

MATRIX[®]

PERIMETER ENCLOSURE GRID



**CONFORMS TO IEEE
GROUNDING STANDARDS**



**MEETS ASCE 7-10
EXPOSURE C WIND LOAD**



**MEETS ASTM F2781
FORCED ENTRY STANDARD**



**LAYERED SECURITY THROUGH
ADDITION OF STALWART BARRIER**

(various ASTM F2656 tested & engineered fence barriers available)

PRIMARY APPLICATIONS

- ▶ POWER UTILITY
- ▶ CHEMICALS OF INTEREST
- ▶ INDUSTRIAL STORAGE
- ▶ COUNTER TERRORISM
- ▶ DATA STORAGE
- ▶ SALLY PORTS
- ▶ THREAT STANDOFF
- ▶ BLAST MITIGATION CAGING



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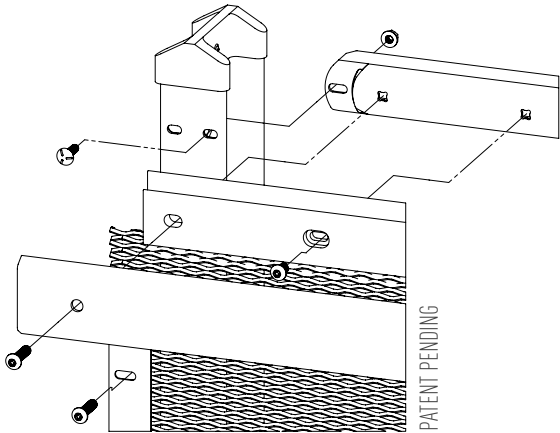
Experience a safer and more open world

AMERISTAR[®]

ASSA ABLOY

MATRIX®

SECURE PERIMETER ENCLOSURE CONTAINMENT



Matrix security fence is a perimeter enclosure grid with expandable design, which allows the user to determine the level of visibility, delay and deterrence required for the site.

- Durable powder-coat finish
- 10 year warranty
- Engineered Solution

DESIGN INTEGRATION

The Matrix framework is a raceway for wiring, conduits & security cabling required around the perimeter of a project. This integrated design eliminates the need for costly trenching & boring becoming a value added solution for perimeter security upgrades.

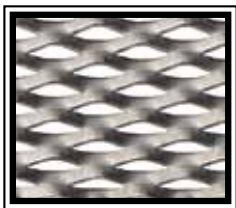
- Communication & Video Cables
- Intrusion Detection / Fiber Optic Cables
- Access Control Wiring
- Pre-punched Unistrut mounting provisions for conduits



(inside of rail shown above / view from protected side)

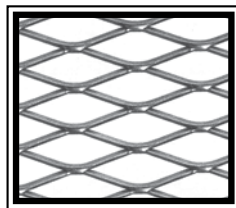
FILLER OPTIONS

Matrix is designed to be fitted with a filler that best matches the level of security required. Each of the Matrix fillers have unique characteristics that provide specific levels of delay and visual screening.



X-Span® Modified

.5" x #13R (.188 strand) std. option



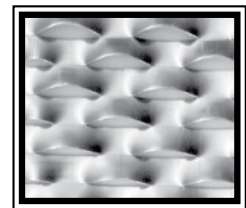
X-SPAN®

.75" x #9F std. option



WireWorks®

.5" x 3" x 8ga & 6ga std. option

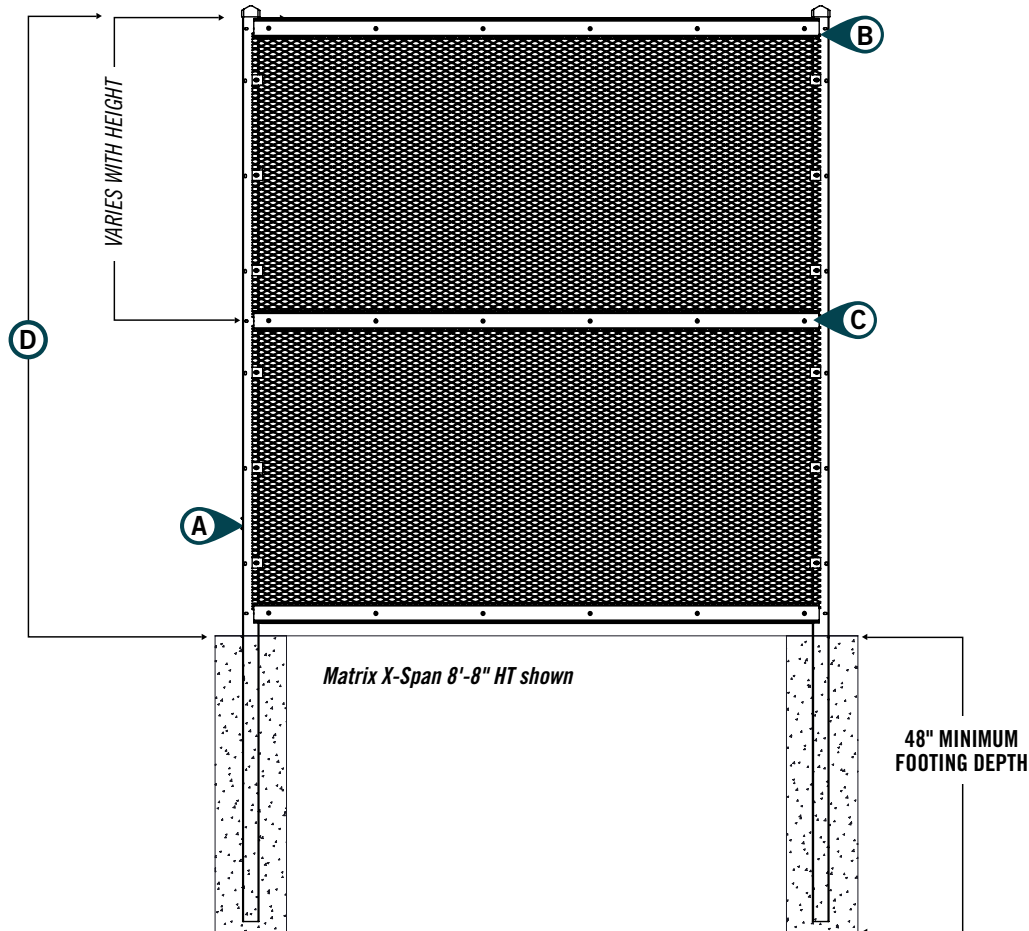


X-Screen®

1.5" x #14 std. option

MATRIX® | MULTIPLE SECURITY MESH OPTIONS

STANDARD 2" FROM GRADE



- Ⓐ 4" x 2.75" x 11ga I-BEAM POSTS - post offering varies with height
- Ⓑ GRID CHANNEL & RETAINER
- Ⓒ 2" C-SHAPE x 11ga RAILS
- Ⓓ 8'-8", 10'-8", 12'-9", 15'-7" & 20'-10" HEIGHTS

NOTE: HARDENED MATRIX NOT DEPICTED ABOVE

PANELS REQUIRE ASSEMBLY

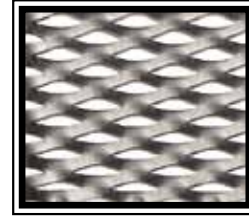
Refer to construction specification & tables within this section for post setting requirements

Effective: 04/01/20

MATRIX® | X-SPAN MODIFIED MESH - ASSEMBLY REQUIRED

.75" X #13R (.188 STRAND) MESH | 8'8" & 10'8" HT - 3 RAILS/2 FILLERS | 12'9" & 15'7" HT - 4 RAILS/3 FILLERS | 20'10" HT - 5 RAILS/4 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
8'-8" ht.	M13R⊗3096N	247 lbs	⊙
10'-8" ht.	M13R⊗3120N	288 lbs	⊙
12'-9" ht.	M13R⊗4144N	356 lbs	⊙
15'-7" ht.	M13R⊗4192N	371 lbs	⊙
20'-10" ht.	M13R⊗5240N	569 lbs	⊙



X-SPAN MODIFIED™

PANEL KITS CONTAIN INFILL PANELS, RAILS, TRACKS, CAPS & FASTENERS

8'8" HT. & 12'9" HT. USE 4' X 8' INFILL PANELS

10'8" HT., 15'7" & 20'10" USE 5' X 8' INFILL PANELS

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

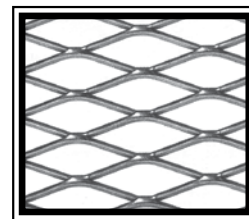
⊙ = NON-STOCKED PRODUCT

For details, see Ameristar's Sales Policy in the catalog guide.

