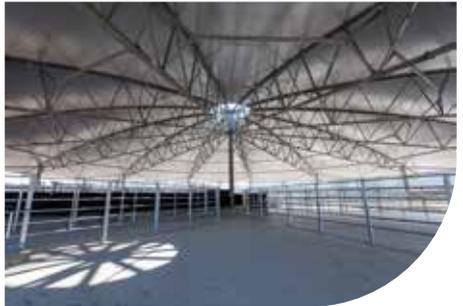
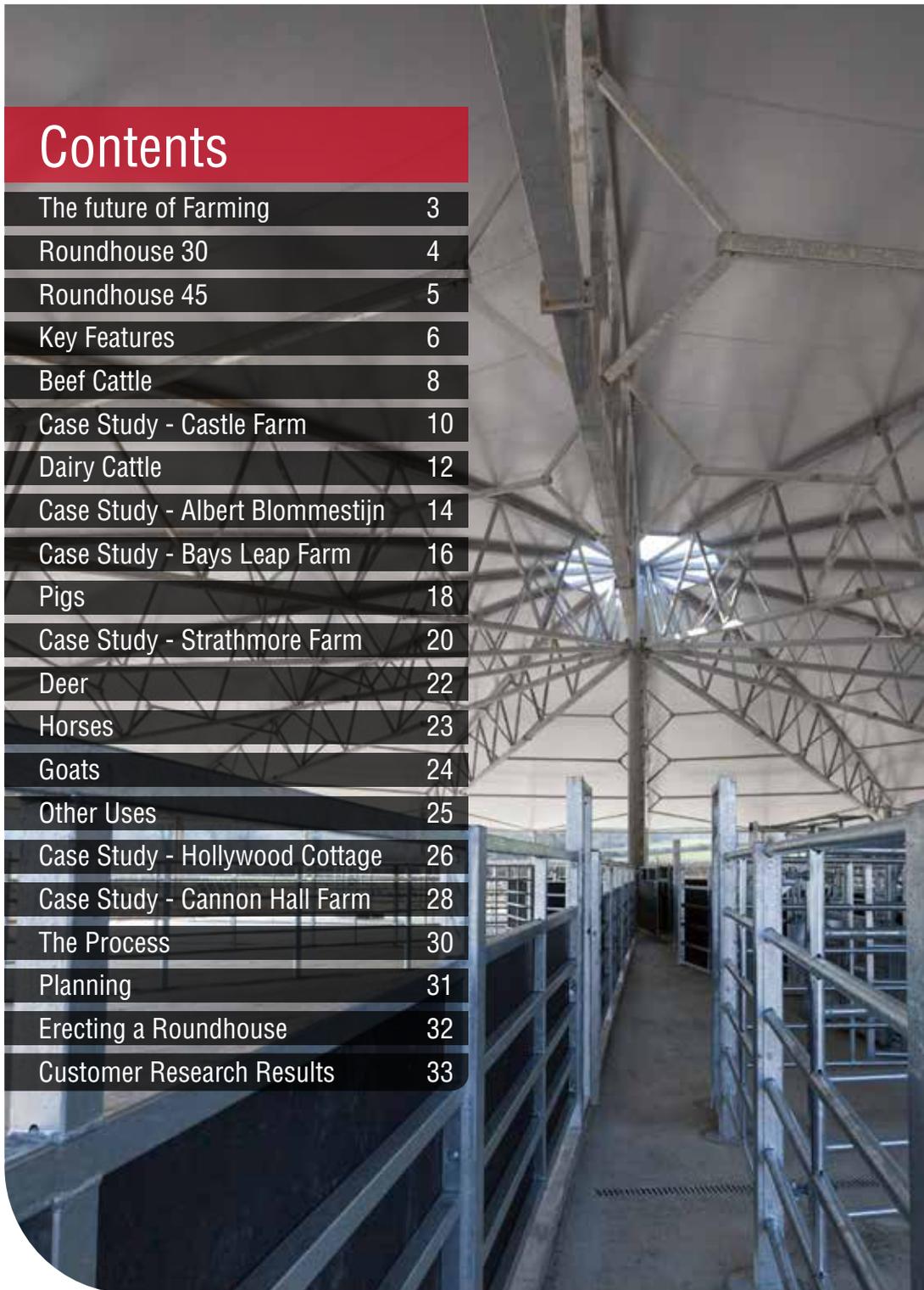


cutting edge design,  
unrivalled animal welfare



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# Welcome to the future of Farming



The Roundhouse concept is a simple one. Round buildings date back to the Bronze Age and make full use of natural forces. Roundhouse Building Solutions have developed the

design using modern technology and materials to create a unique building which not only optimises animal welfare but significantly reduces operational and building costs.



## BIENVENUE...

Le concept Roundhouse est simple. Les bâtiments circulaires remontent à l'Âge de Bronze et exploitent les forces naturelles. Roundhouse Building Solutions a développé cette conception en faisant appel à la technologie et aux matériaux modernes pour créer un bâtiment unique, optimisant non seulement le bien-être des animaux, mais réduisant également les coûts d'exploitation et de construction de manière significative.



## WILLKOMMEN...

Das Rundhaus-Konzept ist ein einfaches Konzept. Runde Gebäude lassen sich bis in die Bronzezeit verfolgen und nutzen die natürlichen Kräfte in vollem Maße aus. Roundhouse Building Solutions hat ein Design entwickelt, das moderne Technologie und Materialien verwendet, um ein einzigartiges Gebäude zu schaffen, das nicht nur die Tierhaltung optimiert, sondern auch die Betriebs- und Baukosten erheblich senkt.



## WELKOM...

Het Roundhouse-concept is een eenvoudig concept. Ronde gebouwen dateren van de Bronstijd en maken volop gebruik van natuurlijke krachten. Roundhouse Building Solutions heeft een ontwerp ontwikkeld met moderne technologie en materialen om daarmee een uniek bouwwerk te creëren. Een bouwwerk dat niet alleen het welzijn van het dier optimaliseert, maar ook de operationele en bouwkosten terugdringt.



## VELKOMMEN...

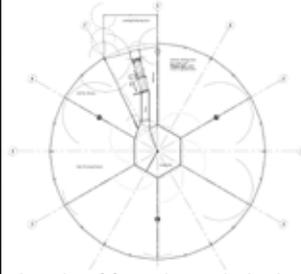
Roundhouse-konceptet er simpelt. Runde bygninger kan dateres tilbage til Bronzealderen og udnytter de naturlige kræfter fuldt ud. Roundhouse Building Solutions har udviklet konstruktionen ved brug af moderne teknologi og materialer for at skabe en unik bygning, som ikke blot optimerer dyrevelfærd, men også reducerer drifts- og bygningsomkostninger betydeligt.



