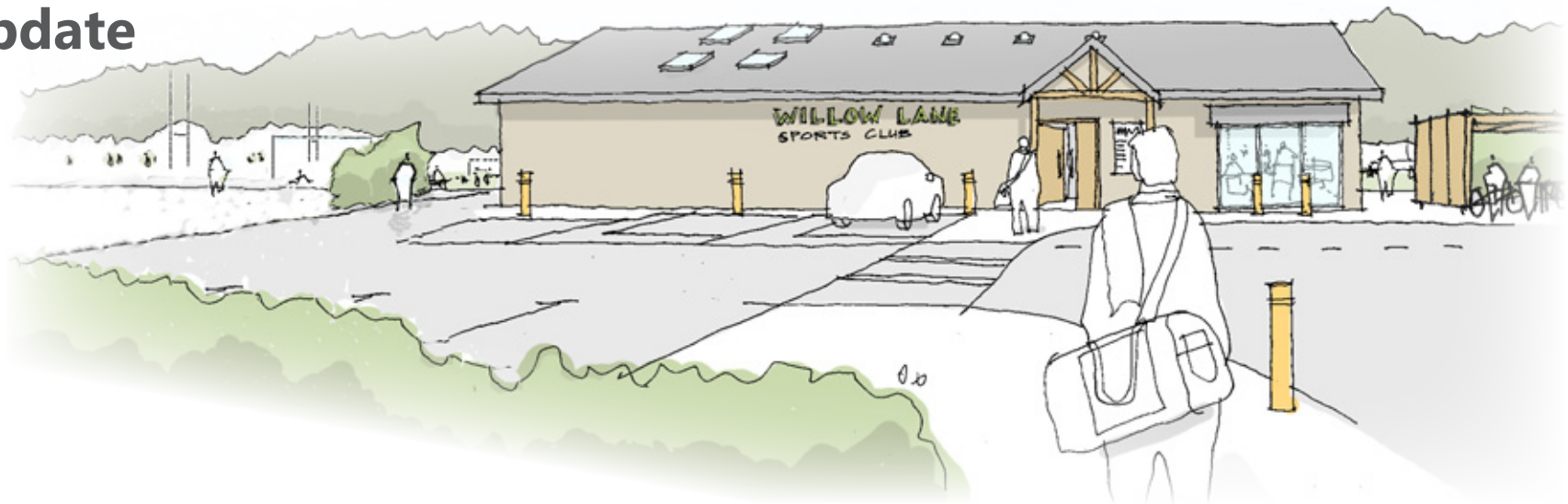


# Clubhouse

## Design Guidance Notes

2016 Update



# 3 REFURBISHMENT

## Display panels

## Documents

### Video

#### DP Design Principles

- 1 Site analysis
- 2 Site response
- 3 Approach to main entrance
- 4 Circulation
- 5 Changing rooms
- 6 Showers
- 7 Social space
- 8 Example clubhouse layout

#### DE Design Examples

- 1-2 Cricket
- 3-4 Football
- 5-6 Rugby
- 7-8 Hockey

### Video

#### R Refurbishment

- 1 Internal planning improvements
- 2 Thermal efficiency & draught proofing
- 3 Damp caused by condensation

#### S Sustainability

- 1 Passive design
- 2 Renewable energy
- 3 Water saving measures

### 1 Project Management

### 2 Design

### 3 Refurbishment

### 4 Sustainability

# FOREWORD

These videos, display panels and guidance notes are intended to help clubs and their design teams work through and apply general principles and processes to achieve better clubhouses. The guidance covers all the key stages – from start to finish.

The information has been developed with the help and support of National Governing Bodies for the range of sport that use and operate such buildings and with input from specialists with particular technical knowledge.

Although clubhouse buildings are often small in scale and shared on a multi-sports community basis, they are nevertheless, essential elements in the sporting landscape. They provide the access, social areas, changing, storage and other essential support spaces for the particular sports.

It is important that the facilities are designed, operated and maintained well to help create a sporting habit for life.

All figures, timescales, legislation and regulations are based on data and information available at the time of writing.

<https://www.sportengland.org/facilities-planning/tools-guidance/design-and-cost-guidance/pavilions-clubhouses/>

# CONTENTS

|   |           |   |           |
|---|-----------|---|-----------|
| <b>Introduction</b>                       | <b>3</b>  | <b>5.0</b>                              | <b>16</b> |
| <b>1.0</b>                                | <b>4</b>  | <b>Building Fabric Improvements</b>     |           |
| <b>Financial Performance</b>              |           | Draught Prevention                      |           |
| Redevelopment Review                      |           | Insulation                              |           |
| Other Alternatives                        |           | Improving Thermal Efficiency in Walls   |           |
| Running Costs                             |           | Improving Thermal Efficiency in Roofs   |           |
| Sources of Revenue                        |           | Improving Thermal Efficiency in Windows |           |
| Funding                                   |           | Improving Thermal Efficiency in Floors  |           |
| <b>Cost Benefit Analysis</b>              |           | Building Regulations                    |           |
|   |           | Condensation and Damp                   |           |
| <b>2.0</b>                                | <b>7</b>  |   |           |
| <b>Existing Building Condition</b>        |           |   |           |
| Building Condition and Structural Survey  |           |   |           |
| Thermal Imaging Survey                    |           |   |           |
| Asbestos Survey                           |           |   |           |
| <b>3.0</b>                                | <b>10</b> |   |           |
| <b>Internal Improvements</b>              |           |   |           |
| Layout                                    |           |   |           |
| Child Protection                          |           |   |           |
| Social Space Analysis                     |           |   |           |
| Accessibility for All                     |           |   |           |
| Regulation Compliance and Design Guidance |           |   |           |
| <b>4.0</b>                                | <b>15</b> |   |           |
| <b>External Improvements</b>              |           |   |           |
| Improving the Area Around the Building    |           |   |           |

# INTRODUCTION

This document provides guidance on the refurbishment, modernisation and improvement of an existing clubhouse.

