ROOF WATERPROOFING

Torch-On vs Liquid Waterproofing: Which Does Your Roof Need?

By DirectHome Team Updated 15 September 2026 5 min read Explore our roof waterproofing service ↗

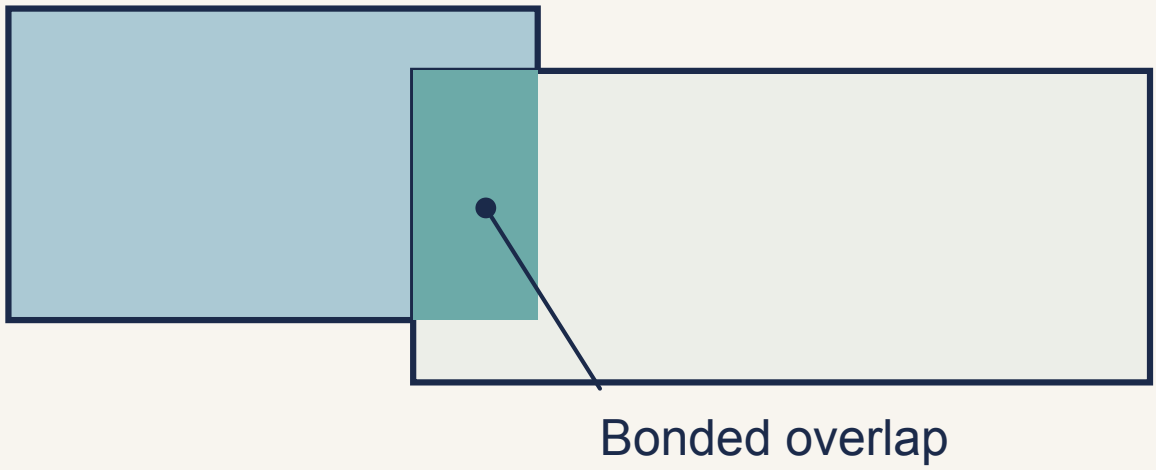
Torch-on systems use sheet membranes, while liquid waterproofing forms a coating on the prepared surface. Choosing between them depends on the roof's condition, details, exposure and intended use. Compare the complete installation and repair plan rather than treating the material name as proof that one approach will stop every leak.

