



Practical Guide to Covered Feedpads

Control feed, manage effluent, protect pasture and support production.



Feed Systems for Smarter, Stronger Farming

Across New Zealand, dairy farmers are under growing pressure to make their systems more efficient, more resilient and easier to manage year-round.

For some farms, the challenge starts with effluent. For others, it is feed wastage, heat stress, damaged pasture or the daily pressure of feeding cows in poor conditions. A covered feedpad helps bring those challenges back under control.

By putting a roof over one of the most important working areas on farm, farmers can separate clean water from dirty water, protect valuable feed, support cow comfort and reduce pressure on paddocks during wet periods.

Feed is one of the largest investments on any dairy farm. When it is exposed to rain, wind, mud or inconsistent access, losses add up quickly. A covered feedpad protects feed at the point it matters most, helping improve utilisation and giving cows more consistent access to their ration.

At the same time, keeping rain off the pad can reduce effluent volumes, make storage and spreading easier to manage, and support better separation of clean roof water from the effluent stream.

The benefits are not limited to winter. During summer, shade, airflow and roof clearance can help reduce heat stress and support more consistent intake when temperatures rise.

A well-designed covered feedpad is not just shelter. It is a practical farm system tool that supports four key areas:

Effluent control

Keep clean water clean and reduce pressure on storage.

Feed utilisation

Protect feed from rain, spoilage and wastage.

Heat stress management

Support intake, comfort and summer production.

Pasture protection

Get cows off paddocks during wet or high-pressure periods.

Aztech designs and builds covered feedpads across New Zealand, using our Futura Box Beam system to deliver strong, open, naturally ventilated structures that are built for real farm conditions.

Backed by decades of rural construction experience, we work alongside farmers to design each feedpad cover around the site, herd, feeding system, effluent setup and long-term direction of the farm.

Contents

Introduction	2
Challenge 1: Effluent Control	4
Challenge 2: Feed Utilisation	6
Challenge 3: Heat Stress	8
Challenge 4: Getting Cows off Pasture	10
Case Study: Honeysett Feedpad Cover	14
Before & After: Exposed to Controlled	18
Feedpad Configurations	20
Feedpad Cover Projects	22
Bins vs Lanes	30
Cleaning & Daily Operation	32
Case Study: Barrett Feedpad Cover	34
Typical ROI & Results	36
FAQs	40

Challenge 1:

Effluent Control

Keep Clean Water Clean and Dirty Water Managed

For many farms, the covered feedpad conversation starts with effluent.

Uncovered feedpads allow rainfall to mix with effluent. This increases the volume of liquid that needs to be collected, stored and spread, without adding nutrient value. During prolonged wet periods, that extra water can place real pressure on storage capacity, spreading windows and day-to-day compliance confidence.

A covered feedpad changes that at the source.

By keeping rain off high-use areas, clean roof water can be separated from effluent runoff. Volumes become more predictable, storage is easier to plan around and the whole system becomes simpler to operate.

CLEAN WATER VS DIRTY WATER: CONTROL STARTS AT THE FEEDPAD

Rain falling onto an open feedpad adds volume without adding value. That water still has to be handled as part of the effluent system, even though it contributes no useful nutrient benefit.

A covered feedpad allows farmers to:

- Separate clean roof water from effluent runoff
- Reduce dilution of effluent during wet periods
- Make better use of storage and spreading capacity
- Lower pressure during extended rainfall events
- Capture clean roof water for reuse, where suitable

This separation is especially important as regional requirements continue to evolve. While rules vary across New Zealand, the principle remains the same: keep clean water clean, manage dirty water deliberately and design the system around the farm's local requirements.

Effluent rules vary by region, so the most important part is getting the system design right from the start.

REDUCED PRESSURE ON PASTURE AND INFRASTRUCTURE

Uncontrolled runoff from open feedpads can contribute to saturated soils, pasture damage, tracking effluent into clean areas and increased pressure around high-use zones.

A covered feedpad helps contain and control where water and nutrients go. This keeps surrounding areas more stable, protects nearby pasture and reduces the amount of weather-related clean-up required after wet periods.

CAPTURING RAINFALL & REUSING IT WELL

With a covered feedpad, clean roof water can be captured separately and reused where it adds value on farm.

Common reuse options include:

- Yard, dairy shed and race washdown
- Irrigation or non-potable water needs
- Reducing reliance on groundwater or reticulated supply.

Rather than becoming part of the effluent problem, rainfall becomes a managed resource.

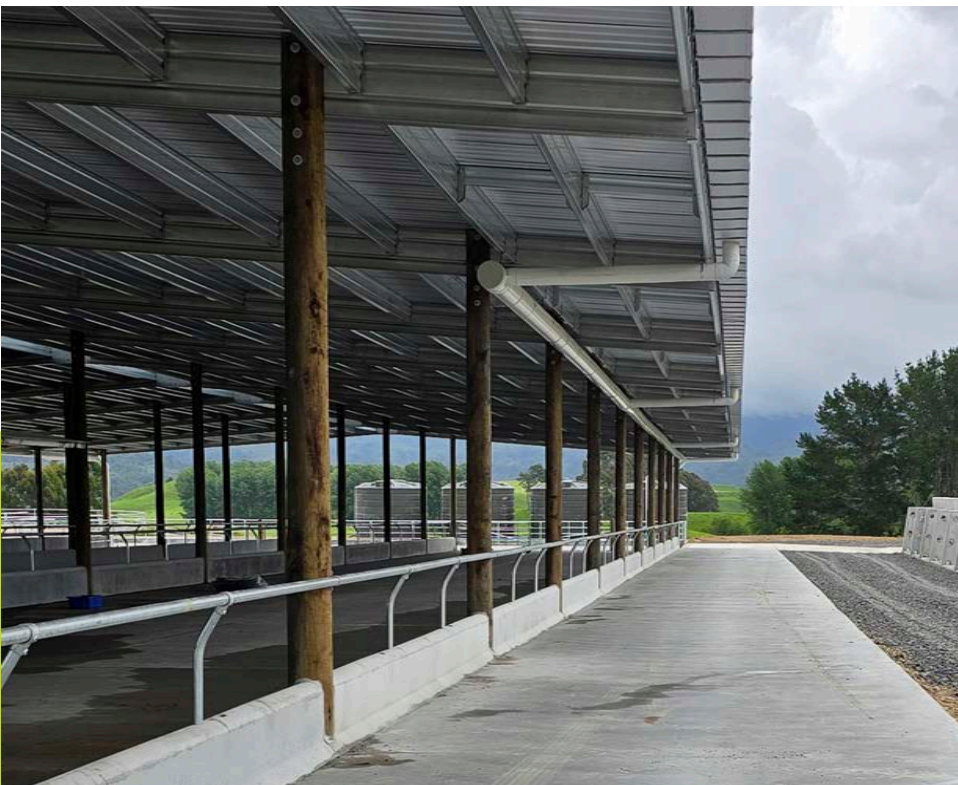
COMPLIANCE CONFIDENCE WITHOUT COMPLEXITY

A covered feedpad can make effluent systems easier to explain, monitor and manage because it removes one of the biggest variables: uncontrolled rainfall entering the effluent stream.

