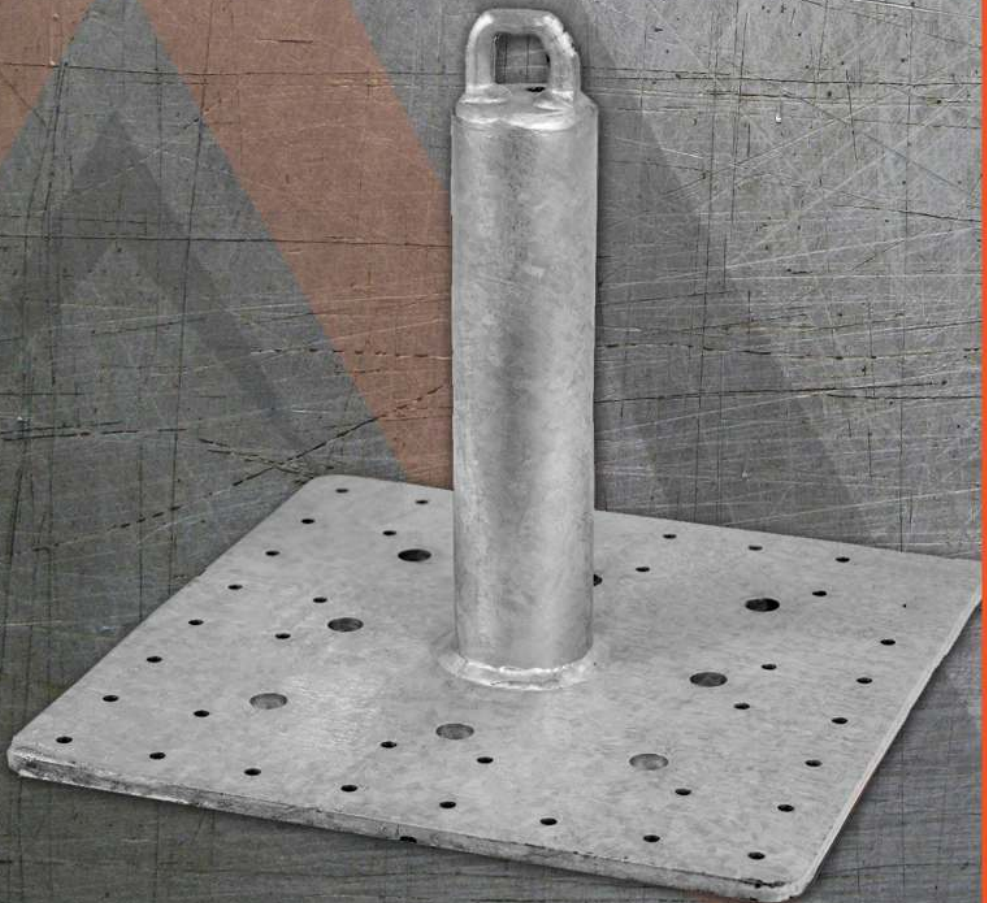




MALTA
DYNAMICS

FALL PROTECTION & SAFETY

Roof Anchor
Instruction Manual



Roof Anchor INSTRUCTION MANUAL

This product meets applicable OSHA® 1910,
OSHA® 1926:502 (d) (15) (1) (1) fall protection codes.
Designed in accordance with IWCA 1-14.1 and ANSI Z359.18-2017
These instructions apply to the following model(s):

A6320 - Roof Anchor 12” Standard
A6321 - Roof Anchor 18” Standard

Manual Revision Code:
MD-RAUIM250304

*A copy of this manual must be available to users at all times. Please visit www.MaltaDynamics.com
for the latest user instruction manual revision available for this product offering.*



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UNDER PENALTY OF LAW

This manual must be read and understood in its entirety, and used as part of a fall protection training program, as required by OSHA or any state/local regulatory agencies. This instruction manual is intended to meet industry standards required by ANSI Z359.18-2017 Type A and should be used as part of an Employee Fall Safety Training Program as required by OSHA. User must read and fully understand the limitations and proper use of the equipment. All users must be properly trained by their employer prior to use, per OSHA 29 CFR 1910.66, 29 CFR 1926.503, and applicable local standards.

