



# Installation Manual

## JOMY Stairs

## **!! WARNING !!**

*It is important to read the entire notice before starting the installation of the staircase to have an overview of the operations to be performed.*

# 1. Principles of mounting

This guide is intended to help a professional in the installation of a JOMY staircase. All assembly and fixing work of the staircase must be done by a professional and, if necessary, validated by an official organism.

It is important to read the entire manual before starting the installation of the staircase in order to have an overview of the operations to be performed. This document describes in a general way the methods of assembly of our material. However the exact order of the various operations is to be judged by the installer. This will depend on the staircase ordered, the building on which the staircase is installed, the number of people working on the staircase and the equipment available for the installation work.

The drawing provided with the staircase indicates its exact configuration. Please refer to it exactly for both the position of the balconies and flights of stair and the position of the supporting elements.

The installation of this equipment must be carried out according to the safety standards in application in the country of the project. Depending on the site conditions, specific lifting equipment and personal protective equipment may be required for mounting.

The installer must verify that the supporting structure has the necessary capacity to support the staircase.

On site, please do not put the stairs in contact with cement or mortar as they attack the aluminum, even anodized.

If during assembly you have to cut or grind steel (such as a threaded rod), take care not to do it near the aluminum stairs. In time steel fragments, even if they come from stainless steel, that lay on the aluminum parts will rust and make orange/brown stains that can't be removed.

In general, the staircase is assembled starting with the first landing then its lower flight. The operation is repeated with the second landing and the second flight, etc. until top of the stairs.

## 2. The ordered material

The material is delivered in separate parcels for balconies and landings, stair flights, railings, supporting elements. This is to give you a clear view of the staircase and allow you to assemble quickly and easily on site. The hardware is packaged separately.

The following documents must also accompany the staircase:

- Overall drawing: take the three views of the stairs. Allows to visualize in a general way the position of the various elements of the staircase.
- Detail drawing: Detail the composition of each element (landing, volley, silt ...).
- Screw list: Details exactly the hardware supplied with the staircase
- Packing List: Used by the carrier, lists the different packages that you must receive.

It is imperative to be in possession of these documents before starting the installation work.

On the different drawings, the flights, balconies, stringers and support structures are numbered to allow you to determine the position and role of each component. These numbers are found on the components themselves. It is essential to follow the numbering on the drawings.



### 3. Required Tools for installation

All assembly and fixing work of the staircase must be done by a professional and, if necessary, validated by an official organism.

The installation of this equipment must be carried out according to the safety standards in application in the country of the project. Depending on the site conditions, specific lifting equipment and personal protective equipment may be required for mounting.

The persons carrying out the installation must at least be equipped with the following equipment:

- Battery-powered screwdriver
- Drill with percussion drill
- Miter saw
- Jigsaw
- Rivet pliers STAINLESS STEEL diam. 4,9 or electric riveter / pneumatic
- Drills for drilling in aluminum from: 4 - 5 - 6.5 - 8.5 - 11 mm
- Step drill
- Chamfering drill bit for 8 - 10 mm holes
- Concrete drill bits for anchors in the wall / foundation: 10 - 16 - 20 mm
- Type of anchorage to be defined by the person responsible for the installation
- Wrenches size 10 - 13 - 17 - 19 (mm)
- Ratchet wrenches sizes from 10 - 13 - 17 - 19 (mm)
- Hammer (+/- 500gr).
- Flat screwdriver
- Mill file
- Metal saw
- F-Clamps
- Small lashing straps
- Pin for guiding in holes of diam.8mm.
- Drive punch for rivet nail for removing a blind rivet stem Ø 3mm.

