## Basic Construction Information

When you create a design with the PipeJointSystem, there are multiple important factors to take into account.
On this page you will find the basic information.
Please note that these values are an indication.

## Sizes

When cutting a pipe, you need to consider the sizes of the joints that you are planning to use. The sizes that matter are the same for all [standard) joints.

The picture on the right shows that 30 milimeters of a pipe will dissapear inside the joint. 35 mm from the end of the pipe, is the centerpoint of a possible rectangular pipe.

For instance, if you need a total size of 1000 mm ,
 the lenght of the pipe should be 896 mm . The design is dimensioned based on the centre of the pipe.

## Length and strength

If you want to bridge a horizontal length, you need to take into account the maximum force for the pipe.
The picture gives you an indication of the maximum force for different lenghts for a standard pipe of 1 mm coated steel pipe.


Lenght x approx. Max strenght approx

| 450 mm | 140 KG |
| :--- | :--- |
| 900 mm | 70 KG |
| 1000 mm | 58 KG |
| 1100 mm | 52 KG |
| 1300 mm | 46 KG |
| 1500 mm | 38 KG |
| 1800 mm | 32 KG |

## Strengthening

To increase the maximum amount of force you can use multiple tricks in your design. The many different joints can always offer a solution. The drawing below shows two options and the change they bring in the maximum force the design can handle.