No building will last forever but by careful and targeted investment, an existing clubhouse could be given a new lease of life. The more information that can be gathered about the existing building the better and this should be done in conjunction with a wholesale review of the club's needs and aspirations and how best to respond to the challenges and opportunities the club faces. This research will enable the club to make well-informed decisions about how best to remodel, adapt and modernise the clubhouse.

# 1.0 FINANCIAL PERFORMANCE

## Redevelopment Review

The need to reduce expenditure and increase income generating potential is a crucial driving factor in redeveloping a clubhouse facility.

Much of the existing clubhouse facility provision was provided over twenty years ago during which time, much has changed. Design standards have moved on considerably and public expectation has risen, with the provision of health and fitness facilities becoming a common feature.

These factors can combine to mean that refurbishing an existing facility may not be a sensible option. It could be that:

- The location of an existing building may no longer serve the needs of the local population, because people have moved away or the area is no longer a residential area
- The local population may be better served by other providers who have more or better facilities
- In physical terms the existing facility may not be adaptable and the associated costs are so high that refurbishment is not a reasonable option.

It is essential that before any decision is taken on refurbishment or replacement, the facility needs to be looked at in the wider context of the area. Rational decisions about the merits of refurbishing or replacing a particular facility can then be made.

## Other Alternatives

Future needs may be best served by a range of options which may be more desirable than refurbishing an existing building. For example:

- Working in partnership with other providers to share existing facilities
- Working in partnership with other providers to develop a new clubhouse that provides accommodation for both parties with a wider range of facilities to attract members
- Building a new provision in an area where there is more demand.

These decisions can only be taken following a detailed analysis of the future aspirations of the club set against the budget and finding possibilities available.

## Running Costs

Running costs are the amount regularly spent to operate a club. This could include things such as salaries, utilities, and rent.

The annual running costs for a clubhouse consists of:

- Staff costs
- Utility costs (i.e. gas, electricity, water)
- Business Rates
- Management/service costs (i.e. cleaning, maintenance, security)
- Ground rent / leasehold.

Any reduction in the annual running cost of the clubhouse as a result of the refurbishments should be considered in the business plan.

### Staffing costs

Generally, staffing costs of clubhouses are very low, or nil as many sport clubs are run by volunteers. That said, inefficient planning and design can result in higher staff demands.

Some key areas which may need to be reviewed include the reception area, the bar area and the changing rooms. Good planning can allow efficient supervision of two or more areas at once.

### Community Amateur Sport Clubs (CASC)

There are potential 'charity type' benefits if clubs register with HMRC under the CASC scheme. These include mandatory business rate relief, Gift Aid on donations and certain corporate tax.

See <http://www.cascinfo.co.uk/> for the current details.

### Utility Costs

Utility costs include services such as electricity, heating, water and waste collections that the club will need to purchase in order to operate. These will vary from project to project and the particular tariffs that are charged by suppliers. A typical sports club will spend around 30% of its running costs on energy and about £10,000 each year on electricity alone.

See <http://www.sustainableclubs.co.uk/> for guidance on environmental sustainability to reducing running costs. It contains an energy calculator and can help clubs focus on where they should focus their efforts to for greater sustainability.

#### Management/Service costs

Other costs that a club will incur that should be considered during the design stage of a project include:

- Cleaning
- Security
- Regular maintenance
- Periodic repairs and replacements.

These can be 'designed out and avoid future expense by careful selection of materials and appropriate detailing.

## Sources of Revenue

Typically, the sources of revenue that fund or subsidise the running costs are:

- Rental income from the lease to an operator
- Fees, charges and subscriptions paid by members of the public (i.e. users, visitors)
- Subsidies from other government departments, public bodies, charities, etc.
- Revenue from the bar/ social facilities
- Fundraising.

All of these funding sources should be considered in the Business Plan.

## Funding

There are a range of funding sources that may be able to provide the club with a grant for proposed refurbishment works. Approach the National Governing body for details of possible funding sources.



## Cost Benefit Analysis

Clubs should undertake a cost-benefit analysis to determine the impact that a refurbishment will bring to the club against the cost of the project. This should be undertaken before any major financial decisions are taken. The level of initial investment depends on the clubs budget for the project but quality products and a higher standard of finishes may have a longer life and lower maintenance costs.

Generally all fixtures, fittings and decorations should be robust, long lasting and appropriate for the use that is expected. For example, good quality doors and fittings will be required in busy circulation areas and the initial extra expense of designing the showers without exposed pipework will avoid future cost from accidental damage.

Floor and wall finishes should also be chosen to be easily cleaned and to maintain an acceptable appearance over a period of time.

## 2.0 EXISTING BUILDING CONDITION

Although the main building structures of a sports building may have a useful life of up to 50 years, the individual components probably do not.

The most common problems are:

- Heat loss from poor insulation and poor air tightness
- General wear and tear to finishes and fabric due to use and age.
- Building Movement
- Damp and water ingress
- Inadequate ventilation
- Blocked drains
- Structurally unsafe ceilings, walls and roof
- Failure of double glazed windows
- Lack of plant efficiency and control
- Asbestos and other deleterious materials
- General lack of maintenance
- Lack of DDA compliance
- Poor storage
- Lack of flexibility to meet current demands.





Alongside the practical issue of the ageing stock of facilities, the focus on sustainability provides a powerful case for refurbishing and replacing existing buildings and making them more energy efficient and operationally effective.

It is essential however that before committing to a refurbishment, the club determines the condition of the existing building. The anticipated lifespan of the refurbished existing building versus the capital cost of any remedial work needs to be considered.

The following surveys are might be appropriate:

- Building Condition and Structural Survey
- Thermal Imaging Survey
- Asbestos Survey.

## Building Condition and Structural Survey

A Building Condition Survey provides an assessment of the physical characteristics. The survey should identify deficiencies and maintenance issues including structural, mechanical, electrical, and life safety systems.

