

TERRALAM[®]

EPZ GROUNDING MATS USER AND INSTALLATION GUIDE

Version 01 - 03.26.2025



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Additional resources, including information about grounding, OSHA regulations, and other documents can be found at:
sterlingsolutions.com/epz-resources/
or by scanning the QR code below.

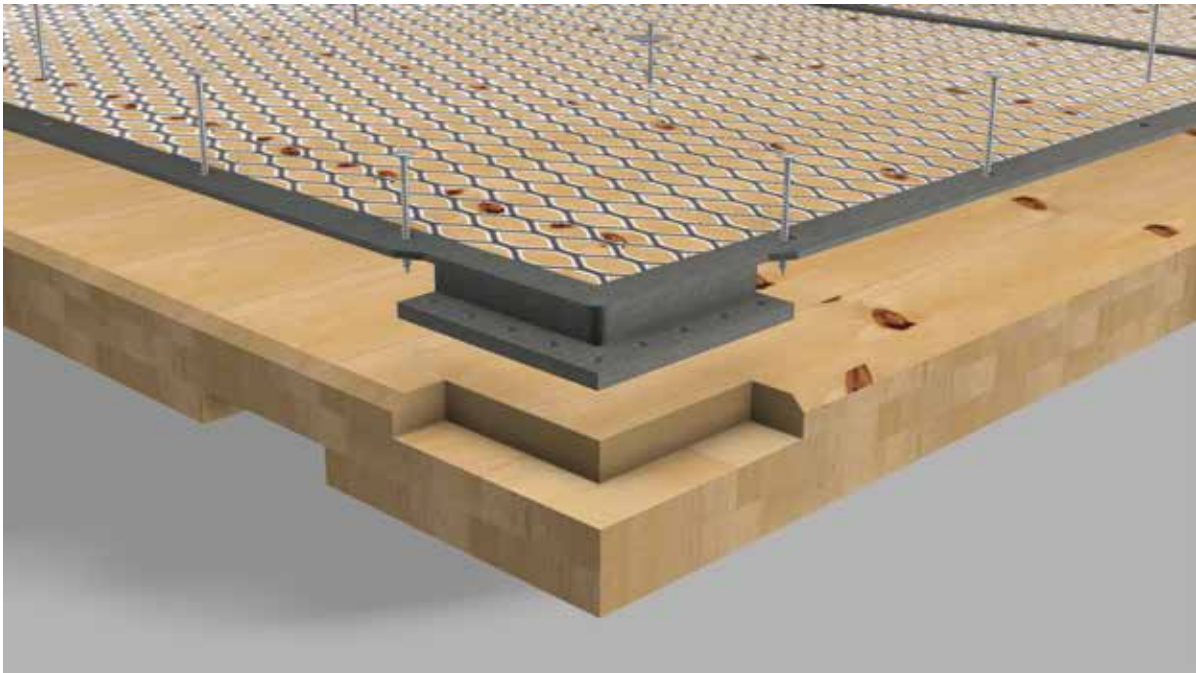


Introduction

This User's Guide was developed with the primary objective of informing and educating Sterling employees as well as customers/users who will be self-performing all, or parts of an EPZ system installation, re-location, deconstruction, or shipping of the EPZ system.



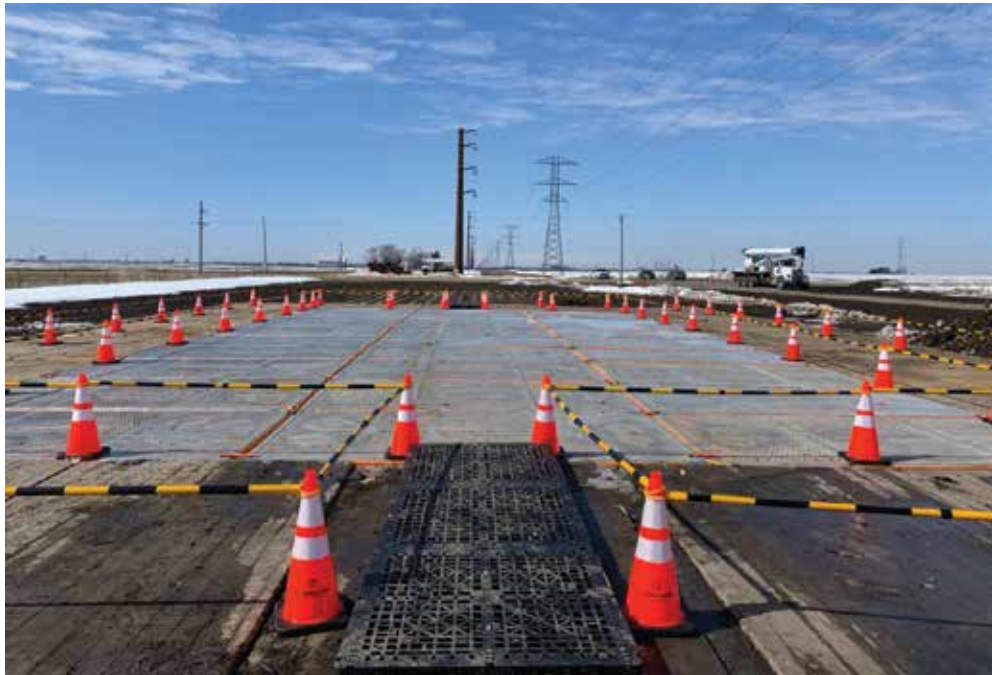
Example of an installed TerraLam EPZ Grounding Mat system that is in use



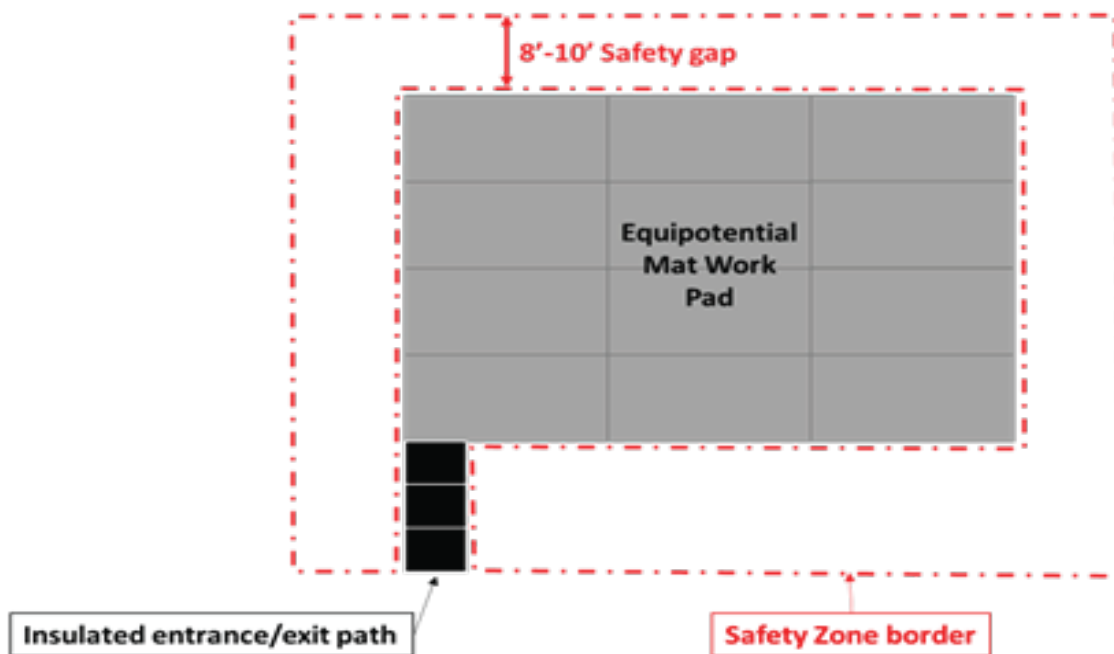
Expanded view of Sterling's TerraLam EPZ Ground Mat. comprised of an engineered conductive metal top and a modified TerraLam 308 CLT mat base

Typical Pad Layout

Sterling's TerraLam EPZ Ground Mat system was designed to create an equipotential zone as part of an overall strategy to assist employers and contractors with their obligations under OSHA Regulations. The setup includes a grounded equipotential zone surrounded by a safety gap with appropriate delineations of the borders and an insulated entrance/exit.



