

# Fire Rating Natural Stone

# Fire Rating of Natural Stone

Prepared by: RMS Traders

---

## Introduction

Natural stone is widely recognized for its durability, aesthetic appeal, and fire-resistant properties. As a non-combustible material, natural stone is an excellent choice for residential and commercial applications where fire safety is a priority. This report outlines the fire rating of natural stone based on Australian Standards and its performance in fire conditions.

---

## Fire Resistance of Natural Stone

Natural stone materials, including granite, bluestone, limestone, and sandstone, exhibit high resistance to fire and heat. Unlike synthetic materials, natural stone does not burn, emit toxic fumes, or contribute to fire spread.

The fire performance of natural stone depends on its mineral composition and density. Some stones, such as granite, have a higher resistance to heat, while limestone and sandstone may experience surface changes at extreme temperatures.

---

## Australian Fire Standards for Natural Stone

In Australia, building materials must comply with relevant fire safety standards to ensure they meet regulatory requirements. The key standards applicable to natural stone include:

- **AS 1530.1:1994 – Methods for Fire Tests on Building Materials**
    - This standard classifies natural stone as a **non-combustible** material.
  - **AS 3959:2018 – Construction of Buildings in Bushfire-Prone Areas**
    - Natural stone can be used as a recommended material for building in areas with high Bushfire Attack Levels (BAL).
  - **National Construction Code (NCC) Compliance**
    - Natural stone cladding and paving meet fire-resistant construction requirements when installed as per NCC guidelines.
-

## Fire Testing and Performance

Fire tests on various natural stones indicate that they maintain structural integrity even when exposed to extreme heat. Key findings include:

- **Non-combustibility:** Natural stone does not ignite or contribute to fire spread.
- **Thermal Stability:** Some stones may experience discoloration or surface cracking when exposed to temperatures above 600°C.
- **Structural Strength:** Most natural stones retain their load-bearing capacity under high temperatures.

---

## Conclusion

Natural stone is an inherently fire-resistant material that complies with Australian fire safety standards. It is a safe and reliable choice for fire-prone environments, providing both aesthetic and functional benefits. RMS Traders recommends natural stone for projects requiring fire-resistant construction materials.

For more information on the fire rating of specific stone products, please contact RMS Traders.

---

## RMS Traders

[naturalstonetiles.com.au](http://naturalstonetiles.com.au)



[naturalstonetiles.com.au](http://naturalstonetiles.com.au)

Richmond  
Hoppers Crossing  
Geelong

(03) 9121 8888  
(03) 9748 7788  
(03) 5261 7777

591 Bridge Rd, Richmond  
6 Nevada Crt, Hoppers Crossing  
327 Shannon Ave, Newtown