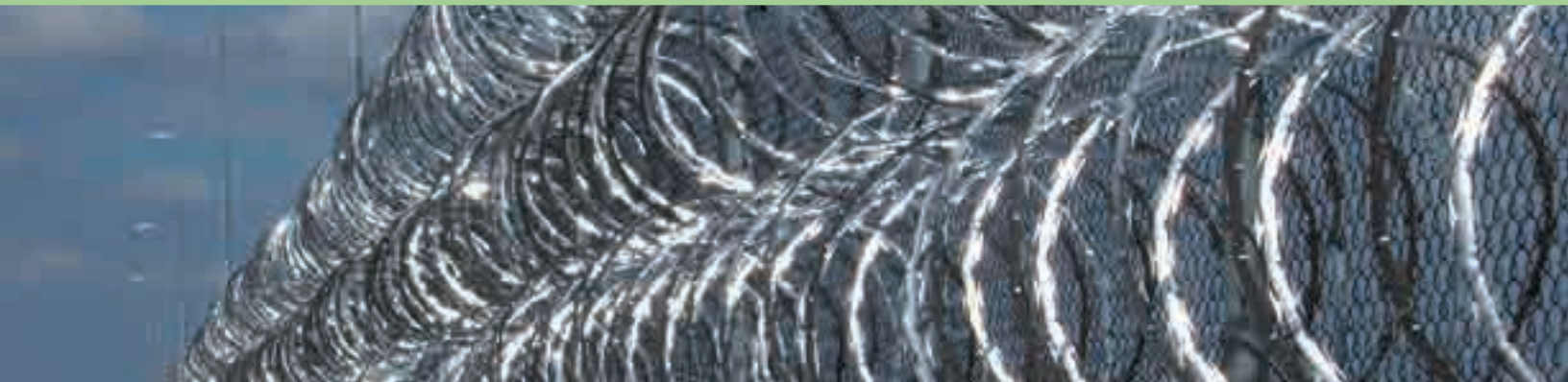
Uses: confinement, detention, utility companies, airport perimeters, etc.

*Double coil used for minimum to maximum security applications



Single and Double Coil Maze® (Wire-Reinforced)

NSN	Diameter		Coil Loops	Strip Material	Core Wire	Clips	Loop Spacing		Yield		Pkg.	ASTM F 1910 Item #
	(in)	(mm)					(in)	(mm)	(ft)	(m)		
5660-01-457-9849	18	450	31	SS	SS	3	12	300	15	4.5	4/Box	#9
5660-01-457-9847	18	450	31	SS	GA	3	12	300	15	4.5	4/Box	#8
5660-01-495-6178	18	450	31	GA	GA	3	12	300	15	4.5	4/Box	-
5660-01-457-9852	24	600	31	SS	SS	3	16	400	20	6.0	5/Box	#11
5660-01-457-9850	24	600	31	SS	GA	3	16	400	20	6.0	5/Box	#10
5660-01-495-6284	24	600	31	GA	GA	3	16	400	20	6.0	5/Box	-
-	30	750	31	SS	SS	3	16	400	20	6.0	3/Box	#13
-	30	750	31	SS	GA	3	16	400	20	6.0	3/Box	#12
-	30	750	31	GA	GA	3	16	400	20	6.0	3/Box	-
-	36	900	31	SS	SS	3	16	400	20	6.0	4/Box	-
-	36	900	31	SS	GA	3	16	400	20	6.0	4/Box	-
-	36	900	31	GA	GA	3	16	400	20	6.0	4/Box	-
-	18/24	450/600	31/31	SS	SS	3	12	300	15	4.5	5/Box	-
-	18/24	450/600	31/31	SS	GA	3	12	300	15	4.5	5/Box	-
-	18/24	450/600	31/31	GA	GA	3	12	300	15	4.5	5/Box	-
-	24/30	600/750	31/31	SS	SS	3	16	400	20	6.0	5/Box	#22
-	24/30	600/750	31/31	SS	GA	3	16	400	20	6.0	5/Box	#21
-	24/30	600/750	31/31	GA	GA	3	16	400	20	6.0	5/Box	-



Minimum to Maximum Security Applications

- Perimeter security products
- The most versatile of all barbed tape products
- Deploys tangle free for fast installation for both temporary and permanent use
- Permits rapid recovery and reuse
- Punched with offset barbs for greater entanglement and psychological deterrence
- Single coil stainless steel non-reinforced concertina diameters of 24", 30", 40", 60"
- Tape material: stainless steel



Uses: ground barrier for maximum security confinement, prisons, detention facilities, nuclear generating plants, petroleum/chemical storage, refiners, nuclear weapons storage, etc.

Instabarrier® (Non-Reinforced)

NSN	Diameter		Coil Loops	Coil Material	Strip Cable	Welds	Loop Spacing		Yield		Pkg.	ASTM F 1910 Item #
	(in)	(mm)					(in)	(mm)	(ft)	(m)		
-	24	600	101	SS	1	3	12	300	50	15	7/Box	#24
5660-01-495-6363	30	750	101	SS	1	5	12	300	50	15	7/Box	#25
-	40	1000	101	SS	1	7	12	300	50	15	5/Box	#26
-	60	1500	101	SS	1	13	12	300	50	15	2/Box	#27

Supermaze® & Nato Barrier™ Barbed Tape



Maximum Security Applications

- Perimeter security products
- Long-barb, wire-reinforced concertina barrier designed for high density maximum security applications
- Used as a fence topping, mid fence or, ground barrier
- Concertina barbed tape and core available in galvanized or stainless steel
- See **Product Selector Guide** for additional loop configurations

Uses: maximum security



Single Coil Supermaze® (Wire-Reinforced)

NSN	Diameter		Coil Loops	Strip Material	Core Wire	Clips	Loop Spacing		Yield		Pkg.	ASTM F 1910 Item #
	(in)	(mm)					(in)	(mm)	(ft)	(m)		
5660-01-495-9534	30	750	51	SS	SS	5	12	300	25	7.5	3/Box	#15
5660-01-495-9566	30	750	51	SS	GA	5	12	300	25	7.5	3/Box	#14
-	30	750	51	GA	GA	5	12	300	25	7.5	3/Box	-
-	36	900	51	SS	SS	5	12	300	25	7.5	2/Box	-
-	36	900	51	SS	GA	5	12	300	25	7.5	2/Box	-
-	36	900	51	GA	GA	5	12	300	25	7.5	2/Box	-
-	40	1000	51	SS	SS	5	12	300	25	7.5	2/Box	#17
-	40	1000	51	SS	GA	5	12	300	25	7.5	2/Box	-
-	40	1000	51	GA	GA	5	12	300	25	7.5	2/Box	-

Single Coil NATO Barrier™ (Wire-Reinforced)

NSN	Diameter		Coil Loops	Strip Material	Core Wire	Clips	Loop Spacing		Yield		Pkg.	ASTM F 1910 Item #
	(in)	(mm)					(in)	(mm)	(ft)	(m)		
-	40	1000	51	SS	SS	7	12	300	25	7.5	2/Box	#18
-	40	1000	51	SS	GA	7	12	300	25	7.5	2/Box	#16
-	40	1000	51	GA	GA	7	12	300	25	7.5	2/Box	-
-	60	1500	51	SS	SS	9	12	300	25	7.5	2/Box	#20
-	60	1500	51	SS	GA	9	12	300	25	7.5	2/Box	#19
-	60	1500	51	GA	GA	9	12	300	25	7.5	2/Box	-

Barb Options



Long Barb



Maximum Security Applications

- Perimeter security products
- Single coil wire-reinforced concertina
- Barb designed with clusters of 8 needle sharp barbs along the spiral turns
- Barb angle and hooked barb configuration is the most severe Razor-Ribbon® product produced
- Concertina barbed tape and core available in galvanized or stainless steel
- See **Product Selector Guide** for additional coil length configurations

Uses: confinement applications, maximum security prisons, detention facilities, nuclear generating plants, petroleum/chemical storage, refiners, nuclear weapons storage, etc.



Detainer Hook® Barb (Wire-Reinforced)

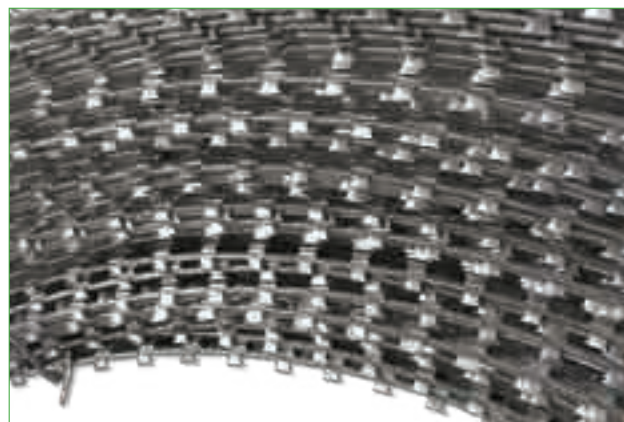
NSN	Diameter		Coil Loops	Strip Material	Core Wire	Clips	Loop Spacing		Yield		Pkg.
	(in)	(mm)					(in)	(mm)	(ft)	(m)	
5660-01-495-6200	19	483	31	SS	SS	3	12	300	15	4.5	4/Box
5660-01-495-6189	19	483	31	SS	GA	3	12	300	15	4.5	4/Box
5660-01-495-6161	19	483	31	GA	GA	3	12	300	15	4.5	4/Box
5660-01-494-0218	25	635	31	SS	SS	3	16	400	20	6.0	5/Box
5660-01-494-0228	25	635	31	SS	GA	3	16	400	20	6.0	5/Box
-	25	635	31	GA	GA	3	16	400	20	6.0	5/Box
5660-01-495-9581	31	787	51	SS	SS	5	12	300	25	7.5	3/Box
5660-01-495-9585	31	787	51	SS	GA	5	12	300	25	7.5	3/Box
-	31	787	51	GA	GA	5	12	300	25	7.5	3/Box
-	37	940	51	SS	SS	5	12	300	25	7.5	2/Box
-	37	940	51	SS	GA	5	12	300	25	7.5	2/Box
-	37	940	51	GA	GA	5	12	300	25	7.5	2/Box
-	41	1041	51	SS	SS	7	12	300	25	7.5	2/Box
-	41	1041	51	SS	GA	7	12	300	25	7.5	2/Box
-	41	1041	51	GA	GA	7	12	300	25	7.5	2/Box
-	61	1549	81	SS	SS	9	12	300	40	12	1/Box
-	61	1549	81	SS	GA	9	12	300	40	12	1/Box
-	61	1549	81	GA	GA	9	12	300	40	12	1/Box



Military Security Applications

- Perimeter security products
- Single coil wire-reinforced concertina
- Standard configuration: short barb with galvanized tape and high tensile galvanized core (military BTC)
- Refer to military specification A-A-55522A for additional information
- Concertina barbed tape and core available in stainless steel

Uses: military battlefield and training barrier



Military Tactical Barrier Concertina Coil (Wire-Reinforced)

NSN	Diameter		Coil Loops	Strip Material	Core Wire	Clips	Loop Spacing		Yield	
	(in)	(mm)					(in)	(mm)	(ft)	(m)
-	18	450	56	SS	SS	3	16	406	37	11
-	18	450	56	SS	GA	3	16	406	37	11
-	18	450	56	GA	GA	3	16	406	37	11
-	28	720	56	SS	SS	3	21	533	50	15
-	28	720	56	SS	GA	3	21	533	50	15
-	28	720	56	GA	GA	3	21	533	50	15
-	36	900	50	SS	SS	5	24	600	50	15
-	36	900	50	SS	GA	5	24	600	50	15
5660-00-921-5516	36	900	50	GA	GA	5	24	600	50	15
-	38	965	56	SS	SS	5	21	533	50	15
-	38	965	56	SS	GA	5	21	533	50	15
-	38	965	56	GA	GA	5	21	533	50	15
-	40	1000	56	SS	SS	5	21	533	50	15
-	40	1000	56	SS	GA	5	21	533	50	15
-	40	1000	56	GA	GA	5	21	533	50	15

Barb Options



Short Barb



Medium Barb



Military Security Applications

- Perimeter security products
- Single coil wire-reinforced concertina
- Barb length and spacing designed to meet NATO specifications
- BTC NATO-22 coils come standard with galvanized barbed tape and galvanized core
- Available in offset barb which greatly increases barb effectiveness, coil density, and psychological deterrence
- Barbed tape and core available in stainless steel

Uses: military and NATO BTC applications



BTC NATO-22 (Wire-Reinforced)

Diameter		Coil Loops	Strip Material	Core Wire	Clips	Loop Spacing		Yield	
(in)	(mm)					(in)	(mm)	(ft)	(m)
18	450	56	SS	SS	3	16	406	36	11
18	450	56	SS	GA	3	16	406	36	11
18	450	56	GA	GA	3	16	406	36	11
24	600	56	SS	SS	3	16	406	36	11
24	600	56	SS	GA	3	16	406	36	11
24	600	56	GA	GA	3	16	406	36	11
28	720	56	SS	SS	3 (5)	21 (16)	533 (406)	50 (36)	15 (11)
28	720	56	SS	GA	3 (5)	21 (16)	533 (406)	50 (36)	15 (11)
28	720	56	GA	GA	3 (5)	21 (16)	533 (406)	50 (36)	15 (11)
30	750	56	SS	SS	5	21	533	50	15
30	750	56	SS	GA	5	21	533	50	15
30	750	56	GA	GA	5	21	533	50	15
36	900	56	SS	SS	5	21	533	50	15
36	900	56	SS	GA	5	21	533	50	15
36	900	56	GA	GA	5	21	533	50	15
38	980	56	SS	SS	5 (7)	21 (6)	533 (150)	50 (14)	15 (4.3)
38	980	56	SS	GA	5 (7)	21 (6)	533 (150)	50 (14)	15 (4.3)
38	980	56	GA	GA	5 (7)	21 (6)	533 (150)	50 (14)	15 (4.3)
40	1000	56	SS	SS	5	21	533	50	15
40	1000	56	SS	GA	5	21	533	50	15
40	1000	56	GA	GA	5	21	533	50	15