# The Roundhouse 22

The Roundhouse22 (RH22) is the latest Roundhouse building to be developed following requests for a smaller building. It has the following key features:

Diameter (leg to leg)	22.85m (75')
Eaves height	3.6m (11'9")
Overall height	7.3m (23'11")
Circumference	72m (236')
Floor area	410m <sup>2</sup> (4413sqft)
Roof area	535m <sup>2</sup> (5260sqft)
Ventilation hole size	5.3m <sup>2</sup> (57sqft)
Number of perimeter legs	12
Roof structure	900g PVC Coated Polyester
Galvanised structure	9.1tonnes



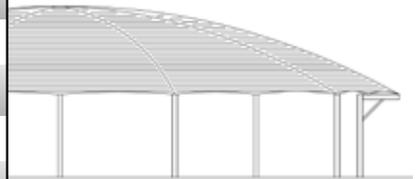
As a beef fattening unit the building will hold 80\* 500kg animals and allow every animal to eat at the perimeter of the building at the same time. As a Suckler unit it will hold 50-60\* cows with calves to six months of age.

*\*Based on RIDBA guidelines.*

# The Roundhouse 30

The Roundhouse30 (RH30) was the first of the Roundhouse buildings to be developed and has the following key features:

Diameter (leg to leg)	30.25m (99'2")
Eaves height	4.1m (13'5")
Overall height	8.7m (28')
Circumference	95m (312')
Floor area	718m <sup>2</sup> (7728sqft)
Roof area	900m <sup>2</sup> (9688sqft)
Ventilation hole size	9m <sup>2</sup> (97sqft)
Number of perimeter legs	16
Roof structure	900g PVC Coated Polyester
Galvanised structure	14tonnes



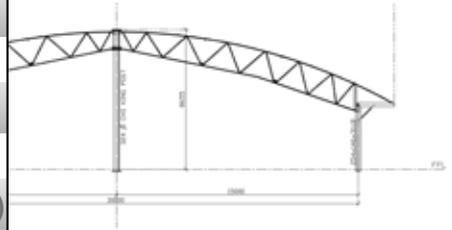
As a beef fattening unit the building will hold 140\* 500kg animals and allow every animal to eat at the perimeter of the building at the same time. As a Suckler unit it will hold 80-100\* cows with calves to six months of age.

*\*Based on RIDBA guidelines.*

# The Roundhouse 45

The Roundhouse45 (RH45) was developed during 2011 with the first building erected in the winter of 2011/12. Due to the span of the building, it is three times the weight of the RH30 with the following features:

Diameter (leg to leg)	45.4m (148'11")
Eaves height	4.1m (13'5")
Overall height	9.7m (32')
Circumference	142m (467')
Floor area	1616m <sup>2</sup> (17394 <sub>sqft</sub> )
Roof area	1882m <sup>2</sup> (20258 <sub>sqft</sub> )
Ventilation hole size	16m <sup>2</sup> (172 <sub>sqft</sub> )
Number of perimeter legs	24
Roof structure	900g PVC Coated Polyester
Galvanised structure	44tonnes



As a beef fattening unit the building will hold 280\* 500kg animals and allow every animal to eat at the perimeter of the building at the same time. As a Suckler unit it will hold 160-200\* cows with calves to six months of age.

*\*Based on RIDBA guidelines.*



# Key Features



## Exceptional animal welfare

The interior space creates a very calm and relaxed environment and must be experienced to be appreciated. The animals can also see each other at all times.



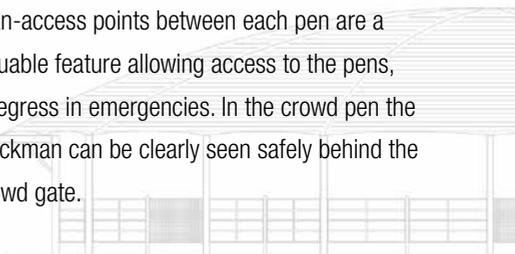
## Operational with ease

The building can easily be managed by a single operative with the exception of circumstances where, for health and safety reasons, more than one person should be present.



## Superb stock handling system

Man-access points between each pen are a valuable feature allowing access to the pens, or egress in emergencies. In the crowd pen the stockman can be clearly seen safely behind the crowd gate.





## Virtual elimination of working at height during construction

Designed to be constructed on the ground and raised on hydraulic rams, eliminating safety netting and edge scaffolding during construction.



## Excellent ventilation

The excellent ventilation in the roof ensures a continuous updraught of air working in a similar way to a very large chimney.



## Aesthetically pleasing with minimal visual intrusion

Sympathetic roof colours blend well in most situations and, whilst unusual in shape in the traditional farmscape, it is also highly pleasing to the observer who sees the building outline tangentially significantly reducing the apparent size of the building.



# Beef Cattle

Farmers using the revolutionary Roundhouse building for beef cattle estimate their animals are finishing between three and five weeks faster than those in conventional accommodation because of the superior environment.



Labour input is also being cut by half, and veterinary bills slashed by between 50% and 75%. There's also a reduction in straw use for bedding - by between 15% and 20%. All of the farmers, when surveyed, gave the Roundhouse full marks for the quality of the atmosphere in the building, for the handling system, and for the ease of use of the building. All would recommend it, they said.

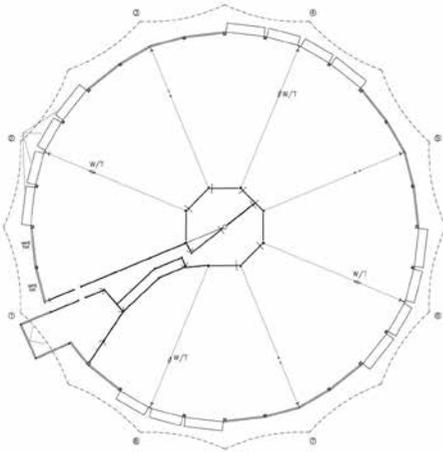
Integrated features – such as the handling system and escape gaps in the pen divisions – were particularly highlighted by the farmers as being useful features. “The Roundhouse allows the

farmer to run cattle through a race on his own, instead of gathering a group of people to together to perform the task,” said one user. Another commented that “there is no safety issue with one man working on his own in The Roundhouse for most operations due to the safety measures”.

## **Animal welfare, handling and loading**

The Roundhouse has been designed with animal welfare in mind – be it the environment, or the handling system.





**8 Pen Beef Plan**



**Suckler Plan**

The open sides and roof vent mean airflow is perfect for the animals, flowing evenly in through the sides and out through the top. Users of the building report much lower rates of disease, particularly pneumonia.

The open internal layout means the animals can always see other animals across the building, reducing stress because the “fright and flight” zone is much wider than in a conventional building.

The integral crowd pen and handling system are key, making management of stock much easier and stress free than in conventional buildings – for both the animals and stockman.

