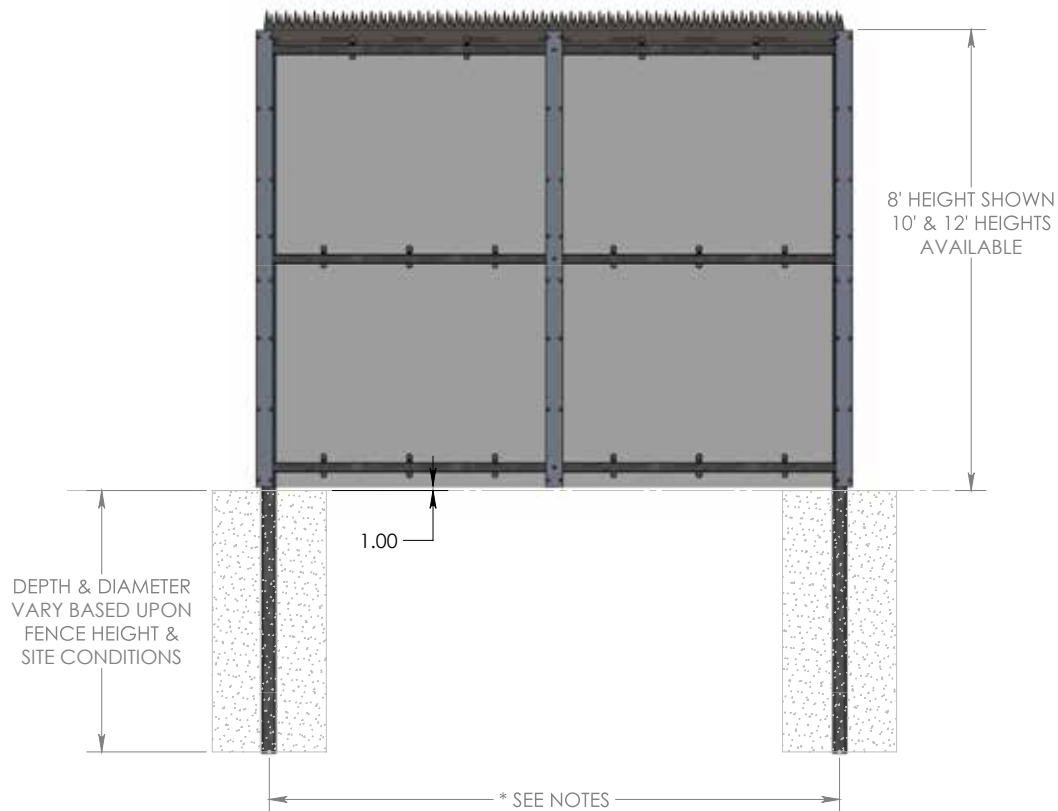


MATRIX ALPHA® | MULTIPLE GALVANIZED SECURITY MESH OPTIONS



- (A) 3" x 6", 4" x 4", & 6" x 6" POSTS**
- (B) 2" X 2" RAILS**
- (C) VARIOUS INFILL OPTIONS**
- (D) 8', 10' & 12' HEIGHT OPTIONS**

NOTES:

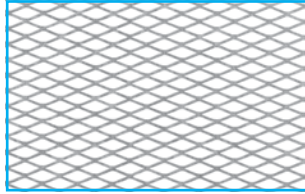
1. VARIOUS MESH INFILL OPTIONS AVAILABLE. SEE SPECIFICATION FOR DETAILS.
2. 3" x 6" x .083 wall POST SHOWN IN ELEVATION. POST OPTIONS VARY BASED UPON FENCE HEIGHT, SITE CONDITIONS AND WIND LOADING REQUIREMENTS.
3. OPTIONAL SPIKE DETERRENT STRIPS SHOWN IN ELEVATION. 3-WIRE BARB ARMS FOR INSTALLATION OF BARB-WIRE ALSO AVAILABLE.
4. INFILL TO RAIL ATTACHMENT METHODS VARY BASED ON SPECIFICATION REQUIREMENTS.
5. * ON CENTER POST SPACING SHALL BE BASED UPON WIND LOAD AND SITE CONDITIONS. POST SPACING NOT TO EXCEED 12' ON CENTER.
6. OPTIONAL ANIMAL MITIGATION SHIELD AVAILABLE FOR DETERRING INTRUSION OF NUISANCE ANIMALS.

