



ACOUSTICAL PERFORMANCE

Soundstop BA-Cored LVT Technical Brief

Why the Glue-Down Performs Better on Impact Noise — and why a thinner, denser plank outperforms heavier floating products on wood-frame assemblies.

STC up to 64

Sound Transmission Class

IIC up to 58

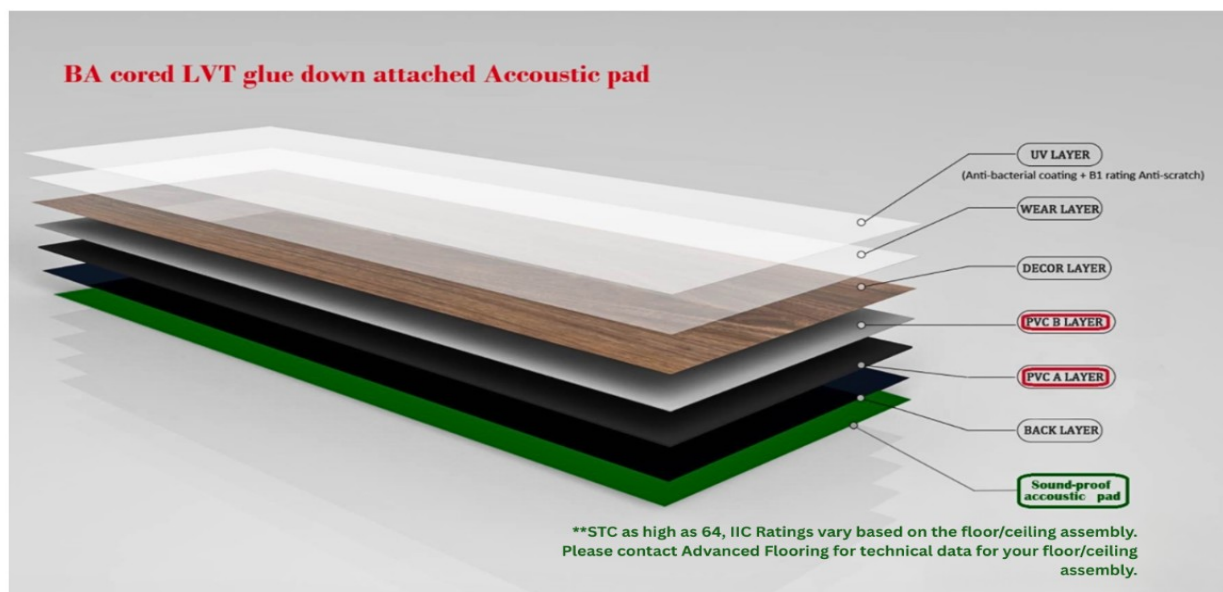
Impact Insulation Class

HIIC up to 72

High Impact Insulation Class

No Sound Mat

Required
Single-product acoustical solution



BA Cored LVT Glue Down — Attached Acoustic Pad Construction

1 Full Adhesion vs. Floating

The 3 mm Glue-Down is fully bonded directly to the subfloor, creating a solid, monolithic connection with almost no gaps or movement. Vibrations from footsteps are quickly damped and dissipated before they travel into the joists or trusses below. A floating click product, even with an attached pad, allows tiny amounts of movement at the click joints — letting more impact energy transfer through the structure, especially under repeated footsteps.

2 How the Attached Pad Works

Because the Glue-Down is compressed flat by the adhesive, its factory-bonded acoustic pad operates in optimal compression. It acts as a true resilient layer that decouples the rigid vinyl core from the subfloor, absorbing and dissipating impact energy far more effectively than a pad that is free to flex under a floating plank.

3 Barium Sulfate Core — the 'Secret Sauce'

The 3 mm SoundStop uses BA-cored construction: the core is loaded with barium sulfate, a very dense mineral powder. This adds significant mass in a thin plank and dramatically improves vibration damping. That dense core is exactly why the thinner 3 mm product 'punches above its weight' and achieves such strong impact ratings on wood-truss assemblies.

In short: The Glue-Down wins on acoustics because of full adhesion + optimal pad compression + dense barium-filled core.

CERTIFIED TEST RESULTS

Third-Party Acoustical Laboratory Results

| Product | Assembly | STC | IIC | HIIC |
|---------------------------|-----------------------|-----|-----|------|
| Soundstop 3mm Glue Down | 3/4" Gypsum / 18" OWT | 61 | 56 | 68 |
| Soundstop 3mm Glue Down | 3/4" Gypsum / 16" OWT | 61 | 56 | 68 |
| Soundstop 3mm + 1/8" Mat | 3/4" Gypsum / 18" OWT | 63 | 58 | 70 |
| Soundstop 5mm SPC Click | 3/4" Gypsum / 18" OWT | 62 | 57 | 70 |
| Soundstop 6.5mm SPC Click | 3/4" Gypsum / 18" OWT | 64 | 58 | 72 |

All tests conducted by an independent accredited laboratory per ASTM E90 (STC), ASTM E492 (IIC), and ISO 10140 (HIIC). Full test reports available upon request.