

INSTALLATION INSTRUCTIONS

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ELECTRICAL RATINGS

Low voltage systems, operating at 12V AC or DC power.

12VDC DRIVER REMOTE DISTANCE

	Wire Gauge	Maximum Lead Length
12V Driver	18 AWG	10 ft (3m)
	16 AWG	15 ft (4.5m)
	14 AWG*	25 ft (7.5m)
	12 AWG*	40 ft (12m)

* Terminal blocks on the drivers accept only solid 18AWG or 16AWG wire. To use wire gauges larger than 16AWG connect up to 3 ft of 18AWG or 16AWG, then connect 14AWG or 12AWG with UL approved wire nuts up to the maximum lead length in the above tables.

NOTE: 12VAC Transformers can go up to 200 feet with 14 gauge wire.

WIRE SIZE CONVERSION

Wire Gauge	mm ²
22-18 AWG	0.5 - 1.0
16-14 AWG	1.5 - 2.5

HARDWARE REQUIRED (PROVIDED BY TEMPO)

- 1) Set & Step Adhesive (see product spec sheet for ordering information)
- 2) 2.5mm Hex Tool
- 3) Butt Splice Connectors

HARDWARE REQUIRED (BY OTHERS)

- 1) Power Drill
- 2) Crimping Tool
- 3) Tape Measure
- 6) 20 oz Sausage Pack Caulk Gun
- 7) Screws
- 8) Wire Cutters
- 9) Utility Knife

RECOMMENDED COMPANION PRODUCTS

- 1) LPS Raceway
- 2) LPS J-Box



WARNING:

Read and understand these instructions before installing.

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

Turn off main power supply before you start installing your Guardian AI Step & Aisle System.

Set&Step

ADVANCED HYBRID ADHESIVE

APPLICATION

Set&Step™ is a one component, fast grab adhesive designed to secure Tempo floor safety products. The multipurpose elastomeric sealant has high green strength for quick adhesion. When fully cured, this unique VOC compliant formula offers UV stability and a steadfast bond to concrete, wood, metal, painted surfaces, and many other common substrates.

FEATURES & BENEFITS

- Alternative to mechanical fastening
- Black material color to match Tempo products
- High green strength/elastic with fast cure
- Flexible & durable, will not shrink or crack
- Can be sanded & painted
- Adhesion to Kynar[®]
- Odorless & non-corrosive
- VOC compliant
- Contains no solvents or Isocyanates
- Color stability and UV resistant (ASTM G26)
- Non-yellowing/staining
- Resistant to most chemicals

PRODUCT USAGE

- LPS Step Nose (24' per sausage pack)
- LPS Raceway (50' per sausage pack)
- Guardian Step Nose (16' per sausage pack)
- Guardian Aisle CC (60' per sausage pack)
- Guardian Aisle CF (50' per sausage pack)

MEETS SPECIFICATIONS

ASTM C920 Type S, Grade NS, Class 25, Use NT, A, M

P/N: ADH-BOND-S



PHYSICAL PROPERTIES		TEST METHOD
Cure System	Hybrid, Moisture Cure	
Movement Capability, %	± 25%	ASTM C-719
Modulus	Medium	ASTM D-412
Physical Properties (Cured)	Rubber	
Specific Gravity	1.55	
Extrusion Rate, g/min.	100	ASTM C-1183
1/8" orifice @ 50 psi		Modified
Temperature Range	-75° F to 225° F	
Intermittent Temperature Range	250° F	
Accelerated Weathering (10,000 hrs.)	No Change	AUV Weatherometer
Skin Over Time (min)*	20	MNA Method
Tack Over Time (min)*	35	ASTM C-679
Cure Rate*	1/8" per 24hrs.	MNA Method
Tensile Strength (psi)	287	ASTM D-412
Elongation %	250	ASTM D-412
Durometer Shore A	55	ASTM C-661
Shelf Life (months)	18	
Volatile Organic Content	> 26 gr./litre	

* All properties derived from lab conditions (77°F at 50% relative humidity). Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

Set&Step

ADVANCED HYBRID ADHESIVE

IMPORTANT NOTES:

1. This adhesive is Moisture Curing. When applied to sealed or painted surfaces you must apply water from a spray bottle before securing the Step & Aisle lighting product to ensure proper adhesion.
2. Only use Caulk Guns designed to use 20oz sausage packs.
3. DO NOT exceed 45 psig. when used in air powered caulking guns.