Effective: 05/07/19

MATRIX ALPHA® | INFILLS

ALL MATRIX INFILL'S ARE A 5' WIDTH

X-SPAN

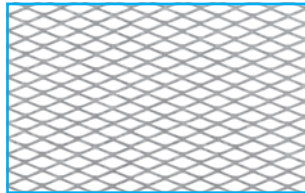


.75 X #9 std. option

HEIGHT	ITEM NUMBER	PALLET QTY	WEIGHT
8'	MAEM9U60096	47	74.4 lbs
10'	MAEM9U60120	37	93.0 lbs
12'	MAEM9U60144	31	111.6 lbs

Expanded metal steel mesh provides modest delay to cut-through threats.

X-SPAN ULTRA

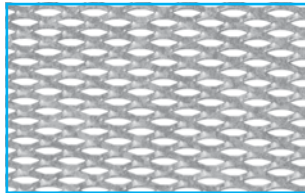


.5 x #13 std. option

HEIGHT	ITEM NUMBER	PALLET QTY	WEIGHT
8'	MA13UU60096	50	69.2 lbs
10'	MA13UU60120	40	86.5 lbs
12'	MA13UU60144	33	103.8 lbs

Expanded metal steel mesh provides modest delay to cut-through threats and moderate visual screening.

X-SPAN MODIFIED

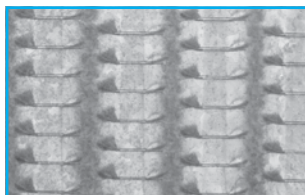


.5 x #13R (.188 strand) std. option

HEIGHT	ITEM NUMBER	PALLET QTY	WEIGHT
8'	MA13RU60096	28	124.0 lbs
10'	MA13RU60120	22	155.0 lbs
12'	MA13RU60144	18	186.0 lbs

Modified Expanded metal steel mesh provides superior delay to cut-through threats as well as ample visual screening.

X-SCREEN



1.5" x #14 std. option

HEIGHT	ITEM NUMBER	PALLET QTY	WEIGHT
8'	MA94RU60096	31	110.4 lbs
10'	MA94RU60120	25	138.0 lbs
12'	MA94RU60144	21	165.0 lbs

Louvered steel mesh provides favorable delay to cut-through threats and maximum visual screening.

WIREWOKS



.5" x 3" x 6GA. & 8GA.

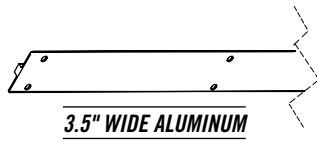
HEIGHT	ITEM NUMBER	PALLET QTY	WEIGHT
8'	MAAC⊗U60096	28 / 40	79.5 / 111.8 lbs
10'	MAAC⊗U60120	22 / 32	99.2 / 139.6 lbs
12'	MAAC⊗U60144	19 / 27	119.0 / 167.5 lbs

Welded Wire steel mesh provides ample delay to cut-through threats and modest visual screening.

⊗ = GAUGE OPTIONS AVAILABLE | 6 = 6GA 8 = 8GA

Effective: 05/07/19

MATRIX ALPHA® | T-TRACK / INFILL COVERS



LENGTH	ITEM NUMBER	PALLET QTY	WEIGHT
8'	MAUTC-8	75	6.35 lbs
10'	MAUTC-10	75	7.94 lbs
12'	MAUTC-12	75	9.53 lbs

T-Track / Infill Covers are used to join infill sheets. Therefore, the quantities required should match the infill sheet quantity.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

CARRIAGE BOLT HARDWARE SET:

1 Ea. #2-0090-UBKT (5/16"-18 x 1-1/4" Carriage Bolt), 1 Ea. #103414-BKT (5/16" Flat Washer), 1 Ea. #3-0051-UBKT (5/16"-18 Flange Nut)

TRI-LOBE HARDWARE SET:

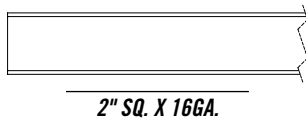
1 Ea. #1-0049-142BKT (3/8"-16 x 1.69" Screw), 1 Ea. #18991-BKT (3/8" Flat Washer), 1 Ea. #3-0038-UBKT (3/8"-16 Nut)

MAUTC-8: 16 Hardware Sets

MAUTC-10: 20 Hardware Sets

MAUTC-12: 24 Hardware Sets

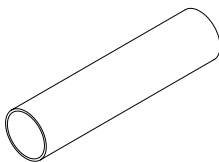
MATRIX ALPHA® | RAILS



LENGTH	ITEM NUMBER	BUNDLE QTY	WEIGHT
24'	MAU24	64	37.03 lbs

8' & 10' height systems to use a minimum of 3 rails. 12' height system to use a minimum of 4 rails.

