

ANATOMY OF WOOL FACT SHEET

FLAME RETARDANT

- Wool has among the best indoor natural fire safety performance of any floor covering.
- Fire resistance derives from wool's natural nitrogen content, which makes the natural fiber difficult to ignite.
- Unlike many synthetic textiles, natural wool does not melt when it burns, but crumbles into a layer of char, which helps to extinguish flames.
- Burning wool releases less smoke and toxic gas than many synthetic fibers.
- Wool carpet is often used in situations that require high fire safety standards, such as high-rise buildings and passenger aircraft.

HYPOALLERGENIC

- Wool contributes to a healthier environment by helping remove pollutants and allergens from the air.
- Wool does not emit any harmful gasses, and helps absorb pollutants from the air, permanently binding them within its structure, away from human breathing space.
- Wool carpet may also temporarily trap dust and allergens, which aggravate Asthma and respiratory conditions when inhaled. Caught between the wool fibers, the dust will not easily become airborne again with general movement and may be removed by regular vacuuming.

WATER REPELLANT

- Despite its great absorption capacity, remarkably, wool is also water resistant.
- A tiny amount of natural grease from the sheep known as lanolin remains on the fiber even after the cleaning processes it undergoes before manufacturing. This, as well as the outer cell structure, means liquid will initially form into droplets rather than soak into wool carpet. Accidental spills that are quickly dealt with are less likely to leave a stain.

WARMTH

- Wool is a highly effective insulator.
- Wool carpet can help to reduce energy costs from heating and air conditioning and feels more comfortable to walk on, as the heat radiating from the human body is not absorbed away into the floor, making you feel cold.
- In warmer drier conditions, the fiber uses up energy to release absorbed moisture, making it feel cooler.

STRENGTH

- Wool's chemical structure is linked together in a spiral shaped chain. This gives it great strength and flexibility, allowing it to be stretched or compressed, and it is still capable of reverting to its original shape.
- A single strand of fiber can be bent up to 20,000 times without breaking. As a result, wool carpet can be impressively durable and should stay in good condition, retaining its quality for many years.