MATRIX® | X-SPAN MESH - ASSEMBLY REQUIRED

.75" X #9F MESH | 8'8" & 10'8" HT - 3 RAILS/2 FILLERS | 12'9" & 15'7" HT - 4 RAILS/3 FILLERS | 20'10" HT - 5 RAILS/4 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
8'-8" ht.	MEM9⊗3096N	183 lbs	⊙
10'-8" ht.	MEM9⊗3120N	208 lbs	⊙
12'-9" ht.	MEM9⊗4144N	260 lbs	⊙
15'-7" ht.	MEM9⊗4192N	296 lbs	⊙
20'-10" ht.	MEM9⊗5240N	389 lbs	⊙



X-SPAN™

PANEL KITS CONTAIN INFILL PANELS, RAILS, TRACKS, CAPS & FASTENERS

8'8" HT. & 12'9" HT. USE 4' X 8' INFILL PANELS

10'8" HT., 15'7" & 20'10" USE 5' X 8' INFILL PANELS

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

⊙ = NON-STOCKED PRODUCT

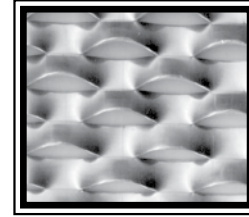
For details, see Ameristar's Sales Policy in the catalog guide.

Effective: 04/01/20

MATRIX® | X-SCREEN MESH - ASSEMBLY REQUIRED

1.5" X #14 LOUVERED MESH | 8'8" & 10'8" HT - 3 RAILS/2 FILLERS | 12'9" & 15'7" HT - 4 RAILS/3 FILLERS | 20'10" HT - 5 RAILS/4 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
8'-8" ht.	M94R⊗3096N	231 lbs	⊙
10'-8" ht.	M94R⊗3120N	267 lbs	⊙
12'-9" ht.	M94R⊗4144N	332 lbs	⊙
15'-7" ht.	M94R⊗4192N	390 lbs	⊙
20'-10" ht.	M94R⊗5240N	502 lbs	⊙



X-SCREEN™

PANEL KITS CONTAIN INFILL PANELS, RAILS, TRACKS, CAPS & FASTENERS

8'8" HT. & 12'9" HT. USE 4' X 8' INFILL PANELS

10'8" HT., 15'7" & 20'10" USE 5' X 8' INFILL PANELS

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

⊙ = NON-STOCKED PRODUCT

For details, see Ameristar's Sales Policy in the catalog guide.

MATRIX® | WIREWORKS MESH - ASSEMBLY REQUIRED

.5" X 3" X 6GA & 8GA MESH | 8'8" & 10'8" HT - 3 RAILS/2 FILLERS | 12'9" & 15'7" HT - 4 RAILS/3 FILLERS | 20'10" HT - 5 RAILS/4 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
8'-8" ht.	MAC⊗⊗3096N	269 / 218* lbs	⊙
10'-8" ht.	MAC⊗⊗3120N	314 / 250* lbs	⊙
12'-9" ht.	MAC⊗⊗4144N	389 / 312* lbs	⊙
15'-7" ht.	MAC⊗⊗4192N	454 / 361* lbs	⊙
20'-10" ht.	MAC⊗⊗5240N	592 / 465* lbs	⊙



WIREWORKS™

PANEL KITS CONTAIN INFILL PANELS, RAILS, TRACKS, CAPS & FASTENERS

8'8" HT. & 12'9" HT. USE 4' X 8' INFILL PANELS

10'8" HT., 15'7" & 20'10" USE 5' X 8' INFILL PANELS

⊗ = WIRE GAUGE AVAILABLE | 6 = 6 GAUGE 8 = 8 GAUGE*

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

⊙ = NON-STOCKED PRODUCT

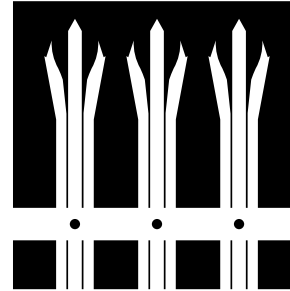
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Effective: 04/01/20

HARDENED MATRIX® | TRIDENT - ASSEMBLY REQUIRED

.75" X #9F MESH | 9'9" & 11'9" HT - 3 RAILS/2 FILLERS | 13'10" & 16'10" HT - 4 RAILS/3 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
STANDARD PALE SPACING 16 PALES			
9'-9" ht.	HMEMT⊗3096	332 lbs	⊙
11'-9" ht.	HMEMT⊗3120	394 lbs	⊙
13'-10" ht.	HMEMT⊗4144	475 lbs	⊙
16'-10" ht.	HMEMT⊗4192	568 lbs	⊙
ANTI-CLIMB PALE SPACING 23 PALES			
9'-9" ht.	HMEMT⊗3096AC	406 lbs	⊙
11'-9" ht.	HMEMT⊗3120AC	483 lbs	⊙
13'-10" ht.	HMEMT⊗4144AC	581 lbs	⊙
16'-10" ht.	HMEMT⊗4192AC	697 lbs	⊙



HARDENED MATRIX TRIDENT

PANEL KITS CONTAIN X-SPAN INFILL PANELS, RAILS, BACKING STRIPS, PALES & FASTENERS

9'9" HT. & 13'10" HT. USE 4' X 8' X-SPAN INFILL PANELS

11'9" HT. & 16'10" HT USE 5' X 8' X-SPAN INFILL PANELS

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

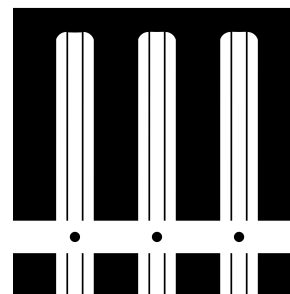
⊙ = NON-STOCKED PRODUCT

For details, see Ameristar's Sales Policy in the catalog guide.

HARDENED MATRIX® | STRONGHOLD - ASSEMBLY REQUIRED

.75" X #9F MESH | 9'9" & 11'9" HT - 3 RAILS/2 FILLERS | 13'10" & 16'10" HT - 4 RAILS/3 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
STANDARD PALE SPACING 16 PALES			
9'-9" ht.	HMEMS⊗3096	344 lbs	⊙
11'-9" ht.	HMEMS⊗3120	408 lbs	⊙
13'-10" ht.	HMEMS⊗4144	491 lbs	⊙
16'-10" ht.	HMEMS⊗4192	584 lbs	⊙
ANTI-CLIMB PALE SPACING 23 PALES			
9'-9" ht.	HMEMS⊗3096AC	423 lbs	⊙
11'-9" ht.	HMEMS⊗3120AC	503 lbs	⊙
13'-10" ht.	HMEMS⊗4144AC	604 lbs	⊙
16'-10" ht.	HMEMS⊗4192AC	720 lbs	⊙