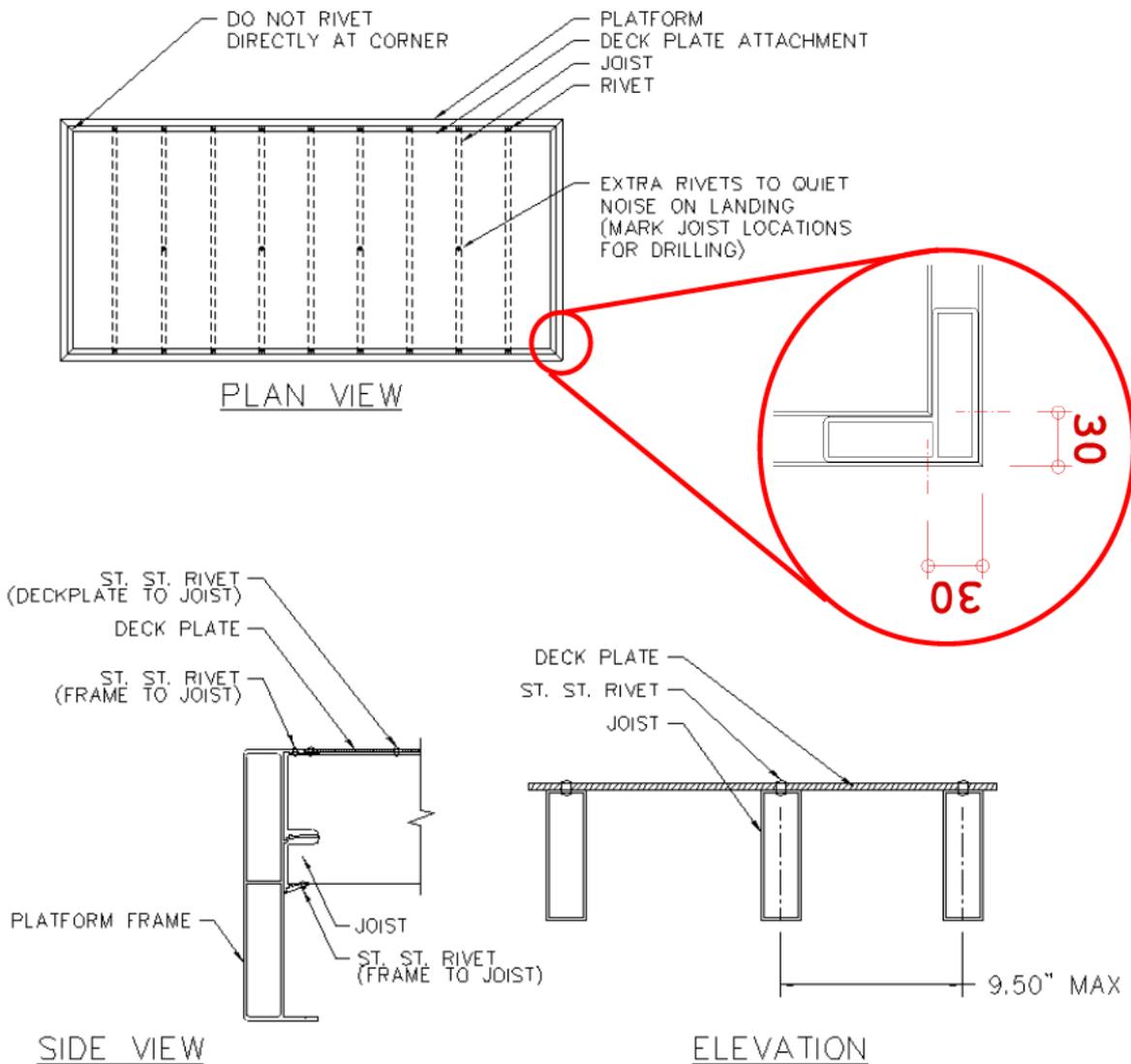
Depending on the type of stairs, additional hardware may be needed.  
Do not hesitate to contact us for any additional information on this subject.

# 4. Main elements

The balconies are formed by an outer frame in tubular profile of 208 x 30 x 2 mm, double chamber, as shown in the drawings below.

In this frame are embedded rectangular cross members. These joists support the decking, consisting of anti-skid plates.

