Overlay Board vs Screed Build-Up

Which floor build-up route is better for your project?

When planning a floor build-up, one of the most important choices is how the finished floor structure will be formed above the structural deck or subfloor. Two common approaches are an **overlay board system** or a **screed build-up**.

At a glance, both routes can achieve a usable, level floor and both can work with underfloor heating, insulation layers and a wide range of floor finishes. But they are not the same thing, and choosing the wrong route can cause unnecessary cost, programme delays, build-up height problems, drying-time issues or performance compromises.

The right answer depends on what the project actually needs. Some projects need speed, low weight and dry installation. Others need mass, encapsulation, robustness and a more traditional floor construction. This comparison breaks down the differences in a clear and practical way so you can understand where each option fits best.

What is an overlay board?

An overlay board build-up usually refers to a **dry-installed board layer** placed over an existing or prepared substrate. This might be a structural deck, timber floor, existing concrete floor, insulation layer or underfloor heating panel arrangement, depending on the system being used.

Overlay boards are commonly made from materials such as:

- gypsum fibre board
- cement-based board
- high-density chipboard or engineered board
- specialist routed underfloor heating overlay panels
- composite flooring boards designed for renovation applications

These systems are generally designed to provide a **fast, relatively low-profile and dry method** of forming a finished floor build-up.

Overlay boards are especially common in:

- renovation projects
- upper floors
- timber floor constructions
- projects with restricted floor-to-ceiling height

- programmes where waiting for wet trades to dry is a headache nobody wants

What is a screed build-up?

A screed build-up uses a **wet-applied screed layer** to create the floor build-up. This screed may be:

- traditional sand and cement screed
- modified sand and cement screed
- flowing anhydrite screed
- flowing cementitious screed
- rapid-drying screed
- levelling or smoothing screed in thinner applications

The screed is applied over a suitable base, which may include:

- concrete slab
- insulation
- separating membrane
- acoustic layer
- underfloor heating pipework
- bonding layer, depending on the design

Screed systems can be used to create a flat, strong and durable floor surface and are often chosen where a more monolithic, heavy-duty or thermally efficient build-up is required.

They are widely used in:

- new build projects
- ground floors
- large floor areas
- commercial spaces
- projects using wet underfloor heating
- floors needing greater mass and load distribution

The core difference

The simplest way to frame it is this:

Overlay board = dry, lighter, thinner, faster
Screed build-up = wet, heavier, more robust, more traditional

That is not the whole story, but it is the commercial headline.

Comparison: Overlay Board vs Screed Build-Up

1. Installation speed

Overlay board

Overlay board systems are usually faster to install overall because they are dry systems. Once the substrate is ready, the boards can often be laid, fixed and prepared for the next stage with minimal waiting time.

This can be a major advantage where:

- the programme is tight
- follow-on trades need access quickly
- moisture-sensitive finishes are going down soon after
- the building is already occupied or partially occupied

A dry floor build-up can massively reduce downtime. In live refurb projects, that can be gold dust.

Screed build-up

Screed installation can also be fast in application terms, especially with pumped flowing screeds or efficient screed teams. However, the issue is not always how quickly it goes down. The issue is **how long it takes before the next stage can safely proceed**.

Even rapid-drying screeds still require correct curing and drying conditions. Standard screeds may need significantly more time before moisture-sensitive floor finishes can be installed.

Winner

Overlay board, for programme speed and reduced drying dependency.

2. Drying time and moisture risk

Overlay board

Because overlay boards are dry-installed, there is little or no introduced construction moisture from the board layer itself. That makes them attractive where moisture control is critical.

This reduces risk around:

- delayed floor finish installation
- trapped moisture
- adhesive failure
- timber movement
- moisture-sensitive floor finishes

That said, the substrate below still matters. A dry board on top of a damp floor is not a magic trick. That is just a hidden problem wearing smarter shoes.

Screed build-up

Screeds introduce moisture into the build-up. This is one of the biggest practical differences. Depending on the screed type, thickness, environmental conditions and ventilation, drying can be a key programme constraint.

If floor finishes are installed too early, the result can include:

- adhesive breakdown
- floor finish distortion
- debonding
- mould risk
- long-term performance issues

Screed moisture must be managed properly and tested as required before applying sensitive finishes.

Winner

Overlay board, where low-moisture construction is a priority.

3. Build-up thickness

Overlay board

Overlay systems are often chosen where floor depth is limited. They can provide a lower-profile build-up, especially in refurbishment work and retrofit underfloor heating systems.

This is useful where:

- threshold heights are tight
- door clearances are fixed
- stair geometry cannot be changed easily
- ceiling heights are limited
- additional floor depth would trigger expensive redesign work

Screed build-up

Screed build-ups often require greater thickness, especially where they are being used to fully encapsulate underfloor heating pipes, accommodate insulation or deliver a floating floor design.

