Technical Notes



PipePillo® Structured Pipeline Support

PipeSak® Pipeline Protection

GENERAL

PipePillo® is a structured pipeline pillow (SPP) used to safely support fully loaded pipelines, in rocky trenches, for the life of the pipeline.

PipePillo® pipeline supports are light enough to be handled, yet dense enough to **resist flotation.**

PipePillos® are manufactured from high-strength polypropylene resins which are **environmentally inert** yet softer than most pipeline coatings. In addition, many PipePillo® pipeline support openings allow cathodic protection.

The design incorporates a patented dual frustoconical shape which **transfers extreme loads** effectively through to consolidated or virgin soil beneath. PipePillo® supports offer a **full 90**° **of support** and will not damage the pipe or its coating.

PipePillos® can also be used to support exposed pipelines during and following integrity digs to **reduce the requirement for compacted soil** beneath the pipeline.

See the PipePillo® dimensional data chart on page 2 for more details or call us for a project-specific design.



FOR USE IN-TRENCH

Most PipePillo® sizes have a rectangular center hole for a standard wood 2x4' to position them in place while keeping workers out of the trench. For deeper excavations, PipePillos® can be strapped to the bottom of the pipeline before installation.

For larger PipePillos®, a hydraulically controlled installation rod, PilloPicker®, can be used to quickly pick up and place PipePillos® - one at a time.

- Position each PipePillo® pipeline support along the trench line as per the provided spacing requirements.*
- 2. PipePillo® pipeline supports can be carefully tossed into the trench and straightened later with a standard 2'x4' ensuring the yellow stickers on each PipePillo® are aligned.
- 3. As the pipeline is lowered in, ensure it is centered over the PipePillo® pipeline supports.
- **4.** For inconsistent areas of trench (e.g. sags, over bends, sidebands, tie-ins, etc.) or areas where external loading is anticipated, closer spacing is recommended.
- **5.** For deep excavations (>6ft/2m), it is recommended proper compacted sand bedding be maintained along the trench bottom between individual PipePillos® to ensure sufficient load capacity is maintained.

In addition, loosely attach each PipePillo® with an attachment strap (suggest 3/8"-1/2" poly rope) through the two side holes to the bottom of the section of the pipe prior to pipe installation.

*Contact PipeSak for your required PipePillo® spacing.

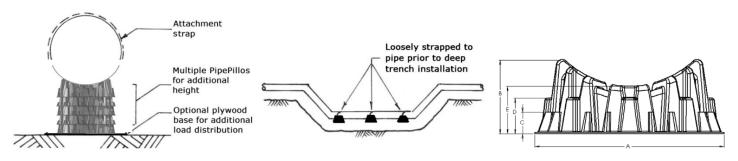
FOR USE OUT-OF-TRENCH

Although designed for stable, long-lasting support in rocky trenches, PipePillos® can be used individually or stacked for various heights outside of the trench during stringing and welding processes (note: stacked PipePillos® have reduced ultimate capacities, Ultimate Load Capacities in the dimension data chart).

- PipePillos® arrive stacked in a tight configuration as shown.
- 2. For stringing, space PipePillos® as you would wooden skids with approximately one tower of PipePillo® pipeline supports of the pipe. Contact PipeSak for spacing.

- 3. Each PipePillo® has two stacked levels +/- the shipping level, which adds 3" to the height, and the extended level, which adds 4.5"-6" to the height/PipePillo® pipeline support. To achieve the extended level, rotate the top PipePillo® approximately 22.5° off center.
- **4.** For areas where soil may be loose or wet, a bottom plate of ¾" plywood may be utilized. For long-term pipe stability and safety following welding, it is recommended every other PipePillo® tower be tightly strapped to the pipeline. When the pipeline moves, its support moves with it.

PipePillo® pipeline supports can also be screwed directly to a base through the bottom flange attachment holes.



PIPEPILLO® DIMENSIONAL DATA

When stacking, ensure corresponding shoulders line up as shown below.

Suggested maximum 5 PipePillo® per stack. **Contact us for more information about stacking.**

PipePillo® Model			SPP8	SPP16	SPP24	SPP36	SPP48
Pipe Size (in)		Up to 4	Up to 8	Up to 16	Up to 24	Up to 36	Up to 48
Weight	lbs. (kg)	0.8 (0.4)	0.8 (0.4)	5.1 (2.3)	9.2 (4.2)	26.7 (12.1)	42.8 (19.4)
Diameter (A)	in (cm)	9 (22.8)	9 (22.8)	16 (40.6)	24 (60.9)	36 (91.4)	46 (116.9)
Overall Height(B)	in (cm)	3.3 (8.4)	3.3 (8.4)	8 (20.3)	9.4 (23.8)	14.0 (36.0)	15.5 (39.4)
Low Stacked Height (C)	in (cm)	1.5 (3.8)	1.5 (3.8)	2.75 (7)	2.75 (7)	3 (7.6)	3 (7.6)
High Stacked Height (D)	in (cm)	N/A	N/A	4.5 (11.4)	4.5 (11.5)	6 (15.2)	6 (15.2)
Pipe Support Height (E)	in (cm)	2.5 (6.4)	2 (5.1)	6 (15.2)	6 (15.2)	8 (20.3)	8 (20.3)
Ultimate Load Capacity	lbs. (kg)	3,500	8,500	20,000	33,000	65,000	85,000
(Single)		(1,588)	(3,856)	(9,070)	(14,970)	(29.480)	(38,550)
Ultimate Load Capacity	lbs. (kg)	2,450	5,600	12,000	20,000	35,000	55,000
(Stacked)		(1,111)	(2,540)	(5,443)	(9,072)	(15,876)	(24,948)