Example of an installed TerraLam EPZ Grounding Mat system



Overhead diagram of the work pad with a surrounding safety gap

Zone Components and Functions

Equipotential Zone (EPZ) work pad

The pad is a pre-defined bonded and grounded surface consisting of multiple EPZ mats with conductive grates that are then bonded (connected) using jumper cables, adaptor plates (buss bars) and finally run to ground, thus creating a network that provides a temporary protective equipotential zone.

Bonding Adaptors (aka Buss Bars)

If required by the customer/user (some customers/users have their own buss bars), Sterling can provide Bonding Adaptor plates which may be mounted by the customer/user to the EPZ pad and used as a necessary bonding aid to complete the circuit and to run inadvertent current to ground. The bar section of the Sterling Adaptor provided by Sterling is designed to accept the most common grounding cable attachment types.

Final Grounding

****IMPORTANT** The customer/user provides the equipment, manpower, and qualified technical expertise to execute the final grounding to protect workers. Note: grounding locations may be added/removed depending upon the locations of vehicles, rigs, spools, etc. as the requirements of the pad changes over the phases of the project.**

Inner and Outer Safety Zone border

The standard Sterling installation includes the erection of a buffer zone designed to isolate the bonded EPZ pad zone, from the surrounding non-protected work areas. The gap between the inner and outer borders creates what is known as the **Safety Gap**. This Safety Gap discourages touches that may occur between workers standing ON the protected pad, and workers standing OFF the protected pad. Touches may occur when workers are handing off items (tools or others) to one another.

Insulated Entrance/Exits

At the customer(s)/user(s) guidance, one (or more) entrance(s) and exit(s) will be constructed by Sterling at the time of installation via the approved Access Plan. These predetermined ingress/egress points provide consistency and assist in avoiding a loss of boundaries as well as visually defining the overall protected work zone.

Caution: Workers walking or standing on the composite EPZ walkway pad at the entrance/exit points are NOT protected from current differential hazards.

Recommended Uses and Application

The Sterling EPZ mat and associated accessories were designed for de-energized work zone hazard protection in a typical utility environment with ASTM F855-19a Grade 5 (or lower) requirements. And:

- Applications where accidental re-energizing of a system, or other induced currents/voltages can create step/touch potential.
- These Application(s) come under:
 - **OSHA CFR 1910.269** Appendix C Protection from Hazardous Differences in Electric Potential **and**
 - **OSHA CFR 1926.926** Subpart V Grounding for the Protection of Employees

Typical utility application(s) include:

- Overhead wire pulling work sites.
- Underground wire pulling work sites.
- Erection and operation of temporary sub-stations, or electric supply stations.

Additional resources, including information about grounding, OSHA regulations, and other documents can be found at:
sterlingsolutions.com/epz-resources/
or by scanning the QR code below.



- Users of Sterling EPZ Mats and Accessories (or other associated equipment) are required to adhere to all regulatory safety requirements to protect workers from hazards associated with electrical potential.
- Utilize PPE that is appropriate for workers within a de-energized temporary equipotential zone to protect against hazards associated with inadvertent electric differential keeping in mind both “step” and “touch” potential hazards.
Please consult your Safety Management for required PPE
- Thorough, up-front, site planning (setting up the team/project for success) is important. Checklist items to be considered include:
 - Proximity and management of electrical and other hazards.
 - Review of ground conditions (wet, un-even terrain, foliage).
 - Site selection and preparation.
 - Installation planning and materials requirements.
- Utilize trained personnel to execute the installation (or re-location) phases of a project safely and properly. The use of safety checklists, which include a pre-use bonding confirmation (via Ohm/Megger meter) is highly recommended to ensure a properly installed and safe zone.
- Maintain your EPZ installation regularly (it is recommended to check **at a minimum daily**) throughout the project. Daily inspection items include (but are not limited to):
 - Proper bonding and connection integrity
 - Damage to mats, grates, cables, grounding devices
 - Deterioration of zone definition:
 - Safety barriers upset or missing.
 - Entrances/Exits removed.
 - Shifting of the pad (stressing bonding connection points).
 - Continual monitoring of electrical conductivity and resistance of the EPZ installation.
 - Monitor and take action for dynamic changes to the site caused by weather (wind, rain, snow, heat), changes in workflow, equipment positions, non-qualified worker activity.

Many of the more detailed standard practices are described in the EPZ Installation Guide section included in Sections 10 and 11 of this Users Guide.

EPZ Specifications and Parts

Dimensions and Weights

Description	Sterling Part Number	L	W	H	Weight (lbs)
TerraLam 308-14 Mat	MCN39614SL	164"	92"	4.125"	1,163
EPZ Grate	EPZGRATE14	163.25"	91.875"	.75"	257
Complete EPZ Mat Assembly	MCU39614SL-EPZ	164"	92"	4.375"	1,420

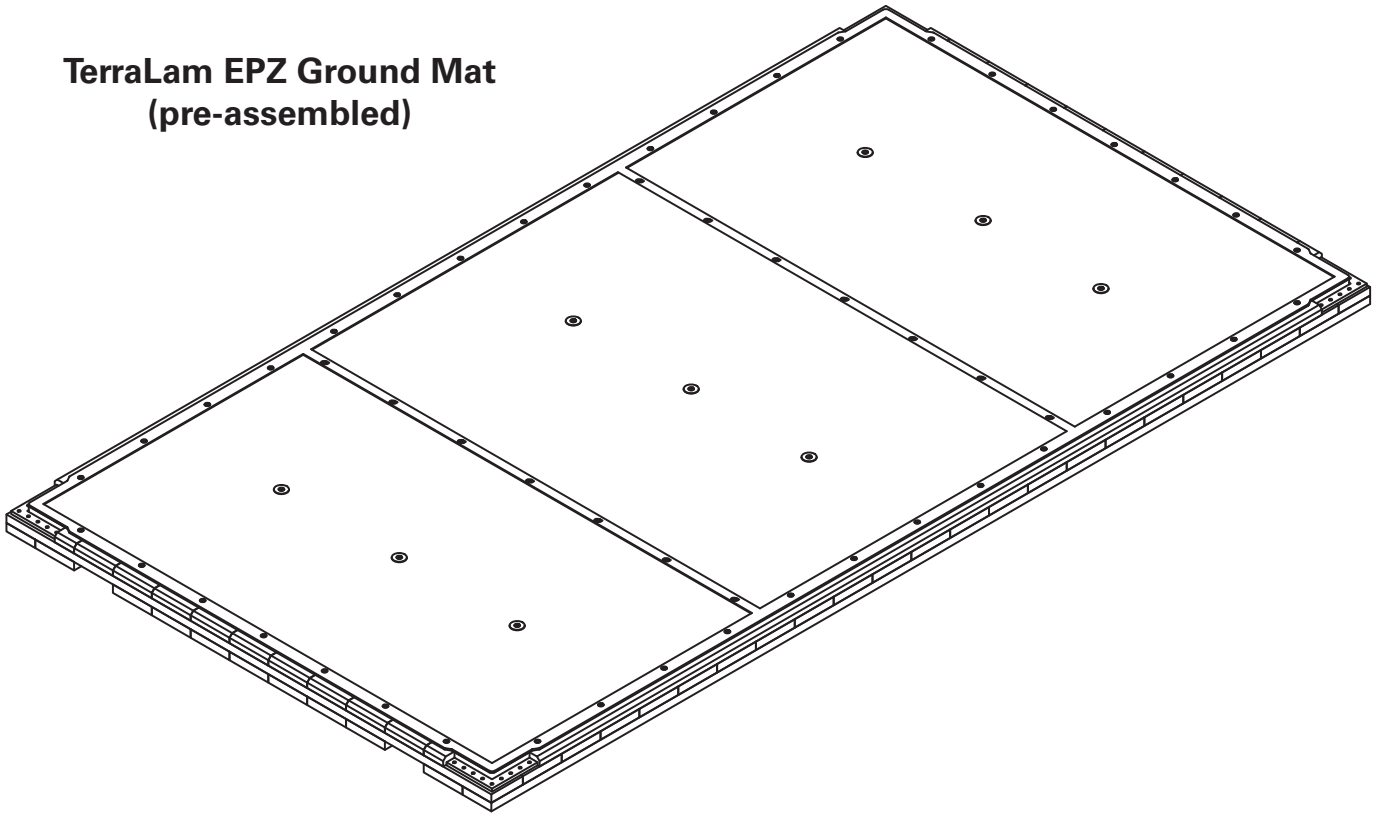
Component Ordering/Usage (Bill of Materials)

