Durable investment

Eye appeal

Cost effective

Aluminum Custom Gangways

MAADI™ group

Photo: Tom Hurst

Since 2005, MAADI Group has specialized in structural design and building using hardwearing aluminum that lasts decades.

Constantly innovating to maximize efficiency, our maritime gangways are maintenance-free and optimize aluminum's sustainable benefits to create products that contribute to a more eco-friendly environment.

Highest Standards

MAADI Group maritime aluminum gangways are designed by top-grade professional engineers specialized in pony truss bridge design and top chord stability criteria, utilizing elastic lateral restraints.

Design and materials

- 100% recyclable aluminum structural components and energy-efficient recycling.
- Resistant to corrosion from salt water, chemicals and pollution. A permanent film of natural oxide makes the metal less impacted by the environment.
- Suited to extreme cold, aluminum does not crack at low temperatures.
- Marine grade extruded aluminum alloy construction using 6061-T6, 6005A-T6 and 5083-H321.
- Integrates well with new constructions and retrofits of existing structures.

Maintenance

Virtually maintenance-free and highly cost-effective, compared with steel when total cost of ownership (TCO) is considered.

Vandalism

Very easy to remove graffiti by brushing or sanding bare aluminum, compared to steel that has protective coating.

Warranty

15-year limited warranty on aluminum against material failure, defects and corrosion.

Watch our video to learn more

Codes and standards

At MAADI Group, all of our design specifications meet local, regional and national building codes and professional standards as required. All of our technical designs and calculations for our aluminum structures bear the seal of one of our engineers.

Canada

- CSA S157-17 Strength Design in Aluminum
- CSA W59.2-18 Welded Aluminum Construction
- CSA W47.2-11 (R2020) Certification of Companies for Fusion Welding of Aluminum

U.S.

- AASHTO Specifications for Design of Pedestrian Bridges
- AA ADM (2020) Aluminum Design Manual
- AWS D1.2/D1.2M (2014) Structural Welding Code – Aluminum of the American Welding Society
- Aluminum Standards and Data (AS&D)
- Americans with Disabilities Act (ADA)
- Environmental Engineering for Small Boat Basins, U.S. Army Corps of Engineers
- Planning and Design Guidelines for Small Craft Harbors
- Marinas 2020 of the Coasts, Oceans, Ports, and Rivers Institute (COPRI) of the American Society of Civil Engineers (ASCE)
- Marinas and Small Craft Harbors
- Layout and Design Guidelines for Marina Berthing Facilities of the California Division of Boating and Waterways (DBW)

International

- SAA AS 3962:2020 Standards Australia International – Guidelines for Design of Marinas
- BS 6349-8:2017 British Standards Institution – Maritime Structures
- BS EN 1999-1-1:2007 + A2:2013 Eurocode 9: Design of aluminium structures - General structural rules

Certification

MAADI Group is certified in Division 1 for Fusion Welding of Aluminum per CSA Standard W47.2 of the Canadian Standards Association.

All our welders, welding operators and tack welders are governed by the Canadian Welding Bureau (CWB).

We carry general contractor licences from the Régie du bâtiment du Québec (RBQ).

We work closely with our manufacturing partners to ensure that product quality standards are fully and consistently maintained throughout the design, production and installation process.

