



Calf Unit Design

Presentation Outline



- Calf house specification
- Ventilation
- Drainage
- Choice of environment
- Cleaning and disinfection
- Labour efficiency



Slurry Stores

Silage Clamps

Dry Cows

Cubicle Shed

Milking Parlour & Calving Pens

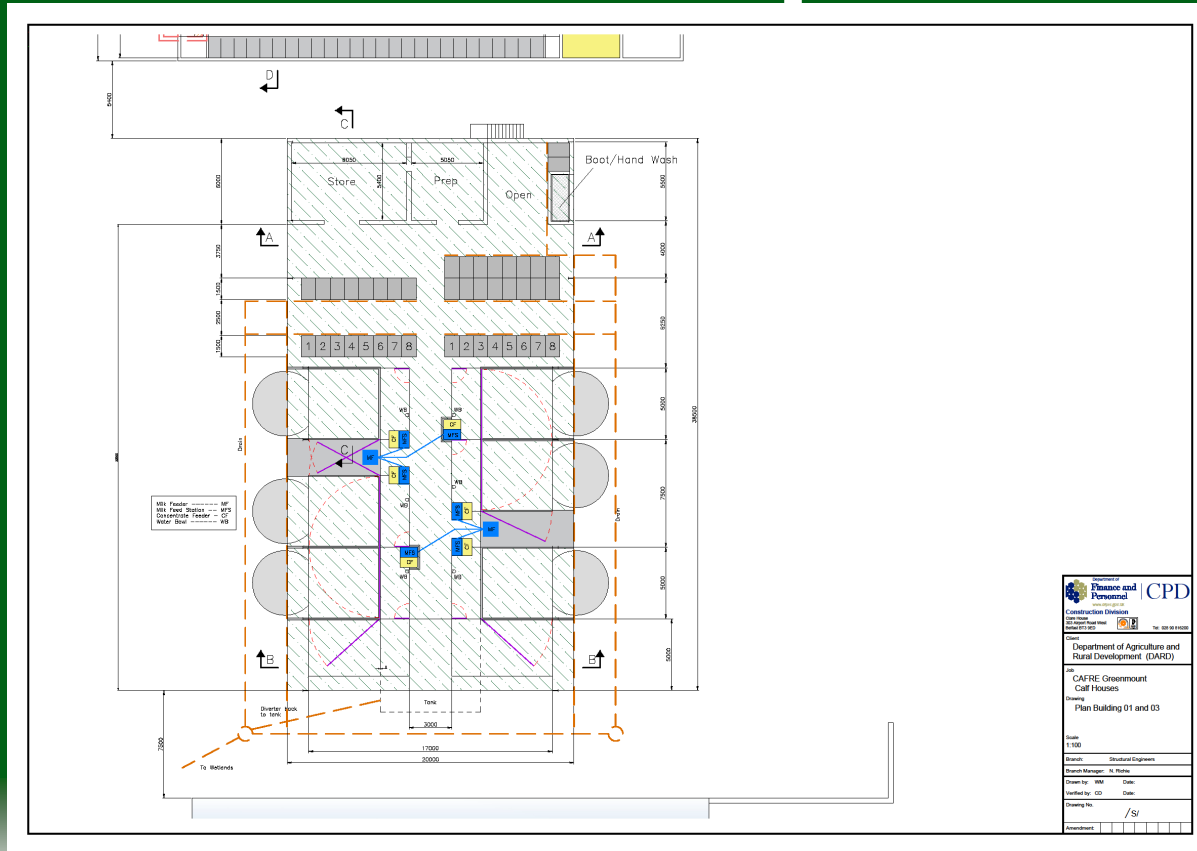
Mating Heifers

Post Weaning Heifers