Tested in compliance with the requirements of ANSI/ASSE Z359.7, testing covers only the hardware and does not extend to the anchorage and substrate to which the anchorage connector is attached.

Malta Dynamics Anchors do not comply with CalOSHA standards for buildings over 36' (or three stories), to comply with CalOSHA standards, anchors must be designed to meet window washing loads, must not show any sign of deformation under 2,500 lb. proof load, and no permanent deformation under a 5,000 lb. ultimate load. Refer to CalOSHA standards for details.

NOTE: This User Instruction Manual is not to be removed except by the equipment user. Current User Instruction Manuals can be found online at www.MaltaDynamics.com. Read and understand these instructions before using equipment. Do not discard User Instructions.

WARNING

Misuse or failure to follow warnings, instructions and limitations on the use of this equipment may result in serious personal injury or death. For further instructions about proper use, refer to supervisor or contact Malta Dynamics at 1-800-494-1840.

MATERIALS

Galvanized Steel

SAFETY INFORMATION

WARNING

Failure to understand and comply with safety regulations may result in serious injury or death. Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

WARNING

This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

WARNING

Do not alter or intentionally misuse this equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electric shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a Competent Person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to.

Fall protection equipment must be chosen by a Competent person. Selections must account for all potential hazardous workplace conditions.

The complete fall protection system must be planned (including all components, calculating fall clearance, and swing fall) before using.

All fall protection equipment must be purchased new and in unused condition.

Fall protection systems must be selected and installed under the supervision of a Competent Person, and used in a compliant manner.

Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRLs. Class A SRLs must arrest falls within 24". Class B SRLs must arrest falls within 54".

The user shall be equipped with a means of limiting the maximum dynamic forces exerted on the user during the arrest of a fall to a maximum of 8kN (1800-lbf).

Use of this product must be approved by an engineer or other qualified person to be compatible with any and all structural & operational characteristics of the selected installation location and system to be connected to this anchorage connector.

Forces applied to anchors must be calculated by Competent person.

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be compatible size and configuration.

A user must be of sound mind and body to properly and safely use this equipment in normal and emergency situations. Users must have a physician ensure they are clear of any medical conditions that may affect the proper and safe use of this equipment in normal and emergency situations.

A written pre-planned rescue plan in case of a fall must be in place. The written rescue plan must be project-specific. The written rescue plan must allow employees to rescue themselves, or provide an alternative means for their prompt rescue.

Store rescue equipment in an easily accessible and clearly marked area.

Maintenance of equipment must be done according to manufacturer's instructions. Equipment instructions must be retained for reference.

No on-site repair of equipment unless explicitly permitted by Malta Dynamics.

A user must be of sound mind and body to properly and safely use this equipment in normal and emergency situations. Users must have a physician ensure they are clear of any medical conditions that may affect the proper and safe use of this equipment in normal and emergency situations.

Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.

Do not remove the labeling from this product.

Additional requirements and limitations may apply depending on anchorage type and fastening option utilized for installation. All placements must be approved by an engineer or other qualified person.

MAINTENANCE, CLEANING, AND STORAGE

WARNING

Remove any surface contamination such as concrete, stucco, roofing material, etc., that could accelerate cutting or abrading of attached components.

Clean roof anchors as needed. Do not subject roof anchors to chemicals or adverse elements that could damage or corrode them.

INSPECTION

KEEP INSTRUCTIONS AVAILABLE FOR REFERENCE.

Record Date of First Use.

Prior to each use, inspect Roof Anchor for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, broken stitching, fraying, bird-caging, and missing or illegible labels. **IMMEDIATELY** remove Roof Anchor from service if defects or damage are found and contact Malta Dynamics to inquire about its return or repair. Equipment subjected to forces of fall arrest must immediately be removed from use.

Ensure that applicable work area is free of all damage, including, but not limited to, debris, rot, rust, decay, cracking, and hazardous materials. Ensure that selected Substrate will support the application-specific minimum loads set forth in this instruction manual. Substrate must be stable.