A well-designed system supports:

- Better separation of clean and dirty water
- More predictable effluent volumes
- Less pressure on storage
- Greater confidence during wet periods
- A clearer pathway for future infrastructure planning

A covered feedpad is not just a roof over concrete. It is a way to control water, protect feed, support cows and take pressure off the wider farm system.



Challenge 2:

Feed Utilisation

The feed you buy, should be the feed cows eat

Feed is one of the largest and most controllable costs on any dairy farm. But when feed is exposed to rain, wind, mud and inconsistent access, losses can add up quickly.

For many farmers, improving feed utilisation is one of the biggest reasons to cover a feedpad.

A covered feedpad protects feed at the point it matters most: when it is placed in front of cows. By keeping feed dry, accessible and protected from the weather, farmers can reduce waste, support more consistent intake and make better use of the feed they are already investing in. When feed is protected, more of what is put out has the opportunity to be converted into production.

REDUCING FEED WASTAGE IN WET CONDITIONS

On exposed feedpads, rainfall can quickly reduce feed quality. Wet feed becomes less palatable, more likely to spoil and more likely to be rejected, trampled or pushed away from the feed face.

Rain and wet conditions can contribute to:

- Clumping and spoilage of feed
- Loss of dry matter before intake
- More rejected or trampled feed
- Inconsistent feeding behaviour
- Extra clean-up and replacement feed costs

Under cover, feed stays drier and more stable. This helps ensure the ration presented to cows is closer to the ration they actually consume. For farmers buying in supplement or relying on mixed rations, even small daily improvements in feed utilisation can have a meaningful impact across a season.

MORE CONSISTENT INTAKE

Cows respond quickly to changes in feed quality, access and comfort. When weather disrupts feeding, intake becomes less consistent, which can affect milk production, body condition and overall system performance.

A covered feedpad supports:

- Reliable access to feed in wet or hot conditions
- More consistent feeding routines day to day
- Less interruption during prolonged rainfall
- Better feed-face access and cow flow
- Reduced reliance on feeding out in paddocks during poor conditions

Under cover, intake is driven more by feed strategy and management, rather than mud, rain or weather disruption.

PROTECTING MARGIN, NOT JUST FEED

Feed wastage is not just a mess to clean up. It is margin being lost before it has the chance to become milk.

A covered feedpad helps protect that margin by creating a more controlled feeding environment. Feed is kept drier, cows have more reliable access, and the daily feeding routine becomes easier to manage.

For many farms, this is where the value of a covered feedpad becomes very practical. It is not just about putting a roof over a pad. It is about making sure the feed you buy is protected, presented well and used efficiently.

SUPPORTING LABOUR EFFICIENCY

Wet feeding conditions also create extra work. Staff may spend more time cleaning spoiled feed, working around muddy areas, managing slippery surfaces or adjusting feeding routines around the weather. A covered feedpad helps simplify daily operation by creating a more predictable feeding environment.

This can support:

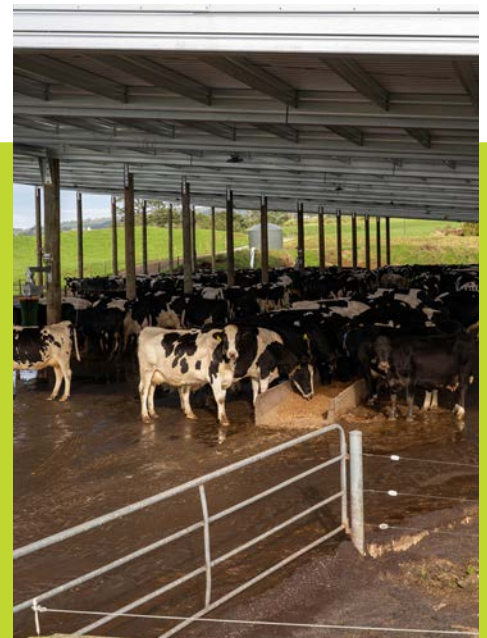
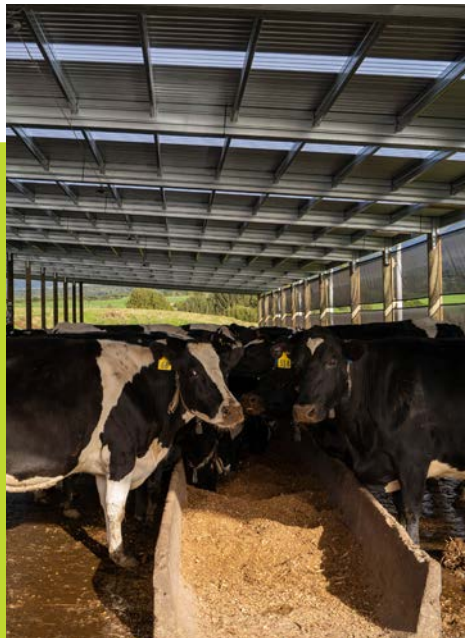
- Faster feed-out routines
- Less weather-related disruption
- Easier clean-up
- Safer machinery movement
- A more reliable day-to-day system

These labour gains may seem small in isolation, but across weeks and seasons they can make the feeding system easier and more efficient to run.

YEAR ROUND SYSTEM RELIABILITY

A feedpad that can be used confidently in all conditions becomes part of the core farm system, not just a wet-weather backup. When feed stays protected and cows can access it consistently, the whole farm system becomes more controlled.

Feed utilisation is simple: the less feed lost to weather, spoilage and trampling, the more opportunity there is to turn feed into production.



Challenge 3:

Heat Stress

Cooler cows keep eating

Heat stress is one of the most underestimated challenges in New Zealand dairy systems. Long before cows show obvious signs of heat stress, rising temperatures can begin to affect feed intake, rumination, milk production and recovery. When cows are too hot, they spend less time eating and more energy trying to cool themselves down.

For many farms, this can quietly limit production through summer and into the shoulders of the season. A covered feedpad helps by creating a more controlled feeding environment. By removing direct solar load, improving shade and supporting natural airflow, cows can access feed in a cooler, more comfortable space.

When cows stay cooler, they are more likely to keep eating. When they keep eating, production is easier to protect.

HEAT STRESS STARTS BEFORE YOU SEE IT

Heat stress does not always look dramatic at first. A cow does not need to be visibly struggling for heat to be affecting her performance.

During hot or humid conditions, cows may:

- Eat less
- Spend less time ruminating
- Stand for longer periods
- Drink more but consume less feed
- Produce less consistently
- Take longer to recover after hot spells

Even short heat events can have a flow-on effect. Reduced intake today can affect production tomorrow, and repeated heat pressure can contribute to seasonal dips that are difficult to recover from.

SHADE, AIRFLOW AND CLEARANCE WORKING TOGETHER

Effective cooling is not just about creating shade. It is about designing a structure that supports air movement, comfort and heat escape.