Need advice for your home? WhatsApp our team ↗



Sheets make joints visible

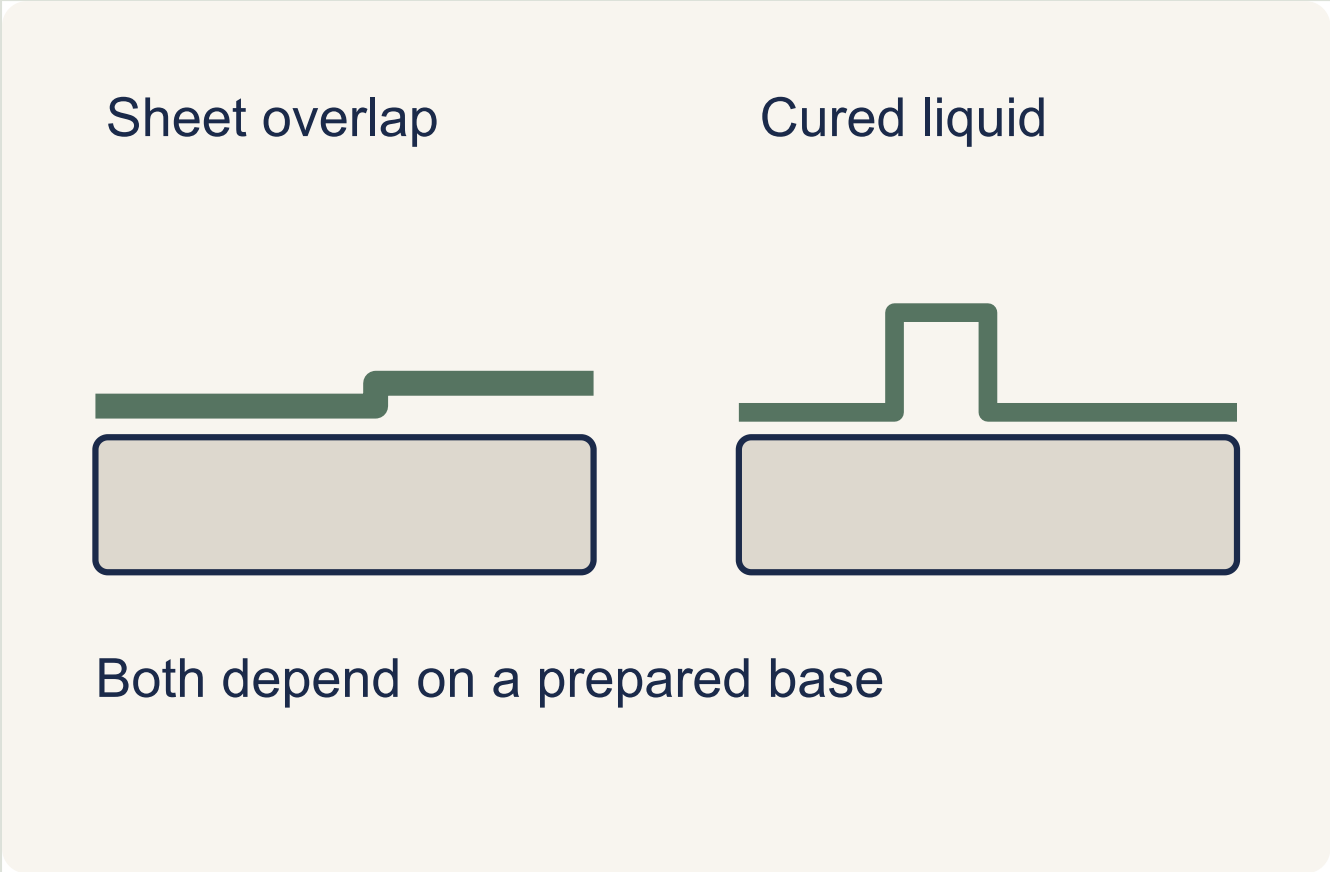
Sheet: joined at overlaps



The joint is part of the barrier.

Adjacent sheets rely on their bonded overlap to complete the waterproof barrier.