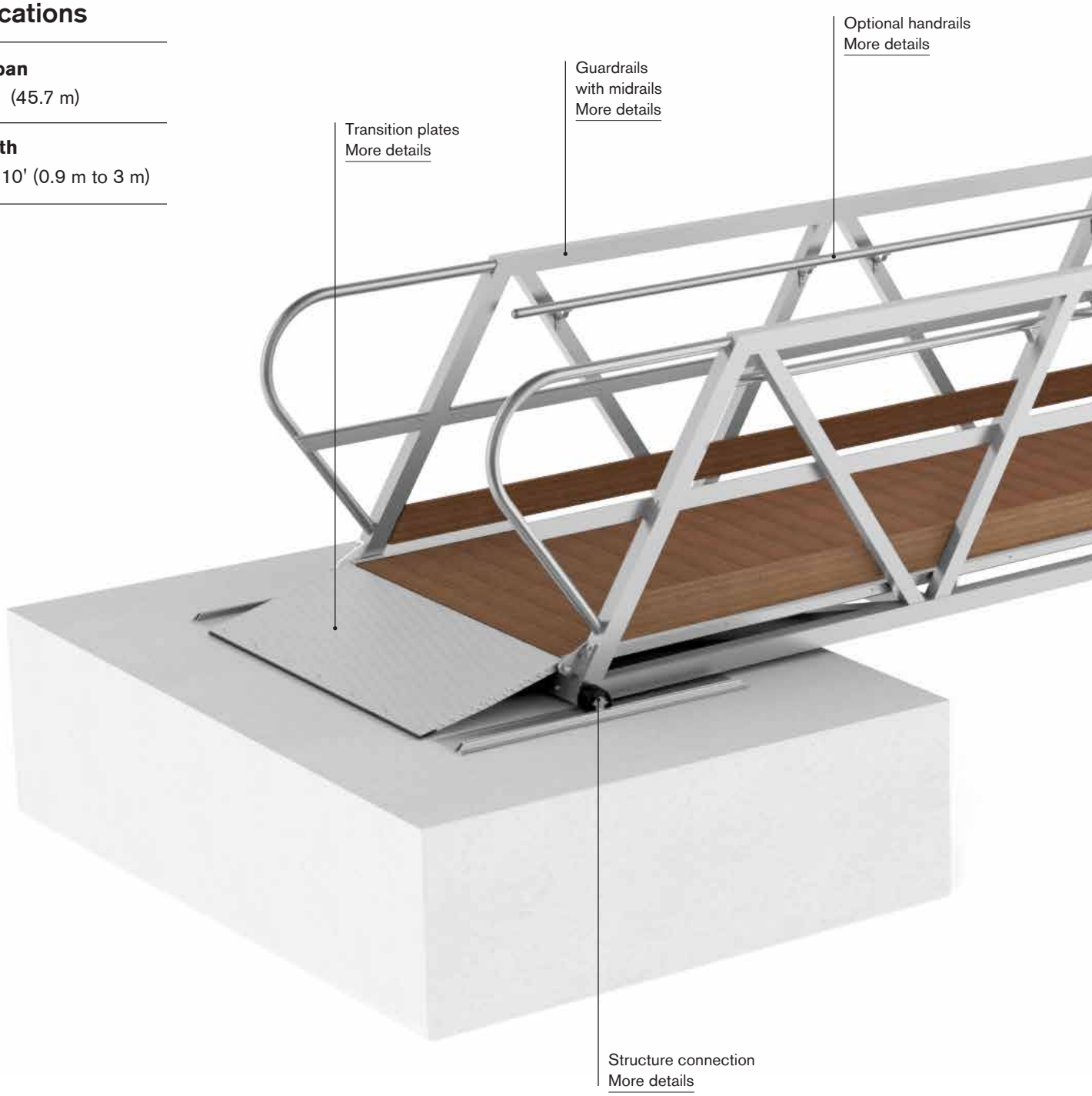
Tailored Designs

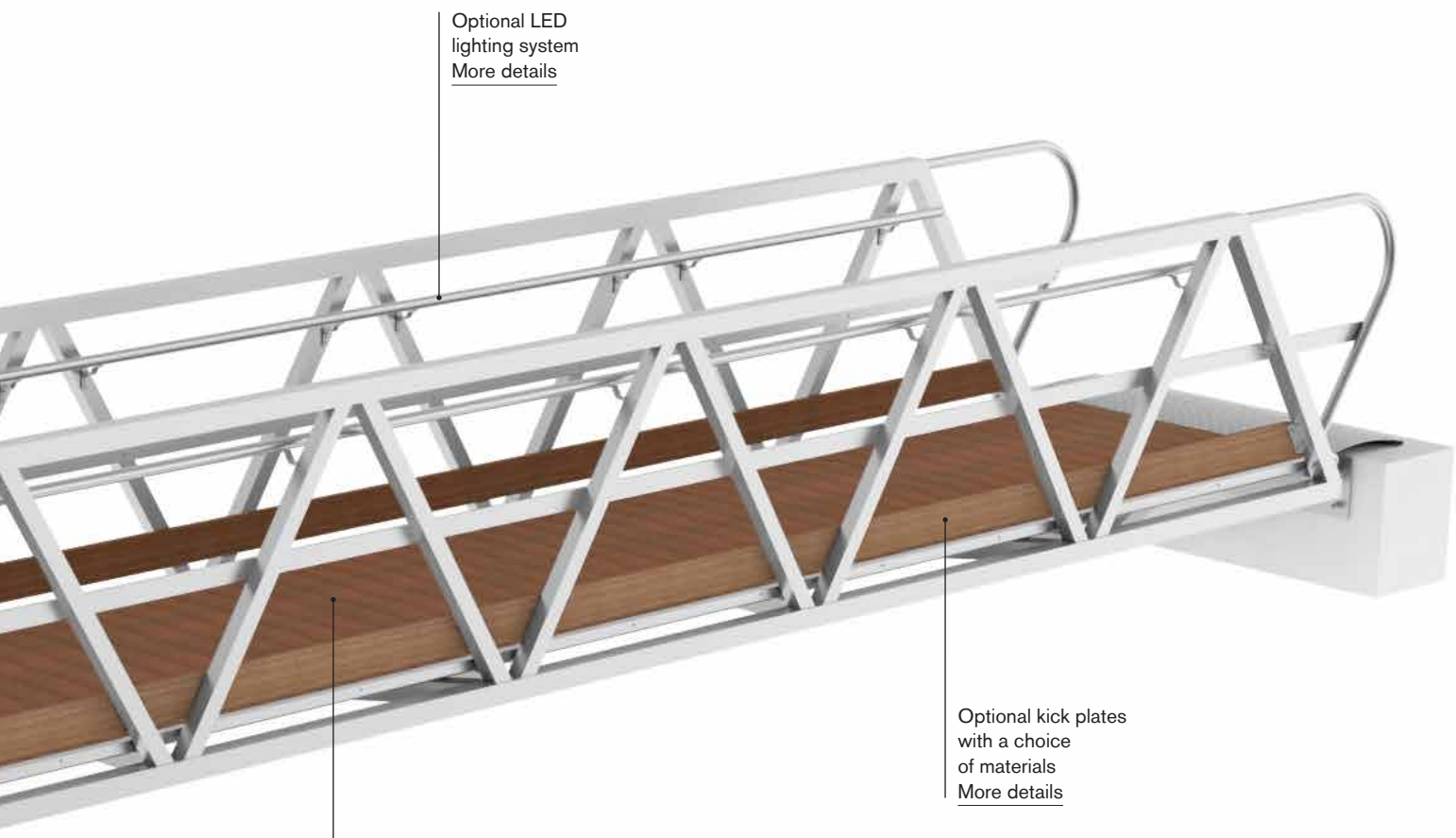
Customized to your specifications and needs.

Specifications

Overall span
Up to 150' (45.7 m)

Clear width
From 3' to 10' (0.9 m to 3 m)




Optional LED
lighting system
More details
Optional kick plates
with a choice
of materials
More details
Decking with a
choice of materials
More details

Guardrails

MAADI Group guardrail systems offer safe and practical solutions that are also attractive. Our guardrails comply with Canadian and American bridge codes and standards.