Aztech feedpad covers can support heat stress management through:

- Permanent roofing that reduces direct solar load
- Open-sided layouts that encourage natural airflow
- High roof clearances that allow warm air to rise
- Optional ridge vents to help release hot air
- Clear, open layouts that support cow flow and reduce congestion

This creates a noticeably more comfortable environment for cows to feed, move and stand, especially during peak summer temperatures.

PROTECTING INTAKE THROUGH SUMMER

Summer production is strongly linked to how well cows maintain intake. When cows are exposed to direct sun and heat, intake can drop. If they are spending less time eating, it becomes harder to maintain milk flow, body condition and late-season performance.

A covered feedpad gives cows a more reliable place to access feed during hot conditions.

This can support:

- More consistent feed intake
- Reduced production dips during hot periods
- Better cow comfort through summer
- Improved body condition heading into autumn
- Greater confidence in late-season feeding strategy

For many farmers, the summer value of a covered feedpad is just as important as the winter value.

BUILT FOR HOTTER, MORE VARIABLE CONDITIONS

As weather patterns become more variable, farmers need infrastructure that can support the herd in both wet and hot conditions.

A covered feedpad is not just a winter shelter. It can also become a key part of the farm's summer management strategy, helping reduce heat pressure, protect intake and keep cows feeding when conditions are working against them. With the right design, a covered feedpad supports cow comfort year-round.

Heat stress is a silent production limiter. Cooler cows keep eating, and when cows keep eating, production follows.

"Reducing a cow's body temperature by just 1 degree on a hot day can result in approximately 1 litre of additional milk per hour." Dr Sue Macky



Challenge 4:

Getting Cows Off Pasture

Protect pasture before the damage is done

Wet paddocks, high cow traffic and repeated feeding pressure can quickly turn a productive pasture system into a recovery problem.

For many farms, one of the biggest advantages of a covered feedpad is the ability to get cows off pasture when conditions are working against them. This is not about removing cows from grass completely. It is about having a controlled area available when paddocks need protection, feeding needs to be more consistent or weather is placing extra pressure on the farm system.

A covered feedpad gives farmers more choice. Cows can be brought onto the pad during wet periods, high-risk grazing windows, summer heat or times when pasture needs time to recover.

By reducing pressure on paddocks, farmers can protect pasture, preserve soil structure and make better decisions around grazing, feeding and herd movement.

REDUCING PUGGING AND SOIL DAMAGE

When cows are on saturated paddocks, damage can happen quickly.

Wet conditions and repeated hoof traffic can contribute to:

- Pugging and soil compaction
- Damaged pasture covers
- Slower pasture recovery
- Increased need for under-sowing or re-sowing
- Reduced feed availability later in the season
- More pressure on staff, machinery and grazing decisions

Once pasture is damaged, the cost is not just immediate. It can affect future growth, rotation planning and the amount of supplementary feed required to fill the gap. A covered feedpad helps reduce that pressure by giving cows a stable, purpose-built area to stand and feed when paddocks are vulnerable.

FEEDING WITHOUT SACRIFICING THE Paddock

Feeding out in paddocks during wet conditions can create a double loss. Feed can be wasted through trampling, mud and weather exposure, while the paddock underneath is damaged at the same time. A covered feedpad helps separate feeding from pasture pressure. Feed can be delivered in a controlled environment, cows can access it more consistently, and paddocks are not carrying the same level of traffic during high-risk periods.

This supports:

- Better pasture recovery after wet weather
- Less feed wasted in mud or poor conditions
- Improved control over cow movement
- More strategic use of grazing areas
- Greater flexibility during winter and shoulder seasons

MORE CONTROL THROUGH WINTER

Winter places some of the highest pressure on pasture, effluent systems and daily feeding routines. A covered feedpad can help farmers manage that pressure by creating a reliable place to feed and hold cows when paddocks are too wet or access becomes difficult.

This can support farms that want to:

- Reduce damage during prolonged wet periods
- Keep more cows on-farm where suitable
- Protect pasture during winter grazing pressure
- Improve feeding consistency when conditions are poor
- Reduce reliance on reactive decision-making

For some farmers, this may also support a shift in wintering strategy, depending on the farm system, infrastructure and feed plan.

A MORE FLEXIBLE FARM SYSTEM

The value of getting cows off pasture is not limited to winter.

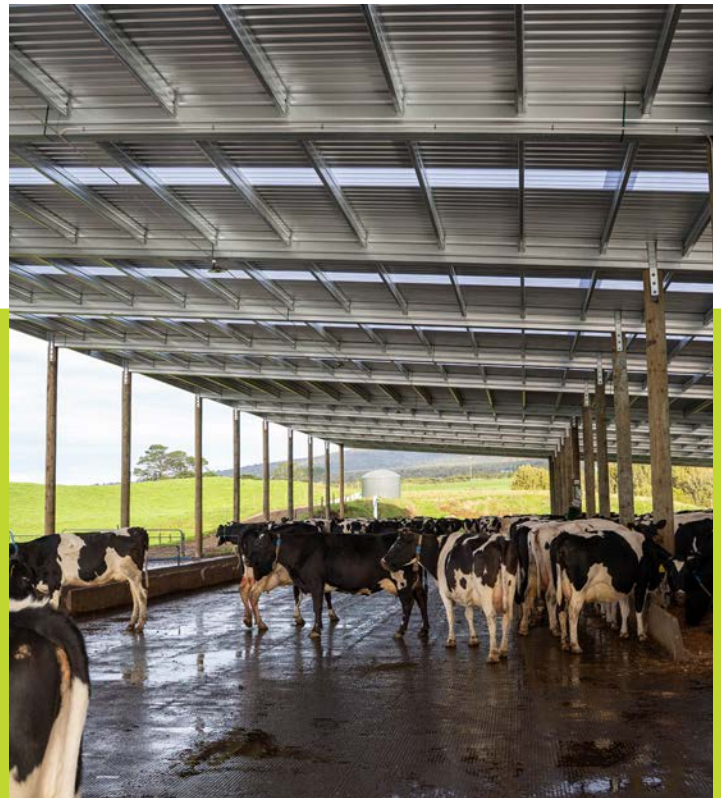
A covered feedpad can also support pasture protection during wet spring conditions, dry summer pressure, autumn transitions and periods of high cow movement.

When farmers have a protected area available, they have more options.

They can feed more consistently, protect vulnerable paddocks, manage cow flow and respond to weather without the same level of disruption.

A covered feedpad does not replace good pasture management. It strengthens it.

Pasture protection is not just about avoiding damage today. It is about preserving future growth, protecting soil structure and giving the whole farm system more flexibility.



Built for Today. Designed for What's Next.

As climate conditions continue to shift, structures that actively manage heat will become increasingly important. A covered feedpad does more than protect cows today. It strengthens the resilience of your feeding system, giving you confidence that production can be maintained through hotter summers and more variable weather patterns.



McLeod Feedpad Cover, Edgecumbe, Bay of Plenty
70m Long by 26m Wide



Pease Feedpad & Yard Cover, Southland
180m Long by 8m Wide



Case Study:

Matt Honeysett, South Wairarapa



Feedpad Cover Size: 128m Long x 21m Wide

Location: Featherston, South Wairarapa

Herd Size: 720 Cows



FROM 525,000KGMS TO 670,000KGMS
107KGMS INCREASE PER COW
1,350 COW HERD
389KGMS/COW TO 496KGMS/COW

When Matt Honeysett installed his covered feedpad, the goal was to create a more reliable feeding system, protect feed and support stronger production consistency across the season.