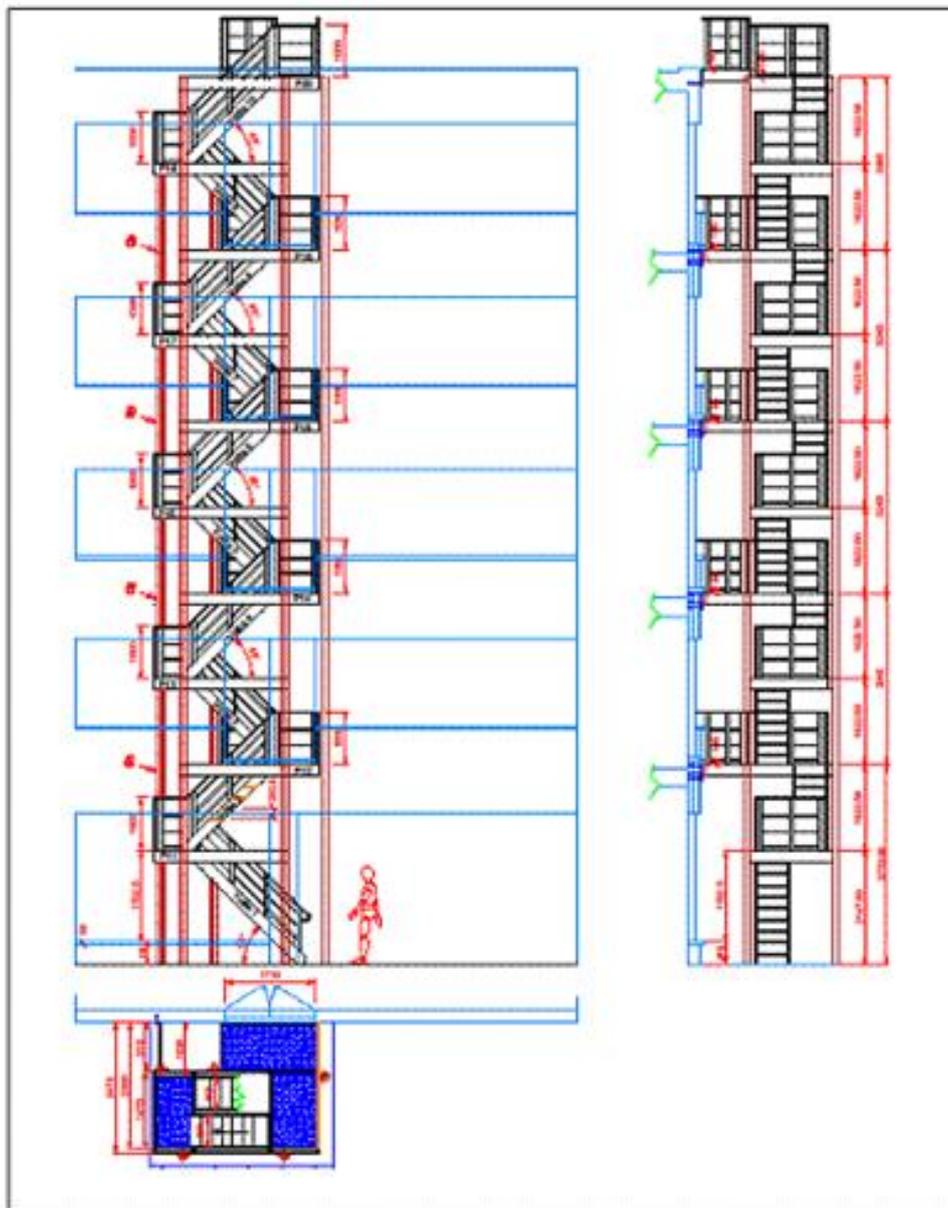
The stair can be supported in two ways. It can be either freestanding on columns, or fixed to the facade using wall brackets. Combinations of these two supports can be envisaged.



## 5. Identification of the different elements regarding to the numbering on plan

The packing list and the screw list detail the items you received. It is important to list all the pieces received and to compare them with the details drawings.

Each balcony, flight and support is numbered on the plan and on the element to allow you an easy understanding of the plan.



*The dimensions and indications shown in the above drawings are only by way of example.  
For dimensions and exact indications please refer to the detail drawing sent with the staircase.*

# 6. Preparation

## **6.1. Height control :**

The first step is to check the heights of the different levels of the building to which the staircase will be fixed. These must correspond with those indicated on the plan.

If not, please contact our office to determine the most suitable solution. Indeed, if the lower ground level is slightly different but the distance between the different floors remains the same it is possible to adapt on site the length of the columns / support elements. To do this, we recommend that you contact our office to be sure of the procedure to follow.

**5.2 Pre-assembly:** Exclusively if the mounting of the staircase is carried out using a crane.

The pre-assembly consists in performing several ground tasks in order to save time when the crane will be present on the site. Nearly finished mounted elements are installed with the crane. The tasks that can be performed in case of pre-assembly are:

- Assembly of the balcony arms and, if necessary, constitution of the balconies
- Fixing railings on balconies
  - **WARNING:** the guardrails must be fixed only when the flight is already attached to the complete staircase. It should not be done during pre-assembly.
- Installation and fixing of the deck plates on balconies
- Drilling the water holes in the decking.
- Fixing treads on the flight

For explanations of these different steps please refer to the following points.

The use of a crane makes it possible to mount pre-assembled elements to the structure of the staircase.



## 7. Thermal expansion

Changes in temperature can change the staircase dimensions as well as those of the building. This can create stresses in the structure and / or damage elements or sometimes even the entire staircase.

The bigger a staircase is, the greater is the risk of stresses due to thermal expansion.

As a practical value for staircases in a 15F to 95F degree temperature range, a 1mm/m elongation is often taken into account, although this is not an absolute value and should be verified by a proper calculation taking into account all possible parameters.

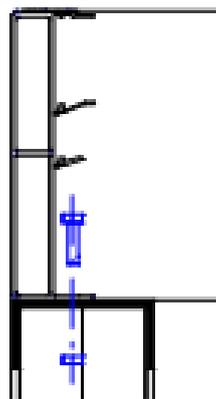
JOMY stairs are designed so that they can expand freely and avoid this problem.

To do this, oblong holes are often used for parts that make the connection between the wall and the staircase elements. It is important to check their correct use during assembly.