MATRIX ALPHA® | RAIL SPLICE



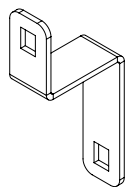
DESCRIPTION	ITEM NUMBER	BOX QTY	WEIGHT
Rail Splice	MAUS	32	1.08 lbs

Rail splices are used to join the rails. Therefore, the quantity required should match the rail quantity.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

2 Ea. #1-0067-UBKT (#12 Tek Screw)

MATRIX ALPHA® | INFILL HANGER BRACKET



FITS 2" X 2" RAIL

DESCRIPTION	ITEM NUMBER	SACK QTY	WEIGHT
Infill Hanger Bracket	MAUB22H	92	0.22 lbs

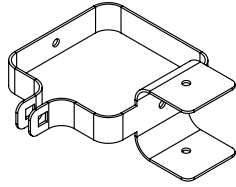
Each Infill sheet uses a minimum of 2 hanger brackets on top rail. More may be used depending on attachment option per job.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

1 Ea. #2-0102-UBKT (5/16"-18 x 1-1/4" Elevator Bolt), 1 Ea. #2-0103-UBKT (5/16"-18 x 3-1/2" Elevator Bolt) and 2 Ea. #3-0051-UBKT (5/16"-18 Flange Nut)

Effective: 05/07/19

MATRIX ALPHA® | POST BRACKETS

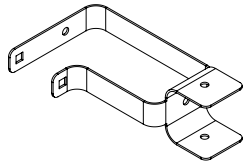


DESCRIPTION	ITEM NUMBER	SACK QTY	WEIGHT
4" x 4" Post Bracket	MAUB44W	28	0.52 lbs

Post Bracket quantities to match number of rails per post.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

1 Ea. #2-0090-UBKT (5/16"-18 x 1-1/4" Carriage Bolt), 1 Ea. #3-0051-UBKT (5/16"-18 Flange Nut), 4 Ea. #1-0067-UBKT (#12 Tek Screw)

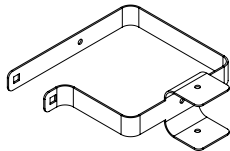


DESCRIPTION	ITEM NUMBER	SACK QTY	WEIGHT
3" x 6" Post Bracket	MAUB36W	28	0.58 lbs

Post Bracket quantities to match number of rails per post.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

1 Ea. #2-0086-UBKT (5/16"-18 x 3-1/2" Carriage Bolt), 1 Ea. #3-0051-UBKT (5/16"-18 Flange Nut), 4 Ea. #1-0067-UBKT (#12 Tek Screw)

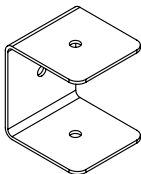


DESCRIPTION	ITEM NUMBER	SACK QTY	WEIGHT
6" x 6" Post Bracket	MAUB66W	20	0.71 lbs

Post Bracket quantities to match number of rails per post.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

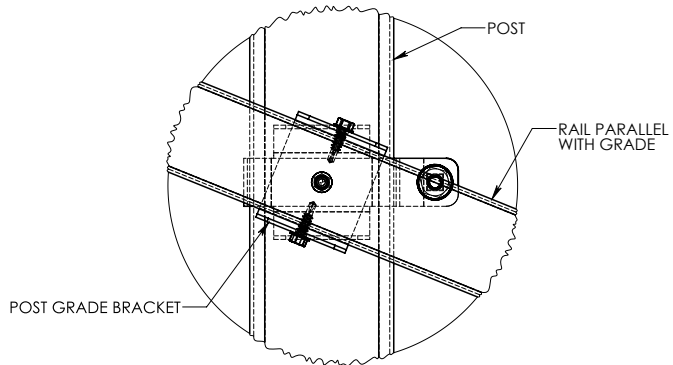
1 Ea. #2-0086-UBKT (5/16"-18 x 3-1/2" Carriage Bolt), 1 Ea. #3-0051-UBKT (5/16"-18 Flange Nut), 4 Ea. #1-0067-UBKT (#12 Tek Screw)



DESCRIPTION	ITEM NUMBER	BOX QTY	WEIGHT
Post Grade Bracket	MAUSB	39	0.26 lbs

Post Grade Brackets to be used at post when grade angle exceeds what standard channel on bracket can accommodate.