Since then, the results have continued to build.

In the two seasons before the feedpad cover, the farm produced around 525,000kgMS. In the first season after installation, production lifted to 640,000kgMS. This season, the farm has reached 670,000kgMS from a 1,350-cow herd.

That represents an average lift from 389kgMS per cow to 496kgMS per cow, an increase of 107kgMS per cow.

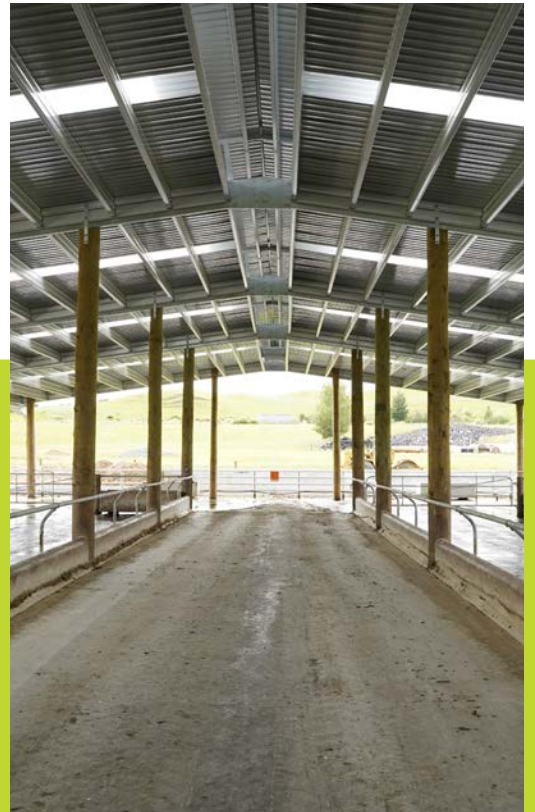
For Matt, the covered feedpad has become more than shelter. It is now a central part of the farm's feeding system, helping protect feed, improve cow flow and support more consistent production.

STRENGTHENING THE WIDER FARM SYSTEM

Before installing the covered feedpad, Matt would typically winter all cows off-farm. He is now keeping the majority of the herd on-farm, supported by improved pasture growth and the stability the covered feedpad provides.

Since then, the farm has continued to invest in the wider feeding system around it. Matt has recently completed a major feed storage area, including three large concrete bunkers, creating more capacity and control around feed management.

This next stage reflects the role the covered feedpad now plays in the broader operation. Rather than being a standalone structure, it has become part of a larger, more efficient farming system. With feed better protected, cow flow improved and the daily feeding environment more controlled, the farm has been able to keep building around the infrastructure already in place.



By keeping rain out, feedpad covers reduce effluent pressure and make the whole system easier to manage.





Udderfield Knowles Feedpad Cover, Stratford
82m Long x 25m Depth



Before & After

From Exposed Pad to Controlled System

An uncovered feedpad can work well in ideal conditions, but weather quickly exposes the pressure points.

Rain adds unnecessary volume to the effluent system. Feed becomes wet, spoiled or trampled. Cows are exposed to heat, mud and changing conditions.

A covered feedpad changes the system at the source. By protecting the pad, farmers can create a more controlled environment for feeding, effluent management, cow comfort and daily operation. The result is not just a drier pad. It is a more reliable farm system.

BEFORE COVER

- Rainfall enters the effluent stream
- Feed is exposed to weather
- Wet feed is more likely to be rejected or wasted
- Cows remain exposed to heat and wet conditions
- Daily routines are more weather-dependent

AFTER COVER

- Clean roof water can be separated from effluent
- Feed stays drier and more protected
- Cows have more consistent access to feed
- Shade and airflow support cow comfort
- Cows can be moved off pasture when needed
- Feeding, cleaning and cow flow become easier to manage

A covered feedpad is not just about improving one part of the farm. It helps bring multiple pressure points into one controlled, purpose-built area.



Project Highlight

McCullough

Feedpad Cover

75m Long x 27m Wide

Constructed using Timber Poles with a Futura Box-Beam Steel Roof Structure.

Herd Size: 600 Cows
Waipa, Waikato

Practical system built for year round control

Located in Waipā, Waikato, the McCullough feedpad cover was designed to support a 600-cow herd with a more reliable and protected feeding environment.

For a farm system where feed efficiency, cow comfort and day-to-day practicality matter, this covered feedpad creates a more controlled environment that works across wet weather, summer heat and seasonal pressure.



Feedpad Configurations

Designed around how you farm actually works

No two dairy farms run the same way. Herd size, cow flow, feed delivery, machinery access, effluent systems, existing concrete and future growth plans all influence what the right covered feedpad should look like.

That is why a covered feedpad should never be treated as a one-size-fits-all structure.

Whether you are covering an existing pad or planning a new build, the layout needs to support how cows move, how feed is delivered and how the system will operate every day.

A well-designed feedpad cover should make the farm easier to run, not create new restrictions.

COVERING AN EXISTING FEEDPAD

Many farms already have a feedpad or concrete area that works well, but is exposed to weather. Covering an existing pad can be a practical way to improve feed protection, reduce rainfall entering the effluent system and make the area more useful year-round, without starting again from scratch.

Retrofitting can help farmers:

- Protect feed without rebuilding the full pad
- Reduce clean water entering the effluent stream
- Improve cow comfort and feeding conditions
- Keep existing cow flow and machinery access where possible
- Upgrade infrastructure in stages

The key is designing around what is already working, while improving the parts of the system that are under pressure.

GREENFIELD FEEDPAD BUILDS

For farms planning a new feedpad, a greenfield build gives more flexibility from the start.

This allows the full system to be planned around:

- Cow entry and exit points
- Feed lane or bin placement
- Machinery movement
- Clean water and effluent separation
- Drainage and washdown
- Future herd growth
- Integration with other infrastructure

Greenfield builds are often a good fit for farms that are expanding, changing their feeding strategy or wanting to design a long-term system from the ground up.

BUILT AROUND COW FLOW, FEED FLOW AND FUTURE GROWTH

The best feedpad configuration is the one that works naturally with the farm.

This means thinking about:

- How many cows need to feed at once
- How cows enter, move through and leave the pad
- How feed is delivered
- What machinery needs access
- How cleaning will work
- Where clean water and effluent will go
- Whether the structure may need to be extended later

Aztech's Futura Box Beam system allows for wide, open spaces with minimal internal obstruction, helping maintain machinery access, cow flow and flexible layout options.

