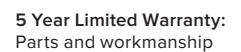




 Caution: Observe precautions for handling electrostatic sensitive devices.



EXT-0043-R04-042017 1/38

1.0 Important Installation Notes	3
2.0 System Contents	3
3.0 Introduction to Cooledge TILE Tunable White	7
4.0 Care and Handling Guidelines	7
5.0 System Layout	8
6.0 Example Installation	9
6.1 Mount the 1st Run of Cooledge TILE Tunable White	10
6.2 Install the Connector Strips	13
6.3 Cutting Cooledge TILE Tunable White	15
6.4 Install TILE Tunable White on Curved Surfaces	16
6.5a Mount the Additional Runs of Cooledge TILE Tunable White	17
6.5b Install the Last Run (if less than 12" (305mm) width)	18
6.6 Install the TILE Tunable White Corner Kit	19
6.7 Install the TILE Tunable White Cut-out Kit	21
6.8a Wiring to the LED Driver North America	31
6.8b Wiring to the LED Driver EU	32
6.8c Wiring to 3rd party LED Driver	33
6.9 Disassembling Cooledge TILE Tunable White (if required)	34
7.0 Maximum Circuit Capacity and Wire Lengths	35
7.1 600lm Cooledge TILE Tunable White	36
7.2 300lm Cooledge TILE Tunable White	36
7.3 150lm Cooledge TILE Tunable White	37
8.0 Troubleshooting	38
9.0 Product Support	38
10.0 Warranty	38

1.0 IMPORTANT INSTALLATION NOTES

Please read instructions prior to installation

Installation must be completed by a qualified electrician in accordance with all national and local electrical and construction codes.

Ensure power is off prior to installation.

TILE Tunable White products are dry location rated only.

TILE Tunable White must be powered by a Cooledge approved constant voltage Class 2 or LPS LED Driver.

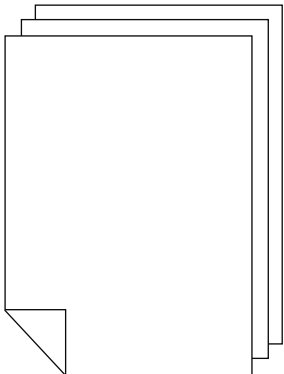
Using a non-approved power source could damage the system and will void the warranty.

 DO NOT DISCARD the contents of the Installation Kit. All components will be needed to perform the installation.

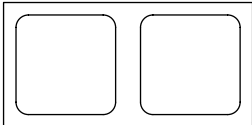
2.0 SYSTEM CONTENTS

A. Installation Kit:	A bag that contains this document and a set of insulating patches that are required when cutting TILE Tunable White.
B. TILE Tunable White	Packaged in cardboard boxes each containing 1–10 pieces.
C. TILE Tunable White Connector Kits:	Packaged in bags each containing one (1) strip, enough wire jumpers to connect the strips to two (2) TILE Tunable White and one adjacent Connector Strip.
D. LED Drivers	Boxes containing LED drivers.
E. Jumper Cables	Box containing two (2) long jumper wires.
F. TILE Tunable White Starter Cables	10’ (3m) length shielded 16AWG (1.5mm2) cables with two (4) snap connectors (positive and negative) at one (1) termination for connection to the Connector Strip and stripped conductors at the other termination for connection directly to the LED driver or to an Extension Cable.
G. TILE Tunable White Extension Cables (optional):	<p>Shielded 16AWG (1.5mm2) cables cut to the length ordered with a set of four (4) crimp connectors for making a connection between a Starter Cable and LED Driver when the remote mounting distance of the driver exceeds 10’ (3m).</p> <p>Note: installer to supply appropriate four (4)-conductor wire that meets local electrical code requirements when wire size required is other than 16AWG (1.5mm2) noted. For example when the remote mounting distance exceeds the capacity of 16AWG (1.5mm2) conductors.</p>
H. TILE Tunable White Cut-out Kit (optional)	A bag with a special TILE Tunable White that may be cut in two directions or may have one or more square segments removed from the middle to accommodate obstacles. The kit includes a short and long jumper wire as well as a clamp to hold the long jumper in place if required.
I. TILE Tunable White Corner Kit (optional)	A bag with a special TILE Tunable White that may be cut in two directions to fit areas that are smaller than 12” x 12” (305mm x 305mm). The kit includes a jumper wire to connect to the connector strip.

A. INSTALLATION KIT (DO NOT DISCARD)

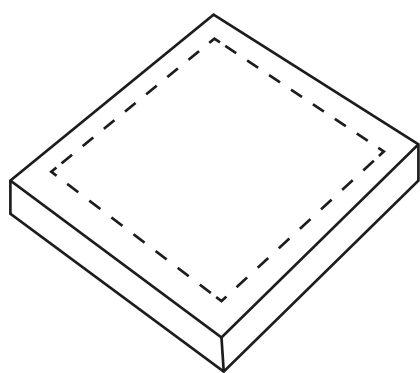


(1) Quick Start Guide

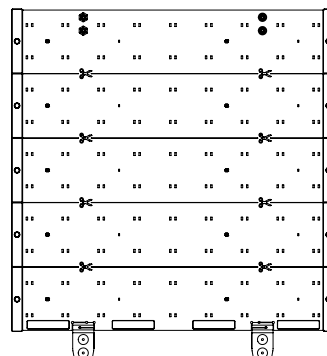


(1) Set of 12 Insulating Patches

B. TILE TUNABLE WHITE

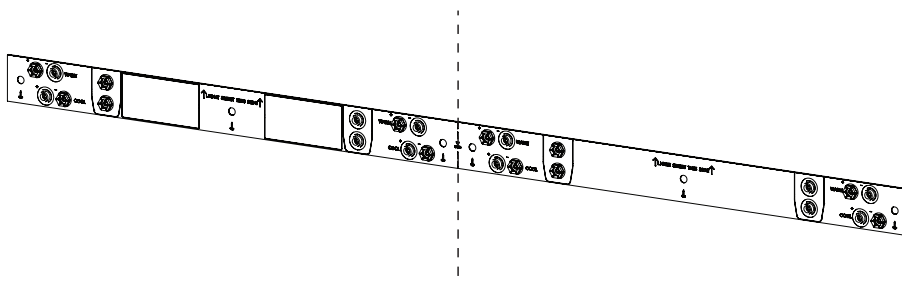


Quantity = 1–10 pieces

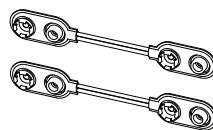


C. TILE TUNABLE WHITE CONNECTOR KIT (REQUIRED)

- Connects to 1 or 2 Cooledge TILES
- May be cut to length in 1' increments (along dashed line)



(1) Connector Strip 2' (610mm)

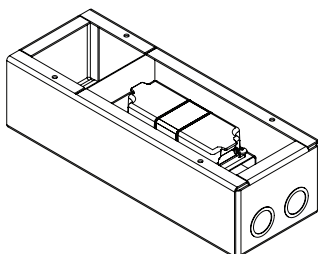


(2) Double Jumper (short)

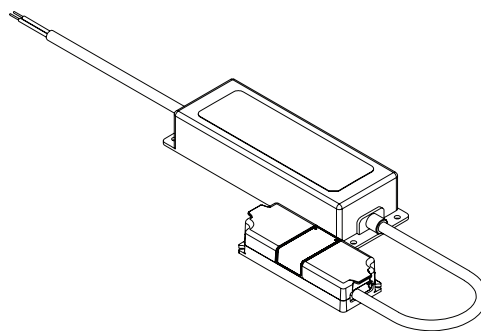
D. LED DRIVER (MAXIMUM 90W)

- Connects to Starter Cable or Extension Cable on low voltage side (inside enclosure in North America)

*includes UL approved enclosure in North America

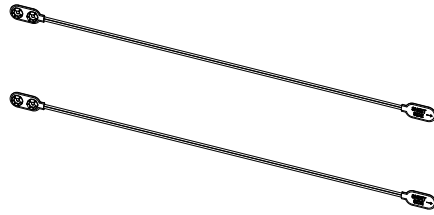


UL Listed Version



CE Compliant Version

E. JUMPER CABLES (OPTIONAL DEPENDING ON DESIGN LAYOUT)



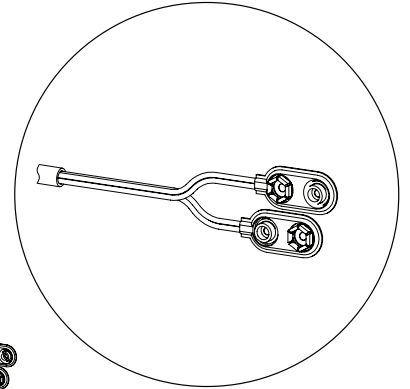
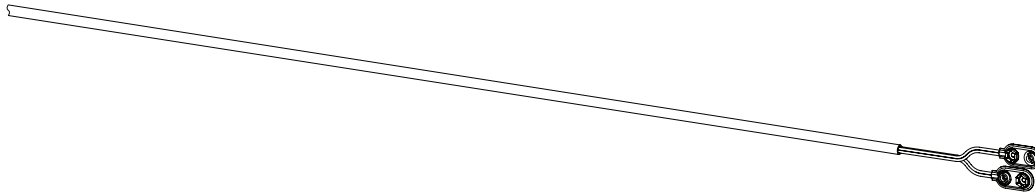
(2) Double Jumper (Long)

*(3) Double Jumper cables (long) are included with the Cut-Out Kit

F. TILE TUNABLE WHITE STARTER CABLE 10' (3M) (MAXIMUM 90W)

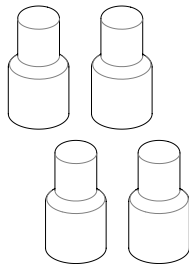
- Connects to Connector Strip and Enclosed Driver or Extension Cable
- May be cut shorter if required

(1) 16AWG (1.5mm²) Shielded Cable 10' (3m)

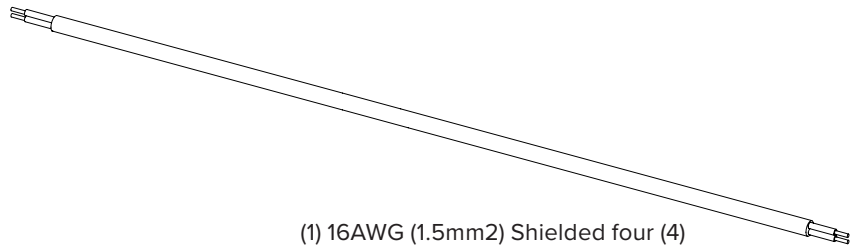


G. TILE TUNABLE WHITE EXTENSION CABLE (OPTIONAL)

- Connects to a Starter Cable and Enclosed Driver



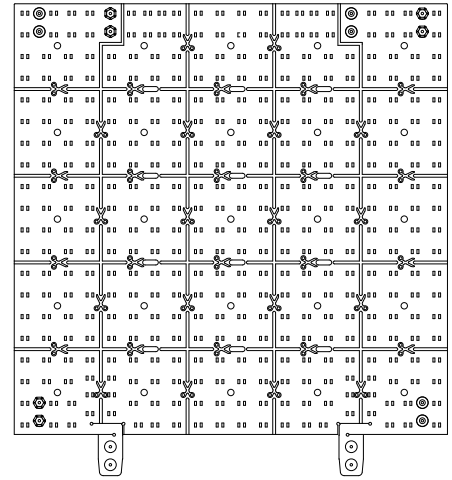
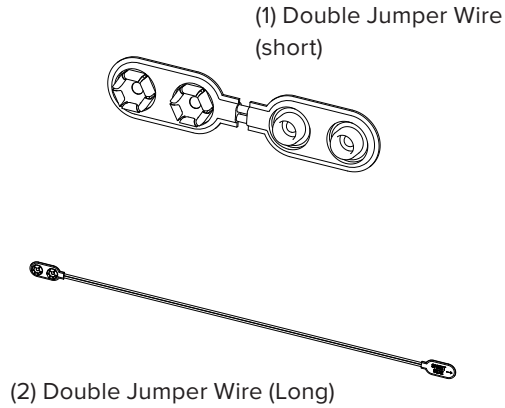
(2) Crimp Connectors



(1) 16AWG (1.5mm²) Shielded four (4) conductor Cable (length as per order)

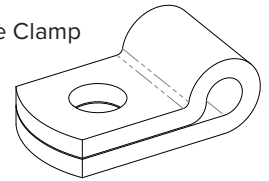
H. TILE TUNABLE WHITE CUT-OUT KIT (OPTIONAL DEPENDING UPON DESIGN LAYOUT)

- TILE Tunable White Cut-out may be in both directions cut to fit around obstacles on the mounting surface
- Jumper wires can be used to feed power from one TILE Tunable White Cut-out to the next
- Wire clamp is used to hold long jumper wires in position



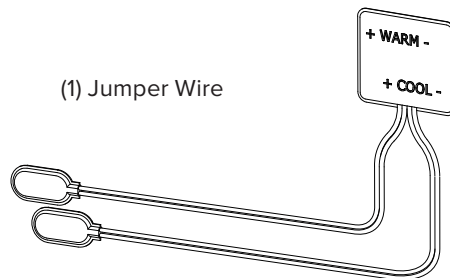
(1) TILE Tunable White Cut-out

(2) Wire Clamp

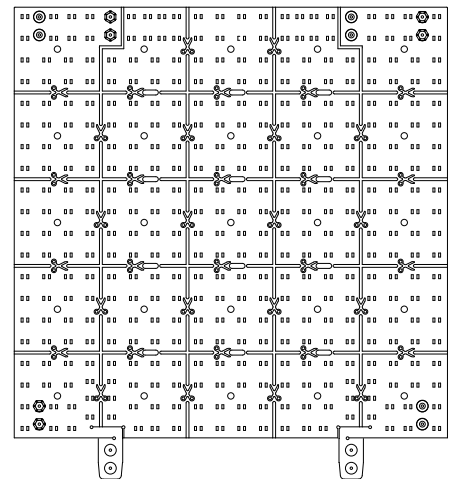
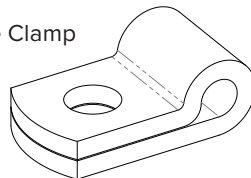


I. TILE TUNABLE WHITE CORNER KIT (OPTIONAL DEPENDING UPON DESIGN LAYOUT)

- TILE Tunable White Corner may be cut to fit around obstacles or in tight areas on the mounting surface



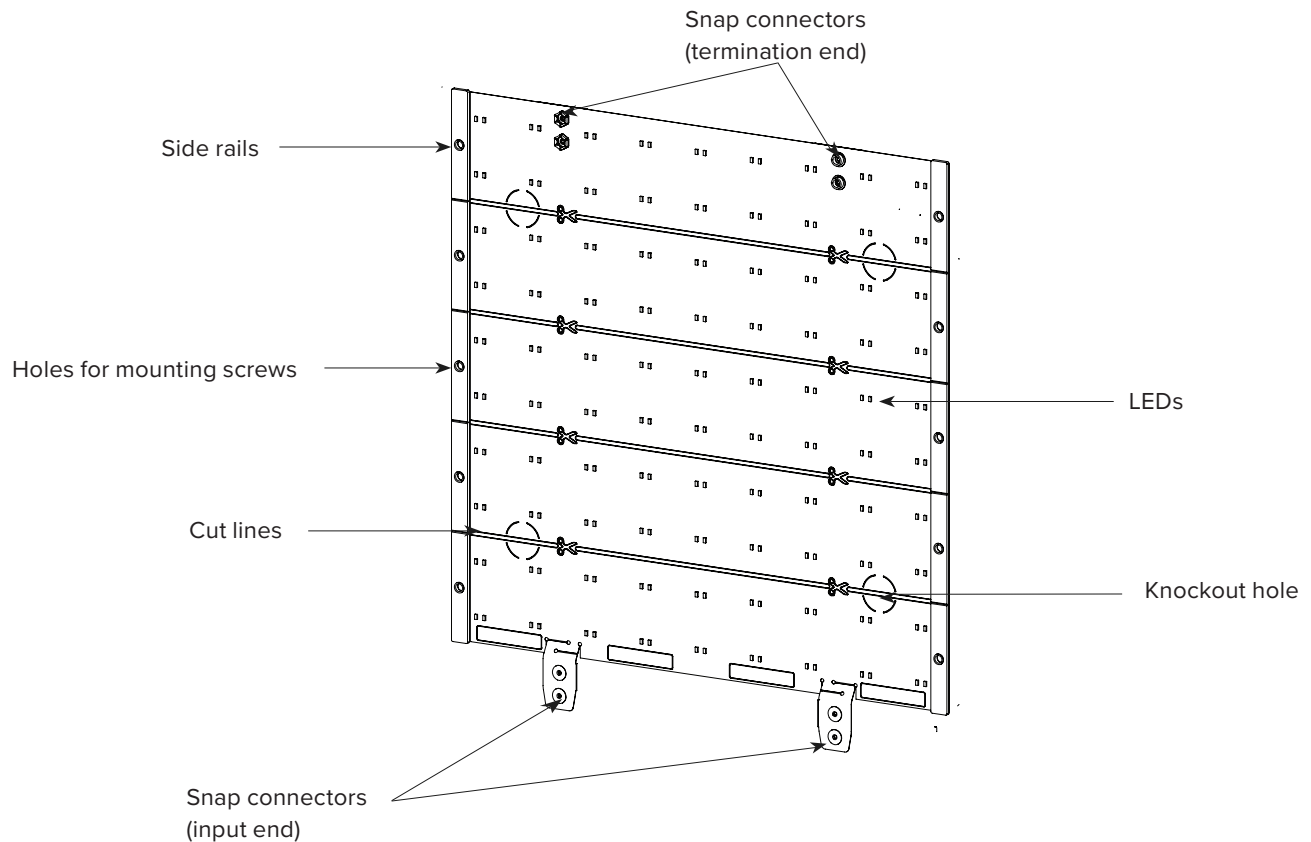
(2) Wire Clamp



(1) TILE Tunable White Corner

3.0 INTRODUCTION TO TILE TUNABLE WHITE

TILE Tunable White provides a flexible low profile means of illuminating large areas, and has the ability to change CCT. TILES can be connected in series using snap connectors and can be installed on both flat and curved surfaces.