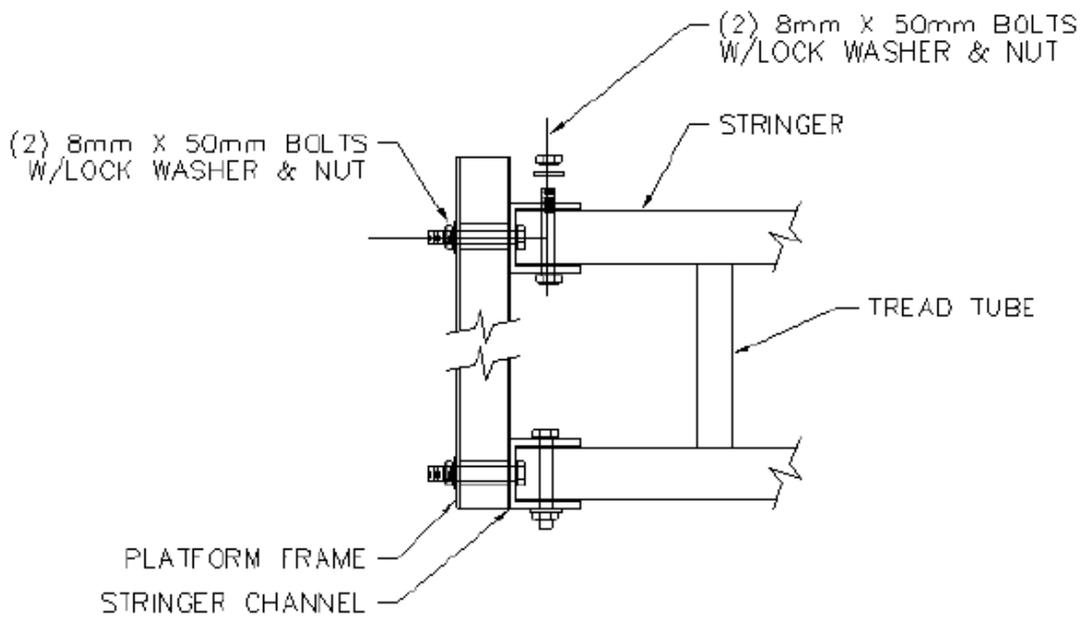
However some specific drilling must sometimes be done on site to ensure the free expansion of the structural elements. If necessary, the actions to be taken are described in comments in the list of hardware.

## 8. Connecting the balcony to its support

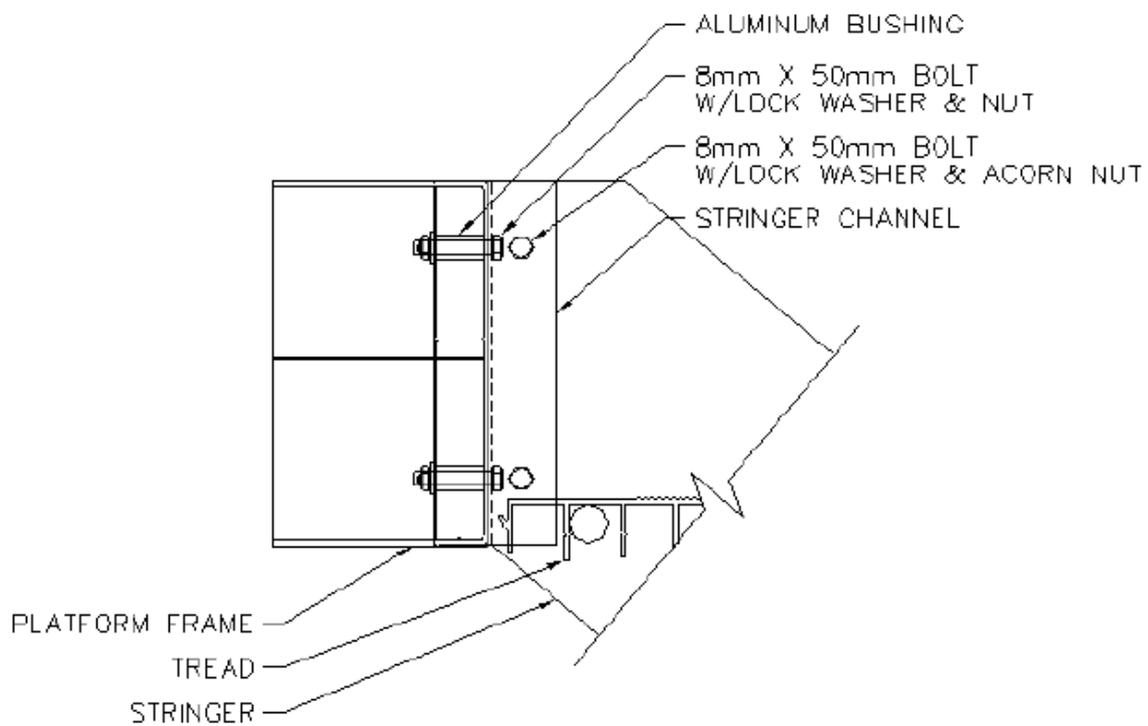
The connections between the balconies and the support structures vary from one staircase to another. The exact details of your connections is described on the plans that you received with the staircase. However, the following configuration is regularly used :