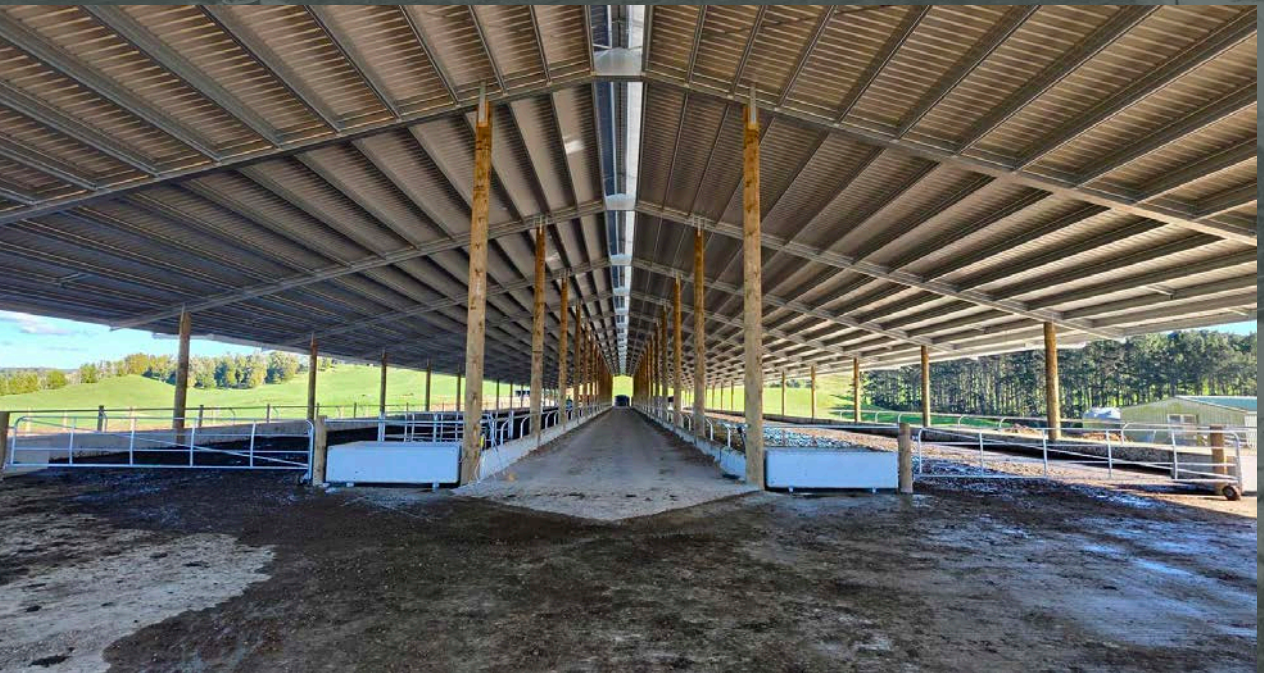
TYPICAL CONFIGURATION OPTIONS

Covered feedpads can be designed for a range of situations, including:

- Clearspan gable covers
- Monoslope covers
- Gable centre feedpad covers
- Feed lane layouts
- Feed bin layouts
- Single or multi-lane systems
- Retrofit covers over existing concrete
- Large-scale greenfield systems
- Tractor laneways and cow races

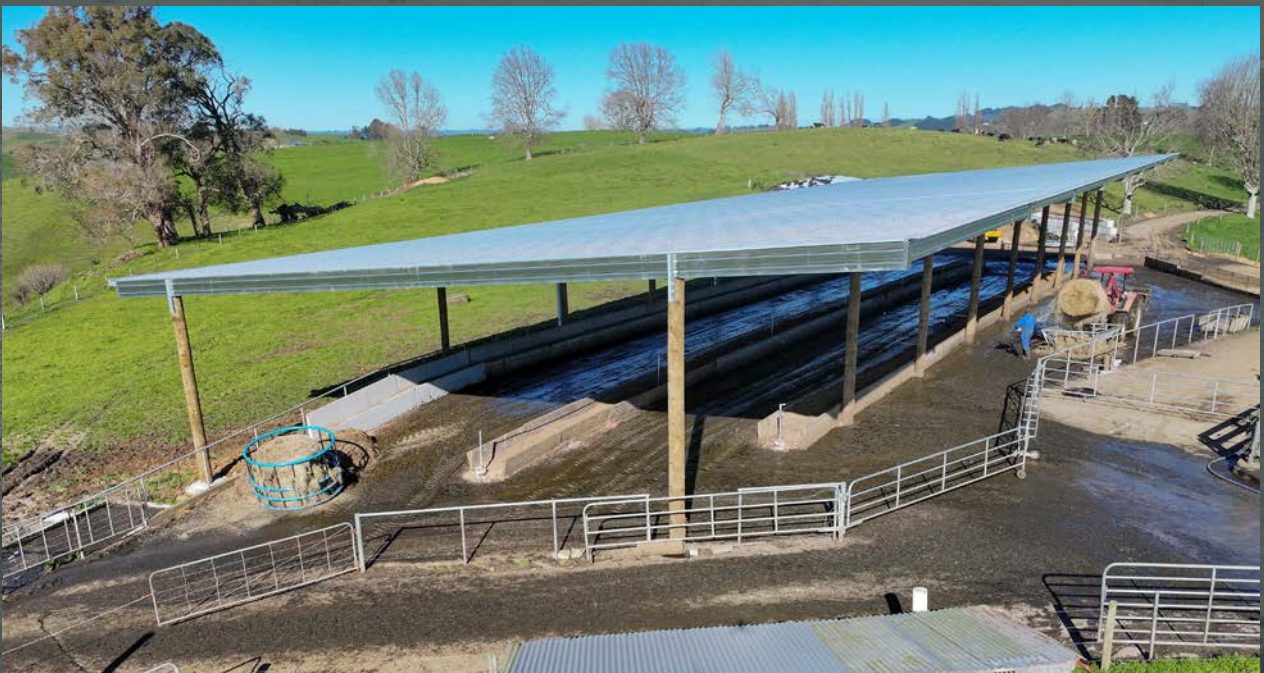
The right option depends on the farm, the herd and the long-term plan. A good layout should support the way the farm operates today, while leaving room for how it may need to work tomorrow. Strong design should enhance your system, not force the farm to work around the