4.0 CARE AND HANDLING GUIDELINES

Always handle TILE Tunable White by the plastic rails running the length of the sheet on both sides.


Avoid handling, scraping, rubbing or wiping the front surface of the sheet. Although the LEDs and drive components are bonded strongly to the plastic base material, it is possible to remove them or damage the electrical connection if not handled with care.

Do not penetrate the sheet anywhere other than along the cut lines or the knockout holes.


As with all electronics, light sheets are susceptible to damage from Electrostatic Discharge (ESD). Where possible avoid situations that are conducive to creating static.

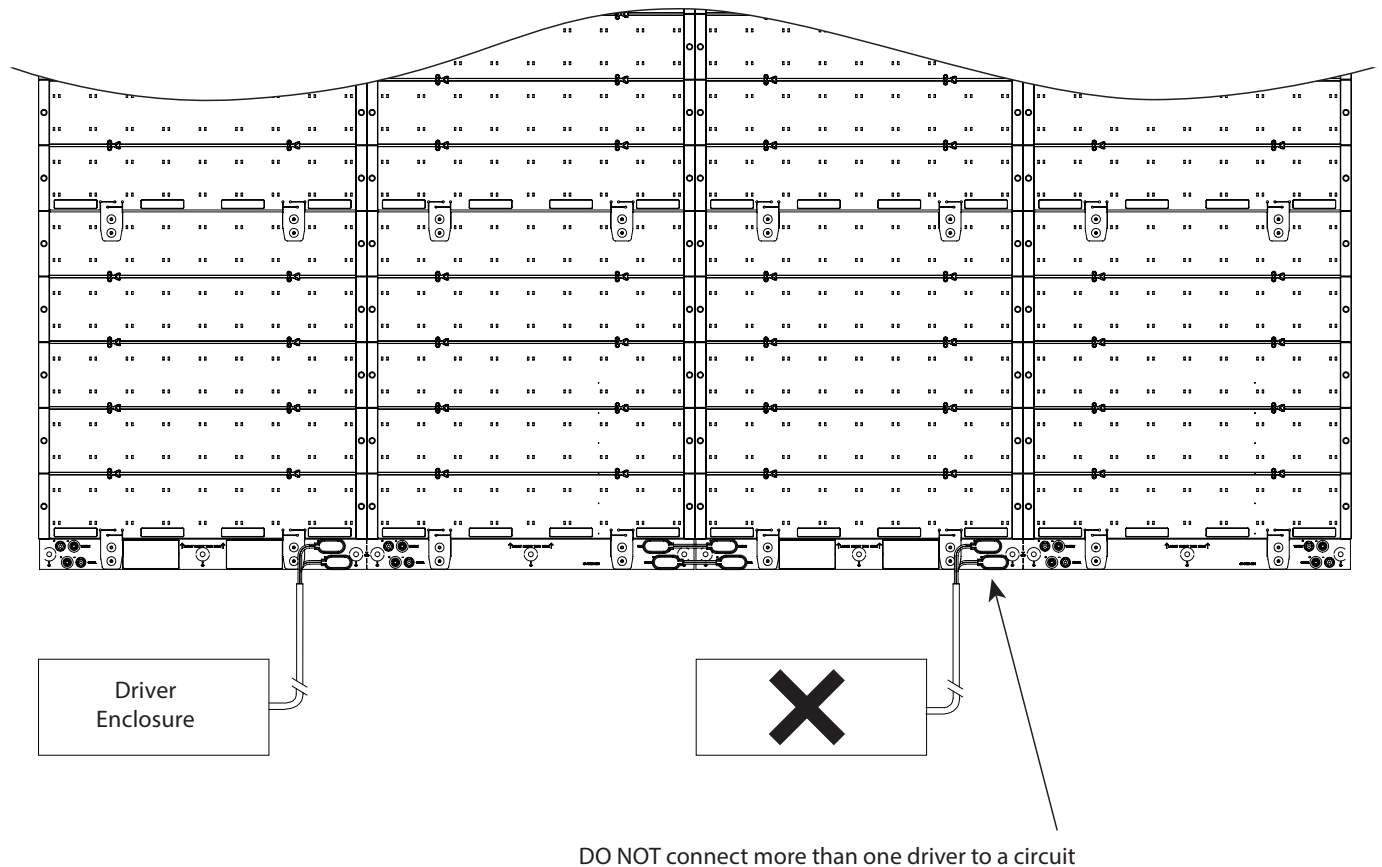
Avoid creasing or repeated flexing of TILE Tunable White as this may cause separation in the traces of the electrical circuits located on the surface of the sheets.

5.0 SYSTEM LAYOUT

 BEFORE STARTING installation carefully consider your system layout (refer to project shop drawings if available):

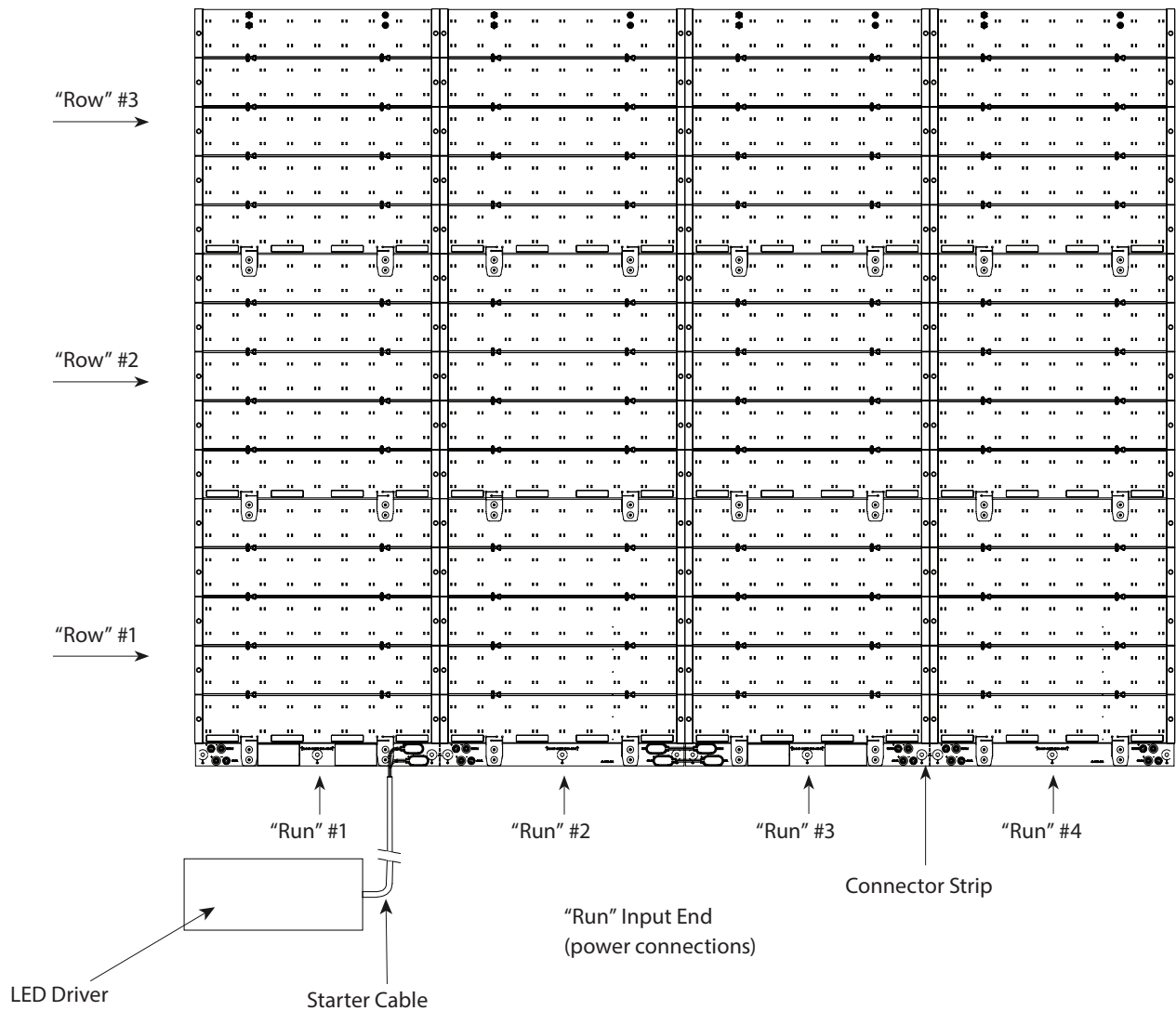
- A maximum of sixteen (16) 600lm or sixty-four (33) 300lm or sixty-six (66) 150lm TILES may be powered from a 90W driver.
- No more than twelve (12) 600lm rated or twenty (20) 300lm or twenty-eight (28) 150lm rated light sheets may be connected in series (e.g. in a single “run”)
- Each TILE Tunable White illuminates a 12”x12” (30cm x 30cm) area.
- TILE Tunable White are joined electrically by attaching the four (4) sets of snap connectors.

 DO NOT CONNECT more than one (1) LED Driver to one (1) electrical circuit. An electrical circuit includes any Connector Strips that are in electrical contact with each other. Circuits must be 90W maximum.



6.0 EXAMPLE INSTALLATION

The installation below shows four (4) runs of TILE Tunable White. Each run consists of three (3) TILE Tunable White sheets connected in series. The Driver is connected to the system via Connector Strips that directly contacts the input end of the runs of TILE Tunable White.

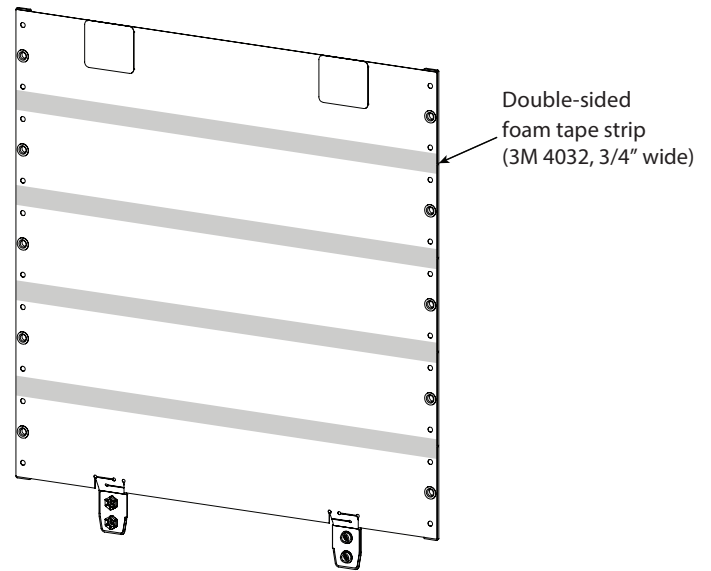


CUTTING TILE Tunable White:

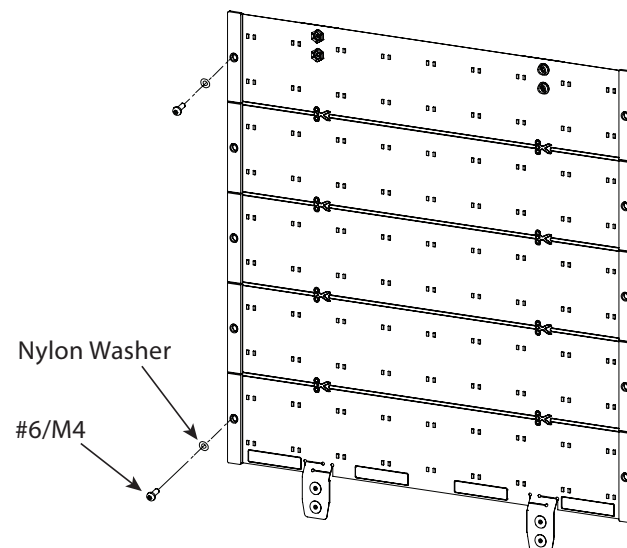
Some layouts will require a TILE Tunable White to be cut at the termination end of the run to fit into the area provided for mounting. Additionally, if runs are required that are less than the width of a TILE Tunable White, the layout will require that the TILES be cut and rotated to fill the space. Please refer to Section 6.3 "Cutting TILE Tunable White" for detailed instructions on how to do this.

6.1 MOUNT THE 1ST RUN OF TILE TUNABLE WHITE

For ceiling mounted applications or where flatness is critical it is recommended to use tape applied to the back of the sheets in addition to mechanical fasteners.



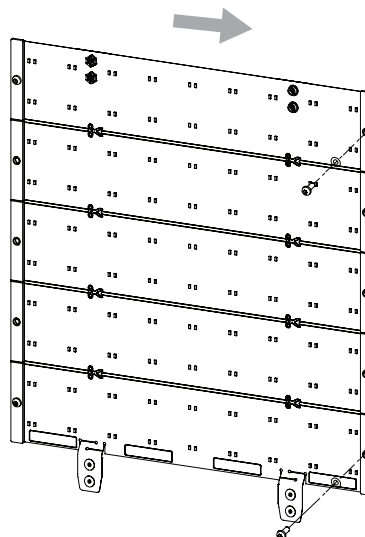
1. Beginning at the input end of a run, position the first TILE Tunable White where required, with the posts in the rails pointing to where the second TILE Tunable White will be located. Fasten the sheet to the mounting surface along one (1) rail using two (2) #6 (or M4) fasteners appropriate for the mounting surface. It is recommended to use nylon washers to allow for expansion and contraction of the rails and prevent damage to TILE Tunable White.



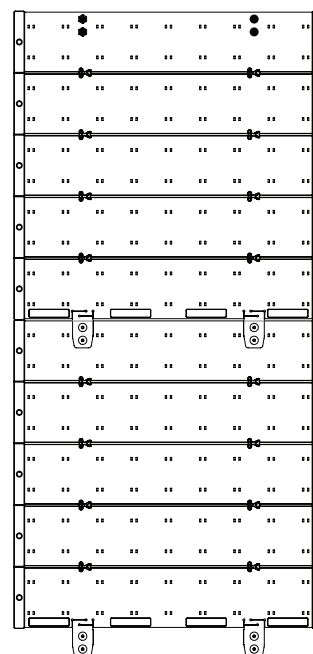
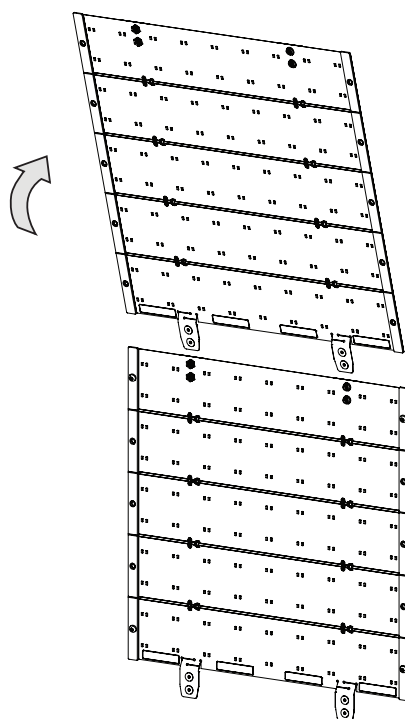
TIP - Securing the first rail with tape will help hold the TILE Tunable White in place while attaching with fasteners.

2. Stretch the TILE Tunable White until it lies flat against the mounting surface. Fasten the second rail to the mounting surface.

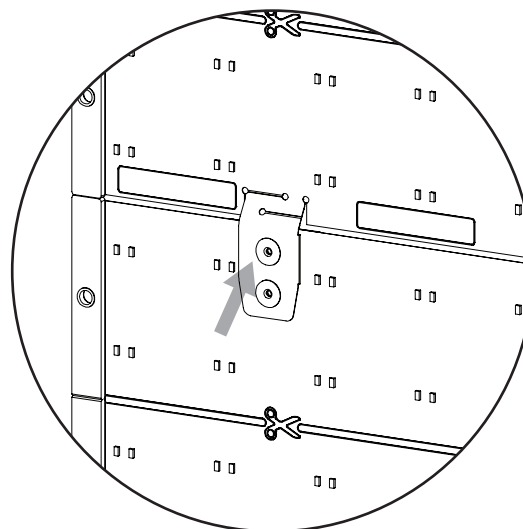
TIP - In some situations, it may be easier to attach several TILES (e.g. 3-5) in a run together using the snap connectors (see Step 5) prior to attaching them to the mounting surface.



3. Align the next TILE Tunable White rails with the rails of the first TILE Tunable White and have them touching. Lay the second TILE Tunable White against the mounting surface, double check alignment and fasten the TILE Tunable White down as shown in step 1.



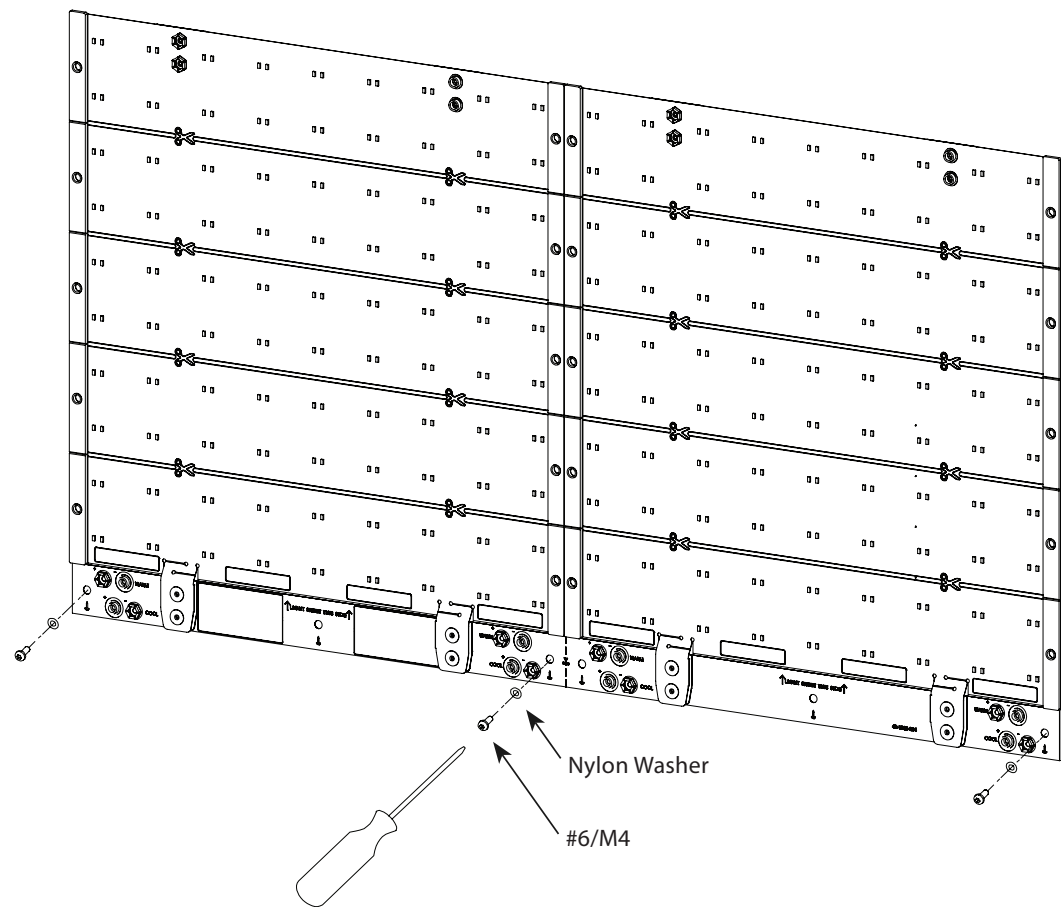
-
4. Make the electrical connection between the two (2) TILE Tunable White sheets by gently pressing the snap connectors on the overhanging tabs down until they click together.