HARDENED MATRIX STRONGHOLD

PANEL KITS CONTAIN X-SPAN INFILL PANELS, RAILS, BACKING STRIPS, PALES & FASTENERS

9'9" HT. & 13'10" HT. USE 4' X 8' X-SPAN INFILL PANELS

11'9" HT. & 16'10" HT USE 5' X 8' X-SPAN INFILL PANELS

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

⊙ = NON-STOCKED PRODUCT

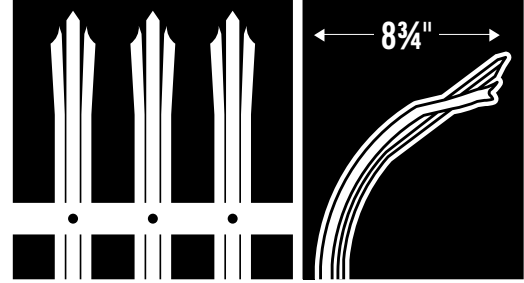
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Effective: 04/01/20

HARDENED MATRIX® | GAUNTLET - ASSEMBLY REQUIRED

.75" X #9F MESH | 9'9" & 11'9" HT - 3 RAILS/2 FILLERS | 13'10" HT - 4 RAILS/3 FILLERS

PANEL	ITEM NUMBER	WEIGHT	STOCKING
STANDARD PALE SPACING 16 PALES			
9'-9" ht.	HMEMG⊗3096	337 lbs	⊙
11'-9" ht.	HMEMG⊗3120	399 lbs	⊙
13'-10" ht.	HMEMG⊗4144	481 lbs	⊙
ANTI-CLIMB PALE SPACING 23 PALES			
9'-9" ht.	HMEMG⊗3096AC	414 lbs	⊙
11'-9" ht.	HMEMG⊗3120AC	491 lbs	⊙
13'-10" ht.	HMEMG⊗4144AC	590 lbs	⊙



HARDENED MATRIX GAUNTLET

PANEL KITS CONTAIN X-SPAN INFILL PANELS, RAILS, BACKING STRIPS, PALES & FASTENERS

9'9" HT. & 13'10" HT. USE 4' X 8' X-SPAN INFILL PANELS

11'9" HT. USE 5' X 8' X-SPAN INFILL PANELS

⊗ = COLOR OPTIONS AVAILABLE | **B** = Black | **142** = CC142 Gray

⊙ = NON-STOCKED PRODUCT

For details, see Ameristar's Sales Policy in the catalog guide.

MATRIX® BALLISTIC PANEL & TRACK KITS - ASSEMBLY REQUIRED

BALLISTIC RATING - UL 752 - LVL 8

SIZE	ITEM NUMBER	WEIGHT	STOCKING
48" SWD x 95.5" LWD	BPK⊗-48	353 lbs	⊙
60" SWD x 95.5" LWD	BPK⊗-60	441 lbs	⊙
BALLISTIC TRACK KIT	BTK⊗-8	14 lbs	⊙

#BPKB-48 KIT CONTAINS (6) 3/8"-16 x 1.69" GR5 SCREW (1-0049-1) | (6) 3/8" x 1.50" FENDER WASHER (4-0047-1)

#BPKB-60 KIT CONTAINS (8) 3/8"-16 x 1.69" GR5 SCREW (1-0049-1) | (8) 3/8" x 1.50" FENDER WASHER (4-0047-1)

#BTKB-8 KIT CONTAINS (1) ALUMINUM CAP W/HOLES (MTCX-8N) | (9) 3/8"-16 x 1.69" GR5 SCREW (1-0049-1) | (3) 3/8" STAINLESS STEEL NUT (HB537)

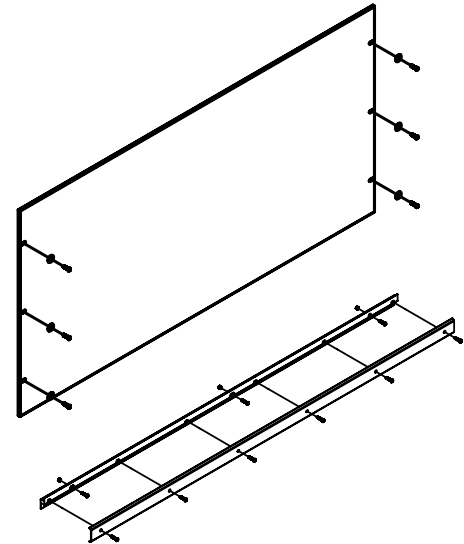
- 8'8" HT. & 12'9" HT. use 4x8 panels
- 10'8" HT., 15'9" HT., & 20'10" HT. use 5'x8' panels

- 8'8" HT. & 10'8" HT. have 3 rails w/ 2 Infill panels
- 12'9" HT. & 15'9" HT. have 4 rails w/ 3 Infill panels
- 20'10" HT. has 5 rails w/ 4 Infill panels

⊗ = COLOR OPTIONS AVAILABLE | **B** = Black

⊙ = NON-STOCKED PRODUCT

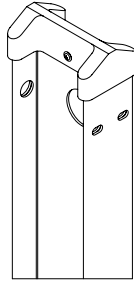
For details, see Ameristar's Sales Policy in the catalog guide.



Effective: 04/01/20

MATRIX® | POSTS

I-BEAM POST ASSEMBLIES



ITEM LVL	ITEM NUMBER	APPLICATION	WEIGHT	STOCKING
8'-8" HEIGHT MATRIX / 9'-9" HARDENED MATRIX				
LEVEL 1	MPⓉ3096-4N☒	Buried	69 / 92 lbs	☒
LEVEL 2	MPⓉ3096-4F☒	Buried	76 / 99 lbs	☒
LEVEL 2	MPⓉ3096-4F☒ P	Plated	61 / 84 lbs	☒
LEVEL 2	MPⓉ3096-4F☒ S	Stepped Buried	103 / 118 lbs	☒
LEVEL 2	MPⓉ3096-4F☒ PS	Stepped Plated	83 / 99 lbs	☒
LEVEL 3	MPⓉ3096-4R☒	Buried	120 / 143 lbs	☒
LEVEL 3	MPⓉ3096-4R☒ P	Plated	125 / 148 lbs	☒
LEVEL 3	MPⓉ3096-4R☒ S	Stepped Buried	175 / 190 lbs	☒
LEVEL 3	MPⓉ3096-4R☒ PS	Stepped Plated	163 / 178 lbs	☒
10'-8" HEIGHT MATRIX / 11'-9" HARDENED MATRIX				
LEVEL 1	MPⓉ3120-4N☒	Buried	80 / 108 lbs	☒
LEVEL 2	MPⓉ3120-4F☒	Buried	86 / 115 lbs	☒
LEVEL 2	MPⓉ3120-4F☒ P	Plated	72 / 101 lbs	☒
LEVEL 2	MPⓉ3120-4F☒ S	Stepped Buried	115 / 134 lbs	☒
LEVEL 2	MPⓉ3120-4F☒ PS	Stepped Plated	97 / 116 lbs	☒
LEVEL 3	MPⓉ3120-4R☒	Buried	158 / 187 lbs	☒
LEVEL 3	MPⓉ3120-4R☒ P	Plated	150 / 179 lbs	☒
LEVEL 3	MPⓉ3120-4R☒ S	Stepped Buried	222 / 236 lbs	☒
LEVEL 3	MPⓉ3120-4R☒ PS	Stepped Plated	188 / 206 lbs	☒
12'-9" HEIGHT MATRIX / 13'-10" HARDENED MATRIX				
LEVEL 1	MPⓉ4144-4N☒	Buried	90 / 125 lbs	☒
LEVEL 2	MPⓉ4144-4F☒	Buried	102 / 137 lbs	☒
LEVEL 2	MPⓉ4144-4F☒ P	Plated	86 / 121 lbs	☒
LEVEL 2	MPⓉ4144-4F☒ S	Stepped Buried	159 / 182 lbs	☒
LEVEL 2	MPⓉ4144-4F☒ PS	Stepped Plated	113 / 136 lbs	☒
LEVEL 3	MPⓉ4144-4R☒	Buried	189 / 223 lbs	☒
LEVEL 3	MPⓉ4144-4R☒ P	Plated	175 / 209 lbs	☒
LEVEL 3	MPⓉ4144-4R☒ S	Stepped Buried	243 / 266 lbs	☒
LEVEL 3	MPⓉ4144-4R☒ PS	Stepped Plated	215 / 238 lbs	☒