The crowd pen is accessible from all pens and delivers the stock directly into the handling system, and then onward to the loading dock. The operator always has steel and gate protection around him, thus improving his health and safety.

The loading dock and collecting pen at the end of the race allows animals to be penned before loading and provides sufficient turning space to return the animals back to their pens.

## Feed and Water

The Roundhouse lends itself to quick and safe feeding, with troughs placed on the circumference for easy access by a mixer wagon, or materials handler. There is also enough space between the top of any trough and bottom of the roof to comfortably fit a round bale through. There is no need to open gates or enter the pens for either feeding or bedding purposes.

Water is delivered to small troughs via a gravity fed system that utilises a single header tank in the handling area. There are no ball-cocks accessible to the stock, so there is nothing for them to damage or to freeze in bad weather.



# Case Study

The best of welfare inside... twinned with best of welfare outside. That's the life of luxury enjoyed by the 250 finishing beef cattle on the farm of William and Caroline Alexander, of Castle Farm, Shoreham, Sevenoaks, in Kent.



Geoff Simpson (left) and William Alexander (right) toast the completion of William's RH30

In the winter the cattle are snug in their Roundhouse, while during the grazing season groups of them have access to a paddock, where they are free to come and go as they please. During the day they usually choose to be outside grazing pastures, while in the evening and at night they come inside and help themselves to forage and concentrate supplementary feed. Generally animals from four of the building's yards have access to grazing at any one time.

"The Roundhouse delivers unbeatable welfare standards," says William. "The building is light, airy and the open design allows animals to see each other easily in the neighbouring pens. Such social contact means that the cattle are calm and contented, leading to greater feed intake. Furthermore the integral handling system inside the building means that even when being moved, treated or weighed the cattle do not become stressed.

The cattle are housed in the building for the final four to six months of the finishing period - a critical period in which to manage diets for growth rates and finishing profitability.

**"The Roundhouse delivers unbeatable welfare standards"**

**William Alexander**

David, the stock manager, confirms that the food intake by the growing cattle in the Roundhouse is significantly more than in their previous accommodation, contributing to the cattle finishing between one month and six weeks younger.

# Case Study

And there are other advantages linked to the new building too. The Alexanders supply specialist high quality catering outlets with four to six animals a week, with a need for the quality of the meat supplied to be exemplary. Clearly the less stress the animals have during the growing and finishing stage the better. Recently the farm played host to a group of chefs, waiters and waitresses from the London based “Canteen” restaurant chain who were interested to see and learn first-hand about the provenance of their meat supplies. “I was delighted that we were able to demonstrate the high welfare afforded to our animals and to improve our customers understanding of our part in providing wholesome, traceable food.” commented Mr Alexander. Obviously the Roundhouse lends itself to such conversations.

William added “I believe that The Roundhouse is ‘a very elegant structure’, fitting comfortably into the landscape. We had no problems gaining planning permission and with a public footpath running close to the building, it attracts much comment and interest. So by way of public relations, I have erected a sign informing walkers about the building, the cattle and my production system”.

He concluded, “If I needed to house more cattle I’d definitely put up another Roundhouse because I’m totally positive about all of its qualities.”

For more information on the HopShop, please go to [www.hopshop.co.uk](http://www.hopshop.co.uk)



# Dairy Cattle

Used for housing calves or followers in the RH30 and actually using the RH45 as housing for the dairy herd, utilising automated milking machines, the Roundhouse options for the dairy farmer are numerous and varied.



The ventilation in the Roundhouse means that housing calves from a day old has dramatic effects on their health and well being. As long as the building has some shelter for the day old animals during bad weather the financial results are proven and, quite rightly, creating a lot of interest.

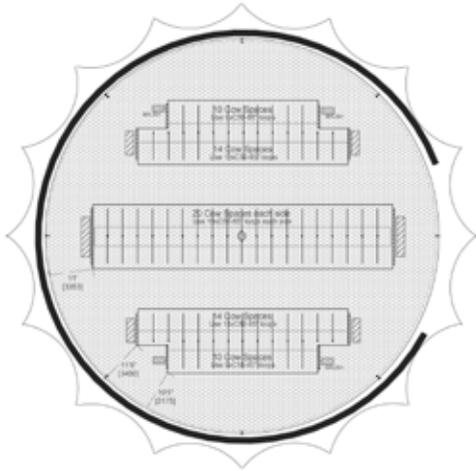
Similarly using the building for dry cows and followers has had some excellent results. By splitting the building into the eight pens, the crowd pen is accessible from all pens delivering the stock directly into the handling system. This

is ideal for dealing with livestock whether testing, treating or calving. The animals can be handled quickly and safely and with minimum stress and then easily returned to their pens or loaded out of the building using the integral loading dock.

Feeding for all livestock is at the perimeter and can be carried out using a TMR or concentrate into troughs. However, for calves, a milk machine can be placed in the centre giving free access to milk.

Similarly, fresh water is always available using our gravity watering system that removes the need for ball valves in troughs and therefore dramatically reduces the issue of potential problems. Also with water accessing troughs through the floor, freezing has not been a problem in even the harshest of conditions.

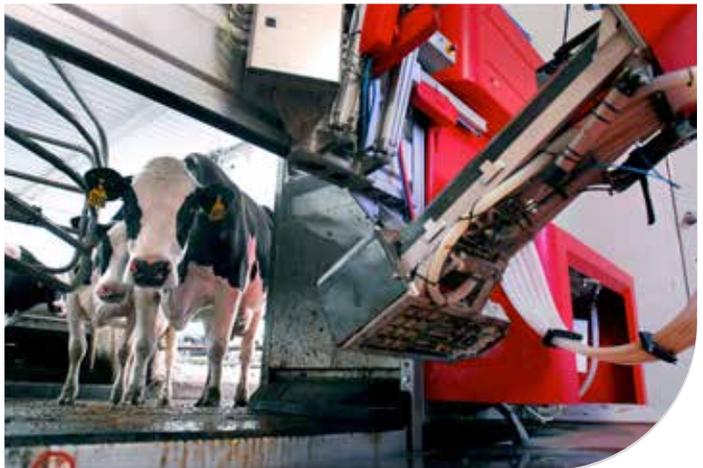




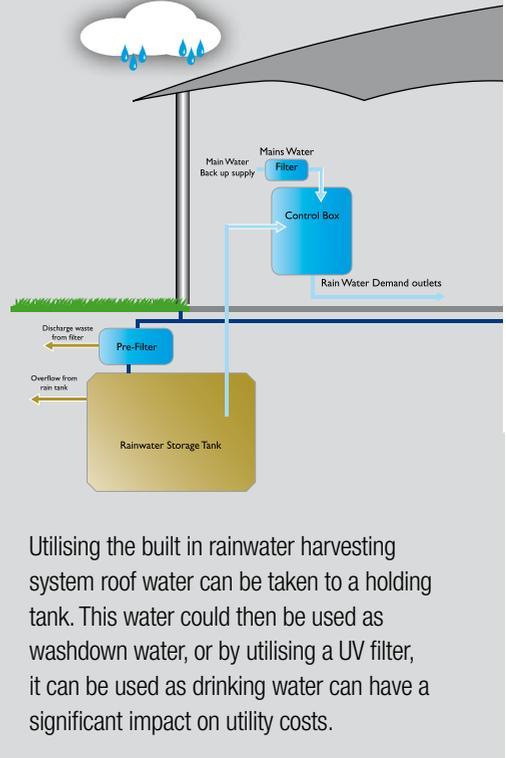
**Dairy Cattle internal layout option**

For the dairy herd, the use of robot milking machines to the perimeter of the building and an open straw yard is already reality. This is a very European design, giving the herd free access to both grazing, a ration and the milking machines. The use of the milking machine is becoming increasingly common along with feed automation and the Roundhouse lends itself to incorporating this developing technology.

