



# **LED handrail**

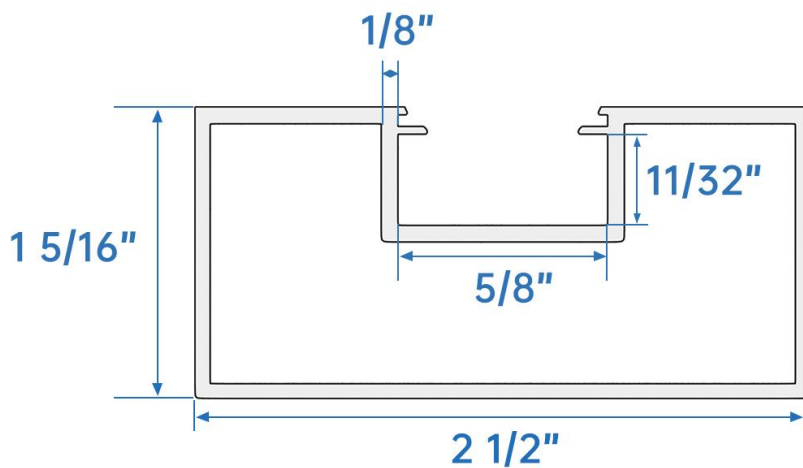
User Guide

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# 1. Overview

Muzata LED handrail is an innovative product that combines a handrail with LED lighting. This unique feature provides improved safety by illuminating the way on decks and stairs, allowing your family to walk securely at night. The aluminum material can be easily cut and drilled, and the connectors are custom designed for a weldless installation, making it beginner-friendly.

## 2. Handrail Specifications



Handrail



Diffuser

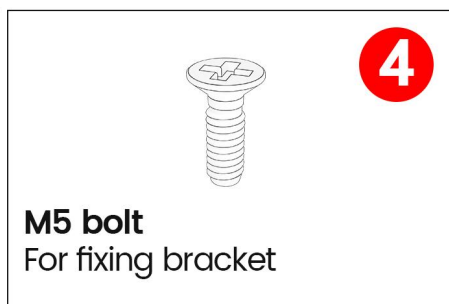
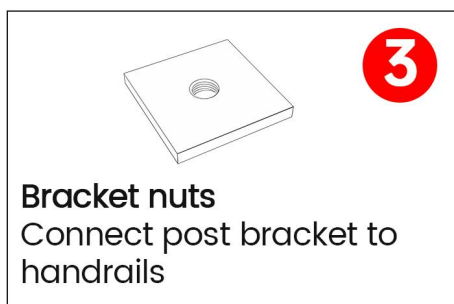
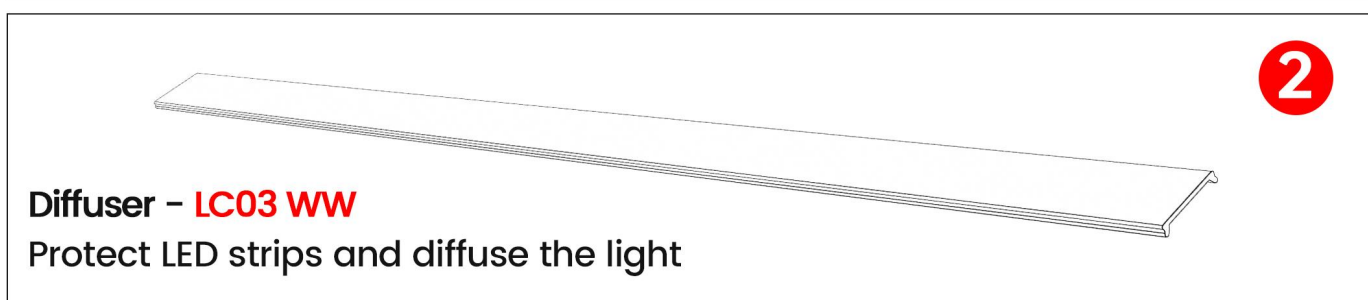
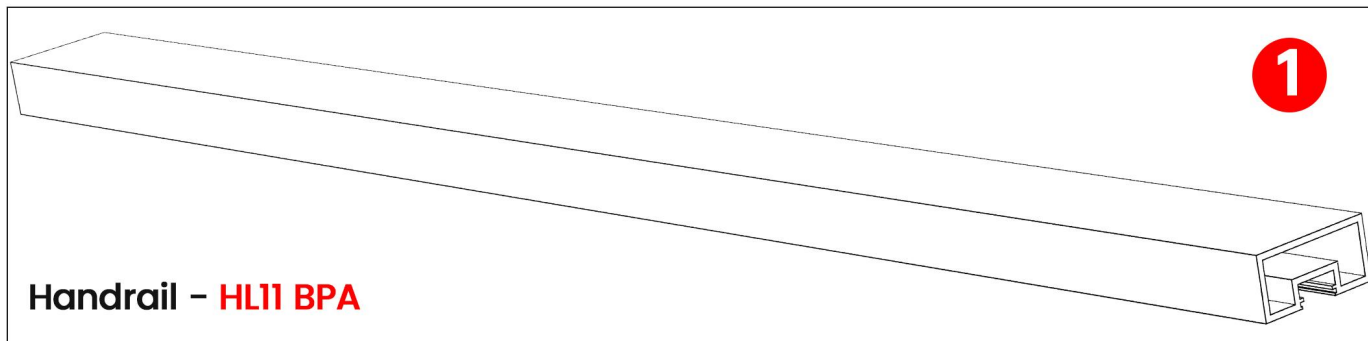