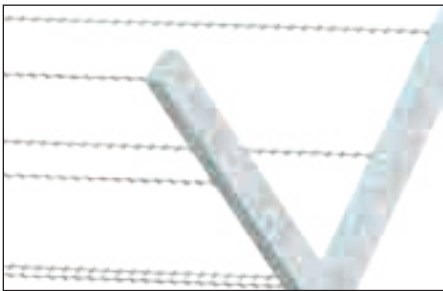
**Barb
Options**



BTC NATO Barb



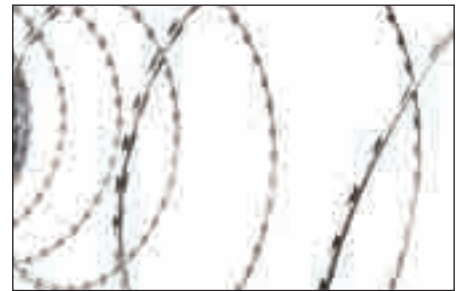
Razor Strand™



Coreless



Helical



Concertina



Flat Razor Wrap



Rapid Deployment

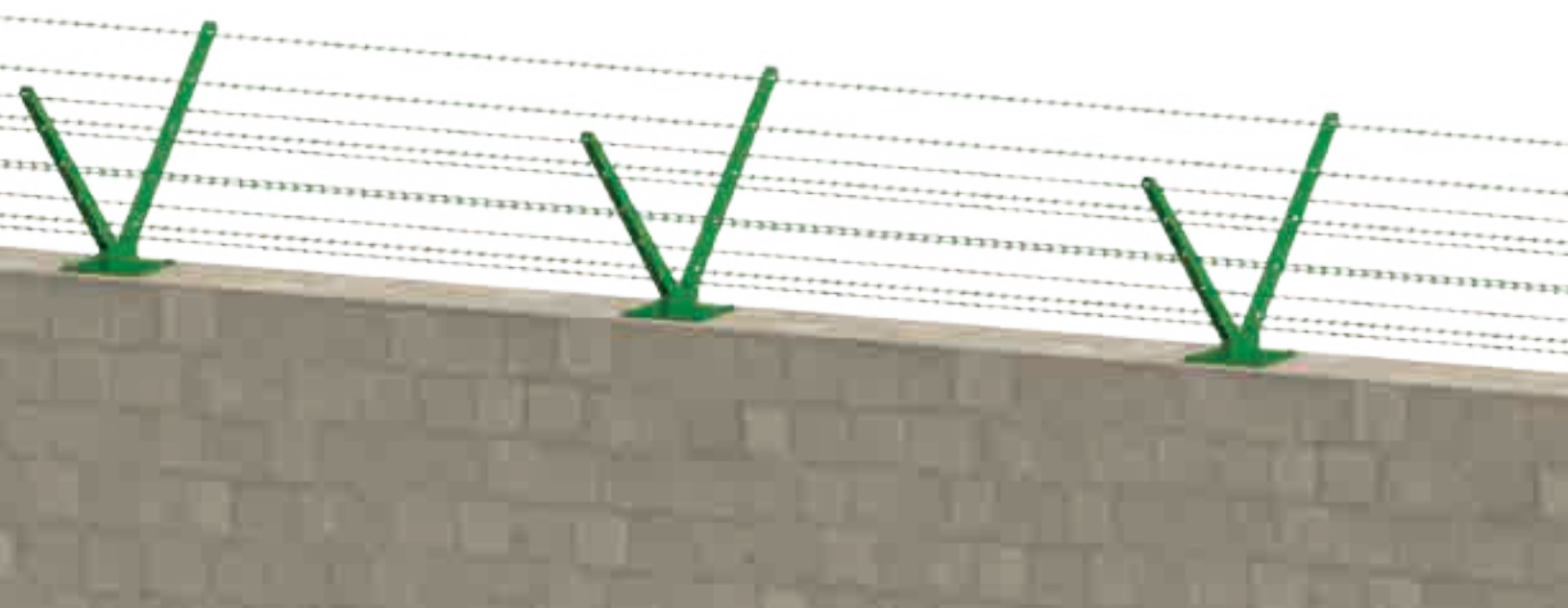
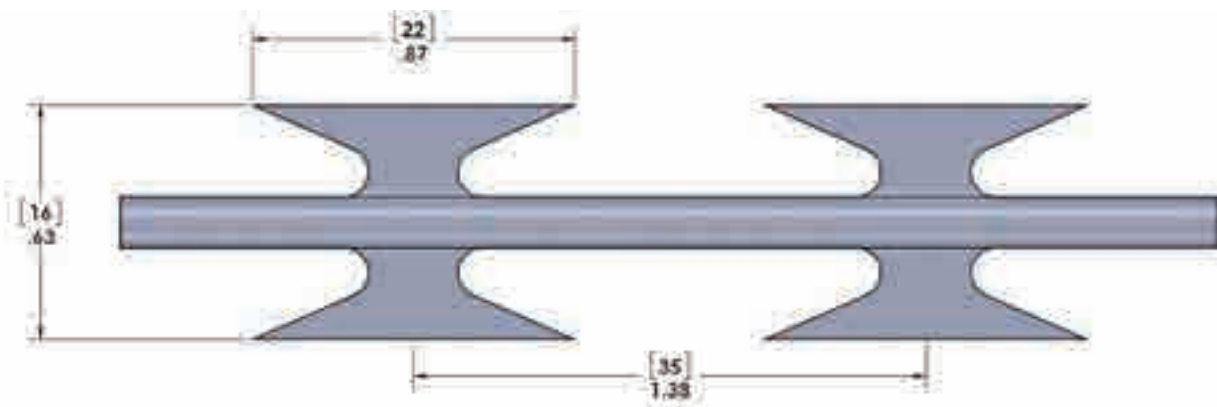
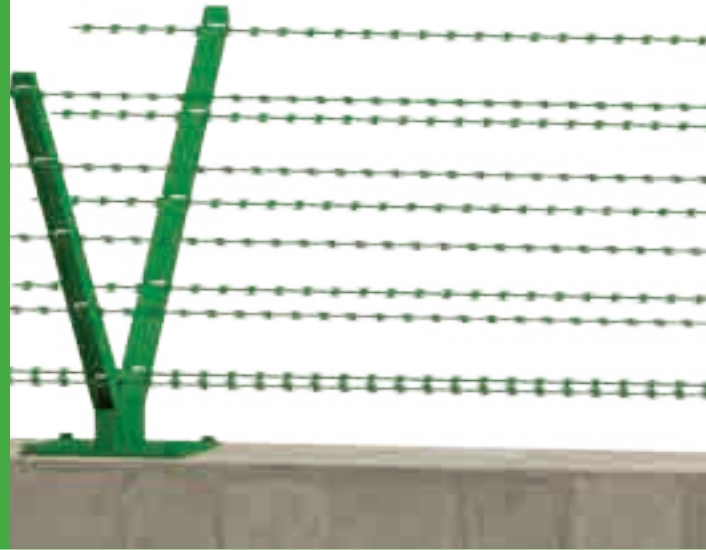


Features

- Developed for applications requiring NATO compliance as it is the most specified in the UK and European countries
- Exceptional Quality – Like all Razor-Ribbon products, NATO-22 is manufactured out of high-quality/high-strength stainless or galvanized steel meeting all European standards and specifications
- Countless Configurations – NATO-22 barbed tape comes in more standard diameter/loops/clips configurations than any other Razor-Ribbon product
- Versatile – The NATO-22 barb is available on all Razor-Ribbon products
- Available powder coated color
- Made in USA. Complies with Buy America Act

Features

- Anti-climb barrier
- Deterrent and delay wire solution
- Aesthetically pleasing powder coat finish available for added corrosion protection
- Made in USA. Complies with Buy America Act
- Razor Strand - NATO-22 barb shown (available in any barb type)
- Y-Arm - Barb arms welded to base, can be configured with 3 strand or 5 strand





Razor-Ribbon® Fence Pickets

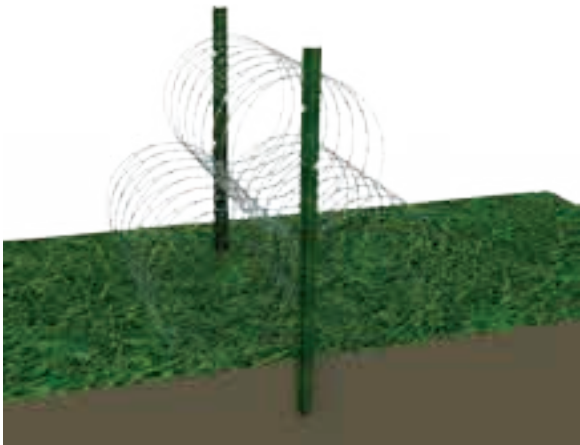
Razor-Ribbon® fence pickets are designed for the rapid installation of a security perimeter. After the post is driven into the ground, barbed wire is inserted into the built-in slots along the length of the perimeter. This system can either stand alone or be augmented with the addition of BTC barbed tape concertina attached to the barbed wire when needed.

The fence picket is constructed from steel conforming to ASTM A1011, producing a yield strength of 50,000 psi (345 MPa), and complies with federal specifications and GSA guidelines for fence post, drive type, and spadeless.

The posts, depending on length, have alternating slots on each side every 9" (229mm) to accommodate strands of barbed wire. The post width is approximately 3" (76mm) and can be ordered in a variety of lengths ranging from 32" to 96" (81cm to 244cm).

The standard exterior color is forest green with additional colors and/or galvanization available upon request.

Refer to military specification A-A-55523 for additional information.



Razor-Ribbon® Fence Pickets

NSN	Length		Width		Slots
	(in)	(mm)	(in)	(mm)	
5660-00-270-1589	32	813	3	76	2
5660-00-270-1587	60	1524	3	76	4
5660-00-270-1510	72	1829	3	76	4
5660-00-262-9914	96	2438	3	76	5



Security Level	Product Name	Diameter		Loops	Clips	Loop Spacing		Length Per Roll		Weight Per Roll	
		(in)	(mm)			(in)	(mm)	(ft)	(m)	(lb)	(kg)
Military (Any Level)	BTC Barbed Tape <small>Short or Medium Barb Medium available offset</small>	18	450	56	3	16	406	37	11	17	8
		28	720	56	3	21	533	50	15	26	12
		36	900	50	5	24	600	50	15	30	14
		38	965	56	5	21	533	50	15	35	16
		40	1000	56	5	21	533	50	15	37	17
Military (Any Level)	BTC NATO-22 Barbed Tape <small>BTC NATO Barb Available offset</small>	18	450	56	3	16	406	36	11	17	8
		24	600	56	3	16	406	36	11	23	10
		28	720	56	3 (5)	21 (16)	533 (406)	50 (36)	15 (11)	27	12
		30	750	56	5	21	533	50	15	28	13
		36	900	56	5	21	533	50	15	34	16
		38	980	56	5 (7)	21 (6)	533 (150)	50 (14)	15 (4.3)	36	16
		40	1000	56	5	21	533	50	15	38	17
Minimum (Low Level)	Razor-Ribbon® Helical <small>Long Barb (Standard) Short, Medium, BTC NATO-22 or Detainer Hook available Long, Medium and BTC NATO-22 available offset</small>	18	450	33	-	18	450	50	15	14	6
		24	600	33	-	18	450	50	15	18	8
		30	750	33	-	18	450	50	15	23	10
		36	900	33	-	18	450	50	15	28	12
Minimum to Maximum	Maze® <small>Long Barb Available offset</small>	18	450	31	3	12	300	15	4.5	13	6
		24	600	31	3	16	400	20	6	18	8
		30	750	31	3	16	400	20	6	22	10
		36	900	31	3	16	400	20	6	26	12
		18/24	450/600	31/31	3	12	300	15	4.5	31	14
		24/30	600/750	31/31	3	16	400	20	6	39	18
Maximum	Supermaze® <small>Long Barb Available offset</small>	30	750	51 (81)	5	12	300	25 (40)	7.5 (12)	36 (58)	16 (26)
		36	900	51 (81)	5	12	300	25 (40)	7.5 (12)	43 (69)	20 (31)
		40	1000	51 (81)	5	12	300	25 (40)	7.5 (12)	48 (77)	22 (35)
Maximum	NATO Barrier™ <small>Long Barb Available offset</small>	40	1000	51 (81)	7	12	300	25 (40)	7.5 (12)	49 (77)	22 (35)
		60	1500	51 (101)	9	12	300	25 (50)	7.5 (15)	73 (144)	33 (65)
Maximum	Detainer Hook® Barb <small>Detainer Hook Barb</small>	19	483	31	3	12	300	15	4.5	15	7
		25	635	31	3	16	400	20	6	20	9
		31	787	31 (51)	3 (5)	16 (12)	400 (300)	20 (25)	6 (7.5)	26 (42)	12 (19)
		37	940	51	5	12	300	25	7.5	51	23
		41	1041	51	7	12	300	25	7.5	57	26
		61	1549	81 (101)	9	12	300	40 (50)	12 (15)	135 (168)	61 (76)
Minimum to Maximum (Ground Barrier)	Instabarrier® (Non-Reinforced) <small>Instabarrier Barb</small>	24	600	101	3 welds	12	300	50	15	49	22
		30	750	101	5 welds	12	300	50	15	62	28
		40	1000	101	7 welds	12	300	50	15	82	37
		60	1500	101	13 welds	12	300	50	15	124	56

Rapid Deployment Units

Set, Deploy, And Secure In Seconds!