Calf House

Farm Office

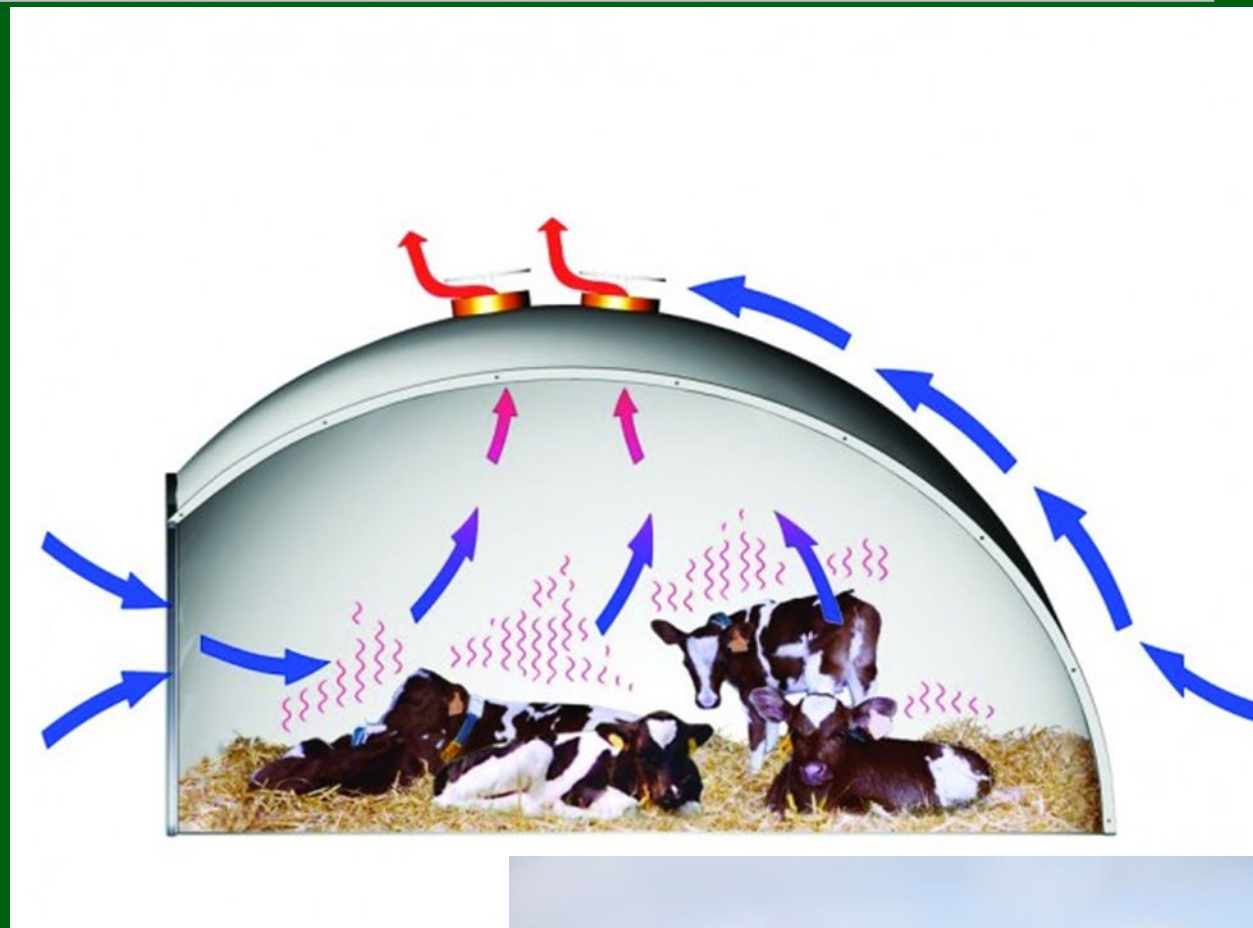
Calf house - specification



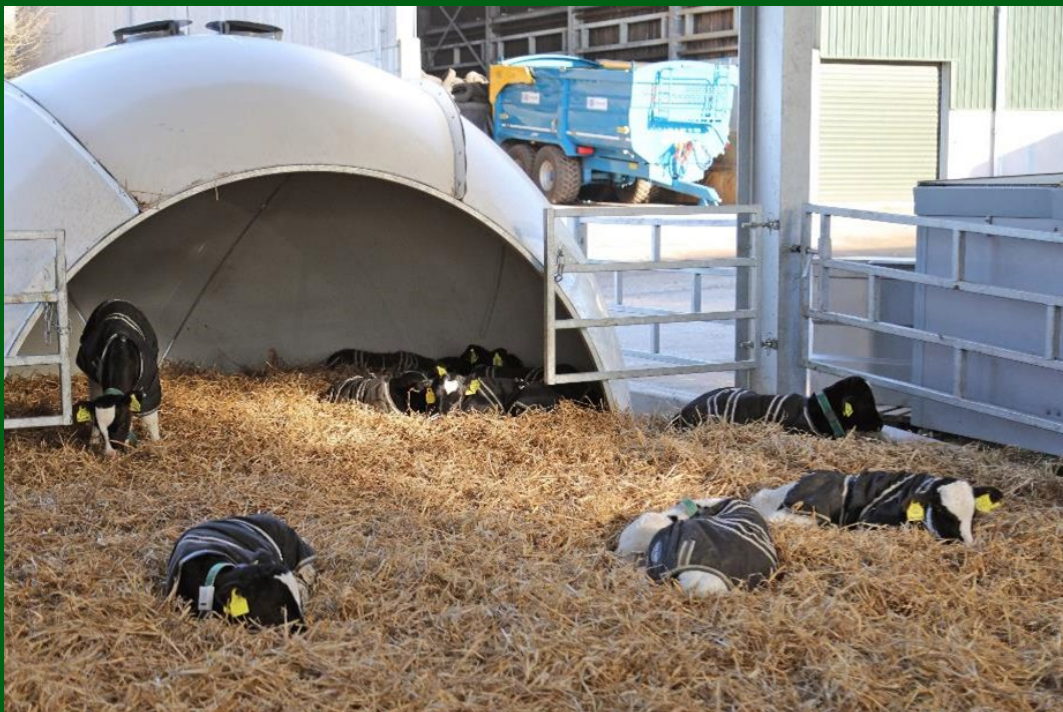
- Building orientation.
- Isolation area (for sick calves)
- 40 No. Individual calf pens
- 6 group pens – 15 calves per pen.
- Auto. weight recording.
- Straw storage area
- Milk preparation room
- Store room