Each pad installation and bonding requirement is custom and unique, each requiring varying quantities of components based on pad dimensions, layout, and bonding requirements. The Sterling specialty products group has developed a utility used in calculating the quantity of various components required for any given installation (project). Also see [Page 26](#) of this Users Guide (Product Support), Sterling can assist users in addressing any questions or peculiarities of your specific installation needs. However, general guidelines for overall EPZ Pad component requirements are as follows:

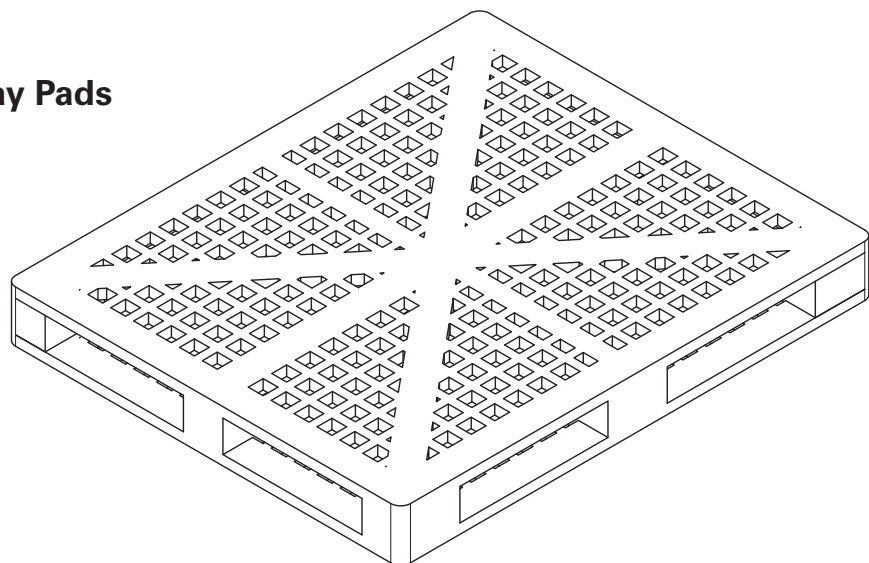
Item Number	Description	Standard Package Quantity
MCN39614SL-EPZ	EPZ mat assembly	A
EPZJUMPER12	Jumper Cables (pre-assembles with hardware)	Bonding plan (approx. 1.5 X A)
SSBOLT1	Jumper Cable Screw	(2 X EPZJUMPER12) + 10%
WASHERLK1	Jumper Cable Lock Washer	(2 X EPZJUMPER12) + 10%
WASHERFLT1	Jumper Cable Flat Washer	(2 X EPZJUMPER12) + 10%
EPZBUSBAR1	Bonding Adapter	Per Access Plan (Ave. 4-6 per pad)
WOODSCREW1	Bonding Adapter Wood Screws	(6 X EPZBUSBAR1) + 10%
WASHERFND1	Bonding Adapter Fender Washer	(6 X EPZBUSBAR1) + 10%
CONSTRAP12	TerraLam Connect Straps	2 X A +10%
SCREWS	TerraLam Connect Screws	2 X (CONSTRAP12)
EPZSAFETYCONE	EPZ Safety Cones	Pad Inner-outer perimeter / 10
EPZCONEBAR	EPZ Cone Bars	Pad Inner-outer perimeter / 10
EPZWALKPAD	EPZ Walkway Pads (pallet)	3 PER EXIT/ENTRANCE

Note: To mitigate the risk of running short of parts during installation and causing delay, Sterling recommends shipping an overage of components to the job site.

**TerraLam EPZ Ground Mat
(pre-assembled)**



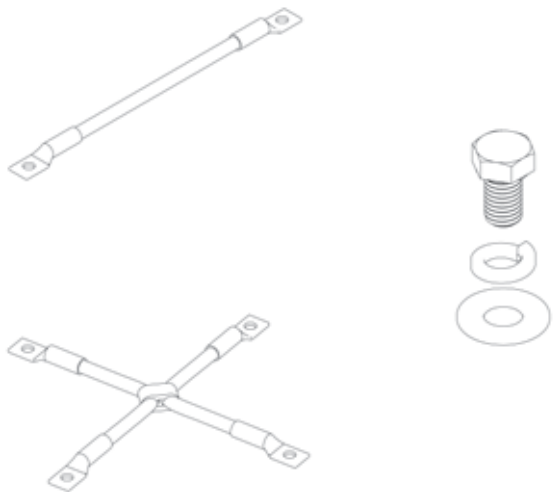
Composite EPZ Walkway Pads



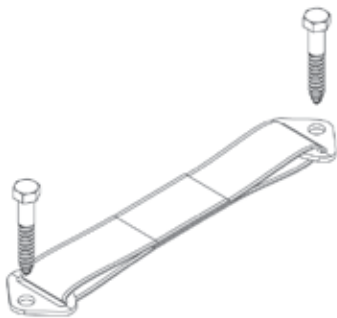
**Bonding Adapter with Wood
Screw and Fender Washer**



**2-way and 4-way Jumper Cables
with Jumper Cable Screw, Lock
Washer, and Flat Washer**



**TerraLam Connect Straps with
Connect Screws**

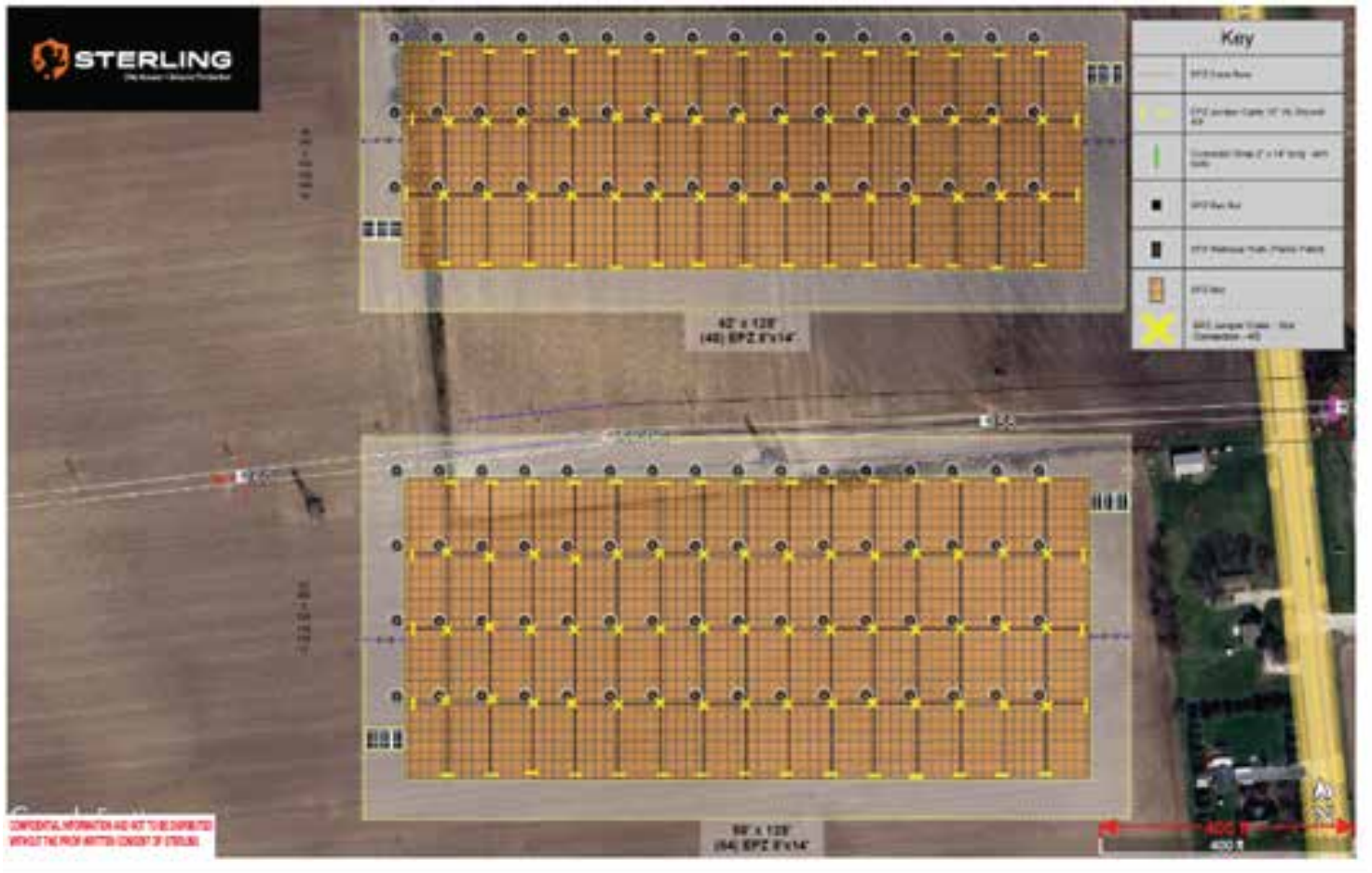


Safety Cones and Cone Bars



Sterling Access Plan

As part of the overall EPZ service experience provided by Sterling, an Access Plan is developed by our Team and submitted, along with the proposal, as a means of providing design services and a scope thus defining the project parameters, layout, and components required. A sample Access Plan is presented below.