NOTE: USES HARDWARE FROM EXISTING POST BRACKET



Effective: 05/07/19

MATRIX ALPHA[®] | CORNER BRACKET



CORNER BRACKETS

DESCRIPTION	ITEM NUMBER	WEIGHT
8' Corner Bracket	MAUCB-8	14.55 lbs
10' Corner Bracket	MAUCB-10	18.23 lbs
12' Corner Bracket	MAUCB-12	21.95 lbs

Corner Brackets are used to join Infill Sheets at corners. The quantity should equal the number of corners of the site.

NOTE: HARDWARE NOT INCLUDED, SEE FASTENER SECTION

CARRIAGE BOLT HARDWARE SET:

1 Ea. #2-0090-UBKT (5/16"-18 x 1-1/4" Carriage Bolt), 1 Ea. #103414-BKT (5/16" Flat Washer), 1 Ea. #3-0051-UBKT (5/16"-18 Flange Nut)

TRI-LOBE HARDWARE SET:

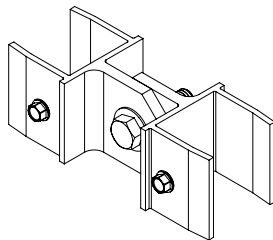
1 Ea. #1-0049-142BKT (3/8"-16 x 1.69" Screw), 1 Ea. #18991-BKT (3/8" Flat Washer), 1 Ea. #3-0038-UBKT (3/8"-16 Nut)

MAUCB-8: 14 Hardware Sets

MAUCB-10: 16 Hardware Sets

MAUCB-12: 18 Hardware Sets

MATRIX ALPHA[®] | CORNER/GRADE CHANGE HINGE



DESCRIPTION	ITEM NUMBER	BOX QTY	WEIGHT
Corner/Grade Change Hinge Hardware Box	MAUCGB	12	0.47 lbs

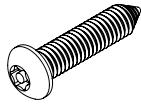
Corner/Grade Change Hinge is used to join rails at any corner/grade change between 0°-90°.

Kit includes: 2 Ea. #90-130-15405 (Max Corner Hinge), 2 Ea. #18991 (3/8" x 7/8" Flat Washer), 1 Ea. #19024 (3/8-16 18-8 Hex Nut), 1 Ea. #2-0097-U (3/8"-16 x 1-1/2" Hex Bolt), 2 Ea. #1-0067-U (#12 -14 x 3/4" Tek Screw)

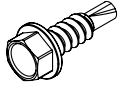
NOTE: The quantity used at each corner/grade change is equal to the number of rails at that location.

Effective: 05/07/19

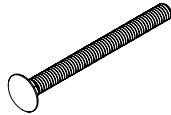
MATRIX ALPHA® | FASTENERS



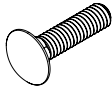
DESCRIPTION	ITEM NUMBER	SIZE	BUCKET QTY	WEIGHT
Screw	1-0049-142BKT	3/8"-16 x 1.69"	480	0.05 lbs Ea.



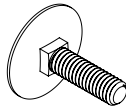
#12 Tek Screw Stainless Steel	1-0067-UBKT	#12-14 x 3/4"	480	0.01 lbs Ea.
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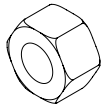
Carriage Bolt Stainless Steel	2-0086-UBKT	5/16"-18 x 3-1/2"	240	0.07 lbs Ea.
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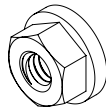
Carriage Bolt Stainless Steel	2-0090-UBKT	5/16"-18 x 1-1/4"	480	0.04 lbs Ea.
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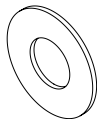
Elev Bolt Stainless Steel	2-0102-UBKT	5/16"-18 x 1-1/4"	150	0.04 lbs Ea.
Elev Bolt Stainless Steel	2-0103-UBKT	5/16"-18 x 3-1/2"	300	0.08 lbs Ea.