Specifications

Material

- Extruded aluminum alloy with natural finish

Dimensions

- Height: 42" (1,070 mm)
- 2" (50 mm) midrails installed at mid-height

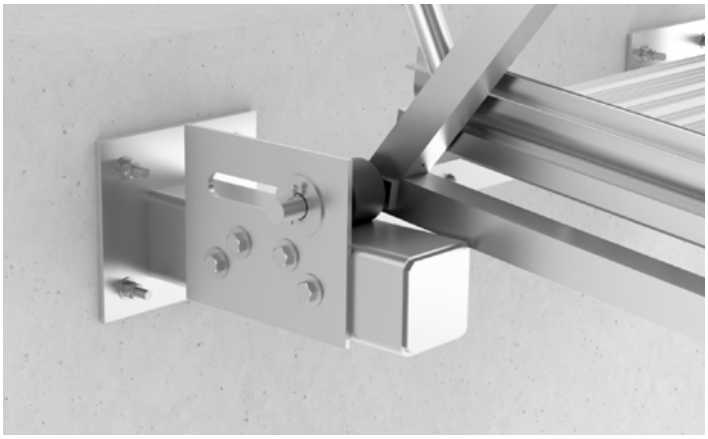
Custom design

Option

- Personalize your guardrails with your own design

Structure Connections

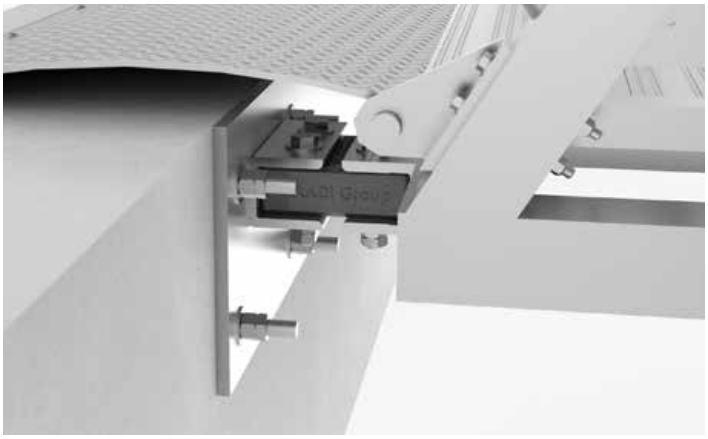
Each connection system is adapted to a particular application and is specified by MAADI Group engineers.



Roller and plate system

Specifications

- System allows lateral and vertical movement
- Usually required to link a chain-anchored floating dock to land



Flexible connector

Specifications

- Connector allows small vertical movement
- Usually required to link a pile-anchored floating dock to the land

Roller and rail system

Specifications

- Usually used in conjunction with roller and plate system or flexible connector on the land side
- Rails are made of aluminum
- Wheels are made of UHMW
- Easy to install

Transition Plates

With non-slip finishing, transition plates facilitate access to the gangway from adjacent surfaces.

Flat transition plate

Specifications

- Used with the roller and rail system.
- Aluminum plate with anti-slip diamond treads.
- Comes with frictionless edge to protect decking surface.

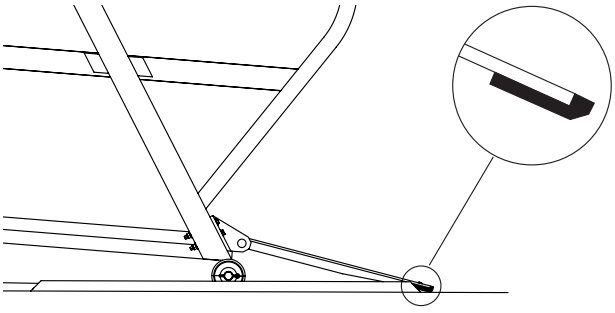
Options

Anti-slip strips

- Aluminum plate with anti-slip extruded strips is available upon request.

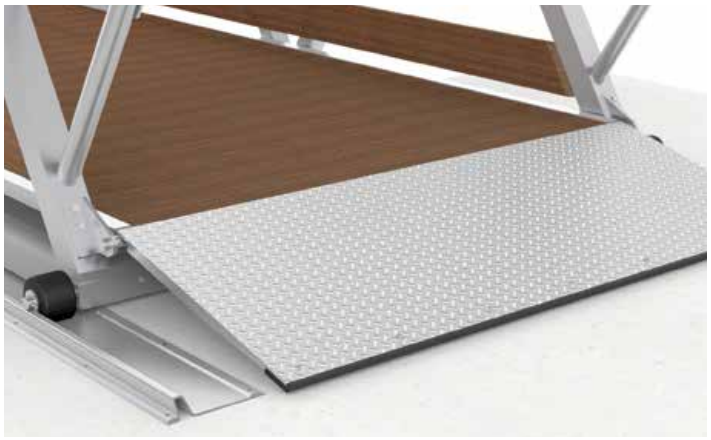
Anti-slip coating

- Aluminum plate with anti-slip durable polyester powder coating is available upon request.
- Compliant with AAMA 2604-10 & ASTM D3359.