Ormsby Feedpad Cover, Waikato
144m Long x 29m Wide



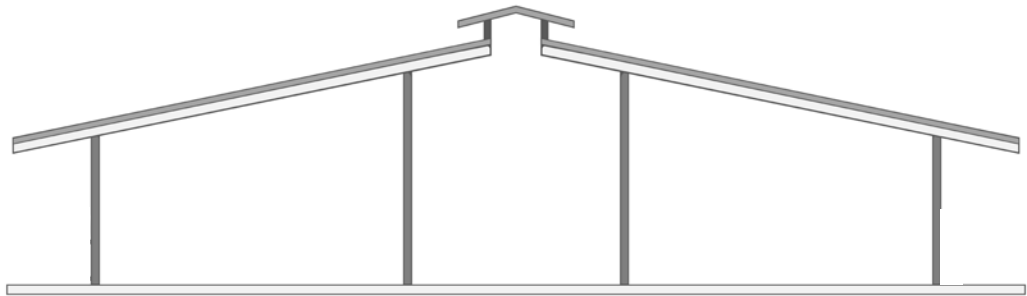


Collinson-Smith Feedpad Cover, Waikato
59.7m Long x 14.5m Wide

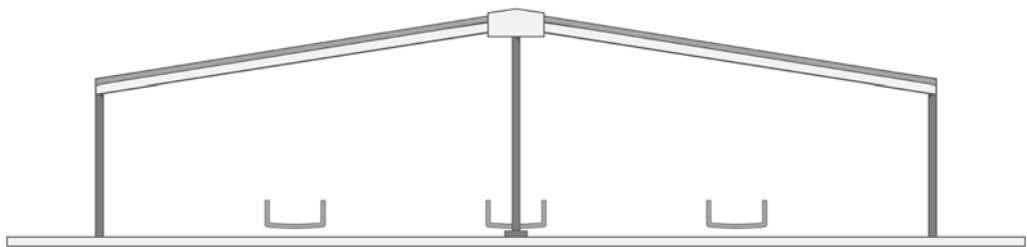


Feedpad Configurations

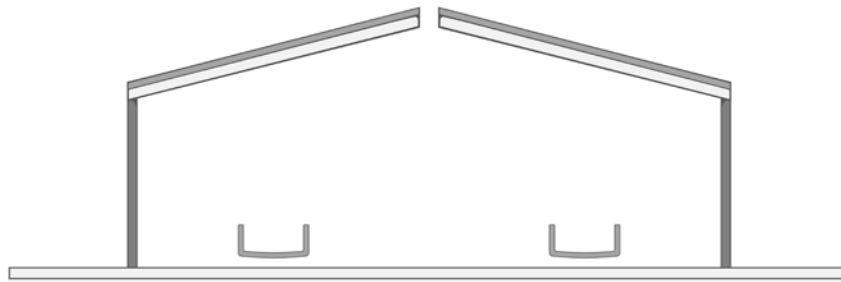
Our Most Common Feedpad Cover Configurations



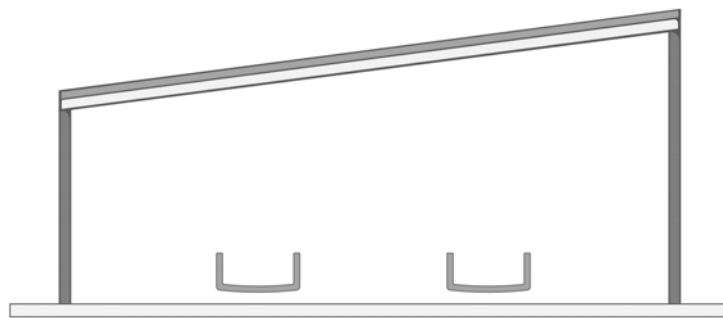
Aztech Feedpad Cover with Centre Lane
A typical feedpad set up with feed lanes



Aztech Gable Centre Feedpad Cover



Aztech Clearspan Gable Feedpad Cover



Aztech Clearspan Monoslope Feedpad Cover

Purpose-built configurations for real farm systems. Designed around cow behaviour, feed delivery, and daily operation.



Lockett Feedpad Cover, Waikato
91m Long x 18m Depth





Dyer Feedpad Cover, Taupo, Waikato
88.3m Long x 25.5m Depth



Project Highlight

Airlie Lodge

Feedpad Cover

128m Long by 46m Wide

Constructed using Timber Poles with a Futura Box-Beam Steel Roof Structure.

Herd Size: 1000 Cows

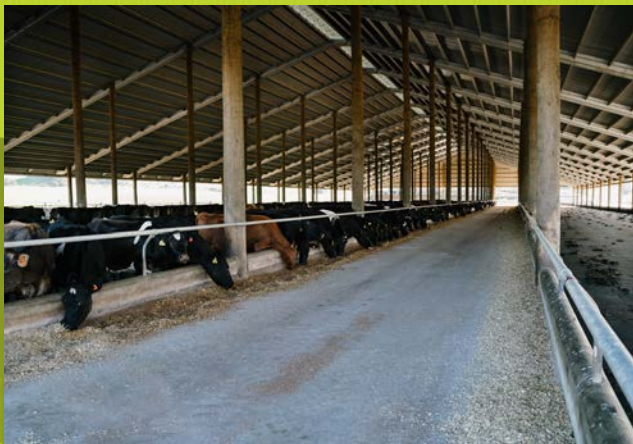
Richmond Downs, Piako, Waikato

Protecting Feed, Cows and Farmer Peace of Mind

A structure that keeps cows dry, feed protected and farm operations running smoothly, no matter the season.

Nestled in the lush dairy country of Waikato, this feedpad cover was purpose-built to keep cows warm and dry during the region's notoriously wet seasons.

The design provides excellent protection while allowing natural ventilation through a central ridge vent, ensuring both durability and cow comfort year-round.



Project Highlight

Simpson Farms

Feedpad Cover

96m Long by 63m Wide

Constructed using Timber Poles with a Futura Box-Beam Steel Roof Structure.

Herd Size: 900 Cows
Te Kauwhata, Waikato

Designed to feed the entire herd at once

Mike and Trevor knew incremental tweaks wouldn't deliver the future they wanted.

They were chasing better animal welfare, stronger production, protected pasture, and lower environmental impact.

After visiting eight farms and learning firsthand what worked and what didn't, they made a bold move. A purpose-built 6,100m² covered feed pad designed to feed the entire herd in one sitting.



Bins vs Feed Lanes

Choosing the right feeding setup for your Farm

When planning a covered feedpad, one of the biggest layout decisions is how feed will be delivered and accessed.

Both feed bins and feed lanes can work well. The right option depends on herd size, feeding style, machinery access, labour availability and how the system needs to perform long-term.

The structure should support the way you farm, not force you into a layout that does not suit your operation.

FEED LANES

Feed lanes are commonly used where efficiency, access and cow flow are priorities.

They are often well suited to farms that need:

- Fast and efficient feed-out with tractors, wagons or mixer wagons
- Strong feed-face access
- Clear machinery movement through the pad
- Consistent cow flow
- A system that can scale as herd numbers or feed requirements grow

Feed lanes generally allow more cows to access feed at once, helping reduce competition and support more consistent intake across the herd.

For medium to large-scale operations, feed lanes are often the most practical and scalable option.

FEED BINS

Feed bins can be a good fit where flexibility, targeted feeding or lower upfront infrastructure is important.

They are often suited to farms that want:

- A more flexible feeding layout
- Targeted supplement feeding
- Lower initial setup costs
- The ability to move or reconfigure feeding areas
- A practical option for smaller herds or staged upgrades

Bins can work well when feed allocation needs to be more controlled. However, in larger systems, they may require more manual handling, limit feed-face access and create more competition at feeding time if not carefully planned.



WHICH OPTION IS RIGHT?

Choosing between bins and feed lanes comes down to six key questions:

- How many cows need to feed at one time?
- How often are you feeding out?
- What machinery needs to move through the pad?
- How much labour do you want tied up in daily feeding?
- Will the system need to expand in the future?
- What are the costs involved now and in the future

There is no one-size-fits-all answer.

The best feeding setup is the one that gives cows consistent access to feed, keeps daily labour efficient and leaves room for the farm to grow.