USING SAUSAGE PACKS

- Remove dirt, grease & moisture from surface and allow to dry thoroughly.
- Make a 1" slit close to the crimp on one end of sausage pack.
- Load the pack into the applicator barrel (slit side out) and place the rounded end of sausage nozzle onto the slit end of pack and fix with retaining ring. Then cut nozzle to desired size and shape.
- Push sealant ahead for uniform bead. Section thickness should be limited to 1/4" (6mm) or less.
- Spread sealant immediately before skin forms.
- Skin time is 20 minutes. Bonding must occur within the first half of skin time.
- Tack time is 35 minutes. Curing time is 24 hours.

Note: Length time of full cure depends on thickness of application, temperature and humidity.



Manual 20oz sausage gun
Recommended minimum thrust: 18:1



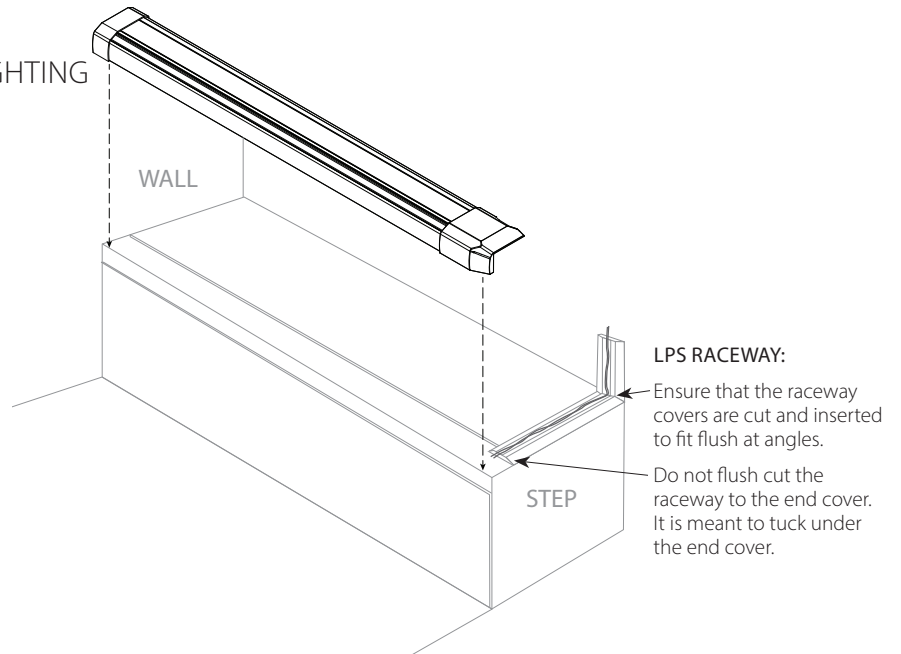
Electric or Cordless 20oz sausage gun

Guardian¹³ AI

ALUMINUM STAIR NOSE WITH EMBEDDED LIGHTING

INSTALLATION

Commercial grade aluminum body is cut to the desired length and assembled with end covers at factory for ease of installation.



Total length includes end covers. End covers are available in Wall and tapered Carpet to Floor options that can be configured per desired specification and delivered pre-assembled (Figure A).

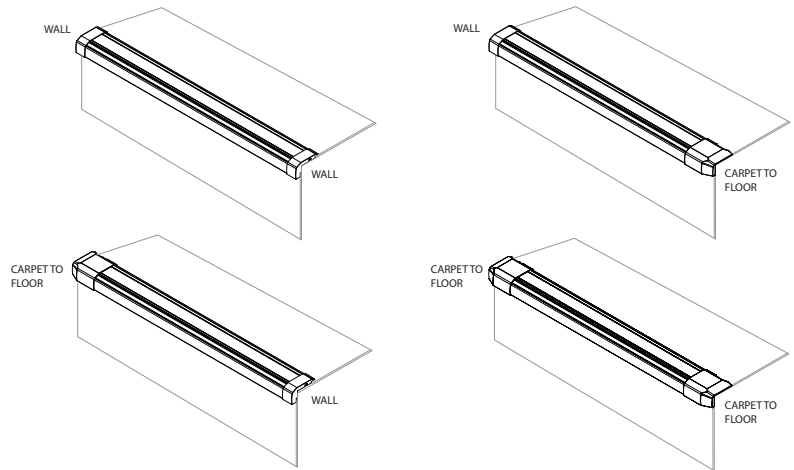


Figure A

Field length adjustments can be made up to 10mm in on each end extending out from the original specified run length (Figure B).