Line posts contain: I-beam Post, Cap, Fasteners & Grounding Lugs | Corner / Stepped Post contain: I-beam Post, Cap, Grounding Lugs, Brackets & Fasteners

POSTS ARE PRE-ASSEMBLED | CAP & LUGS TO BE FIELD INSTALLED

☒ = POST TYPE AVAILABLE | L = LINE POST | C = CORNER POST | Weight indicated as: line / corner

Ⓣ = COLOR OPTIONS AVAILABLE | B = Black | 142 = CC142 Gray

☒ = NON-STOCKED PRODUCT

REFER TO POST SELECTION TABLE / WINDLOAD TABLE FOR POST REQUIREMENTS

Effective: 04/01/20

MATRIX® | POSTS & TECH POSTS

I-BEAM POST ASSEMBLIES

ITEM LVL	ITEM NUMBER	APPLICATION	WEIGHT	STOCKING
15'-7" HEIGHT MATRIX / 16'-10" HARDENED MATRIX				
LEVEL 3	MPⓧ4192-4R☒	Buried	204 / 247 lbs	☉
LEVEL 3	MPⓧ4192-4R☒ P	Plated	191 / 234 lbs	☉
LEVEL 3	MPⓧ4192-4R☒ S	Stepped Buried	250 / 276 lbs	☉
LEVEL 3	MPⓧ4192-4R☒ PS	Stepped Plated	228 / 255 lbs	☉

Line posts contain: I-beam Post, Cap, Fasteners & Grounding Lugs | Corner / Stepped Post contain: I-beam Post, Cap, Grounding Lugs, Brackets & Fasteners

NOTE: In order to meet the wind loads listed for Level 4 given on the wind loading chart, (1) wind load rail kit per panel section must be added.

SQUARE POST ASSEMBLIES

ITEM LVL	ITEM NUMBER	APPLICATION	WEIGHT	STOCKING
20'-10" HEIGHT MATRIX				
LEVEL 3	MPⓧ5240-8R☒	Buried	938 / 938 lbs	☉
LEVEL 3	MPⓧ5240-8R☒ P	Plated	695 / 695 lbs	☉
LEVEL 3	MPⓧ5240-8R☒ S	Stepped Buried	1030 / 1030 lbs	☉
LEVEL 3	MPⓧ5240-8R☒ PS	Stepped Plated	787 / 787 lbs	☉

Post assemblies contain: 8" SQ Post, Cap, Grounding Lugs, Brackets & Fasteners

Posts to be field assembled

ALL POSTS ARE PRE-ASSEMBLED UNLESS OTHERWISE NOTED | CAP & LUGS TO BE FIELD INSTALLED

☒ = POST TYPE AVAILABLE | L = LINE POST | C = CORNER POST | Weight indicated as: line / corner

ⓧ = COLOR OPTIONS AVAILABLE | B = Black | 142 = CC142 Gray

☉ = NON-STOCKED PRODUCT

REFER TO POST SELECTION TABLE / WINDLOAD TABLE FOR POST REQUIREMENTS

TECH POSTS

FENCE HT.	ITEM NUMBER	APPLICATION	WEIGHT	OVERALL HT
Technology Posts				
8'-8" / 9'-9"	MTPⓧ3096	Buried	861 lbs	24'-2"
8'-8" / 9'-9"	MTPⓧ3096P	Plated	528 lbs	21'-2"
10'-8" / 11'-9"	MTPⓧ3120	Buried	870 lbs	24'-2"
10'-8" / 11'-9"	MTPⓧ3120P	Plated	537 lbs	21'-2"
12'-9" / 13'-10"	MTPⓧ4144	Buried	877 lbs	24'-2"
12'-9" / 13'-10"	MTPⓧ4144P	Plated	544 lbs	21'-2"
15'-7" / 16'-10"	MTPⓧ4192	Buried	903 lbs	25'-2"
15'-7" / 16'-10"	MTPⓧ4192P	Plated	656 lbs	25'-2"
20'-10"	MTPⓧ5240	Buried	1113 lbs	30'-1"
20'-10"	MTPⓧ5240P	Plated	869 lbs	30'-1"

TECH POST CONTAIN BRACKETS, ACCESS PLATES, HARDWARE, CAPS & FASTENERS

TECH POSTS TO BE FIELD ASSEMBLED

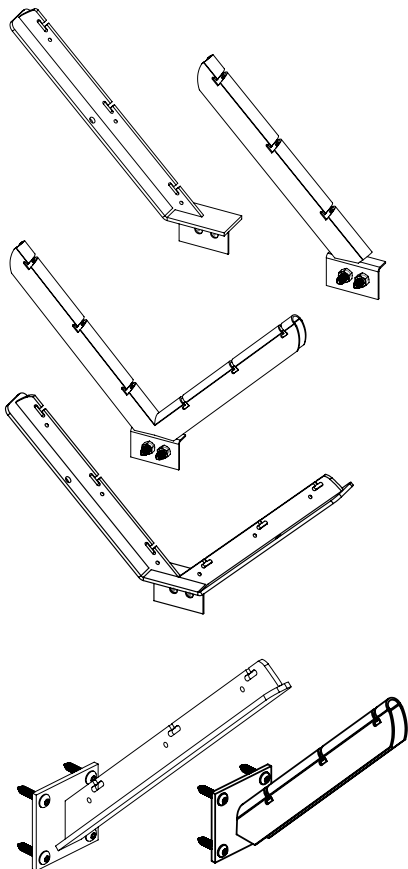
MATRIX / HARDENED MATRIX

ⓧ = COLOR OPTIONS AVAILABLE | B = Black | 142 = CC142 Gray

CONTACT AMERISTAR FOR WINDLOAD DATA

Effective: 04/01/20

MATRIX® | BARB ARMS



PRODUCT	ITEM NUMBER	WEIGHT	ARM LENGTH	STOCKING
SINGLE LINE	MBA <u>U</u> SLK	4 lbs	16 inches	⊗
SINGLE END	MBA <u>U</u> SEK	10.5 lbs	16 inches	⊗
SINGLE CORNER	MBA <u>U</u> SCK	12 lbs	18 inches	⊗
DOUBLE LINE	MBA <u>U</u> DLK	6 lbs	16 inches	⊗
DOUBLE END	MBA <u>U</u> DEK	14.5 lbs	16 inches	⊗
DOUBLE CORNER	MBA <u>U</u> DCK	17 lbs	18 inches	⊗
FLAT MOUNT SINGLE LINE	MBA <u>U</u> FLK	12.7 lbs	16 inches	⊗
FLAT MOUNT SINGLE END	MBA <u>U</u> FEK	20.4 lbs	16 inches	⊗
FLAT MOUNT SINGLE CORNER	MBA <u>U</u> FCK	19.1 lbs	18 inches	⊗

BARB ARM KITS SUPPLIED WITH FASTENERS | END & CORNER ARMS SUPPLIED WITH BRACING ARM

FLAT MOUNT BARB ARMS DO NOT REQUIRE BRACING

END & CORNER ARMS DIFFER IN LENGTH

SINGLE LINE - QTY 10/BOX | SINGLE END - QTY 5/BOX | SINGLE CORNER - QTY 5/BOX

DOUBLE LINE, END & CORNER - QTY 1/BOX

FLAT MOUNT SINGLE LINE, END & CORNER - QTY 4/BOX

COLOR OPTION | U = Uncoated (galvanized finish)