Two Fundamentally Different Approaches

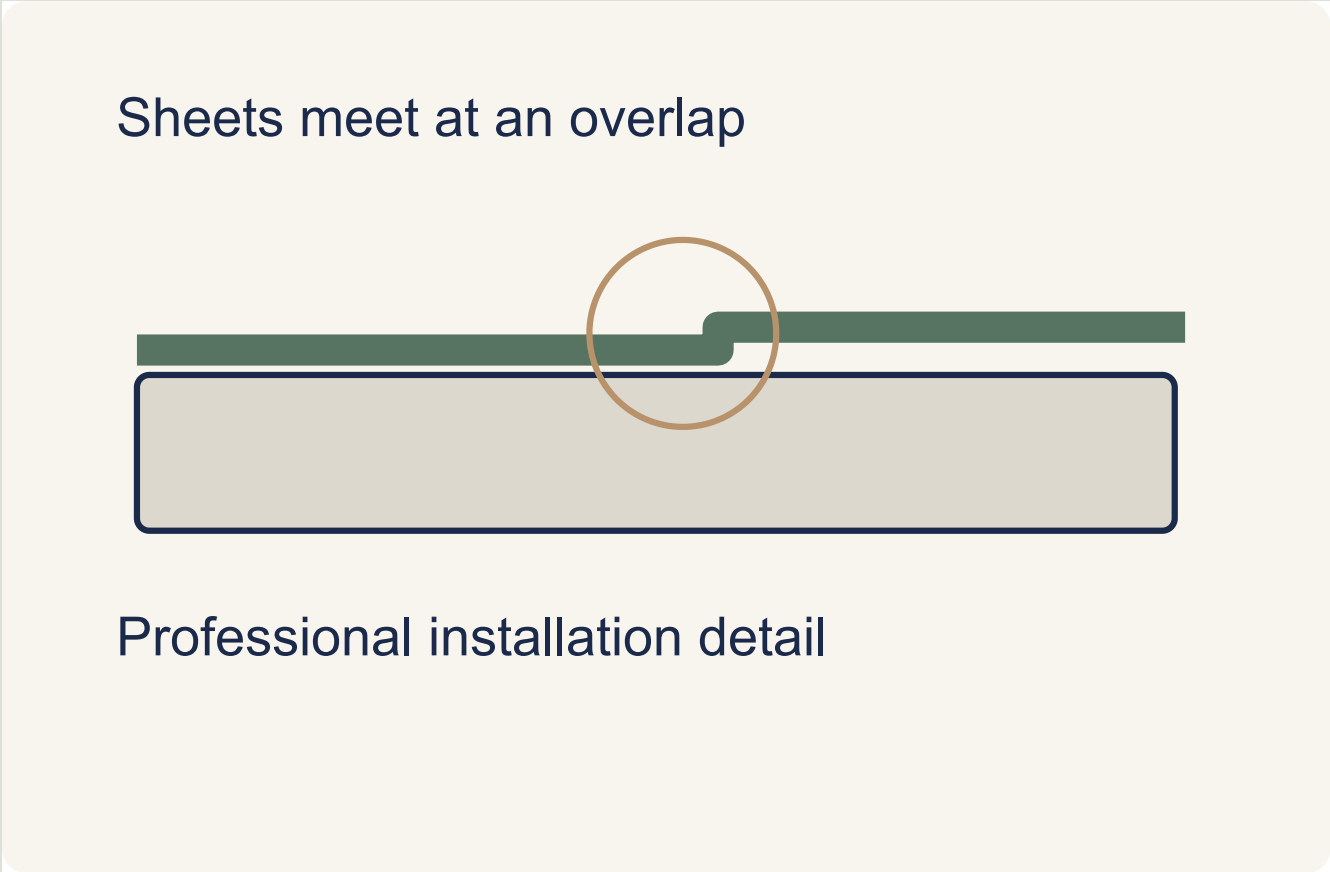


Sheets form a barrier through their overlaps, while a liquid system cures around the prepared roof details.

Torch-applied modified-bitumen sheets and liquid-applied membranes are two waterproofing approaches; other sheet-fixing methods also exist. The right choice depends on the substrate, exposure, details and permitted installation method. Compare complete systems rather than a universal durability ranking.

Understanding how each method works helps you ask the right questions when getting quotes, and spot when a contractor is recommending the wrong system for your situation.

How Torch-On Membrane Works



The overlap joins separate sheets into the specified waterproofing system.

Torch-on waterproofing uses pre-manufactured sheets of modified bitumen (APP or SBS modified) that are unrolled across the surface and bonded using a gas torch. The heat melts the underside of the membrane, fusing it to the substrate and to adjacent sheets at the overlaps. The result is a continuous, fully bonded waterproof barrier.

Thickness, layers, overlaps and protective finish follow the selected sheet-system specification. Suitability for sunlight, traffic or standing water must be confirmed for the complete specified system. An overlap width or sheet thickness taken from another product is not a substitute for its instructions.

