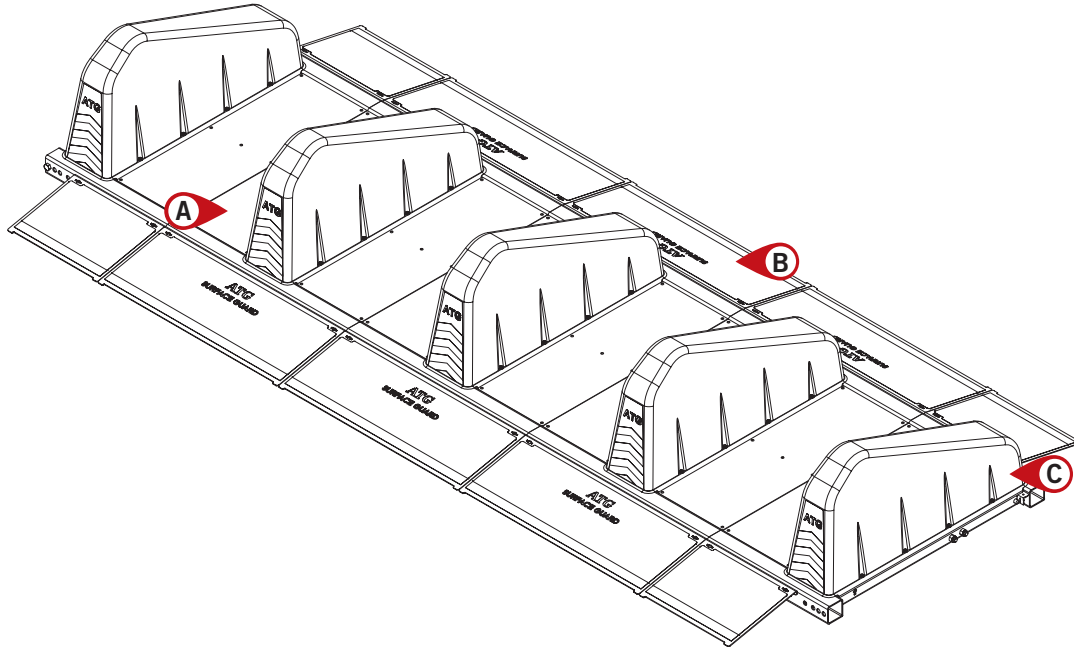


SURFACE GUARD™

Rapid Deploy Vehicle Barrier



- Ⓐ BASE UNIT BARRIER FRAME
- Ⓑ PEDESTRIAN RAMP WITH ANTI-SLIP MATERIAL
- Ⓒ GREY POLYURETHANE BARRIER COVER

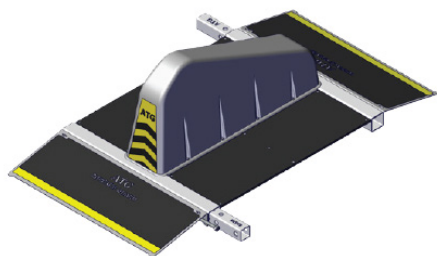
BARRIERS REQUIRE SITE ASSEMBLY

Refer to installation manual online for appropriate product configuration.

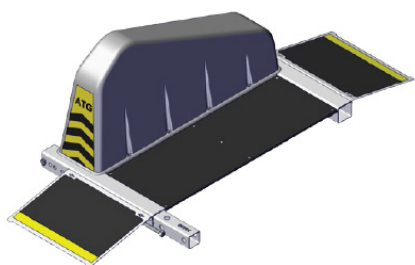
Effective: 06/20/18

SURFACE GUARD™ | MAIN FRAME UNITS

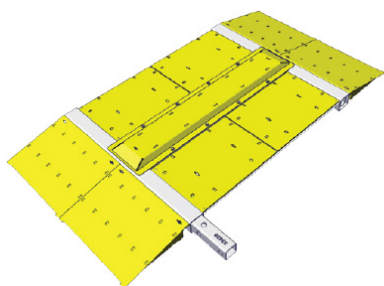
Rapid Deploy Vehicle Barrier



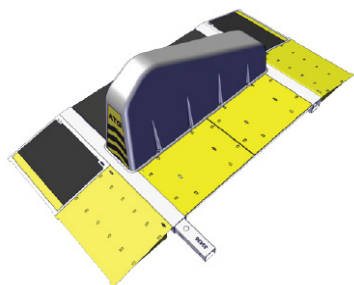
CENTER FRAME



LEFT/RIGHT HAND FRAME



EVA CENTER FRAME



EVA LEFT/RIGHT HAND FRAME

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Center Frame	33934X	350 lbs
Left Hand Frame	33936X	310 lbs
Right Hand Frame	33937X	310 lbs

