

Graf Carat Tank

The [Graf Carat tank](#) is the premier underground plastic rainwater collection cistern. The tank itself is now on its third iteration with the product being in production and refinement for the past 40 years. Graf's expertise in plastics engineering and manufacturing has resulted in a tank with superior lifespan, durability, rigidity, and ease of use. The Graf Carat tank is available in several sizes ranging from 700 – 1700 gallons. The 1700 gallon model is the most popular choice of the line and will be the focus of discussion for the remainder of this article. The Graf Carat tank utilizes a clam shell design and is shipped in two pieces that fit with in one another. This superior design allows 5 tanks to be placed on a single pallet resulting in significant shipping savings. The tank comes complete with a seal kit, dome, and shaft.



Upon arrival on site the Carat tank fits together with ease. A rubber gasket seal is placed around the entire circumference of the bottom half and coated with a small layer of lubricant. Next, centering pins are placed all the way along the perimeter to ensure perfect alignment between the two halves. At this point the top half is ready to be lowered onto the bottom half. Each half weighs approximately 220 pounds (1700 gallon version) and can easily be lifted with 3-4 people manually or with 2 people when using a mini excavator to place the top half. The halves snap together with ease and are now ready for the final pieces to create a water tight seal. Clips are placed around the entire border of the tank and hammered in using a wood block to ensure a perfect seal. Now the dome and lifting lugs are installed and the tank is ready to be dropped into the hole using a mini excavator or bobcat. The entire assembly process takes only 20 – 30 minutes!

Aside from this ease of use the Carat tank offers superior durability and lifespan when compared to any other plastic tank. The Graf Carat tank is guaranteed under warranty for a full 15 years, 3 to 5 times the length of many competing plastic tanks. This guarantee is thanks to the superior design and construction of the Graf Carat tank. All Carat tanks are manufactured using injection molding which produces a superior product with fewer inconsistencies than traditional rotational molding. Thanks to the superior rigidity from the design and manufacturing of this tank it is stable in groundwater up to the midway point of the tank without needing any type of ballast. Additionally, the Carat tank is one of the few plastic tanks with a fully usable capacity. Most other tanks are required to be at least $\frac{1}{4}$ full of water at all times to guarantee that they will not collapse or pop out of the ground. The result is that a 1,600 gallon tank from a competitor only truly yields 1,200 gallons of capacity since there must always be at least 400 gallons of water in the tank. The Graf Carat tank can be left bone dry and is still guaranteed not to collapse or float. A 1,700 gallon Carat tank means that you have 1,700 gallons of storage capacity! Last, the superior construction of the Carat tank allows it to support up to 4,400 pounds of vehicle traffic when used in conjunction with the cast iron vehicle loading lid, making it the perfect solution to use under a residential driveway. In terms of plastic tanks, there truly is little comparison. The Graf Carat tank annihilates the competition.