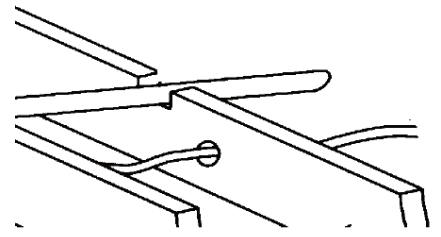


# Holes and Notches in Joists

Please ensure that you are not compromising the structural integrity of any joist that has to be drilled or notched, you must ensure that any notches and holes made are in 'safe areas' as shown below. Making holes or notches outside these areas may seriously weaken the structure and may become dangerous. The diagram below shows where notches and holes are in compliance with Part 'A'

of the Building Regulations (1.1.2.5) and also the IS444 and can be made without affecting the strength of the joist significantly.

Holes or notches made in a joist will weaken it, avoid making them if possible, even if it means re-routing cables. If this is not possible please follow the requirements below. Note: Drilling or



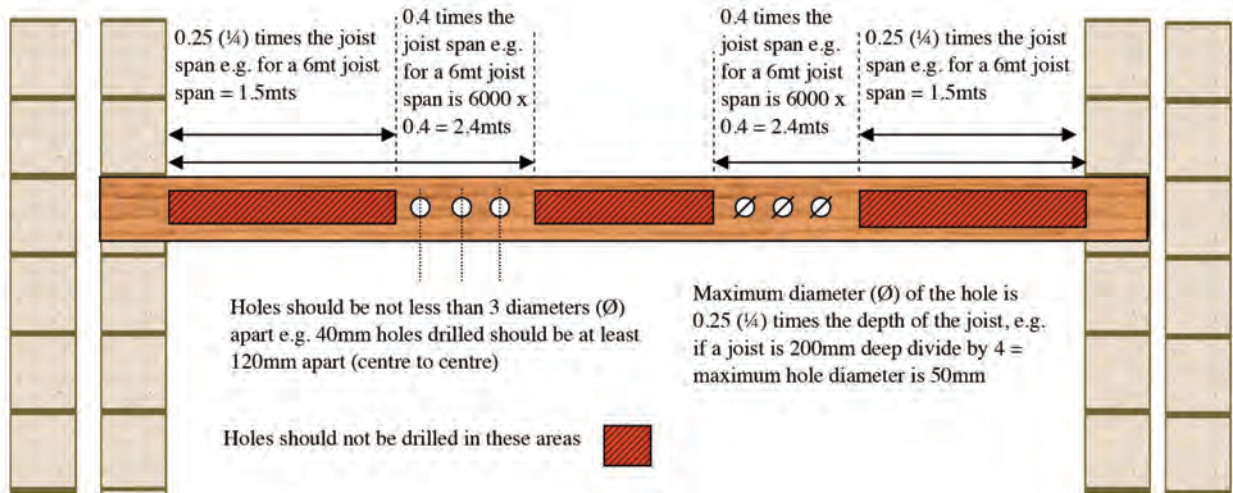
notching outside these limits should be designed by an engineer.

## 1.1.2.5 Notches and holes in simply supported floor and roof joists should be within the following limits:



- notches should be no deeper than 0.125 times the depth of a joist and should not be cut closer to the support than 0.07 times the span, nor further away than 0.25 times the span,
- holes should be no greater diameter than 0.25 times the depth of the joist, should be drilled at the neutral axis, should be not less than three diameters (centre to centre) apart and should be located between 0.25 and 0.4 times the span from the support, and
- the horizontal distance between any hole and any notch should not be less than the depth of the joist.

### HOLES



### NOTCHES