That added depth may be perfectly acceptable in new build work, but it can become a problem in refurbishment or constrained-height applications.

Winner

Overlay board, in low-profile and height-restricted projects.

4. Structural weight and loading

Overlay board

Overlay boards are generally much lighter than screed build-ups. This makes them attractive for:

- timber upper floors
- renovation of older buildings
- structures with limited load capacity
- projects where dead load needs to be controlled

This lighter construction can simplify the design and reduce stress on the existing substrate.

Screed build-up

Screed is heavier. Sometimes that is a disadvantage, especially where structural loading is a concern. In other cases, it is a benefit because the mass contributes to robustness, load distribution and acoustic performance.

The key point is that screed adds significantly more dead load and must be considered as part of the wider design.

Winner

Overlay board, where weight reduction matters.

5. Thermal performance with underfloor heating

Overlay board

Overlay board systems can work very well with underfloor heating, particularly in retrofit situations. Routed overlay systems allow pipework to be installed with a relatively shallow build-up and fast response time.

Because the system is lighter and lower mass, it tends to heat up more quickly. That can be useful where users want a more responsive heating system.

However, rapid response is not always the same thing as best overall thermal comfort. A lighter system may cool down more quickly too.

Screed build-up

Screed is often seen as the more traditional partner for wet underfloor heating because it fully surrounds and encapsulates the pipework. This improves contact between the heating element and the floor mass.

Benefits can include:

- good heat distribution
- thermal stability
- slower and more even release of heat
- solid encapsulation of pipework

The trade-off is that higher thermal mass means slower response times. It behaves more like a slow-turning ship than a speedboat.

Winner

No clear winner.
Overlay board often wins for **fast-response retrofit systems**.
Screed build-up often wins for **thermal mass and full encapsulation**.

6. Acoustic performance

Overlay board

Overlay boards can contribute to acoustic performance, especially where specialist acoustic boards or resilient layers are built into the system. However, performance varies heavily depending on the exact board type, substrate and full floor build-up.

A standard overlay board by itself does not automatically equal excellent sound insulation.

Screed build-up

Screed often performs well acoustically because of its mass, especially when combined with suitable resilient layers or acoustic insulation within the floor build-up.

In many floor designs, mass helps reduce airborne sound transmission, though impact sound control depends on the full system design rather than screed alone.

Winner

Often **screed build-up**, especially where floor mass is beneficial and the full acoustic design supports it.

7. Floor robustness and feel underfoot

Overlay board

A well-installed overlay board system can provide a very good floor surface, but performance depends heavily on the product, fixing method, support below and overall system design.

In some situations, especially over imperfect substrates or poorly supported areas, a board system can feel less solid than a properly designed screed floor.

This does not mean overlay boards are weak. It means they are more dependent on precise system design and installation quality.

Screed build-up

A properly installed screed build-up usually gives a more monolithic and solid feel underfoot. It can provide a strong, durable base for many types of floor finish and is often preferred where a substantial, traditional floor feel is required.

Winner

Screed build-up, for solidity and traditional floor mass.

8. Suitability for renovation projects

Overlay board

This is where overlay board systems often shine. They are commonly used in renovation because they can be installed with less disruption, lower weight and reduced wet-trade dependency.

They are particularly useful where:

- the existing floor remains in place
- the build-up must stay shallow
- drying time must be avoided
- access is difficult
- upper floors are involved

Screed build-up

Screed can absolutely be used in renovation projects, but it may be less convenient where access, weight, drying time or build-up depth are restrictive.

Winner

Overlay board, in many refurbishment and retrofit scenarios.

9. Suitability for new build projects

Overlay board

Overlay boards can be used in new build applications, but they are not always the default choice where a full screed design better suits the project.

Screed build-up

Screed build-ups are very common in new build work because the design can accommodate:

- greater build-up depth
- wet trades
- drying schedules
- integrated insulation and UFH
- larger open floor areas

Winner

Often **screed build-up**, particularly in standard new build floor designs.

10. Programme risk

Overlay board

The big commercial advantage of overlay board is reduced drying risk. That can make the programme easier to manage and reduce the number of moving parts that can derail the job.

Screed build-up

Screed is more exposed to programme issues linked to:

- drying conditions
- humidity
- low temperatures
- poor ventilation
- early trafficking
- premature floor finish installation

With good planning, these risks can be managed. But they do need managing.

Winner

Overlay board, for lower programme volatility.

11. Surface regularity and finish preparation

Overlay board

Overlay boards can provide a good surface, but joints, fixing quality and board alignment matter. Some floor finishes may still require a smoothing or preparation layer depending on the finish type and tolerance requirements.

Screed build-up

Screed can provide a flat, continuous surface across large areas, especially when installed and controlled properly. Some screeds may still require local preparation, sanding or smoothing depending on the chosen finish and screed type.