Model	Material	Length	Surface treatment
HL11 BPA	Aluminum	6'6"	Black powder coated

### 3. Items related

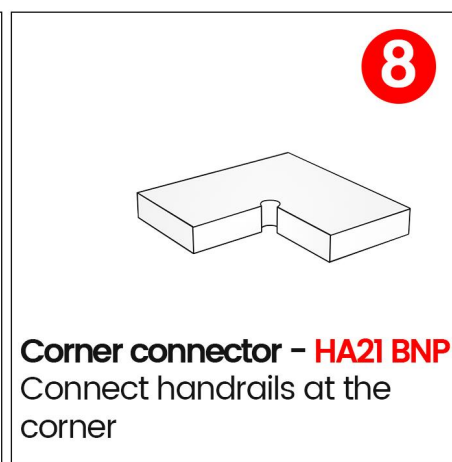
#### (1) Package includes

For your convenience, we have provided a list of items included in the handrail packaging below.



#### (2) Accessories related

Please note that accessories listed below may be required but are not included in the package. If needed, they can be purchased separately.



## 4. Installation steps

### (1) Connect the handrail onto the post

#### ① Straight connection



**Step 1** - Connect the nuts **3** with the bracket.



**Step 2** - Slide the handrail through one bracket nut **3**.



**Step 3** - Screw the bolt **4** on one end to fix the handrail to the post.



**Step 4** - Install handrail connector **7** and slide another handrail from the other side.



**Step 5** - Screw the bolt **4** on the other end to fix the other handrail onto the post.



**Step 6** - Predrill guide holes, then fix handrail connector and handrail with screws **5**.

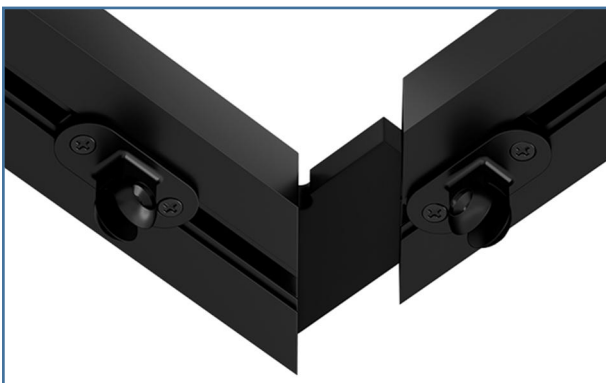
**2 Corner connection**



**Step 1** - Connect the nuts **3** with the bracket.



**Step 2** - Cut the handrail to 45° and slide the handrail through one bracket nut **3**.



**Step 3** - Install handrail connector **8** and joint two handrails.



**Step 4** - Put the handrail onto the posts and tension the brackets.



**Step 5** - Screw the bolts **4** to fix handrails onto the posts.



**Step 6** - Predrill guide holes, then fix handrail connector and handrail with screws **5**.

## **(2) Install the LED strips**

Note: Please use waterproof LED strips for outdoor projects since the handrail could not protect LED strips from water.



## **(3) Install the LED diffuser**

Please align the LED diffuser with the slot in the handrail, and then securely attach the diffuser by snapping it into the handrail slot.



**(4) Insert the end caps into handrail**



**(5) Install the cable railing kits**

Please follow the sequence to install all cable runs.



## 5. Tips

- (1) This LED handrail only fit led strip with a width < 16mm.
- (2) Waterproof light strips are required for outdoor projects.
- (3) Ensure that your posts and handrail are properly installed before you start cable installation.
- (4) You might have to buy a few more materials than expected in case some materials might not be reusable after operation mistakes.
- (5) The recommended post spacing between two posts is 3ft-4ft, no more than 4ft. For our 6'6" handrails, it would be best to adopt 3'3" post spacing.
- (6) The overall height of the railing (includes handrail) should be equal or higher than 36" to meet residential building codes of most states. Please consult your local building offices for building codes and make sure the system complies with the codes.
- (7) 3" cable spacing and 200 lbs tension on each cable line are recommended in order to pass the 4" sphere test (required by some states). You can buy a tension gauge online or from local stores.

## 6. Free design service

If you are a beginner or not sure about how to do it, please reach us. Our experts can do all the planning, designing and budget work for you without extra charging.

## 7. About MUZATA

MUZATA has helped millions of families with their cable railing projects during the past years. We believe that home renovation should be easy and affordable. So we work with every effort to provide quality products service, and professional to make Muzata a reliable brand.