

The Timber Garden Building Checklist

Here you'll find our complete checklist to help you plan your timber garden building project, using natural, sustainable building materials.

Thanks for downloading our timber garden building checklist, hopefully it will help you decide exactly how to insulate your building.

Sheds, summer houses and occasional use buildings

When insulating buildings to try and just keep them a little warmer and a little drier than they would usually be, the levels of insulation you need can be quite minimal. These kind of buildings would usually have fairly shallow timber studs in the walls and shallow rafters in the roof. It is often not possible to insulate between them as this would cause condensation issues against the timber cladding on the exterior.

What type of insulation to use?

In these situations we'd usually suggest using a rigid wood fibre board as a liner to the interior as it has good thermal insulation properties, high thermal mass but also manages moisture well and helps to prevent condensation and mould.

The wood fibre boards are fixed, using specialist insulation fixings, to the inside surface of the studs or rafters. The thinnest we'd suggest would be 40mm boards but you can increase the thickness, depending on how much space is available.

Once the boards are installed we'd recommend fixing a vapour control membrane to the surface of the boards before either fixing plasterboard to the surface or another kind of lining board. Alternatively, you can plaster directly on to the surface of the wood fibre boards with a lime based plaster.

The overall specification would therefore be as follows:-

Exterior

Timber cladding/Roof covering

50-75mm timber studs/rafters

40mm [NaturHeld wood fibre boards](#), screw fixed to the studs

Then either:-

[Ampatex DB90 vapour control membrane](#), bonded using double sided tape

12mm plasterboard or other internal finishing board.

Or:-

5mm [UdiMULTIGRUND vapour regulating plaster](#), incorporating [UdiREINFORCEMENT Mesh](#)

2mm [BaumitKlima Glatte fine lime skimming plaster](#)

Interior

In case you need them, typical U-values for the thermal performance of the walls would be around 0.69 W/m²K for the 40mm boards and 0.52 W/m²K for the 60mm boards.

Can I instal more insulation?

If you have deeper studs or rafters than we mention above and if you have external cladding with a breathable membrane behind it then you can potentially add flexible wood fibre insulation between the studs to improve the thermal performance. Contact us for more information on this.

Garden Studios and Offices

Buildings that are going to be used for longer term occupation, such as offices and studios, benefit from having higher levels of insulation. It is sometimes assumed that because they are smaller buildings than houses they somehow need less insulation than a house, but in fact the requirements are much the same. You need the building to stay at a nice, even temperature in the winter and summer and it also needs to be a quiet space to allow uninterrupted work or relaxation.

What type of insulation to use?

As with the buildings above, wood fibre insulation offers very high levels of sound insulation as well as being very effective at shielding from the sun during the summer months. This is very important as lightweight insulation is often used without realising that the building may well overheat in the summer because of it.

To achieve good levels of thermal insulation, summer comfort and acoustic insulation, we'd suggest the following specifications for the roof, walls and floors, of the building:-

Pitched roof specification - [Click here to see the specification](#)

Flat roof specification - [Click here to see the specification](#)

Timber clad wall specification - [Click here to see the specification](#)

All of these specifications are based on using 150mm timbers in the walls and roof of the buildings. If you have a different size timber, try using our [Specification Generator](#).

What about floor insulation?

Whatever type of insulation you choose to use in your floor structure, we would recommend it is a type of fibre. This could be glass or mineral fibre or it could be a natural fibre such as wood fibre, sheep's wool or hemp. We would usually steer people towards the wood fibre as it is very good at managing moisture within the structure and also gives you acoustic benefits, being 2-6 times the density of most other fibre insulation products.

The specification we'd suggest would be as follows:-

Timber suspended floor specification - [Click here to see specification](#)

Being a garden building it is unlikely to have a conventional concrete strip foundation so we would recommend that the bottom of the floor structure is boarded over with OSB or MDF (but not Plywood boards) to keep any rodents out of the floor structure.

We hope you find this quick summary useful but if you have any questions, please call us on 01392 861763