# Gangway and Ramp Specifications 

## 1. Gangways and Ramps

1-A. AccuDock aluminum gangways and ramps are built with 6005-T5 marine grade aluminum to customer's desired length and width. All AccuDock gangways and ramps are built to withstand a 50 pounds per square foot live load rating. Typically, gangway and ramp construction will be as follows:

1-A1. Core Fabrication - Will be done with either 2 " x .125 " aluminum square ribbed tubing or 3 " x .125 " aluminum square ribbed tubing depending on the overall dimensions of the gangway or ramp. Gangway sides are built as a truss, where the center stanchions are typically $5^{\prime}$ center to center (or as close to $5^{\prime}$ as possible depending on the length of the gangway), and they are built into the structure of the design and take a pre-stressed arch shape for additional strength. Underneath support trusses are included as needed, where the stanchions are composed of the same aluminum square tube as the core structure and the stringer is either 2 " $\times 2$ " x. 25 "architectural angle or 3 " x 3 " $\times .375$ " architectural angle depending on the size of the gangway or ramp. Additional $45^{\circ}$ square tube gussets are built in on select gangway and ramp ends where extra structural stability is needed.

1-A2. Standard Decking - Will be 1" x 12" 6005-T5 aluminum ribbed and knurled non-skid aggressive surface, with decking supports at no more than 24 " on centers. On each end of the deck boards, the boards will be supported by a 1 " $\times 1$ " $\times .125$ " architectural angle which spans the distance of the gangway or ramp. All decking members will be welded to these pieces of angle, and thus will be welded to the structure of the gangway. No deck screws will be used to attach standard aluminum decking. On gangways, the distance from the standing surface of the decking to the top of the side truss will be no less than 42 ".

1-A3. Additional Decking - Several options are available to match desired decking on float surface. Additional decking options include, but are not limited to: Wolf PVC deck boards or Plastic Thru-flow style decking. The Wolf PVC deck boards will be supported on each end of the board with 2" 1 " $\times .125$ " architectural angle, where the 2 " side will be oriented underneath the deck boards. The boards will be screwed down through the angle to secure them to the gangway. Additionally, the Wolf PVC deck boards will be supported by stringers at no more than 16 " center to center.

1-B. AccuDock gangway and ramp attachment points will vary per customer's location as well as dock attachment desires/availability. Typical gangway and ramp attachments include, but are not limited to:

1-B1. Landside Hinge Attachment - A piano hinge design made up of various lengths of dock connector welded to the face of a piece of flat bar and with a $1-1 / 4$ " SCH 80 aluminum pipe hinge pin with a PVC Pipe bushing. Hinges to have no more than $1 / 8$ "gap between knuckles (dock connector) horizontally, and to have smooth transition as to not create a trip hazard. Landside of hinge material TBD based upon each specific requirement (Typically 6 " x .375 " flat bar or 8 " x .375 " flat bar). The gangway or ramp side of the hinge material is typically 3 " x .5 " flat bar or 4 " x .5 " flat bar depending on the size of the gangway or ramp.


1-B2. Landside Spike Attachment - Vertical hoops which are typically small lengths of dock connector that are welded to the side of the gangway or ramp and are to accept $1-1 / 2^{\prime \prime}$ pipe to be driven into the ground.

1-B3. Dockside Hinge Attachment - A piano hinge design made up of various lengths of dock connector welded to the face of a piece of flat bar and with a $1-1 / 4$ " SCH 80 aluminum pipe hinge pin with a PVC pipe bushing. Hinges to have no more than $1 / 8^{\prime \prime}$ gap between knuckles (dock connector) horizontally, and to have smooth transition as to not create a trip hazard. Dockside hinge material will typically be either 3 " x 3 " x .25 "structural angle or 9 " x .375 " flat bar depending on the specific type of AccuDock system that the gangway or ramp is being attached. The gangway or ramp side of the hinge material is typically 3 " $\times .5$ " flat bar or 4 " x .5 " flat bar depending on the size of the gangway or ramp.

1-B4. Dockside Roller Attachment - These roller assemblies are attached to the underside of the gangway or ramp and land on the floating dock to allow the dock to rise and fall with fluctuating water levels. The roller assembly is composed of two tabs that are composed of 2" x .375 " flat bar that are welded to the underside of the gangway or ramp. Also, there is a $5 / 8^{\prime \prime}$ stainless steel round rod that is used as the axel going through the roller and the flat bar tabs. The roller is a 12 " long by $2-3 / 8$ "diameter polyurethane round tube manufactured by Stoltz. The number of roller assemblies attached to the gangway or ramp depends on its width.

1-B5. Transition Plate - Transition assemblies are composed of two parts: a mounting plate and a transition plate. The mounting plate is welded to the end of the gangway or ramp and is composed of either 3 " x .5 " flat bar or 4 " x .5 " flat bar depending on the size of the gangway or ramp, and it has a 1 " x 1 " $\times .25$ " architectural angle that is welded to the face to create a lip for the transition plate to rest. The transition plate is composed of a sheet of $1 / 4^{\prime \prime}$ diamond plate (dimensions are custom to the customer's needs), with a piece of 1 " $\times 1$ " x .25 " architectural angle that is welded to the bottom of the diamond plate, therefore the angle can sit inside the angle of the mounting plate.