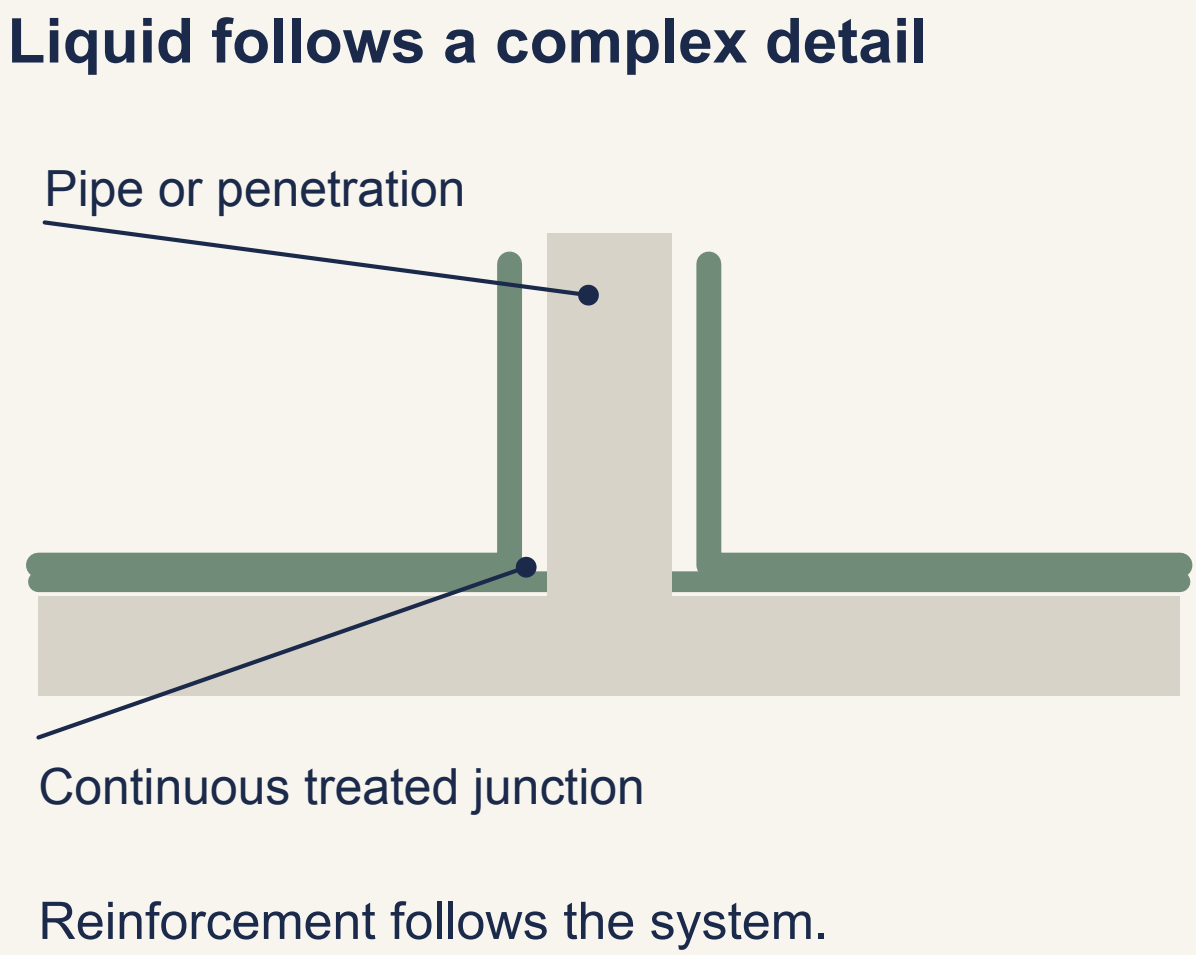
The process requires skilled applicators with experience using open flames safely. In Singapore, this means additional fire safety precautions during application, particularly on residential roofs near combustible materials.

Need advice for your home?

Tell us what you need on WhatsApp and send a few