

Design, create and maintain outdoor mosaics

Mosaics can provide a stunning centrepiece or backdrop to outdoor projects like Fruit-full Communities (FFC) orchards. However, in order for them to be sustainable in the face of adverse weather conditions and other external factors, they require careful planning from initial design through to completion.

This short guide highlights useful hints and tips that will help plan your outdoor mosaic project and offers advice on the most appropriate materials to use. YMCA centres involved in the first year of the FFC project have provided useful information acquired through their own practical experience of creating lovely mosaics (see photo right).

What do you need to consider?

Weather - if the mosaic is to be a permanent outdoor fixture, then robust weather-proofing with the correct materials is extremely important.

Design - best to plan this right from the start, unless you are looking for a more 'organic' design. What do you want it to say about your site/project?

Materials – choosing the right materials is crucial to success. Wood should never be used as a direct surface for outdoor mosaics, even those kept relatively dry, because wood expands and contracts due to humidity changes in the air – tiles will eventually fall off. In place of wood, use 6mm (1/4") cement weatherboard (or backerboard) (see image below).



Example of mosaic on non-wooden surface sited on wood log



Vertical outdoor mosaic at YMCA North Tyneside Community Allotment

This can be cut by scoring with a box cutter and snapped along a straight edge. Masonry, concrete and stone are also good outdoor mosaic backers. Masonry can be made smooth by plastering with thin-set mortar a few days (preferably 2 weeks) before the mosaic is applied.

All stone, masonry and concrete should be scoured with a wire brush prior to applying a layer of thin-set mortar in order to remove contaminants and invisible concrete sealers, which could interfere with bonding.

Use thin-set mortar instead of adhesive for all outdoor mosaics. This can also be used for grouting.

Which tile to use?

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Glass tiles are impervious to moisture penetration and therefore resistant to freeze damage. They are available in many different colours to enhance the impact of your design.



Glass tiles

Unglazed ceramic tiles are the weakest of outdoor mosaic materials and do not hold up well under either intense heat or freezing temperatures. It is always best to avoid soft ceramics for outdoor use.



Unglazed ceramic tiles

The thin-set mortar used to adhere and grout the tiles is porous and therefore vulnerable to adverse conditions so multiple applications of a good quality sealant is highly recommended. There are two types of grout sealers: penetrating sealant and membrane sealant. Penetrating sealant is made of latex or silicone, soaks into the grout and fills in the spaces. Membrane sealants stay on the grout surface and give a glossy finish.

Helpful links:

www.doityourself.com/stry/4-tips-for-making-an-outdoor-mosaic

www.mosaicartsupply.com/outdoor-mosaics/

http://www.diy.com/departments/hardiebacker-6mm-cement-backerboard-for-tile-stone-11200mm-w800mm-t6mm/150528_BQ.prd



**Good luck with your outdoor
mosaic project!**