Conex Shipping Container Feature

****IMPORTANT**** The Conex box feature is **ONLY** utilized in rental scenarios whereby Sterling is shipping a complete kit to the job site and performing aspects of the installation as part of our service offering.

****IMPORTANT**** Customers that have purchased an EPZ system outright **WILL NOT** receive a Conex box and will need to determine how they will execute the storage and transport of their EPZ system components.

To better support our customers and crews, Sterling utilizes 8' x 10' Conex shipping containers customized with internal shelving and logistic track to easily organize, transport, and store all of the accessories associated with a field installation project.

Once the container is stocked for the field (the project kit), the container is then shipped to the jobsite along with the EPZ matting and remains at the job site for the duration of the project.

This process plays out in reverse when the EP Zone is dis-assembled as part of jobsite re-location or for return to the Sterling yard at the end of the project.

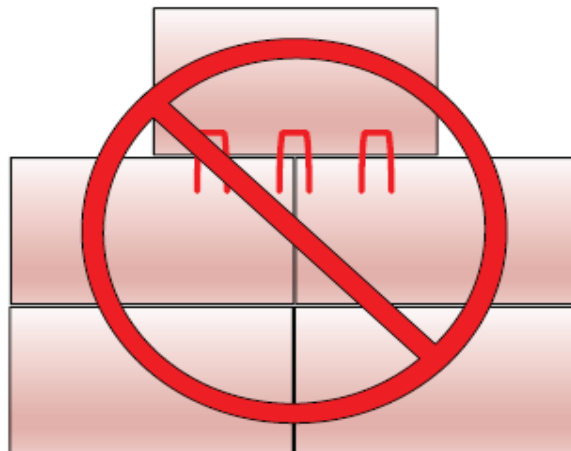


Sterling Bonding Standards

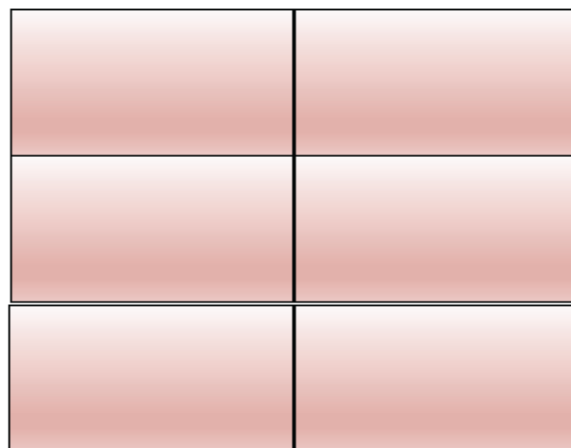
Sterling's field installation crews are not qualified to make the connections associated with the bonding and grounding of the TerraLam EPZ Matting installation including the Jumper Connection Cables and Adaptor Plate (Buss Bars) provided in the kit. Qualified, and in some areas licensed (check your local regulatory requirements) electricians must complete the bonding and grounding task. Prior to the use of installed pads (and periodically throughout the project), qualified electricians should check/re-check the system's conductivity and the resistance of the installed pad to ensure proper bonding and current carrying capacity are established and maintained throughout the project duration.

AVOID OVERLAPPING MATS

**AVOID THIS PAD DESIGN AS THERE ARE
NO MID-MAT CABLE CONNECTION
POINTS.**



**SIMPLY ADD THE ADDITIONAL MAT TO
COVER THE AREA. CABLE CONNECTION
POINTS NOW IN CORRECT LOCATION**



Sterling EPZ System Installation

Disclaimer: Sterling Site Access Solutions, LLC (SSAS) is not a licensed electrical company, contractor, or engineering firm and does not represent itself as such. Responsibility for the electrical connection of components and application of this product rests solely on the person or entity using the product and should be conducted by licensed (where applicable) and qualified individuals.

Trained Personnel

- EPZ (Equipotential Zone) installations, specifically the bonding portion, should only be performed by qualified-trained personnel (or where required, licensed) in the regulations, practices, testing, and hazards associated with protection(s) for de-energized electrical equipotential safety hazards.
- The following OSHA Standards apply for all Employers:
 - **OSHA CFR 1910.269** Appendix C Protection from Hazardous Differences in Electric Potential **and**
 - **OSHA CFR 1926.926** Subpart V Grounding for the Protection of Employees

Tools Required

- Impact drivers – ½" drive
- ¾" sockets (used on jumper cable bolts and connecting strap lag screws)
- 7/16" socket (bonding adapter plate wood screws)
- Brass cleaning brushes (used to clean cable contact surfaces) at time of installation or whenever re-locating the EPZ work area.
- Ohm meter/testing device – to check for continuity and resistance of the EPZ bonding and connector cable installation.

Safety and Quality related Documents (recommended)

Note: Users may substitute their own checklists and procedures if applicable.

- **QA-FORM-EPZ-001** - EPZ Install and Re-Lo Quality Safety checklist (Page 24)
- **QA-FORM-EPZ-002** - Recommended Customer Daily Checklist (Page 25)
- **QA-DOC-EPZ-001** – Project Access Plan - provided to users as a consultative service to assist users in planning their EPZ installation project.
- Install photos (for the job file)

Install-Laydown Equipment Required (preferred)

- Excavator w/AMI grapple (Kobelco 140/170 or similar) w/rubber pads on tracks or
- Skid Steer or Wheel loader

Sterling EPZ System Installation (continued)

Installation Process

1. Unload mats and accessory containers from the truck.

A. Please note – For rental contracts, stickers/dunnage should be saved and stored as you are asked to re-package the return trailer in the same configuration as received (see shipping/loading instruction section of this Installation Guide).

2. Inspect the site/area. (per [QA-DOC-EPZ-001](#) if applicable) for proper surface preparation (rocks, even soil, etc.). Tall vegetation (example: corn stubs) should be cleared prior to mat lay-down to avoid protruding up through the pad surface.

3. Place mats in desired work pad arrangement. (per [QA-DOC-EPZ-001](#) if applicable).

Caution: Some installations (low-lying - soft or wet terrain) may require ground preparation and/or a sub-pad to be installed first. Also, point loaded or “rocking” EPZ mats places strain on the connection system and the cables. In the case of customer/user installation, consideration should be given to site preparation to maximize system performance and to avoid damage charges.

A. Mats can be laid with a skid steer, excavator (rubber tracked with grapple), or with a wheel loader.

B. Mats should be kept as tight together and as square to one another as possible to ensure a solid EPZ work pad surface. Note: large gaps between mats will cause loss of grounding if the operator steps off into the gap. Large corner mismatch may mean connecting cable(s) will not reach.

C. Ensure the corners of adjacent mats are aligned as much as possible.

4. Pre-layout jumper cables at the EPZ Mat corners to pre-check the desired bonding pattern prior to making the bolted connections. Jumper locations are the responsibility of the user and may be selected based on the Sterling Standard Bonding guidelines [QA-DOC-EPZ-002](#) or based on the customer/user’s qualified installer recommendation. It is critical to select a bonding/connection matrix that once made, ensures that all mats in the pad zone are linked and adequately bonded. As an option: A 2-man team can be effective in ensuring a good crosscheck of a proper bonding layout.