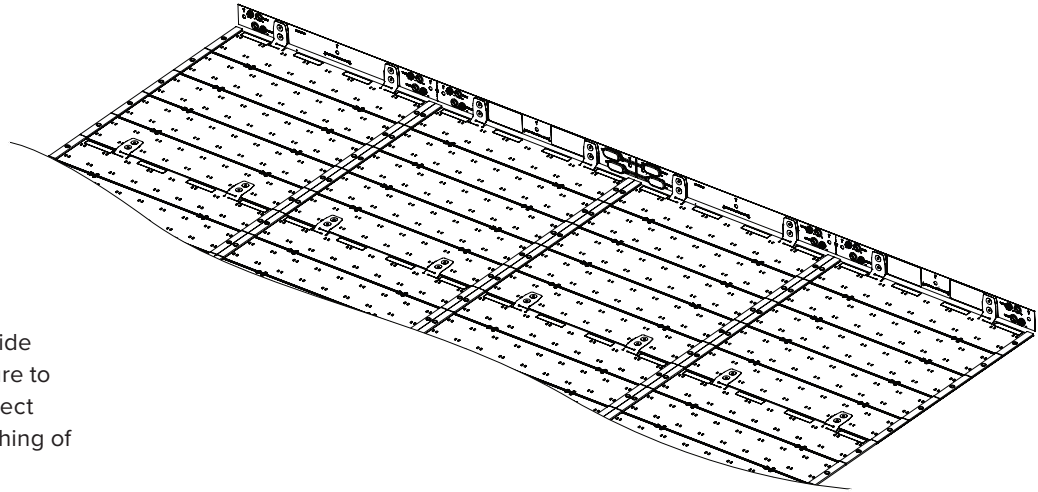
5. Repeat steps 1, 2 and 3 until the run is complete. For runs where the TILE Tunable White at the termination end must be cut to fit into the allowable space, please refer to Section 6.3:

6.2 INSTALL THE CONNECTOR STRIPS

1. If available, refer to the project layout drawings to locate the input end of the TILE Tunable White runs. Connector Strips are to be mounted adjacent to the input end of the sheets.
2. To attach the connector strips first connect them to the to the input run of the TILE Tunable White. Connector strips are shipped with an adhesive backing; once attached to the TILE Tunable White remove the adhesive liner from the back of the strip and position it on to the mounting surface avoiding folds and wrinkles.
3. Once attached in the correct location, the Connector Strip should be secured with fasteners appropriate for the mounting surface.

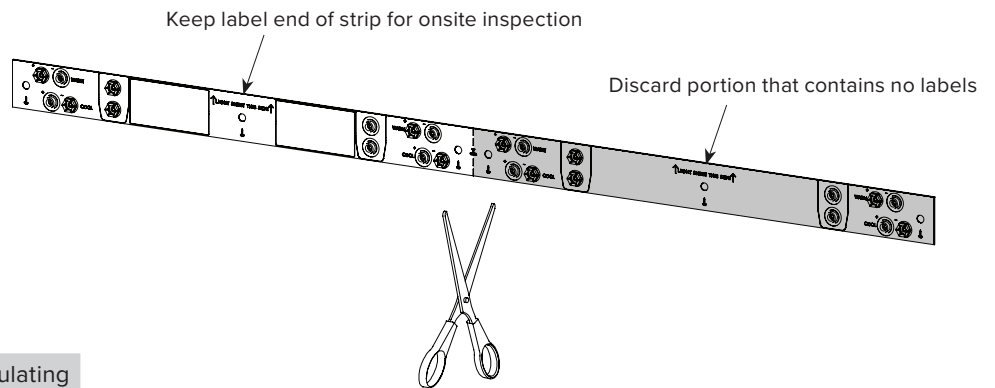


TILE Tunable White mounted to a light box back surface,
with Connector strip mounted to light box wall at 90° to
a TILE Tunable White.

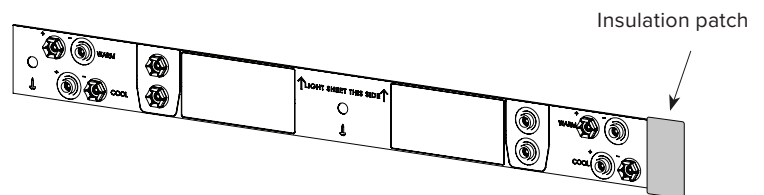


TIP - Connector Strips may be mounted to the inside
walls of an enclosure if preferred as shown. Be sure to
mount the TILE Tunable White first and then connect
the connector strips. This will decrease the stretching of
the connector tabs.


4. Connector Strips may be cut at the end of a series
of rungs where <2' (610mm) of space remains.
Cutting can be done only at 1ft (305mm) where
indicated.



5. After cutting the connector strip, place insulating
tape over the cut portion as shown in the image
below.



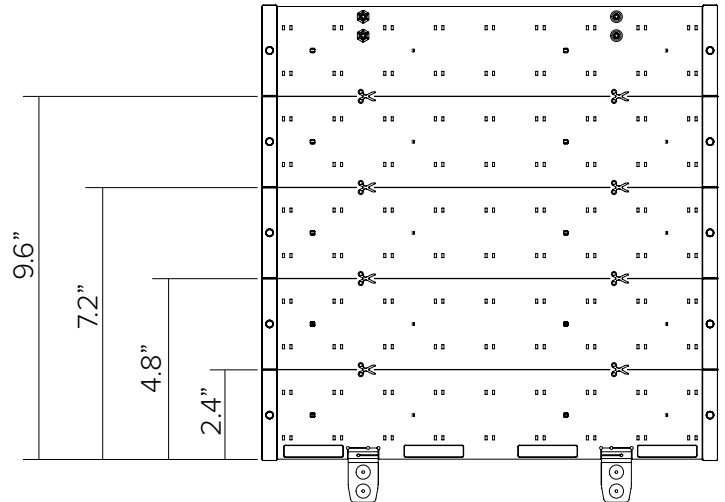
6.3 CUTTING TILE TUNABLE WHITE

 **TRIM ONLY ALONG THE CUT LINES SHOWN ON THE TILE TUNABLE WHITE.**

TILE Tunable White may be cut to shorter lengths if required. The cut TILE Tunable White must always be placed at the termination end of a run as they can no longer be connected to additional TILE Tunable White. Cut TILES before mounting.

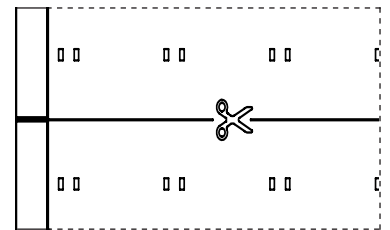
To cut the TILE Tunable White use sharp scissors or snips to carefully cut along the white line indicated by the scissor symbol. The plastic rails are notched at these points to aid cutting.

A TILE Tunable White can be cut to give 12" (30cm) wide x lengths of approximately 2.4" (61mm), 4.8" (122mm), 7.2" (183mm) or 9.6" (244mm) as shown.

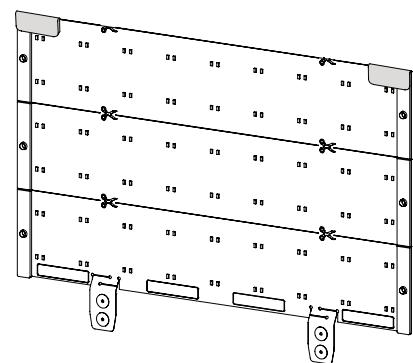
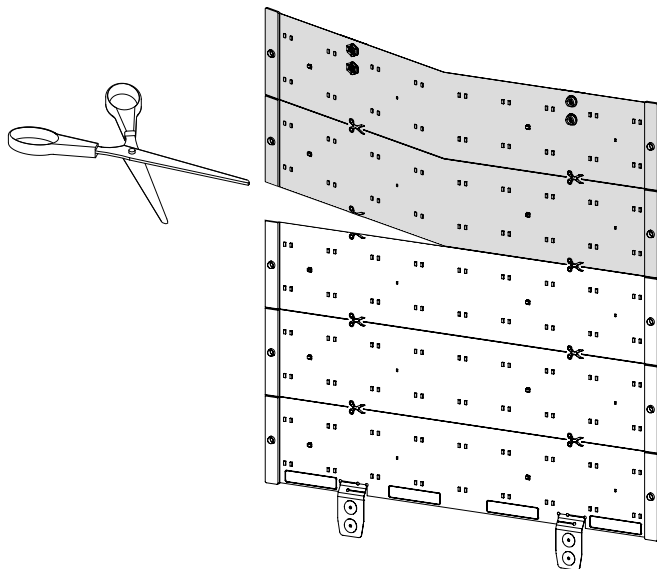


 **DISCARD** the trimmed piece of sheet

After cutting, the exposed edges of the electrical conductors must be insulated with the supplied insulating patches. These must be wrapped around both cut edges of the TILE Tunable White as shown below:



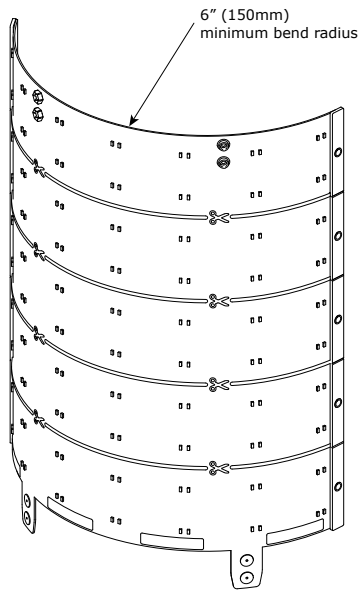
Cut TILE Tunable White between the guide lines



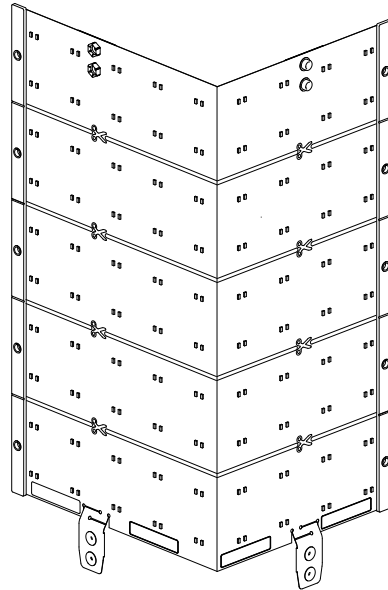
6.4 INSTALL TILE TUNABLE WHITE ON CURVED SURFACES

The following examples show configurations which are acceptable and are not acceptable.

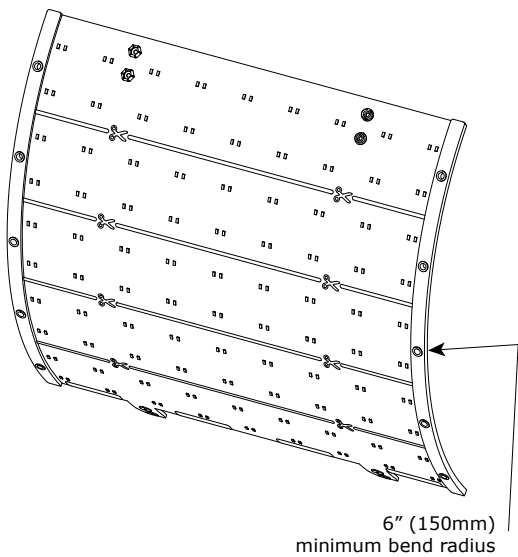
1. Round bend, side to side



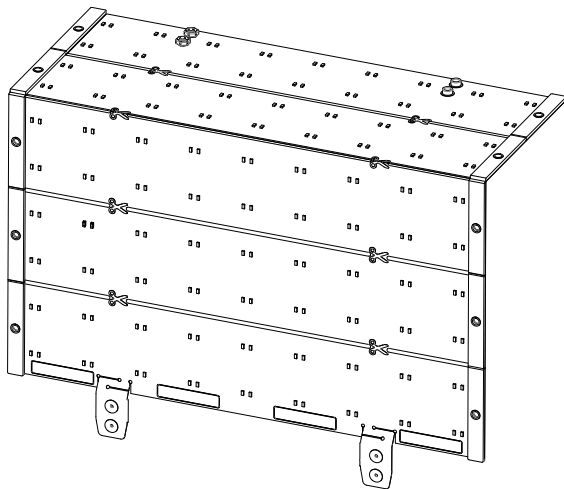
2. Sharp bend, side to side



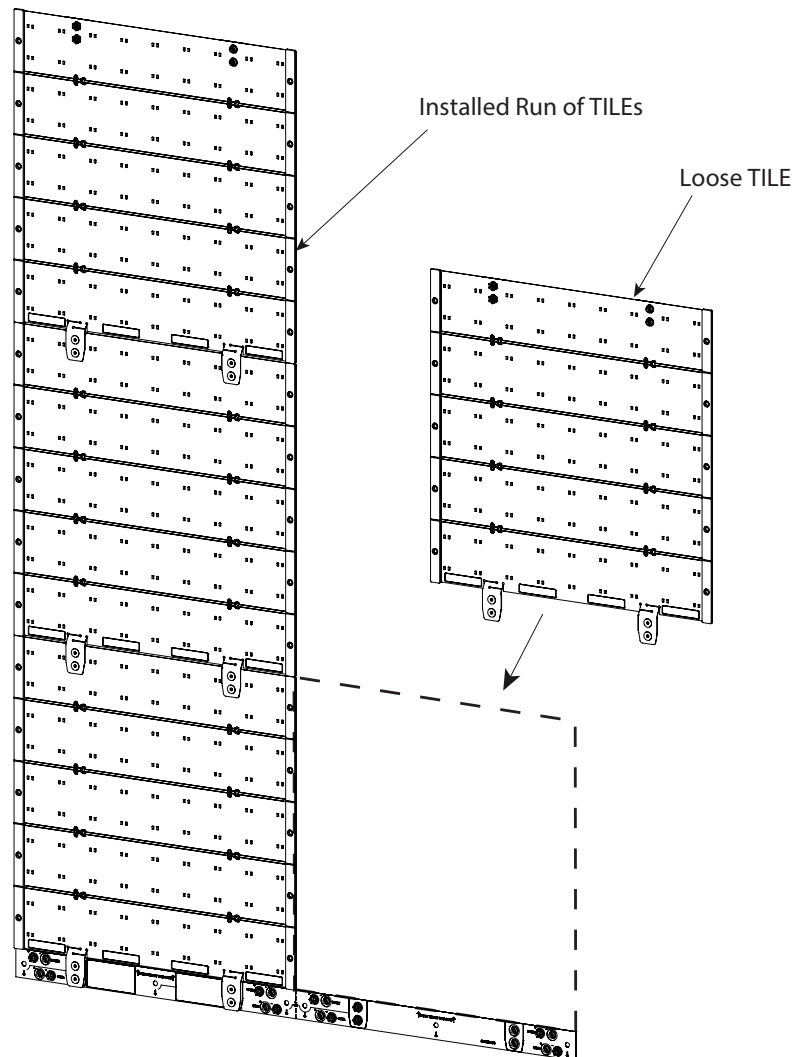
3. Round bend, top to bottom



4. Sharp bend, top to bottom

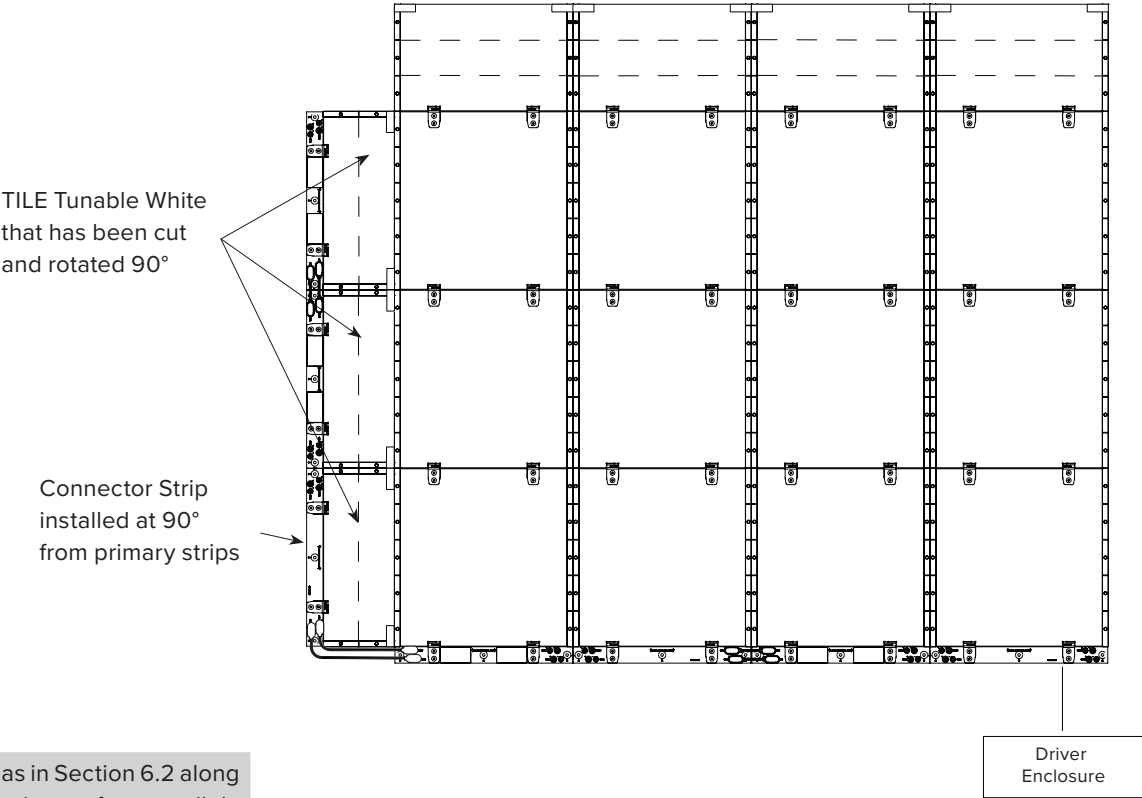


1. Once the first rail is attached, place the next TILE Tunable White next to the first rail as shown in the outlined area. Follow step 6.1 for fastening down Cooledge TILE.
2. Once the first rail is attached, stretch the TILE Tunable White until it is flat and attach the second rail with fasteners as done for the TILES in the first run.
3. Repeat Steps 1 and 2 until the run has been completed.
4. Repeat until all of the runs have been installed.
5. Some designs will require a run with a width that is less than 12" (305mm) (e.g. smaller than the width of a full sheet). For these layouts, follow the procedure described in Sections 6.5 and 6.6.