At least every 12 months, a Competent Person other than user must inspect Roof Anchors. **Competent Person inspection must be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent person must sign their initials in box corresponding to the month and the year the inspection took place. If grid becomes full or illegible, contact Malta Dynamics for replacement label.**

During inspection, consider all applications and hazards Roof Anchors have been subjected to.

PRODUCT LABELS

The following labels are affixed to the product and must not be removed:



ROOF ANCHOR SERIES

A6320 Roof Anchor 12" Standard

This product meets applicable OSHA® 1910, OSHA® 1926-502 (d) (15) (1) (1) fall protection codes. Designed in accordance with ANSI Z359.18-2017 Type A IWCA 1-14.1 Compliant 1,250 lbs Load Rating

DATE OF MANUFACTURE: _____

SERIAL NUMBER: _____

BATCH NUMBER: _____

WARNING: Refer to instructions for connection and installation specifications. Avoid contact with hazards, including but not limited to heat, chemicals, electricity, and sharp or abrasive edges and surfaces.

Prior to use, read and understand all manufacturer's instructions provided with equipment at time of shipment.

MATERIALS: Galvanized steel

Only make compatible connections.

Refer to instructions for proper installation and connection methods. All PFAS equipment must be selected and deemed compatible with anchor by a Competent Person.

Working Load: 1250 lbs
Minimum Breaking Strength (MBS): 5000 lbs
Service Temperature: -30 deg F to 130 deg F (-34 deg C to 54 deg C)

INSPECTION GRID

DATE OF FIRST USE: _____

Made in
China

Inspection Date	Initials	Inspection Date	Initials

User must inspect prior to EACH use. Competent Person must complete formal inspection every 12 months. Competent Person to inspect and initial. Product Lifetime is indefinite as long as equipment passes pre-use and Competent Person inspections. If equipment fails inspection, IMMEDIATELY REMOVE FROM SERVICE.

DO NOT REMOVE LABEL

800-494-1840 | MaltaDynamics.com

210 13th Street | Malta, OH 43758



ROOF ANCHOR SERIES

A6321 Roof Anchor 18" Standard

This product meets applicable OSHA® 1910, OSHA® 1926-502 (d) (15) (1) (1) fall protection codes. Designed in accordance with ANSI Z359.18-2017 Type A IWCA 1-14.1 Compliant 1,250 lbs Load Rating

DATE OF MANUFACTURE: _____

SERIAL NUMBER: _____

BATCH NUMBER: _____

WARNING: Refer to instructions for connection and installation specifications. Avoid contact with hazards, including but not limited to heat, chemicals, electricity, and sharp or abrasive edges and surfaces.

Prior to use, read and understand all manufacturer's instructions provided with equipment at time of shipment.

MATERIALS: Galvanized steel

Only make compatible connections.

Refer to instructions for proper installation and connection methods. All PFAS equipment must be selected and deemed compatible with anchor by a Competent Person.

Working Load: 1250 lbs
Minimum Breaking Strength (MBS): 5000 lbs
Service Temperature: -30 deg F to 130 deg F (-34 deg C to 54 deg C)

INSPECTION GRID

DATE OF FIRST USE: _____

Made in
China

Inspection Date	Initials	Inspection Date	Initials

User must inspect prior to EACH use. Competent Person must complete formal inspection every 12 months. Competent Person to inspect and initial. Product Lifetime is indefinite as long as equipment passes pre-use and Competent Person inspections. If equipment fails inspection, IMMEDIATELY REMOVE FROM SERVICE.

DO NOT REMOVE LABEL

800-494-1840 | MaltaDynamics.com

210 13th Street | Malta, OH 43758

PRODUCT SPECIFIC APPLICATIONS

Malta Dynamics Permanent Roof Anchor is intended for use as part of a Personal Fall Arrest System (PFAS) or Fall Restraint System to help limit the forces associated with fall arrest.

WARNING

Use of equipment for unintended applications may result in injury or death. Maximum 1 attachment per connection point.



Personal Fall Arrest: Roof Anchors may be used to support a MAXIMUM of 1 Person in Fall arrest applications. Structure must withstand loads applied in all directions permitted by the system of at least 5,000 lbs. Maximum free fall is 6', or up to 12' if used in combination with equipment explicitly certified for such use. Applicable D-ring: Dorsal.