Nut Stainless Steel	3-0038-UBKT	3/8"-16	480	0.02 lbs Ea.
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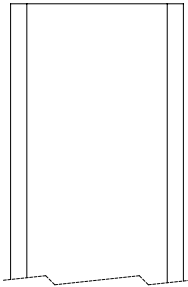
Flange Nut Stainless Steel	3-0051-UBKT	5/16"-18	480	0.03 lbs Ea.
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Flat Washer Stainless Steel	18991-BKT	3/8" x 7/8"	480	0.01 lbs Ea.
Flat Washer Stainless Steel	103414-BKT	5/16" x 3/4"	480	0.01 lbs Ea.

Effective: 05/07/19

MATRIX ALPHA® | BURY POSTS

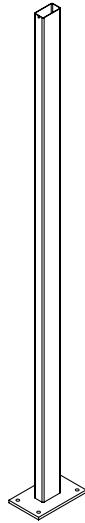


SIZE	DEPTH	ITEM NUMBER	WEIGHT
4" x 4" x 11GA	Varies	MAUP44LXXXL	Varies
3" x 6" x 14GA	Varies	MAUP36LXXXL	Varies
3" x 6" x .1875"	Varies	MAUP36HXXXL	Varies
6" x 6" x .1875"	Varies	MAUP66HXXXL	Varies

XXX = VARIABLE LENGTH OPTIONS AVAILABLE

NOTE: Post length is dependent on but not limited to: soil conditions, wind load requirement, fence height, post spacing & infill used. Please consult your Ameristar representative for correct post length.

MATRIX ALPHA® | PLATED POSTS



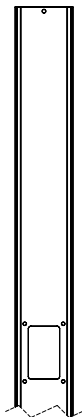
	POST LENGTH	ITEM NUMBER	WEIGHT
4" x 4" x 11ga.	8'	MAUP44PL094LG	69.09 lbs
	10'	MAUP44PL118LG	81.36 lbs
	12'	MAUP44PL142LG	93.63 lbs
	Varies	MAUP44PLXXXLG	Varies
3" x 6" x 14ga.	8'	MAUP36PL094LG	85.44 lbs
	10'	MAUP36PL118LG	99.35 lbs
	12'	MAUP36PL094LG	113.26 lbs
	Varies	MAUP36PLXXXLG	Varies
3" x 6" x .1875"	8'	MAUP36PH094LG	132.38 lbs
	10'	MAUP36PH118LG	153.40 lbs
	12'	MAUP36PH142LG	174.42 lbs
	Varies	MAUP36PHXXXLG	Varies
6" x 6" x .1875"	8'	MAUP66PH094LG	162.10 lbs
	10'	MAUP66PH118LG	190.78 lbs
	12'	MAUP66PH142LG	219.47 lbs
	Varies	MAUP66PHXXXLG	Varies

XXX = VARIABLE LENGTH OPTIONS AVAILABLE

NOTE: Post length is dependent on but not limited to: soil conditions, wind load requirement, fence height, post spacing & infill used. Please consult your Ameristar representative for correct post length.

Effective: 05/07/19

MATRIX ALPHA® | BURY TECH POST



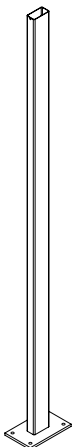
SIZE	HEIGHT	DEPTH	ITEM NUMBER	WEIGHT
6" x 6" x .1875	18'	Varies	MAUTP66H216HXXXD	Varies
6" x 6" x .1875	Varies	Varies	MAUTP66HYYYHXXXD	Varies

YYY = VARIABLE HEIGHT OPTIONS AVAILABLE

XXX = VARIABLE DEPTH OPTIONS AVAILABLE

NOTE: Post length is dependent on but not limited to: soil conditions, wind load requirement, fence height, post spacing & infill used. Please consult your Ameristar representative for correct post length.

MATRIX ALPHA® | PLATED TECH POST

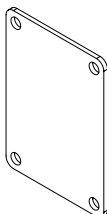


SIZE	HEIGHT	ITEM NUMBER	WEIGHT
6" x 6" x .1875	18'	MAUTP66H216HG	305 lbs
6" x 6" x .1875	Varies	MAUTP66HYYYHG	Varies

YYY = VARIABLE HEIGHT OPTIONS AVAILABLE

NOTE: Fasteners not included, hardware required for each box (3 plates) which is 1 Tech Post: 12 Ea. #1-0049-147BKT

MATRIX ALPHA® | TECH POST ACCESS COVER PLATE



DESCRIPTION	ITEM NUMBER	BOX QTY	WEIGHT
Tech Post Access Cover Plate	MAUTPCP	3	5.55 lbs

Sold in box quantity of 3 which match number of access posts on Tech Post.

