

Unravelling the Mystery of Squeaking Boards in Adhesive-Fixed Engineered Floors.

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Timber flooring has long been a popular choice among homeowners and designers for its versatility, warmth, and natural beauty. Engineered wood floors have particularly gained favour due to their increased stability and resistance to moisture, along with the variety of colour selections and speed of installation. Adhesive-fixing engineered floors in place is becoming increasingly popular – with floating floor installations (in Engineered Timber) becoming less popular. Adhesive-fixing the boards gives a firm feel underfoot, has neater perimeter detailing, and often allows for better re-finishing options in the future.

However, a persistent issue that plagues many adhesive-fixed engineered floors is the annoying and unwelcome phenomenon of squeaking boards. In this article, we will delve into the common causes of squeaking boards and discuss effective strategies for diagnosing and remedying the issue.

Causes of Squeaking Boards in Adhesive-Fixed Engineered Floors

Adhesive Failure: The primary cause of squeaking in adhesive-fixed engineered floors is often a breakdown in the adhesive itself. This could result from improper selection of adhesive, insufficient application, or an incorrect installation method. When the adhesive bond between the subfloor and flooring material weakens or fails, the boards can rub against one another or the subfloor, producing a squeaking sound.

Subfloor Irregularities: A level and properly prepared subfloor is crucial to the performance of an adhesive-



fixed engineered floor. Irregularities in the subfloor, such as bumps or dips, can cause the flooring material to flex, leading to squeaking noises. Inadequate subfloor preparation and the presence of debris can exacerbate these issues. As a general rule, the tolerance for floor flatness with an adhesive-fixed board is 3mm over 3m.

Moisture-related Expansion and Contraction: Engineered wood flooring is less susceptible to moisture-related issues than solid hardwood. However, significant fluctuations in moisture levels can still lead to expansion and contraction of the material. This movement can cause the boards to rub against one another or the subfloor, resulting in squeaking. Peaking at end joints, associated vertical movement and squeaking is a common way expansion pressure presents in an adhesive-fixed floor.

Diagnosing the Issue

Pinpointing the source of the squeaking is the first step in addressing the problem. Some diagnostic methods include:

Visual Inspection: Examine the floor for any visible signs of adhesive failure or subfloor irregularities, such as gaps or raised edges.

Sound Localisation: Walk over the entire floor, paying close attention to the areas where the squeaking occurs. This can help narrow down the problem area and provide valuable information on the possible causes. Try to pinpoint if a single board moves (likely board-on-board squeaking) or if an area of floor moves (more likely involving the subfloor in some way).

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Moisture Testing: Use a moisture meter to measure the moisture content of both the flooring material and the subfloor. Comparing these readings to the manufacturer's recommendations can help determine if moisture-related issues are the cause of the squeaking.

Remedying Squeaking Boards

Once the cause of the squeaking has been identified, appropriate remedial measures can be taken:

Adhesive Failure: If adhesive failure is the culprit, the first point of call is adhesive injection. This requires some practice with both the injection of the adhesive and the neat patching of the hole. For larger

areas, the affected boards may need to be removed and replaced. In extreme cases, the entire floor may need to be replaced.

Subfloor Irregularities: Addressing subfloor issues may require removal of the flooring in the affected area, leveling the subfloor, and reinstalling the flooring. Keep in mind that the area to remove and repair is almost always bigger than appears on the surface – plan for 30% more as a guide in most instances.

Moisture-related Expansion and Contraction: If moisture ingress has caused the issue, identify and resolve the moisture ingress first, then allow time for the floor to settle. If the floor settles well,

some injection may be all that is required; however, often some board replacement will be necessary.

Conclusion

Squeaking boards in adhesive-fixed engineered floors can be a frustrating issue for homeowners. Understanding the common causes and implementing appropriate diagnostic and remedial measures can go a long way in ensuring a silent, comfortable, and long-lasting engineered wood floor. **1**