Sterling EPZ System Installation (continued)

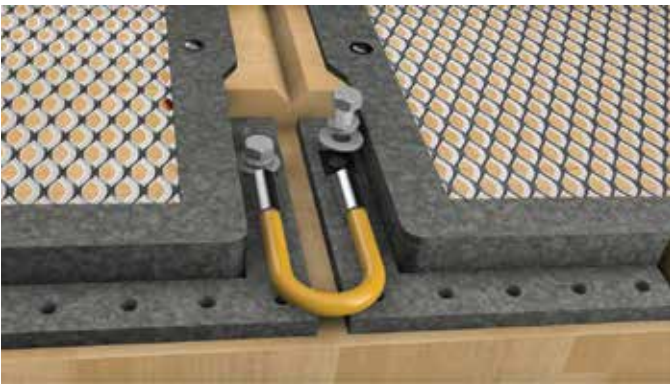
5. Install 4/0 Jumper Cables 2-way and 4-way:

A. Determine optimal jumper cable connection configuration.

Note: Use the Standard “U-shaped” connection for all 2-way cables/location. The “L-shaped” 2-way connection option may also be used if some of the holes or threads are damaged. Note: Each EPZ mat corner has 9 possible cable attachment points.

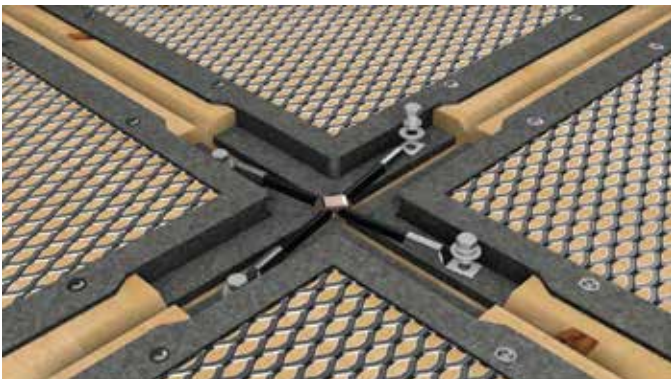
B. Use the Standard “U-shaped” connection for all 2-way cables/location.

- I. If the holes or threads are damaged and the “U” shape is not possible, the “L-shaped” 2-way connection option may be used.
- II. Connection should allow for slack in jumper cable to ensure that cable does not become stressed during typical mat movement.
- III. Cables should be configured to stay below the surface of the mat.



Standard “U-Shaped” 2-way connection

Optional “L-Shaped” 2-way connection



Standard “X-Shaped” 4-way connection

Sterling EPZ System Installation (continued)

5. Install 4/0 Jumper Cables 2-way and 4-way (continued):

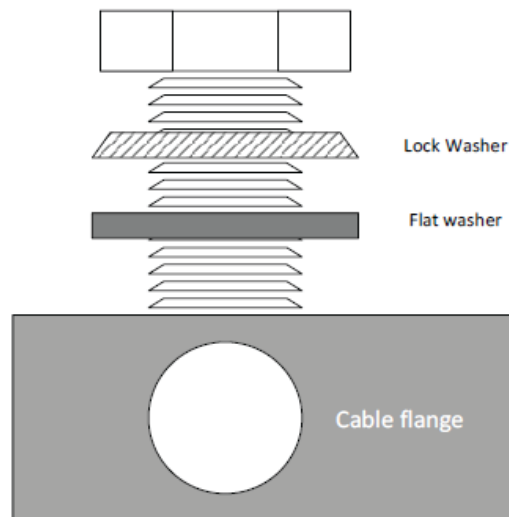
C. Fastening

- I. Remove plastic hole protectors if installed.
- II. Clean any dirt or debris from the area of the connection strip where you intend to secure the cable and the matting flange of the cable.
- III. Perform cleaning (wire brush) to the contact surface of the bonding cable mounting flange.
- IV. Proper sequence: flat washer, lock washer on top of flat washer, bolt.

Note: The project is "kitted" with pre-counted bags of fasteners (bolt, flat washer, lock washer).

- V. Drive the bolt into the hole on the connecting strip using torque adequate to flatten the lock washer. Bolt torquing options are as follows.
 - a. Use the "1/3 turn past snug" convention to determine bolt rotational force
or
 - b. Use of an driver/impact wrench set to a low RPM and 350# force in combination with a hand wrench verification of the bolt rotation force.

Caution – start threading by hand to avoid cross threading before proceeding to using the impact drive.



Bolt and washer arrangement diagram

Sterling EPZ System Installation (continued)

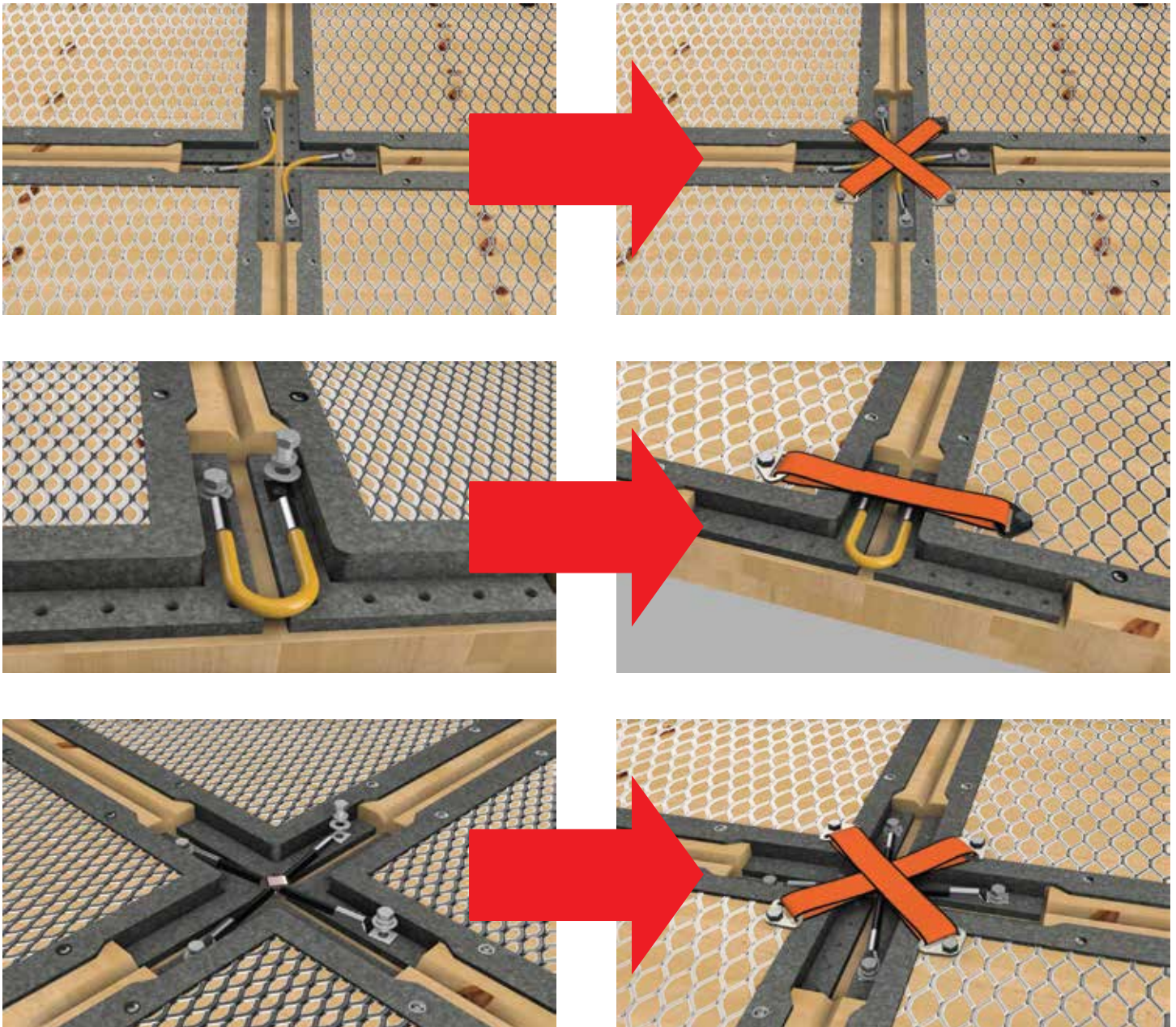
6. TerraLam Connect system – Install at each mat junction.