⊗ = NON-STOCKED PRODUCT

MATRIX® | INFILL SHEETS

PRODUCT	PANEL SIZE	ITEM NUMBER	WEIGHT	STOCKING
X-SPAN MODIFIED	4' X 8'	MLM⊗95.548ST	78 lbs	⊗
X-SPAN MODIFIED	5' X 8'	MLM⊗95.560ST	99 lbs	⊗
X-SPAN	4' X 8'	EM⊗95.548ST	46 lbs	⊗
X-SPAN	5' X 8'	EM⊗95.560ST	59 lbs	⊗
X-SCREEN	4' X 8'	LM⊗95.548ST	70 lbs	⊗
X-SCREEN	5' X 8'	LM⊗95.560ST	88 lbs	⊗
WIREWORKS 6GA.	4' X 8'	AC⊗95.548-6ST	89 lbs	⊗
WIREWORKS 6GA.	5' X 8'	AC⊗95.560-6ST	112 lbs	⊗
WIREWORKS 8GA.	4' X 8'	AC⊗95.548-8ST	64 lbs	⊗
WIREWORKS 8GA.	5' X 8'	AC⊗95.560-8ST	80 lbs	⊗

THE ABOVE INFILL PANELS DO NOT INCLUDED FASTENERS | FASTENERS SOLD SEPARATELY

MATRIX - USE 4X8 PANELS FOR 8'-8" HT. & 12'-9" HT. | USE 5X8 PANELS FOR 10'-8" HT., 15'-9" HT. & 20'-10"

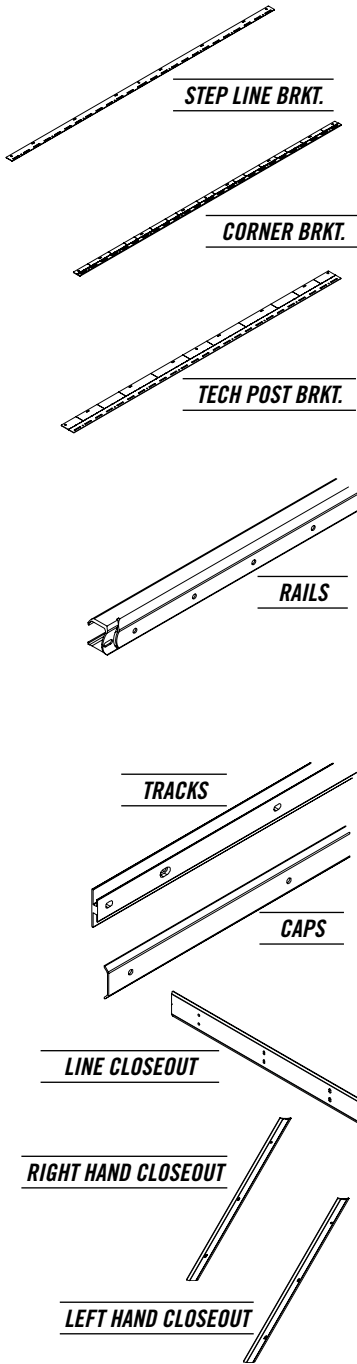
HARDENED MATRIX - USE 4X8 PANELS FOR 9'-9" HT. & 13'-10" HT. | USE 5X8 PANELS FOR 11'-9" HT.

⊗ = COLOR OPTIONS AVAILABLE | **B** = Black **142** = CC142 Gray

⊗ = NON-STOCKED PRODUCT

Effective: 04/01/20

MATRIX® | COMPONENTS, KITS & ACCESSORIES



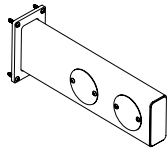
DESCRIPTION	FENCE HEIGHT	ITEM NUMBER	BAG QTY	BOX QTY	WEIGHT
STEP LINE OR CORNER BRACKET KIT	8'-8"	M <u>☒</u> <u>§</u> <u>⊗</u> -8	n/a	1	8 / 23 lbs
STEP LINE OR CORNER BRACKET KIT	10'-8"	M <u>☒</u> <u>§</u> <u>⊗</u> -10	n/a	1	10 / 29 lbs
STEP LINE OR CORNER BRACKET KIT	12'-9"	M <u>☒</u> <u>§</u> <u>⊗</u> -12	n/a	1	12 / 35 lbs
STEP LINE OR CORNER BRACKET KIT	15'-9"	M <u>☒</u> <u>§</u> <u>⊗</u> -16	n/a	1	16 / 43 lbs
STEP LINE OR CORNER BRACKET KIT	20'-10"	M <u>☒</u> <u>§</u> <u>⊗</u> -20	n/a	1	83 / 82 lbs
TECH POST BRACKET KIT	8'-8"	MTS <u>⊗</u> -8	n/a	1	34.5 lbs
TECH POST BRACKET KIT	10'-8"	MTS <u>⊗</u> -10	n/a	1	43 lbs
TECH POST BRACKET KIT	12'-9"	MTS <u>⊗</u> -12	n/a	1	50 lbs
TECH POST BRACKET KIT	15'-9"	MTS <u>⊗</u> -16	n/a	1	59 lbs
TECH POST BRACKET KIT	20'-10"	MTS <u>⊗</u> -20	n/a	1	83 lbs
RAIL KIT	8'-8"	M000 <u>⊗</u> 3096N	n/a	n/a	91 lbs
	10'-8"	M000 <u>⊗</u> 3120N	n/a	n/a	91 lbs
	12'-9"	M000 <u>⊗</u> 4144N	n/a	n/a	121 lbs
	15'-9"	M000 <u>⊗</u> 4192N	n/a	n/a	121 lbs
	20'-10"	M000 <u>⊗</u> 5240N	n/a	n/a	150 lbs
RAIL KIT / ANTI-SCALE RAIL KIT	9'-9"	HM000 <u>⊗</u> 3096 / HM000 <u>⊗</u> 3096AC	n/a	n/a	72 lbs
	11'-9"	HM000 <u>⊗</u> 3120 / HM000 <u>⊗</u> 3120AC	n/a	n/a	73 lbs
	13'-10" / 16'-10"	HM000 <u>⊗</u> 4144 / HM000 <u>⊗</u> 4144AC	n/a	n/a	96 lbs
WIND LOAD RAIL KIT STD / ANTI-SCALE	16'	WLRKX / WLRKX-AC	n/a	n/a	50 lbs.
<i>Kit Contains: (3) rails or anti-scale rails with hardware</i>					
NOTE: For Windload Level 4 16' WLRKX required					
RAIL / ANTI-SCALE RAIL	-	RIM <u>⊗</u> -8 / RIM <u>⊗</u> -8-AC	n/a	n/a	17 lbs
TRACK	-	MTB <u>⊗</u> -8	n/a	n/a	8 lbs
CAP	-	MTC <u>⊗</u> -8	n/a	n/a	5 lbs
4' LINE INFILL CLOSEOUT		90-133-13507- <u>X</u>	n/a	n/a	13 lbs
4' RH CORNER INFILL CLOSEOUT		90-133-13508- <u>X</u>	n/a	n/a	7 lbs
4' LH CORNER INFILL CLOSEOUT		90-133-13508- <u>X</u>	n/a	n/a	7 lbs
5' LINE INFILL CLOSEOUT		90-133-13855- <u>X</u>	n/a	n/a	17 lbs
5' RH CORNER INFILL CLOSEOUT		90-133-13856- <u>X</u>	n/a	n/a	9 lbs
5' LH CORNER INFILL CLOSEOUT		90-133-13857- <u>X</u>	n/a	n/a	9 lbs

☒ = POST TYPE AVAILABLE | L = LINE POST | C = CORNER POST
⊗ = COLOR OPTIONS AVAILABLE | B = Black
☒ = H.M. PALE TYPE | § = STRONGHOLD | T = TRIDENT | G = GAUNTLET
X = 1 | 1 = Black | 142 = CC142 Gray

Weight indicated as: line / corner | Kits contain fasteners
 Rail Kits Contain: qty of rails, tracks, caps & fasteners required for fence ht.
 Bracket for Step Line, Step Corner & Tech Posts contain: multi-directional bracket & fasteners

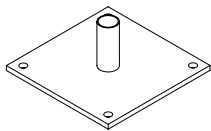
Effective: 04/01/20

MATRIX® | COMPONENTS, KITS & ACCESSORIES



DESCRIPTION	SIZE	ITEM NUMBER	BOX QTY	ITEM WEIGHT
Camera Arm	5-1/2" x 9-1/2"	90-130-13646A-⊗	1	38 lbs

Kit contains the arm 1/4" base plate with 3" x 7" x 1/4" tube 24" long with camera holes. Comes with fastener kit box (mounting fasteners as well as plates for the camera access holes).