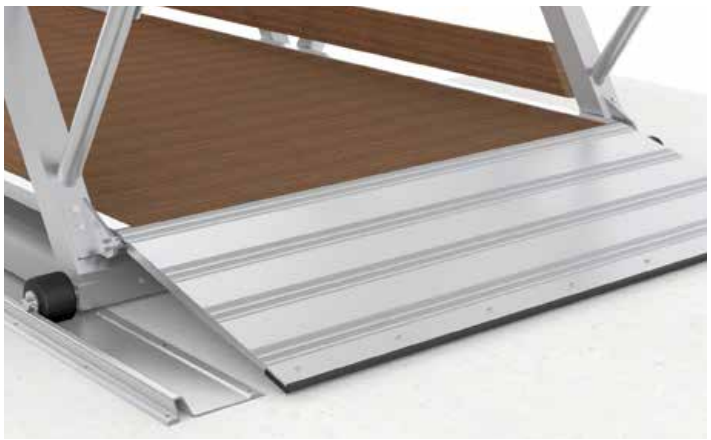


Roller and rail system

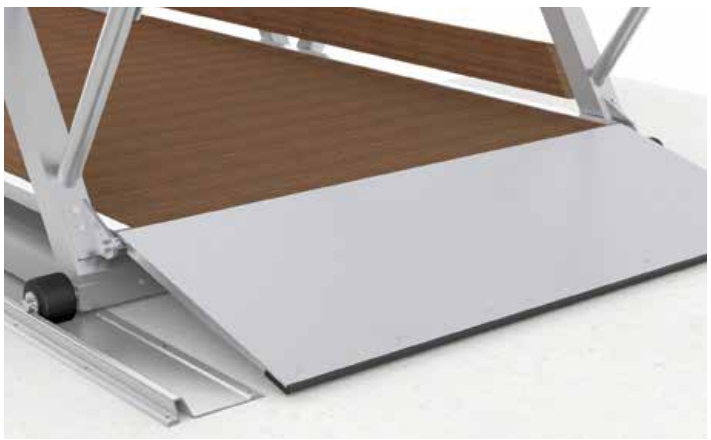
Diamond treads



Anti-slip strips



Anti-slip coating



Curved transition plate

Specifications

- Used with the roller and plate system.
- Aluminum plate with anti-slip diamond treads.
- Comes with frictionless edge to protect decking surface.

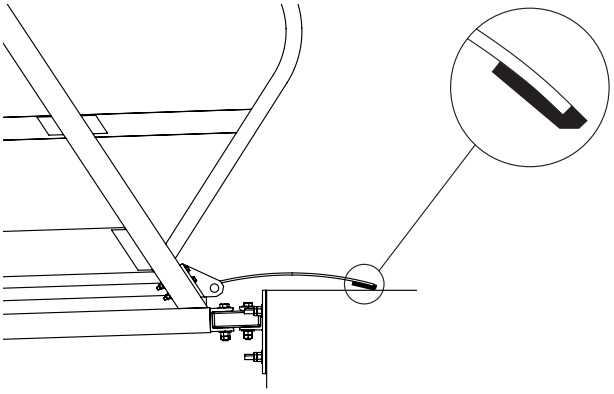
Options

Anti-slip strips

- Aluminum plate with anti-slip extruded strips is available upon request.

Anti-slip coating

- Aluminum plate with anti-slip durable powder coating is available upon request.
- Compliant with AAMA 2604-10 & ASTM D3359.



Roller and plate system

Diamond treads

Anti-slip strips

Anti-slip coating

Customization

Decking Materials

Choose the material best suited to the function of the structure. Let our engineers advise you on the best decking for your needs.

Ipe hardwood

Specifications

- Naturally very resistant to decay, rot and insect attack
- Minimum 40-year lifespan depending on use
- Low maintenance, no treating or sealing required for durability (treating may be required to keep the original color)
- Straight grain with fine to medium texture
- Economical over life of the structure
- Average density of 69 lb/ft^3 (1,100 kg/m^3)
- Fastened with stainless steel screws

Dimensions

- S4S outside corner
- Width varies between 5" and 7 3/8" (127 mm and 188 mm)
- Thickness varies between 1" and 1 1/2" (25 mm et 40 mm) depending on loads and applications

