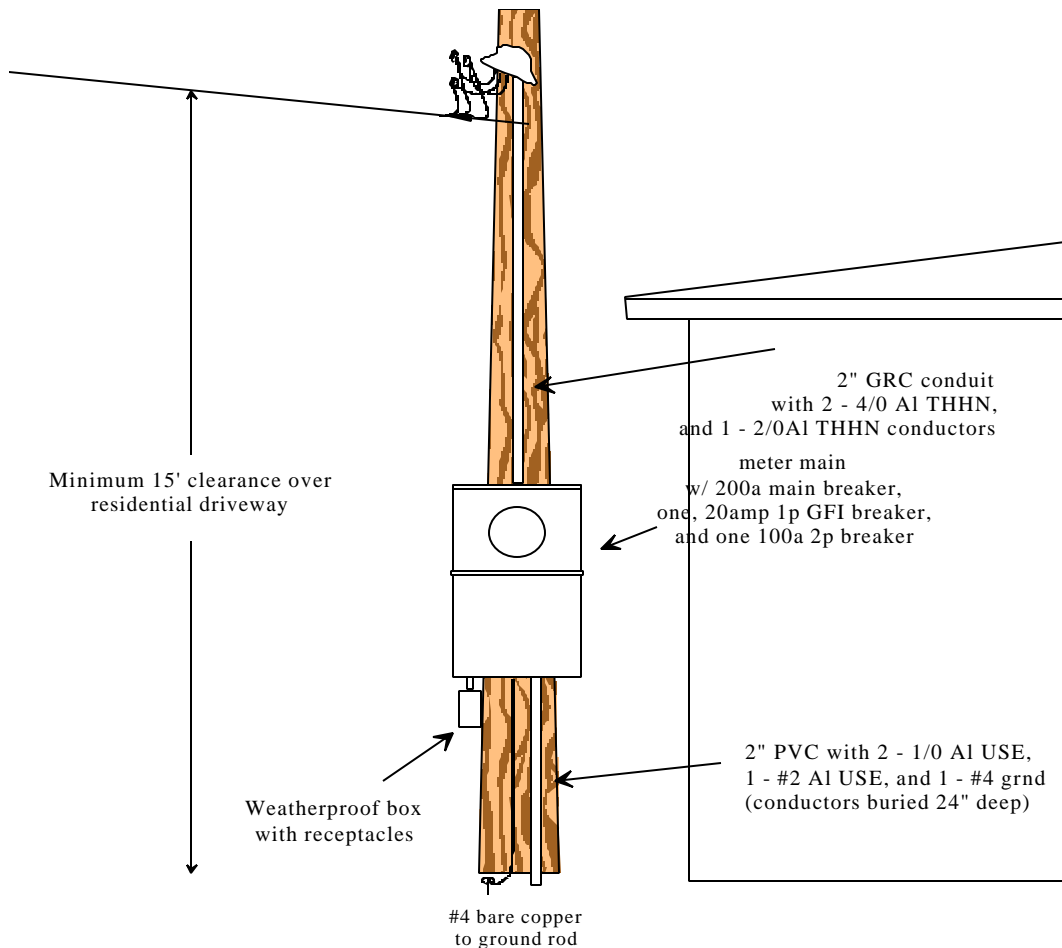
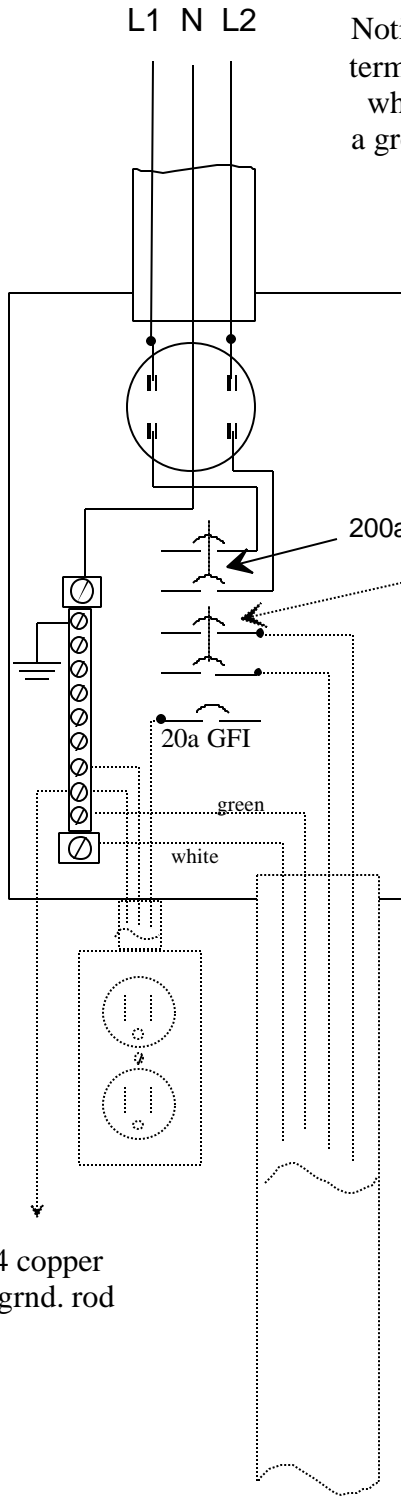