DESCRIPTION	SIZE	ITEM NUMBER	BOX QTY	ITEM WEIGHT
Light Davit	12" x 12"	90-111-14990-⊗-SP	1	22 lbs

1/2" steel plate with a 1-7/8" pipe 4" long extending. Comes with hardware 5/8" fasteners (bolt/nut/washer/lockwasher).

⊗ = COLOR OPTIONS AVAILABLE | 1 = Black 142 = CC142 Gray

MATRIX® HARDENED | COMPONENTS & ACCESSORIES

DESCRIPTION	FENCE HEIGHT	ITEM NUMBER	BAG QTY	BOX QTY	WEIGHT
BACKING STRIP	-	HMBS ⊗ -8	n/a	n/a	7 lbs
ANTI-SCALE BACKING STRIP	-	HMBS ⊗ -8-AC	n/a	n/a	7 lbs
PALE 9'-9" ht.	9'-9"	HM ☒ ⊗ 3096	n/a	n/a	12 lbs
PALE 11'-9" ht.	11'-9"	HM ☒ ⊗ 3120	n/a	n/a	14 lbs
PALE 13'-10" ht.	13'-10"	HM ☒ ⊗ 4144	n/a	n/a	16 lbs
PALE 16'-10" ht.	16'-10"	HM ☒ ⊗ 4192	n/a	n/a	19 lbs

☒ = POST TYPE AVAILABLE | L = LINE POST C = CORNER POST

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

☒ = H.M. PALE TYPE | S = STRONGHOLD T = TRIDENT G = GAUNTLET

X = 1 | 1 = Black

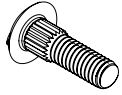
Weight indicated as: line / corner | Kits contain fasteners

Rail Kits Contain: qty of rails, tracks, caps & fasteners required for fence ht.

Bracket for Step Line, Step Corner & Tech Posts contain: multi-directional bracket & fasteners

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MATRIX® | FASTENERS, ACCESSORIES & TOUCH-UP PAINT



DESCRIPTION	SIZE	ITEM NUMBER	BAG QTY	ITEM WEIGHT
Spur Bolts	.3125" x 1.125"	2-0065-⊗P-20	20	.8 lbs

1.125" length bolt used for rail to post attachment



Flange & Hex Nuts	.3125"	3-0029-⊗P-20	20	.08 lbs
	.375"	H⊗537	20	.08 lbs

Flange Nuts to be used with spur bolts



Tek Screws	#10 x .75"	1-0052-⊗P-20	20	.12 lbs
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Tek Screws to be used with cap attachment



Track, Cap & Mesh Screws	.375" x .87"	1-0051-⊗P-20	20	.7 lbs
	.375" x 1.69"	1-0049-⊗P-20	20	.8 lbs

.87" screw used for attaching: track to cap, pale to rail, tech post bracket to post, 20' brackets to posts.

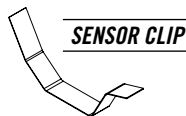
1.69" screws used attaching: mesh to posts & track to rail



Grounding Lugs	.5" x 1.5"	1-0050-⊗P-20	20	3.7 lbs
	.5" x 1.5"	4-0031-⊗P-20	20	.05 lbs

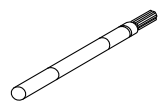
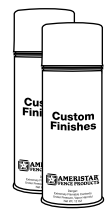
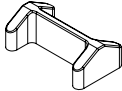
Lug & washer are required for grounding - items included in post | Others responsible for grounding fence to grid

⊗ = COLOR OPTIONS AVAILABLE | 1 = Black U = Uncoated (zinc plated) 142 = CC142 Gray



SENSOR CLIP

I-BEAM POST CAPS



DESCRIPTION	ITEM NUMBER	BAG QTY	BOX QTY	WEIGHT
Flat Strap Bracket	B⊗022R	2	80	.5 lbs
Sensor Wire Clip	SWC100	n/a	100	2 lbs
Rail Cover (94")	IRC81	n/a	n/a	1 lbs
4" I-Beam Post Caps*	IC4	n/a	30	.5 lbs
Tech Pole Plug	TPPLUG	n/a	10	2 lbs
Tech Pole Grounding Strap	TGSTRAP	n/a	5	5 lbs

ZINC-RICH PAINT PEN	PZ100			.5 lbs
PAINT PEN	P⊗100			.5 lbs
ZINC-RICH SPRAY PAINT	FZ100			1.1 lbs
SPRAY PAINT	F⊗100			1.1 lbs

⊗ = COLOR OPTIONS AVAILABLE | B = Black 142 = CC142 Gray

*Post caps are packaged with I-beam post kit. In order to meet the grounding requirements caps are uncoated and require a tek-screw fastener attachment to post.

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MATRIX® | POST SELECTION TABLE

MATRIX WIND LOADING CHART										
FENCE HEIGHT	POST SIZE		Footing Dia. x Depth	WIND SPEED (MPH) SOIL CONDITIONS 150 PSF/F						
	LEVEL	GRADE		X-SPAN	X-SPAN MODIFIED	X-SCREEN	ANTI-CLIMB 8GA	ANTI-CLIMB 6GA	HARDENED MATRIX	HARDENED MATRIX AC
8'	LEVEL 1	LEVEL	24" x 48"	127.4	N/A	N/A	127.4	118.2	90.4	N/A
		STEPPED	24" x 64"	182.7	125.9	118.6	182.7	169.5	126.1	108.7
	LEVEL 2	LEVEL	24" x 74"	160	111.2	104.8	160	148.4	111.9	97.3
		STEPPED	24" x 90"	275.8	193	181.8	275.8	256.6	193.4	166.6
	LEVEL 3	LEVEL	24" x 96"	245.3	170.5	160.7	245.3	227.5	171.5	149.2
		STEPPED	24" x 102"	219.9	151.3	142.6	219.9	204	154.7	133.5
10'	LEVEL 1	LEVEL	24" x 48"	108.2	N/A	N/A	108.2	100.4	N/A	N/A
		STEPPED	24" x 62"	142.2	97.8	92.1	142.2	131.9	100	N/A
	LEVEL 2	LEVEL	24" x 72"	127.7	N/A	N/A	127.7	117.9	90.4	N/A
		STEPPED	24" x 106"	196.7	136.5	128.7	196.7	182.5	139.8	121.7
	LEVEL 3	LEVEL	24" x 102"	219.9	151.3	142.6	219.9	204	154.7	133.5
		STEPPED	24" x 106"	196.7	136.5	128.7	196.7	182.5	139.8	121.7
12'	LEVEL 1	LEVEL	24" x 48"	93.7	N/A	N/A	93.7	86.9	N/A	N/A
		STEPPED	24" x 61"	128	N/A	N/A	128	118.7	92.3	N/A
	LEVEL 2	LEVEL	24" x 69"	117.6	N/A	N/A	117.6	109.1	84.6	N/A
		STEPPED	24" x 99"	197.1	133.5	127.7	197.1	182.8	140.7	121.5
	LEVEL 3	LEVEL	24" x 100"	197.1	133.5	127.7	197.1	182.8	140.7	121.5
		STEPPED	24" x 106"	179.2	132.8**	117.1	179.2	166.2	128.9	112.2
16'	LEVEL 3	LEVEL	24" x 98"	149.5	102.6	96.7	149.5	138.6	107.6	92.6
		STEPPED	24" x 98"	145.6***	101.2*	94.4***	145.6***	135.1***	105***	91.4*
	LEVEL 4	LEVEL	24" x 98"	169.9	116.8	110	169.9	157.6	122.4	105.4
		STEPPED	24" x 98"	165.6***	115.1*	107.4***	165.6***	153.6***	119.5***	103.1***
	LEVEL 3	LEVEL	24" x 121"	191.8	133.4	125.7	191.8	177.9	N/A	N/A
		STEPPED	24" x 121"	187.1****	130.3****	122.7****	187.1****	173.5****	N/A	N/A

Note: Footer May Decrease in Size with Post Modifications

Design Criteria:

1. ASCE 7-10, Exposure C, Case A
2. IBC 2015
3. 150 Linear Feet Average Fence Span
4. 8' Post Centers As Standard (20' is 8.92')
5. ACI 301-3000 PSI Concrete, 28 day cure
6. Designed using IBC-1806.3.4 Which Allows for a Doubling of Soil Bearing Pressure
7. 32" Max Step for Stepped Variations (Unless Otherwise Stated)
8. Based on 150 PSF/F Soil Conditions

*9. MAXIMUM 6" STEP AVAILABLE

**10. MAXIMUM 7" STEP AVAILABLE

***11. MAXIMUM 10" STEP AVAILABLE

****12. MAXIMUM 24" STEP AVAILABLE

Additional wind load capabilities available with modified post design. Contact Ameristar representative for information.

