

**Architecture &
Design Scotland**
Ailtearachd is Dealbhadh na h-Alba

Design elements for school grounds

Furniture and shelter





Furniture and shelter



In this section we explore furniture and shelter, and how they can help to form engaging and functional outdoor spaces. Schools that lack greenspaces can benefit from furniture and shelter to create dedicated activity areas for pupils, which can maximise the learning potential in school grounds.

From comfortable social seating areas to protective shelters and convenient storage solutions, these design elements can inspire and engage students of all ages.

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Seating

Using a variety of seating can create different areas for resting, observing, and for quiet or informal play. Consider options such as benches (with or without planters), picnic tables, seating with tables, sheltered seating, and dedicated seating for outdoor classrooms and storytelling. Buy from suppliers directly, or consider make smaller informal seating out of small logs which you can paint (see p.7).



materials

Create colourful log seating with timber/logs and outdoor paint. Find logs from fallen trees through your local authority or timber yard.



estimated time

This project can be integrated into a school activity, where pupils decorate their own small logs to contribute to an outdoor class seating area.



estimated costs

Costs will vary depending on the type, size, and materials used. As a guide, 30 log seats (30cm high) may cost approx. £400.

A machine-finished oak bench (3m long) starts from around £500.

**see 'Costings note' on p.12*



labour and skills

Construction skills or a joiner may be required for more complex furniture. DIY skills are helpful for painting and positioning logs.

Design considerations

Provide seating opportunities within the different play zones. Some seating can double-up as informal play elements.

Metal is not recommended for seating or benches as it is uncomfortable, and can become too cold in winter and too hot in summer.

Seating can be used to create smaller or quiet areas within the school ground.

Offer a variety of seating areas for different activities (play or learning) and group sizes.

Consider benches for all ages and for different mobility needs (some benches with backrests and armrests).

Ensure seating areas are sheltered from the wind, and some from rain or sun.

Technical considerations

A level base or foundation may be required.

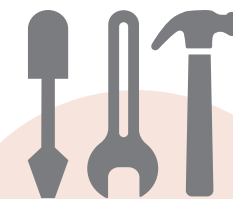
Legal considerations

Permission or sign off by local authority might be required for any self-build elements.



loose play parts

Depending on the type of seating created, consider adding elements that support quiet play, such as rugs, fabric, chalk, or arts and crafts materials.



maintenance and lifespan

Carry out regular maintenance checks and plan for annual paint touch-ups.

For purchased seating, see the manufacturer's guidelines.



further ideas

Enhance seating areas with surrounding planting to create a more welcoming and natural space. Consider a nearby storage unit for easy access during play times.

Seating



Under the canopy, parallel timber beams form seating that doubles as a walkway for students, encouraging imaginative play.



For this seating, timber slats are integrated into concrete stands, creating a robust and immovable structure.



Give your seating more personality by adding paint. This could be used as a classroom activity. In this example, logs have been shaped and painted into toadstools to create fun seating area.



This school have added different textures to this manufactured amphitheatre style furniture to blend the seating in with the natural surrounding area.

Shelter

A large gazebo or outdoor classroom can provide an opportunity to take learning outside while offering shelter during interchangeable weather. Small shelters are great for quiet play or learning in smaller groups, and can provide a quiet space for pupils to socialise with friends or eat lunch.



materials

For health and safety reasons, shelters should be purchased or constructed by a professional. Materials will vary depending on the design, but timber is commonly used.

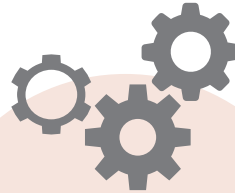


estimated costs

Shelters of varying sizes can be purchased from a range of play suppliers, with costs around £3,500–£15,000.

Search online for 'school outdoor classroom', 'outdoor wooden teepee', or 'imaginative shelter' to explore options.

***see 'Costings note' on p.12**



loose play parts

To encourage quiet play, include loose parts such as arts and crafts materials.

Adding rugs and cushions can also help to create a comfortable and inviting seating area.

Design considerations

A bespoke or self-build structure will require engineering input for structural integrity, as well as sign off from the local authority. Purchasing shelters from play providers is therefore the most cost effective and efficient way to install these elements.

Larger shelters can be positioned to create outdoor classrooms or focal points with multiple learning areas around them.

Smaller shelters can be positioned to create areas for more quiet activities.

Larger shelters should be large enough for a whole class. This should include seating, a black or white board, and any other elements for outdoor lessons.

Consider the distance from shelter to school building – keep walking time to a minimum. Consider accessibility of the space and surrounding area for pupils with different mobility needs.

Consider storage for outdoor learning items and loose play parts.

Ensure good surveillance to reduce potential vandalism.

Technical considerations

A level base or foundation is required.

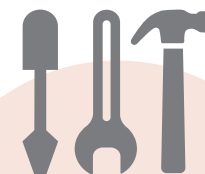
Timber surfaces can become slippery when wet, consider installing an anti-slip finish.

Legal considerations

Most insurance requires structures with a roof to be placed at least 8–10m distance from other buildings, for fire safety.

Depending on the size of the shelter, planning permission may be required.

Permission or sign off by local authority may be required for any self-build elements.



maintenance and lifespan

Carry out annual checks to ensure the structure remains stable and safe.

Follow the manufacturer's maintenance guidelines.



further ideas

Consider the surrounding environment when placing your shelter.

Incorporating planting or insect hotels can help soften the structure and create added interest.



estimated time

Installation may take 1–2 days, depending on whether a base or foundations are required.

Manufacturers can advise on installation timelines.

Shelter



In this example at Queen Margaret University, this outdoor structure is integrated into the surrounding landscape with the addition of a green roof. Reclaimed timber panels create a small screen to provide shelter from the wind, as well as a natural habitat for insects.



In this scenario, a school has built two shelters for pupils to use. Built-in seating within the shelters creates a comfortable space for socialising, whether for escaping the summer heat or staying dry on rainy days. The learning potential could be maximised here by creating different themes for each shelter.



An open-sided shelter welcomes students from all directions, whilst integrating into the surrounding trees. Complemented by a small ramp with wooden slats for safe access in all weather, this design fosters imaginative play, allowing children to choose how they enter and interact with the space.

Image credits and acknowledgements

This resource has been produced in collaboration with Urban Pioneers.

Cover: Urban Pioneers

Page 2, 6 (top), 11: Urban Pioneers

Page 7 (top): Muddy Faces

Page 7 (bottom): The Hideout House Company Limited

Page 6 (bottom), 10, 14, 15: Architecture and Design Scotland

Costings note: Please note that all pricing information contained within these design guidance reflects estimates based on market conditions as of the 2024-2025 period. Due to the dynamic nature of industry costs, including material fluctuations and evolving labour rates, these prices are subject to change.

Explore our other resources related to design elements for school grounds.

This resource is part of a series of six documents looking at design elements for school grounds. Each document focuses on different parts of our school grounds and provides design ideas on how to enhance them for activities and learning. Other topics are:

- enhancing surfaces
- food growing
- planting and gardens
- rain gardens
- play and outdoor learning

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