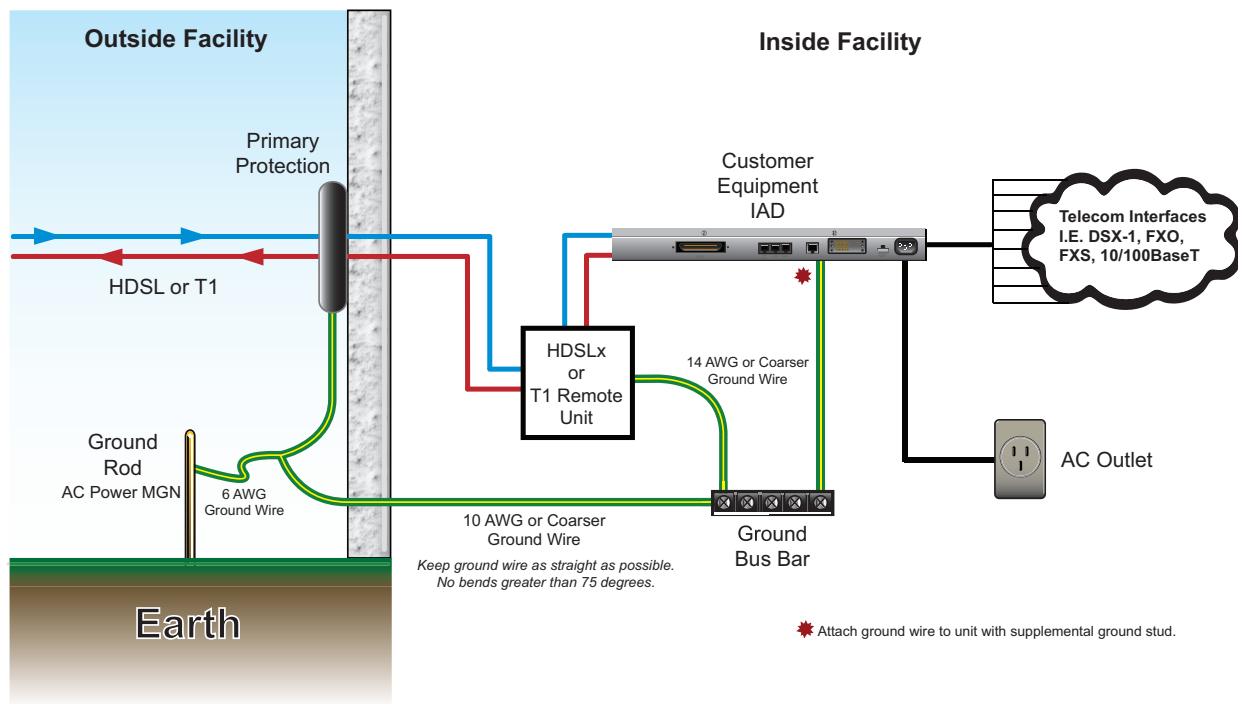


# NOTICE

ADTRAN's Total Access IADs are designed with a robust internal surge protection system on the T1 interface. For the surge protection to function during all events, the IAD's supplemental ground (additional ground stud on the rear of the unit's chassis) must be connected with a low impedance conductor directly to the same ground point as the service providers' equipment. The following illustration details this connection:



All telecommunication system grounds should be connected in single-point fashion to the multi-grounded neutral (MGN) at the entrance facility. The MGN is the same point where the primary protection provided by the service provider is grounded. The telecommunication Ground Bus Bar in the preceding diagram illustrates how multiple pieces of equipment can be tied to the MGN in a single-point fashion.

The AC main's third wire ground system provides an adequate safety ground but does not provide an adequate ground path for transients coupled onto the T1 conductors of the IAD. Additionally, using only the AC main's third wire ground for the IAD creates a multi-point grounding system between the IAD and the service providers' equipment. Lightning strikes in the vicinity can cause ground potential rise (GPR) between the multiple ground points and damage the transient protection circuitry provided for the T1 conductors. This condition is eliminated when the supplemental ground on the IAD is connected directly to the same ground point as the service providers' equipment.