The benefits of the RH for the dairy herd is the excellent ventilation which reduces heat stress and the light interior reducing stress and maximising the living environment.



## Rainwater harvesting made easy



Utilising the built in rainwater harvesting system roof water can be taken to a holding tank. This water could then be used as washdown water, or by utilising a UV filter, it can be used as drinking water can have a significant impact on utility costs.

# Case Study

Albert Blommestijn caught sight of the Roundhouse a few years ago. The characteristic shape was suited perfectly to his needs, in terms of animal welfare, handling system, ventilation and aesthetics. So when the building became available in the Netherlands, he did not hesitate.

In the densely populated Netherlands, the aesthetics of the building were a very important aspect for Mr Blommestijn. The farm is surrounded on three sides by residential areas. “Our neighbours have had an unobstructed view of the meadows for the past thirty years. I did not want to take that away from them”, said Mr Blommestijn. The open structure of the Roundhouse allows for a clear sight through the building on the grassland behind it.

The unusual shape of the Roundhouse also serves another purpose for Mr Blommestijn. The iconic building draws visitors to his other business: Poldersport – Outdoor Activities. Friends, families, colleagues, stag parties; they come to the farm to enjoy themselves with canoes, climbing, the challenge track and various other outdoor activities.

“you can see that the animals feel happy”

Albert Blommestijn

Attracting visitors was also one of the reasons for Mr Blommestijn to switch to a family herd of Blaarkop cows. The Blaarkop is an ancient Dutch breed, typical to the region. Allowing low-ranked animals to flee easily due to its round shape, makes the Roundhouse ideal for these horned cows.

In essence Mr Blommestijn is still a farmer, he has long been a fan of the idea of a family herd. “I love the sight of the calves in the herd”, he says. The building is eventually intended to house 60 milkcows and 25 calves. “The perimeter



# Case Study



of the Roundhouses allows us to create 140 feeding places for 100 animals” according to Mr Blommestijn. He also finds the feeding very efficient; in one turn the entire livestock can be fed.

Mr Blommestijn has created a free range barn within his Roundhouse. His cattle are housed on woodchip bedding. The circular shape of the building makes stirring the bedding easier, especially compared to a traditional barn. “I only have to draw circles with the tillage tool, which works very efficiently and creates a nice even result”.

Most important however is the excellent ventilation capacity of the Roundhouse. “Good for the health of the cows but mostly essential for a dry top layer of the bedding”, mentions Mr Blommestijn. The real test is going to be this winter but currently the



bedding is perfectly dry. The animals have been in the Roundhouse since April. Mr Blommestijn did not find any problems yet. “You can see they feel happy”.

# Case Study

The initial concept of The Roundhouse is growing in popularity in the dairy sector for calf rearing and housing followers. One farmer in the north of England is so impressed with the results, that he has now bought and erected two Roundhouses.



Chris McDonald, Bays Leap Dairy Farm with calves in one of his Roundhouse30's

One class of animal that building designers Geoff Simpson and John Allinson didn't think the building would be suitable for, though, is young calves – on the grounds that they would be too cold. But that's definitely not the case in the experience of dairy farmer Chris McDonald, from Bays Leap farm, Heddon on the Wall, Newcastle.

He milks 500 cows and rears all the farm's youngstock in one of his Roundhouses – from day old calves to around 12 months of age. The very young calves are put in the smallest of the building's pens, which is protected from the elements with Stockboard at the bottom and a Galebreaker at the top. They stay in there for five days on colostrum, before moving into the next

pen where there is a computerised calf feeder. Every two months or so the animals are moved into the adjacent pen, when the building is also mucked out.

“There's no check to the animals' growth by moving them to a new building,” says Chris. “The system works extremely well indeed.”

The building houses around 200 calves in total, and all in all it takes around 1.5 hours a day to sort the colostrum, check and load the automatic calf feeder, look at the stock, mix and feed out the Total Mixed Ration, and bed every other day (with a Spreadabale machine). Handling the stock for routine pneumonia, Lepto and BVD vaccination is also extremely simple, he adds.

# Case Study

Health wise it is so far so good – there have been just two cases of pneumonia since the calves entered the house in September. “It’s not a worry. We’ve had a couple of calves puff a bit with pneumonia symptoms, but we jabbed them and they were fine.”

**“It’s a marvellous building, and so much easier than the way we did it before”**

**Chris McDonald**

Chris admits that they haven’t had the bad weather of last year to really test the system – but he’s confident that the extreme cold of last winter won’t be an issue, and additional protection from draughts or the elements can always be provided if necessary. “Provided the calves are eating well they will be OK,” he insists.

Overall he is delighted with the way the building is functioning, and has fitted-in with his overall dairy enterprise. “It’s a marvellous building, and so much easier than the way we did it before. Managing the animals is very simple, quick and efficient for us, and it’s ideal for the animals in terms of their feed, environmental, ventilation and space requirements.”

In the winter of 2013/14 Chris took delivery of a second RH 30, having seen the difference the first one has made to the health and growth rate of the stock.

This second RH is used to house the followers and has the addition of a five stall milking parlour

“The concept is a simple one, I calve cows in my new Roundhouse and the cow is kept in the Roundhouse with the colostrum being fed to calves in the original Roundhouse. Only once I am satisfied that the cow is over the calving, eating properly and the colostrum gone, is she reintroduced to the milking herd” Chris McDonald

The Roundhouse is split into the eight pens as normal but with one pen accounting for a handling system and the milking parlour. The remaining seven pens are loose straw yards

Two pens of four bays have manual roller doors to protect staff working in the building in the winter from the weather but otherwise it is completely open.



# Pigs

A pig palace, is how The Roundhouse was described when the World famous Sheepdrove Organic Farm opted for one to finish their outdoor reared pigs.



The Roundhouse lends itself to the straw yard system and can be split into anything from one to eight pens depending the on system. Using external feeders and the integral handling system is a good way of running a dry sow pig operation with reduced stress and ease of handling key to the operation.

