

AC RATINGS FOR LAMINATE

AC is the wear rating for laminate flooring. The letters stand for abrasion class, the scale runs from AC1 to AC6, and the test behind it is written into the European standard EN 13329. Porcelain uses PEI. The two scales never meet. This guide shows you what each AC class is rated for, and what else decides how long a laminate floor lasts.

ON THIS PAGE

What AC measures

The six classes

Why laminate has no PEI

What else decides the floor

Which class each room needs

Common questions

WHAT AC MEASURES

AC rates how long the printed face of a laminate board survives being rubbed. The test sits in EN 13329, the European standard for laminate floor coverings. Two weighted wheels wrapped in abrasive paper turn against the finished board while the sample rotates under them. An inspector counts turns and watches for the moment the print first wears through. That count is the initial wear point, and the class comes from it. More turns, higher class.

The wheels run on the finished board, not on a layer peeled off it. What resists them is the whole top of the plank: the melamine overlay, the aluminium oxide held in it, the printed decor paper underneath and the press that fused all three. So AC has no thickness you can

quote. Vinyl states a wear layer in MIL, and laminate cannot, because there is no separate wear layer to measure.

THE SIX CLASSES

Each class carries a use rating with it. The use classes come from EN ISO 10874, the numbering that splits residential from commercial, and they are what the class actually promises.

AC1	Moderate residential. Bedrooms and closets. Rooms crossed a few times a day, in soft shoes or none. Almost nothing is sold at AC1 any more.
AC2	General residential. Living rooms and dining rooms. Daily traffic, no street door opening onto it.
AC3	Heavy residential, moderate commercial. Every room in a house, hallways and kitchens included, and the light commercial floors above that: a hotel room, a small office. This is the class most homes are sold.
AC4	General commercial. Offices, boutiques, cafes. Floors that take street shoes all day.
AC5	Heavy commercial. Department stores, public buildings, showrooms.
AC6	Very heavy commercial. The class added at the top of the scale for the busiest floors laminate is put on. Rare, and priced accordingly.

WHY LAMINATE HAS NO PEI

PEI is a glaze test. Under ISO 10545-7, steel balls and abrasive grit turn on the glazed face of a ceramic or porcelain tile, and the rating is the count the glaze survives with its finish intact. Laminate has no glaze, so PEI has nothing to measure on it. Where a laminate page carries a PEI figure, read it as a note about the range it sits in rather than as a laminate specification. The class that governs a laminate floor is its AC. Read the PEI guide for the porcelain side of this.

Each material carries the wear rating its own surface allows.

WEAR RATING BY MATERIAL

MATERIAL	WEAR RATING
Glazed porcelain and ceramic	PEI 1 to 5, ISO 10545-7
Unglazed porcelain	Deep abrasion, ISO 10545-6
Laminate	AC1 to AC6, EN 13329
SPC vinyl	Wear layer thickness, in MIL

WHAT ELSE DECIDES THE FLOOR

AC covers the face and nothing else. Four other things on the technical sheet decide whether the floor holds up.

Core.

Laminate is built on a fibreboard core. HDF is pressed denser than MDF, and the sheet states the density in kilograms per cubic metre. A denser core dents less and grips the locking profile harder.

Edges.

Wax or resin on the milled profile slows water reaching the core through the joint. How much a board swells after immersion is measured under EN 317, in per cent of its thickness.

Click.

The locking strength of a click joint is tested under ISO 24334. It is the force needed to pull two planks apart, and a weak joint opens into a gap you can feel underfoot.

Water.

Laminate is water resistant, never waterproof. No AC class changes that, because the water goes past the face, not through it.

Board thickness belongs on the same list, and it is not the AC rating. A thicker board is stiffer over a subfloor and quieter underfoot. Each product page prints its own thickness. A thin board can still carry a high class, and a thick one a low class.

WHICH CLASS EACH ROOM NEEDS

MINIMUM AC CLASS BY ROOM

ROOM	CLASS
Bedrooms and closets	AC1 or higher
Living and dining rooms	AC2 or higher
Hallways, kitchens, whole house jobs	AC3 or higher
Rentals, hotel rooms, small offices	AC3 or higher
Shops, cafes, busy offices	AC4
Department stores, public buildings	AC5 or higher
Bathrooms and laundry rooms	No class. Use porcelain or SPC vinyl.

Grit wears the print, not feet. The rooms that need the higher class are the ones that catch sand and street dirt, and a mat at the door cuts most of it before it lands on the floor.

COMMON QUESTIONS

What AC rating do I need for a house?

AC3. It covers every room in a home, kitchen and hallway included, which is why most residential laminate is sold at that class. AC4 and above are commercial classes. You can buy them for a house, and you are paying for traffic a house never sees.

Is a thicker board the same as a higher AC class?

No. Thickness is the board in millimetres and it changes how the floor feels and sounds. AC is the abrasion test on the face. An 8 mm board can carry a higher class than a 12 mm one, so read the two numbers separately.

Does a high AC class make laminate waterproof?

No. AC only measures surface wear. Water reaches a laminate floor through the joints and swells the fibreboard core from below. The waterproof guide sets out what each material really promises.

Can I put laminate in a bathroom?

A bathroom holds standing water and steam, and a fibreboard core swells once water reaches it. Porcelain and SPC vinyl are the materials for that room. Sell laminate for the dry rooms and the floor lasts.

Where do I find a laminate floor's AC class?

On the manufacturer's technical sheet, listed under abrasion class or EN 13329, and usually printed on the box beside the use class figure. Every PORCEMALL laminate product page links its tech sheets. If the class is not on the sheet, ask before you sell the floor into a hallway.

CHECK A LAMINATE FLOOR AGAINST THIS GUIDE

PORCEMALL's laminate floors are all wood look. Most run 9 by 60 inches, and the range covers more than one board thickness. Open a product page, pull the tech sheet and read the class against the room it is going into.

954 278 8022 • infousa@porcemall.com

The floors Florida lives on

HEADQUARTERS

954 278 8022

Deerfield Beach

3101 SW 13th Drive, Deerfield Beach, FL 33442

Monday to Friday 8:30 am to 5:00 pm

[Get directions ↗](#)

MAIN OFFICE

407 730 9074

Orlando

7530 Currency Dr, Orlando, FL 32809

Monday to Friday 8:30 am to 5:00 pm

[Get directions ↗](#)



infousa@porcemall.com

© 2026 PORCEMALL. All rights reserved. [Privacy Policy](#) [Terms and Conditions](#) [EN](#) [ES](#)