6.5B INSTALL THE LAST RUN (IF LESS THAN 12" (305MM) WIDTH)

TILE Tunable White may not be cut in both directions without breaking the electrical circuits that provide power to the LEDs. For this reason, when installing a run that is <12" (305mm) in width, it is necessary to cut the sheets to the required width along the cut line identified in Section 6.3 that corresponds with the required run width, and then rotate the TILES 90° so that the input end faces the outer edge of the run.

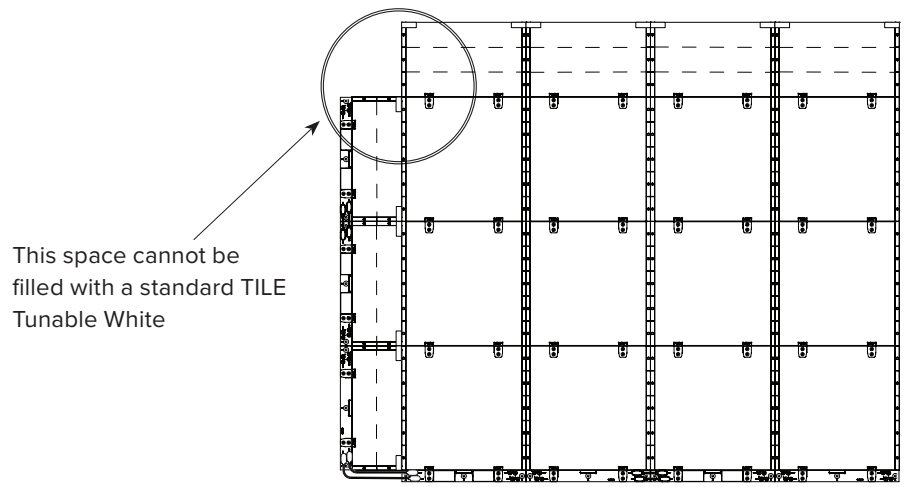


- | | |
|----|---|
| 1. | Install the Connector Strip as in Section 6.2 along the outer edge of the mounting surface parallel to the previously installed runs (i.e. At 90° to the Connector Strip already installed). |
| 2. | The number of TILE Tunable White sheets that will need to be cut is equal to the number of rows of full-sized TILES already installed (e.g. if there are six (6) rows of uncut light sheets in the runs already installed, six (6) sheets will need to be cut and rotated to make up the last run.) |
| 3. | Determine the required cut increment (Section 6.3) that will fit into the width remaining. |
| 4. | Cut the TILE Tunable White so that each sheet is equal to or slightly smaller than the required width and retains the snap connectors. |
| 5. | Starting at the input end of the previously installed runs, rotate one (1) of the cut TILES 90° ensuring that the snap connectors are adjacent to the Connector Strip, and fasten using appropriate #6 (M4) fasteners as in Section 6.2. |
| 6. | Repeat Steps 6.4 and 6.5 until the run has been completed or there is one (1) remaining space that is <12" (305mm) in both dimensions. |

If a space remains upon completion of Section 6.5, a TILE Tunable White Corner that can be cut in two (2) directions is required: proceed to Section 6.6.

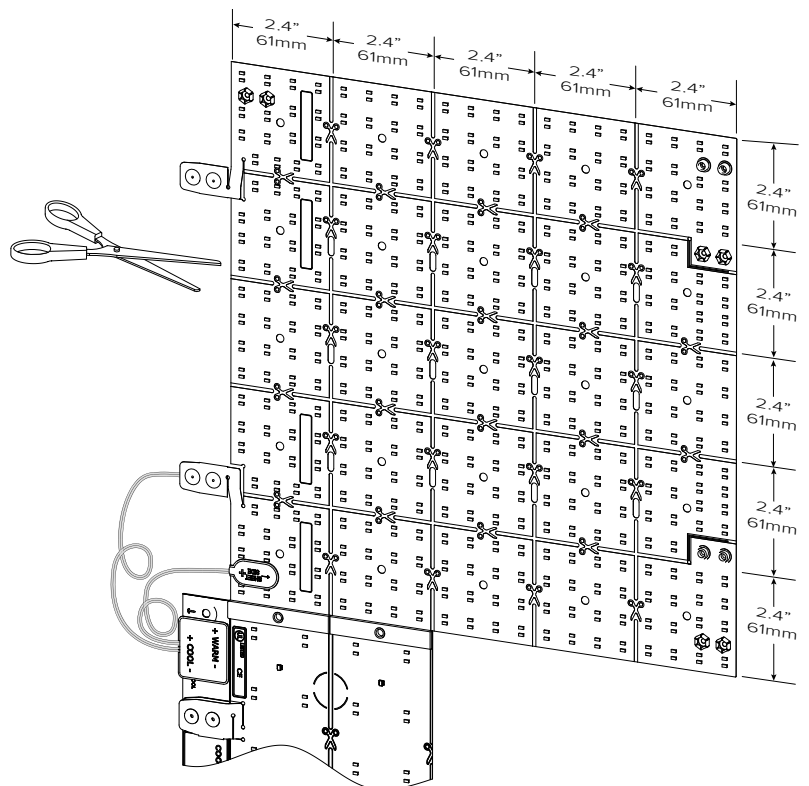
6.6 INSTALL THE TILE TUNABLE WHITE CORNER KIT

For design layouts requiring runs that include end TILES that are cut short and where the last run is less than 12" (305mm) in width, there will be a space remaining - the "last corner" -that cannot be filled by cutting a standard TILE Tunable White.

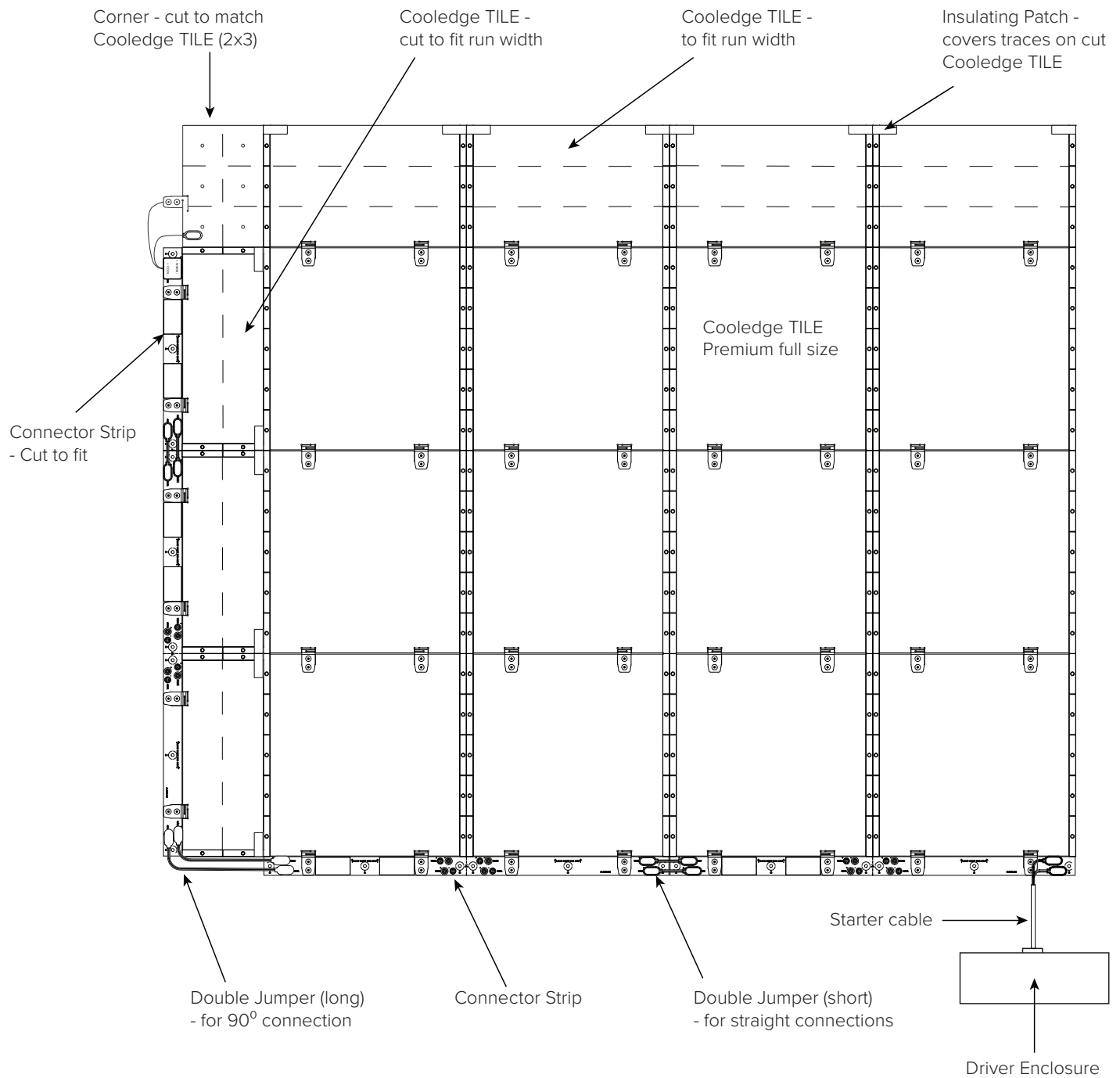


A TILE Tunable White Corner is used to fill in this last corner in any square or rectangular layout. This sheet has been designed to be cut in both directions.

1. Determine the size of TILE Tunable White Corner required. The sheets are sized to correspond to the allowable cut sizes of the standard sheet (each Corner is 5 x 5 cut increments).
2. Cut the TILE Tunable White Corner to the required size by cutting only along the guides between the smaller white square sections.
3. Peel the adhesive backing from the TILE Tunable White Corner and adhere it to the mounting surface with the snap connectors adjacent to the Connector Strip. Install #6 (M4) fasteners at the four corner mounting holes.
4. Use the wire harness to route power from the connector strip to the Corner TILE. Use wire clamps to hold the cables away from the LEDs.



4. Connect the TILE Tunable White Corner to the Connector Strip using a Corner Kit Jumper Wire



6.7 INSTALL THE TILE TUNABLE WHITE CUT-OUT KIT

You may encounter obstacles such as sprinkler heads or pipes which pass through the mounting surface. The TILE Tunable White Cut-out is designed to be used in these situations. This TILE Tunable White can not only be cut in both directions, but interior sections of the TILE Tunable White can be removed to work around the obstacle.



Trim only along the cut lines shown on the TILE Tunable White Cut-out



Discard the trimmed section of the sheet as it can no longer be used.

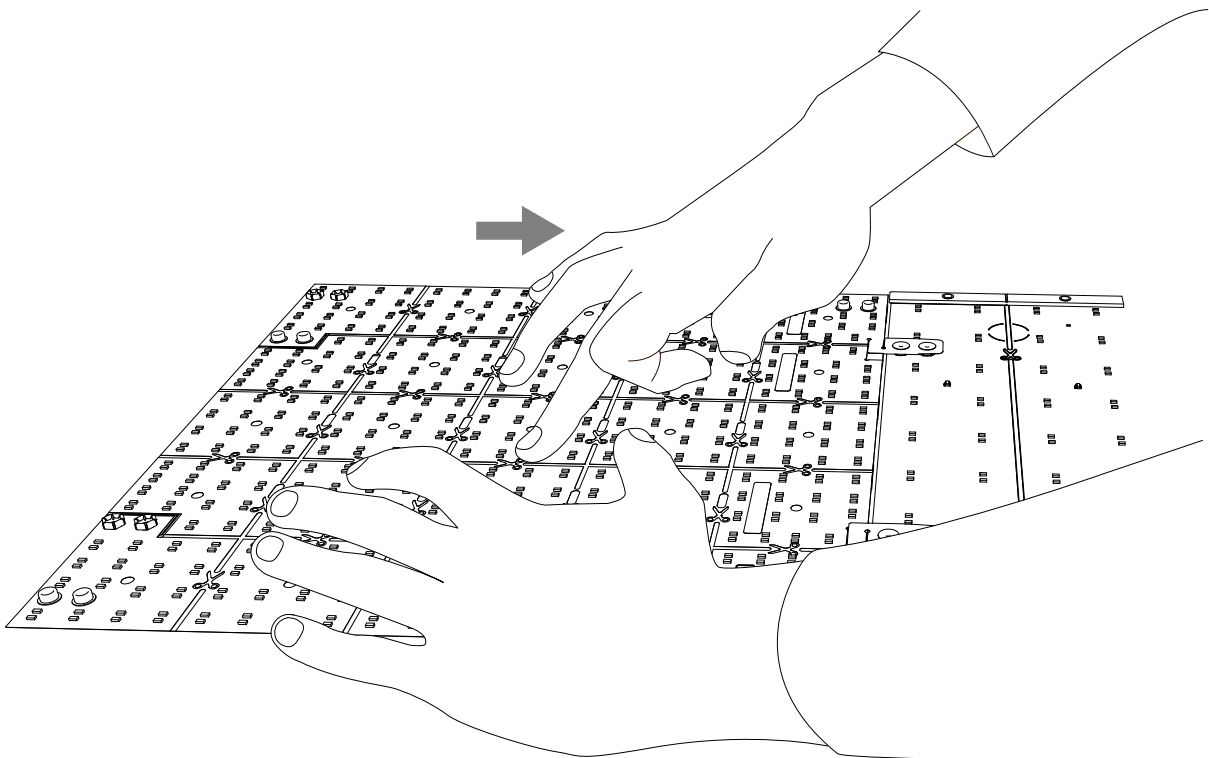
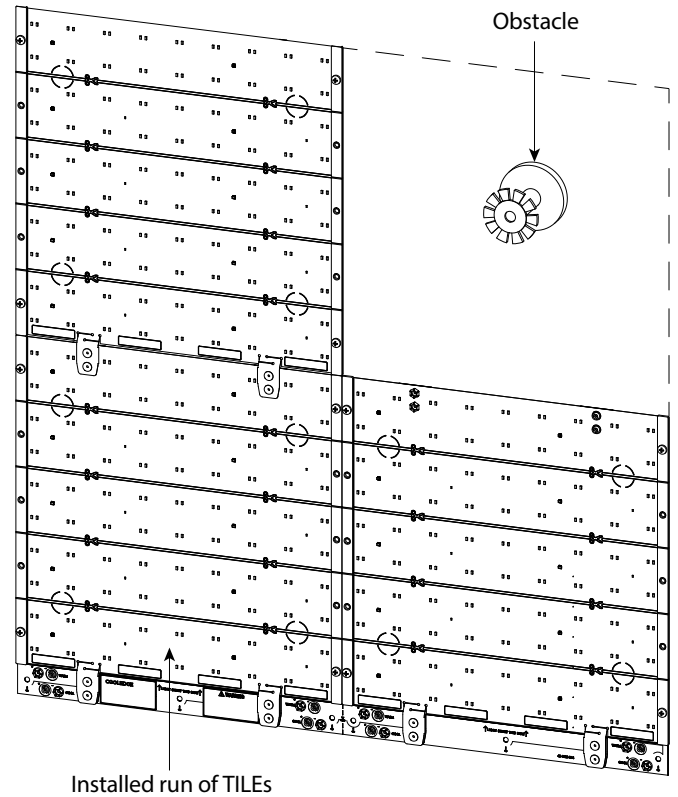


Do not cut the TILE Tunable White while it is powered.

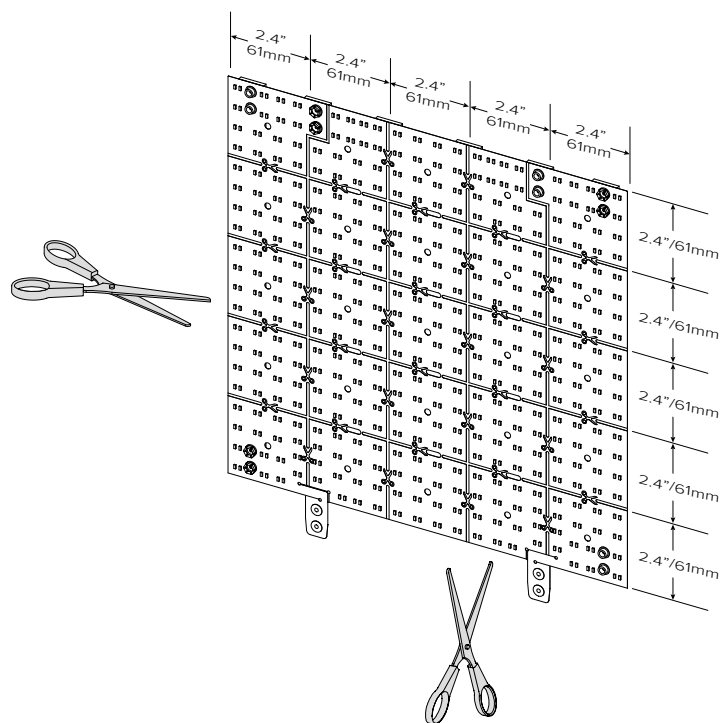
The TILE Tunable White Cut-out sheet has double-sided adhesive foam tape on the back side. This tape ensures that the sheet is held flat against the mounting surface. Prior to applying the sheet, remove the liner on the back side of each strip of tape. Note that the foam tape is pressure sensitive and **MUST** be pressed down firmly along its entire length in order to achieve a bond. In order to do this, hold the sheet down with one hand while running one finger of the opposite hand down the cut line.