1.SET

Set the RDU in place using any vehicle with fork attachments. A trailer option is available.



2.STRETCH

Deploy the unit with a two man team. In as little as two minutes, a 480' (146 m) triple strand barrier can be in place.



3.SECURE

Anchor the supports in place.



The RDU is engineered to be retracted in 12-17 minutes with a two man team. Storable, compact, and reusable.

Triple Strand Rapid Deployment

- US Patent No. 7,909,309 B2
- Economical, simple, and reusable rapid deployment system
- Capacity to deploy 480' (146m) of Razor-Ribbon® in just minutes
- Eliminates the need for a large crew working hours in the field, and the potential hazards that go with it
- Only requires two people to deploy
- Consists of a stack of one (1) 60" (1500mm) barbed tape coil on top of two (2) 30" (750mm) barbed tape coils
- Various coil diameter options available
- Package size is 90" (2250mm) high by 62" (1575mm) wide
- Ship weight is 2,100 lbs. (950 kg)
- Standard configuration: short barb with galvanized tape and high tensile galvanized core (military BTC)
- Coils fastened together in an alternate loop arrangement to minimize any intrusion attempts
- Can be customized with any of the full line of Razor-Ribbon® barbed tape products including our Detainer Hook® barb
- Easily integrated with intrusion sensing equipment



Uses: military, police, municipalities, commercial/ industrial security integrators with instant physical perimeter protection

Triple Strand Rapid Deployment Unit - US Patent No. 7,909,309 B2

NSN	Description	Diameter		Height		Width		Yield		Weight	
		(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)	(lb)	(kg)
5660-01-537-7956	Triple Strand RDU with Magazine	(2)-30" (1)-60"	(2)-750mm (1)-1500mm	90	2250	62	1575	480	146	2200	998
5660-01-537-7957	Triple Strand RDU without Magazine	(2)-30" (1)-60"	(2)-750mm (1)-1500mm	90	2250	62	1575	480	146	1900	862

Six-Pack RDU

- A greater level of security in height and Razor-Ribbon® compared to the Triple Strand Rapid Deployment Unit
- Designed to quickly deploy for emerging threats
- Capacity to deploy 247' (75m) of Razor-Ribbon® in just minutes
- Various coil diameter options available
- Recovered manually using only 2-3 people in approximately 20 minutes
- Utilized as a temporary or permanent barrier
- Comes preassembled and stacked in a pyramid configuration on a magazine
- Magazines can be deployed quickly and efficiently by most vehicles with towing capability
- Eliminates the need for a large crew working hours in the field and any potential hazards that go with it
- Standard with Razor-Ribbon® short barb material galvanized or stainless (other barb options available)

Uses: military, police, municipalities, commercial/ industrial security integrators with instant physical perimeter protection



Six-Pack Rapid Deployment Unit

NSN	Description	Diameter		Height		Width		Yield		Weight	
		(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)	(lb)	(kg)
-	Six-Pack RDU with Magazine	(6)-24	(6)-600	66	1675	74	1880	247	75	2400	1089
-	Six-Pack RDU without Magazine	(6)-24	(6)-600	66	1675	74	1880	247	75	1958	888

Rapid Deployment Unit Trailers

BTC Express Trailer

Features

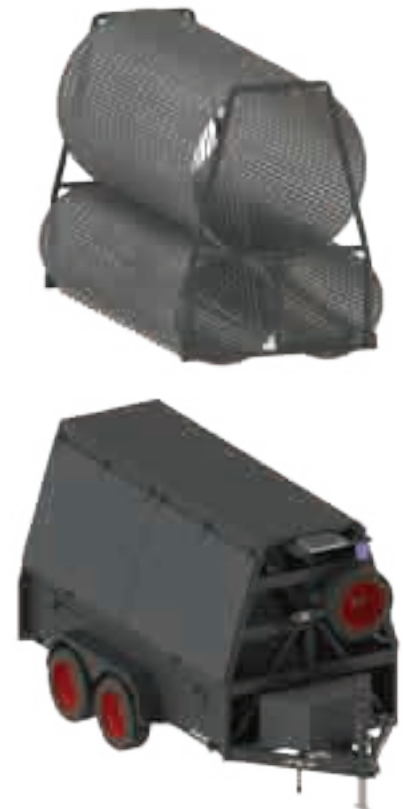
- Patented design
- Versatile and economical rapid deployment system
- Designed for use in difficult terrains where forklifts can't be used to deploy a Triple-Strand Rapid Deployment Unit
- Compatible with any vehicle equipped with a standard hitch
- Trailer dimensions – 12.5' (3.8m) L x 7.3' (2.2m) W x 7' (2.1m) H approx.
- Trailer features – 4,000lb (1800kg) capacity, 6' (1.8m) long forks (fixed or adjustable), 5' (1.5m) width capacity, Hydraulic controls, Powder coat finish (customizable)
- Razor barrier dimensions – 500' (150m) L x 4.6' (1.4m) W x 6' (1.8m) H
- Triple-Strand Razor Wire Barrier (customizable)
- Made in USA. Complies with Buy America Act



Rapid Deployment Unit (RDU) Covered Trailer

Features

- Patented design
- 3-pack RDU barrier housed in a covered trailer capable of deploying up to 500' (150m) in 30 seconds
- Reusable barrier – Coils can be loaded back onto the trailer and ready for redeployment in under 10 minutes
- RDU can be deployed as a temporary or permanent barrier for emerging threats
- Available in various lengths, barb styles, and configurations in stainless steel or galvanized steel
- RDU can be custom designed to fit customer's security needs
- Approved and used by the U.S. Department of Defense and other government agencies
- Made in USA. Complies with Buy America Act



Fast Deployment

- Deploys in seconds providing rapid construction of controlled, limited and exclusion areas
- Appropriate as a temporary or permanent barrier for emerging threats
- Deploys coils stacked in pyramid fashion (available in 3 coil stack or 6 coil stack) quickly and efficiently
- Capacity to deploy 480-500' (146-152m) of Razor-Ribbon® in seconds
- Deploys with as few as two people and removes the potentially hazardous conditions associated with field installation of barbed tape coils
- Retracts quickly and efficiently for reuse
- Works in various road conditions and best used in difficult terrains, based on the level of security required
- Available in various lengths, barb styles, and configurations in galvanized or stainless steel
- Meets any level of security requirements
- Manufactured in Hebron, Ohio



Additional Specifications

- Trailer Info
 - Double axle trailer (no base vehicle included)
 - 4-wheel type
 - Spring suspension
 - Trailer overall width - 87.5" (222cm)
 - Trailer overall length - 186.0" (472cm)
 - Trailer overall height - 96.0" (244cm)
- Fully loaded weight - 5,000lbs (2,270kg)
- 3,500lb (1,590kg) winch
- Solar panel
- Tool box - fully loaded w/ deploy and retrieval tools
- Heavy duty metal doors



RDU Hat Box

- Visual and physical deterrent
- Passive non-lethal countermeasure
- Freeboard deck and onboard barrier
- Multiple methods of deployment
- Rapidly deploy Instabarrier® in hallways, stairwells, entrances and exit areas, etc
- Quickly recovered for repeated use
- Used both indoors and outdoors
- All of the materials and tools are included for immediate use



Uses: riot control, crowd control (impedes movement on stairways, corridors, sidewalks and streets, etc.) INS facilities, courthouses, military and police - use in varying climates and terrain conditions

Hatbox Rapid Deployment Unit

NSN	Description	Diameter		Coil Loops	Strip Material	Cable	Welds	Yield		Pkg.
		(in)	(mm)					(ft)	(m)	
5660-01-495-6421	Single Coil Concertina Rapid Deployment	30	750	101	SS	1	5	50	15	1/Box

Barbless RDU

- The barbless RDU has the same construction as the traditional triple strand rapid deployment unit but without any barbs to prevent any harm
- Dimensional barrier and visual deterrent
- Can be used for signage and advertising
- Permanent installations are appropriate but it is also adaptable to traveling venues as a visual barrier to control crowds



Uses: agricultural, school events, crowd control barriers, instant physical perimeter deterrent



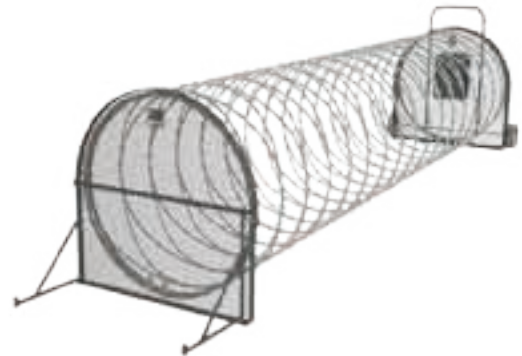
Features

- Patent pending design provides rapid barrier for controlled, limited and exclusion areas
- Appropriate as a temporary or permanent barrier for emerging threats
- Deploys up to 75 feet (22.8m) of barbless tape or non-reinforced Instabarrier® barbed tape in under 30 seconds
- Deploys and retracts quickly and efficiently for reuse by a single person
- Removes the potentially hazardous conditions associated with field installation of coils
- Rugged design features heavy duty wheels, hot-dip galvanized panels and powder coat finish make the unit suitable for deployment in differing climates and terrain
- Lightweight, high strength and modular allowing multiple units to be easily tied together forming one continuous barrier
- Made in USA. Complies with Buy America Act

Instabox with Barbless Coil



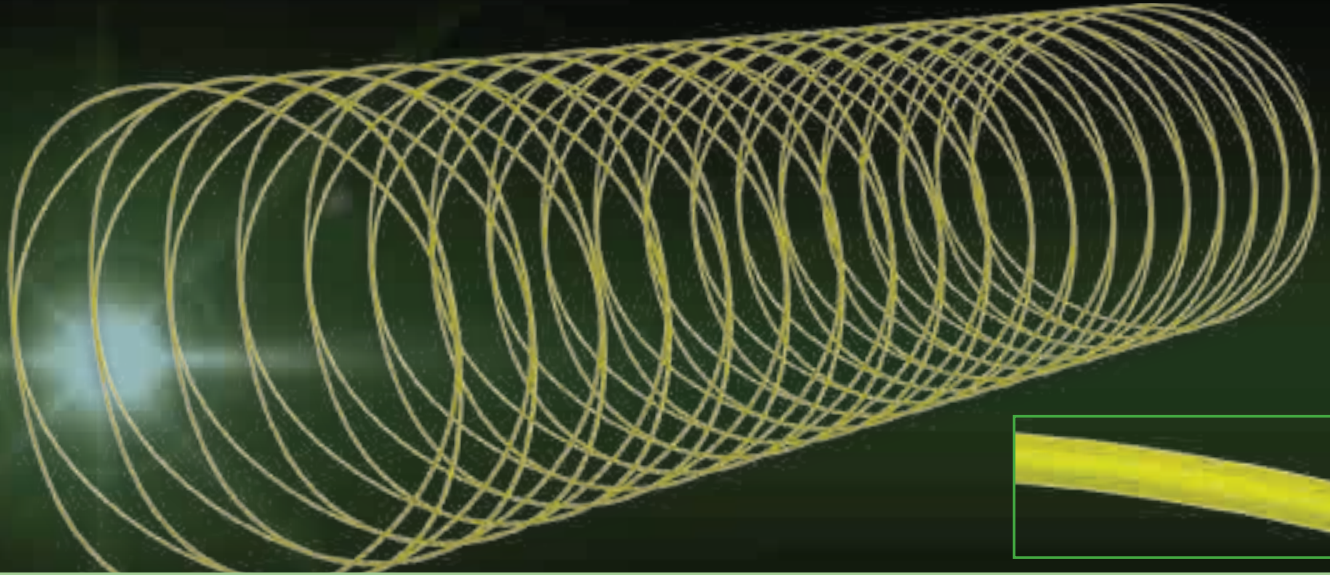
Instabox with Instabarrier® Coil



Diameter		Coil Loops	Clips	Loop Spacing		Yield	
(in)	(mm)			(in)	(mm)	(ft)	(m)
30	762	71	3	16	406	47	14
48	1219	71	5	12	305	35	11
48	1219	101	5	12	305	50	15
60	1524	71	7	12	305	35	11

Diameter		Coil Loops	Strip Material	Cable	Welds	Yield	
(in)	(mm)					(ft)	(m)
30	762	101	SS	1	5	50	15
30	762	151	SS	1	5	75	23
48	1219	151	SS	1	9	75	23
60	1524	101	SS	1	13	50	15

Barbless coils available powder coated for added visibility



Barbless Concertina Coils are specifically designed as a deterrent against intrusion while eliminating any danger associated with sharpness of razor wire. With its quick and easy deployment, the Barbless Concertina Coils instantly create a safe and effective protective barrier.