Winner

Depends on the system and finish requirement.
For large continuous areas, **screed build-up** often has the edge.

12. Flexibility for floor finishes

Overlay board

Overlay boards can accept many common floor finishes, but the compatibility depends on the exact board type, moisture conditions, joint treatment and manufacturer recommendations.

Some finishes may need additional preparation to ensure a suitable substrate.

Screed build-up

Screed is also compatible with many floor finishes, but moisture and surface preparation remain critical. A screed that is not dry enough or properly prepared can quickly turn a flooring job into a legal argument.

Winner

Neither automatically wins.
Both can work well, but only when correctly specified and prepared.

13. Cost considerations

Overlay board

Overlay board systems can sometimes appear more expensive on a material-only basis, particularly where specialist boards are involved. However, that is not the full commercial picture.

You also need to factor in:

- reduced drying time
- less downtime
- fewer wet trades
- quicker access for follow-on works
- reduced structural loading implications
- less disruption in refurbishment

In the right job, the whole-life project cost can stack up well.

Screed build-up

Screed may offer strong value in larger areas, particularly in new build applications or where a traditional floor build-up is already planned. But total project cost must include:

- drying time
- moisture testing
- sequencing
- access
- protection
- programme impact

Cheap on paper can become expensive on site. Construction has a habit of doing that.

Winner

Depends on project type.
Overlay board often wins in refurbishment and fast-track projects.
Screed build-up can be cost-effective in larger, conventional new build scenarios.

14. Repairability and future access

Overlay board

Some overlay board systems can be easier to lift, replace or locally alter compared with a full screed floor, depending on the construction method. This can be useful in certain retrofit or service-related scenarios.

Screed build-up

Screed is more permanent and monolithic. That can be beneficial for robustness, but it can be less forgiving when later changes or access are needed.

Winner

Overlay board, where future adaptability matters.

Side-by-side summary

Overlay board tends to suit:

- refurbishment projects
- retrofit underfloor heating
- upper floors
- timber floors
- low build-up applications
- fast-track programmes
- projects where moisture risk must be minimised
- situations where structural weight matters

Screed build-up tends to suit:

- new build projects
- larger open areas
- floors requiring greater mass
- wet underfloor heating systems needing full encapsulation
- projects where a more traditional solid floor build-up is preferred
- applications where acoustic mass and robustness are important

Advantages and drawbacks at a glance

Overlay board – strengths

- fast installation route
- dry system with reduced moisture risk
- lower profile build-up
- lighter weight
- well suited to retrofit and upper floors
- quicker access for follow-on trades
- often ideal for renovation and constrained projects

Overlay board – limitations

- may feel less substantial depending on system design
- acoustic and structural performance vary significantly by system
- can require careful joint treatment and surface preparation
- not always the best choice for large, heavy-duty or mass-reliant floors

Screed build-up – strengths

- robust and solid underfoot
- good for full UFH pipe encapsulation
- strong thermal mass characteristics
- well established in new build construction
- suitable for large continuous floor areas
- can support strong acoustic and load-distribution performance

Screed build-up – limitations

- introduces moisture into the build-up
- longer drying and programme dependency
- heavier construction
- usually deeper build-up
- less convenient in many retrofit situations

Comprehensive conclusion

The best choice between **overlay board** and **screed build-up** comes down to what the project needs the floor to do, not which option sounds more modern, more traditional or more convenient in isolation.

If the key drivers are **speed, low weight, reduced moisture, shallow build-up and retrofit practicality**, overlay board is often the stronger solution. It is especially effective in renovation work, upper floors, timber structures and projects where floor heights are tight and programme pressure is real. In those situations, an overlay system can deliver a highly efficient route with fewer delays and less structural burden.

If the key drivers are **robustness, floor mass, full underfloor heating encapsulation, acoustic weight and a more conventional heavy-duty floor construction**, screed build-up often has the advantage. It remains a strong solution for new build, larger floor plates and applications where the floor design benefits from a more monolithic structure.

Neither system is universally better. That would be far too easy, and construction rarely does easy. The correct specification depends on factors such as:

- substrate type
- available build-up depth
- structural loading limits
- floor finish type
- underfloor heating design
- programme demands
- moisture management
- acoustic targets
- occupancy and access conditions

In simple terms:

- choose **overlay board** when the project needs a **fast, dry, lightweight and low-profile solution**
- choose **screed build-up** when the project needs a **solid, heavier, more traditional and thermally massive floor system**

For many specifiers, the commercial reality is this: overlay board is often the smarter answer in refurbishment, while screed remains the stronger default in many new build and conventional floor construction scenarios.

The smartest move is not to force either system into the wrong job. It is to align the build-up with the actual technical and programme requirements of the project from the outset.