A. Note: The “kit” provides 2 x optional strap lengths for each job as follows.

- I. 12” (Orange) straps – approx. 80% of your kit.
- II. 18” (Green) straps - approx. 20% of your kit.

B. Along the edges of the work pad, TerraLam Connect straps should be installed (as taut as possible) to limit mat movement during operations, and as close as possible to the edge of the mat to limit possible EPZ mat and jumper cable movement both laterally and horizontally.

Note: place connection strap at all junctions whether cabled or not.



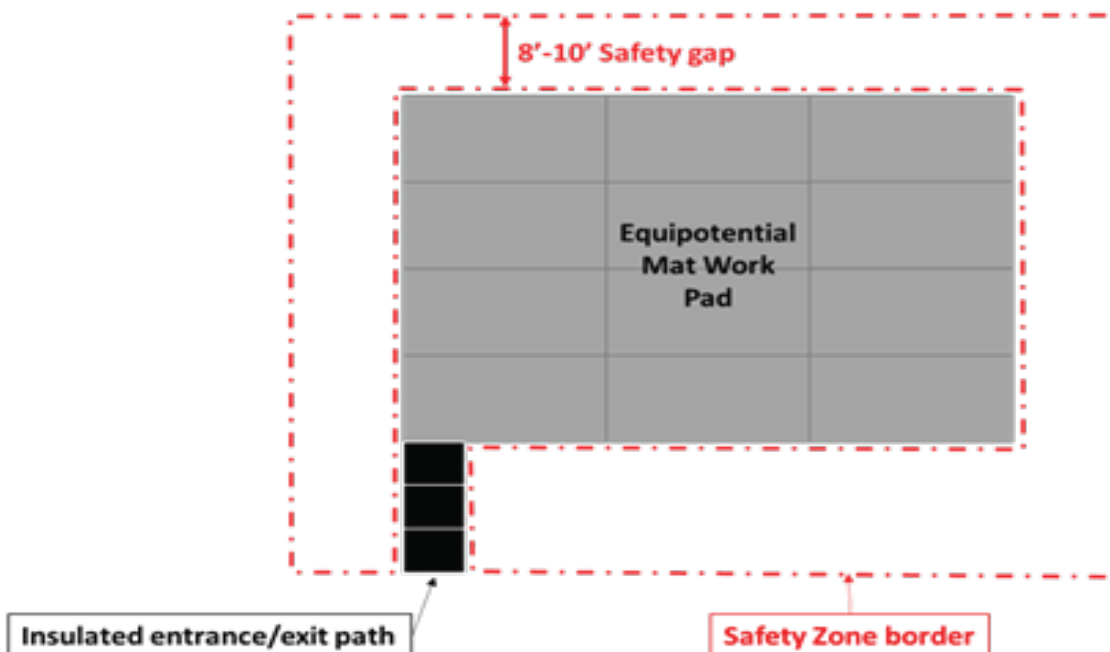
Sterling EPZ System Installation (continued)

7. Cones, Bars, and Walkways

Used to construct the Safety zone around the EPZ installation and to designate the approved entrance/exit points should be laid out around the work pad per the approved Access Plan (per [QA-DOC-EPZ-001](#) if applicable) provided within your install packet.



Example of an installed TerraLam EPZ Grounding Mat system



Overhead diagram of the work pad with a surrounding safety gap

Sterling EPZ System Installation (continued)

7. Cones, Bars, and Walkways (continued)

- A. An EPZ Safety Zone layout consists of 1 or 2 x insulated entrance/exit pathway(s) extending from the pad surface, through the **safety gap**, and out to the unprotected space thus defining the EPZ Safety Zone. This path is created using plastic walkway pads (provided in the kit) and laid in a row widthwise or end to end. The entrance/exit path should be 8-10' long, typically matching the **safety gap** width dimension.
- B. Highly visible safety border(s) must be made a) around the perimeter of the equipotential zone, and again b) around the perimeter of the pad itself using the cones and adjustable bars provided in the kit. The space between borders should be 8' to 10' and it is termed the **safety gap**.

The EPZ safety scheme shall include a minimum of 1 x approved entrance/exit path. Some Access Plans ([QA-DOC-EPZ-001](#)) may provide 2 pathways. Worker traffic should be guided to use the entrance/exit pathway(s) only.

Note: The buffer zone between the inner and outer cones and bars (**the safety gap**) is meant to discourage the possibility that workers standing **off** the EPZ pad will hand tools or materials to workers standing **on** the EPZ pad, thereby possibly creating a touch hazard at the point of hand-off and exposing both workers to a potential threat.

Important: EPZ Pad access should be restricted to only workers who have received proper training, are wearing appropriate PPE, and are licensed to handle work associated with the project, where required.

Sterling EPZ System Installation (continued)

8. Bonding (grounding) Adapter Plates

Customer/user qualified personnel have the responsibility for locating and fastening the adapter plates or buss bars (along with the jumper cables) used in EPZ construction that are provided in the kit. Some customers/users provide their own bonding adaptor plates or buss bars.

Bonding Suggestions and considerations for the customer/user:

A. Remove dirt/debris from both the EPZ grate (at the connection location) and from the contact surface of the adapter plate base. A wire brush is ideal to promote electrical connection.

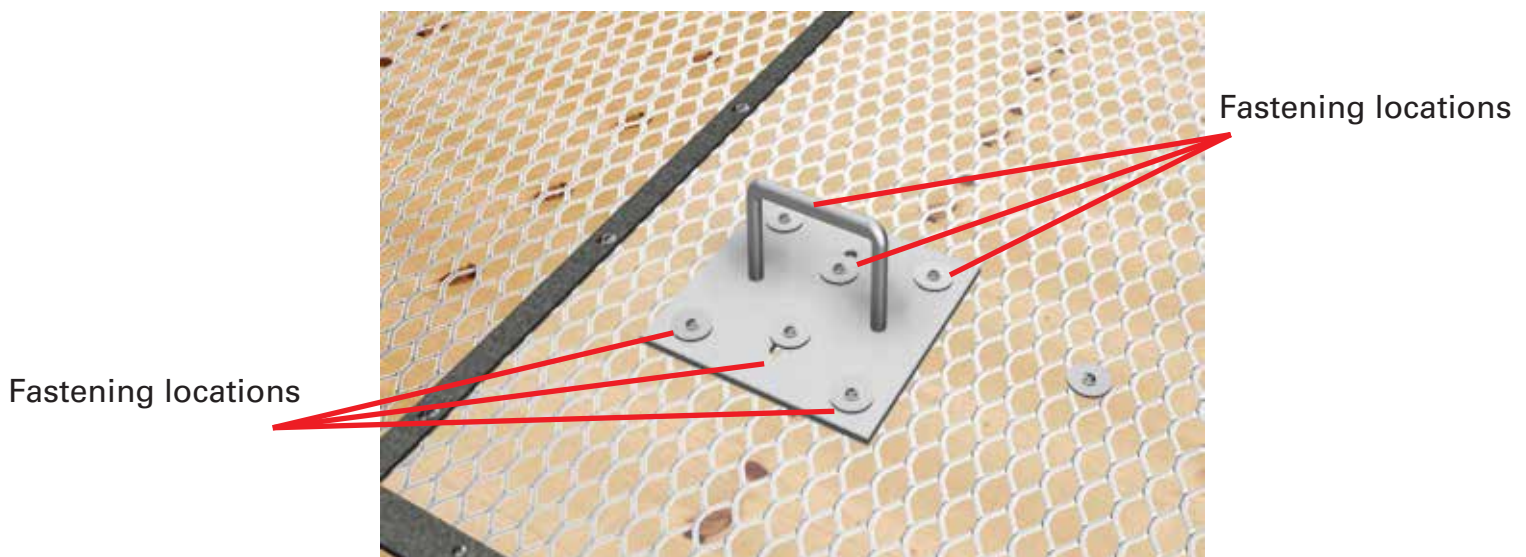
B. Use ALL 6 fastening hole locations provided to attach the adaptor plate.

- I. Place flat washers at each of the 6-x attachment holes.
- II. Use 7/16" socket head adaptor screws provided in the kit.
- III. Torque until screw heads are flush to fender washer on top of mounting plate.