The building should be safe and fit for purpose. This should take precedence over the addition of extra facilities or improvement of finishes.

This survey should help you to determine whether refurbishment is the best solution or whether it would be more cost effective to demolish and rebuild.

A structural survey should ensure that there is no subsidence and that the building structure is sound. This survey should also include electrical, plumbing, water and drainage.

## Thermal Imaging Survey

A thermal imaging survey of the building fabric can identify where air leaks in or out, and show thermal insulation defects and overall thermal efficiency. The thermal image, which is effectively a picture of thousands of surface temperature measurements, makes it easy to see where insulation is missing, or where air is leaking, or fabric failures such as cold bridges and damp penetration.



## Asbestos Survey

It is possible that your clubhouse contains asbestos if it was built or refurbished before the year 2000. Asbestos can typically still be found in any of the following:

- Asbestos cement products (pipes, flues, roofs etc.)
- Lagging (on pipes and boilers etc.)
- Water tanks and toilet cisterns
- Asbestos insulating board (AIB – which closely resembles typical plasterboard)
- Loose asbestos in ceiling and wall cavities
- Sprayed coatings on ceilings, walls and beams / columns
- Textured decorative coatings (commonly referred to as Artex)
- Floor tiles
- Textiles and composites.



The club should take reasonable steps to find out if there are materials containing asbestos in the building. It is fairly common to find asbestos in a clubhouse building built pre 2000. If found, the removal of asbestos can be managed and controlled by specialist contractors.

An asbestos survey is an effective way to help manage asbestos in the club premises and avoid it being exposed either during refurbishment or demolition. Asbestos surveys should only be carried out by suitably qualified surveyors.

Further information regarding asbestos is available at:

<http://www.hse.gov.uk/pubns/manageasbestos.pdf>

## Flood Zones

If the clubhouse is located in a flood zone, the building will need to recover quickly following a flood. For more information, refer to Sport England's Flood Guidance available at:

<http://www.sportengland.org/facilities-planning/tools-guidance/flood-guidance/>

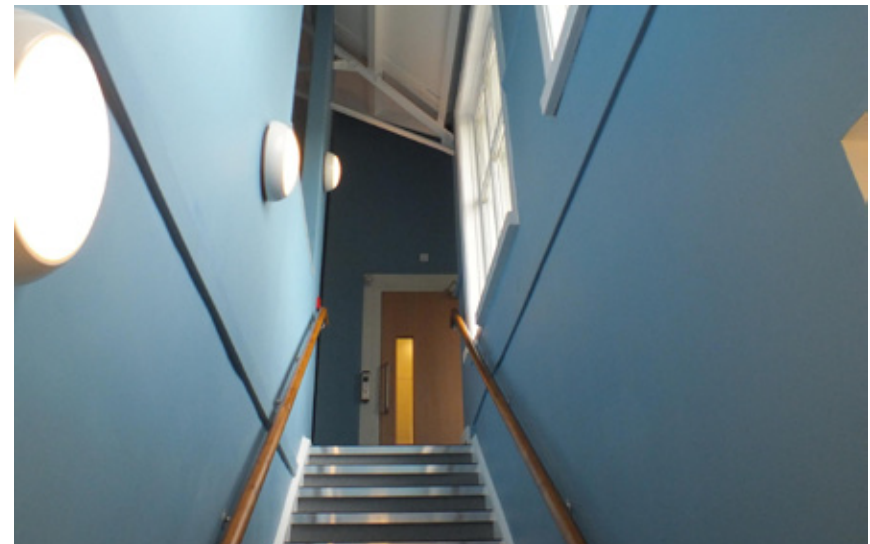
To determine if the club's site is within or close to a flood zone, contact the Environment Agency at:

<https://www.gov.uk/government/organisations/environment-agency>

## 3.0 INTERNAL IMPROVEMENTS

The internal layout of the clubhouse is important to the overall success as a building. It should provide suitable accommodation for the sports that it supports and this should be arranged in a logical, convenient and efficient plan.

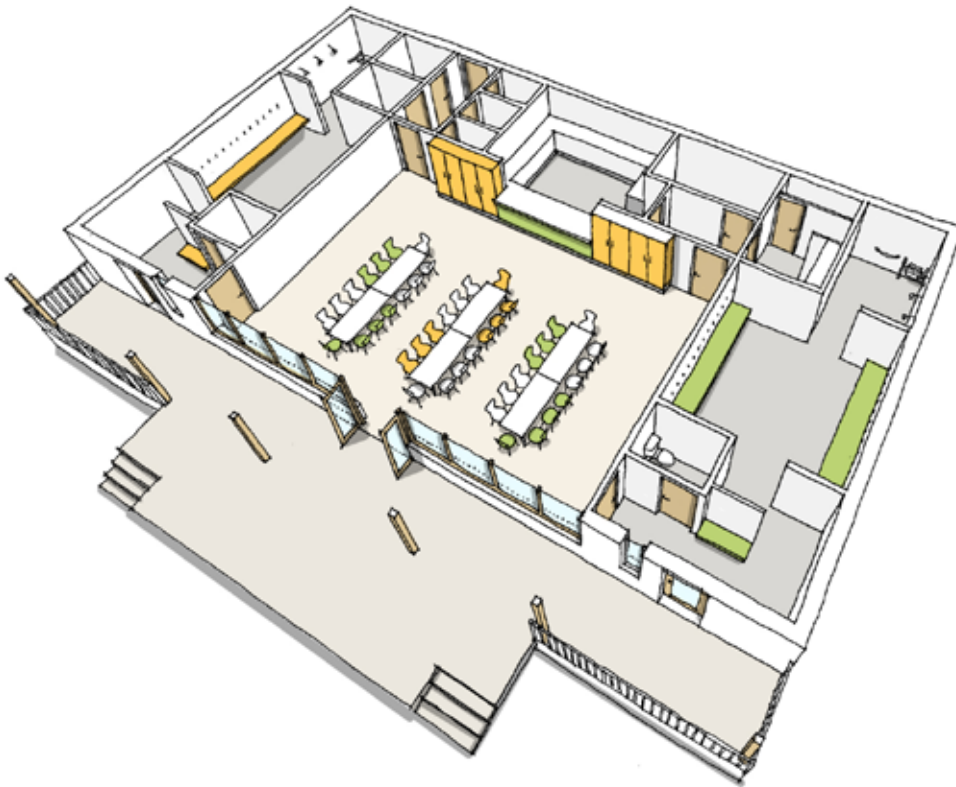
The layout should provide safe access to the pitches and have changing facilities for all ages and physical abilities. All areas should be fit for purpose and be of an appropriate size for the activities that take place. Furthermore, the overall design of the building should contribute to creating an attractive and welcoming sporting ambience.