Features & Benefits

- Rigid - Reinforced concertina coil manufactured from galvanized or stainless steel material
- Delay Barrier - Physical barrier that deters intrusion
- Entanglement - Entangles intruders when they try to surpass the barrier
- Protective - Ideal solution for low level security applications
- Harmless - Smooth profile means no cuts and no harm, even when touched with bare hands
- Safe - Can be deployed and retrieved without the use of personal protective equipment



Available in various sizes and colors

Uses

Asset protection, summits, crowd control barriers, public venues, retail, events and other instant physical perimeter deterrent applications

Made in Hebron, Ohio U.S.A.

Barbless Concertina Coil

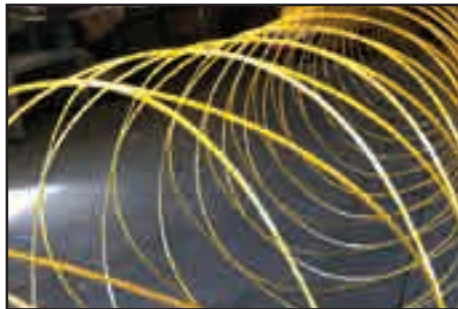


Diameter		Coil Loops	Clips	Loop Spacing		Yield	
(in)	(mm)			(in)	(mm)	(ft)	(m)
18	450	71	3	12	305	35	11
24	600	71	3	16	406	47	14
30	750	71	3	16	406	47	14
36	900	71	3	16	406	47	14
40	1000	71 (101)	5	12	305	35 (50)	11 (15)
48	1200	71 (101)	5	12	305	35 (50)	11 (15)
60	1500	71	7	12	305	35	11

Different Forms Available for Different Applications



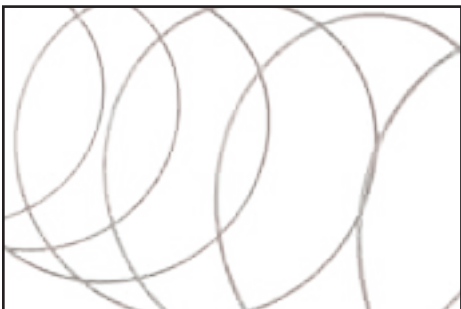
Rapid Deployment Unit (RDU)



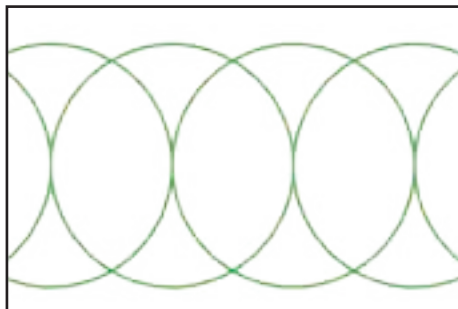
Barbless Concertina



Instabox Portable RDU



Helical



Flat Barbless Wrap



Panel w/Flat Barbless Wrap

Enhanced Security Solutions

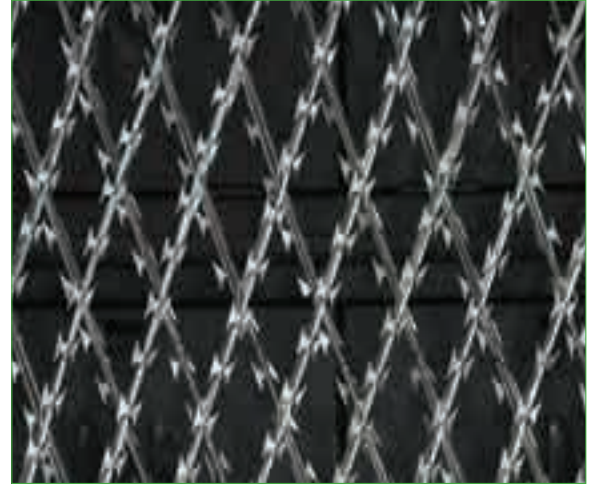
Deter, Delay, Protect



Razor Mesh Panel

Razor Ribbon's new Razor Mesh Panel is the FIRST line of defense to secure a perimeter, from medium to high, to ultra-high security fencing.

- Expanded metal panel with strands of Razor-Ribbon® secured on the panel
- Can be attached to any fence framework for added protection
- Imposing physical deterrent designed to keep you safe
- Anti-climb properties with small openings filled with razors
- Available in galvanized or stainless steel
- Corrosion-resistant
- 72% open with razors
- Easy installation - installs more accurately without waste, dragging, or overlapping
- Can be installed new or as a retro-fit over current chain link fence or chain link fence framework
- Fittings are some of the strongest in the industry and can be locked with breakaway nuts and bolts for added security



Size Offerings

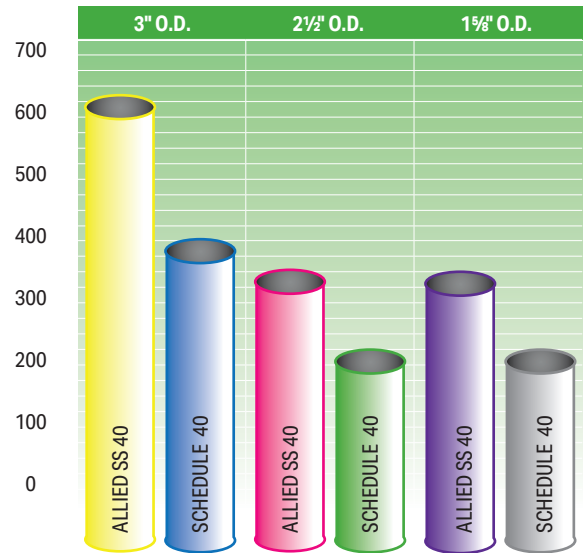
- Panel width: 4 ft (122cm), or 5 ft (152cm)
- Panel height: 6 ft (183 cm), 8 ft (244 cm), 10 ft (305 cm), or 12 ft (366 cm)
- Diamond size: 2" x 6" (51mm x 152mm) with options of 3" x 6" (76mm x 152mm), and 1" x 2" (25mm x 51mm)

Uses: airport, utilities, refineries, nuclear, energy, etc.

SS-40 Fence Framework

SS-40 is manufactured with cold-formed steel which provides high yield and tensile strength, followed by a uniform triple layer of corrosion protection. The coating consists of zinc, a conversion coating, and a clear organic top coat applied in-line by the patented continuous Flo-Coat® process from Allied Tube & Conduit®.

Bending Strength Comparison SS 40 vs Schedule 40



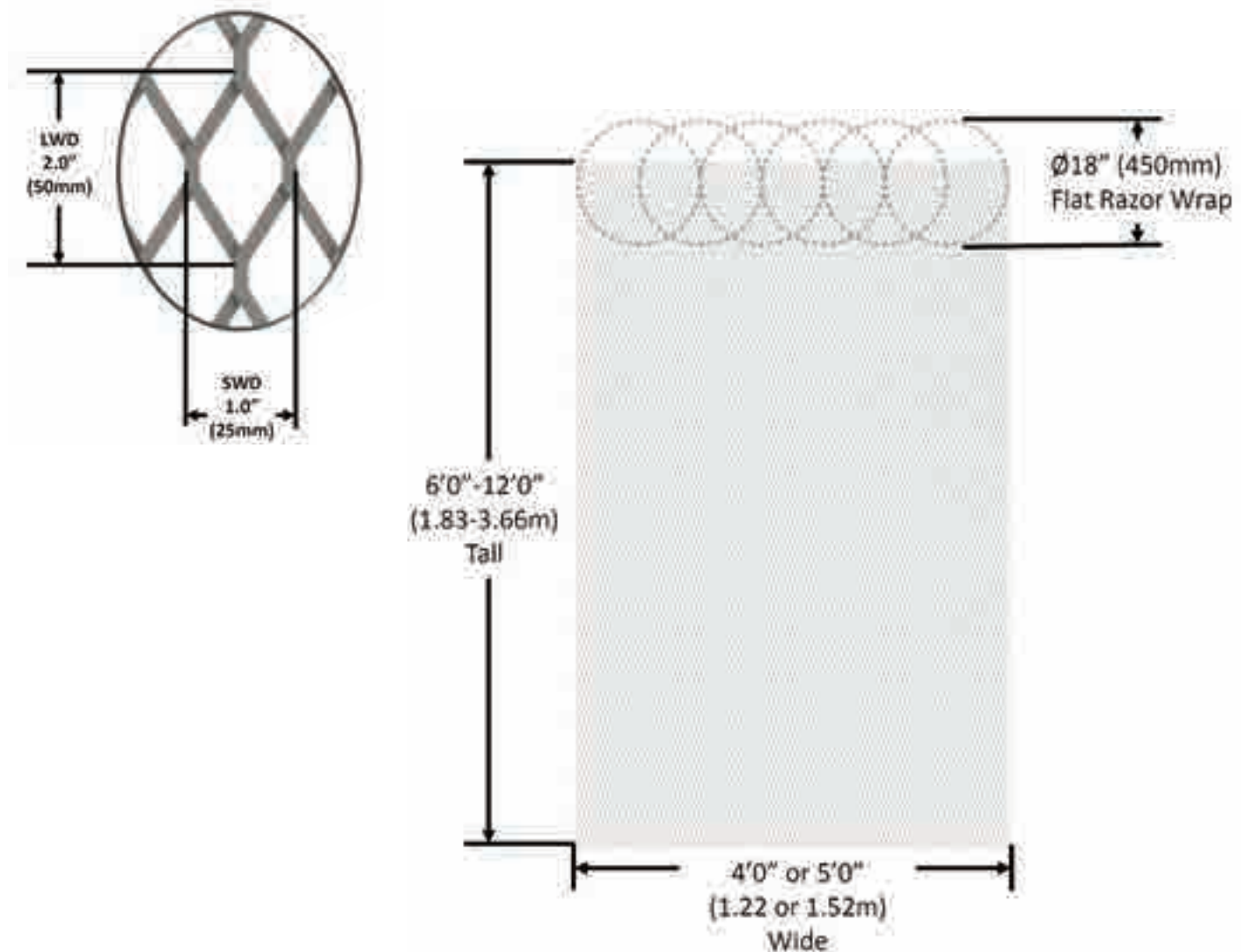
Test results are based on 6 foot cantilevered beam test and 10 foot free-supported beam test.

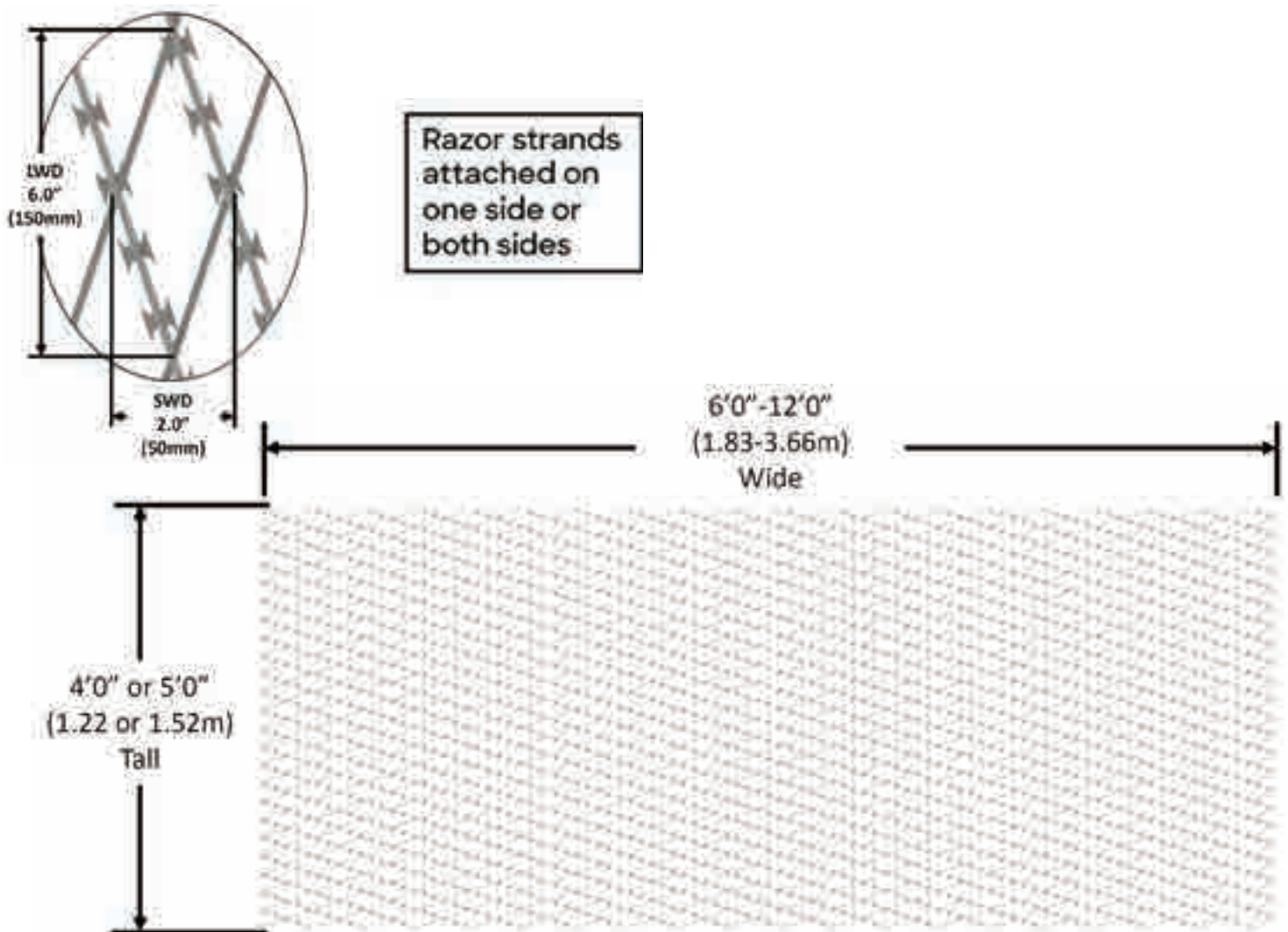
SS-40 Pipe Sizes

Fence Industry	Decimal O.D. Equivalent		Pipe Wall Thickness		Weight		Selection Modulus	Min. Yield Strength	Max Bending Moment	Calculated Load		
	(in)	(mm)	(in)	(mm)	(lb/ft)	(kg/m)				10' Free Supported	Cantilever	
O.D.	(in)	(mm)	(in)	(mm)	(lb/ft)	(kg/m)	(in³)	(psi)	(lb/in)	(lb)	4'	6'
1 3/8	1.315	33.40	.104	2.64	1.35	2.01	.1111	x 50,000	= 5555	185	116	77
1 1/2	1.660	42.16	.111	2.82	1.84	2.74	.1961	x 50,000	= 9805	327	204	136
2	1.900	48.26	.120	3.05	2.28	3.39	.2810	x 50,000	= 14050	468	293	195
2 1/2	2.375	60.33	.130	3.30	3.12	4.64	.4881	x 50,000	= 24405	814	508	339
3	2.875	73.03	.160	4.06	4.64	6.90	.8778	x 50,000	= 43890	1463	914	610
3 1/2	3.500	88.90	.160	4.06	5.71	8.50	1.3408	x 50,000	= 67040	2235	1397	931
4	4.000	101.60	.160	4.06	6.56	9.76	1.7819	x 50,000	= 89095	2970	1856	1237