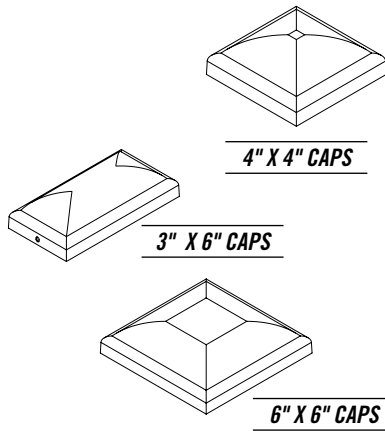
NOTE: Hardware not included, see fastener section.

For each box (3 Plates) which is 1 Tech Post:

12 Ea. #1-0049-142BKT (3/8"-16 x 1.69" Screw)

Effective: 05/07/19

MATRIX ALPHA® | POST CAPS



CAP SIZE	ITEM NUMBER	BAG QTY	WEIGHT
4" X 4" sq.	MAUCAP44	28	0.35 lbs Ea.
3" X 6" sq.	MAUCAP36	28	0.39 lbs Ea.
6" X 6" sq.	MAUCAP66	20	0.62 lbs Ea.

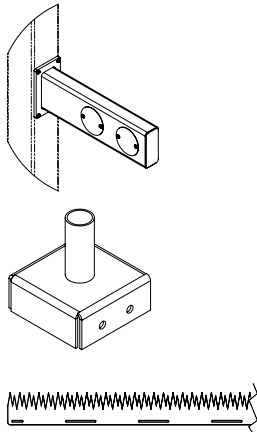
NOTE: FASTENERS NOT INCLUDED, HARDWARE REQUIRED

MAUCAP44: 1 Ea. #1-0067-UBKT (#12 Tek Screw)

MAUCAP36: 1 Ea. #1-0067-UBKT (#12 Tek Screw)

MAUCAP66: 1 Ea. #1-0067-UBKT (#12 Tek Screw)

MATRIX ALPHA® | ACCESSORIES



DESCRIPTION	ITEM NUMBER	SIZE	WEIGHT
Camera Arm	MAUCA	3" X 7" X 1/4" x 24"	35.04 lbs
Camera Arm Hardware	MAXCA-HDW		

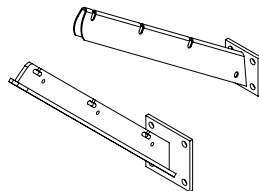
NOTE: #MAXCA-HDW Hardware Kit includes: 4 Ea. #90-133-15409 (5" Round x 14GA Steel Plate), 14 Ea. #1-0049-142 (3/8" x 1.69" Screw), and 1 Ea #90-133-15410 (2" x 3-1/2" x 14GA Steel Plate)

DESCRIPTION	ITEM NUMBER	SIZE	WEIGHT
Davit Arm	MAULA66	7.1875" x 6.625"	6.08 lbs

NOTE: #MAXLA66-HDW Hardware Kit includes: 2 Ea. #3-0044-U (1/2" Stainless Steel Nut), 2 Ea. #2-0093-U (1/2" x 7-1/2" Stainless Steel Hex Bolt), and 4 Ea. #17916 (1/2" Stainless Steel Washer)

DESCRIPTION	ITEM NUMBER	SIZE	WEIGHT
Spike Wall Topper	MAUST10	6.75" X 121.75" L	12.54 lbs

Spike Wall Topper uses existing infill to rail fasteners for attachment, as a standard.



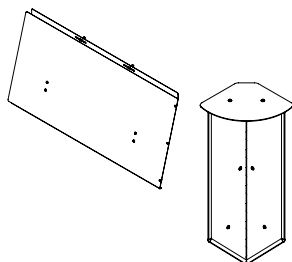
DESCRIPTION	ITEM NUMBER	SIZE	WEIGHT
Line Barb Arm	PBAU-L	18"	2.36 lbs
End/Corner Barb Arm	MBAU-FC	18"	5.08 lbs

Hot dipped galvanized. 1 line barb arm required at each intermediate post. Corner barb arms required at corner posts.

NOTE: If barb arms are to be installed add 3-1/2" to intermediate and corner posts.

NOTE: Hardware not included, see fastener section.