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MATRIX® | CONSTRUCTION SPECIFICATION 32 31 19

HIGH SECURITY STEEL FENCE SYSTEM | PERIMETER ENCLOSURE GRID

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the industrial steel perimeter enclosure grid fence system defined herein at (specify project site).

1.02 RELATED WORK

Section ____ - Earthwork
 Section ____ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a steel perimeter enclosure grid framing system of the Matrix® design, (specify mesh filler, Table 3) style. The system shall include all components (i.e., mesh filler, retainer channels, rails, posts, gates and hardware) required.

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES

- **ASTM A653/A653M** – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process
- **ASTM B117** – Practice for Operating Salt-Spray (Fog) Apparatus
- **ASTM B221** – Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes
- **ASTM D714** – Test Method for Evaluating Degree of Blistering in Paint
- **ASTM D1654** – Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- **ASTM D2794** – Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- **ASTM D3359** – Test Method for Measuring Adhesion by Tape Test
- **ASTM F2548** – Expanded Metal Fence Systems for Security Purposes
- **ASTM F2453/F2453M** – Welded Wire Mesh Fence Fabric
- **ASTM F2781** – Testing Forced Entry, Ballistic and Low Impact Resistance of Security Fence Systems
- **IEEE P80/D10** Draft Guide for Safety in AC Substation Grounding
- **IEEE 142-1991** IEEE Recommended Practice for Grounding of Industrial and Commercial Power Systems
- **IEEE 81-2012** IEEE Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials for a Ground System
- **UL 752** Ballistic Standards

1.06 SUBMITTAL

The manufacturer's submittal package shall be provided prior to installation.

1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall

be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

1.08 PRODUCT WARRANTY

All structural fence components (i.e. rails and I-beam posts) shall be warranted within specified limitations, by the manufacturer for a period of 10 years from date of original purchase. Warranty shall cover any defects in material finish, including cracking, peeling, chipping, blistering or corroding.

1.09 PRODUCT TESTING & COMPLIANCE

- A.** Fence system shall be tested by third party professional engineer to IEEE P80/D10, IEEE 142-1991 and IEEE 81-2012. Test report shall be supplied showing fence system meeting acceptable range for resistance and impedance required within the IEEE standards listed here within.
- B.** Fence system shall be tested to ASTM standard F2781 for forced entry by third party certified testing organization. Test report shall be supplied showing fence system meeting a minimum forced entry threat level rating as follows: single layer mesh installation: L15 to L19.9, M15 to M19.9, dual layer mesh installations: L31 to L60, M20 to M30, A5 to A9.9

PART 2 - MATERIALS

2.01 MANUFACTURER

The fence system shall conform to perimeter enclosure grid framing system of the Ameristar Matrix design, (specify mesh filler, Table 3) style, manufactured by Ameristar Perimeter Security USA Inc. in Tulsa, Oklahoma.

2.02 MATERIAL

- A.** Steel material for perimeter enclosure grid framework (i.e. rails and I-beam posts), shall have a minimum yield strength of 45,000 psi (310 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft² (276 g/m²), Coating Designation G-90.
- B.** The cross-sectional shape of the rails shall conform to the manufacturer's Matrix "C" shaped rail design a nominal 2" x 2" x 11 Ga. Matrix rail shall be pre-drilled to accept fasteners for attachment of mesh retainer channel. Fence posts shall meet the minimum system requirements.
- C.** The cross-sectional shape of the mesh retainer channels shall conform to the manufacturer's channel design with outside cross-section nominal dimensions of 3.5" x .75" (channel dimensions vary to match optional ballistic resistant fillers). Aluminum material for channel & cap shall conform to the requirements of ASTM B221, alloy designation 6005-T5 & 6063-T5.
- D.** Matrix mesh filler material shall comply with one of the options listed in Table 3.

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MATRIX® | CONSTRUCTION SPECIFICATION 32 31 19

HIGH SECURITY STEEL FENCE SYSTEM | PERIMETER ENCLOSURE GRID

2.03 FABRICATION

- A. Rails and I-beam posts shall be pre-cut to specified lengths. Matrix rails shall be pre-punched to accept security fasteners. Post flange shall be pre-punched to accept rail to I-beam post attachment. I-beam posts shall be pre-punched providing a source for attachment of conduits to interior post flange. Post web shall be punched providing a clear opening for interior of rails to align throughout the entire system for affixing conduit, video cabling, IDS (Intrusion Detection System) wiring, and other components for a complete systems integration. Matrix rails shall be attached to post flange providing a bracket-less design at each intermediate post.
- B. Mesh retainer channels shall be pre-cut to specified lengths. Mesh retainer channels shall be affixed horizontally to rails to accommodate the insertion of specified filler material. Locking cover shall be introduced onto the channel to conceal and secure mesh retainer channel fasteners.
- C. Filler panels shall be inserted into the mesh retainer channels to conceal and secure filler material to the framework. Filler material shall be affixed to I-beams using appropriate filler attachment brackets and fasteners.
- D. Swing gates shall match style, height, and color of fence system. All rail and upright intersections shall be joined by welding. Mesh filler shall be securely affixed to gate frame by welding.
- E. Sliding cantilever gates shall match style, height, and color of fence system. Dual enclosed track slide gate shall be an aluminum component design using tracks, uprights, mesh filler, hardware, fittings, and fasteners. Gate installation shall comply with latest ASTM F2200 standards for automated gates, regardless if the gate is of manual operation.
- F. Pedestrian egress gates shall meet IBC Group I-2 Egress requirements. Egress Gate hinges shall be stainless steel five knuckle bearing hinges with non-removable pin and stainless steel fasteners. Pedestrian gate shall be 1.75" x 14ga steel reinforced structural design with ¼" plate reinforced hinge mounting. Gate hardware shall consist of exterior rated devices. Gate and hardware to be pre-assembled prior to shipping.

PART 3 - EXECUTION

3.01 PREPARATION

All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 FENCE INSTALLATION

Fence post shall be spaced according to Table 1. Fence framework and mesh filler shall be attached to system posts with fasteners supplied by the manufacturer. Posts shall be installed as noted in Post Selection Table (Note: In some cases, local restrictions of freezing weather conditions may require a greater depth). The

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"Earthwork" and "Concrete" sections of this specification shall govern material requirements for the concrete footer. Posts setting by other methods such as plated posts or grouted core-drilled footers are permissible only if shown by engineering analysis to be sufficient in strength for the intended application.

3.03 FENCE INSTALLATION MAINTENANCE

When cutting/drilling steel and aluminum system components adhere to the following steps to seal the exposed surfaces; 1) Remove all metal shavings from cut area. 2) Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry. 3) Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. Ameristar spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

3.04 GATE INSTALLATION

Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations.

