



SUSTAINABLE DESIGN

Plant-based materials and traditional crafts are helping designers to create more eco-friendly show gardens

> isitors to RHS Chelsea this year will see more designers than ever using innovative and sustainable materials and highlighting 'slow' traditional crafts in the construction of their show gardens.

Many of those taking part have committed to using no cement at all, including Harry Holding MSGD (The RHS No Adults Allowed Garden) and Tom Stuart-Smith OBE FSGD (National Garden Scheme Garden supported by Project Giving Back (PGB), see page 33). Others are using 'eco-friendly' alternatives, including pre-registered SGD member Katherine Holland, who is using Cemfree in her Grief Kind Garden.

A growing number of designers have also sourced 'eco-friendly' alternatives to concrete. Pre-registered SGD member Emma O'Connell and non-member John Warland are using 'Geo-Grow' bags instead of concrete block construction and clay olla pots for point-specific in-ground irrigation.

Tom Massey MSGD and non SGD member Je Ahn, meanwhile, are using screw piles instead of virgin concrete in their PGB-sponsored garden for Water Aid.

Miria Harris MSGD's garden for the PGB-sponsored Stroke Association will be free of any plastic or concrete. Instead, she is using blocks made of hemp and lime mortar to build walls, negating the need for any cement.

'I'm also using paving slabs made with a prototype hemp and waste material composite, and the garden cladding will be corrugated hempfibre panels,' she says.

Natural, healthy, strong but lightweight, malleable, non-flammable and with good breathability and moisture regulation, hemp is a versatile, sustainable, and renewable plant-based material that has been used to make rope and textiles for thousands of years. More recently, its commercial uses span biodegradeable plastics, paper, building materials, furniture, and paint.

The process of mixing hemp shiv (the woody stems of the plant) with a binder (usually a lime formation) and water to make hemp concrete, commonly marketed as Hempcrete, requires very low energy levels and the raw materials can be sourced locally.

In its basic state, Hempcrete can be used like concrete, mixed on site and cast around a light timber frame for stability or sprayed onto boards. It can also be pre-cast into blocks, briquettes, and panels that can be used to build non-load-bearing walls or to clad or fill a load-bearing frame. O

RFSOURCES

Our shortlist of companies which manufacture, supply and use hemp materials to build sustainable and renewable structures and features.

Erthly - product designer using hemp and recycled fabrics; erthly.co.uk

East Yorkshire Hemp

- supplies sustainable building products made from its own-grown hemp crops; also businessto-business supplier of hemp fibre, including IndiNature (see below); eastyorkshirehemp.co.uk

Hemp Construction

- specialist in hemp construction supplies, hempconstruction.co.uk

IndiNature - maker and supplier of hemp fibre insulation boards; indinature.co

Margent Farm - hemp fibre corrugated panels made with the Cambridgshire farm's own-grown fully certified organic crops; margentfarm.com

MoonCloth - manufactures commercial-grade hemp textiles by the yard; moonclothdesigns.com

The Hemp Block Company - supplies hempcrete blocks manufactured by Senini, breathable hemp shiv clay plasters, lime render, hemp block mortar and IndiTherm by IndiNature;

hempblock.co.uk

UK Hempcrete - specialist hemocrete contractor and supplier, via its Natural Building Store, of bio-based, low-impact building products such as wood fibre roof boards, hempcrete blocks and briquettes, lime render, plaster, and insulating basecoats; ukhempcrete.com; naturalbuildingstore.com