Features

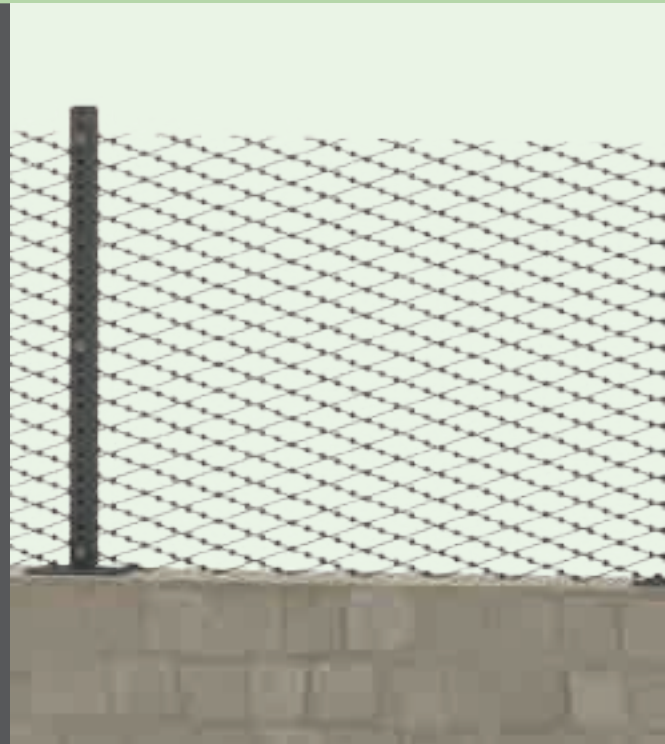
- FIRST line of defense to secure a perimeter
- DETER – Unmatched, imposing physical and psychological deterrent
- DELAY – Anti-cut / Anti-climb properties make it difficult to surpass
- PROTECT – Physical barrier designed to deter and delay attacks keeping your assets protected
- Panels can be installed as standalone or easily integrated with any existing fence framework
- Can be mounted horizontally or vertically
- Made in USA. Complies with Buy America Act



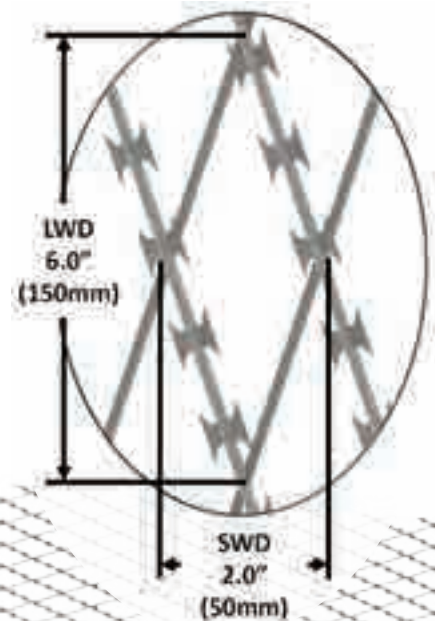


Features

- FIRST line of defense to secure a perimeter
- DETER – Unmatched, imposing physical and psychological deterrent
- DELAY – Anti-cut / Anti-climb properties make it difficult to surpass
- PROTECT – Physical barrier designed to deter and delay attacks keeping your assets protected
- Aesthetically pleasing powder coat finish available for added corrosion protection
- Made in USA. Complies with Buy America Act
- Panel Size – 3' to 5' H x 5' W (0.9m to 1.5m H x 1.5m W)



Razor strands
attached on
one side or
both sides



Razor Cage

- High-quality steel structure lined with Razor Mesh Panels for added security
- Cages can be used to store high value assets or house a pyramid of concertina coils
- Cages also available with a rapid deployment unit inside for expanded barrier protection

Uses: power plants, prisons, jails, above ground, below ground, and other customers with high-security application requirements



Razor-Ribbon® Razor Cage Applications

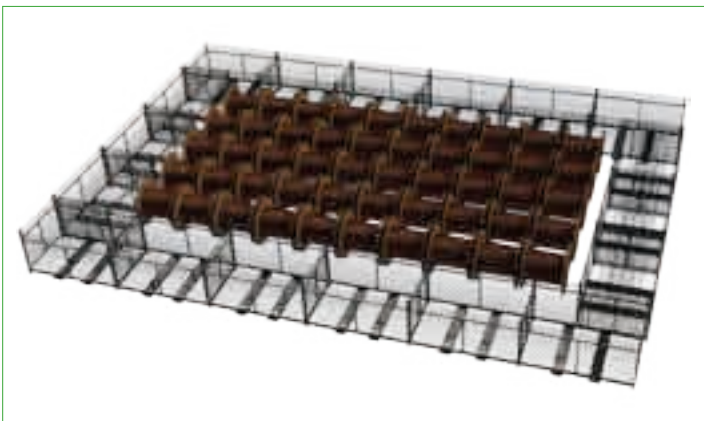
Razor Cage with swinging door for asset storage



Razor Cage with fold down door for asset storage



Razor Cage perimeter around assets



Razor Cage with Triple Strand Rapid Deployment Unit for gate and expanded barrier protection



Features

- Patented design protects a perimeter or an open space and restricts unauthorized vehicle access
- Available in hot-dip galvanized or stainless steel
- Easily moved and installed with a forklift
- Cage dimensions – 16' (4.9m) L x 6' (1.8m) W x 6' (1.8m) H (customizable)
- Specified as a permanent or temporary barrier
- Custom designed based on your security needs
- Ideal for utility or power plant applications
- Made in USA. Complies with Buy America Act

Colored Barbed Tape

Our color coded barbed tape can be easily integrated with your fence framework and perimeter security projects.

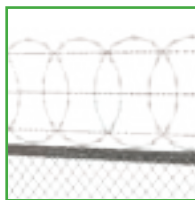
- Offers additional protection against corrosion in harsh environments such as maritime
- Comes in a variety of powder coated colors such as yellow, red, black, orange and army green
- Any industrial or commercial color can be matched



Razor-Ribbon® Single Loop

The single flat coils are regularly used in gate installations where traditional barbed tape is used.

- High security, flanged, wire reinforced loops in a single row
- Multiple diameters available
- Barbed tape and core available in galvanized and stainless steel
- Available in all barb styles



Razor-Ribbon® Single Loop (Flanged, Wire-Reinforced)

Diameter		# Loops	Overlap Spacing		Yield	
(in)	(mm)		(in)	(mm)	(ft)	(m)
18	450	100	6	150	50	15
24	600	75	8	200	50	15
30	750	60	10	250	50	15

Flat Razor Wrap

Flat wrap coils add additional security to traditional perimeter fence applications.

The flat razor wrap coils provide a neat but effective barrier when used together with mesh fences. Flat razor wrap coil installation is particularly simple when it is fitted by overlapping the fence mesh. It is an economical but effective barrier.



- High security, non-flanged, wire reinforced panels
- Multiple diameters available
- Barbed tape and core available in galvanized and stainless steel
- Available in short and medium barb

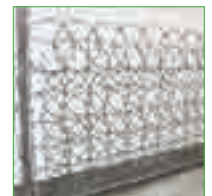
Razor-Ribbon® Flat Wrap (Non-Flanged, Wire-Reinforced)

Diameter		# Loops	Overlap Spacing		Yield	
(in)	(mm)		(in)	(mm)	(ft)	(m)
18	450	133	9	225	50	15
24	600	100	12	300	50	15
30	750	80	15	375	50	15

Razor-Ribbon® Flat Panels

High security, flanged, wire reinforced flat panels.

- High security, flanged, wire reinforced panels.
- Standard configuration is 18" (450mm) in diameter with 6" (150mm) overlap
- Barbed tape and core available in galvanized and stainless steel
- Available in 18", 24" and 30" diameters in all barb styles



Razor-Ribbon® Flat Panel (Flanged, Wire-Reinforced)

Panel Size	Height		Width	
	(in)	(mm)	(in)	(mm)
3-Loop Panel	34	864	120	3048
4-Loop Panel	44	1118	120	3048
5-Loop Panel	51	1295	120	3048
6 Loop Panel	60	1524	120	3048

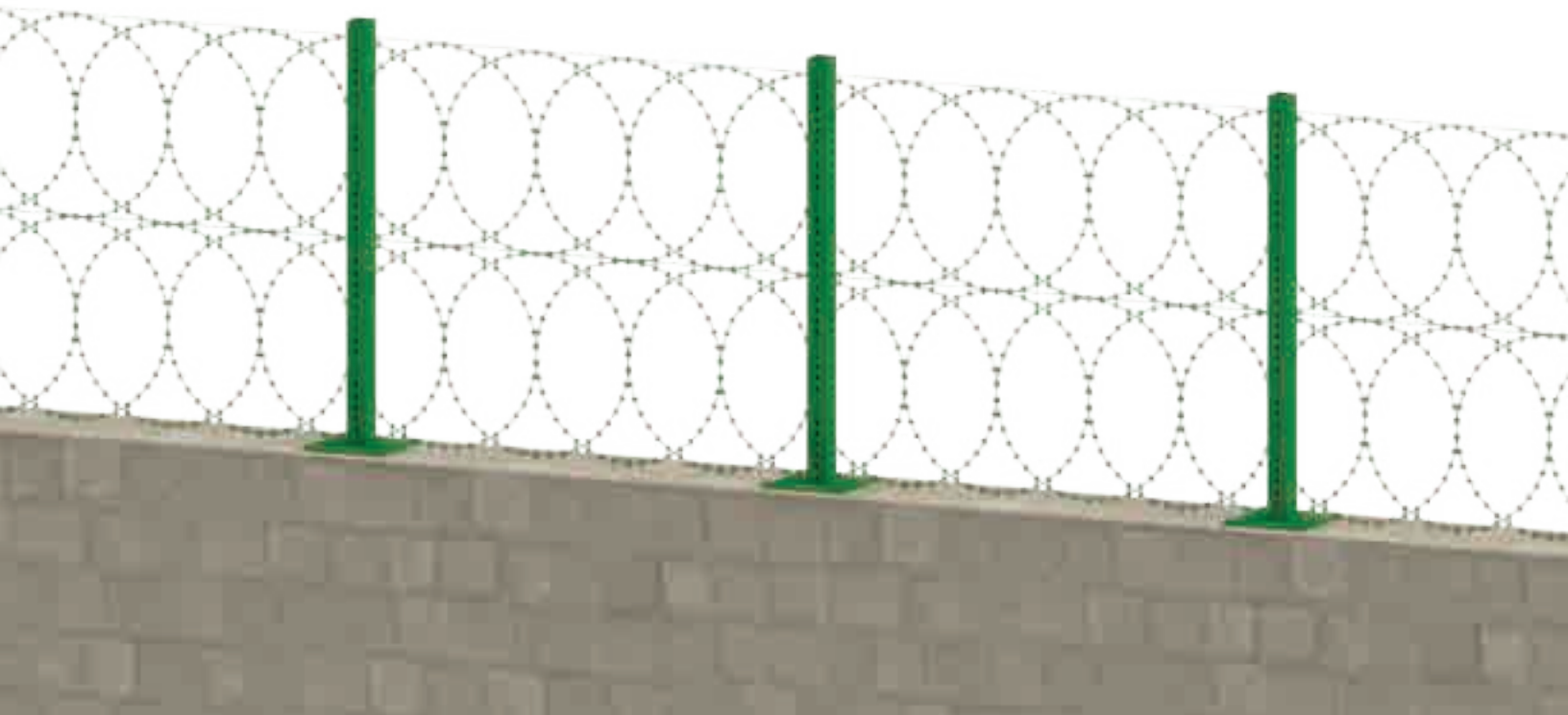
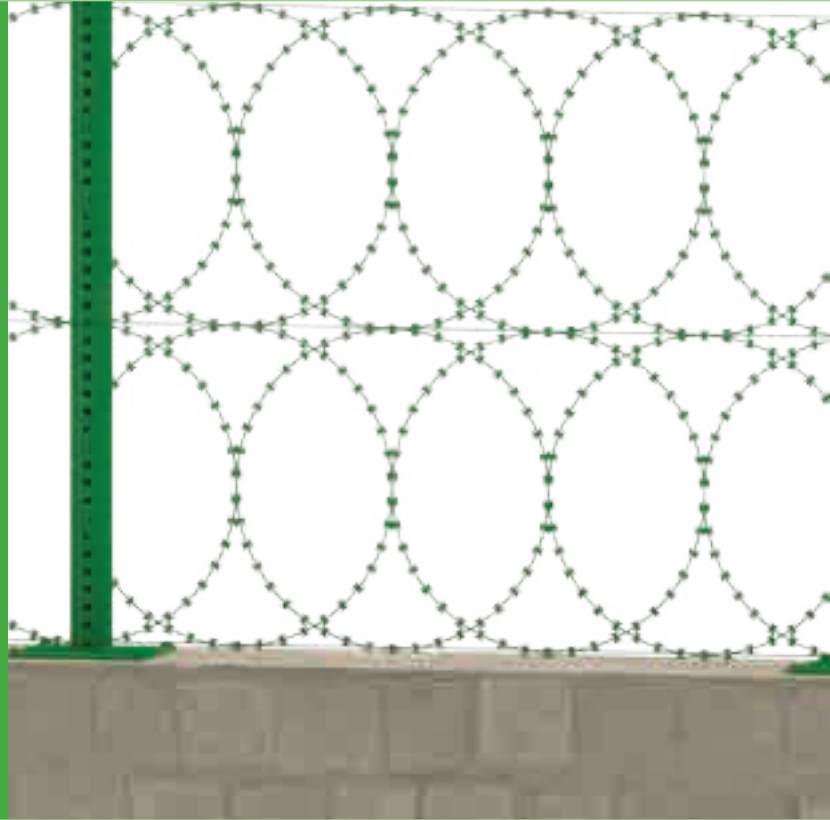
RR Flat Panel is available in all styles