Restraint: Roof Anchors may be used in Restraint applications. Restraint systems prevent workers from reaching the leading edge of fall hazards. Always account for fully deployed length of lanyard/SRL. Structure must withstand loads applied in all directions permitted by the system of at least 1,250 lbs. No vertical free fall is permitted. Restraint Systems may only be used on the surfaces with slopes up to 4/12 (vertical/horizontal). Applicable D-ring: Dorsal, Chest, Side, Shoulder.



Confined Space/Rescue: Roof Anchors may be used in Confined Space/Rescue applications. Confined Space/Rescue Systems are those capable of recovering a worker from a confined location or after they are exposed to a fall. Structure must withstand loads applied in the direction permitted by system of at least 3,000 lbs. No vertical free fall is permitted. Applicable D-rings: Dorsal, Chest, Shoulder.

For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-310 lbs, or up to 420 lbs. if used in combination with equipment explicitly certified for such use. Maximum 1 connection per Roof Anchor.

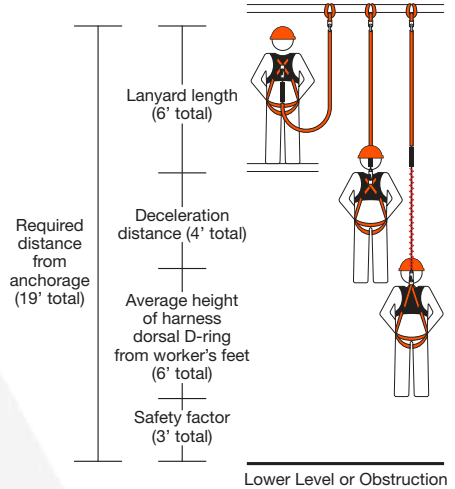
LIMITATIONS

Fall clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a minimum 3' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors.

Diagram shown is an example fall clearance calculation ONLY.

Swing Falls: Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to in line with the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of fall.

FALL CLEARANCE CALCULATION



- NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.
- The anchorage connector is designed to be used in temperatures ranging from -30°F to +130°F (-34°C to +54°C).
- Do not use/install equipment without proper training by a “competent person” as defined by OSHA 29 CFR 1926.32(f).
- Allowable individual worker weight capacity range (including all clothing, tools, and equipment) is 130-310 lbs. if used in combination with equipment explicitly certified for such use and deemed proper by the competent person.

CONNECTOR COMPATIBILITY LIMITATIONS

When making connections with Roof Anchors, eliminate all possibility of roll-out. Roll-out occurs when the interference between the hook and the attachment point causes the hook gate to unintentionally open and release. All connections must be selected and deemed compatible with Roof Anchors by a Competent person. All connector gates must be self-closing and self-locking, and withstand minimum loads of 3,600 lbs. See the following for examples of compatible/incompatible connections.



(A6320/A6321 shown above)

Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.



Do: Attach connector closed and locked to D-ring.

Do not: Attach two or more snap hooks or carabiners to each other.

Do not: Connect directly to webbing.

Do not: Connect two connectors to same D-ring.

Do not: Connect to applications that places load on gate.

Do not: Connect to incompatible or irregular application, which may increase risk of roll-out.

Do not: Connect directly to horizontal lifeline.

WARNING

All installations of Roof Anchors must be performed by a Competent or Qualified Person, or by a Malta Dynamics Fall Protection Certified Installer.

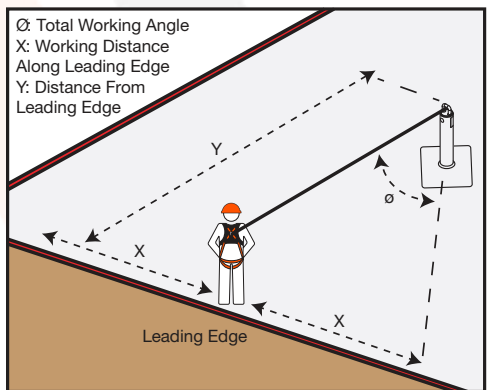
PERFORMANCE

Model #	Description	Min. Breaking Strength	Working Load Limit:	Standard
A6320, A6321	Roof Anchor 12" Standard, Roof Anchor 18" Standard	5000 lbs.	1250 lbs.	ANSI Z359.18- 2017 Type A, IWCA 1-14.1

CORRECT ANCHORAGE POSITIONING

This chart details allowable working zones required to reduce risk of swing falls and improper side loading. **ALWAYS** adhere to information specified by chart.