photos. We'll arrange a free site assessment, then give you a fixed-price quote within 3 to 5 working days.

WhatsApp us Try the free cost estimator

How Liquid Waterproofing Works



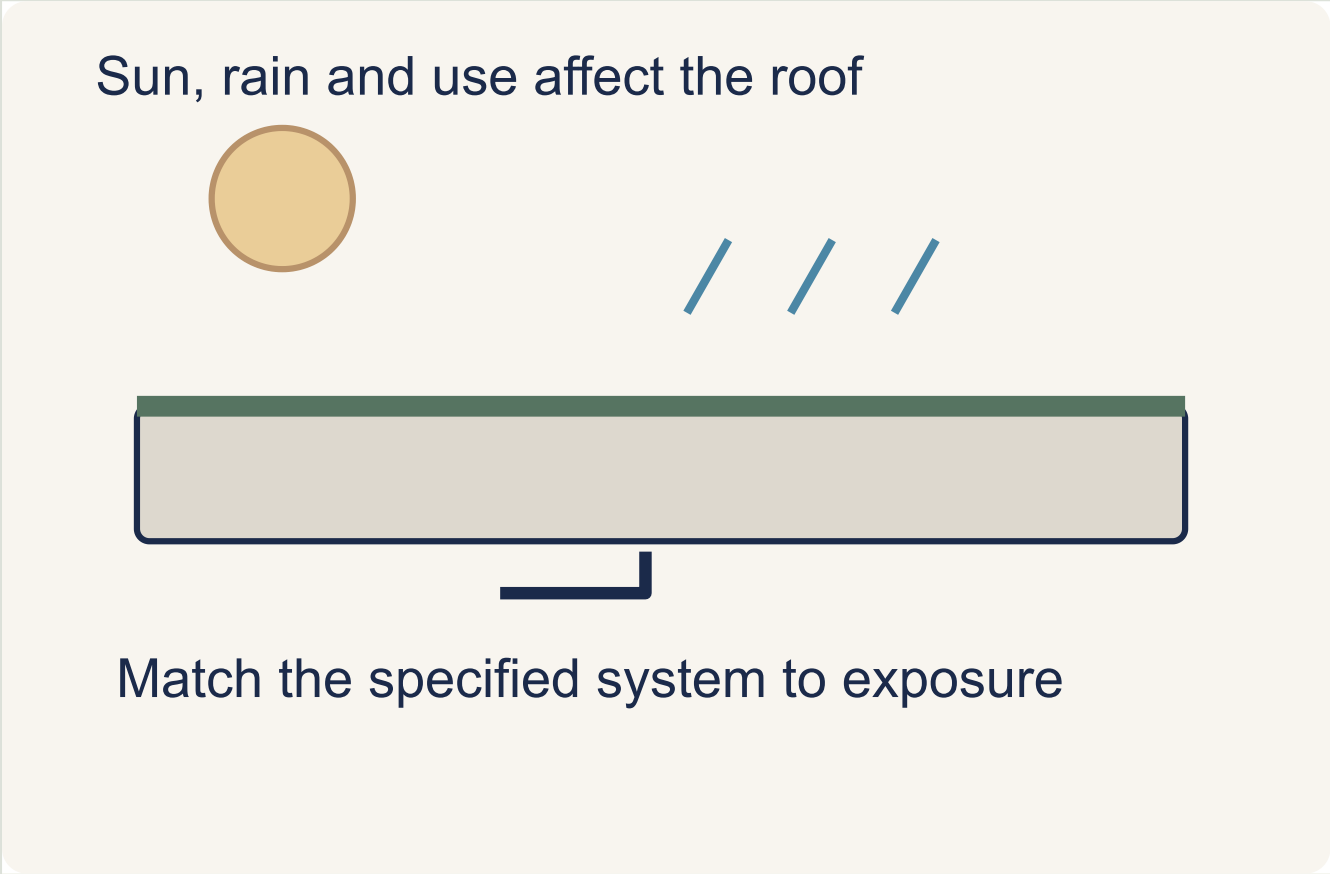
A liquid-applied system can follow a penetration’s shape, but the junction and any reinforcement must follow the specified system.