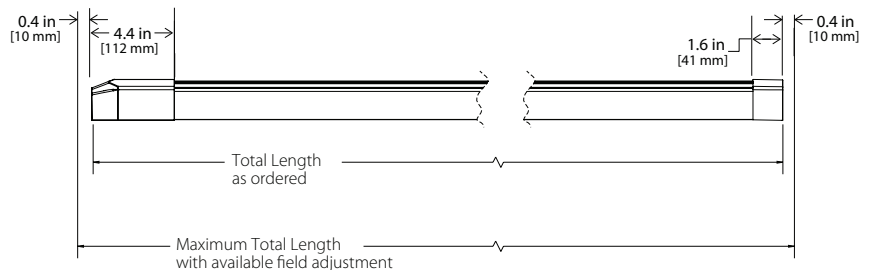


Figure B

INSTALLATION

Application Onto Step:

STEP 1

NOTE: Prior to adhesive application and fastening of extrusion, test fit the assembly to the width of the step and adjust the end covers if necessary (see Figure B).

Apply Tempo Set & Step adhesive or Tempo approved equivalent to underside of step nose extrusion. Ensure that the application surface is clean. Apply a continuous wave pattern, from end to end, along the tread surface (Figure 1). Apply a continuous bead, from end to end, along the riser surface (Figure 2). NOTE: The adhesive will function as a bonding agent as well as a cushion between the step and the rigid extrusion.

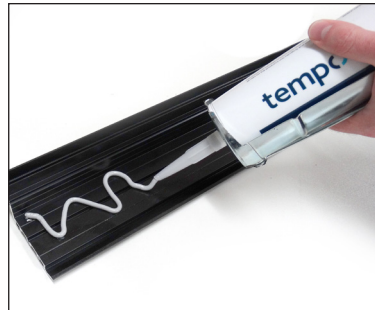


Figure 1



Figure 2

STEP 2

With the adhesive applied to underside of extrusion, align the step nose assembly to the edges of the step and set into place. Within the tread of the extrusion, are pre-drilled holes. Using a power drill, fasten screws (use appropriate screws for the step substrate) through the pre-drilled holes to secure the step nose extrusion onto the step (Figures 3 & 4).



Figure 3



Figure 4

NOTE: It is standard installation practice, and highly recommended by Tempo, to install carpet AFTER the step nose and raceways have been installed and the adhesive curing process is complete. See STEP 7 for details.

Guardian¹³ AI

ALUMINUM STAIR NOSE WITH EMBEDDED LIGHTING

INSTALLATION

Power Feed Connection:

STEP 3

With the Guardian AI Step nose assembly in place on step, identify the end cover that houses the power feed connection. Remove the end cover by locating and loosening the set screw located underneath the front lip on the riser side of the cover (Figures 5 & 6). Guardian AI end covers feature a hinge detail for vertical removal and replacement (Figure 7). Removing the cover will expose the wiring to be connected to the power feed.

NOTE: Guardian AI is available in 1 and 2 circuit configurations. Power feeds should match the configuration.

LPS Raceway - Recommended conduit for electrical feed to Guardian AI Step nose. Installed on step edge, with Set & Step Adhesive, to feed into carpet end cover.

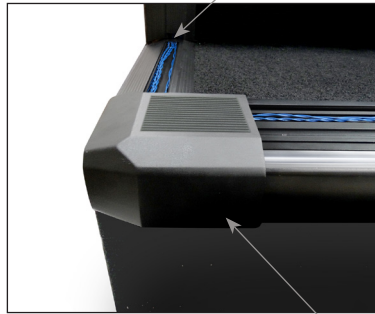


Figure 5



Figure 6

Set Screw to remove end cover can be located underneath the front lip on the riser side of the cover. The screw can be loosened and tightened with a 2.5mm hex tool (provided by Tempo).