Flat Razor Wrap Topper Double Coil

Atkore
Razor Ribbon

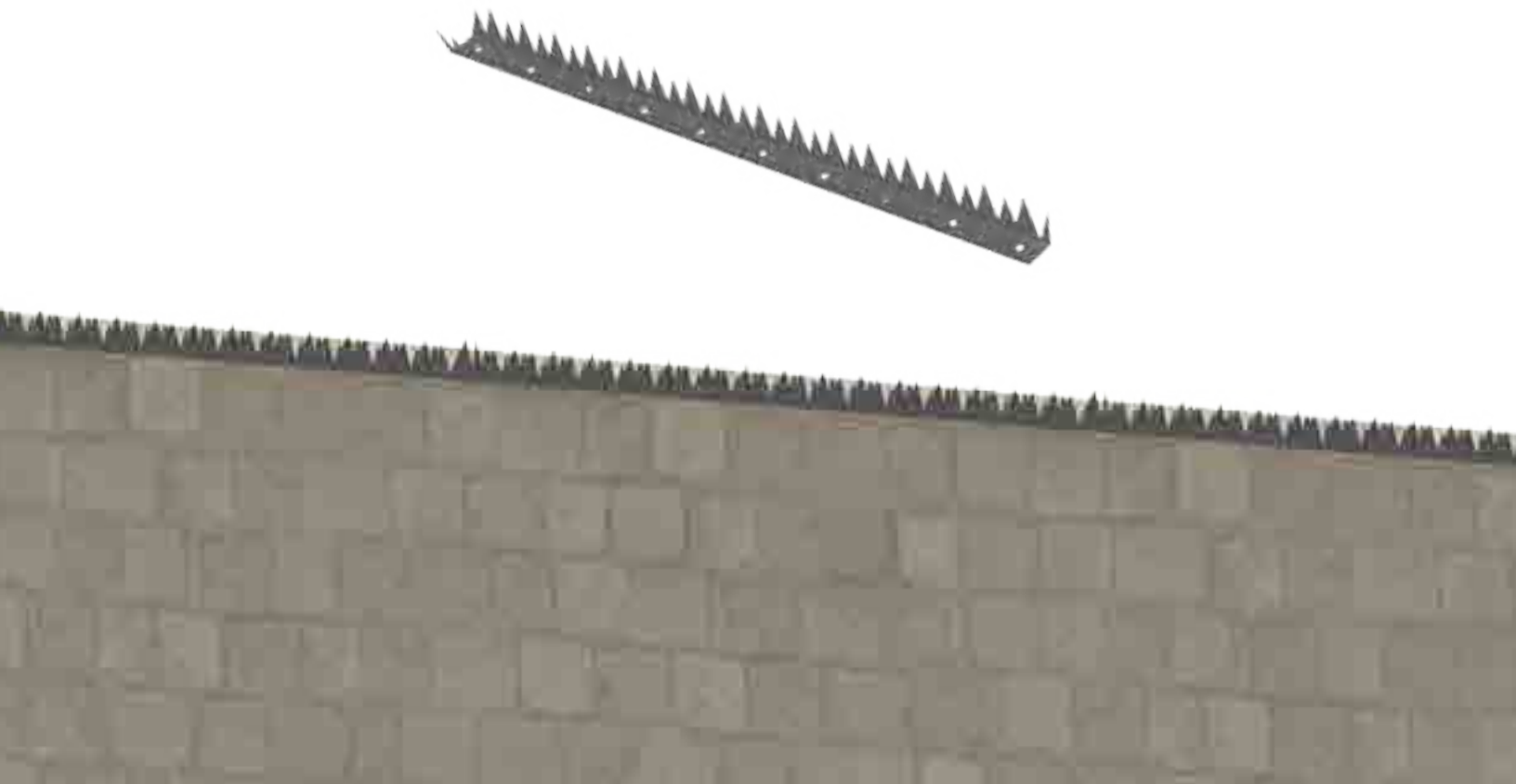
Features

- Psychological deterrence
- Aesthetically pleasing
- Perimeter security delay barrier
- Easily replaceable in case of damage
- Multiple rows of Flat Razor Wrap can be added
- Powder coat finish available for added corrosion protection
- Made in USA. Complies with Buy America Act
- Flat Razor Wrap - 18" to 24" (450mm to 600mm) diameter
- Post - Height varies based on diameter and number of rows used



Features

- Manufactured from 22 gauge high strength steel
- 2-1/2" (64mm) tall spikes
- 4ft (1.22m) long Razor Spike sections
- Mounting holes provided for easy attachment
- Can be mounted on top or front surface
- Aesthetically pleasing powder coat finish available for added corrosion protection
- Made in USA. Complies with Buy America Act



Sensor Clip

Razor-Ribbon® developed a new way to connect hanging sensor wire inside barbed tape without chaffing or setting off false alarms with the new Sensor Clip. The simplicity of the product design also allows for a quick and easy installation. The Razor-Ribbon® Sensor Clip, designed to detect, comes with a host of features and benefits:

- **Cost-Effective** – Only uses (1) fastener and a self-tapping screw that can be driven using a commercially available powered screw driver with magnetic tips. Other clamps considered for this application involved multiple pieces of connecting hardware (nuts and bolts).
- **Easy-to-Install** – The simple design allows the installer to drape the clip over the razor wire, freeing up a hand for easier installation.
- **Chain Link Fence Use** – The thickness of the clip matches the diameter of the wire used for chain link fences. The clip does not need barbed connectors to secure the clip as is used for connection to fence.
- **Flexible** – Works with any Razor-Ribbon® product.
- **Made in the USA** – We proudly manufacture our sensor clips in America.



Razor-Ribbon® Sensor Clip

Part Number	Description	Box Quantity
911780	Sensor Clip for securing the sensor cable to the Razor Wire	50

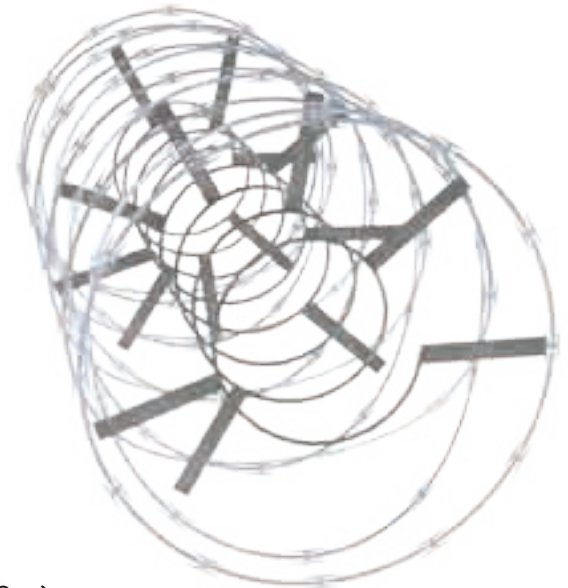


Razor-Ribbon® Sensored Coil

Razor-Ribbon® Model RRC-S 30 Sensored Coil is unique as it integrates a formidable physical barrier assembly with a high-performance detection system for attempted breach or compromise of security thresholds. This Perimeter Detection System (PDS) provides an advanced, high security solution which is flexible enough to be installed on open ground areas, buildings, walls, fences and roofs, without the need to resort to the wide and expensive mix of technologies normally proposed for such diverse applications.

This perimeter barrier with integrated detection system is suitable for use in most applications including open ground deployment and building protection.

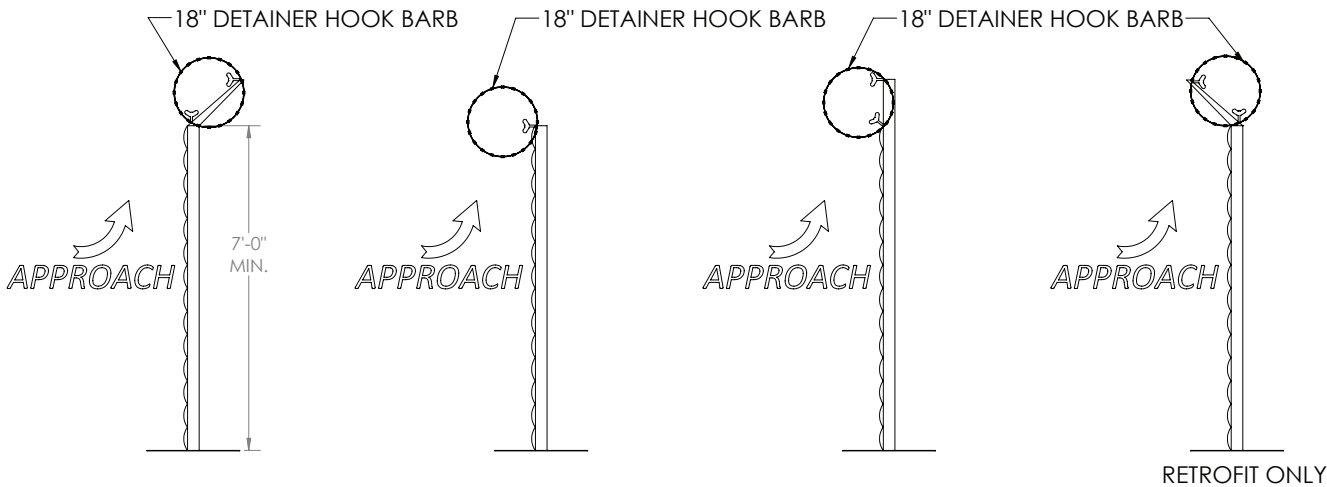
Uses: perimeters, fences, buildings, roofs, etc. and applications where detection is needed