A liquid membrane is applied to a prepared substrate and cures into the specified waterproof layer. PU, acrylic and other formulations have different requirements. The installer must treat joints and details correctly rather than relying on liquid to fill every crack.

Application thickness, interval between coats and readiness for rain or use are product- and condition-specific. Cold application avoids a torch, but does not mean no hazards or preparation requirements. Agree weather protection and curing in the programme.

Reinforcement may be required at details or across the field of the membrane, depending on the system. Ask the contractor to identify the specified fabric and locations. More layers of an unspecified product do not automatically improve performance.

Durability and Performance



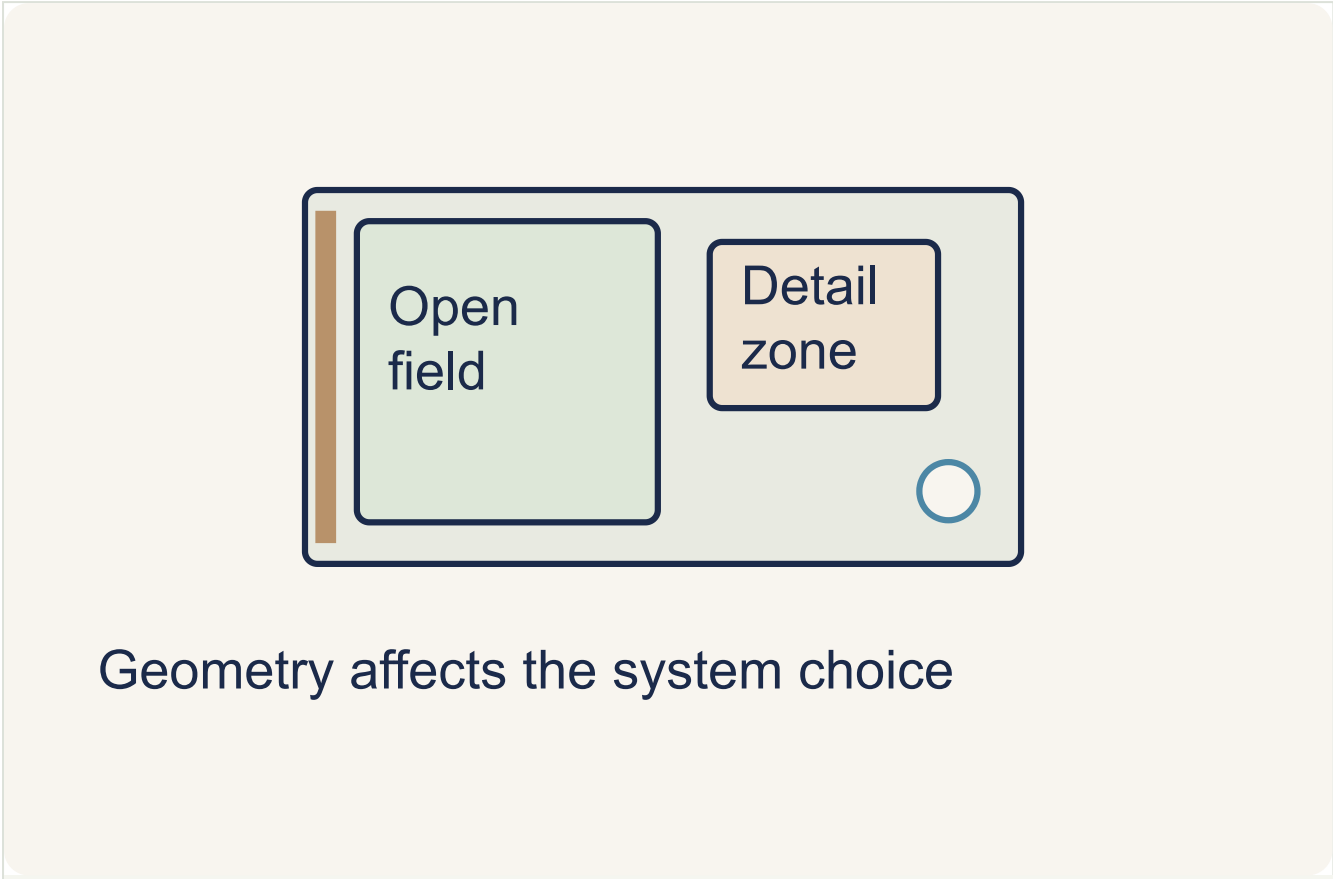
The selected roof system needs to suit its exposure to weather and the intended use of the surface.

Factory sheets provide a manufactured thickness, while liquid systems depend on achieving the specified coverage and cured film. Sheet laps and liquid details each need careful workmanship. Neither method is inherently the longest-lasting choice on every roof.

Maintenance and future repair also differ. A liquid recoat may be possible on a sound compatible base, while sheet repairs need suitable materials and joint work. No membrane can be extended indefinitely without reassessing the underlying condition.

Traffic, planted areas and equipment can require protective layers and additional design. Select a system approved for those conditions rather than assuming a particular chemistry tolerates roots, loading or ponding. Correct drainage remains necessary.

