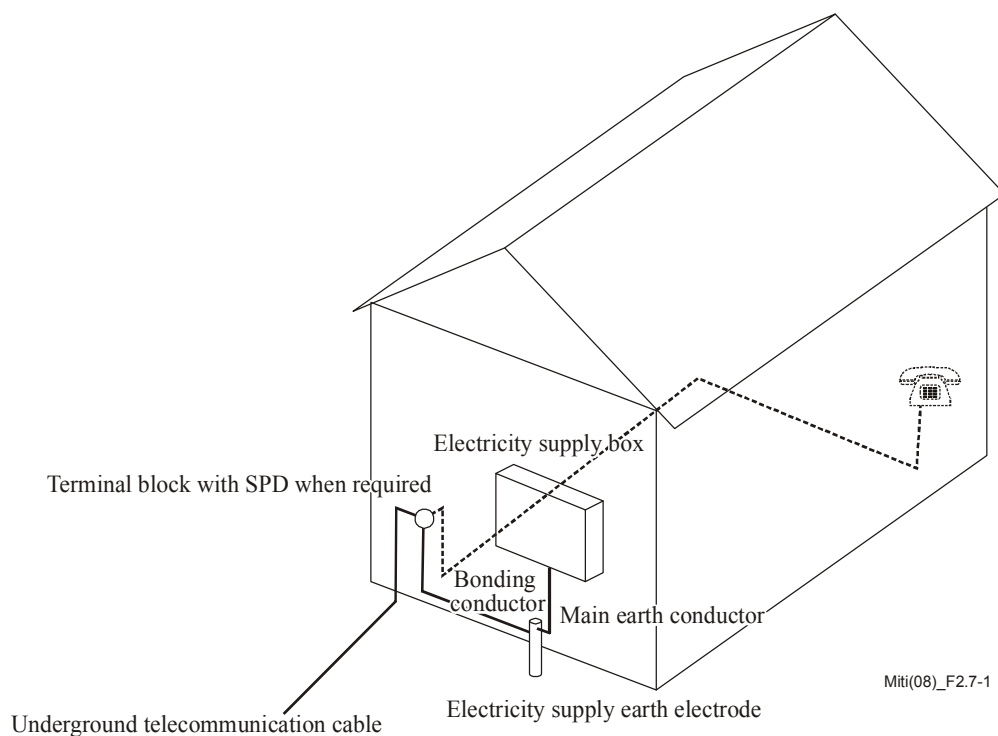


<b>Case study #</b>	2.7
<b>Title</b>	Lightning damage to a telephone
<b>Type of trouble</b>	Damage.
<b>Source of trouble</b>	Lightning.
<b>System affected</b>	Customer equipment.
<b>Location</b>	Customer premises.
<b>Keywords</b>	Damage, lightning surge, inherent resistibility, GDT
<b>Version date</b>	2004-01-01

### System configuration

The problem equipment is a telephone powered from the telecommunication line, in a customer premises. An integrated circuit (IC) in the phone was being physically damaged (impulse type damage). It was assumed that lightning was causing this damage and loss of function. Of the 50 customer premises investigated, half had primary protection and the other half did not. Most customers remembered a very close lightning strike.



**Figure 2.7-1 – System configuration**