4 Ea. #1-0049-142BKT (3/8"-16 x 1.69" Screw), 4 Ea. #18991-BKT (3/8" Flat Washer)



DESCRIPTION	ITEM NUMBER	SIZE	WEIGHT
Animal Shield Line Kit	ASLU	62" L	41.15 lbs
Animal Shield Corner Kit	ASCU	12.75" x 40.125" x 10"	21.00 lbs

NOTE: #ASLU Animal Shield Line Kit includes: 1 Ea. #90-552-15568 (Line), 2 Ea. #90-130-15569 (Bracket) 10 Ea. #10049-X (3/8"-16 x 1.69 GR5 Screw), 10 Ea. #HX537 (3/8 Stainless Steel Nut), and 3 Ea. #1-0067-U (#12-14 x 3/4 Stainless Steel Tek Screw). #ASCU Animal Shield Corner Kit includes: 1 Ea. #90-552-15610 (Corner Cover), 1 Ea. #90-552-15611 (Corner Plate), 6 Ea. #90-130-15612 (Corner Bracket, and 12 Ea. #1-0049-X (3/8"-16 x 1.69 GR5 Screw)

Effective: 05/07/19

MATRIX ALPHA® | CONSTRUCTION SPECIFICATION 32 31 00**GALVANIZED PERIMETER ENCLOSURE GRID (PEG) FRAMING SYSTEM****PART 1 - GENERAL****1.01 WORK INCLUDED**

The contractor shall provide all labor, materials and appurtenances necessary for installation of the industrial galvanized 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® Alpha design, (specify mesh filler, Table 1) style. The system shall include all components (i.e., mesh filler, mesh 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 A123/A123M** - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
- **ASTM B221** - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes
- **ASTM F2548** - Expanded Metal Fence Systems for Security Purposes
- **ASTM F2453/F2453M** - Welded Wire Mesh Fence Fabric
- **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

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

Galvanized surface on all mesh and framework (i.e. rails and posts) is guaranteed under normal and proper usage, against corroding for a period of ten (10) years from the original purchase date. Alpha is also guaranteed for the same period of time against defects in workmanship or materials. See product specific warranty for additional details.

1.09 PRODUCT TESTING & COMPLIANCE

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.

PART 2 - MATERIALS**2.01 MANUFACTURER**

The fence system shall conform to perimeter enclosure grid framing system of the Ameristar Matrix Alpha design, (specify mesh filler, Table 1) 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 posts), shall have a minimum yield strength of 45,000 psi (310 MPa).
- B. Steel material for bury posts 4"x4"x11ga. and 3"x6"x14ga. shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 1 oz/ft², Coating Designation G100.
- C. Steel material for bury posts 3"x6"x.1875" wall shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 1.85 oz/ft², Coating Designation G185.
- D. Steel material for plated posts 4"x4"x11ga., and 3"x6"x14ga. shall be hot-dip galvanized to meet the requirements of ASTM A123/A123M with a minimum zinc coating weight of 1 oz/ft², Coating Thickness Grade 45.

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E. Steel material for plated & bury posts 3"x6"x.1875" wall., 6"x6"x.1875" wall., shall be hot-dip galvanized to meet the requirements of ASTM A123/A123M with a minimum zinc coating weight of 1.7 oz/ft², Coating Thickness Grade 75.

F. Steel material for rails 2"x2"x16ga. shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 1 oz/ft², Coating Designation G100.

G. Rails shall be a minimum 2" sq. x 16 Ga. and shall run continuous along front face of Matrix Alpha fence system. Rail changes in grade and direction shall be accomplished by Matrix Alpha hinged bracket. Hinged bracket shall fully engage each end of rail. Rail sections shall be joined by internal rail splice and secured using fastener. Rail to post attachment brackets shall be a minimum .875" wide x 14ga.

H. Fence post shall meet the minimum system requirements. Post options include 4" sq x 11ga, 3" x 6" x 14ga, 3" x 6" x .1875" or 6" sq x .1875". Post size shall be based upon system design requirements.

I. The cross-sectional shape of the t-track shall conform to the manufacturer's mesh trim design with outside cross-section nominal dimensions of 3.5" x .5" minimum. Aluminum material for t-track shall conform to the requirements of ASTM B221, alloy designation 6063-T5.

J. Matrix Alpha mesh filler material shall comply with one of the options listed in Table 1.

2.03 FABRICATION

A. Posts shall be pre-cut to specified lengths. Rails shall be pre-cut to manageable length and adjoined using splice coupling and fastener.