C. Equipment Specific Bonding Adaptors

Many times bonding adaptor locations are "equipment specific" (used as trucks come and go on the EPZ pad).

- I. When driving vehicles on the surface of the Pad, be sure not to drive over the bonding adaptors thus damaging the adapter. It may be best to remove all bonding adapters once a specific task is complete to avoid damage. Damaged bonding adaptors will be charged back to the customer at the conclusion of a project.



Fastening hole locations on bonding adapter

Sterling EPZ System Installation (continued)

9. Pre-use EPZ Install Testing

Prior to using the EPZ pad, qualified workers should check the continuity and resistance of the entire system to ensure that the EPZ work area meets the requirements for protection against inadvertent electrical hazards.

CAUTION: Use of EPZ is intended to provide secondary protection against electrical hazards and should never be the primary or only means of protection.

10. Moving or re-locating an EPZ system

The identical process as described above for an original installation, should be followed for a move or re-location of the EPZ system. Care should be taken to **COMPLETELY DIS-ASSEMBLE** all components. Resist the urge to leave certain components attached to save time. It will create confusion during re-assembly and may result in damage to the parts.

11. System removal and shipping

Similar to moving or relocating, the system should be entirely disassembled and all components stored neatly back in the Conex box that was provided for the project. Follow item **Truck Loading and Shipping Guideline** including the use of the dunnage sticks placed between mats to protect the EPX Grates from damage.

Truck Load and Shipping

1. Adequate strapping for load stability/safety, along with the use of dunnage sticks between EPZ mat layers, are critical.

EPZ CONEX BOZ AND MAT TRAILER

42' FLAT BED – 20 UNITS PLUS CONEX BOX

* 4 STRAPS PER STACK OF 10 – 3-4 STRAPS ON CONEX BOX

* 2 STICKS OF 3"X3" DUNNAGE BETWEEN MAT LAYERS

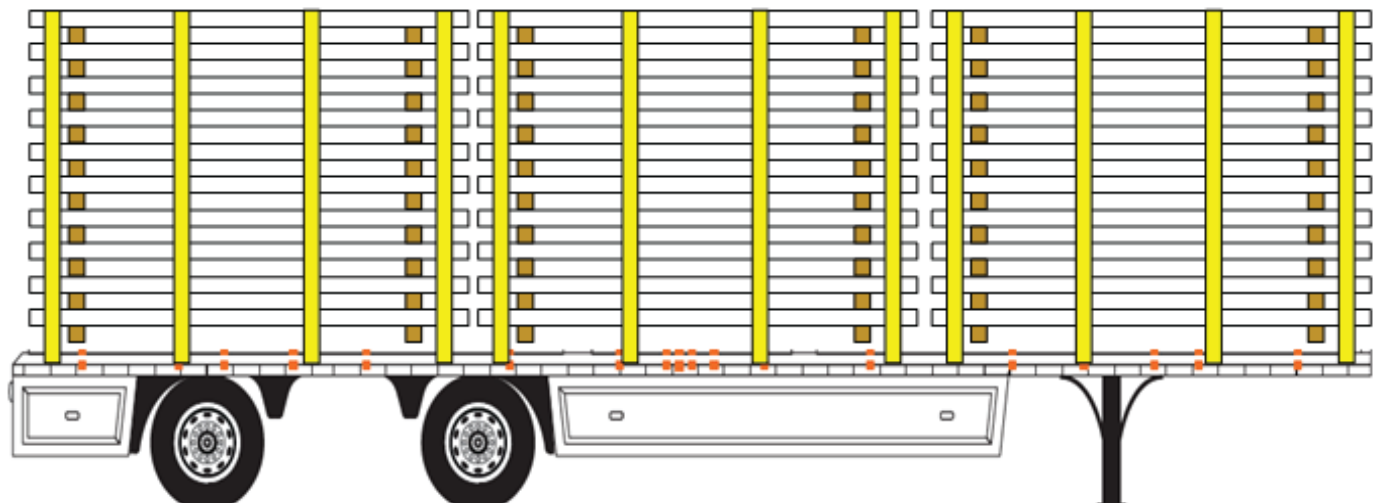


EPZ ALL MAT TRAILER

42' FLAT BED – 30 UNITS

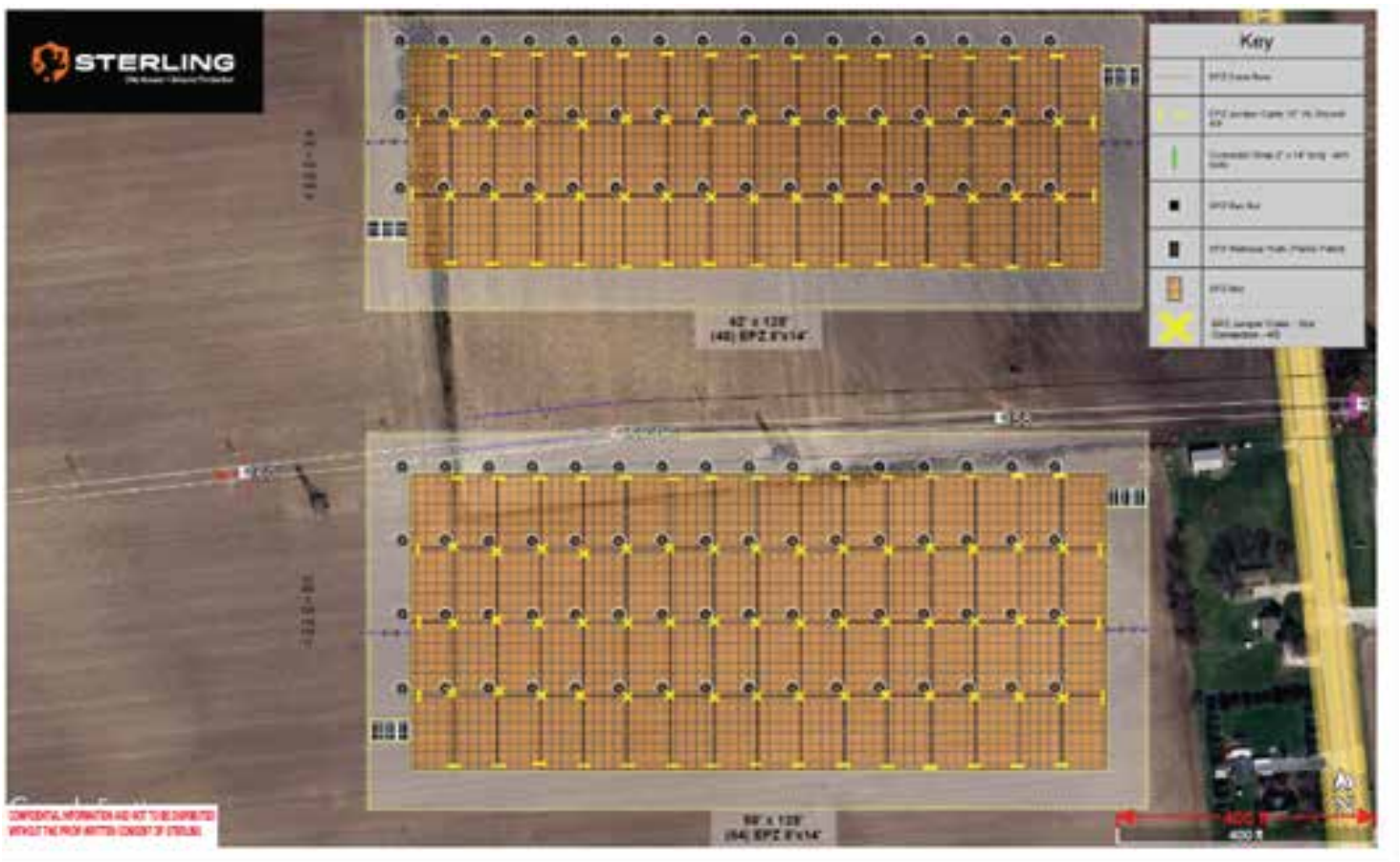
* 4 STRAPS PER STACK OF 10

* 2 STICKS OF 3"X3" DUNNAGE BETWEEN MAT LAYERS



Sample Access Plan Example

QA-DOC-EPZ-001



Installation/Re-location Quality and Safety Checklist

QA-FORM-EPZ-001



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Recommended EPZ - Installation (and re-location) Quality/Safety Checklist