## Layout

Basic cosmetic changes and improvements to comfort will make the clubhouse a nicer place to be and retain membership and attract new people.

The layout of the existing clubhouse needs to be carefully considered and an assessment made of how well it works. Some minor internal adjustments can have a big impact. Increasing the amount of changing rooms for example can allow more matches to be played at peak times, potentially increasing member numbers.



See separate 'Design Principles', Design Examples' and 'Refurbishment' display panels:

- **DP4** Circulation
- **DP5** Changing rooms
- **DP6** Showers
- **DP7** Social space
- **DE2** Cricket: Clubhouse
- **DE4** Football: Clubhouse
- **DE6** Rugby: Clubhouse
- **DE8** Hockey: Clubhouse
- **R1** Internal planning improvements

## Child Protection

Sports clubs have a general duty of care towards children and young people and many NGBs for some sports and other bodies have guidance and policies in place for clubs that are affiliated to them.

See <https://thecpsu.org.uk/resource-library/2013/safe-use-of-changing-facilities/> for further details.

The design and layout of a clubhouse should be reviewed in the context of child protection issues. The aim should be improved to eliminate any features which could potentially put children at risk. For example;

- Avoid direct viewing into changing spaces from public spaces. Sight lines should not allow views of children changing and these are simply avoided with privacy screens and careful planning
- Do not allow adults to change with children. Consider the use of private changing areas
- Public areas and circulation spaces, that children are required to use alone, should be well lit and highly visible
- Changing rooms without en-suite facilities should be avoided as a child would have to leave the changing room and visit the toilet unsupervised
- Communal shower rooms or toilets where different user groups combine are not recommended
- Eliminate communal baths.

This list is not exhaustive but illustrates some of the issues that should be considered with older facilities.

## Social Space Analysis

The social space is the heart of the club and is often the most consistent source of income. This area should therefore be looked at with fresh eyes to see if any improvements could be made to increase social activities.



Typical problems with social spaces include;

- Too big or too small
- Limited or inappropriate storage
- Inadequate bar or kitchen facilities to meet user demand
- Inadequate views onto the field of play
- Poor quality or control of lighting, heating or ventilation
- Lack of flexibility to meet current demands.

The cost of a refurbishment or extension should be weighed against the increase in income that could be generated.

Outside space can form an extension to the social space in summer months. Extended roof eaves will provide a shelter from rain, as would retractable awnings while temporary gazebos and parasols could be used to provide shade and create a sense of occasion.

## Accessibility for All

A number of standards and recommended dimensions in circulation and changing areas have changed since many of the existing facilities were first built. Good design should allow everyone to access the building.

The term disability does not only apply to mobility impairment or learning difficulties, but in this context should also cover people with debilitating conditions, sensory impairment or temporary injury.

The Sport England Design Guidance Note *Accessible Sports Facilities* (ASF) extends this scope further to include '*the young and old, the fit and not so fit, parents with pushchairs and people carrying large sports bags and cumbersome equipment*'. The key outcome is to be inclusive by good design and good management, to integrate all users and increase the independence of everyone using the facility.

An Access Audit can help to identify the areas where improvement is required. By undertaking an Access Audit and then implementing its recommendations you will be improving access for disabled people and, in all likelihood many other users.

To accompany the ASF guidance, a separate Audit Check List is available that can be used in a simple 'walk around the building' to identify any barriers to users and potential solutions. See:

<https://www.sportengland.org/facilities-planning/tools-guidance/design-and-cost-guidance/accessible-sports-facilities/>



## Regulation Compliance and Design Guidance

### Building Regulations

If a building is altered, there is a requirement that all of the work complies with the current Building Regulations, such as access and thermal insulation and ventilation.

<http://www.planningportal.gov.uk/permission/responsibilities/buildingregulations/approvalneeded/>

Any new elements or refurbished areas must meet the required thermal performance. This is referred to as the U-value. It is a measure of how quickly heat will pass through the building fabric.

For further information, please refer to:

[www.planningportal.gov.uk/uploads/br/BR\\_PDF\\_ADL1B\\_2010.pdf](http://www.planningportal.gov.uk/uploads/br/BR_PDF_ADL1B_2010.pdf)

### Sport England

See the Sport England website for guidance relevant to a range of sports facilities available at:

<https://www.sportengland.org/facilities-planning/tools-guidance/>



### National Governing Bodies for Sport (NGBs)

Some NGB's design guidance includes specific requirements for clubhouses and changing areas. For further information and contact details, see:

England and Wales Cricket Board (ECB)

<http://www.ecb.co.uk>

England Hockey (EH)

<http://www.englandhockey.co.uk/>

Lawn Tennis Association (LTA)

<http://www.lta.org.uk>

Rugby Football League (RFL)

<http://www.therfl.co.uk/index.php>

Rugby Football Union (RFU)

<http://www.englandrugby.com/>

The Football Association (FA)

<http://www.thefa.com>





# 4.0 EXTERNAL IMPROVEMENTS

## Improving the Area Around the Building

### Car Parking and Access

If the intention is to refurbish or extend the existing clubhouse, improvements to car parking may be needed to cater for the increased numbers of members and visitors. The need for overflow car parking for special events or significant match days should also be considered. Provision should be made for safe access across and around the car park and at least 5% of all parking to be designated accessible parking bays.