Trailer Service

Trailer and mobile home services are unique in that they are designed to stand alone, even if the living unit they serve is removed or replaced. Small services can consist of a 50 amp four wire receptacle that the trailer plugs into, while larger units require up to 200 amp feeders that are usually piped underground to the distribution panel in the home. In every case, the service is mounted on a pole or pedestal, and the panel in the trailer is a sub-panel. By NEC definition, a sub-panel has separate neutral and ground termination bars. Every branch circuit or feeder that originates from a sub panel must maintain separation between the equipment grounding conductor, (green or bare), and the neutral. Here is the reason for this separation;

All conductive surfaces and enclosures of all appliances, tools, etc. must be connected to a grounding conductor so that if a hot wire shorts out, the grounding conductor will carry enough current back to the panel to trip the overcurrent device. A neutral conductor carries current in normal operation, while a grounding conductor only carries current in the case of a ground fault. Never connect a conductive surface or appliance frame to the neutral! (For more information on appliances and grounding, see the article on grounding for safety).





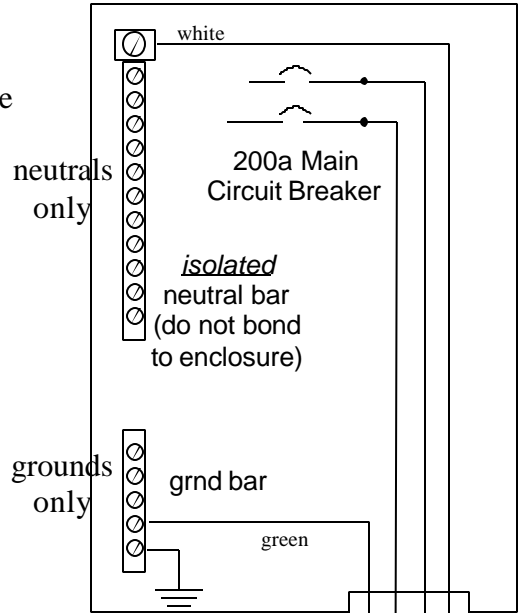
Notice that the meter main has a single terminal strip for grounds and neutrals, while the sub-panel in the trailer has a ground bar, separate from the neutral

New Meter Main, Surface Mount Enclosure

200a main breaker
100a 2 pole breaker

Note that there is space in this panel for another 100a breaker that could feed another sub panel in a garage or shop building

200 amp, main breaker panel inside mobile home is considered a sub-panel



2" Sch. 40 PVC conduits stubbed and extended at least 24" below grade

The purpose for separate ground and neutral terminations in a sub panel is to make sure that conductive surfaces of electrical appliances are not connected to the current carrying neutral conductor. Current only flows on the ground in the event of a ground fault, enough to trip the breaker.

Underground sub-panel feeders to trailer from meter main on pole
2 - 1/0, 1 - #2, and 1 - #4,
all Aluminum USE direct burial conductors