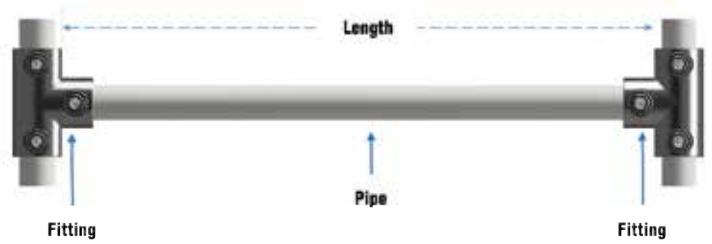
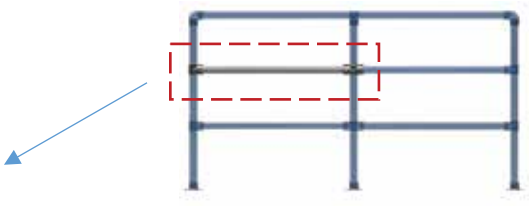
Technical Information

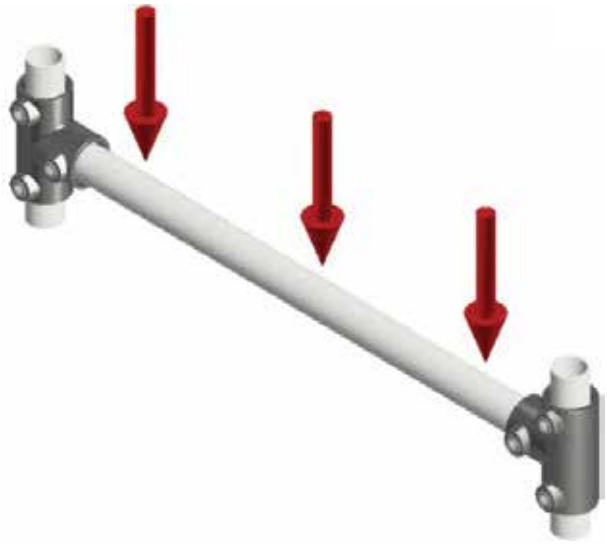
Weight Capacity

To estimate the weight that your project can support, It is necessary to analyze the structure in individual sections. An idividual section of a structure consists of a pipe and two supports or fittings joined at the ends which are able to support a load or weight.





Per the length of the analyzed section, we can determine the maximum recommended weight in the following table:



MAXIMUM RECOMMENED WEIGHT			
Length (ft)	3/8" Pipe	3/4" Pipe	1-1/4" Pipe
1	1280 lb	1400 lb	2120 lb
2	310 lb	700 lb	1800 lb
3	160 lb	450 lb	1150 lb
4	130 lb	300 lb	800 lb
5	120 lb	220 lb	680 lb
6	110 lb	180 lb	580 lb
7	90 lb	160 lb	460 lb
8	70 lb	130 lb	400 lb
9	50 lb	120 lb	350 lb
10	40 lb	100 lb	280 lb

*The suggested loads in the table correspond only to SteelTek™ pipes and fittings when assembled correctly. The use of other products or accessories of different materials such as wood, glass, plastic, etc. is necessary to confirm the material resistance with the supplier.

Technical Information

Set Screw Resistance

In more complex design structures where the same fitting supports 2 or more pipes, it is necessary to

Fitting supported by one screw

Fitting Size	# Screws Which Support the Weight	Resistance
3/8"	1	1700 lb
3/4"	1	2000 lb
1-1/4"	1	1700 lb

Fitting supported by two screw

Fitting Size	# Screws Which Support the Weight	Resistance
3/8"	2	2800 lb
3/4"	2	3500 lb
1-1/4"	2	3500 lb

To determine if the fitting resistance is adequate to the needed support weight, one must obtain the resistance total that supports the adequate weight by adding up all the weights used in each of the fitting ends.

Example:

Fitting Size: 3/4"

Number os screws that support weight: 1

Resistance: < 2000

L = Load (weight) applied

L Total = L1 + L2 + L3 + L4

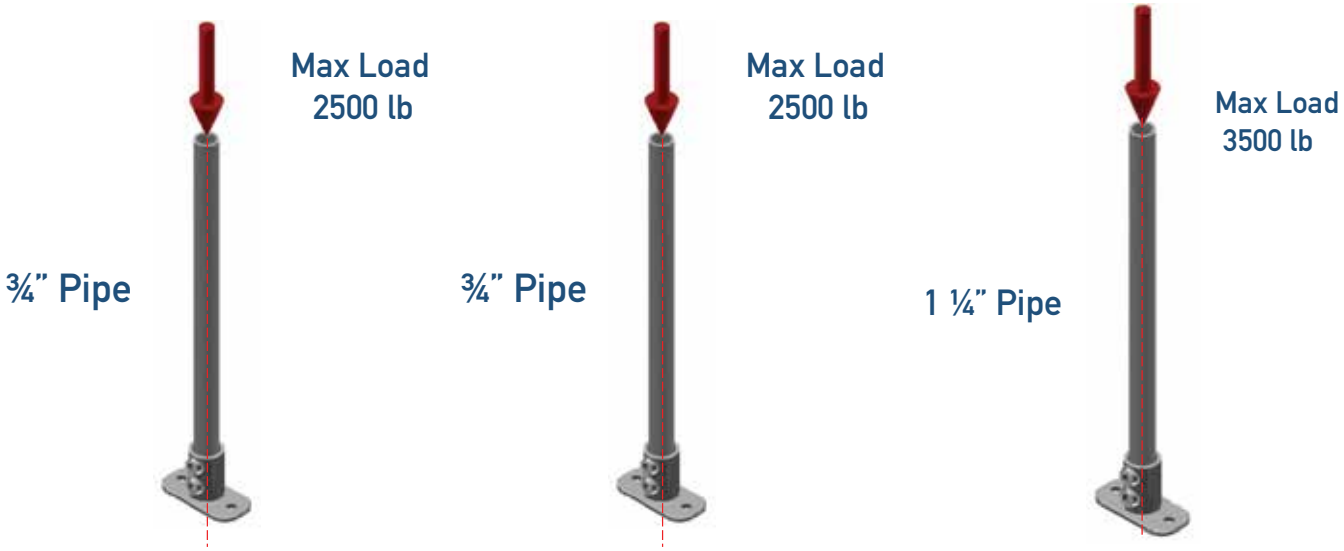
Therefore, "L Total" must be higher than the resistance of the fitting used

Technical Information

Pipe resistance to axial load

The maximum load that a pipe is able to resist when it is placed vertically will depend on the characteristics of the material and design.

In case of SteelTek™ pipes, we recommend you not exceed the following maximum weight.



WARNING

The pipe can support the load mentioned when an axial load (load through longitude axis) is applied as shown in the picture. If you apply this weight with any angle different to 90°, the pipe will fail.

To have more security do not use these loads for pipe longer than 3ft.

To ensure proper assembly between pipe and fittings, it is recommended a tightening torque of 30 lb/ft.

Technical Information

Recomendations

The number of projects that we can manufacture with SteelTek™ products are unlimited but there are some important points that one should consider:

Every project needs a strong base; use the more convenient SteelTek™ flange for a maximum support for your projects.

When you wish to apply a big load in the structure, the equilibrium takes a great importance for the project design, so it is recommended to make structures as firm as possible.