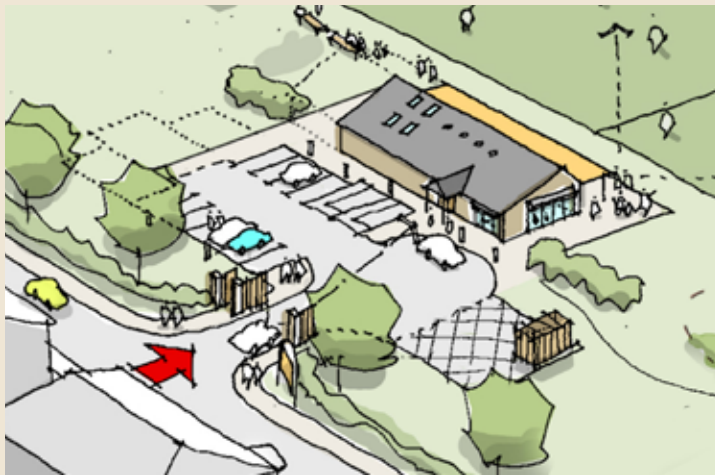
If new car park provision is being considered, advice from the local planning authority will determine if planning permission for the improvements is required.

### Pedestrians

There should be separate routes for pedestrians and vehicles. Surfaces for pedestrian use should be smooth and even, and suitable for mobility scooters and wheelchairs.

### Cyclists

Access roads should be wide enough for cyclists and passing traffic. It is important to discourage cyclists from using the pavements or pedestrian areas. Dry, secure bicycle parking facilities should be provided close to the entrance and not hidden.



# 5.0

## BUILDING FABRIC IMPROVEMENTS

All clubhouse buildings should be designed to be as energy efficient as possible by incorporating insulating materials.

See document 4 Sustainability for methods of harvesting the energy naturally available on site and the use of renewable energy technology.

**See separate 'Refurbishment' display panel:**

- **R2** Thermal efficiency & draught proofing

### Draught Prevention

Draught-proofing is one of the cheapest and most efficient ways to save energy and money in any type of building.

By sealing gaps and preventing draughts, warm air will be contained and therefore less energy will be needed to heat the building.

The most common place for gaps to occur are around poorly fitting doors and windows, but gaps can also occur around loft hatches, electrical fittings or pipework leading to the outside. Draught stripping is cheap and easy to install to block such draughts.

See Sustainable Clubs website at <http://www.sustainableclubs.co.uk/>

## Insulation

Insulation reduces heat loss or gain through the walls, roof and windows making temperature control more economical. By maximising the performance of the building fabric, the need for additional energy from gas or electricity to heat or cool the building is minimised.

Improving the building fabric is a very effective way to reduce energy consumption.

### Insulation in New Buildings

Most types of construction will require a separate insulating layer in addition to the primary construction. Some of the more modern building materials may have insulation as an integral part of the fabric.