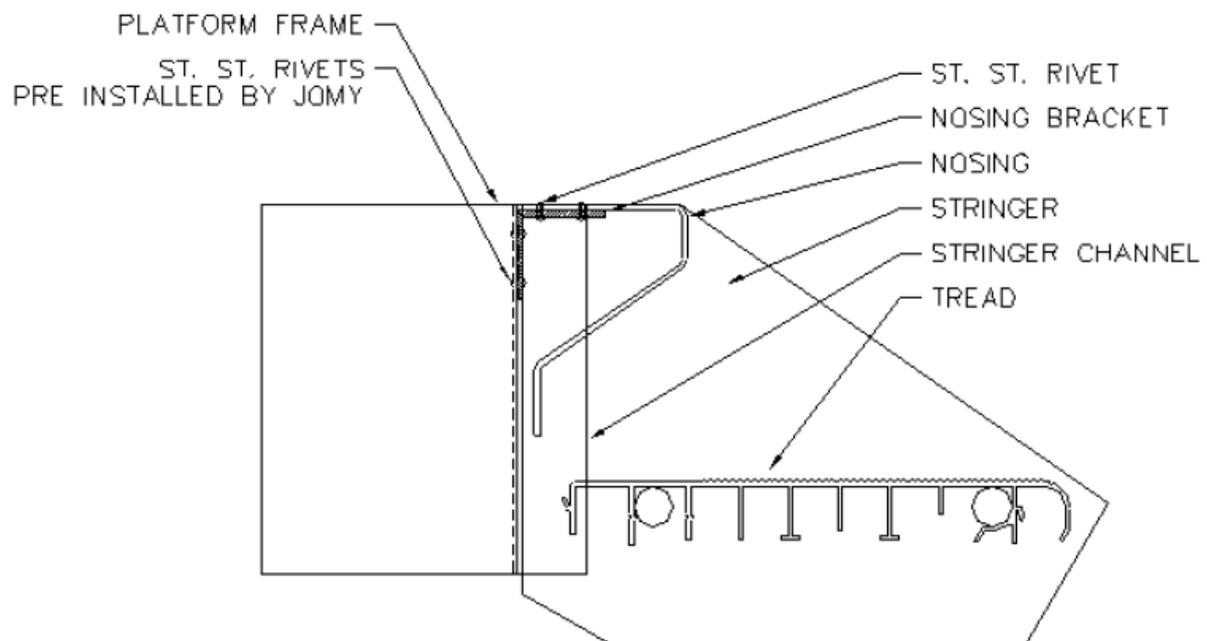
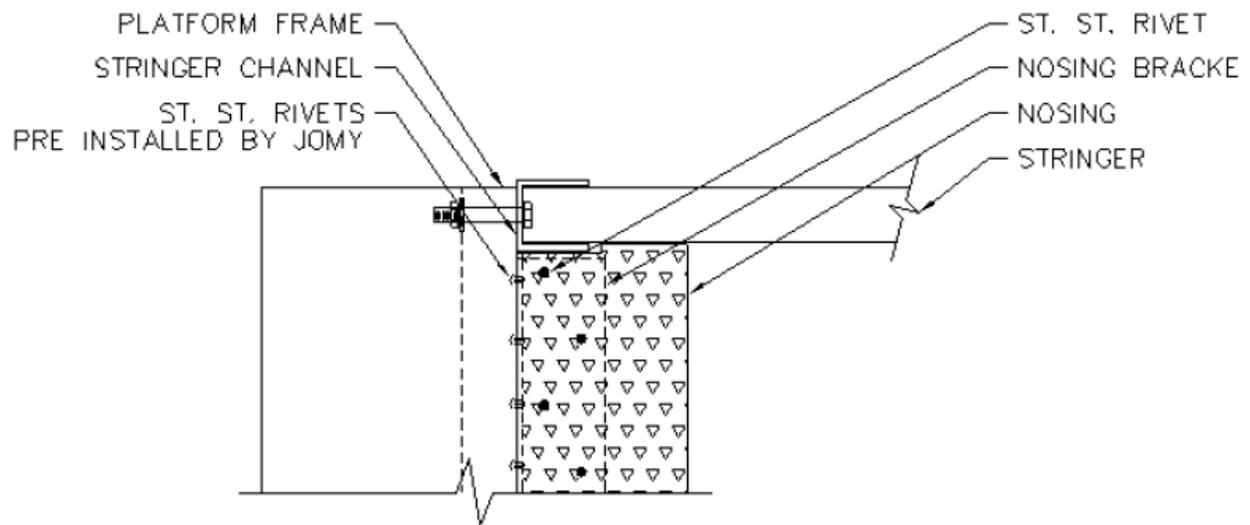
# 9. Fixation of the flight