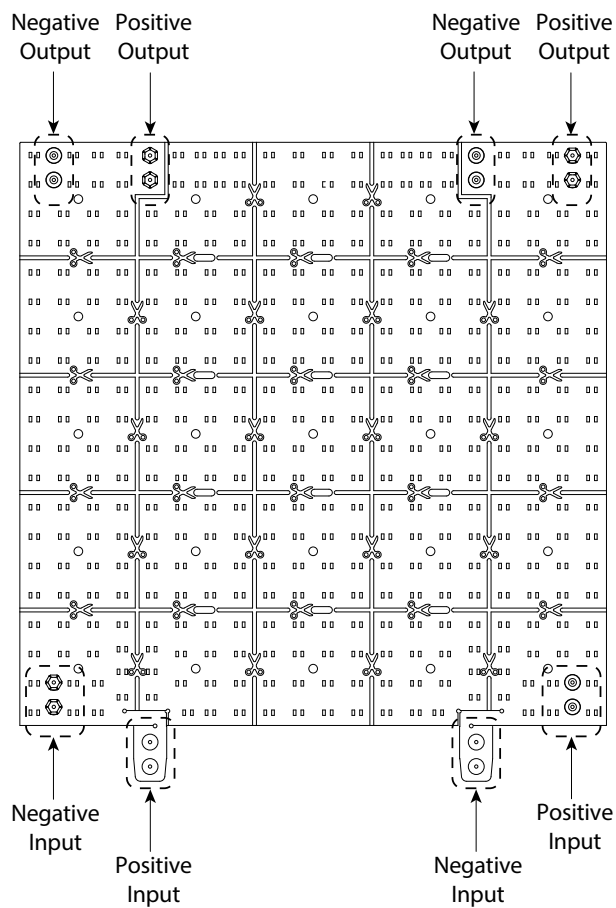
Be careful not to damage any LEDs while performing this task.



The TILE Tunable White Cut-out can be trimmed in either direction at the same 2.4" (61mm) increments as the standard TILE Tunable White.



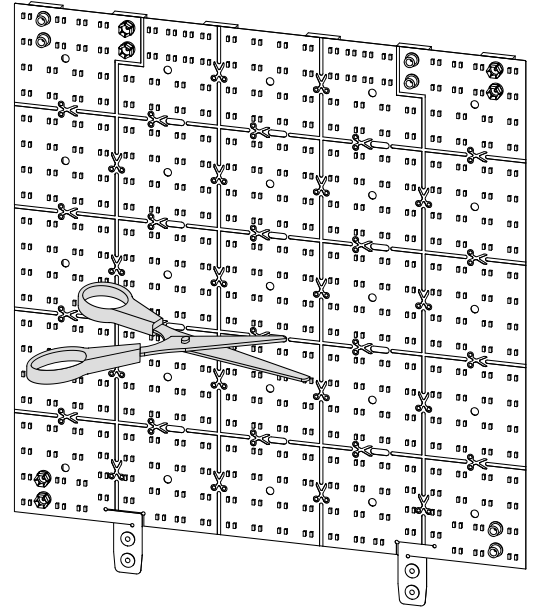
The TILE Tunable White Cut-out has two pairs of snap connectors at each corner. One pair has positive polarity while the other pair is negative. This arrangement allows the TILE Tunable White Cut-out to transfer power to the next sheet in the run even if one of the corners has been removed.




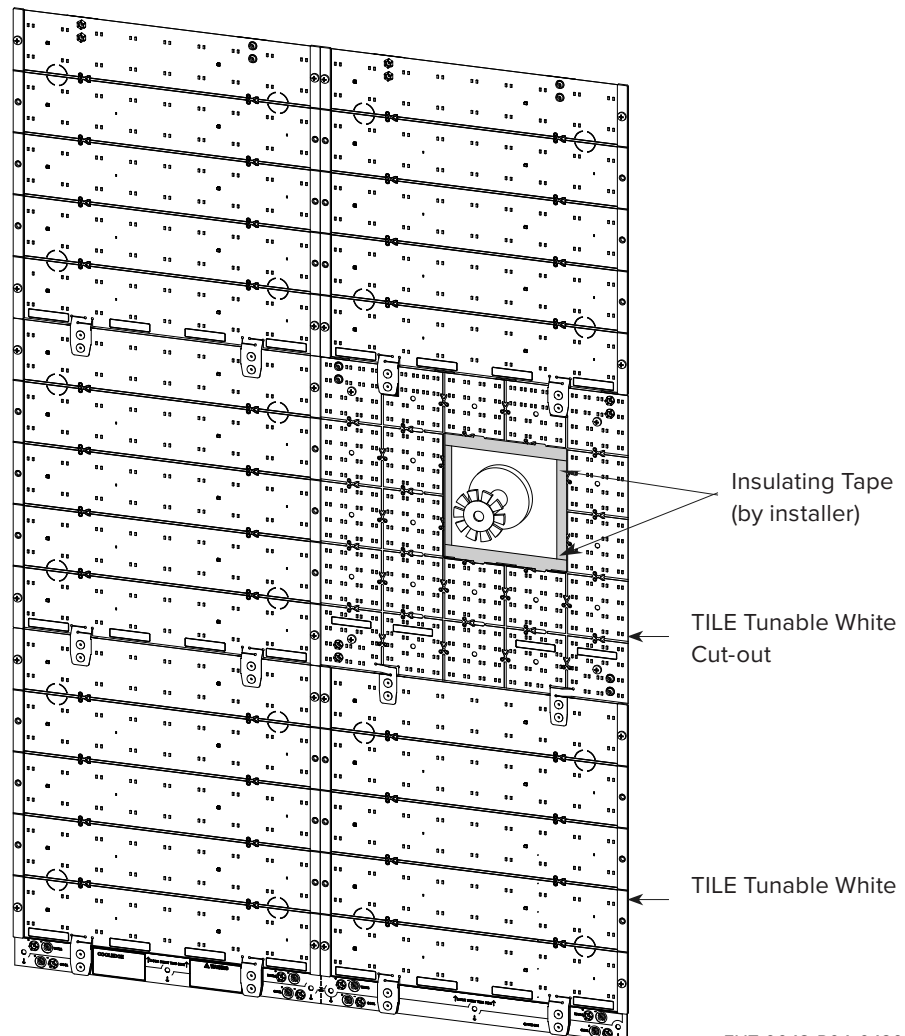
The following installation scenarios are possible:

1. Obstacle which requires an internal cut-out of a single TILE Tunable White Cut-out

- Lay out standard TILES until the obstacle is reached
- Determine the sections of the TILE Tunable White Cut-out which need to be removed
- Use scissors or a knife to cut out the required portions of the TILE Tunable White Cut-out. Slots are provided to allow for internal cuts to be made in the sheet
- Apply white electrical tape to the obstacle and mounting surface to prevent contact between the cut edges of the TILE Tunable White Cut-out and the surrounding surfaces. Electrical traces on the TILE Tunable White are severed when the sheet is cut. It is necessary to prevent these exposed traces from coming into contact with any surface which could create an electrical short.
- Position the sheet and continue with the remainder of the installation

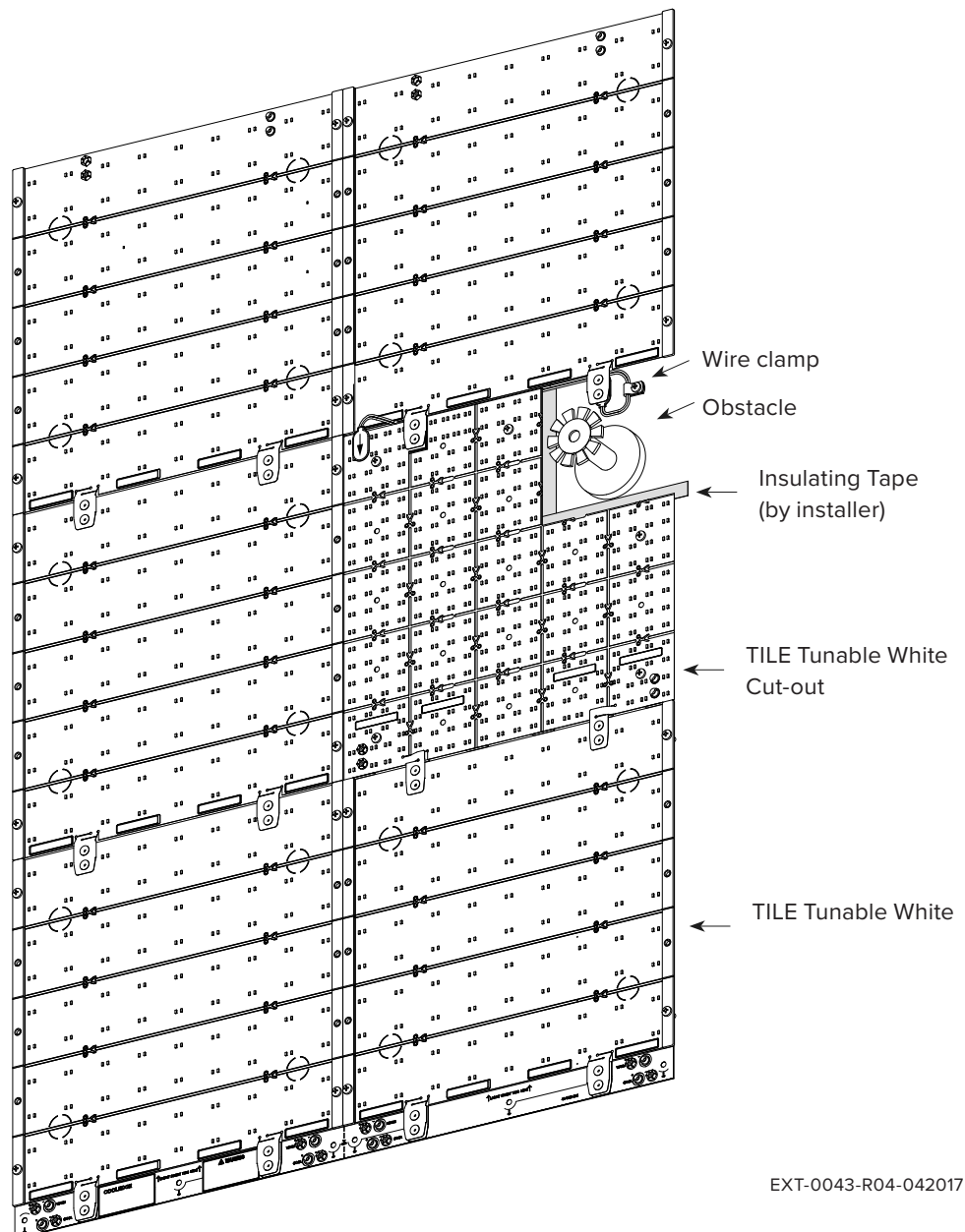


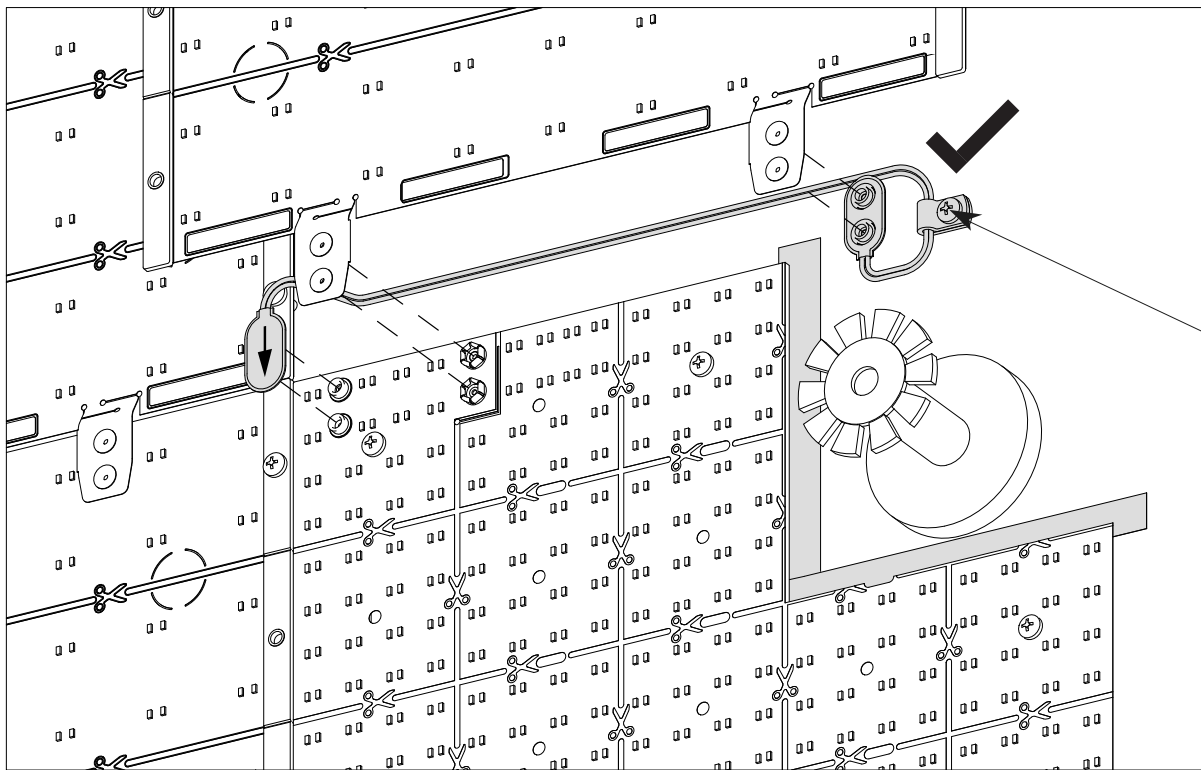
 Be careful not to cut past the edges of the edges of the desired cutout area.



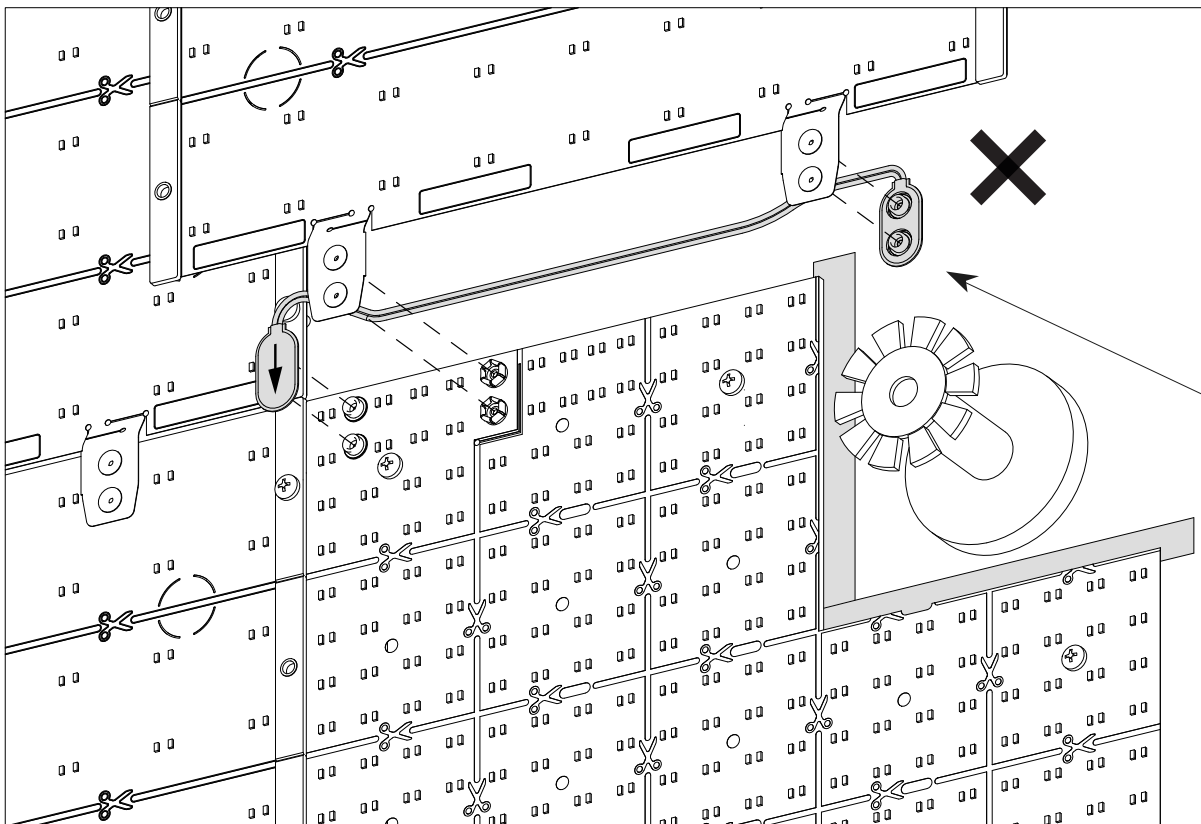
2. Obstacle which requires removal of one corner of the TILE Tunable White Cut-out

- Lay out standard TILE Tunable White sheets until the obstacle is reached
- Determine the sections of the TILE Tunable White Cut-out which need to be removed.
- Use scissors or a knife to cut out the required portions of the TILE Tunable White Cut-out.
- Apply white electrical tape to the obstacle and mounting surface as needed to prevent contact between the cut edges of the TILE Tunable White Cut-out and the surrounding surfaces. Electrical traces on the TILE Tunable White are severed when the sheet is cut. It is necessary to prevent these exposed traces from coming into contact with any surface which could create an electrical short.
- Install the TILE Tunable White Cut-out.
- Use the long jumper wire to route power from the TILE Tunable White Cut-out to the TILE Tunable White. Secure the wire using the provided wire clamp. Note the orientation of the jumper wire





