

Sustainable Design Collective

Thursday 21st July 2022 – Solus Ceramics showroom

Core Team:

Harsha Kotak, WOD; Joanna Knight, WOD; Ella Fathi, Oktra;
Georgia Elliott-Smith, Element 4

Collective Members:

Angela Dapper, Grimshaw; Laura Wardrope, JLL; Asif Din, Perkins & Will;
Rhiannon Laurie, Gensler; May Fawzy, MF Studio / BIID;
Dicky Lewis, White Red Architects; Lucy Bagshaw, TP Bennett; Emily King, BDP;
Gurvinder Khurana, M Moser; Natasha Hewlett, Peldon Rose;
Ana Rita Martins, Woodalls Design; Nigel Tresise, Align; Deepak Parmar, MCM;
Jennie GreenWalker, MAA Architects; Dom Pegram, Salt & Pegram;
Jennifer Russell, Bureau Group; Matt Davies, The Furniture Practice;
Anja Schellenbauer, Conran and Partners

Supporters: Shaw Contract; Steelcase; Sedus UK; Solus Ceramics; Orluna LED;
Workplace Insight

Purpose:

A 'think tank' group committed to acting as a collective within the workplace design community to identify developments and 'best practice' relating to sustainability.

This report highlights some of the points raised during the two hour discussion. We have also flagged some key potential outcomes for the future.

Meeting Four: Standards and Certification

The focus for this event was the evolution of Standards and Certification.



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The Three 'P's

Places:

Discussions commenced with an overview of the new UKGBC (UK Green Building Council) certification scheme: Net Zero Carbon Buildings Standard.

A cross-industry initiative to develop the UK's first Net Zero Carbon Buildings Standard. Leading industry organisations BBP, BRE, The Carbon Trust, CIBSE, IStructE, LETI, RIBA, RICS and UKGBC have all joined forces.



The Standard will set out metrics by which net zero carbon performance is evaluated, as well as performance targets, or limits, that need to be met. These are likely to include energy use, upfront embodied carbon, and lifecycle embodied carbon, with other metrics – such as space heating/cooling demand and peak load – also to be considered. It will also cover the approach to carbon accounting, procuring renewable energy, and the treatment of residual emissions, including carbon 'offsetting'. *The scope and output of the Standard may evolve throughout the development process.*

Further details can be found at www.nzcbuildings.co.uk

An agreed unified definition of net zero will be part of the initiative.

The approach will be applicable to both existing and new buildings (e.g. Homes, Offices, Education, Industry, Retail, Hotels, Healthcare etc.). To start, the focus will be on the most common building typologies, especially those for which industry stakeholders have already robust performance data available to inform the setting of performance targets.

Beta testing is due to commence shortly.

Whilst the scheme is not yet 'live', designers should familiarise themselves with the standard to ensure 'future proofing' of current projects.

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Performance targets will align with science-based trajectories needed to achieve net zero by 2050 and a 78% reduction by 2035 in the UK, i.e. what is known to be required to stand a reasonable chance of mitigating global warming to 1.5°C. It will also align with the energy demand reductions projected to be required to enable a net zero carbon energy supply sector.

Criteria will also be related to the geographic circumstances. As an example, is the project in an area with a depleted aquifer? If so, there will be greater focus on water usage.

Following the initial presentation about the new standard, discussions were held regarding existing ones.

“You can end up ‘chasing’ easy credits rather than making exceptional and relevant projects.”

“We do now have other targets as well as the building standards.”

“We are trying to develop a more holistic approach, but it is getting very complex.”

“Clients are increasingly setting carbon budgets for the whole life of the project.”

Products / Materials:

“We are now starting to get requests for material passporting.”

“Rachel Hoolahan, Architect’s Journal 2022 Sustainability Champion, together with all of the Sustainability Team at ORMS, has undertaken some great work on material passporting.” Further details can be found at <https://orms.co.uk/insights/materialpassports/>



“The format for material passporting for the reuse of steel, for example, could be applied within other sectors. The Alliance for Sustainable Building Products (ASBP) is researching a platform.”

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Presentation:

G-Salvage App (Marcus Hopper, Senior Associate, Gensler, San Francisco)

Marcus joined from San Francisco to describe the pan-Gensler initiative to grow reuse through early stage project planning, partnerships and involvement of wider communities to create social value.

The app has a similar 'look and feel' as many of the reuse clothing apps. Marcus stressed the importance of good photography and marketing for reuse product. "We need to make it a 'no brainer' to the end user customer."

Products / Materials – Continued:

Discussions were subsequently held regarding warranties and the potential for the insurance sector to support warranty extensions.

Whilst the group had varying levels of skills regarding interpretation of EPDs (Environmental Product Declaration), it was accepted that one EPD, on its own, isn't helpful. Need comparisons to get a clearer view.

The scientific formulae in EPDs can be confusing. These actually simply indicate the position of the decimal point / number of 0s to be added e.g. $3.50E+02 = 350\text{kgCo}_2\text{e}$ (the +02 is the number of digits you would move the decimal place).

Solus Ceramics described the application of industry wide EPDs within certain sectors (i.e. shared by a number of manufacturers). Some companies are producing EPDs as a factory-wide average.

A 'good' EPD would include installation. It is highly relevant for products such as tiles.

Discussions were held about the variation in measurements 'to the gate' and 'cradle to grave'. "There are huge assumptions once a product goes beyond the gate."

'Recyclable' is highly debateable. A material may be suitable, in theory, of being recycled but the facilities are not widely available.

The weight of the product is often linked to carbon footprint. "The heavier something is, it is likely to be higher in carbon. It may, however, be more durable and repairable."

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In France, many products include a repairability index. Introduced in January 2021, the index, which is part of the anti-waste bill, had two goals: to inform consumers at the point of purchase on the repairability of a product and to push manufacturers to sell more repairable products in order to improve their score.

The production of an EPD remains cost prohibitive for many manufacturers. Alternatives are under development – such as the European PEF (Product Environmental Footprint).

The discussions concluded with a discussion within the Group considering the opportunity to build one standard ‘qualification’ template for suppliers. This will be investigated further.

People:

Time constraints limited the discussions on specific ‘people’ focussed topics. It was agreed that “You can’t just chase carbon – many issues are interlinked including wellbeing and sustainability.”

Future meetings will potentially look at standards such as The Social Value Portal.

FOOTNOTE:

The Sustainable Design Collective meets every two months. Each meeting addresses different initiatives designed to tackle the impact on our environment.

A summary document will be published after each meeting which will be hosted on the Sustainable Design Collective’s web site – an example of knowledge sharing.

We welcome comment and contributions from the office design sector.

www.woduk.com/sdc