PLAN VIEW



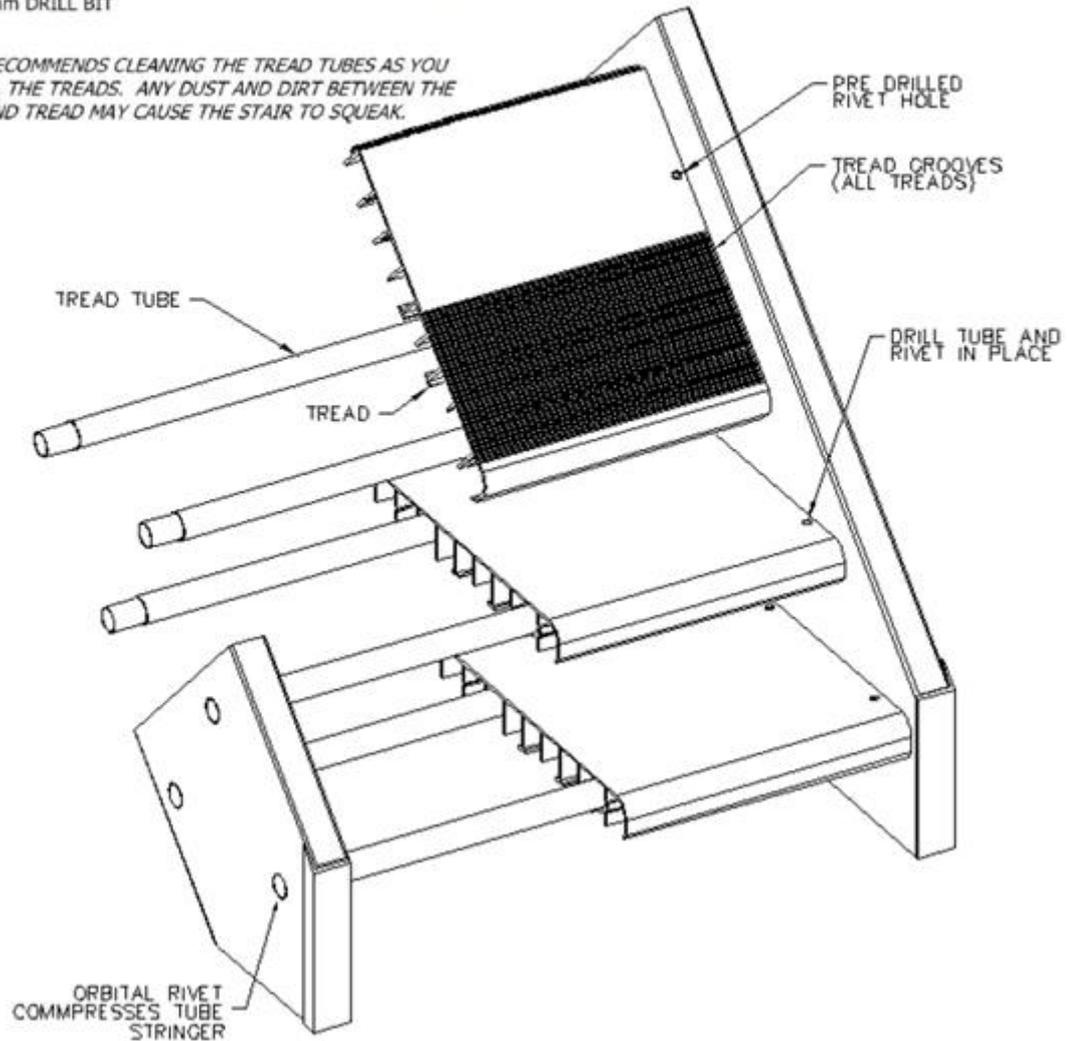
SIDE VIEW



## 10. Fixation of the treads

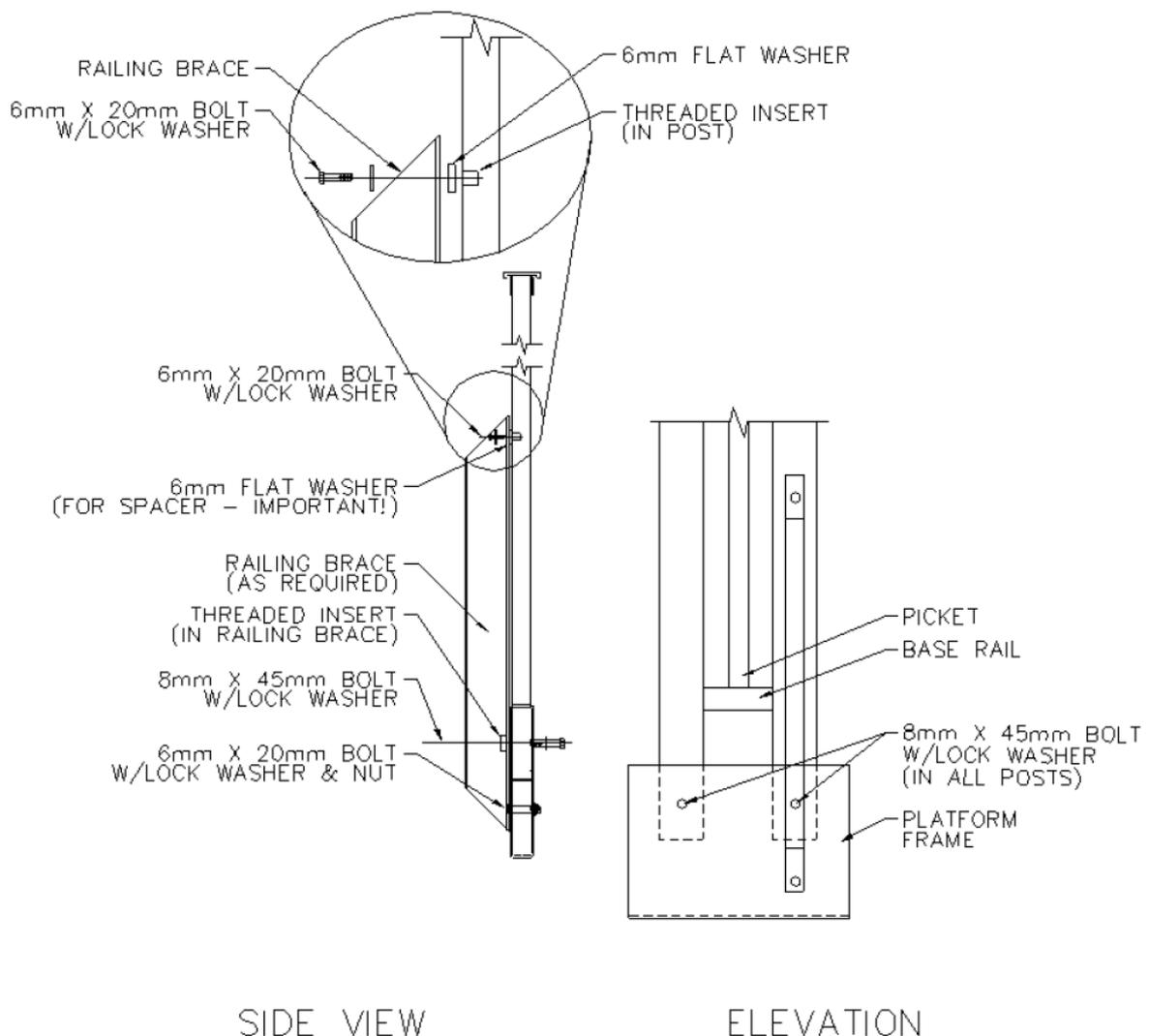
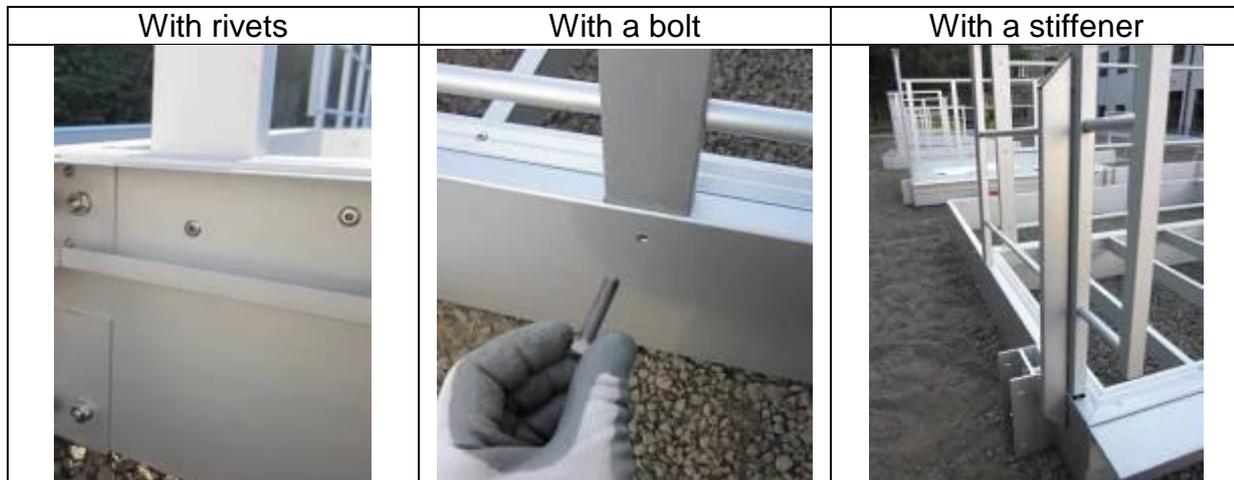
STARTING WITH THE BOTTOM TREAD, PLACE THE TREAD AROUND THE FRONT TREAD TUBE AS SHOWN. TIP THE TREAD BACK UNTIL IT SNAPS INTO THE BACK TREAD TUBE. JOMY PRE DRILLS THE TREADS FOR A POP RIVET, HOWEVER THE TREAD TUBES MUST BE PRE DRILLED W/ A 5mm DRILL BIT