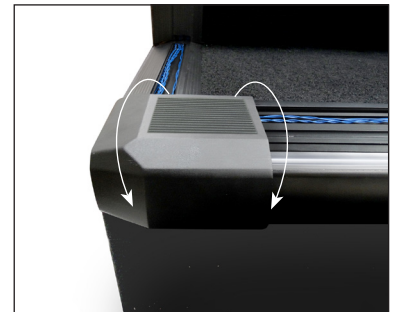


Figure 7

STEP 4

Tempo provides butt splice connectors to wire the Guardian AI to the power feeds. Insert corresponding exposed wires into either end of the connectors and secure with a crimping tool (Figure 8). Tuck completed connections into place (Figure 9).



Figure 8



Figure 9

INSTALLATION

Final Assembly:

STEP 5

Insert provided vinyl tread insert into top tread slot of extrusion by folding in the edges, enabled by scored slot on underside of tread insert (**Figure 10**). Tread insert will expand securely into slot when released (**Figure 11**). Check entire length of tread insert to ensure that it is properly inserted.

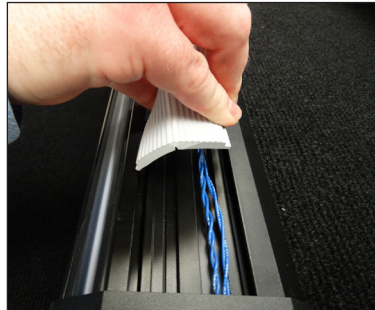


Figure 10



Figure 11

STEP 5

If LPS Wireway is used for power feed, snap in wireway cover to secure wiring (**Figure 12**).

The carpet end cover is designed to fit the LPS Carpet to Floor Raceway profile (**Figure 13**).

LPS RACEWAY NOTE:

As the Guardian AI Carpet End Cover is designed to accommodate the LPS raceway, and raceway cover, there is no need to flush cut the raceway to the end cover. It is meant to tuck under the end cover (see Figures 12 & 13).

Also ensure that the raceway covers are cut and inserted to fit flush at angles (see Figure 13a)



Figure 12

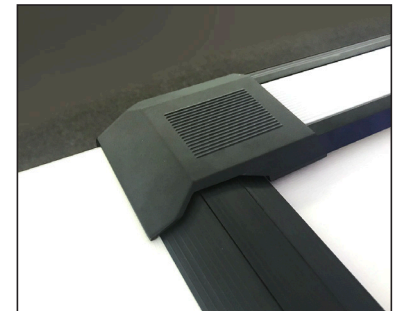


Figure 13

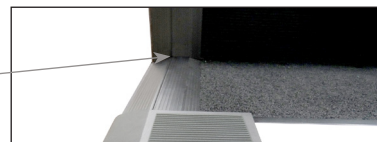


Figure 13a

STEP 6

Re-install the end cover by using the hinge feature to set it back into place on the extrusion and securing by tightening the set screw, with provided hex tool (**Figures 14 & 15**).



Figure 14



Figure 15

INSTALLATION

Final Assembly:

STEP 7

Once the adhesive curing process is complete (2 hours curing time before carpet installation) tuck carpet into flanges on step nose and raceway extrusions, and 24 hours before the extrusion can be walked on, tuck (Figure 16).

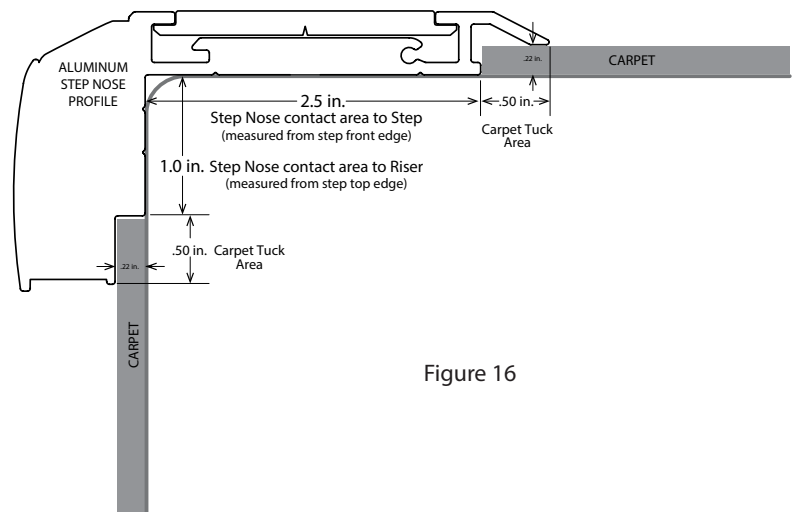


Figure 16