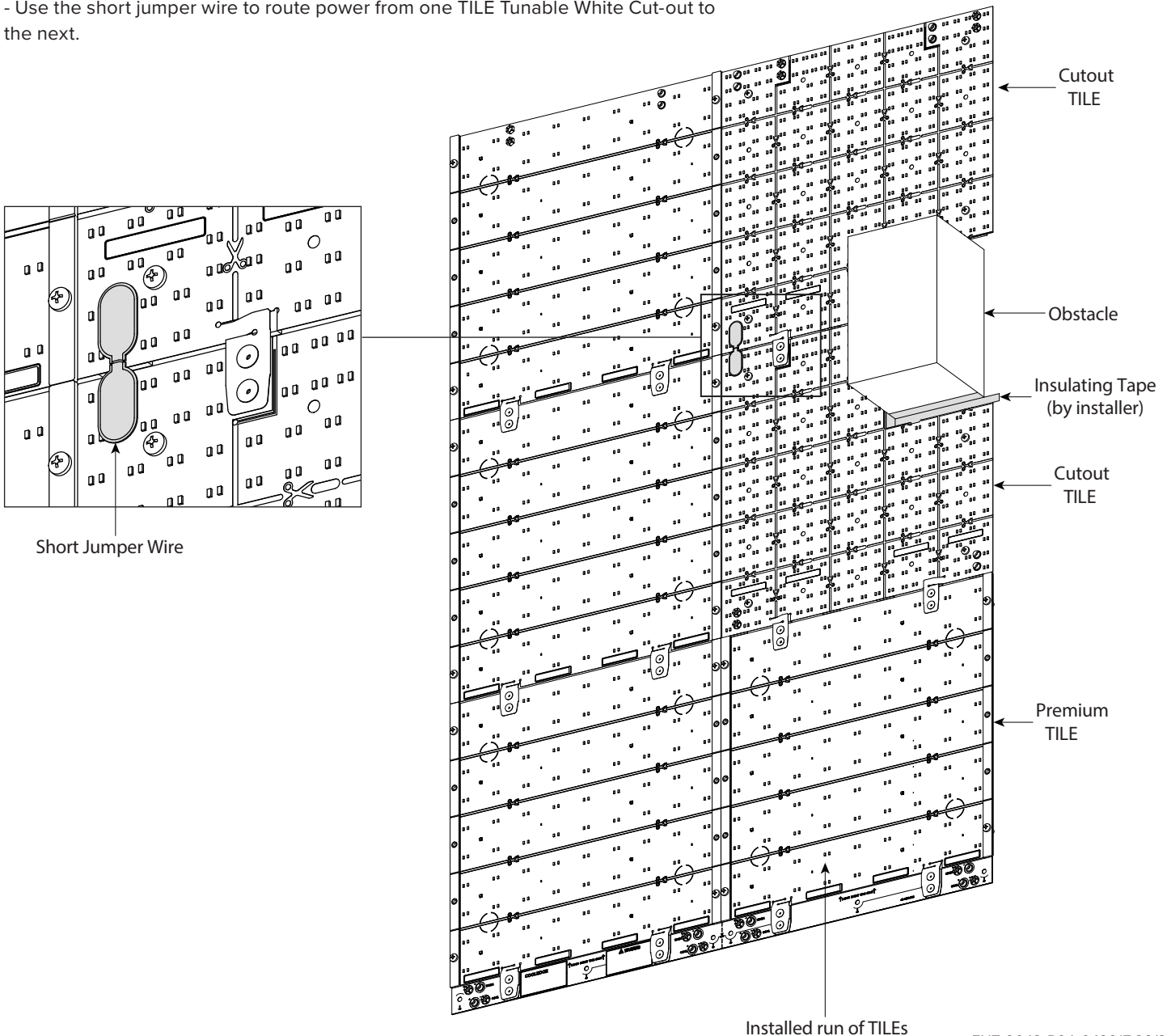
Correct wire
orientation



Incorrect wire
orientation

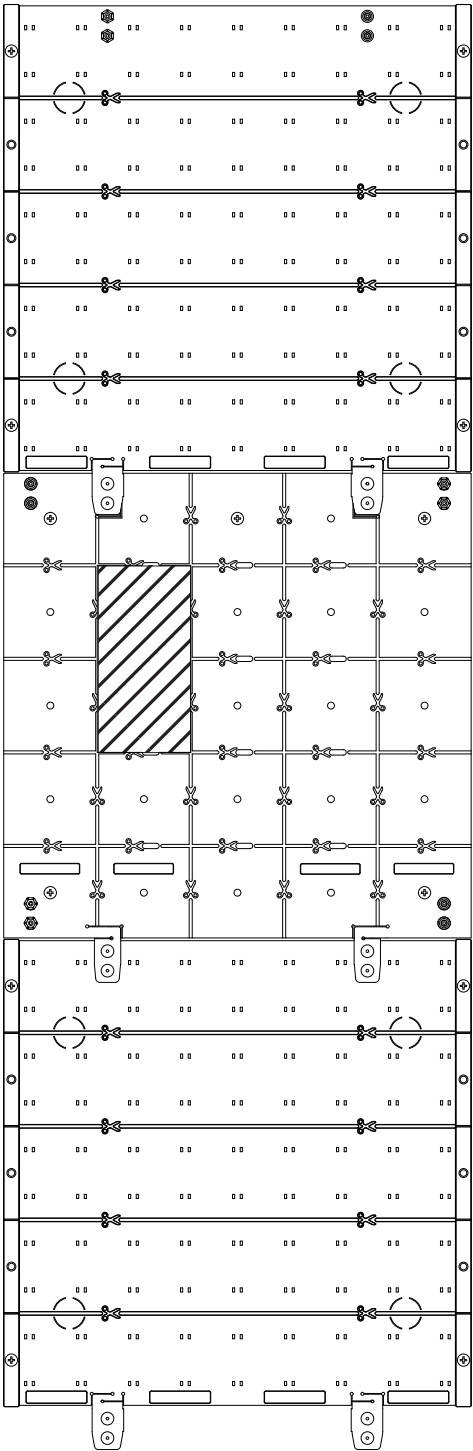
3. Obstacle which requires removal of adjacent sections of TILE Tunable White Cut-out

- Lay out TILE Tunable White sheets until the obstacle is reached
- Determine the sections of the TILE Tunable White Cut-out which need to be removed.
- Use scissors or a knife to cut out the required portions of the TILE Tunable White Cut-outs.
- Apply white electrical tape to the obstacle and mounting surface to prevent contact between the cut edges of the TILE Tunable White Cut-out and the surrounding surfaces. Electrical traces on the TILE Tunable White are severed when the sheet is cut. It is necessary to prevent these exposed traces from coming into contact with any surface which could create an electrical short.
- Install the TILE Tunable White Cut-outs.
- Use the short jumper wire to route power from one TILE Tunable White Cut-out to the next.

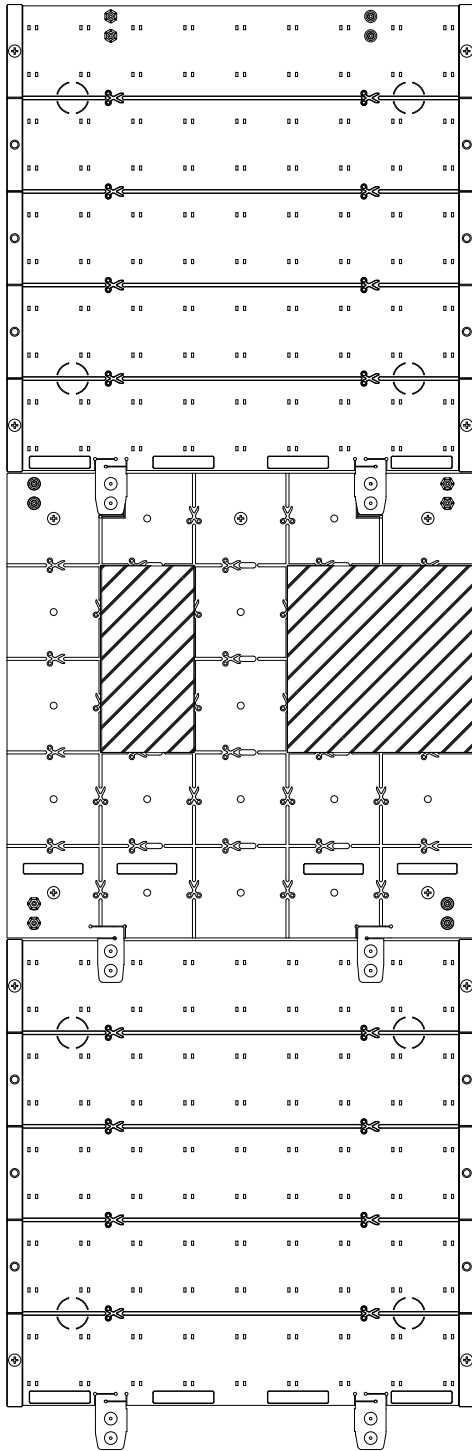


The following examples show configurations which are and are not acceptable.

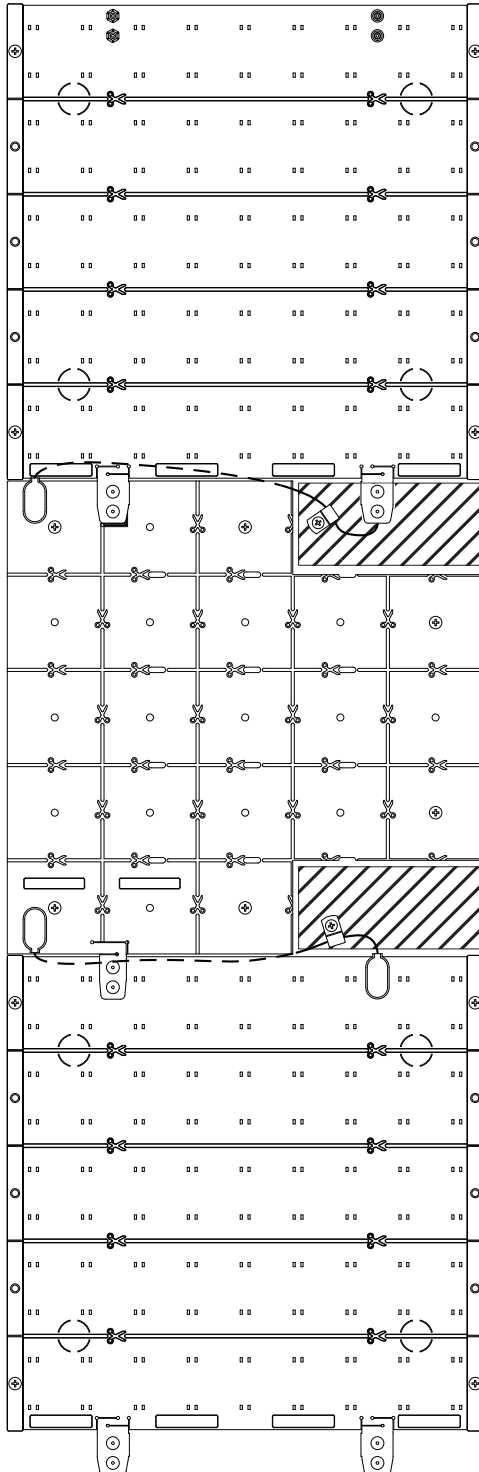
1. Single internal cutout. No power connectors removed. ✓



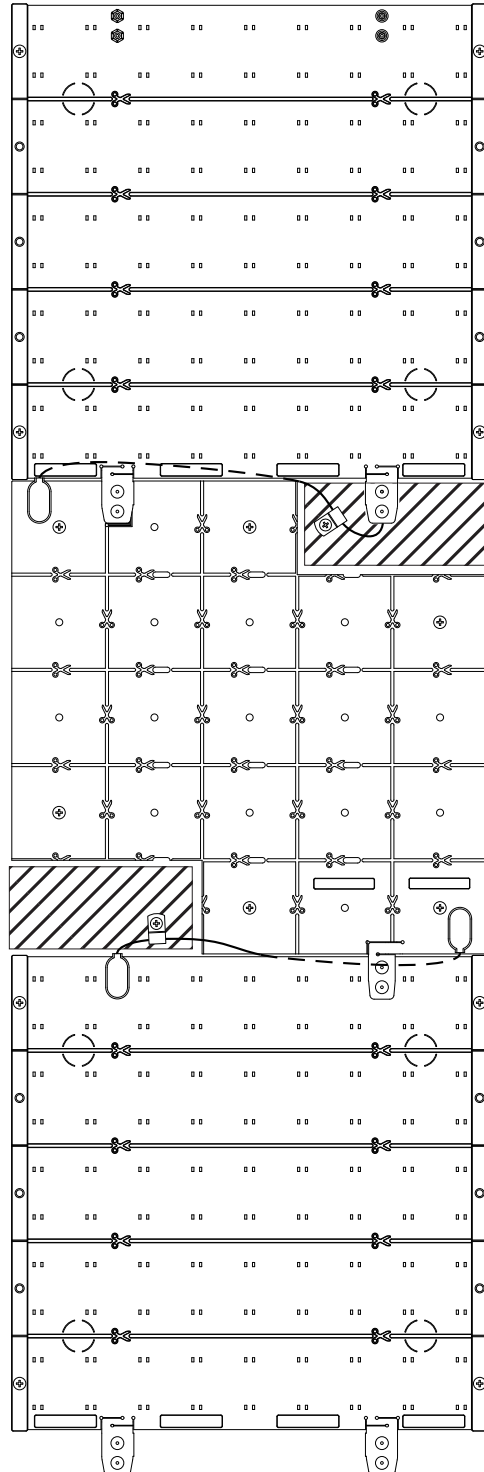
2. Multiple internal cutouts. No power connectors removed. ✓



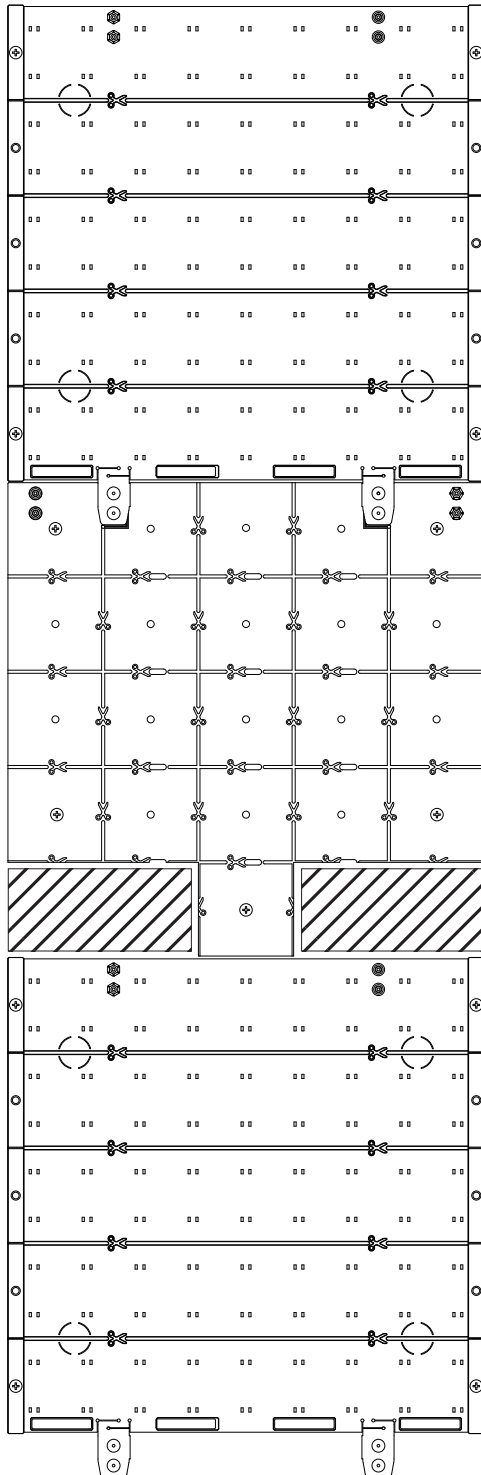
3. Removal of input corner and output corner of the same polarity. ✓



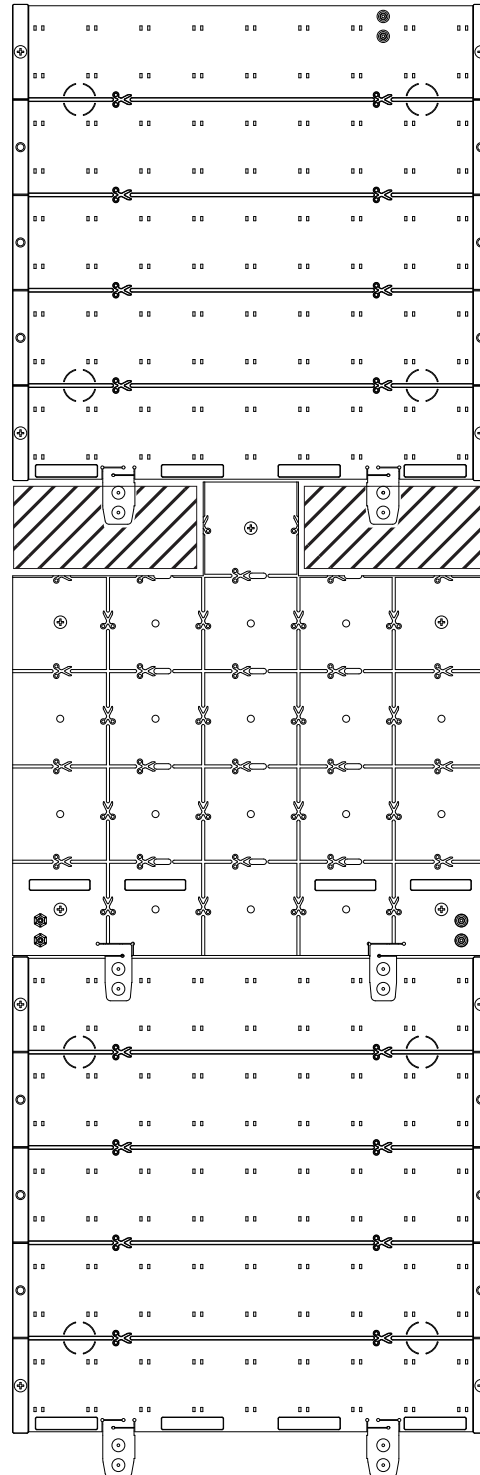
4. Removal of one input corner and one output corner of opposite polarities. ✓