A good covered feedpad starts with the way your farm actually works. The feeding layout

Simple by Design. Efficient in Practice

Cleaning and Daily Operation

One of the first questions farmers ask about a covered feedpad is simple: how easy is it to clean?

With the right design, a covered feedpad should make daily operation easier, not harder.

By keeping clean roof water separate from effluent, designing the pad with the correct fall and directing runoff toward the right collection points, cleaning becomes more predictable and controlled.

Instead of working around rain, mud and inconsistent conditions, farmers can manage feeding and washdown in a purpose-built area that is designed to handle daily use.

DESIGNED FOR FLOW

Every feedpad needs to move water and effluent in the right direction.

A well-designed pad uses controlled fall, drainage channels and collection points to reduce pooling and support efficient clean-up.

This helps create:

- Faster washdown
- Reduced pooling or standing effluent
- Cleaner, safer surfaces underfoot
- Better control of effluent movement
- A more predictable daily routine

When slope and drainage are planned correctly from the start, cleaning becomes part of the system rather than a reactive job after bad weather.

FLOOD WASH AND GREENWASH SYSTEM

For larger operations, flood wash systems can provide an efficient, lower-labour way to clean the pad. These systems release water in controlled bursts across the surface, using the fall of the pad to move effluent toward drains, channels or collection points.

Many farms also reuse greenwash water as part of the cleaning process, reducing the need for fresh water and improving overall system efficiency.

A flood wash system can support:

- Faster cleaning across larger areas
- More consistent washdown
- Reduced manual labour
- Better reuse of water already in the system
- Cleaner feed lanes and standing areas

The right cleaning setup will depend on the size of the pad, the number of cows, the feeding layout and the wider effluent system.

HOSE WASHDOWN AND SCRAPING

Not every feedpad needs a flood wash system.

For smaller systems or certain layouts, hose washdown, scraping or a combination of methods can still work well when the pad has been designed properly.

Good results depend on:

- Kerbing and channels in the right places
- Safe machinery access
- Surfaces that support daily cleaning

The goal is not to make cleaning complicated. It is to make sure the system is designed so daily maintenance is simple, repeatable and efficient.

DAILY OPERATION BENEFITS

Under cover, the day-to-day routine becomes more controlled.

Feed lanes stay drier, machinery can operate more safely, cows stand on firmer surfaces and staff spend less time dealing with mud, runoff and weather-related disruption.

A covered feedpad can help support:

- More reliable feed-out routines
- Safer machinery movement
- Drier standing and feeding areas
- Easier clean-up after feeding
- Less weather related disruption
- Better use of water and effluent systems

What was once weather-dependent becomes system-controlled.

DESIGN DETAILS THAT MAKE THE DIFFERENCE

Small design details can make a big difference to how the feedpad performs every day.

These may include:

- Suspended downpipes to reduce obstruction
- Extended roof overhangs
- Ridge vents for airflow and moisture release
- Wide bay and lintel options for machinery access
- Drainage channels placed around the daily cleaning routine
- Feed lane or bin layouts designed around cow flow

The best feedpad systems are the ones that work quietly in the background: clean, efficient and predictable every day.

A covered feedpad should not add complexity. With the right design, it gives farmers a cleaner, more controlled way to feed, wash down and manage cows year-round.

Typical Results & ROI

Where covered feedpads create value

Every farm is different. Herd size, feed strategy, climate, management, pasture condition, existing infrastructure and daily operation all influence the return a covered feedpad can deliver.

But across farm systems, the value usually comes from several areas working together.

A covered feedpad does not rely on one single benefit. It can help protect feed, reduce effluent pressure, support cow comfort, improve feeding consistency and take pressure off pasture during high-risk periods. Over time, these gains can compound.

FEED UTILISATION

Feed is one of the largest controllable costs on farm. When feed is exposed to rain, mud, wind or trampling, some of that investment is lost before cows can turn it into production. Under cover, feed can be kept drier, cleaner and more accessible.

This can support:

- Less feed lost to weather and spoilage
- More consistent intake
- Better use of bought-in supplement
- Reduced clean-up and replacement feed
- Improved margin from feed already being purchased

The more feed that is protected, the more opportunity there is to convert that feed into milk.

PRODUCTION CONSISTENCY

Covered feedpads can help support more consistent production by improving the environment cows are feeding in.

When cows have reliable access to feed, are protected from heat and wet conditions, and can move through the system more comfortably, production is less likely to be disrupted by weather.

Farmers may see value through:

- Stronger milk solids performance
- Reduced production dips during wet or hot periods
- Improved late-season performance
- Better body condition
- Greater confidence in feeding strategy

Results will vary by farm system, but many of the strongest outcomes come from protecting intake and reducing disruption.

Milk Solids Growth

Better intake supports stronger output. Many farms report 20 to 30 percent gains under cover.

Feed Utilisation

Dry feed reduces wastage fast. Utilisation commonly lifts from 60–70 percent to 90–100 percent.

Pasture Protection

Removing cows from pasture during rainy periods reduces pugging and protects soil structure through winter. Prevents the need of under sowing or re-sowing.



EFFLUENT AND WATER MANAGEMENT

Keeping clean roof water out of the effluent stream can reduce the total volume of liquid that needs to be stored, pumped and spread.

This can create value by:

- Reducing pressure on effluent ponds
- Improving storage and spreading flexibility
- Making effluent volumes more predictable
- Supporting clean water and dirty water separation
- Reducing unnecessary pumping and handling

For high rainfall regions, this can be a major part of the return.

PASTURE PROTECTION

Getting cows off pasture during wet or high-pressure periods can help reduce pugging, soil compaction and pasture damage.

This can support:

- Better pasture recovery
- Less need for under-sowing or re-sowing
- Improved winter and shoulder-season management
- More strategic grazing decisions
- Reduced feed gaps caused by damaged paddocks

Protecting pasture today can help preserve growth and flexibility later in the season.

LABOUR AND DAILY OPERATION

A covered feedpad can also improve the day-to-day running of the farm. When feeding, cleaning, cow flow and machinery access are more controlled, staff spend less time reacting to weather and more time operating a predictable system.

This can support:

- Faster feed-out routines
- Easier washdown
- Safer machinery movement
- Reduced weather disruption
- A more reliable daily workflow

These gains may be harder to measure than milk solids or feed costs, but they can make a real difference across a season. A well-designed covered feedpad gives farmers more control over the variables that can quietly erode margin.

The return is not just in the roof. It is in the feed protected, water controlled, pasture preserved and production consistency supported across the season.

Case Study: Barrett

Keeping 10–12 Million Litres Out of the Pond Each Year



Feedpad Cover Size: 82.4m Long x 31m Wide

Location: New Plymouth, Taranaki

Herd Size: 450 Cows

FEEDPAD COVER DELIVERING ANNUAL RAINFALL SAVINGS

For this Aztech client, the biggest impact of their covered feedpad isn't just what happens during a single storm, it's the cumulative effect across the entire year.

Based on rainfall patterns and roof area, the farmer estimates the covered feedpad is preventing between 10 and 12 million litres of clean rainwater annually from entering the effluent pond. That's water that no longer needs to be pumped, stored or managed as effluent.