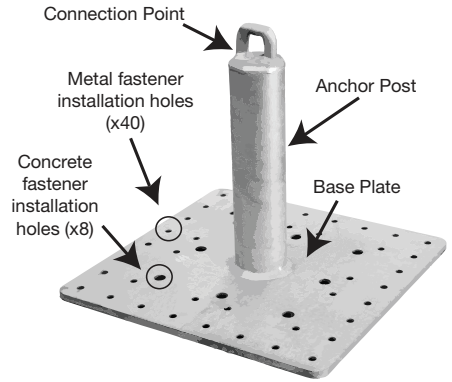
Anchor Distance from Leading Edge (Y)	Working Distance Along Roof Edge (Either Direction) (X)	Working Angle from Perpendicular (Ø)
6'	8'	53°
10'	9'-9"	45°
15'	11'-7"	38°
20'	13'-3"	33°
25'	14'-6"	30°
30'	16'	28°
35'	17'-2"	26°
40'	18'-3"	24°
45'	19'-4"	23°
50'	19'-10"	21°
55'	21'-4"	21°
60'	22'-3"	21°



For example, if the anchorage connector is 6' from the leading edge (Y), the working distance (X) is 8' in each direction from the perpendicular, which translates to a 53° working angle.

INSTALLATION

1. Ensure all PFAS equipment is selected and deemed compatible with applicable Roof Anchor by Competent Person.
2. Eliminate or minimize all risk of swing fall.
3. Ensure structure to which Roof Anchor is to be attached, and on which work is to be performed, is free of all hazards, including, but not limited to, debris, rot, rust, sharp or abrasive edges and requirements specified by this instruction manual.



For all Roof Anchors, all applicable fastener holes must be used.

Window Washing: Anchors are required to be concrete embedded, bolted or field welded.

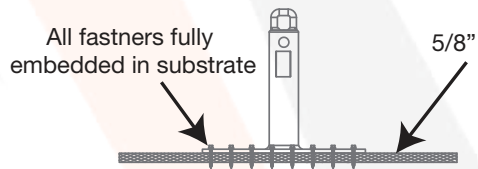
Substrate on which Roof Anchor is to be installed must withstand Minimum load of 5,000 lbs.

INSTALLATION - WOOD SUBSTRATE

MINIMUM substrate requirement: 5/8".

Fasteners: (40) #14 x 2½" Hex Head screws for wood decking or equivalent.

1. Place Anchor at selected installation location.
2. Install all fasteners until snug, and ensure anchor is fully secured to substrate.
3. All fasteners must be fully embedded in wood decking.

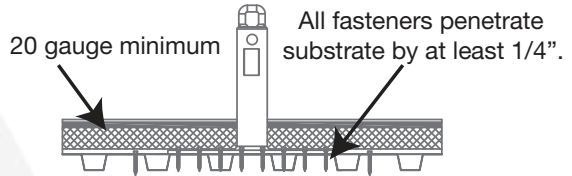


INSTALLATION - METAL SUBSTRATE

MINIMUM substrate requirement: 20 gauge.

Fasteners: (40) #14 x 2½” Hex Head screws for metal decking or (40) Fab-Lok FAS-10-12 RW fastener or equivalent.

1. Place Roof Anchor at selected installation location.
2. Install all fasteners per the fastener manufacturer’s instructions and ensure Roof Anchor is fully secured to substrate.



3. All fasteners must penetrate metal decking by at least 1/4”.

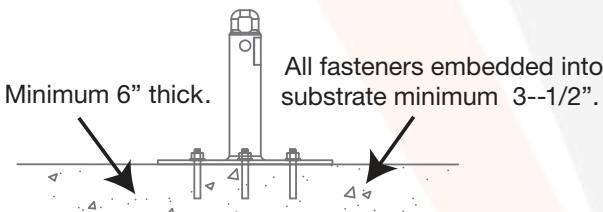
INSTALLATION - CONCRETE SUBSTRATE

Minimum substrate requirement: 2,000 psi, 6” thick.