	Pad 1:	Pad 2:
Preparation:		
Access Plan reviewed	<input type="checkbox"/>	<input type="checkbox"/>
Tools required (see Installation Guide)	<input type="checkbox"/>	<input type="checkbox"/>
Proper Equipment - Excavator w/AMI grapple (Kobelco 140/170 or similar), or skid steer, or wheel loader.	<input type="checkbox"/>	<input type="checkbox"/>
Rubber pads added to metal tracked equipment (if applicable)	<input type="checkbox"/> if-applicable	<input type="checkbox"/> if-applicable
Installation:		
Sub-pad installed (see Access plan) - Overlapping pattern w/EPZ	<input type="checkbox"/> if-applicable	<input type="checkbox"/> if-applicable
EPZ mats - tight pattern/no excessive gaps/even terrain (no rocking or point loading)	<input type="checkbox"/>	<input type="checkbox"/>
Cables/Straps: (Customer/User performs)		
Use wire brush to clean all cable lugs and mounting brackets	<input type="checkbox"/>	<input type="checkbox"/>
Bonding grid ensures fully "networked" pad (no isolated panels from circuit)	<input type="checkbox"/>	<input type="checkbox"/>
Jumper cable connections washered/tight (cable, flat washer, lock washer, bolt) (see installation guide for details)	<input type="checkbox"/>	<input type="checkbox"/>
Protected by straps (double straps in 4 corners, place over top of cables)	<input type="checkbox"/>	<input type="checkbox"/>
Safety Barrier:		
Inner barrier (on mats) and outer barrier (8'-10' minimum)	<input type="checkbox"/>	<input type="checkbox"/>
Entrances (number and location) per Access Plan/Customer	<input type="checkbox"/>	<input type="checkbox"/>
Walk pads - level / matched elevations	<input type="checkbox"/>	<input type="checkbox"/>
Bonding Adaptors: (Customer/User performs)		
Washer and all 6 thru holes used	<input type="checkbox"/> if-applicable	<input type="checkbox"/> if-applicable
Connectivity and Resistance Check (prior to use): (Customer/User performs)		
Use appropriate device to check for continuity and resistance (per OSHA 1910.269 Appendix C and 1926.926 Subpart V)	<input type="checkbox"/>	<input type="checkbox"/>

Document Title Recommended EPZ Install - Re-lo Quality and Safety Checklist	Origination Date: January 27, 2025	Document Number: QA-FORM-EPZ-001
Approving Authority: Jerry Bardeson	Owner / Author: Adam McArdle / Dale Smith	Revision Level / Date: Original February 18, 2025

Recommended User Daily Inspection Checklist

QA-FORM-EPZ-002



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EPZ - Recommended Customer Daily Safety Checklist

Date Checked	Chk'd OK
Overall Pad condition:	
Pad remains tightly configured (not shifting on terrain, no large gaps, square)	<input type="checkbox"/>
Cables and Bonding:	
Overall bonding pattern maintained	<input type="checkbox"/>
All cable connections (bolts) tight (see installation guide)	<input type="checkbox"/>
No torn jacketing or exposed wire (replace cable)	<input type="checkbox"/>
Cables remain protected by straps	<input type="checkbox"/>
Cables remain below work surface / not exposed	<input type="checkbox"/>
Safety Barriers (Cones and Bars):	
Inner and outer cones/bars standing and connected (maintain 8'-10' safety zone)	<input type="checkbox"/>
Walk pads - level / matched elevations / solid surface support	<input type="checkbox"/>
EPZ Mat and Metal Grates:	
Large gaps due to tears in grates (gaps larger than a persons foot) -replace mat/stand up cones	<input type="checkbox"/>
Large gaps (gaps larger than a persons foot) due to mats shifting (re-position mats and re-strap)	<input type="checkbox"/>
Bonding Adaptors:	
Securely fastened to grid	<input type="checkbox"/>
Inspect for damage (bent, broken welds, etc.) replace bonding adaptor	<input type="checkbox"/>
Review Dynamic changes in Site conditions (evaluate impact on Safety - take countermeasures):	
Consider changes in environment (High winds, excessive heat/cold, rain) and their impact on work	<input type="checkbox"/>
Non-Qualified electrical worker activity in the area.	<input type="checkbox"/>
Periodic (continued) Connectivity and Resistance Checks:	
Use appropriate device to check for continuity and resistance (per OSHA 1910.269 Appendix C and 1926.926 Subpart V)	<input type="checkbox"/>

Document Title EPZ-Recommended Customer Daily	Origination Date: January 27, 2025	Document Number: QA-FORM-EPZ-002
Approving Authority: Jerry Iardeson	Owner / Author: Joe Szorek / Dale Smith	Revision Level / Date: Original February 19, 2025

1. Spare and Replacement Parts

Item Number	Description	Quantity per Mat
MCN39614SL-EPZ	EPZ mat assembly	
EPZGRATE14	EPZ Grate - Galvanized steel	1
MCN39614SL	Mat - TL300 14'	1
CLTSCREW100	CLT Screws - 100mm	63
CLTSCREW80	CLT Screws - 80mm	4
WASHERFNDR1	Fender washer - 3/8 in x 2" in O.D., Stainless Steel, 18-8, Plain	9

Item Number	Description	Standard Package Quantity
MCN39614SL-EPZ	EPZ mat assembly	A
EPZJUMPER12	Jumper Cables (pre-assembles with hardware)	Bonding plan (approx. 1.5 X A)
SSBOLT1	Jumper Cable Screw	(2 X EPZJUMPER12) + 10%
WASHERLK1	Jumper Cable Lock Washer	(2 X EPZJUMPER12) + 10%
WASHERFLT1	Jumper Cable Flat Washer	(2 X EPZJUMPER12) + 10%
EPZBUSBAR1	Bonding Adapter	Per Access Plan (Ave. 4-6 per pad)
WOODSCREW1	Bonding Adapter Wood Screws	(6 X EPZBUSBAR1) + 10%
WASHERFNDR1	Bonding Adapter Fender Washer	(6 X EPZBUSBAR1) + 10%
CONSTRAP12	TerraLam Connect Straps	2 X A +10%
SCREWS	TerraLam Connect Screws	2 X (CONSTRAP12)
EPZSAFETYCONE	EPZ Safety Cones	Pad Inner-outer perimeter / 10
EPZCONEBAR	EPZ Cone Bars	Pad Inner-outer perimeter / 10
EPZWALKPAD	EPZ Walkway Pads (pallet)	3 PER EXIT/ENTRANCE

2. Technical Support - Contact

Replacements parts, spare parts, or assistance with determining your needs/requirements may be obtained by

- A) Contacting your Sterling Sales Representative or
- B) Contacting a Sterling EPZ Expert at 708-388-2223

3. Additional Resources

Additional resources, including information about grounding, OSHA regulations, and other documents can be found at: sterlingsolutions.com/epz-resources/ or by scanning QR code below

4. Sterling Address, Phone, and Website

Sterling Site Access Solutions, LLC
 501 E. 151st Street
 Phoenix, IL 60426
 708-388-2223
sterlingsolutions.com



Appendix I – Important Warnings and Disclosures

Caution: Workers walking or standing on the plastic pads at the entrance/exit points are NOT protected from current differential hazard.

These Application(s) come under:

OSHA CFR 1910.269 Appendix C Protection from Hazardous Differences in Electric Potential and

OSHA CFR 1926.926 Subpart V Grounding for the Protection of Employees.

Caution: Some installations (low-lying - soft or wet terrain) may require ground preparation and/or a sub-pad to be installed first. Also, point loaded or “rocking” EPZ mats places strain on the connection system and the cables. In the case of customer/user installation, consideration should be given to site preparation to maximize system performance and to avoid damage charges.

Important: EPZ Pad access should be restricted to only workers who have received proper training, are wearing appropriate PPE, and are licensed to handle work associated with the project, where required.

Customer/user qualified personnel have the responsibility for locating and fastening the adapter plates or buss bars (along with the jumper cables) used in EPZ construction that are provided in the kit. Some customers/users provide their own bonding adaptor plates or buss bars.

CAUTION: Use of EPZ is intended to provide secondary protection against electrical hazards and should never be the primary or only means of protection.

Adequate strapping for load stability/safety, along with the use of dunnage sticks between EPZ mat layers, are critical.

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