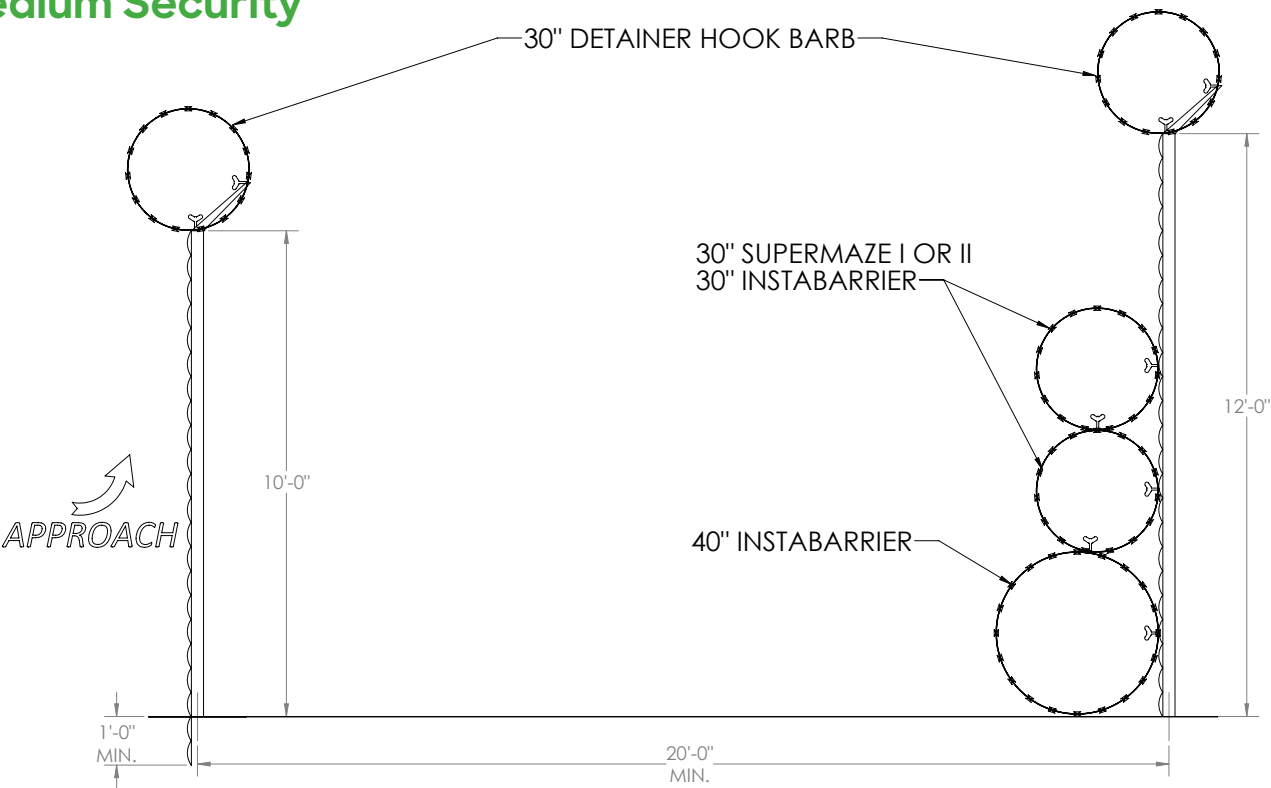
Zone Length	Fences: Recommended maximum 650 ft (200m) Buildings: Recommended maximum 800 ft (250m) Roofs: Recommended maximum 800 ft (250m)
Dimensions	Outside Diameter: 30" (750mm) Maximum Coil Length: 50 ft (15m)
Sensor Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Electro Magnetic Compatibility	Complies with the requirements of BS EN5081-1 and EN50082-1
Installation Maintenance	By Atkore approved personnel only
Inputs	Remote self-test
Outputs	Switchable relays between From A and From B
Contact Rating	Voltage 110V AC or 30V DC
Current	.03 Amps AC or 1.0 Amps DC Power - 30VA or 20W
Audio Monitoring	0 dBm into 600 ohms
Lightning Protection	Transformer isolation and transistor suppression diodes on sensor input. Sparks gaps on signal outputs.
Internal Indicators	Alarm and tamper relay status indicators. Events and climb indicator PCB fuse indicator, all indicators are LEDs.
Internal Control	Sensitivity: Two independent sensitivity controls. Event Timer: Selectable 1-9. Selectable in 30 second intervals. Range: 30-270 seconds.
Power Requirements	10-24V; 90mA at 12V, Reverse polarity and overvoltage protection with fused input as standard
Warranty	12 months from date of approved installation

Contact your sales representative for additional information.

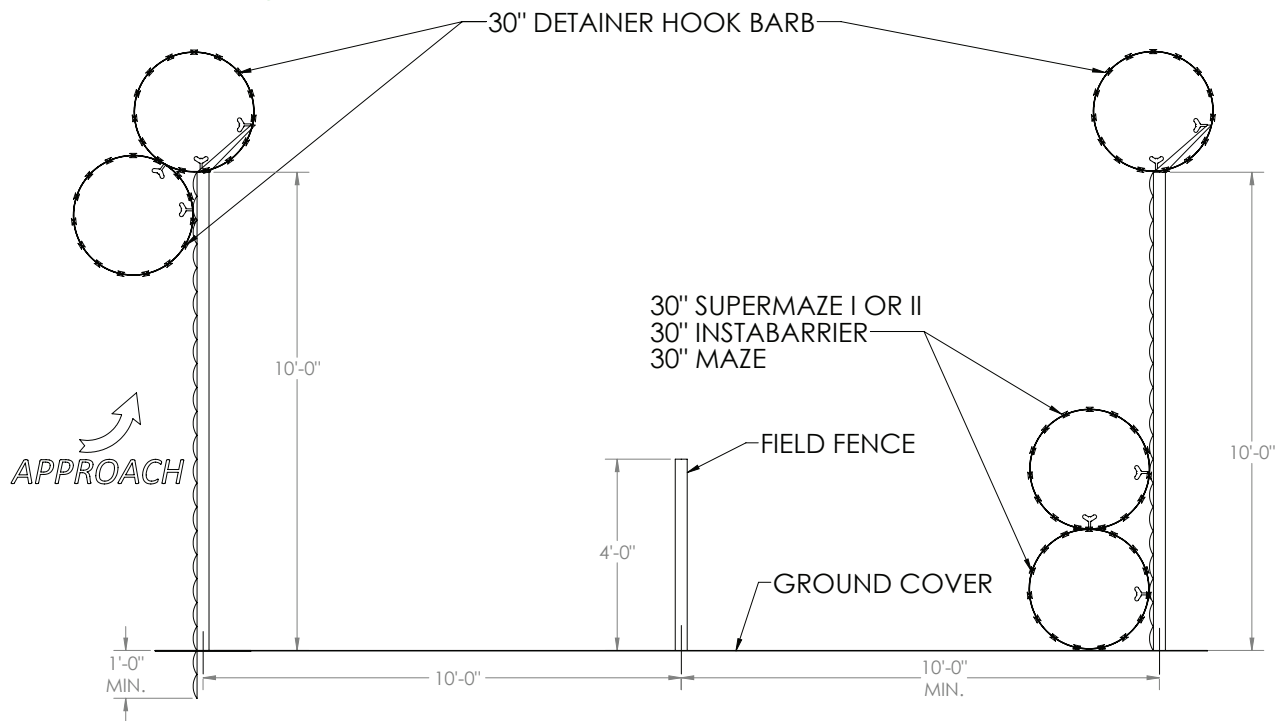
Industrial & Commercial



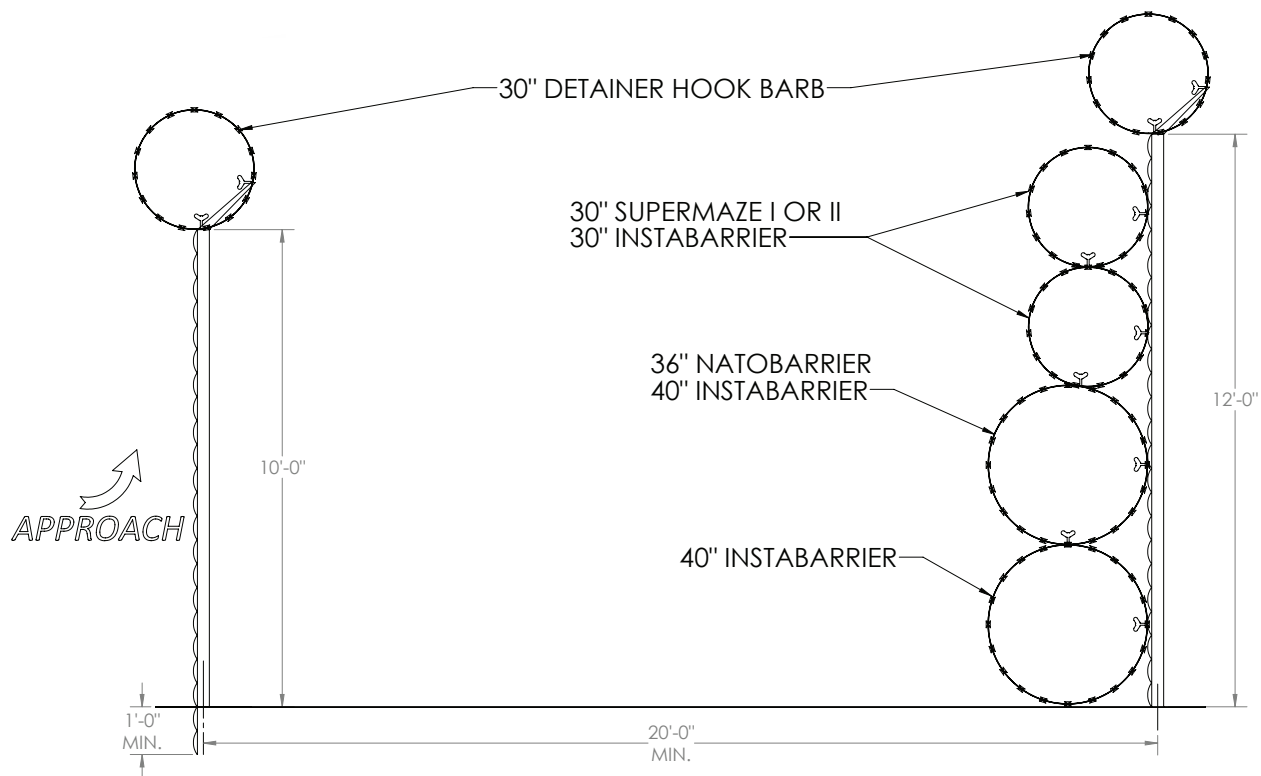
Medium Security

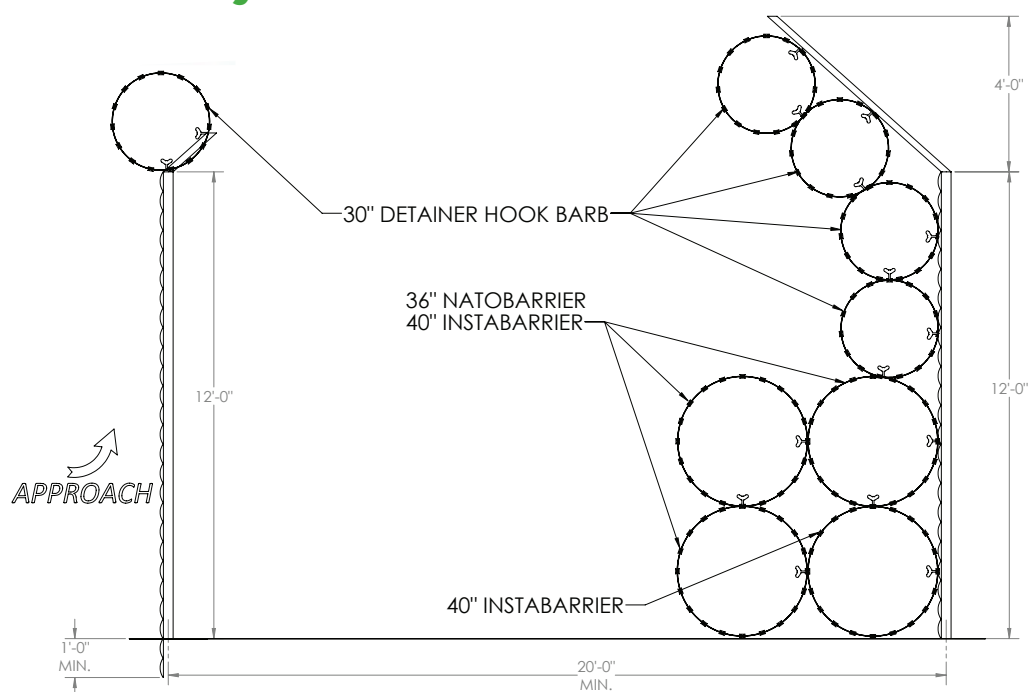
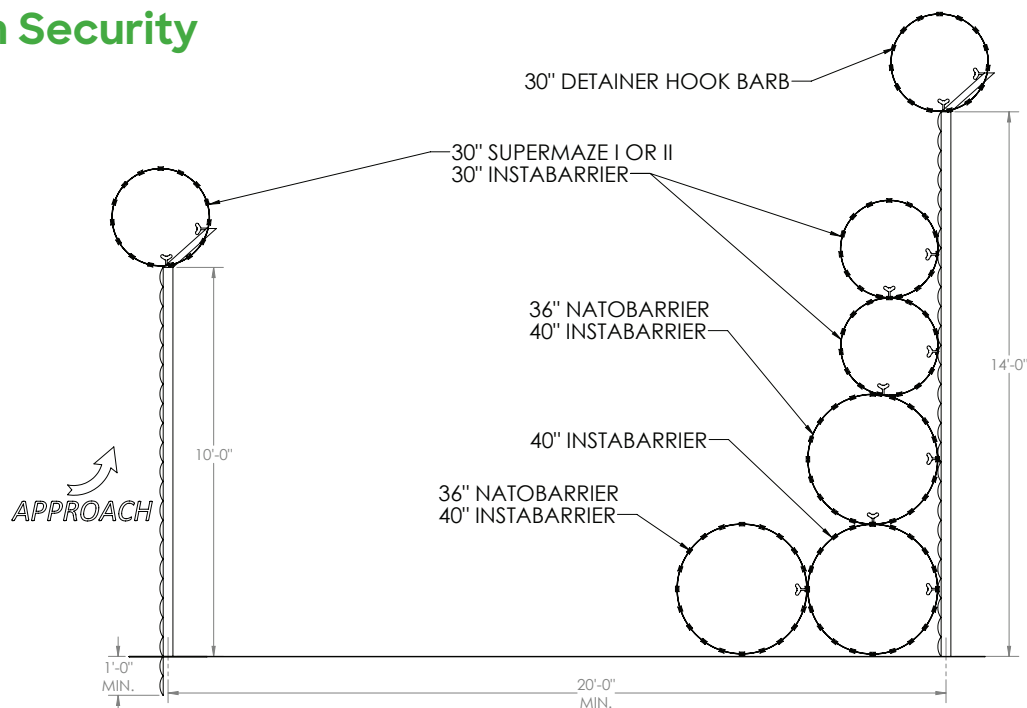


Minimum Security



Maximum Security





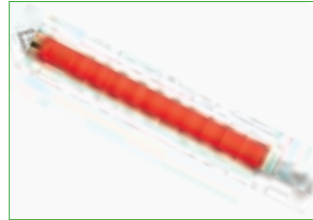
Hexarmor Gloves

These gloves were designed specifically for handling barbed tape products. These gloves are cut, puncture, and abrasion resistant.