Installation must be done a minimum of 8” from all edges. Hilti HIT-HY 200 epoxy or equivalent is required for the installation of Hilti Has-E Rods.

Fasteners must be (8) ½” Hilti Has E-Rods, with minimum 3-½” embedment or (8) ½” Wedge Anchors rated at 6,000 lbs.

1. Place Roof Anchor at selected installation location.
2. Install all fasteners per the fastener manufacturer’s instructions, and ensure Roof Anchor is fully secured to substrate.

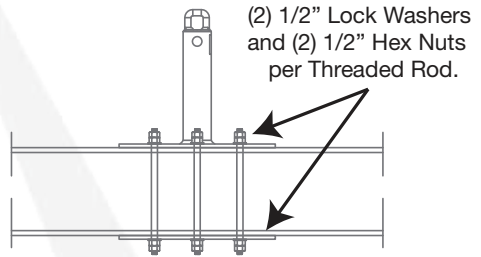


INSTALLATION - STRUCTURAL BEAMS (MIN 6" WIDTH)

NOTE: Backer Plate Required.

Fasteners must be (6) 1/2" Lock Washers, (6) 1/2" Hex Nuts, and (6) 1/2", A307 threaded rods cut in the field to the proper length.

1. Place Roof Anchor at installation location.
2. Secure Backer Plate (A6307) to Roof Anchor with all required fasteners.
3. Tighten all fasteners per the fastener manufacturer's instructions and ensure Roof Anchor is fully secured to substrate.
4. Deform threads on all fasteners to prevent tampering.



LIMITED WARRANTY

Malta Dynamics, LLC warrants that the Roof Anchor shall be free from defects in material and workmanship that develop under normal use for a period of one year from the date of shipment. The foregoing shall be the exclusive remedy of the buyer and the exclusive liability of Malta Dynamics, LLC. Our warranty excludes normal replaceable wear items, i.e. gaskets, wear parts, seals, O-rings, belts, drive chains, clutches, etc. Any equipment, part or product which is furnished by Malta Dynamics, LLC but manufactured by another, bears only the warranty given by such other manufacturer (Malta Dynamics, LLC agrees to furnish free of charge a written description of problem or cause). Warranty is voided by product abuse, alterations, use of equipment in applications for which it was not intended, use of non-manufacturer parts, or failure to follow documented service instructions. The foregoing warranty is exclusive of all other warranties whether written or oral, expressed or implied. No warranty of merchantability or fitness for a particular purpose shall apply. The agents, dealers, and employees of Malta Dynamics, LLC are not authorized to make modifications to this warranty, or additional warranties binding on the Malta Dynamics, LLC. Therefore, additional statements, whether oral or written, do not constitute warranty and should not be relied upon.

Malta Dynamics, LLC's sole responsibility for any breach of the foregoing warranty provisions, with respect to any product or part not conforming to the Warranty or the description herein contained, is at its option:

- (a) to repair, replace, or refund such product or parts upon the prepaid return thereof to location designated specifically by Malta Dynamics, LLC. Product returns not shipped prepaid will be refused.
- (b) as an alternative to the foregoing modes of settlement that dealer may repair defective units with reimbursement for expenses. A written description of problem or cause must accompany all warranty claims.

Except as set forth here in above and without limitation of the above, there are no warranties or other affirmation which extend beyond the description of the products on the fact hereof, or as to operational efficiency, product reliability, or maintainability or compatibility with products furnished by others. In no event, whether as a result of breach of contract or warranty or alleged negligence, shall Malta Dynamics, LLC be liable for special or consequential damages including but not limited to: Loss of profits or revenue, loss of use of the product or any associated product, cost of capital, cost of substitute products, facilities or services or claims of customers. Malta Dynamics, LLC does not assume responsibility for any accident due to equipment modification or misuse.

No claim will be allowed for products lost or damaged in transit. Such claims should be filed with the carrier within fifteen days.

NOTES





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