Instead, it is captured separately and reused across the farm system, including flood washing with greenwash and hosing parts of the yard.

WHAT THAT MEANS FOR THE FARM SYSTEM

By keeping clean roof water out of the effluent system, the farm has significantly reduced pressure on its pond capacity. This creates a more controlled and predictable system, particularly during periods of high rainfall when effluent systems are typically under the most strain.

The result is improved efficiency in washdown processes, reduced pumping requirements and greater flexibility in how water is used across the farm.

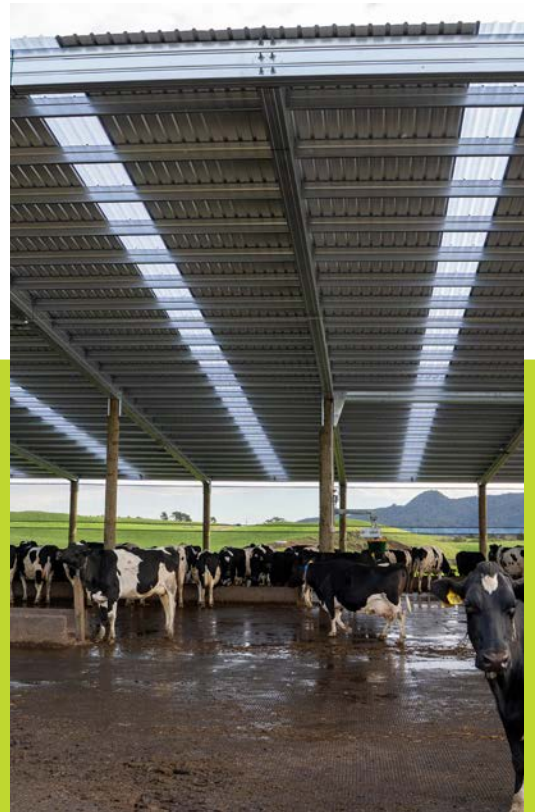
REAL IMPACT

During one weekend event where 250mm of rain fell, the covered roof area prevented approximately 540,000 litres of water from entering the effluent pond. While this highlights the immediate benefit during heavy rainfall, it also reinforces the scale of savings that build over time.

A MORE CONTROLLED APPROACH TO WINTER

The covered feedpad has also changed how the farm manages wet weather. Cows can be fed under cover during rain, reducing damage to paddocks and easing pressure on pasture during winter. The farmer describes it as a shift in mindset from reacting to wet conditions to managing them with more control.

The system also includes matting, which supports cow comfort and improves day-to-day usability of the feedpad. Although the system is still relatively new, the benefits are already clear: less water entering the effluent pond, more efficient use of water across the farm and a more stable approach to managing cows through wet conditions.





Van Der Poel

Waikato

Feedpad Cover
103m Long x 16.6m Wide

Built for High Rainfall, High Performance

“We never stopped milking while it was built.”

A feedpad cover designed for high wind, high rainfall, without disrupting day to day farming in the Waikato.



Tironui Farms

Waikato

Feedpad Cover
57m Long x 34m Wide

Investing in Year Round Protection for the Herd

Tironui Farms, owned by Murray Gibbs and operated by Logan and Sian Dawson, has taken another step forward in improving herd comfort and operational efficiency with the installation of a new feedpad cover.



Davies

Waikato

Feedpad Cover
71.3m Long by 27m Wide

Durable, Weather Smart Solution for Herd Health & Feed Efficiency

The Feedpad cover keeps feed clean and dry, reduces effluent volumes, and improves cow comfort, helping boost milk production and overall farm performance.



Real Farms, Real Results

Improve cow comfort, support farmers, and protect the environment, real results driving sustainable, profitable farming.



Creswell

Hawkes Bay

Feedpad Cover
104.3m Long by 21.5m Wide

Forward Thinking Approach to Managing Growth

Located just outside Hastings, the Creswell's 800-cow dairy operation has taken a major step toward greater efficiency, sustainability, and animal comfort.



Kybush Farms

Bay of Plenty

Feedpad Cover
71.3m Long by 27m Wide

Kybush Farms' covered feedpad in Ōpōtiki was designed to create a more efficient, weather-protected feeding area for the herd.

The Feedpad Cover helps manage effluent run-off, reduce feed waste and support a more comfortable environment for cows.



Barrett Farms

Hurford, Taranaki

Feedpad Cover
82.4m Long x 31 Wide

For Barrett Farms in Hurford, Taranaki, the move to a covered feedpad was about creating a smarter, drier and more reliable feeding system.

The covered pad protects feed, keeps cows more comfortable through wet conditions and supports a more reliable feeding routine.



Frequently Asked Questions

CAN YOU COVER MY EXISTING FEEDPAD?

Yes. Many Aztech projects are retrofits, designed to work with your existing concrete, layout, and infrastructure, without needing a full rebuild of the pad.

WHAT PRODUCTION GAINS CAN I EXPECT?

Most farmers see 20–30% increases in milk solids, driven by more consistent feed intake, reduced heat stress, and better overall cow comfort.

DOES IT REALLY REDUCE FEED WASTAGE?

Yes. Uncovered feeding can result in 20–30% wastage, while covered systems often achieve 90–100% utilisation by keeping feed dry and protected.

HOW DOES IT HELP IN SUMMER HEAT?

A covered feedpad provides shade and airflow, reducing heat stress. Cooler cows maintain feed intake, which helps protect milk production during hot periods.

WILL IT MAKE A DIFFERENCE IN WINTER TOO?

Absolutely. It keeps feed dry, reduces mud, and allows cows to be removed from wet paddocks, improving pasture protection.



FAQs

COMMON QUESTIONS WE GET ASKED

HOW DOES IT CHANGE MY EFFLUENT SYSTEM?

By separating rainwater from effluent, total volumes are reduced. This can significantly reduce pressure on storage systems and improve compliance outcomes.

HOW EASY IS IT TO CLEAN?

Very straightforward. With the correct slope and drainage design, cleaning can be done via flood wash or hose-down systems, often with less effort than uncovered pads.

DO I NEED A FLOOD WASH SYSTEM?

Not always. Smaller systems can be cleaned manually, while larger operations often benefit from flood wash systems for efficiency and consistency.

CAN THE STRUCTURE BE EXTENDED LATER?

Yes. Many Aztech feedpad covers are designed with future expansion in mind, allowing additional bays or extensions as your operation grows.

WHAT'S THE TYPICAL RETURN ON INVESTMENT?

Returns vary, often we see it in 3-5 years. Most farmers see value through a combination of increased production, reduced feed costs, and improved system efficiency, often delivering strong payback and fast ROI.



Local Knowledge, Nationwide Support

Your Aztech Team

Discover what a well-designed feedpad cover can do for your farm. Whether you're in the early research stage or ready to plan your build, our team will guide you through design options, performance insights, and site-specific solutions

Let's build smarter, more sustainable farming together.





**Ready to see it in action?
Book a farm visit or tour a
working Feedpad today.**



0800 298 324

AZTECHBUILDINGS.CO.NZ

VERSION 1.0