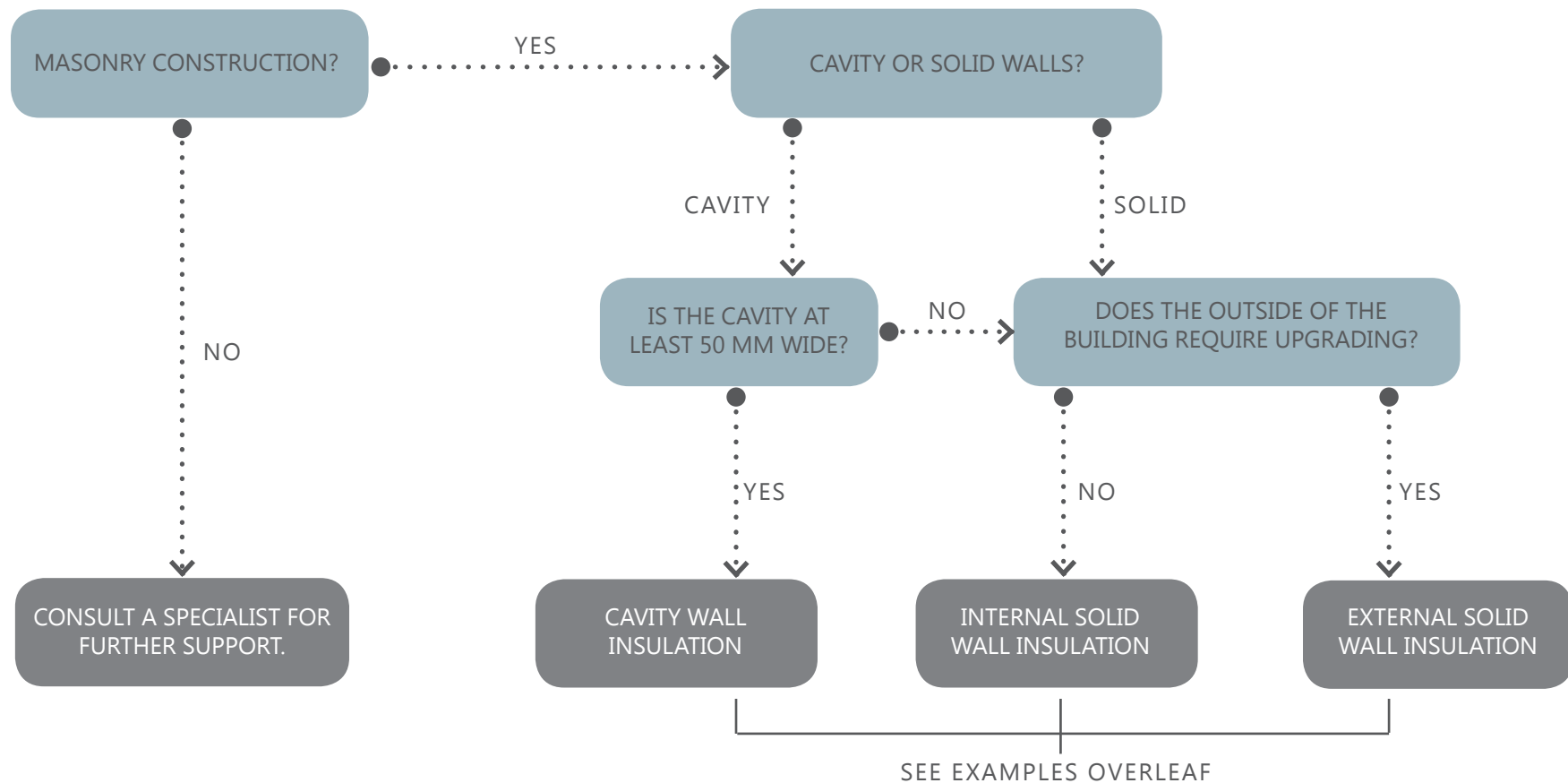
### Insulation in Existing Buildings

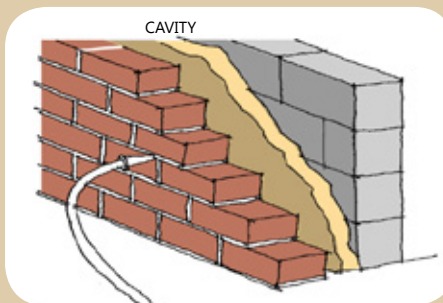
Existing buildings may be draughty and have very little insulation. It is possible to insulate existing floors, walls, windows and roofs and there are various ways to improve these elements depending on the type of construction of the existing building. However, careful positioning of a vapour barriers, detailing and workmanship is required.



## Improving Thermal Efficiency in Walls

The approach to thermal efficiency improvements depends on the type of wall construction of the clubhouse. The diagram below gives an overview of which type of insulation may be suitable.

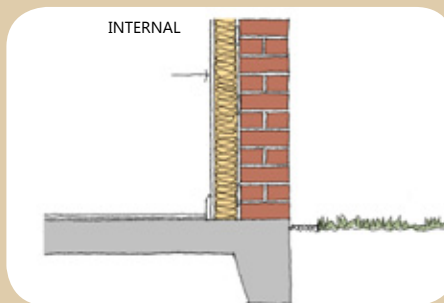




#### Cavity Wall Insulation

For masonry walls with a cavity at least 50 mm wide, a simple way to insulate is to put insulation into the cavity:

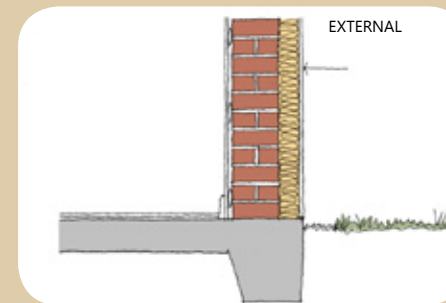
- Cavity wall insulation is blown into the cavity from the outside of the building.
- Cavity wall insulation can be made out of mineral wool, beads or granules or foamed insulants.
- If your walls are exposed to driving rain or you have any areas of damp in your building, this type of insulation is not recommended.



#### Internal Solid Wall Insulation

For buildings with solid walls that do not need upgrading on the outside, this is done by fitting rigid insulation boards to the internal face of the external walls:

- Generally cheaper to install than external wall insulation
- Will slightly reduce the floor area of any rooms in which it is applied
- It is disruptive, but can be done room by room
- Requires skirting boards, door frames, pipes, electrical cables and sockets to be removed and reattached.



#### External Solid Wall Insulation

For buildings with solid walls that do need upgrading on the outside, this involves fixing a layer of rigid insulation boards to the external surface of the external walls and then covering it with a special type of render or cladding:

- There are some products where the cladding is combined with the insulation board to make the installation process simpler
- Can be applied without disruption to the inside of the building
- Avoids reducing internal floor area
- Potential need to adjust or replace rainwater fixtures, soffits and treatment to reveals/openings
- Improves the weatherproofing and sound resistance
- Increases the life of the walls by protecting the brickwork
- Renews the external appearance. However, planning permission will be needed.

**Take professional advice, in particular on vapour barriers, detailing and workmanship**

### 3 Refurbishment

Rev 002 - March 2016

#### Performance Comparison

| <b>1 = POOR<br/>9 = EXCELLENT</b> | External<br>Insulation | Cavity Wall<br>Insulation | Internal<br>Insulation |
|-----------------------------------|------------------------|---------------------------|------------------------|
| Thermal<br>Effectiveness          | <b>7</b>               | <b>5</b>                  | <b>9</b>               |
| Cost<br>effectiveness             | <b>1</b>               | <b>9</b>                  | <b>2</b>               |
| Disruption during<br>installation | <b>8</b>               | <b>9</b>                  | <b>1</b>               |
| Success rate                      | <b>8</b>               | <b>3</b>                  | <b>9</b>               |
| Airtightness                      | <b>2</b>               | <b>3</b>                  | <b>9</b>               |
| Suitability for<br>clubhouses     | <b>9</b>               | <b>5</b>                  | <b>9</b>               |

#### Other Types of Wall

Some clubhouses may be made from a steel-frame, timber-frame or made from pre-fabricated concrete panels. Insulating these buildings is more difficult and will require expert advice (see column opposite) on the most suitable technique for a particular building.

Cavity wall insulation is not recommended for a timber framed building as it can prevent air circulating around the timber and cause internal condensation and timber decay.

For further information, please refer to National Insulation Association website.