B. T-track cover shall be pre-cut to specified lengths and pre-drilled for mesh attachment. T-track shall be affixed vertically to mesh to accommodate the joining of specified filler material.

C. Mesh filler panels shall be pre-cut to match fence height. Each mesh panel shall be affixed to top rail using a minimum of 2 infill hanger brackets. Mesh infill shall be affixed at each remaining rail, minimum of 3 connection points per mesh panel at middle and bottom rails.

D. Integrated technology post shall be pre-manufactured with access ports strategically located and have predrilled holes for attachment. Technology post base shall be a minimum 6" x 6" square, nominally 18 feet above grade.

E. Pedestrian swing gates shall match fence system. Gate shall be pre-drilled to accept appropriate hardware set. Infill frames shall be fabricated as a single unit. Frame shall be of welded construction inset with mesh filler, attachment to gate frame by means of security fasteners. Gate jamb frame shall be fully welded consisting of 3" x 12ga square tubing for main jamb, 1" square gate stop, and strike mounting block, with gate stop bumpers. Jamb to include an electrical access point with conduit point of connection. Electrical connection to gate by means of Power Transfer connection mounted in jamb and gate. Gate shall be pre-assembled. Gate threshold to be mounted with fasteners allowing for placement below grade or removal after gate installation. Gate hardware to consist of exterior rated devices. Gate and hardware to be pre-assembled prior to shipping. Gate opening shall be designed to accommodate a 48" clear opening.

F. Sliding cantilever gates shall match 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.

G. Optional – Animal mitigation shield shall be securely mounted to top portion of fence and gate system. Animal shield shall provide positive deterrent from nuisance animals intruding into protected areas. System shall be installed along the upper most portion of the fence and gate system and throughout the entire perimeter including all corners and/or changes in fence direction. Animal mitigation system shall be evaluated and recommended by an accredited herpetologist for mitigating intrusion of nuisance animal's i.e. snakes, raccoons, squirrels, iguanas, rodents of unusual size, possums, cat species & nutria.

H. Optional – Barbwire deterrent shall be installed at top of fence and gate system. Barbwire deterrent shall have a minimum of 3 strands and be affixed to barb arms. Barb arms shall be securely attached to each line and terminal posts.

SEE REFERENCED TABLES ON THE FOLLOWING PAGE

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I. Optional –Spike Deterrent Strips shall be securely attached to the top of fence and gate system. Spike Deterrent strips shall be 12ga. (.075”) galvanized steel, spike sets shall alternate between two heights every 2 inches, spike set heights shall be 2.75 inches and 3.5 inches. Spike deterrent strips shall affix atop fence and gate system not exceeding a distance between each strip section of 2 inches.

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 to meet system requirements. Fence posts shall not exceed 12 feet on center. Fence framework and mesh filler shall be attached to system posts with fasteners supplied by the manufacturer. Posts shall be installed per system drawings (Note: In some cases, local restrictions of freezing weather conditions may require a greater depth). The “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 exposed surfaces; 1) Remove all metal shavings from cut area. 2) Apply fence system manufacturer provided zinc-rich paint to thoroughly cover cut edge and/or drilled hole; let dry. Failure to seal exposed surfaces per these steps above will negate warranty. 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.

Table 1 - Matrix Alpha Filler Options

Trade Name	Product	Description
X-Span™	Expanded Metal Mesh	.5" x 12R (.188 strand width) Modified - (73% screening) ASTM F2548
		.5" x #13R - (43% 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

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MATRIX ALPHA® | LIMITED WARRANTY

GALVANIZED PERIMETER ENCLOSURE GRID (PEG) FRAMING SYSTEM

Matrix Alpha 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.

The galvanized surface on all mesh and framework (i.e. rails and posts) by Ameristar is guaranteed under normal and proper usage, against corroding for a period of ten (10) years from the original purchase date (minimum threshold of 5% surface affected on overall project). Normal and proper usage does not include physical damage, abrasion or exposure to salty environments to the protective coating.

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

Should any fence mesh or 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, drilling or modifying Matrix Alpha components immediately seal the exposed surfaces by 1) Removing all metal shavings from cut area, 2) Apply two (2) coats of zinc finish (finish paint must have a minimum 69% zinc) to thoroughly cover cut edge and/or drilled areas; let dry.

Failure to seal exposed surfaces per steps the above steps 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 Alpha 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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