## **Animal welfare, handling and loading**

The Roundhouse has been designed with animal welfare in mind – be it the environment, or the handling system.

The open sides and roof vent mean airflow is perfect for the animals, flowing evenly in through the sides and out through the top. Users of the building report much lower rates of disease.

The open internal layout means the animals can always see other animals across the building,

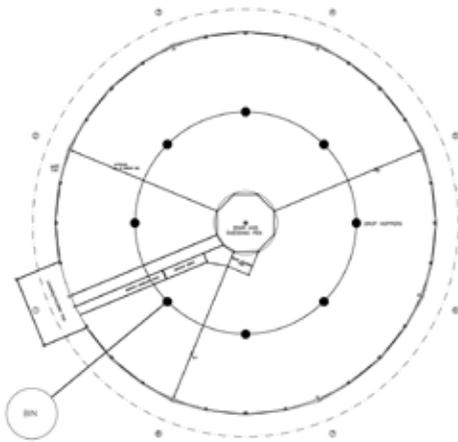
reducing stress because the “fright and flight” zone is much wider than in a conventional building.

The integral crowd pen and handling system are key, making management of stock much easier and stress free than in conventional buildings – for both the animals and stockman.

The crowd pen is accessible from all pens and delivers the stock directly into the handling system, and then onward to the loading dock.

## **Feed and Water**

Feeding methods within the Roundhouse are down to the requirements of the specific operation. Current methods blow nuts into straw for foraging sows. There is also enough space between the top of any trough and bottom of the roof to comfortably fit a round bale through. There is no need to open gates or enter the pens for either feeding or bedding purposes.



Pig layout option

Water is delivered to small troughs via a gravity fed system that utilises a single header tank in the handling area. There are no ball-cocks accessible to the stock, so there is nothing for them to damage or to freeze in bad weather.

### Rainwater harvesting

Rainwater is diverted into channels running down the outer support columns of the buildings, and then into the drainage system to prevent the water ending up on yards. However the water can be diverted and harvested to supply the building if necessary, for added cost saving.



# Case Study

David Soutar believes the difference the buildings have made to his farm is remarkable, not just to the animal side of the business but also to the arable, as bringing the sows indoors has freed up 65 acres of valuable arable land.



It's great, isn't it...pigs running around in the fresh air on a nice sunny day! But what about when it's windy and wet and there are jobs to do – like serving sows! It's not so good then, especially for the stockmen and women. The job can be hard enough at the best of times, let alone in adverse conditions.

That, though, is a thing of the past for David Soutar and the staff of the Strathmore Farming company, at Glamis, Forfar - thanks to the installation of two Roundhouses.

Before the buildings arrived in 2009 the farm had an outside AI service area typical of many outdoor units. Although breeding performance on the 680 sow Freedom Foods accredited herd was pretty good they naturally had no control of the weather, and Mr Soutar admits that it was difficult to get people to work outside and

maintain a high degree of attention to detail. He saw the Roundhouse, and believed it would help.

"I originally saw the building at the Royal Highland Show in 2009, and liked what I saw," he says. "I looked at it for finishing pigs to begin with, but then thought it could solve our dry sow problems. I could see that it would allow us to get better control of our breeding, and that it would do a lot for staff morale as well," he adds.

Each of the two Roundhouses hold around 245 animals, and the animals stay in for 5/7th of the annual pig cycle, and are outside for farrowing and rearing for 2/7ths of the time.

The difference the buildings have made to the farm has been remarkable, he says. The number of pigs has increased by three to four pigs per sow per year, and conception rates of the young herd are 85%, although not all of the credit

# Case Study

for this can be laid entirely at the doors of the Roundhouse (if it had any). Other changes have also been introduced as well, such as a change in breed to a Landrace cross Large White.

**“I doubt we would have stayed in pigs if we hadn’t built them”**

**David Soutar**

But Mr Soutar believes that the better working environment offered by the Roundhouse means his staff are doing a much better job of serving the sows, and the stress-free nature of the building is also playing its part in the

improvement. And the arable side of the business has benefitted too – bringing the sows inside has freed-up 65 acres of valuable arable land.

“The buildings make everything much easier, the working environment is far more pleasurable and performance has improved on the farm” says David.

“The buildings have been great, and I’m very pleased with them. Sometimes we need to put up some square bales as shelter from the prevailing wind, but it’s only on the bad days for a bit of extra protection. We’ve had some hefty gales as well, but have had no issues. I doubt we would have stayed in pigs if we hadn’t have built them,” he concludes.



# Deer

Farming deer is still rare but as consumers tastes change and demand grows for quality farmed venison the housing and handling of the animals is key to success.

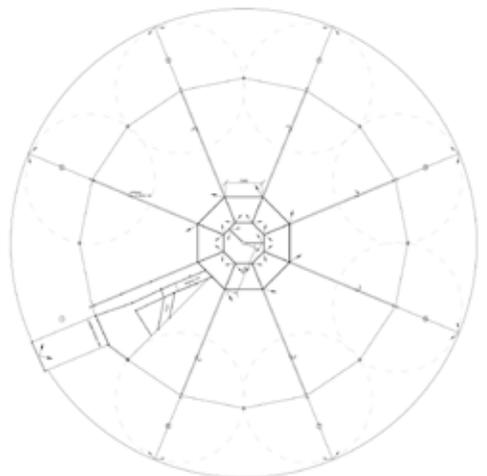


Housing and handling deer is not easy, due to their nature. The use of a round pen is commonplace in deer handling facilities. 'Fright and flight' is common with deer but the Roundhouse allows good all round visibility reducing this significantly, as is shown in the photo.

Putting deer in a Roundhouse has shown to calm the animals significantly as they have remained in a "herd" and also meant capturing and handling are much less stressful on stockman and animal alike.

The shape of the building also gives a lot more feed fence than traditional buildings, meaning more animals can eat at once and bullying is reduced. This can be a big issue when housing deer.

The options in layout for for deer can vary, but experience has shown the 8 pen system, with central handling system is optimal.



Deer Plan

# Horses

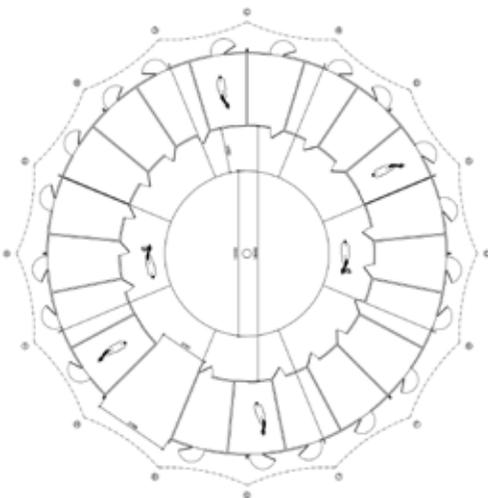
**Putting horses in a Roundhouse seems obvious now, but it wasn't realised until recently when we discussed the options with a famous livery yard.**

Interest from the equine sector was unexpected, but the system works well for open straw yards, a covered yard, or stables and a horse walker.

