

**HEAD of DIVISION**  
**(HOD)**

**ELECTRICAL &**  
**THATCH SAFETY**

**under**  
**DIRECTOR SAFETY**

# **ELECTRICAL SAFETY for PREVENTING FIRE ACCIDENTS**

- 1. All Types of ROOF including  
CONCRETE / CEMENT**
- 2. PALM LEAF ROOF**
- 3. WATER-REED ROOF**
- 4. WIRE-NETTING ROOF**
- 5. SHAMIANA FABRIC-ROOF**

# ELECTRICAL SAFETY for PREVENTING FIRE ACCIDENTS

for all places particularly to these following



PALM LEAF THATCH ROOF



WATER REED  
ROOF



WIRE-NETTING  
ROOF



SHAMIANA (FABRICS) ROOF



BRICK , MORTAR &  
GRANITE ROOF



TILE ROOF

# Electrical cable over a period get worn out and broken

PREVENTION  
IS BETTER  
THAN CURE

All electrical systems will deteriorate over a period of time and should, therefore, be inspected on a regular basis. A visual inspection by the “FIRE-SAFETY ExNoRa HOD” is comparatively easy and any physical damage to wiring, both internally and externally can usually be spotted.

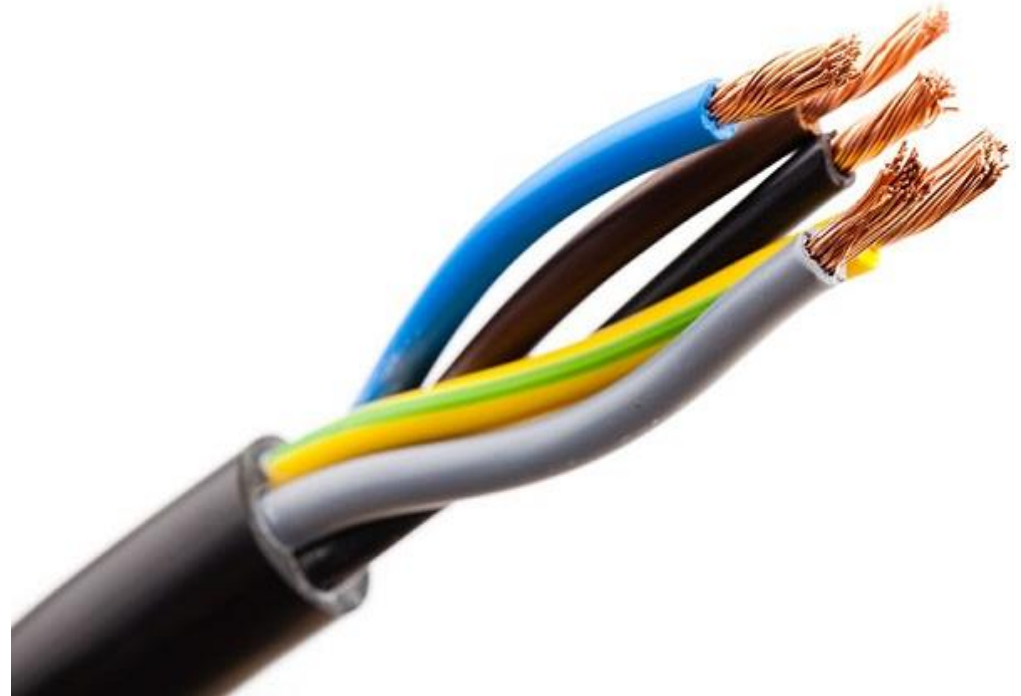


**ELECTRICAL  
INSPECTIONS a MUST**

# **ELECTRICAL SYSTEMS**

## **REWIRING**

**It is recommended that this is carried out annually. A full inspection by a qualified electrician is advised after the first 10 years following a complete rewiring and then every 5 years thereafter.**



## **ELECTRICAL SUPPLY**

**All wiring connections to a property, including aerial leads and supply cables to external chimney smoke extract fans, must be spaced a minimum of 300mm away from the thatch and any wire netting. If the mains connection is by an older type of supply using 2 or more separate wires, instead of the modern single, black PVC covered cable**



# EARLY WARNINGS

Should 'early warnings' of electrical faults occur, such as frequently blowing fuses or light bulbs, or warm plugs or cables be noticed, then have them investigated immediately.

Designing an Early Warning System  
for domestic appliances

Presentation of results


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July 2<sup>nd</sup> 2010

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# RCDs

The fitting of a Residual Current Device (RCD) is the best safeguard if fitted at the consumer unit (fuse box) to cover all circuits. Some modern consumer units are available with a built in RCD so that any 'essential', or lighting, circuits can be excluded from the parts of the electrical system automatically switched off when the RCD detects a fault and trips out. As we are concerned with the prevention of fire, and not just electrical shock, it is recommended that no circuits are excluded in a thatched property.