3.05 CLEANING

The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

SEE REFERENCED TABLES ON THE FOLLOWING PAGE

MATRIX® | CONSTRUCTION SPECIFICATION 32 31 19

HIGH SECURITY STEEL FENCE SYSTEM | PERIMETER ENCLOSURE GRID

TABLE 1

MATRIX POST SETTING ON LEVEL GRADE				
POST TYPE	LEVEL GRADE			
	LEVEL LINE	LEVEL CORNER	TECH POST LINE	TECH POST CORNER
LEVEL LINE	95.75"	96"	97.25"	97.125"
LEVEL CORNER	96"	96.25"	97.5"	97.375"
TECH POST LINE	97.25"	97.5"	98.75"	98.625"
TECH POST CORNER	97.125"	97.375"	98.625"	98.5"

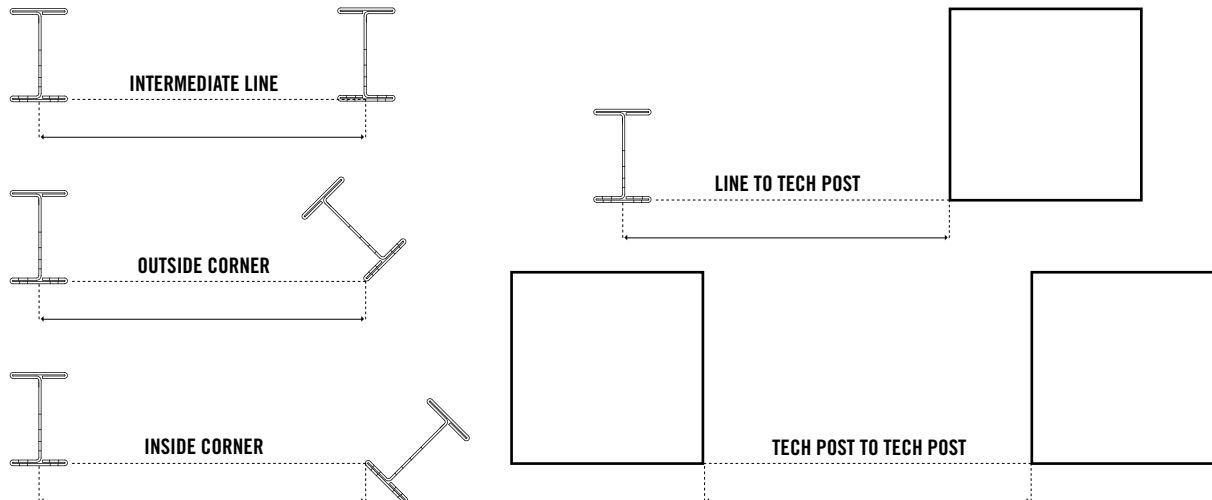
MATRIX POST SETTING ON UN-LEVEL GRADE							
POST TYPE	UPHILL POST						
	BURIED LINE	BURIED CORNER	PLATED LINE	PLATED CORNER	TECH POST LINE	TECH POST CORNER	
DOWNHILL POST	BURIED LINE	97.25"	96"	95.75"	96"	97.25"	97.125"
	BURIED CORNER	97.5"	96.25"	96"	96.25"	97.5"	97.375"
	PLATED LINE	98.5"	97.5"	97.25"	97.5"	98.75"	98.625"
	PLATED CORNER	97.5"	96.625"	96"	96.25"	97.5"	97.375"
	TECH POST LINE	98.75"	97.5"	97.25"	97.5"	98.75"	98.625"
	TECH POST CORNER	98.625"	97.375"	97.125"	97.375"	98.625"	98.5"

TABLE 2

COATING PERFORMANCE REQUIREMENTS		
QUALITY CHARACTERISTICS	ASTM TEST METHOD	PERFORMANCE REQUIREMENTS
ADHESION	D3359 – METHOD B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife kit test).
CORROSION RESISTANCE	B117, D714, D1654	Corrosion Resistance over 3,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters)
IMPACT RESISTANCE	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).

TABLE 3

MATRIX FILLER OPTIONS		
TRADENAME	PRODUCT	DESCRIPTION
X-SPAN™	EXPANDED METAL MESH	.5" X #13R (.188 STRAND WIDTH) MODIFIED - 73% SCREENING / ASTM F2548
		.75" X #9F - 37% SCREENING / ASTM F2548
X-SCREEN™	LOUVERED MESH (STEEL)	1.5" X #14 - 94% SCREENING
WIREWORKS™	WELDED WIRE MESH	.5" X 3" X 8GA - 36% SCREENING / ASTM F2453/F2453M
		.5" X 3" X 6GA - 43% SCREENING / ASTM F2453/F2453M
	BALLISTIC RESISTANT PANEL	UL 752 STANDARDS LEVEL 8 PROTECTION



Effective: 04/01/20

MATRIX® | LIMITED WARRANTY

HIGH SECURITY STEEL FENCE SYSTEM | PERIMETER ENCLOSURE GRID

Matrix® Perimeter Enclosure Grid Fence System by Ameristar® is manufactured from the highest quality materials by skilled craftsmen to meet the highest standards of workmanship in the industry.

Matrix framework and mesh shall be subjected to a multi-stage pretreatment/wash, followed by a duplex cathodic electro-coat system consisting of an epoxy primer, which significantly increases corrosion protection, and an acrylic liquid topcoat, which provides the protection necessary to withstand adverse weathering effects.

Matrix posts shall be subject to a six stage pretreatment/wash followed by an electrostatic spray application of PermaCoat® Color System, a two coat powder system. The base coat is a thermosetting epoxy powder coating. The top coat is a “no-mar” TGIC polyester powder coat finish, which provides the protection necessary to withstand adverse environmental conditions.

The coated surface on all components (*i.e.*, track, cap, rails, posts & mesh filler) by Ameristar is guaranteed under normal and proper usage, against cracking, peeling, chipping, blistering or corroding for a period of ten (10) years from the original purchase date. Normal and proper usage does not include physical damage, abrasion or exposure to salty environments to the protective coating.

Matrix Perimeter Enclosure Grid Fence System framework is also guaranteed for the same period of time against defects in workmanship or materials.

Should any fence framework manufactured by Ameristar fail in accordance with any of the above conditions, Ameristar warrants to the original purchaser their redemption through replacement, renewal or issuance of a pro-rated credit. The decision as to which method of redemption is allowed is solely at the discretion of Ameristar.

If pro-rated allowance is the chosen alternative, the amount will be based on the total number of years under warranty from date of purchase to date of claim, based on the original cost of framing materials found to be defective. Notice of failure under the conditions of this warranty shall be sent to Ameristar or its authorized representative, in writing, together with proof of purchase and shall specify the nature of the defect and when it was first observed. When cutting Matrix components immediately seal the exposed surfaces by 1) Removing all metal shavings from cut area, 2) Apply zinc-rich primer to thoroughly cover cut edge and drilled hole; let dry, 3) Apply two (2) coats of custom finish paint matching fence color

Failure to seal exposed surfaces per steps 1-3 will negate warranty. If the contractor uses non Ameristar parts/components this will negate the warranty. Should the fence be improperly installed, Ameristar shall not be responsible for guaranteed performance or appearance of the material. Neither does this guarantee apply when failure or damage is due to improper use or application, abuse or misuse, salty environments, vandalism or acts of God. Ameristar reserves the right to inspect the material to determine validity of the claim.

Upon validation of the claim by Ameristar or its authorized representative, redemption by replacement, renewal or issuance of a pro-rated credit shall be made by Ameristar. Reimbursement for the costs of removal and installation of materials are not included in the guarantee, nor will Ameristar provide those services.

The above constitutes the complete warranty by the manufacturer. No other agreement, written or implied, is valid. Ameristar does not authorize any other person or agent to make any other express warranties. Ameristar neither assumes nor authorizes any other person or agent to assume any other liability in connection with Matrix Perimeter Enclosure Grid Fence System. Some jurisdictions do not allow limitations on how long an implied warranty lasts, nor do they allow an exclusion or limitation of incidental or consequential damages; therefore, the limitations and exclusions noted herein may not apply.

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