

## A Tent seems pretty simple — structure, fabric, anchorage — yet it can be complicated!

- Building & fire codes to follow
- Permits to obtain
- Underground & overhead utilities to avoid – locating requires 48 business hour notice
- Location – in grass or dirt/sand/gravel, on asphalt or concrete? On a hill? Trees & shrubs?
- Weather conditions
- How to make sure tent stays up & in place? The goal is to secure a tent with enough holding power to withstand the forces of wind, both vertically & laterally (many factors affect wind — altitude, proximity to bodies of water, tent size, roof slope and more)

**STAKING** is the most common & SAFEST method for anchoring – single or gang staking. Setup & Takedown take less time; it requires fewer vehicles & less equipment (no dollies, forklift, dingo, etc) only a jackhammer; Staked Tents also look better because we can get vinyl smoother. Stakes should ALWAYS be pounded straight in (NOT at an angle). For a fee, stakes holes can be patched after takedown (we fill hole with pea-gravel to 1" from top, fill with a quality tar patch, & tamp down nicely). Arrange for asphalt hole patching PRIOR to takedown date.

**WEIGHTING** or BALLAST is sometimes used in locations where staking is impractical. There is some controversy surrounding weighting, because some companies (trying to do it cheap) often don't use enough weight to achieve adequate holding power. It seems logical that 7,200 lbs. of dead weight would anchor a tent just as well as eight stakes, except the holding power of dead weight is significantly reduced by both its level of friction and the attachment point of the guy line. Concrete weights are MUCH MORE effective than water barrels. A concrete block, the same size as a 55-gallon water barrel, produces more than 580 lbs. of holding power, & is considered a dead weight (water barrels are NOT considered dead weight). Water barrels in some states are no longer legal.

**DROP-IN CONCRETE ANCHOR** can be drilled into an area that has at least 6" deep concrete that's not 'old' or have any cracks. It won't work for most patios & sidewalks (because they aren't big or deep enough).



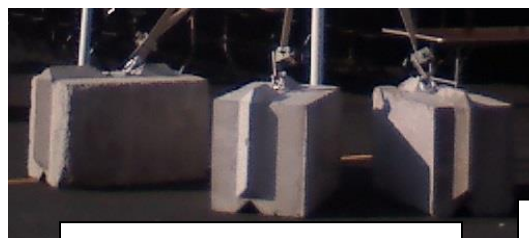
DOUBLE HEADED SINGLE STAKE



GANG STAKING – 3-BAR STAKE PLATE



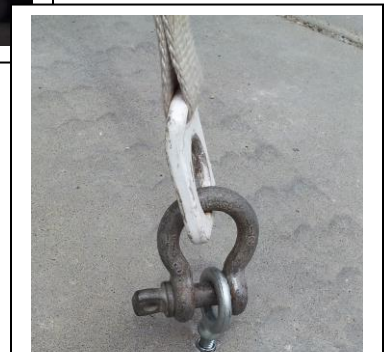
220 LB CONCRETE WEIGHT



1800 LB CONCRETE WEIGHTS



54 LB METAL WEIGHT FOR FRAME CANOPY



DROP-IN CONCRETE ANCHOR