Notes for customer to determine items required

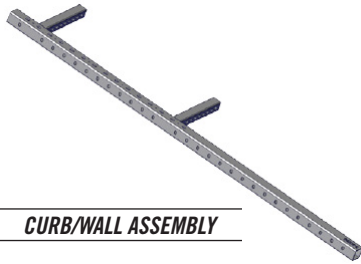
ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Emergency Vehicle Access Center Frame	34135X	850 lbs
Emergency Vehicle Access Left Hand Frame	34142X	660 lbs
Emergency Vehicle Access Right Hand Frame	34144X	660 lbs

Notes for customer to determine items required

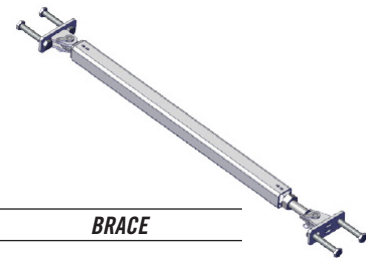
Effective: 06/20/18

SURFACE GUARD™ | FITTINGS

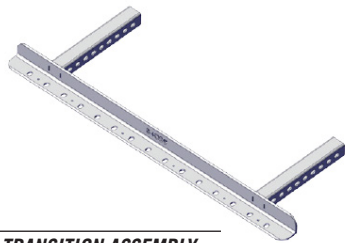
Rapid Deploy Vehicle Barrier



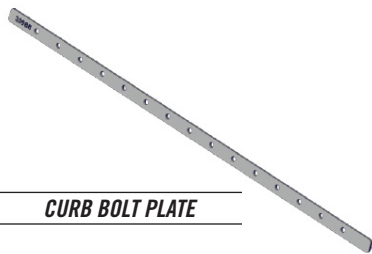
CURB/WALL ASSEMBLY



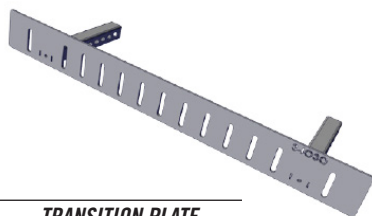
BRACE



TRANSITION ASSEMBLY



CURB BOLT PLATE



TRANSITION PLATE

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Curb / Wall Kit (complete)	33989X	200 lbs
<i>Kit Components</i>		
Curb/Wall Assembly	34026X	120 lbs
Brace	34027X	80 lbs

Notes for customer to determine items required

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Transition Kit (complete)	33994X	75 lbs
<i>Kit Components</i>		
Transition Assembly	34029X	65 lbs
Curb Bolt Plate	33988X	50 lbs

Notes for customer to determine items required

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Transition Plate Kit (complete)	34088X	115 lbs
<i>Kit Components</i>		
Transition Plate	34030X	75 lbs

Notes for customer to determine items required

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SURFACE GUARD™ | COMPONENTS

Rapid Deploy Vehicle Barrier

COMPONENTS

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Surface Guard Cover	33849X	20 lbs
Full Ramp	33917X	23 lbs
Half Ramp	33926X	23 lbs
Box Link	33628X	18 lbs
Obstacle Box Link (11' length)	33797X	190 lbs
Board Panel	33640X	15 lbs
EVA Ramp	33983X	45 lbs
EVA Panel Board	33979X	80 lbs
EVA Spike Cover	33981X	82 lbs

Notes for customer to determine items required

FASTENERS

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Cover Fasteners - M8 Screw	14261X	0.01 lbs
Cover Fasteners - M8 Flat Washer	11529X	0.01 lbs
Link Bolt M20 x 120	33999X	0.5 lbs
Frame connection Bolt - M20 x 200	34000X	0.7 lbs
Frame connection Nut - M20	13519X	.01 lbs
Nylock Nut M20	10046X	.01 lbs
Transition Plate Bolt M20 x 50	15820X	.01 lbs
Spike Pin	34440X	0.2 lbs

Notes for customer to determine items required

TOOLS

ITEM DESCRIPTION	ITEM NUMBER	WEIGHT
Full Unit Lifting Bar (set)	33995X	90 lbs
Half Unit Lifting Bar (set)	33996X	80 lbs

Notes for customer to determine items required

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SURFACE GUARD™ | CONSTRUCTION SPECIFICATION 32 30 00.11

RAPID DEPLOY VEHICLE BARRIER

PART 1 - GENERAL**1.01 WORK INCLUDED**

The contractor shall provide all labor, materials and appurtenances necessary for installation of the anti-ram system defined herein at (specify project site).

1.02 RELATED WORK**1.03 SYSTEM DESCRIPTION**

The manufacturer shall supply a total anti-ram quick deploy barrier system of the Ameristar® Surface Guard™ design. The system shall include all components (i.e., barriers, ramps and covers) 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

- **EN 10025-2** – Structural Steel Grade S235
- **BS EN ISO 1461:1999** – Hot dip galvanized coatings on fabricated iron and steel articles
- **IWA-14-1:2013** – Vehicle Security Barriers -- Part 1: Performance requirement, vehicle impact test method and performance rating

1.06 SUBMITTAL

The manufacturer's literature, warranty & product drawings shall be submitted 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.