The new RH22 adds to the offering by allowing the option of removing the centre column, creating a 22 metre diameter clear span lunging area, while the overhang of the roof provides an ideal covered track.

The Roundhouse shape offers horses a social environment, with fresh air that allows for excellent welfare for the animals and a pleasant working environment for owners.

No matter what the time of year, whether it's to shade people or to keep rain off, a Roundhouse optimises the environment. Options are also available to enclose the building completely if required.



Horse Plan

# Goats & Sheep

The Roundhouse has many uses, other than those previously mentioned. There are Roundhouses in use today for sheep and goats on commercial farms thanks to the numerous internal layouts available.



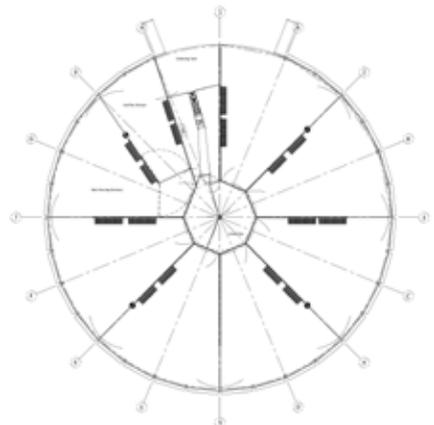
Using the Roundhouse for lambing has reduced heat stress on ewes at this critical time of year due to the massively increased airflow compared with conventional buildings. Also, using the handling system for sheep has greatly reduced handling times and stress.

Stocking densities vary depending upon the breed, as would feed fence length so we recommend the use of walk-through feeders.

Further building uses are for goats, for both meat and milking. Goats are calm animals and require

regular and careful handling but also stimulation and interaction with others. The open and airy nature of the Roundhouse makes it an obvious building for goats.

For more information on the variations available, please contact our technical department.



Sheep & Goat Plan

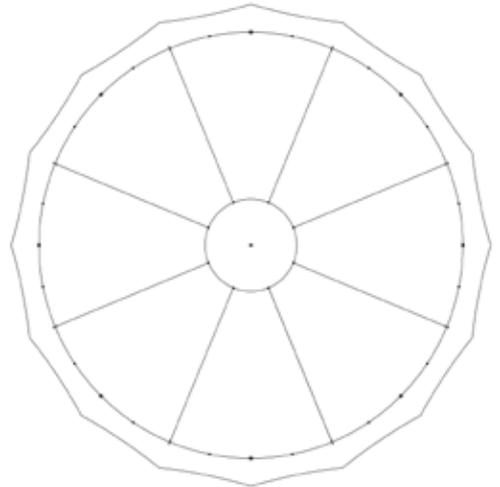
# Other Uses

Regardless of use the Roundhouse is ideal for the livestock sector but also many other industrial uses are also in consideration. For example, Garden Centres, woodchip stores, car sales and even a children's play area.

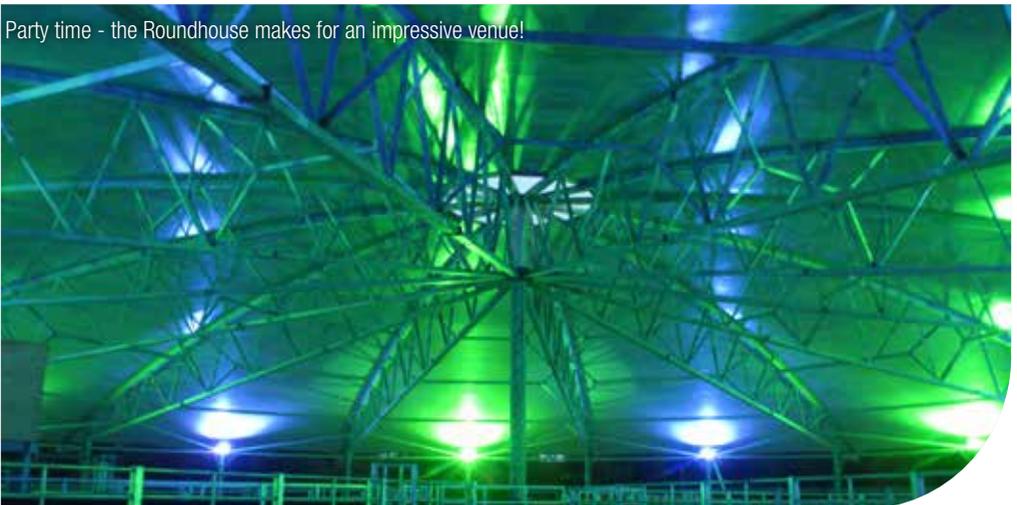
The Roundhouse makes a fantastic all weather cover, to keep the sun or rain off your customers or goods and creates an excellent working environment.

The aesthetics of this multi award-winning building, means it can blend into rural and urban environments, delivering a multitude of potential uses. Options to fully enclose the building are also available, as our branding opportunities.

Incorporating the rainwater harvesting system and optional wind turbine to your specification and the Roundhouse offers many sustainable solutions throughout the commercial sector.



Party time - the Roundhouse makes for an impressive venue!



# Case Study

The Keys open the door to more high welfare UK goat meat. Pioneering farmers Antony and Ruth Key to rear meat goats in a Roundhouse 30.



The revolutionary Roundhouse building may have been originally designed to rear and finish beef animals, but now it can proudly boast that it houses every class of farm livestock, thanks to the decision of pioneering farmers Antony and Ruth Key to rear meat goats in one. Now beef suckler cows and finishers, sows, dairy calves, heifers and milking cows, sheep, and goats all reside under the building's unique structure.

Farming the Ilexignum herd (which trades as Hollywood cottage) of Boer meat goats at Stone, Staffordshire, the relatively small herd was set up in 2012, when the Key's bought 12 goats to see how they got on with them.

From those early days the herd has expanded and currently they have 90 breeding females, and expect around 150 kids in January and February. The capacity of the building will be around 200 to 220 head, with the goats housed in three groups

– the youngstock, breeders and finishers. Housing taking place when the ground becomes very wet as goats are susceptible to foot problems, explains Ruth. When ground conditions are suitable the goats are strip grazed.

The kids will be finished at a weight that maximises the value of the carcass, and which fits in with the capacity of the building, says Antony. Typically that will be after around six months of age and 42kg live, to give a 21kg carcass.

Although goat meat rarely features on the shopping list of the average British national, immigration from parts of the world where people do eat the meat means that there is a ready market, believes Antony. "Some 80% of the global population eats goat, so the potential size of the market is huge."