### Clubhouse Design Guidance Notes

#### Thinking of installing insulation?

These schemes may be able to help:

##### Green Deal

<http://gdorb.decc.gov.uk/>

##### ECO

<https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco>

##### HEEPS

<http://www.scotland.gov.uk/Topics/Built-Environment/Housing/warmhomes/eap>

##### Green Homes Cash Back

<http://www.energysavingtrust.org.uk/scotland/domestic/improving-my-home/green-homes-cashback-scheme>

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Installers should be a member of one of the following organisations:

##### National Insulation Association (NIA)

(Go to the NIA website)

##### Cavity Insulation Guarantee Agency (CIGA)

(Go to the CIGA website)

##### British Board of Agrément (BBA)

(Go to the BBA website)



## Improving Thermal Efficiency in Roofs

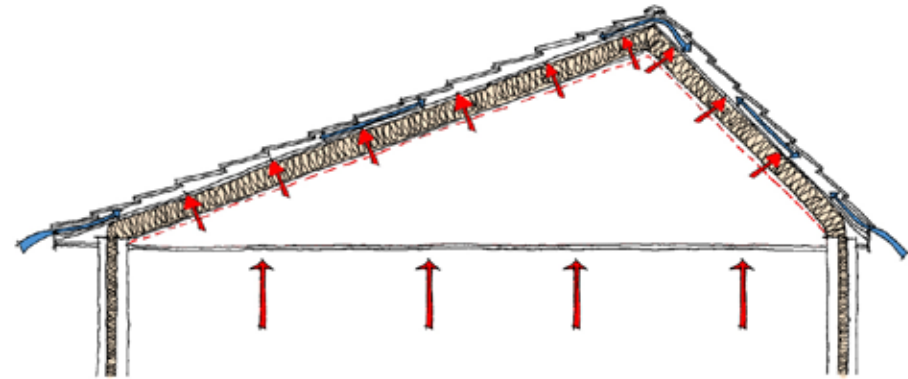
Heat rises, and in an uninsulated building, a large proportion of the heat generated in the building is lost through the roof. There are various ways to insulate the roof with either a 'warm roof' solution or a 'cold roof' solution depending on the shape of the roof.

If there is a roof space, either method can be used. If there is no roof space and the ceiling is the underside of the roof, then a 'warm roof' solution should be used.

Both solutions can be effective ways to insulate the building, however there are various pros and cons for both methods.

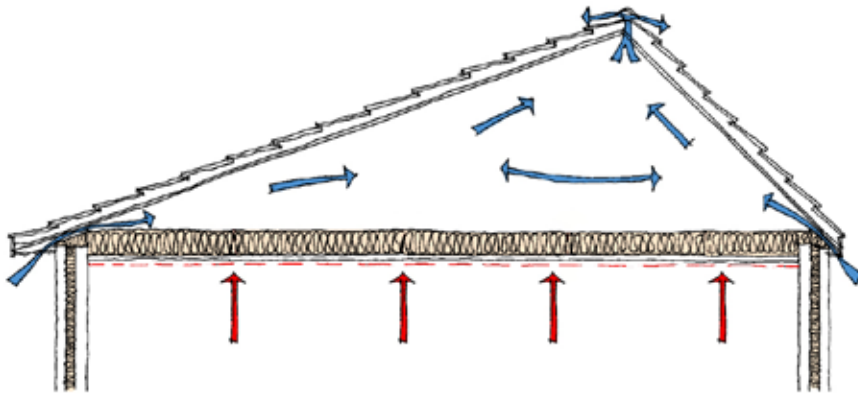
|                   | Cold Roof | Warm Roof |
|-------------------|-----------|-----------|
| Roof with Loft    | ✓         | ✓         |
| Roof without Loft | ✗         | ✓         |
| Flat Roof         | ✗         | ✓         |

If the roof is already insulated, it will still be worth checking that there is enough insulation to achieve the maximum saving.



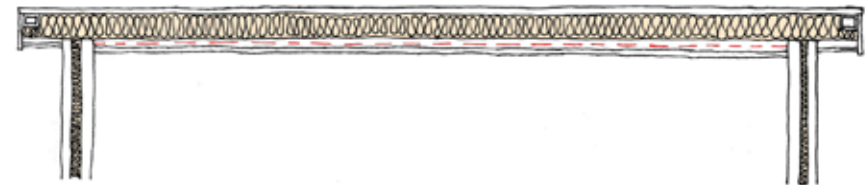
### Warm Roof

- A 'Warm Roof' is where insulation is applied to the underside of, or set within, the roofing structure depth depending on space available and satisfying any ventilation requirements
- A warm roof has condensation risks at the roof level where warm air can move into the insulation and form condensation when it meets the cold air
- The recognised way of preventing this is to install a vapour control layer on the warm side of the insulation, which limits the amount of water vapour that can enter the insulation layer from the building
- The vapour control layer must be continuous, well sealed at joints and placed behind services, such as electrical cables, to avoid puncturing
- Care should be taken not to puncture the vapour control layer during roof maintenance.



#### Cold Roof

- A 'Cold Roof' is where the insulation is laid above the ceiling in the loft. The roof space is therefore above the insulation and is therefore 'cold'.
- A cold roof solution is generally cheaper but again it should be ensured that the loft space is well ventilated to avoid condensation.
- Condensation can occur when warm wet air meets surfaces in the cold roof space.
- The condensation risk is increased where there is a lot of water vapour from showers or from the kitchen and this water vapour passes into the cold roof space and forms water droplets on cold surfaces.
- Ventilating roof spaces and providing adequate ventilation and extract to shower and kitchen areas reduce such condensation risks.



#### Flat Roof

- A flat roof should preferably be insulated from above the waterproof layer.
- A layer of rigid insulation board can be added either on top of the roof's waterproof layer or directly on top of the timber roof surface with a new weather proof layer on top of the insulation. In either case moisture from inside must be prevented from entering the insulation and the risk of interstitial condensation.
- Ideally this should be done when the roof covering is being installed or being replaced. It is not recommended to insulate a flat roof from beneath as this can lead to condensation problems.

