



A Guide to 30, 60, 90 Minute Fire Rated Downlights



Building regulation Part B specifies the level of fire protection required within different types of properties. Typically the requirement for ceilings are either 30, 60 or 90 minutes and in each instance the ceiling joist spacing and plasterboard specification will be configured to achieve the required duration of fire resistance.

When cutting a hole through a fire-rated ceiling to install a recessed downlight the integrity of the ceiling is compromised and this increases the risk of the spread of fire. It is important to choose a suitable fire rated downlight that will maintain the fire rating of the ceiling.

There are separate 30 minute, 60 minute and 90 minute tests for fire rated downlights. In each test the ceiling configuration is different with ceiling thickness and joist centre spacing altered to simulate typical 30, 60, 90 minute ceiling constructions.

All Eterna fire rated downlights have been tested within 30, 60 and 90 minute ceilings and their installation will restore and maintain the original fire rating of the ceiling.

It is important that fire rated downlights **pass all three tests separately** as the differences in ceiling construction mean it is not safe to assume that passing the 90 minute test means a downlight would also pass the 30 and 60 minute tests.

Eterna fire rated downlights utilise intumescent material to achieve their fire rating – this material is designed to expand at high temperatures and in the event of a fire seals the hole and blocks the passage of the fire from passing through the downlight.

SUMMARY

- ✓ Building regulation Part B specifies the level of fire protection within properties – typically ceilings have to be 30, 60 or 90 minute rated
- ✓ Cutting a hole in the ceiling compromises its integrity
- ✓ It is important that fire rated downlights pass all three tests separately
- ✓ It is not safe to assume that passing the 90 minute test means a downlight would also pass the 30 and 60 minute tests
- ✓ Eterna fire rated downlights will restore and maintain the original fire rating of 30, 60 and 90 minute ceilings
- ✓ In the event of a fire, intumescent material will expand to seal the hole and block the passage of fire from passing through the downlight