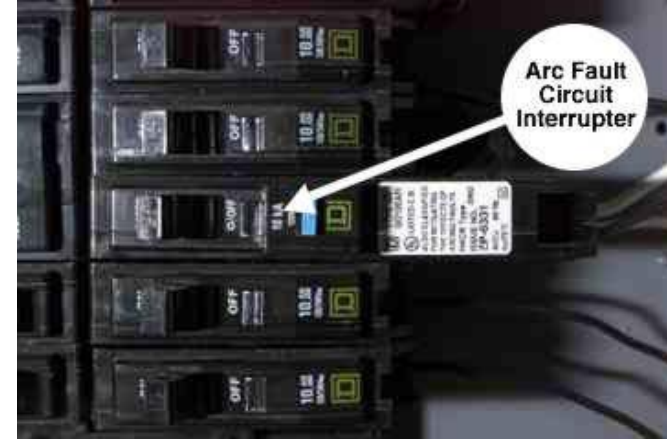




# MCBs

The use of miniature circuit breakers (MCB) instead of fuses is also recommended.





EVERY YEAR, OVER **50 PERCENT**  
**OF ELECTRICAL FIRES** COULD BE  
**PREVENTED** WITH THE INSTALLATION  
OF AN **ARC FAULT CIRCUIT**  
**INTERRUPTER (AFCI).**

# Security Lights

External security lighting gets very hot, especially the popular HALOGEN BULB types:- make sure it is sited well away from the thatch.



# SOCKET ADAPTORS

Do not allow the use of socket adaptors for the 'stacking' of plugs, but follow the rule of one socket, one plug. Unplug any non-essential appliances before going to sleep, or on holiday. Due to the number of fires that start in washing machines, tumble dryers and dishwashers it is inadvisable to leave them running whilst out, or asleep.



***SOCKET ADAPTER***

# WIRING WALL MOUNTED WIRING

It is possible to design electrical circuitry so that there is no wiring within the roof space, by having wall mounted instead of ceiling mounted lighting for example, and this is the best option.

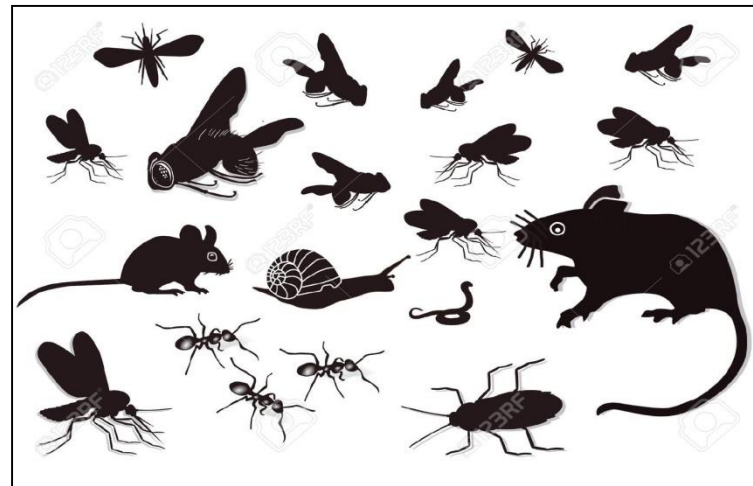


# WIRING PRECAUTIONS

However, if wiring in the loft cannot then certain precautions are advised to minimise the likelihood of an electrical fault fire. Squirrels, mice and rats all seem to enjoy gnawing PVC cable.

## WIRING PRECAUTIONS      VERMINS

Squirrels, mice and rats all seem to enjoy gnawing PVC cable. Unless the loft can be made vermin free, which is difficult to guarantee with thatch, wiring should either be contained in conduit, or proof against attack itself, (e.g. steel wired armoured). Fire resisting cables are not necessarily vermin proof as they are not protected by a hard metal sheathing, (copper sheathing is comparatively soft). Metal conduit is satisfactory and good results have been reported with the use of high impact plastic pipe with a minimum diameter of 20mm. Soft plastic, or smaller diameters, would allow penetration by biting and should therefore be avoided.



# WIRING RECESSED CEILING LIGHTS

Do not have recessed ceiling lights on the upper floor, unless separated from the loft by 30 minutes of fire resistance, with allowance made for ventilation to prevent over-heating of the fitting.





# Wiring

Any light in the loft should be of the bulkhead or well-glass design, be sited on a central post away from the thatch and have its switch in the landing. Wiring should not be fixed to the side of rafters, to avoid possible penetration by thatching spikes/crooks, and junction boxes should be avoided so that all cable within the roof space is a continuous length.

# ROOF SAFETY



# Thatch Roof Safety

- The Poles have to be embedded on earth properly so that it does not fall



# KERALA TEMPLE TRAGEDY

# KERALA TEMPLE TRAGEDY

**TV5**  
NEWS

**86 Died In  
Fire Mishap**



ELECTRICAL SHORT CIRCUIT IN ONE OF THE SHOPS  
SELLING POOJA ARTICLES CAUSED THE FIRE



**Fire**  
**Accident**  
**In**  
**Madurai**  
**Meenakshi**  
**Temple**

மதுரை  
மீனாட்சியம்மன்  
கோயிலில்  
தீவிபத்து





**மதுரையை தொடர்ந்து தஞ்சை  
அகழியில் தீ! அச்சத்தில்  
மக்கள்! அதிர்ச்சி தகவல்!**





15-9-2014





← श्री कुरुनि सलनरु →