Wire Tie Twist Tool

Used to twist wire ties in fence anchored installations.



Hog Rings

For fence anchored installations, Hog Rings are used to connect the barbed tape to the fence fabric. Available loose and in clips.



Arm/Sleeve Guard

Used to protect the installer, the arm/sleeve guard covers from the wrist to the shoulder.



Ground Stakes

Required to anchor ground based installations, usually positioned at 10 feet intervals.



Warning Signs

Used to alert unsuspecting persons of imminent danger.



Retro-Fit Bar Clamps

Used to connect overlapping mesh.



Hog Ring Pliers

Used to compress hog rings in fence anchored installations.



Retro-Fit C-Clamp

Used to connect mesh to line posts and rails.



Retro-Fit Band

Used to connect mesh to terminal posts. Available in various sizes for different post diameters 1" x 11ga HDG.



Wire Ties

Used to secure and anchor installations.



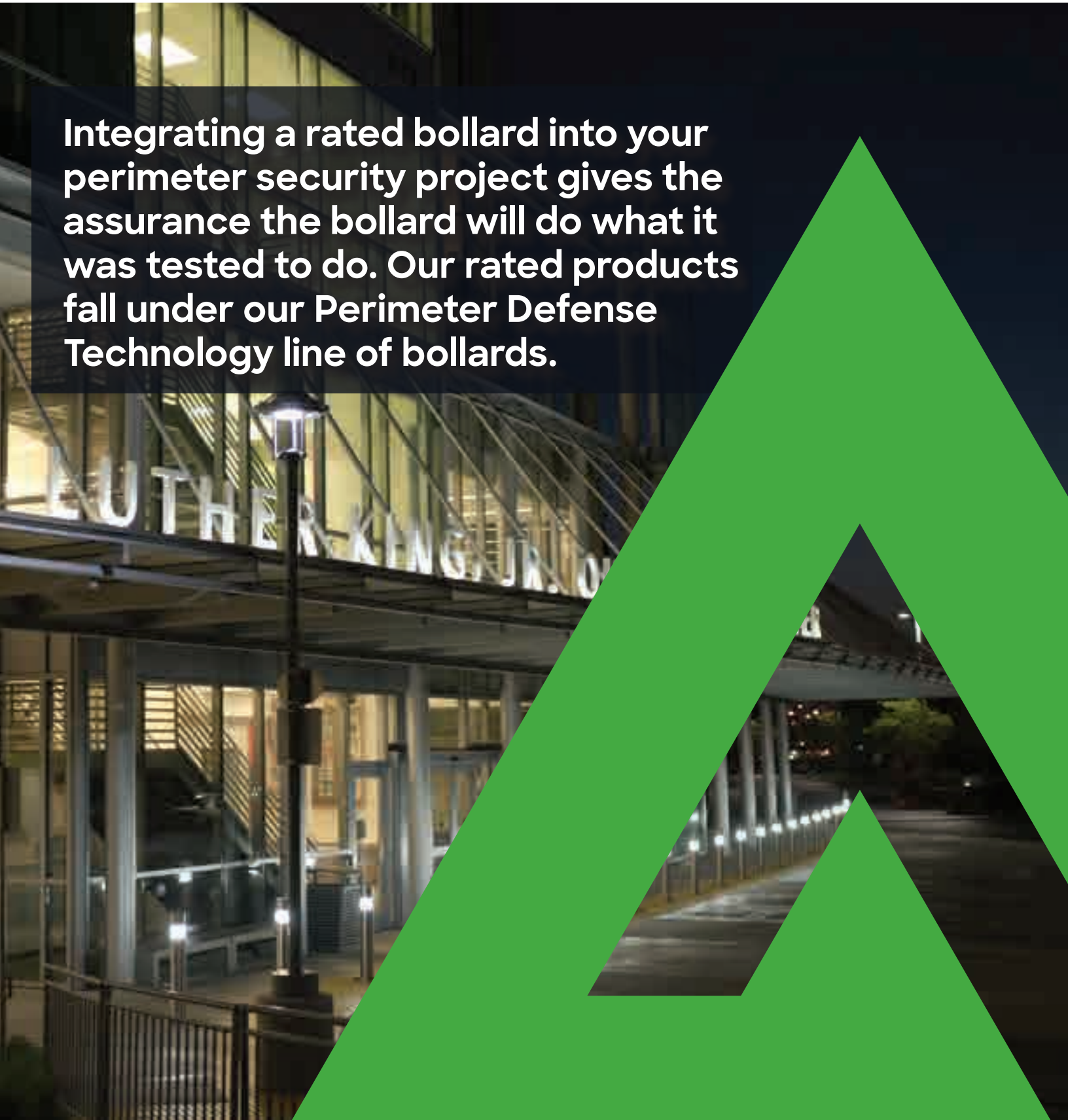
Carriage Bolts and Breakaway Nuts

Used with Retro-Fit clamps and bands.



Safety and Security Bollards

Integrating a rated bollard into your perimeter security project gives the assurance the bollard will do what it was tested to do. Our rated products fall under our Perimeter Defense Technology line of bollards.



Base Plate Bollards and Decorative Covers



Calpipe Security is proud to offer an industrial line of surface mounted base plate bollards manufactured from the highest quality ASTM A53 carbon steel or 300 series stainless steel. Base plate bollards come in a variety of diameters and offer a quick and easy bolt-down installation providing an affixed physical barrier as well as a vehicle deterrence.

Combined with Calpipe Security’s Heritage line of cast iron decorative covers, designers and planners are equipped with a broad range of base plate bollard choices that provide a traditional look to any project whether it’s temporary or permanent. The Heritage line offers both flexibility and aesthetics to safety and security projects where style and profile options have been limited.

Base Plate Bollards

Stainless Steel			Carbon Steel		
Item #	Nominal Pipe Size		Item #	Nominal Pipe Size	
	(in)	(sch)		(in)	(sch)
SSB03040	3	40	IBB03040	3	40
SSB04040	4	40	IBB04040	4	40
SSB05040	5	40	IBB05040	5	40
SSB06040	6	40	IBB06040	6	40
SSB08040	8	40	IBB08040	8	40

Various Cover Options Available



Available Materials

Stainless Steel	Carbon Steel*
SSB Series	IBB Series

*Carbon steel bollards available with Grey Zinc Rich Primer coating or a variety of power coated options including safety yellow and jet black.



Lighted

Architectural Lighted Bollards provide an aesthetic appeal while illuminating the surrounding landscape within a secure perimeter. Anchored to a baseplate foundation, these bollards are easy to install in any location.

- Stainless steel
- Light duty security lighted bollards
- Medium/Heavy security lighted bollards



Fixed

Permanently embedded bollards create a physical barrier for pedestrians and buildings from oncoming vehicles.

- Light security – parking lots, entrances, retail storefronts
- Medium security – hospitals, malls, stadiums
- High security – government facilities, power plants, chemical plants



Removable

External padlocking removable bollards provide a removable perimeter defense. Allows easy access for service and police vehicles into restricted areas.

- Type 316 stainless steel versions for harsher environments
- Parking lots, fire lanes, access roads, and driveways,
- Colleges, oil refineries, municipalities



Automatic Retractable

Designed for repetitive cycles, these bollards are ideal for high-level traffic control parking lots, access control gates, commercial building entrances, and military bases. These bollards can

- Stainless steel composition to avoid corrosion
- Operate with most existing access control systems
- Key system, guard operated, proximity card



Shallow Mount

These bollards use a shallow 12" (300mm) embedment to provide the highest level of protection found around corporate campuses, government buildings, airports, power and water plants.

- Can stop a 15,000-pound (7.5 tons) vehicle at a speed of 50 miles per hour (80.46 km per hour)
- K12/M50-rated
- Significant savings over deep mount bollard installations



Crash Rated

ASTM F3016 crash-rated bollards protect people and property that are vulnerable to low-speed vehicular impact.

- K4/M30- and K12/M50-rated options
- Fixed and removable versions
- Airports, manufacturing plants, railways, gas stations, transportation terminals



Calpipe Security Bollards®

Calpipe Security Bollards® is a worldwide leader in manufacturing high security bollards and is a part of Atkore. Their high security K/M-rated and ASTM crash-tested bollards have been installed to protect patrons and property from accidents and vehicle attacks at pedestrian plazas, professional sports stadiums, various embassies, border crossings facilities, and military sites.



What Level of Protection Are You Looking For?

Vehicle Weight		Vehicle Speed	DOS/DOD Rating	ASTM Rating
(lb)	(t)	(mph)		
15,000	7.5	50 MPH	K12	M50
15,000	7.5	30 MPH	K4	M30

Perimeter Defense Technology Bollards:

Calpipe Security Bollards Mfg. Model #	Description	Speed Rating/ Penetration Rating	As Tested Requirement	Certifying/ Testing Agency & Test Specification
PDTDS22/R	Fixed/Removable Bollard-Deep Mount 10" Diameter 39" Above Grade 44" Embedded Depth	K12 / L3	Minimum Bollard Array: (2) Center on Center Spacing: 59"	DOS DOD DOS: SD-STD-02.01 Rev. A
PDTDS22L	Deep Mount Lighted Bollard 10" Diameter 50" (FLAT CAP) 44" Embedded Depth	K12 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 59"	DOS
PDT10080SMF/R	Fixed/Removable Bollard-Shallow Mount 10" Diameter 36" Above Grade 12" Embedded Depth	M50 / P2	Minimum Bollard Array: (3) Center on Center Spacing: 60"	ASTM ASTM: International Designation F2656-7
PDT10080SML	Shallow Mount Lighted Bollard 10" Diameter 45-3/8" (FLAT CAP) 12" Embedded Depth	M50 *Engineered	Minimum Bollard Array: (3) Center on Center Spacing: 60"	ASTM ASTM: International Designation F2656-07
PDT1200P/H	Pneumatic/Hydraulic/Automatic Retractable Bollard 10" Diameter 36" Deployed Height 58" Embedded Depth	K12 / L3 PAS68:2010	Minimum Bollard Array: (3) Center on Center Spacing: 39" Single Bollard Test-PAS68	DOS - DOD BSI: V/7500(N3)/%o:7.1%:0 DOS: SD-STD-02.01 Rev. A
PDT1200M/A	Screw Driven/Assisted Lift -Manual Retractable 10" Diameter 36" Deployed Height 58" Embedded Depth	K12 / L3 PAS68:2010	Minimum Bollard Array: (3) Center on Center Spacing: 39" Single Bollard Test-PAS68	DOS DOD BSI: V/7500(N3)/%o:7.1%:0 DOS: SD-STD-02.01 Rev. A
PDT8080F/R	Fixed/Removable Bollard-Deep Mount 8" Diameter 36" Above Grade 36" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 48" Single Bollard Test-PAS68	ASTM ASTM: International Designation F2656-07
PDT8080L	Deep Mount Lighted Bollard 8" Diameter 45-5/8" Above Grade 36" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080SMF/R	Fixed/Removable Bollard-Shallow Mount 8" Diameter 36" Above Grade 12" Embedded Depth	M30 / P2	Minimum Bollard Array: (3) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080SML	Shallow Mount Lighted Bollard 8" Diameter 45% Above Grade 12" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (3) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07



Calpipe Security proudly introduces our new line of F3016-19 crash rated security bollards designed to mitigate the risk of vehicle-into-building impact.

Tested and certified to the American Society for Testing Material's F3016-19 standard. The ASTM F3016-19 standard quantifies the performance of a vehicle protective device in stopping a 5,000 lb. (2.5 ton) vehicle at impact speeds from 10 to 30 mph (16 to 48 kph).

Utilizing a short pile foundation design provides more versatility for the bollard's application whether it's a new installation or retrofit project. Common applications include commercial storefronts, outdoor dining, sidewalks, bus stops, and similar environments.



Features and Benefits:

- Certified to the ASTM F3016-19 standard as a single bollard
- Fixed and removable bollard options provide versatility for any application
- Core drilled installation is both cost and time effective - up to 75% cheaper than trench footings
- Customizable with a powder coated or stainless-steel finish for an aesthetic design



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Allied Tube & Conduit ▴ AFC Cable Systems ▴ Heritage Plastics ▴ Unistrut
Unistrut Construction ▴ Cope ▴ US Tray ▴ Calbrite ▴ Calbond ▴ Kaf-Tech
Power-Strut ▴ Calconduit ▴ Razor Ribbon ▴ Calpipe Security ▴ Vergokan ▴ Cii
Columbia-MBF ▴ Eastern Wire + Conduit ▴ ACS/Uni-Fab ▴ Sasco Strut ▴ Marco
FRE Composites ▴ Queen City Plastics ▴ Four Star Industries ▴ Flexicon

Atkore

16100 South Lathrop Avenue
Harvey, IL 60426

PHONE / 740-928-1019
TOLL FREE / 877-285-4066

atkore.com/razorribbon

Want to join a company that helps you build
the mindset, skill set and tool set for success?
Visit us at atkore.com/careers