Option

- Other hardwood options such as ribbed cumaru are available upon request

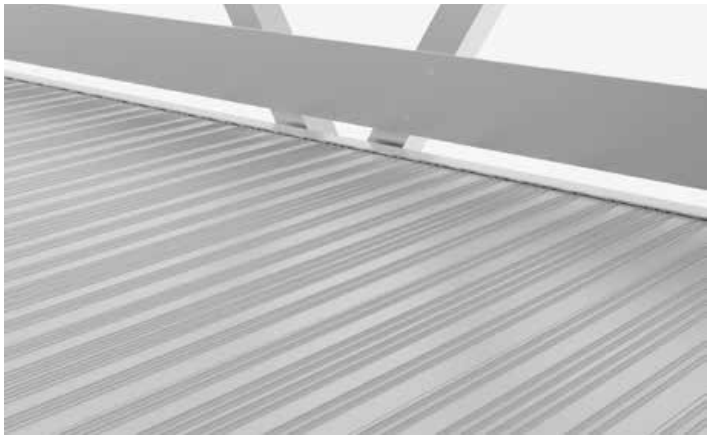
Composite

Specifications
- Designed to resist rot, warping and fading
- Minimum 25-year lifespan depending on use
- Anti-slip ribbed surface
- Low maintenance – no treatments or sealers required
- Economical over life of the structure
- Density of 75 lb/ft^3 (1,195 kg/m^3)
- Fastened with stainless steel screws

Materials
- A blend of wood flour and high-density polyethylene

Dimensions
- S4S outside corner
- 7/8" x 5 1/2" (22 mm x 140 mm)

Color
- Sand



Ribbed aluminum

Specifications
- Unlimited lifespan with regular cleaning
- High grip ribbed tongue and groove planks
- Maintenance-free and corrosion-resistant – no treatments or sealers required
- 100% recyclable and reusable
- Economical over life of the structure
- Fastened with stainless steel screws

Materials
- Extruded aluminum alloy with natural finish – no paint or treatment required

Dimensions
- 7 3/8" x 1 1/4" (188 mm x 31 mm)
- Anti-slip ribs height: 1/16" (2.3 mm)

Options

Kick plates, handrails and LED lighting system are offered to further customize your gangway to best suit the application and the surrounding environment.

Integrated kick plates

Design

- Helps prevent objects from falling and provide a higher level of security

Material

- Extruded aluminum alloy with natural finish

Dimensions

- Height: 4" (102 mm)

Raised kick plates

Design

- Helps prevent objects from falling and provide a higher level of security
- Compliant with the Americans with Disabilities Act

Materials

- Ipe hardwood, wood composite or extruded aluminum alloy
- Other type of woods are availbale upon request

Dimensions

- **Wood or wood composite**
  Heights: 3 1/2" (89 mm), 5 1/2" (140 mm) or 7 1/4" (184 mm)
- **Aluminum**
  Heights: 4" (102 mm), 6" (152 mm) or 8" (203 mm)

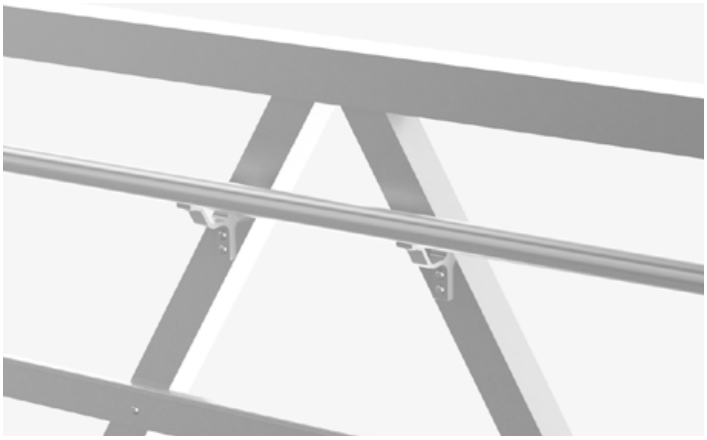


Photo: Tom Hurst

Handrails

Material

- Extruded aluminum alloy with natural finish

Dimensions

- Diameter: 1 1/4" to 2" (32 mm to 50 mm)
- 2" (50 mm) hand clearance
- Standard height: 36" (915 mm)
- ADA height: 24" (610 mm)

Option

- Double handrails (ADA) are available upon request

LED lighting system

Options

- White LED lighting system
- White or RGB programmable LED light projector system
- Handrail-integrated lighting system

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