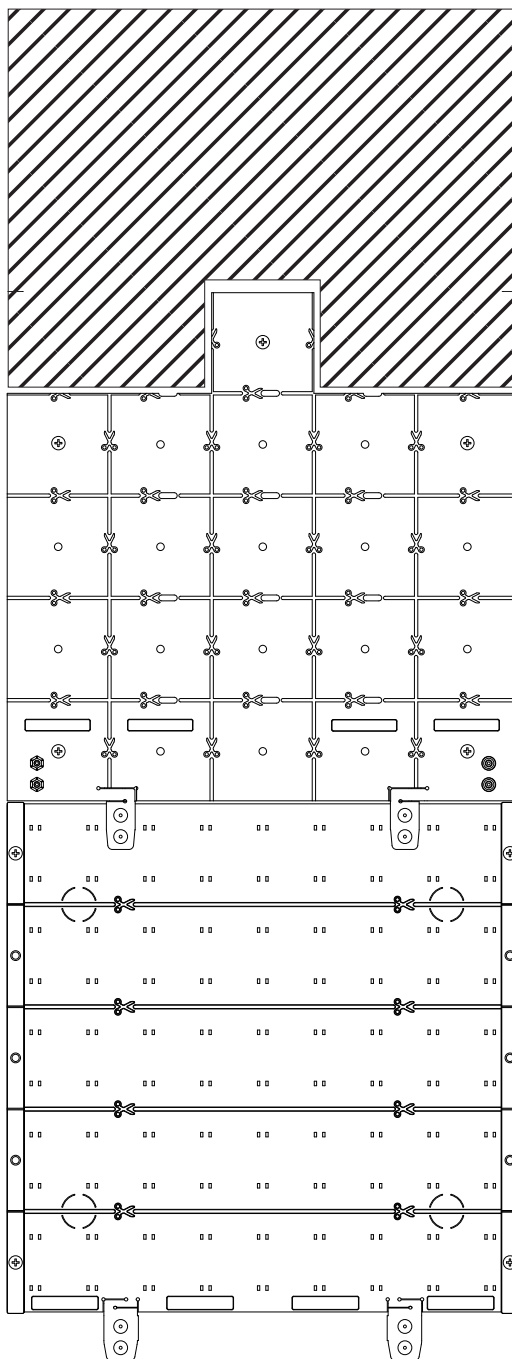
5. Removal of both input corners. **✗**



6. Removal of both output corners. TILE Tunable White Cut-out in the middle of the run. **✗**

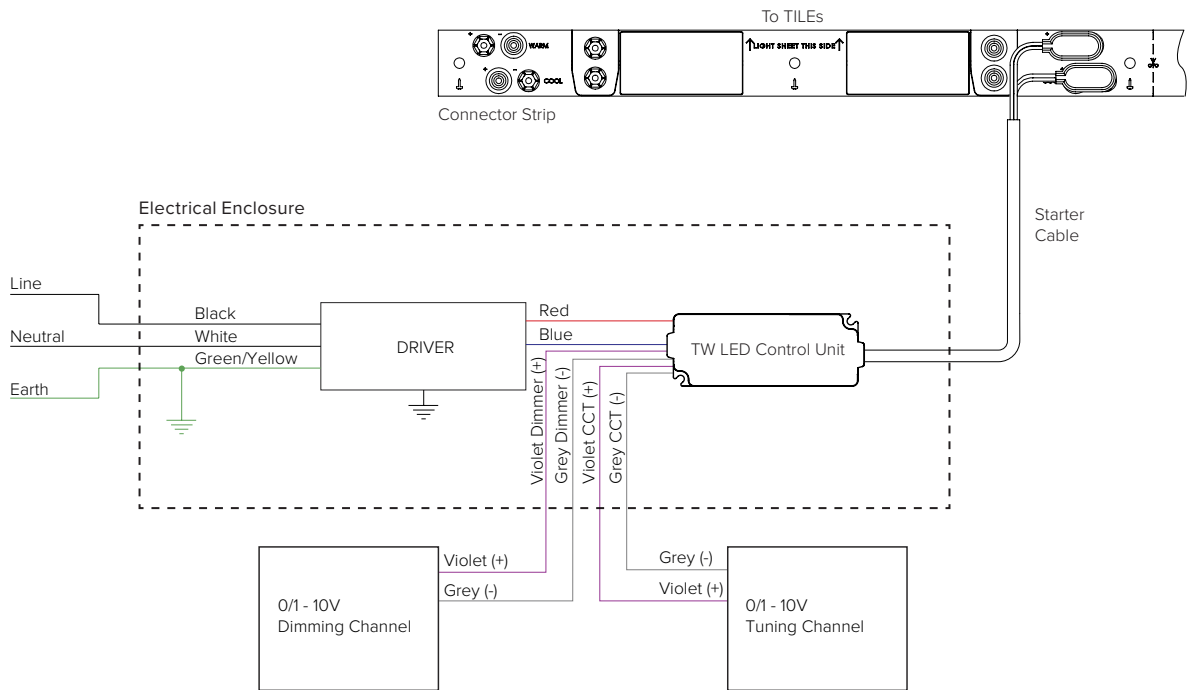


7. Removal of both output corners. TILE Tunable White Cut-out at the end of the run.



6.8A WIRING TO THE LED DRIVER UL LISTED VERSION

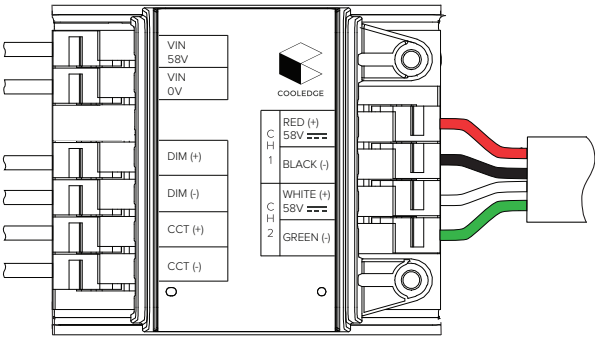
WARNING - DO NOT CONNECT the AC power directly to the TILE Tunable White or Connector Strip. All AC connections are to be made within the LED driver enclosure.



UL Listed version shown

DISCONNECT POWER TO THE SYSTEM before starting the following steps.

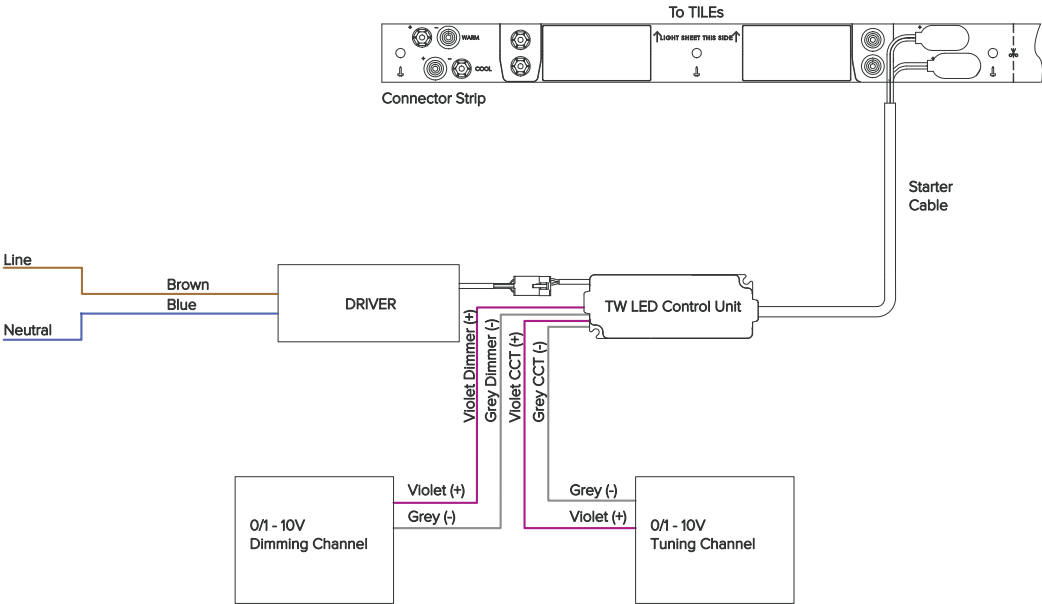
1. Mount the Enclosed Driver at the required location using appropriate fasteners. If enclosure is to be recessed in a wall or ceiling, ensure proper access is available during installation to enable correct installation.
2. Connect the Starter Cable to the Connector Strip using the snap connectors. Guide the Starter Cable until the end reaches the driver housing. If the drivers are located >10' (3m) from the Connector Strip, the Starter Cable should be connected to an Extension Cable using the crimps provided, or to an appropriate cable (supplied by others) that is sized to ensure voltage drop limits are not exceeded, please reference the project shop drawings.
3. Cut the Starter Cable to length and strip the termination, or if at the correct length, connect the bare conductors of the Starter Cable to the indicated terminals on the TW LED Control Unit.
4. Make the AC connection to the LED Driver within the enclosure using a method approved by local electrical codes.
5. Connect the 0/1-10V lighting control systems to their indicated positions on the TW LED Control Unit. One for dimming, and one for adjusting CCT.



TW LED Control Unit

6.8B WIRING TO THE LED DRIVER CE COMPLIANT VERSION

WARNING - DO NOT CONNECT the AC power directly to the TILE Tunable White, Connector Strip, or TW LED Control Unit. All AC connections are to be made within the LED driver.

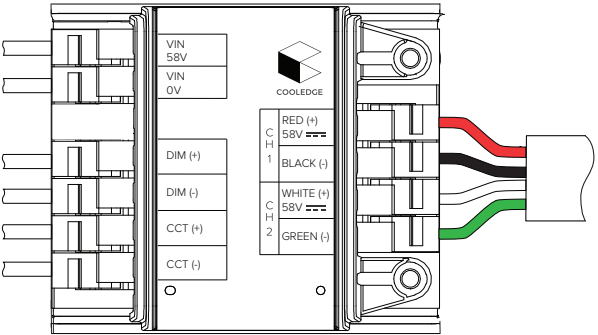


DISCONNECT POWER TO THE SYSTEM before starting the following steps.

CE Compliant version shown

Driver is tuned to 58V, do not adjust voltage.

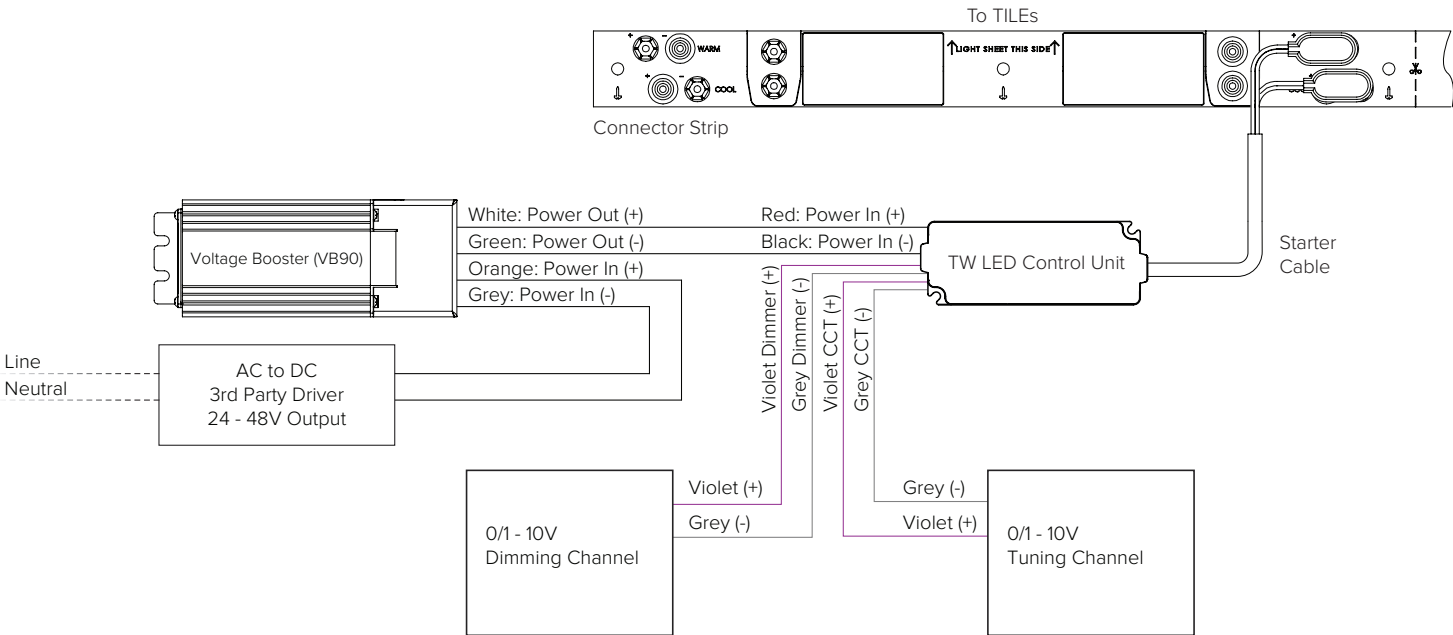
1. Mount the Driver at the required location using appropriate fasteners. Place the TW LED Control Unit near the driver such that once connected together no strain is on the system. If driver is to be recessed in a wall or ceiling, ensure proper access is available during installation to enable correct installation.
2. Remove plugs from the TW Controller, and connect the Starter Cable to the Connector Strip using the snap connectors. Guide the Starter Cable until the end reaches the TW Controller. If the drivers are located > 10' (3m) from the Connector Strip, the Starter Cable should be connected to an Extension Cable using the crimps provided, or to an appropriate cable (supplied by others) that is sized to ensure voltage drop limits are not exceeded, please reference the project shop drawings.
3. Cut the Starter Cable to length and strip the termination, or if at the correct length, connect the bare conductors of the Starter Cable to the indicated terminals on the TW Controller. The Warm channel connects to CH1, and the Cool channel connects to CH2. Make sure the strain relief clamps the cable jacket in the TW Controller.
4. Make the AC connection to the LED Driver using a method approved by local electrical codes.
5. Connect the 0/1-10V lighting control systems to their indicated positions on the TW Controller One for dimming, and one for CCT. Make sure the strain relief clamps the the wires in the TWC.



TW LED Control Unit

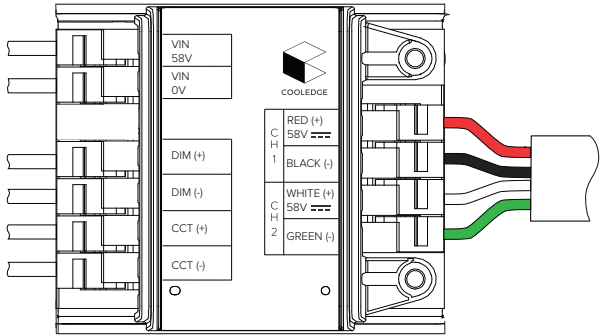
6.8C WIRING TO 3RD PARTY LED DRIVER

WARNING - DO NOT CONNECT the AC power directly to the TILE Tunable White, Connector Strip, or TW LED Control Unit. All AC connections are to be made within the LED driver.




DISCONNECT POWER TO THE SYSTEM before starting the following steps.

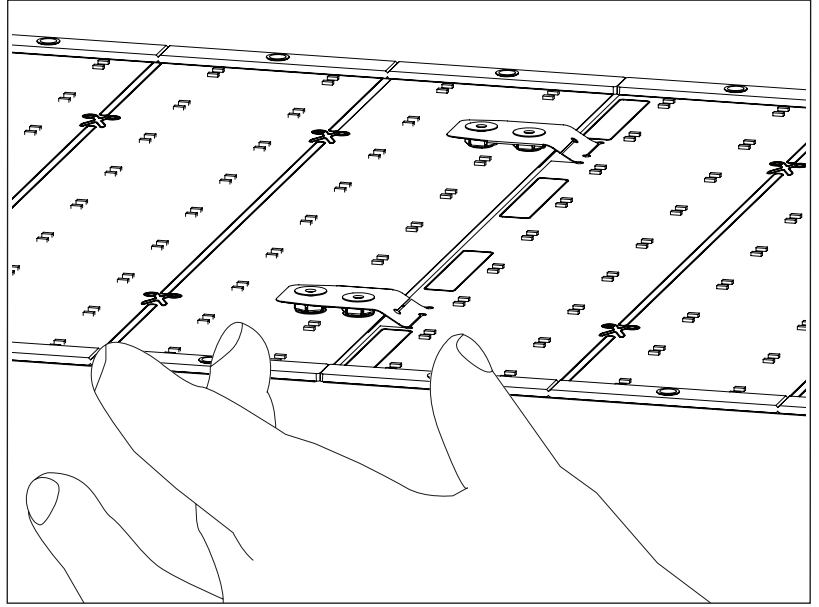
1. Mount the 3rd party driver, voltage booster, and TW Controller at the required location using appropriate fasteners. Place the components near each other such that once connected together no strain is on the system. If driver is to be recessed in a wall or ceiling, ensure proper access is available during installation to enable correct installation.
2. Wire the 3rd party driver to the voltage booster, and TW Controller as indicated in the wiring diagram above. Be sure to properly strain relief any wires attached to the voltage booster.
3. Remove plugs from the TW Controller, and connect the Starter Cable to the Connector Strip using the snap connectors. the Starter Cable until the end reaches the TW Controller. If the Drivers are located > 10' (3m) from the Connector Strip, the Starter Cable should be connected to an Extension Cable using the crimps provided, or to an appropriate cable (supplied by others) that is sized to ensure voltage drop limits are not exceeded, please reference the project shop drawings.



