The 50plus

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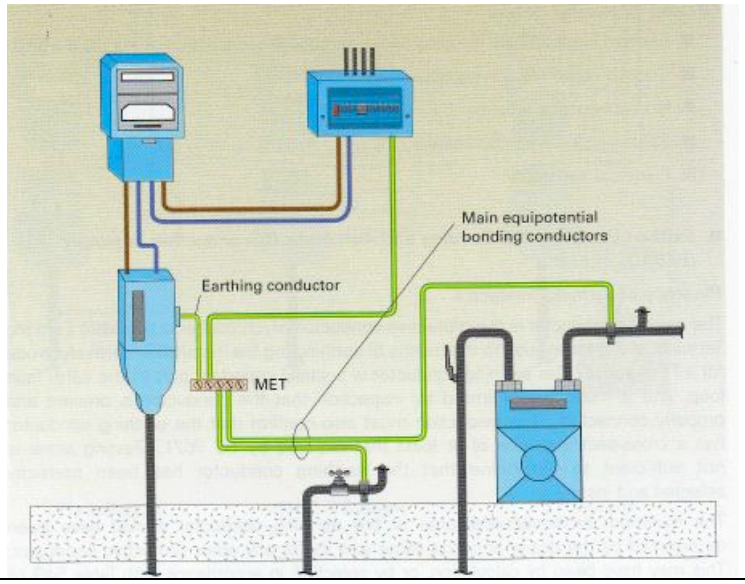
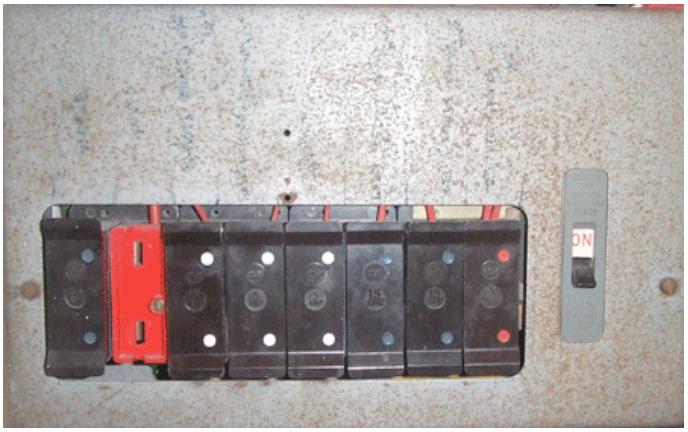
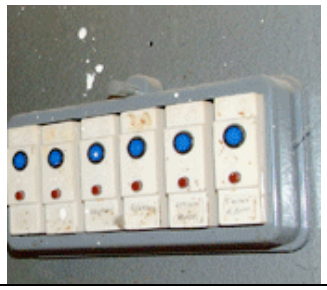
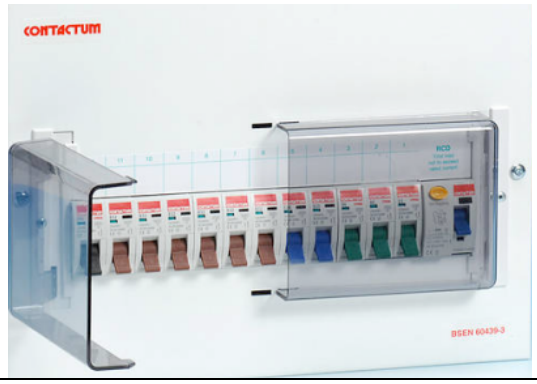
Examples of fuse boxes and consumer units (domestic)

Principle components of electrical distribution. Electricity company 'head end' with incoming fuse feeds a meter, which in turn feeds a fuse box or consumer unit. Note the earthing arrangement (MET = main earth terminal) equipotentially bonding the gas and water pipe-work. Sometimes the earth terminal in the consumer unit is used instead of the MET.	
1950's fuse box Main switch and two fuses (often power and light), and sometimes augmented by separate fused isolator for a cooker.	
1960's fuse box Typical old fuse board (often black plastic but this one is metal). White = 5 amp (lighting) Blue = 15 amp (immersion, storage heater or spur) Red = 30 amp – ring main, cooker or shower And less usually…… Yellow = 20 amp (radial circuits or water heater) Green = 45 amp (shower)	

Fuse board with fuses partially replaced by plug in MCBs of two types. No RCD, no room for expansion and the cover won't fit anymore.	
Single RCD consumer unit All circuits protected by single RCD. Found in modern large installations, usually where two or more consumer units are used to supply a variety of circuits and some older installations. In this example the RCD is also the main switch.	
Split load consumer unit Typical '16th Edition'. In this example the circuits on the right 5 MCBs are RCD protected. Usually the lighting is not RCD protected. Takes standard MCBs so MCBOs (see below) can also be fitted.	
Twin RCD consumer unit Typical '17th Edition'. Not all RCDs have yellow test buttons – some are black. Usually only found in post 2008 installations although some builders started fitting in 2006. Preferably upstairs lights and downstairs sockets are on one RCD and via versa on the other.	
Consumer unit with RCD and MCBO (integrated RCD and MCB). The circuits on left have MCBs and are protected by a common RCD. The single circuit to the immediate left on the main switch is fed from an RCBO – typically used to power freezers or other individual items or ancillary circuits.	

Shower/garage consumer unit. Usually with incoming RCD which also acts as the main switch and for a: - shower one MCB 45A - garage two MCBs. One each for power (16A) and light (6A)	

Other items that may be found

Incoming ELCB (earth leakage circuit breaker – an early form of RCD) on what is or was an overhead supply. Typically rated at 100mA.	

A few basic points

ALL new cabling buried in walls if not fully protected against e.g. nails MUST be electrically protected by an RCD or MCBO.

All new shower installations should be RCD or MCBO protected (30mA). So only units from the single RCD consumer unit to the shower/garage consumer unit are suitable. An ELCB is not suitable.