Best Applications for Each Method



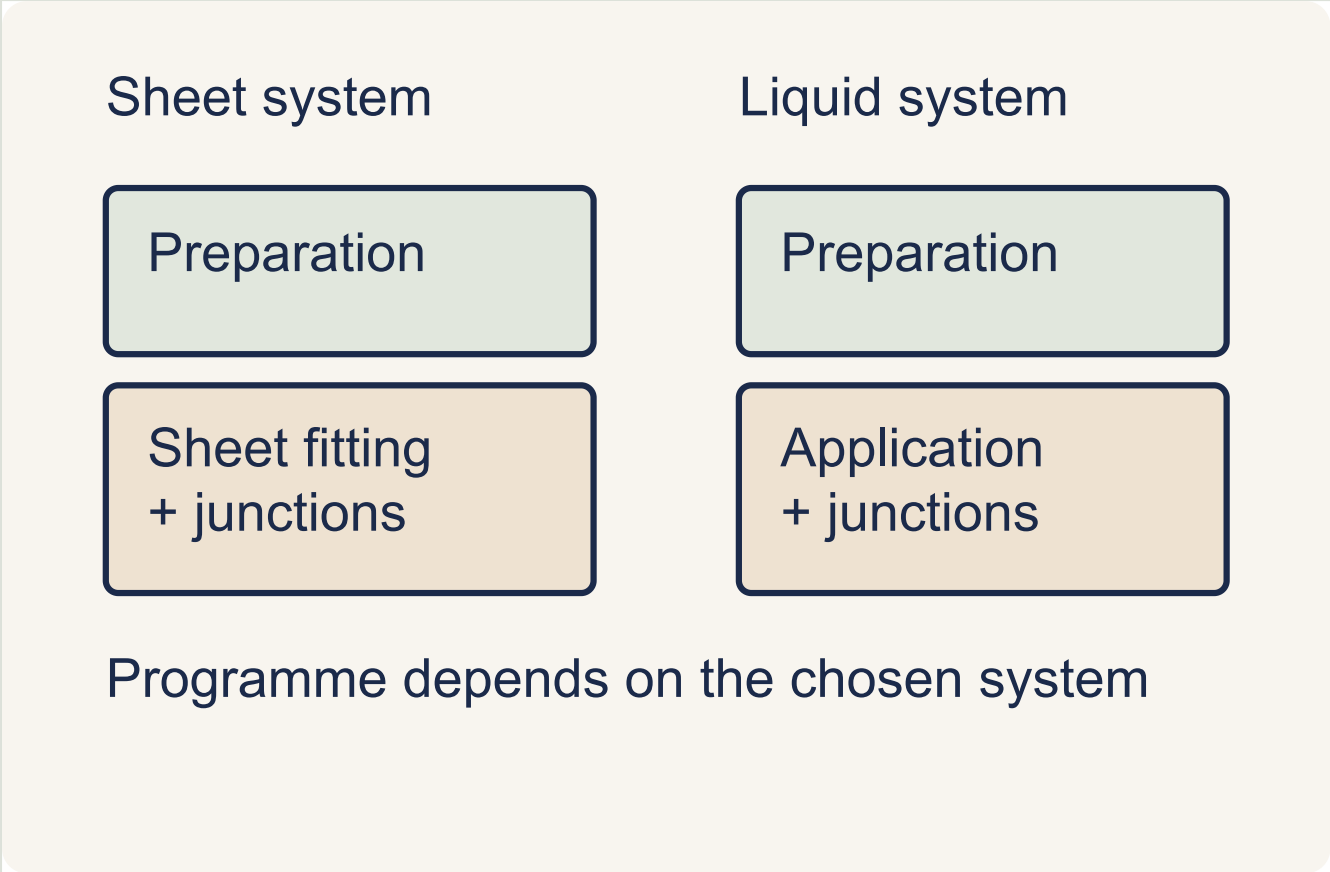
Large open areas and concentrated junctions create different application challenges.

A sheet system may be practical on accessible areas where its details and installation method suit the roof. Check hot-work constraints and protection of combustible construction before specifying torch application. Area alone is not a universal selection threshold.

Liquid systems can suit complex shapes where a compatible specification deals with junctions and penetrations. Recoating depends on the condition and compatibility of the existing layers. Ease of application around details does not remove the need for a sound base.

For wet rooms and balconies, specify the complete membrane and covering system for that use. Do not transfer a roof product into another setting based solely on its waterproofing label. The responsible designer and applicator should confirm suitability.

Cost and Practical Considerations



Compare the preparation, application and detail work included in each system's programme.

Compare quotations with equivalent preparation, access, details, protection and warranty. A sheet or liquid label does not establish a universal price premium or cost per year of life. The useful total is the one for the actual roof and maintenance scope.

Both approaches need suitable surface and weather conditions. Product instructions define acceptable substrate moisture, application conditions and curing. Do not assume a liquid coat can always be squeezed into a short gap between storms.

Have the contractor explain the selected approach against the inspection findings and intended roof use. Send DirectHome the current finish and leak history to discuss the scope, without climbing onto the roof.

Confirm professional inspection arrangements, availability and charges before booking. Retain the written diagnosis and complete system specification with the quotation.

> Compare preparation, access and repair work alongside the waterproofing treatment. roof waterproofing costs →

More on roof waterproofing

Article Water Pooling on Your Roof? Waterproofing Alone May Not Fix It

Article Can Roof Waterproofing Be Done in the Rain?

Article Roof Waterproofing Maintenance: What an Inspection Should Cover

Comparison Acrylic vs Torch-On Waterproofing in Singapore: Which to Pick in 2026

Need help with your project?

Tell us what you need on WhatsApp and send a few photos. We'll arrange a free site assessment, then give you a fixed-price quote within 3 to 5 working days.

WhatsApp us Get a quote

Our service

Roof Waterproofing for your home

Explore the service, then discuss what your home needs with our team.

View service details ↗
Still weighing your options?

Plan with the buying guide

Bring the choices, costs and questions together before deciding what to do next.

Read the roof waterproofing buying guide →

More roof waterproofing articles →