Supplying high quality meat, reared to the highest welfare standards was always top of the priority

**“ It was like the equivalent of going from camping in a field to a five star hotel. They haven’t looked back since”**

**Ruth Key**

list for the Keys, which is why they decided to go for The Roundhouse, adds Ruth. That they had made the right decision was obvious as soon as they had to house the animals:

“The second we brought the goats off grass and into the building they laid down. It was like the equivalent of going from camping in a field to a five star hotel. They haven’t looked back since,” she says. “It is an extremely stress-free building because goats have very close family groups and the mothers never forget their daughters, so it is good that they can see each other through the pens. It also has superb visibility and a great handling system to enable us to carry out routine veterinary tasks and to weigh the kids on a regular basis.” This they do at birth, six weeks, at weaning at four months and “as and when we want”.

The only modifications to a conventional cattle Roundhouse are the use of smaller troughs with a tip mechanism to allow all of the nuts to be spread out along the length of the trough before the animals are given access to it; a different water system (goats do not naturally drink much);



a smaller handling system; LED lights and a new Galebreaker roller system around the outside of the building that can be raised or lowered according to the ambient temperature.

# Case Study

**Using a Roundhouse for livestock is commonplace, but at Cannon Hall Farm it's being used to allow visitors to see farm animals clearly, with minimal disruption, from a specially made gantry within the main structure.**

Be different... be entertaining! That's the philosophy at Cannon Hall Farm at Cawthorne, near Barnsley, South Yorkshire. Yes it's a farm – but not as we know it. That's because this farm has been open to the public for the best part of 20 years, and now plays host to 250,000 people each year, who are attracted to a positive menagerie of different animals including 100 cattle, 400 ewes, 30 sows, 40 pygmy goats, 12 llamas, six donkeys ...and so on.

Owned and run by Roger Nicholson and his family, the farm has conventional enterprises such as arable, and beef production... but also runs bizarre events such as sheep and ferret racing. Needless to say the public love the mix of different

animals and attractions on the farm. So much so that the farm is now consistently one of the top ten tourist attractions in Yorkshire, was named the best farm attraction in the whole of England in 2005, and was a finalist in the Visit Britain awards 2012.

With so many people visiting on-farm safety is of prime concern – which is one of the main reasons why they opted for a Roundhouse when it came to renewing their beef building three years ago. A viewing gallery over the animals means that the public can get up close and personal with the animals, without being put in any danger. They can even put a few nuts down feeding tubes for the animals.



# Case Study

“The Roundhouse was a natural choice because it looked great and blended in well with a Grade 2 listed building next to it, and because it had great airflow,” says David Nicholson. “The planners had no



David Nicholson of Canon Hall farm

problem with it at all. It has an iconic, modern design that suits the farm, and it fits nicely into a rural setting. It is great for us, and gets a lot of positive comments from visitors.”

But the building really comes into its own when it comes to handling cattle and safety, he says. “We have to be very careful for ourselves and for others and the dedicated handling system makes light work of it. If you use the system with intelligence the cattle can be handled without ever getting into a pen with them.”

All of the animals in the Roundhouse are bought in as youngstock and finished at around 650 kgs. All are sold via the farm shop, with four to five being required per week. Growth rates of 1 kilo per day are typical in the building, off a diet of grass silage, wholecrop and a concentrate blend.

“The animals do extremely well in the building,” adds David. “We’re very pleased with it and how they perform.”

Visit the Cannon Hall website at [www.canonhallfarm.co.uk](http://www.canonhallfarm.co.uk)



# The Process

At Roundhouse we work alongside you through your entire project process. We will undertake the entire build process through the following stages giving help and support at every stage.



## a) Discussion

The first place we start is whether a conventional or a round building would be best suited, but there are many other factors to consider.

## b) Planning

We will complete the planning application for you, all you do is pay the local authority fees.

## c) Manufacture

The Roundhouse is designed and manufactured to be in accordance with BSEN1090-1:2009, BSEN1090-2:2008 and BS5502-22 (Class II).

## d) Erecting

We are RIDBA Members so you can be assured the building will be erected in a professional and timely manner complying with all current safety regimes.

## e) Internals

As part of the design process, we will design the internal fittings with you and then supply and install them if you wish.



# Planning

## Do I need Planning Permission?

Planning permission is always required for the RH30 and RH45 but is not necessarily required for the RH22. Examples of when it is not required include:

- for agricultural operations or the use of existing buildings on agricultural land for agricultural purposes.
- Changes to the inside of buildings or small alterations to the outside ( a good example being an alarm box)
- If permitted development is applicable - RH22

## Building Warrants\*

Only required in Scotland

If your building is in Scotland you will need to get a Building Warrant and we will complete this work for you as a part of the planning process. A Building Warrant is in addition to a planning application and the two don't work together, so you can be allocated one, but you need both before you can start the build.

The cost of a building warrant is calculated by your local authority and is based upon the value of the project. There is also an engineers fee for a site visit and investigation. We do not charge for our work, as long as you are buying the building from us.

## RIDBA:

We are RIDBA (Rural and Industrial Design and Building Association) Corporate Members. RIDBA brings together the common aims of those involved in high quality, rural and industrial construction, following good practice in safety; with a very wide membership base; representing contractors, designers, colleges, surveyors, land agents, planners, manufacturers and clients.

Our membership and involvement at Board level is further commitment of our consistent strive for quality in everything we do.

**RIDBA**  
Rural & Industrial  
Design & Building Association



# Erecting a Roundhouse

At Roundhouse we work alongside you through your entire project process. We will undertake the entire build process through the following stages giving help and support at every stage.

## Stage One



All of the materials arrive on site on the back of a single trailer and are unloaded carefully in order of erection.

## Stage Two



The kingpin is put in place ready to start the metalwork. The fabric roof is attached.

## Stage Three



The fabric roof is carefully unrolled over the first half of the truss work before the remainder of the truss work is attached.

## Stage Four



The rafter and cantilever are attached and all of the metal work bolts are tightened.

## Stage Five



The roof is tensioned on the ground using steel cables and the rainwater harvesting system is completed.

## Stage Six



The roof is constructed on the ground before being raised, using hydraulics, up the centre pin, when the legs are dropped in place - simple!!



# Customer Research Results

We asked all of our Roundhouse owners, who have had the opportunity to use their building through at least one winter, a series of questions to allow us to better understand how the building and animals were performing. The basis of the questions were with regard to:

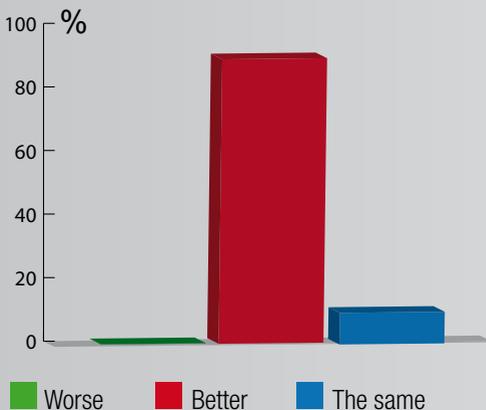
- Animal performance
- Animal handling
- Disease instance
- Ventilation
- Bedding
- Labour

Our company ethos is to constantly improve our farm buildings (it's what brought about the Roundhouse in the firstplace) and we will use these results and results of future surveys to find ways can make improvements for farmer and livestock welfare.