## Improving Thermal Efficiency in Windows

In the case of windows that are single glazed, consider replacement with double (or triple) glazing. Although installation costs are high, payback can be significant after several years.

The double glazing contains a void (air or gas) that forms an insulating barrier that keeps heat in. This will make the building warmer, quieter and more energy efficient. The cost of secondary glazing or replacement double-glazed panes is generally less than full replacement with new proprietary double glazed units.

If double glazing is not an option, curtains lined with heavy material can reduce heat loss from the room through the window and limit draughts.

The recent rises in energy prices and improvements in technology make the cost benefits more favourable than in the past. For clubhouses, upgrading single glazing to the latest high performance double (or triple) glazing (low-emissivity glass, gas-filled sealed units with warm-edge spacers) will cut heating bills significantly and potentially give a pay-back.



## Improving Thermal Efficiency in Floors

Older buildings are likely to have suspended timber floors. Timber floors can be insulated by lifting the floorboards and laying mineral wool insulation supported by netting between the joists. Ensure air bricks and sub floor ventilation is not blocked. Some clubhouses will have a ground floor made of solid concrete. A layer of rigid insulation can be laid on top of an existing floor, but be mindful of doors skirtings pipes etc which may need to be refitted.

Having a timber floor insulated professionally, including filling the gaps between the floorboards and around the skirting, depends on the size and shape of the room and the insulation material used. The insulation will make the room feel warmer in the winter and reduce heating bills.

## Building Regulations

If new works include insulating external walls, floors or the roof, such work will need to comply with the current Building Regulations.

Any new elements or refurbished areas must meet the required thermal performance. This is measured in U-value. The U-value is a measure of how quickly heat will pass through the building fabric.

For further information, please refer to the below website.

[https://www.planningportal.gov.uk/uploads/br/BR\\_PDF\\_ADL1B\\_2010.pdf](https://www.planningportal.gov.uk/uploads/br/BR_PDF_ADL1B_2010.pdf)



For further information visit: <https://www.cse.org.uk/>

## Condensation and Damp

### Damp Caused by Condensation

Condensation occurs when warm moist air comes into contact with a cold surface and appears as water droplets on non-absorbent surfaces such as windows, walls and ceilings.

Existing clubhouses often suffer from condensation more than most buildings as they tend to have an uninsulated building envelope, limited ventilation, poor heating and high humidity from shower and kitchen areas.

Condensation can lead to serious problems such as rot and is detrimental to fixtures, fittings and furnishings.

Moisture from the breath of several people in a small space can also create condensation if not properly ventilated.



Improvements to the ventilation in the building will reduce condensation. There are ways of improving ventilation without causing draughts. For example,

- Adding trickle vents to the windows
- Unblocking existing air bricks and grilles to allow a controlled amount of air to circulate,
- Keeping doors to kitchen spaces closed when kettles are boiling or cooking is taking place,
- As a minimum, at least partial heating of all rooms, especially in colder weather.

Most changing spaces do not have sufficient opening windows due to problems with vandalism. If this is the case a mechanical ventilation solution may be the only option. Cost is a factor to consider, however, it is a false economy not to take precautionary measures and the cost to repair and maintain is greater in the long run. Often condensation is the cause of mould spots not damp.

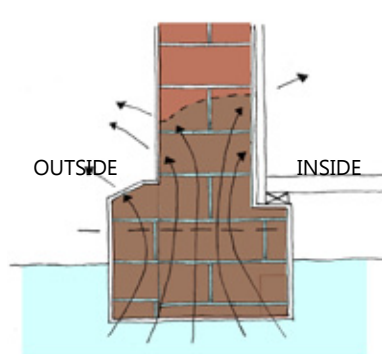
**See separate 'Refurbishment' display panel:**

- **R3** Damp caused by condensation

#### Rising Damp and Penetrating Damp

**Rising Damp** is water from the ground that enters the building walls or floor and rises up through the bricks. Most types of masonry used in the walls of buildings will allow some water movement by capillary action, however this is usually controlled by a physical barrier or damp proof course. If this physical barrier is absent, broken down or damaged, this leads to rising damp which can damage the internal finishes and plaster.

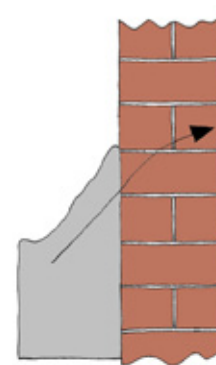
The indications of rising damp include decayed timber floors and skirting boards, crumbling or stained plaster, and peeling paint or wall paper.



If these symptoms are evident or if they are not evident but rising damp is suspected, it is important that a damp survey is undertaken by a competent damp specialist who can recognise the problem and suggest remedial measures to effectively resolve it. The damp specialist should be CSRT (certified surveyor in remedial treatments) registered.

**Penetrating Damp** refers to any water that enters a building and moves through the walls horizontally or from a higher to a lower level. Penetrating damp occurs as a result of problems with the fabric of the building that may have occurred through poor maintenance. It can allow water to leak from the outside of the building into the ceilings, walls or floors. Typical defects leading to penetrating damp are faulty flashings, poor pointing, cracked rendering and built up external ground levels.

There are several physical symptoms which suggest the occurrence of penetrating damp, these are the appearance of damp patches on walls, damage to decoration and plaster, decay in exposed timber, and mould growth.



It is important that penetrating damp and the cause are correctly identified and that the correct remedial treatment is undertaken. A damp survey should be undertaken by a competent damp specialist who should be CSRT (certified surveyor in remedial treatments) registered.



### Alternative Languages and Formats:

This document can be provided in alternative languages, or alternative formats such as large print, Braille, tape and on disk upon request. Call the Sport England switchboard on 08458 508 508 for more details.

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### User Guide:

Before using this design guidance note for any specific projects all users should refer to the User Guide to understand when and how to use the guidance as well as understanding the limitations of use.

Click here for **'User Guide'**

Click here for current **'Design and Cost Guidance'**

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### Further Information:

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