



Technical Notes

PipePillo® Support Working Loads

PipeSak® Pipeline Protection

PipePillo® Supports

Working Loads

PipePillo® pipeline supports can be used for in-trench and out-of-trench applications but have differing working loads for each situation which must be considered during design. A PipePillo® support performs at maximum strength when supporting pipe diameters matching its largest cradle diameter and has reduced strength when supporting pipes with smaller diameters. Additionally, PipePillo® supports have lower capacities when supports are stacked versus when used in a single height configuration.

For both in-trench and out-of-trench applications a factor of safety (FOS) is added to ensure safety and function while parts are in use. For in-trench applications, PipeSak® Inc. recommends a FOS of 5 be applied to the ultimate load of the PipePillo® support (stacked configuration not generally recommended for typical in-trench applications). For use out-of-trench, a factor of 8 is recommended with a single or stacked configuration due to increased environmental exposure and human activity. The table below shows the **working capacity** for in-trench and out-of-trench applications. Both situations should consider the weight of the pipe and hydrostatic test water if applicable.

Pipe Diameter	PipePillo® Mode	Working Loads (lbs)		
		In-Trench Single (5x FOS) ¹	Out-of-Trench Single (8x FOS)	Out-of-Trench Stacked (8x FOS)
in (mm)		lb. (kg)	lb. (kg)	lb. (kg)
4.5 (114.30)	SPP8	700 (318)	425 (193)	NA
6.625 (168.28)	SPP8	1350 (612)	850 (386)	NA
8.625 (219.08)	SPP8	1700 (771)	1050 (476)	NA
10.75 (273.05)	SPP16	2600 (1179)	1625 (737)	925 (420)
12.75 (323.85)	SPP16	3200 (1451)	2000 (907)	1125 (510)
16 (406.40)	SPP16	4000 (1814)	2500 (1134)	1500 (680)
20 (508.00)	SPP24	5300 (2404)	3300 (1500)	2050 (930)
24 (609.60)	SPP24	6600 (2994)	4125 (1871)	2500 (1134)
30 (762.00)	SPP36	10400 (4717)	6500 (2948)	3625 (1644)
36 (914.40)	SPP36	13000 (5897)	8125 (3685)	4375 (1984)
42 (1066.80)	SPP48	13600 (6169)	8500 (3856)	6000 (2722)
48 (1219.20)	SPP48	17000 (7711)	10625 (4819)	6875(18)

Note:

- Should overburden soil loading be known, PipePillo® support FOS can be reduced from 5X to 2X

Contact Pipesak® engineers for project specific spacing recommendations or for further information on how to use PipePillo® supports