Ventilation

- Unrestricted airflow
- Minimise disease incidence
- Choice of Igloo or bedded pen
- Individual pens – solid sides/covers



Choice of Environment



- Draught prevention more important than temperature
- Choice of Igloo or bedded pen
- End individual pens can be turned through 90° facing away from the wind
- Deep straw bedding
- Calf jackets

Calf Jackets



- AFBI, Teagasc & AHDB research
- Skin temperature + 6 °C higher
- Jacket cleaning

Calf Housing	*Mean Temp (°C)
Wool	10.2
Wool bedded pen	7.9
Automatic calf feeder pens	9.4
Individual calf pens	10.7

*CAFRE, 2017



Drainage

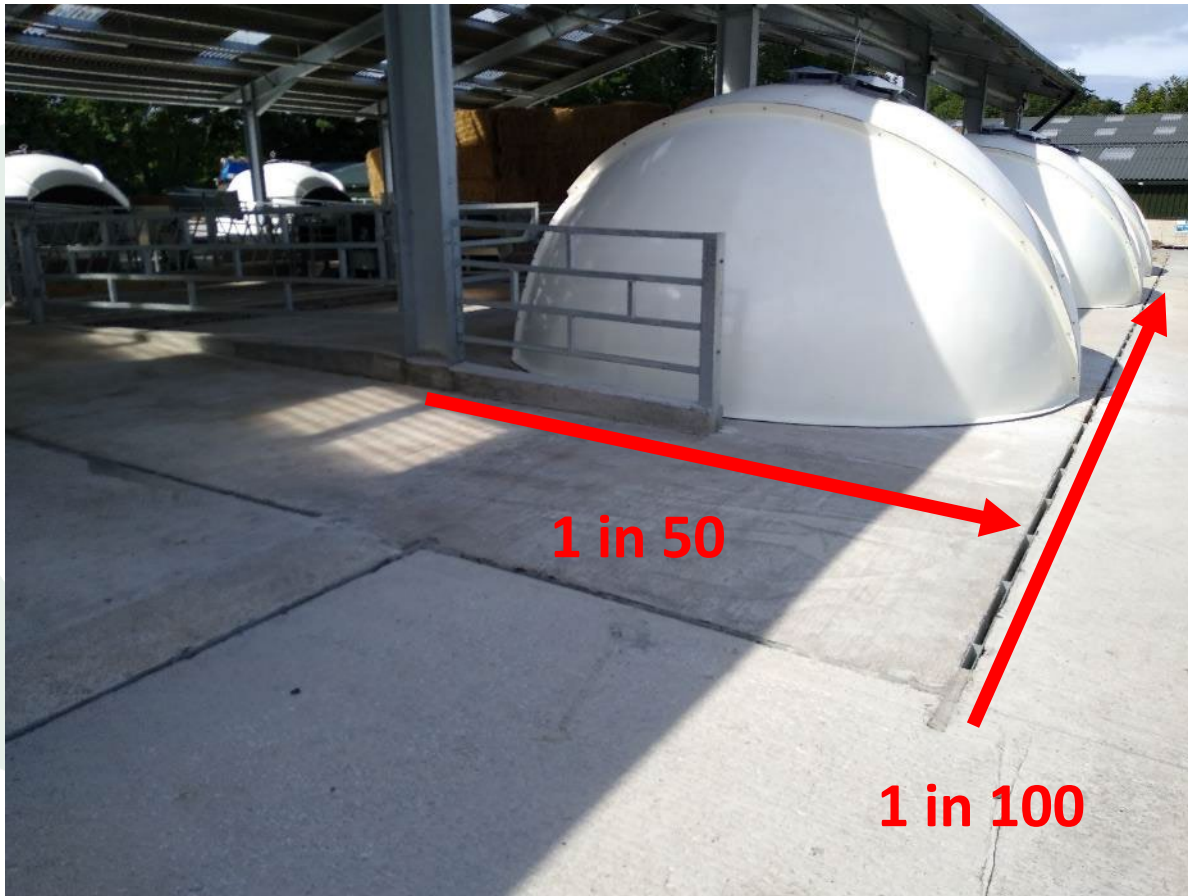


- Dampness increases air humidity
- Humidity supports pathogen survival
- Humidity reduces calf cold tolerance
- Good calf house drainage essential

Drainage



Drainage



Cleaning & Disinfection

- All calves – individual pen first 7 days
- Cleaned and disinfected in wash bay
- Calf jackets – washed and dried
- Heifer calves - Igloo pen weeks 2-10
- Igloo cleaned and disinfected in wash bay
- Each igloo pen used twice per year
- End of season complete calf house cleanout



Labour Efficiency

- Recent labour study in Co Down 18% of time on calf rearing.
- Automatic milk and meal feeders
- Automatic weighing.
- Calf Cloud software
- Milk taxi
- Straw storage beside bedded pens



Labour Efficiency

- Planning for TB incidence.
- Future proof the calf rearing facility.
- Flexibility to manage increased calf numbers