PART 2 - MATERIALS**2.01 MANUFACTURER**

A. The anti-ram quick deploy barrier system shall conform to the Surface Guard design provided by Ameristar Perimeter Security Inc., in Tulsa, Oklahoma. This system shall be tested and certified to meet IWA-14-1:2013, Impact Condition Designation V/7200[N3C]/32/90:4.8 (Penetration of 4.8 meters/15.75 feet), with the with capability of stopping a 7200kg/15,000 lb. vehicle traveling at speeds up to 32km/h or 20 mph.

B. The anti-ram single barrier fixed system shall conform to the Surface Guard design provided by Ameristar Perimeter Security Inc., in Tulsa, Oklahoma. This system shall be tested and certified to meet IWA-14-1:2013, Impact Condition Designation V/2500[N1g]/48/90:4.5 (Penetration of 4.5M / 14.76 feet), with the with capability of stopping a 5,500 lb. vehicle traveling at speeds up to 30 mph.

C. The entire anti-ram barrier system, and all associated accessories and fittings shall be obtained from a single source.

2.02 MATERIAL

- A.** Steel material for barrier base shall conform to the requirements of structural steel grade S235, with a minimum yield strength of 33,000psi. Steel frame units must be hot dipped galvanized per BS EN ISO 1461:1999 standards.
- B.** Fabricated from structural steel the barrier base unit shall be a minimum 28-3/4" assembled height with a base unit dimension front to rear of 56-1/8". Barrier spike covers shall be constructed of HDPE Polyethylene plastic, grey in color. Pedestrian barrier ramps shall be constructed of steel and covered with a non-slip coating for pedestrian travel.
- C.** When required barrier units shall be supplied constructed to a reinforcement specification that will allow Emergency Vehicles Access.

2.03 FABRICATION

A. Barrier system components shall be provided complete and fabricated by welding. Collapsible spike shall be deployed into position and secured using pins. Covers shall be installed to conceal barrier spikes and affixed using fasteners. Pedestrian barrier ramps shall be provided at the front and rear of the barrier and shall be affixed to the base unit providing a secure surface to traverse barrier units.

PART 3 - EXECUTION**3.01 PREPARATION**

The purchaser shall indicate the location of all barriers with suitable means.

3.02 INSTALLATION

The barrier shall be installed per Ameristar System Drawings (supplied upon request). Barriers shall be installed per product drawings and installation instructions. Excavation and or rebar structure shall not be required.

3.05 CLEANING

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

Effective: 06/20/18

SURFACE GUARD™ | LIMITED WARRANTY

RAPID DEPLOY VEHICLE BARRIER

The Surface Guard quick deploy barrier by Ameristar is manufactured from the highest quality materials by skilled craftsmen to meet the highest standards of workmanship in the industry. Ameristar warrants its Surface Guard barrier against defects in material and workmanship for a period of 1 year. Barrier warranty requires that the requirements and instructions described in the operation and maintenance manual be followed and records of all maintenance activities be kept. Records should be available upon request and may be required for warranty claims.

Should the barrier fail in accordance with the details described herein, Ameristar warrants to the original purchaser their redemption through replacement, renewal or issuance of a pro-rated credit. 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.

Should the barrier be improperly installed, Ameristar shall not be responsible for guaranteed performance or appearance of barrier. Failure to install barrier with a professionally licensed and manufacturer-approved installer shall negate warranty.

Warranty does not apply when failure or damage is due to improper use or application, abuse or misuse, vandalism, natural disasters/catastrophes, or if products have been altered or modified, subjected to improper storage, improper maintenance, negligence, or used with parts not authorized by the manufacturer including but not limited to: excessive vehicle speed, excessive vehicle weight, temperature extremes, long term flooding or lack of drainage, packed debris, snow or ice around the barrier.

This warranty excludes wear, scratches and/or other damage to finishes and painted surfaces due to normal use. The manufacturer shall not be liable for damage to the product which results in the use of the barrier as a protective device (i.e. sustains a vehicle crash), due to damage caused by any other vehicle contact when the barrier is not in the active barrier position, and/or due to damage caused by snow plow operations. The manufacturer shall not be liable for any special, incidental or consequential damages, which result from the use of the products by Buyer, Owner/Operator (End User) and/or any other party, and limits the liability to the amounts paid by Buyer for the Product.

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. If a warranty claim does not meet the warranty criteria, then the Buyer or Owner/Operator (End User) shall be responsible for reimbursing the manufacturer for service and/or repair costs. This warranty may exclude any on site labor, travel costs to site and/or expenses in performing service or repair on site, for valid warranty claims.

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 the barrier. 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.

Effective: 06/20/18