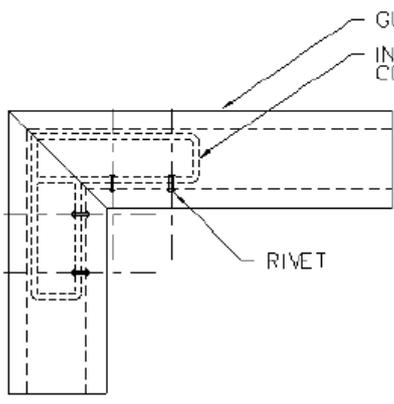
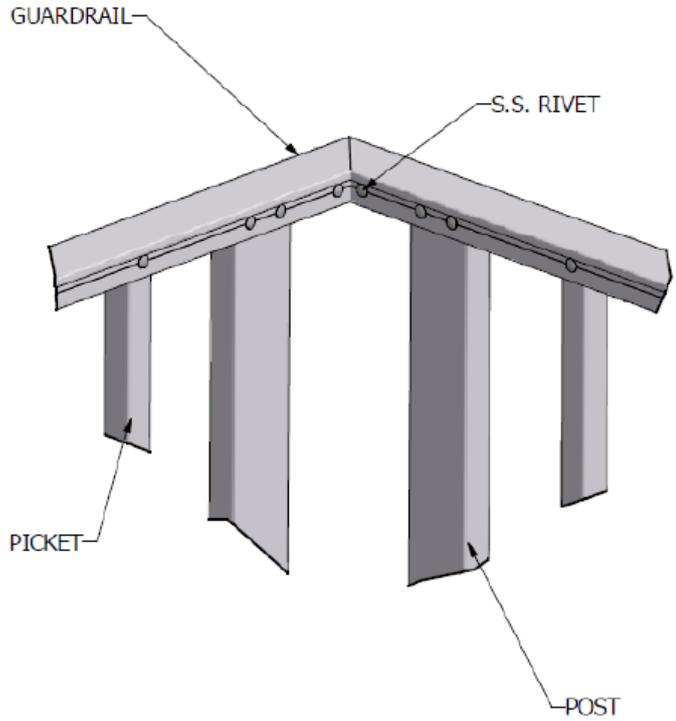
*JOMY RECOMMENDS CLEANING THE TREAD TUBES AS YOU INSTALL THE TREADS. ANY DUST AND DIRT BETWEEN THE TUBE AND TREAD MAY CAUSE THE STAIR TO SQUEAK.*



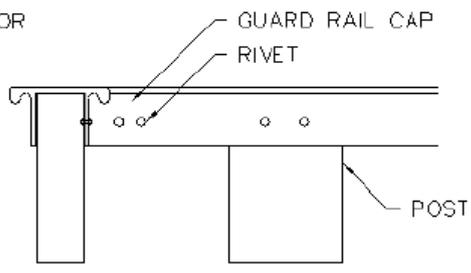
# 11. Fixation of the guard-rails

Depending on the configurations of your staircase, different types of guardrail fixation may occur.





PLAN VIEW



SIDE VIEW



## 12. Set up and fixation of the deck plates on the balconies

You must first place the plate on the balcony with the anti-skid face up. The plate is fixed with blind rivets. These are fixed through the outer plate supporting blade of the frame profile and through a joist of the balcony. The number of rivets to use per balcony is described in the hardware list.

The drill center must be exactly 5mm from the edge of the frame for an optimal connection.



## 13. Water holes on the decking

If the staircase is installed outdoors or in a wet environment, it is necessary to drill water evacuation holes in the deck plate.

The holes are made by drilling with a 11mm drill bit through the deck plate only..

We recommend, for aesthetic reasons, drilling at the intersections of the different patterns of the plate. After drilling, it is advisable to use a chamfering drill to chamfer the holes.

In general, a water hole can be made between each joist.