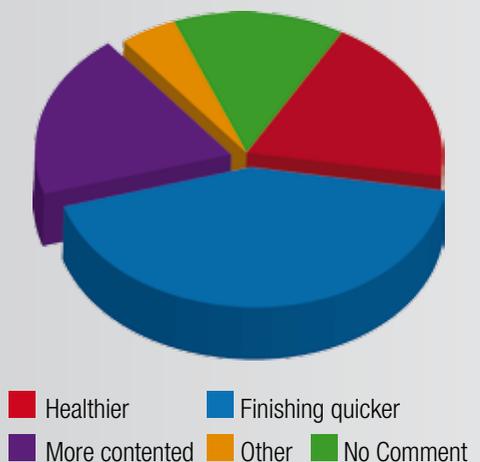
A summary of the results is covered below and over the following pages.

## ANIMAL PERFORMANCE

How do you feel the animals perform in a Roundhouse compared with a conventional building?

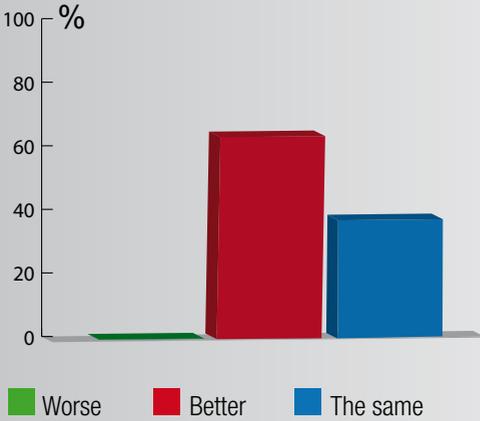


If you feel the animals are performing better, can you quantify this?



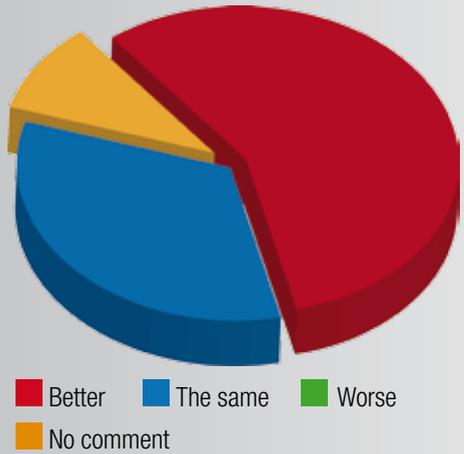
## ANIMAL HANDLING

How does handling your livestock compare with your existing method?



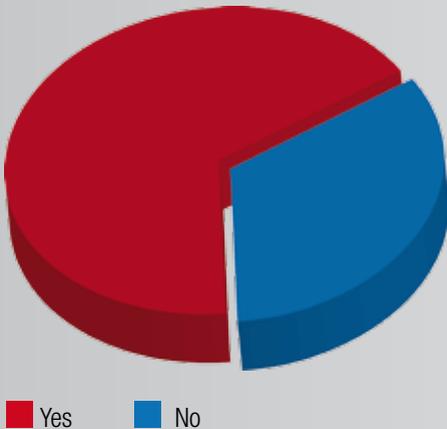
## EASE OF USE

How easy is the building to use compared with your conventional buildings?

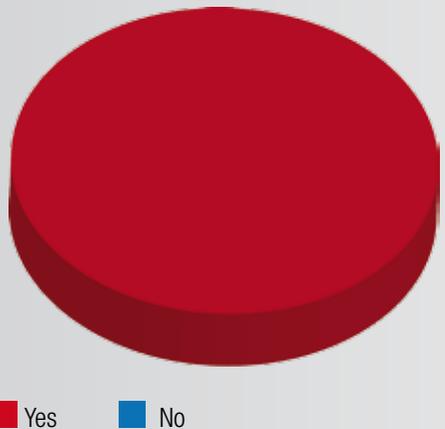


## DISEASE

Do you operate a closed herd?

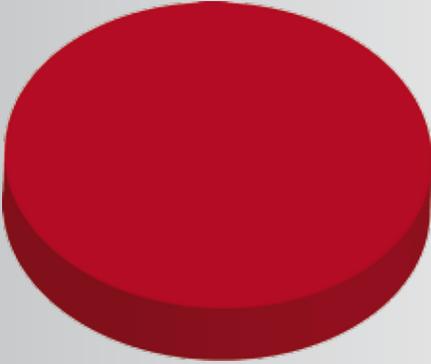


Do you feel your Roundhouse provides a healthier environment for your stock?



## VENTILATION

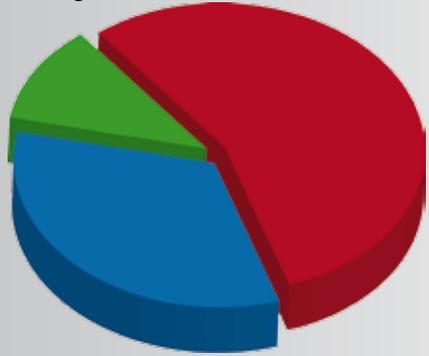
How does the atmosphere/ventilation compare with your existing buildings?



■ Better ■ The same ■ Worse

## BEDDING

How does straw consumption compare with your conventional buildings?



■ Better ■ The same ■ Worse

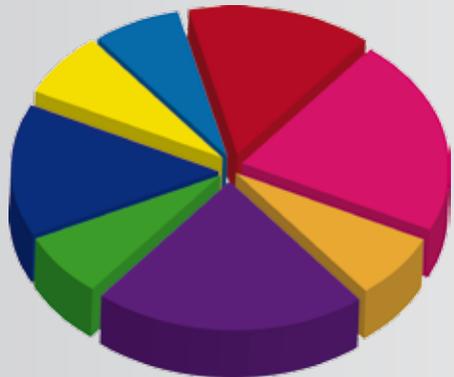
## LABOUR

How much labour do you estimate you save over your conventional building?



■ 50% ■ 30% ■ 25%  
■ 20% ■ 15% ■ 0%

The Roundhouse has been designed to provide a healthy stress free environment for livestock & operatives. Compared with your conventional buildings has veterinary medication been reduced and if so by how much?



■ 0% ■ 10% ■ 20%  
■ 25% ■ 50% ■ 60%  
■ 75% ■ 100%



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