

Use of Type NM Cable in Garages and Accessory Buildings at Multi-Family Dwellings

Question: NEC Section 334.10 clearly permits the use of Type NM cable in one- and two-family dwellings, garages and storage buildings without a 15-minute thermal barrier. Why is Type NM cable prohibited in other structures of Type III, IV or V construction (such as the detached garages at a multi-family dwelling) without the 15-minute thermal barrier?

Answer: The 15-minutes is an established time period considered sufficient for occupants to escape from a building before they can be trapped or overcome by smoke from burning construction and finish materials.

Numerous studies have found that NM cable presents no added building fire propagation concerns, especially compared to the inherent vulnerabilities of wood and roofing materials as well as flammable, explosive and corrosive substances found inside buildings.



Although some obstacles may be present, the limited occupant capacity and short exit route make an escape from a of Type NM cable at residential accessory buildings or structures of Type V construction at multifamily dwellings will not trigger the 15 minute thermal barrier requirement as described in NEC section 334.10.

Remember that NEC section 334.15 requires physical protection for exposed installations of NM cable in all occupancies and is a much more important consideration.