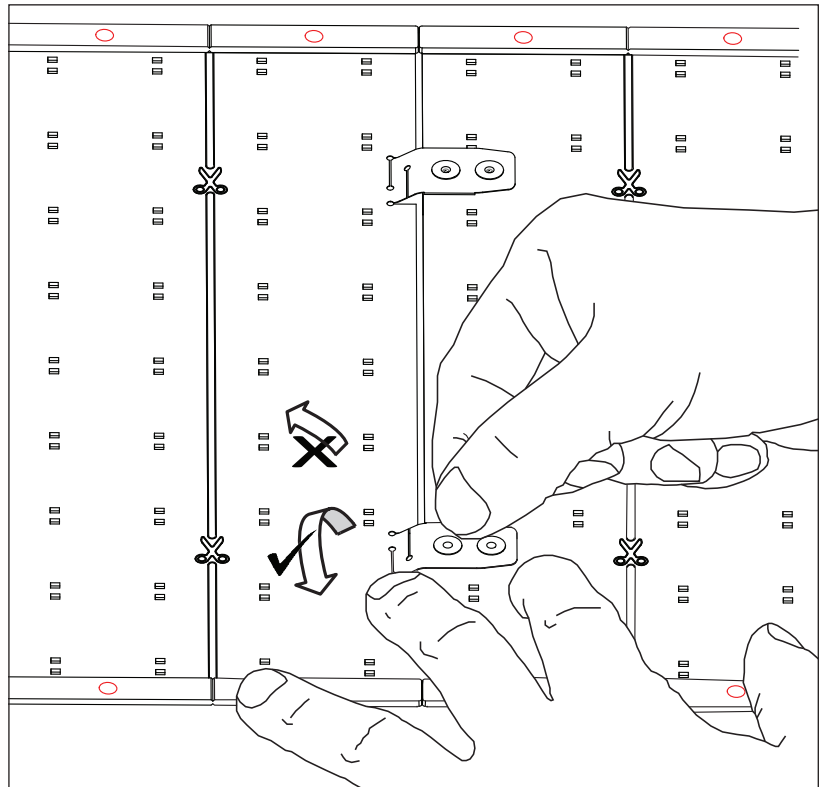
4. Cut the Starter Cable to length and strip the termination, or if at the correct length, connect the bare conductors of the Starter Cable to the indicated terminals on the TW Controller. The Warm channel (2700K) connects to CH1, and the Cool channel (5700K) connects to CH2. Make sure the strain relief clamps the cable jacket in the TW Controller.
5. Make the AC connection to the LED Driver using a method approved by local electrical codes.
6. Connect the 0/1-10V lighting control systems to their indicated positions on the TW Controller. One for dimming, and one for CCT. Make sure the strain relief clamps the the wires in the TW Controller.

6.9 DISASSEMBLING TILE TUNABLE WHITE (IF REQUIRED)

 Caution - the snap connectors are not intended for repeated connections. If it is necessary to separate the sheets after the snap connectors have been mated together, it can be done as follows:



1. Grip the tab between the thumb and index finger. Disconnect the snap connectors one at a time, in the direction shown in the illustration on the right. Gently separate the sheets while keeping the side rails restrained.



2. Similarly, when disconnecting Jumper Wires from the sheets or Connector Strips, the plastic material should be restrained while gently separating the connectors.

7.0 MAXIMUM CIRCUIT CAPACITY AND WIRE LENGTHS

With a 90W driver, up to 16 sheets of Cooledge TILE 600lm, up to 32 sheets of 300lm or up to 66 sheets of 150lm can be connected. To prevent an excessive voltage drop, design with the allowable layout configurations indicated below.

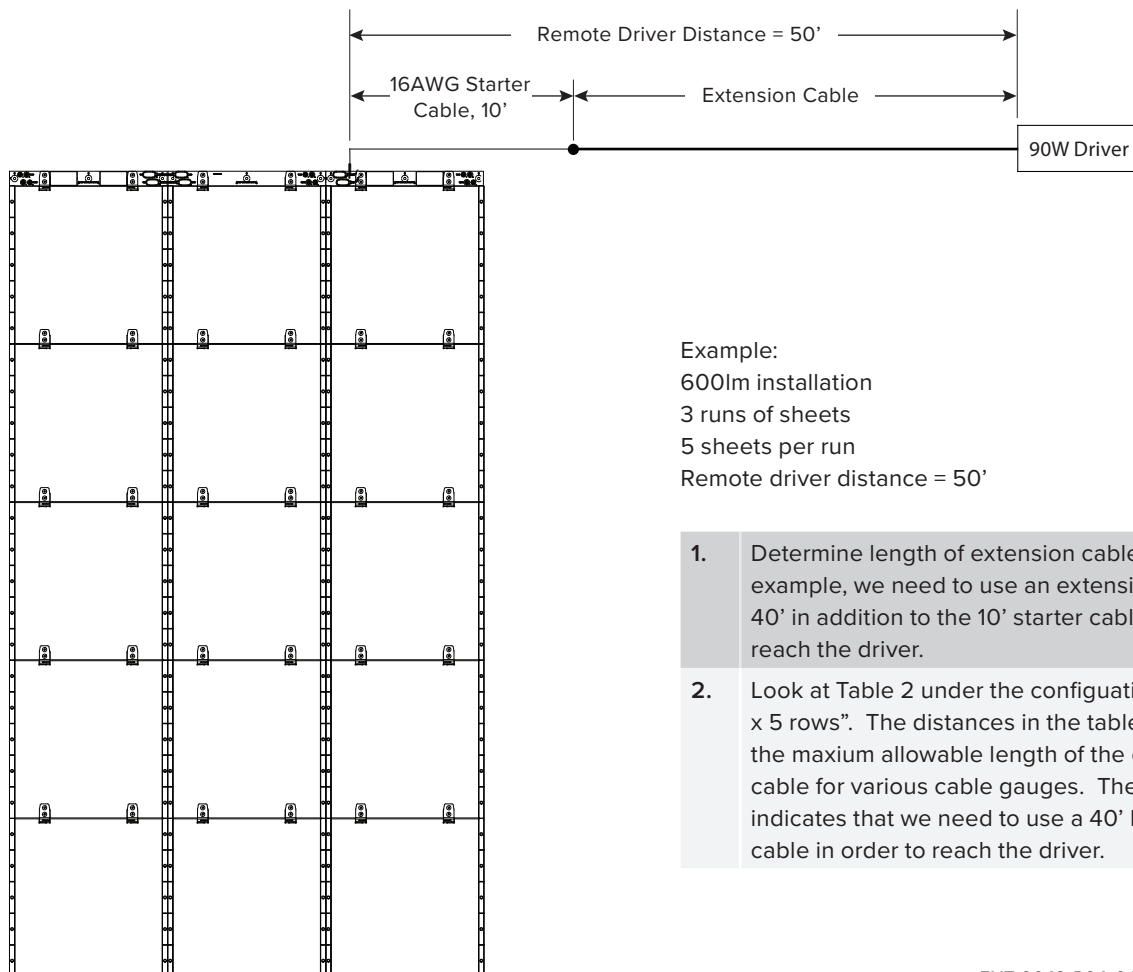
7.1 600LM COOLEGE TILE TUNABLE WHITE

Table 1. Maximum Number of Sheets per Run - 600lm TILE Tunable White

Product	1 run	2 runs	3 runs	4 runs	5 runs	6 runs	7 runs	8 runs
600 lm	13	8	5	4	3	2	2	2

Table 2. Maximum Length (in feet) of Extension Cable - 600lm TILE Tunable White

Cable Gauge	1 x 13	2 x 8	3 x 5	4 x 4	5 x 3	6 x 2	7 x 2	8 x 2
16AWG	2	17	24	22	22	32	22	14
14AWG	4	27	38	36	36	52	35	23
12AWG	7	43	60	57	57	83	56	36
10AWG	11	69	96	91	91	132	90	58
8AWG	18	110	153	144	145	209	143	93
6AWG	29	175	244	230	231	333	227	148



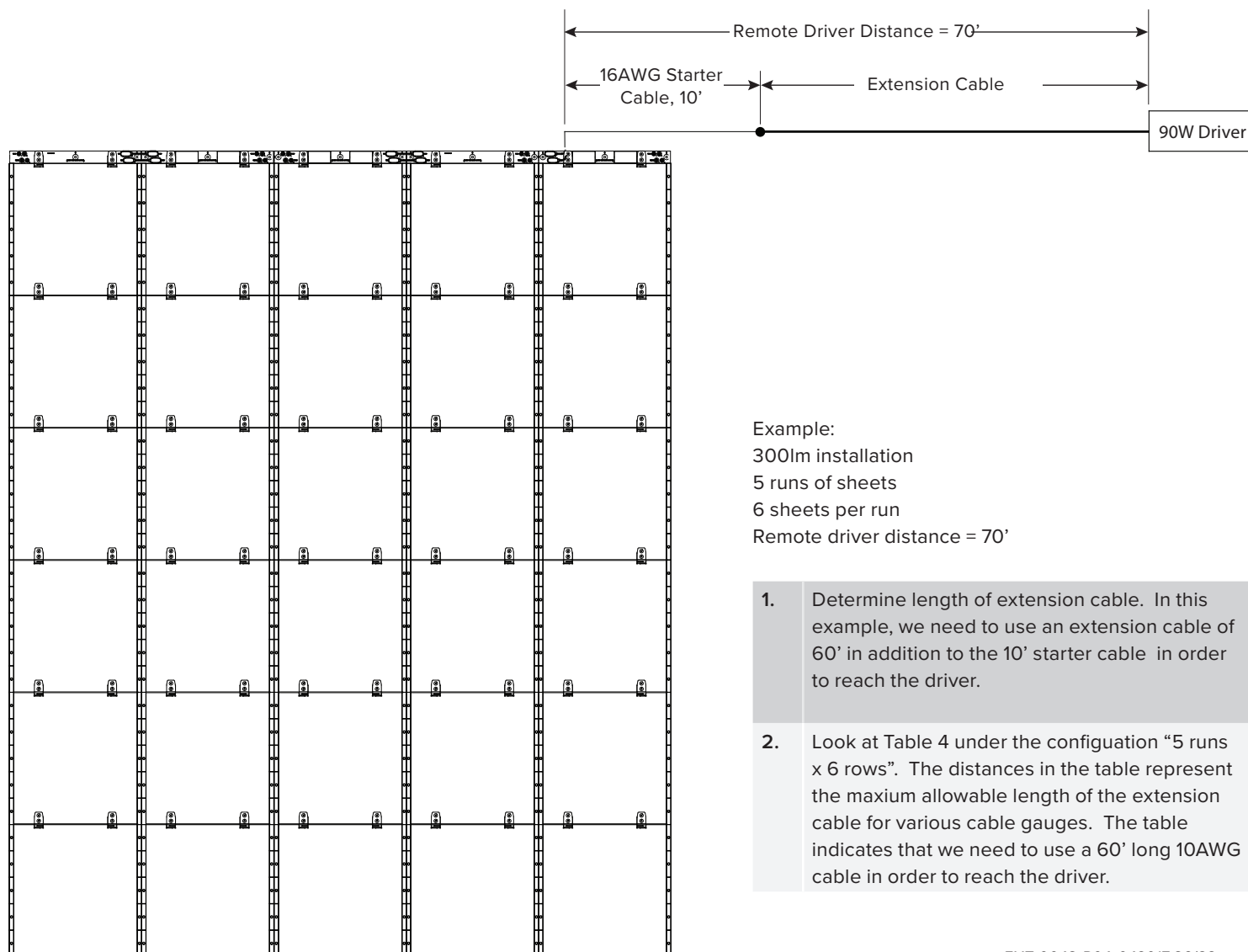
7.2 300LM COOLEGE TILE TUNABLE WHITE

Table 3. Maximum Number of Sheets per Run - 300lm TILE Tunable White

Product	1 run	2 runs	3 runs	4 runs	5 runs	6 runs	7 runs	8 runs
300 lm	18	16	11	8	6	5	4	4

Table 4. Maximum Length (in feet) of Extension Cable - 300lm TILE Tunable White

Cable Gauge	1 x 18	2 x 16	3 x 11	4 x 8	5 x 6	6x5	7x4	8x4
16AWG	10	5	14	18	21	20	21	14
14AWG	17	9	23	29	33	33	34	22
12AWG	27	14	36	47	53	52	55	35
10AWG	43	22	58	75	84	83	88	56
8AWG	68	36	93	120	135	133	140	89
6AWG	108	57	147	191	214	212	222	142



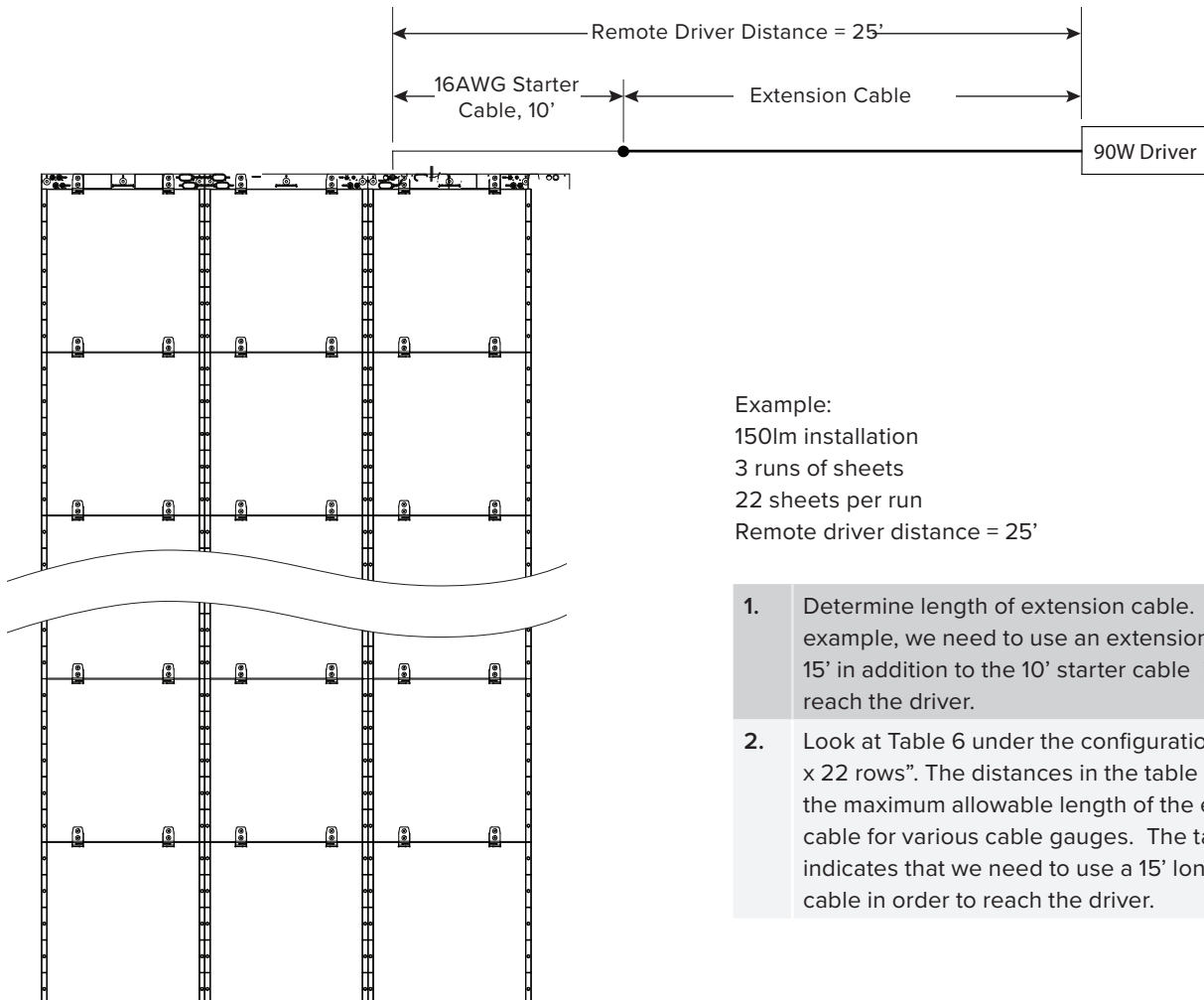
7.3 150LM COOLEGE TILE TUNABLE WHITE

Table 1. Maximum Number of Sheets per Run - 150lm TILE Tunable White

Product	1 run	2 runs	3 runs	4 runs	5 runs	6 runs	7 runs	8 runs
150 lm	28	26	22	16	13	10	8	7

Table 2. Maximum Length (in feet) of Extension Cable - 150lm TILE Tunable White

Cable Gauge	1 x 28	2 x 26	3 x 22	4 x 16	5 x 13	6 x 10	7 x 8	8 x 7
16AWG	2	1	4	13	14	18	20	19
14AWG	4	2	6	21	22	28	32	30
12AWG	6	3	10	33	25	45	51	48
10AWG	10	6	16	53	56	72	81	76
8AWG	16	9	25	84	90	116	130	121
6AWG	25	15	41	134	143	184	206	193



8.0 TROUBLESHOOTING

If the TILE Tunable White does not illuminate when power is applied:

- Check to ensure all electrical connections have been made.
- Check voltages across the main connections.

If a single LED or one (1) section of LEDs on a TILE Tunable White does not illuminate:

- The circuit for those LEDs has likely been damaged and the TILE Tunable White should be replaced.

If when set to limit of CCT range a mix of LED CCTs are illuminated:

- Colour channels have been mixed: Check wiring connection on starter cable, between connector strips and at Corner TILE jumper wires.

9.0 PRODUCT SUPPORT

Contact Cooledge Technical Support at:

E: apps.engineering@cooledgelighting.com
O: +1.604.273.2665
T: 1.844.455.4448 (toll free – North America)

10.0 WARRANTY

Cooledge warrants that the products manufactured, distributed or sold by it will:

- | | |
|----|---|
| 1. | Be free of any claim of ownership by third parties |
| 2. | Be conforming to the Specifications and free from defects in materials and workmanship under normal use, handling, warehousing and service. |

The warranty period specified in the Cooledge Warranty Terms and Conditions for the products will be for a period of five (5) years from the shipment date of any products sold by Cooledge.



EN 60598 Compliant (as a system)



In Canada, TILE Tunable White must be installed within an enclosure

RoHS



5 Year Limited Warranty:
Parts and workmanship

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T +1 844 455 4448
W cooledgelighting.com

Cooledge Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

EXT-0043-R04-042017 38/38