

Materials Brief

January 2021

1 Introduction

This document contains the material requirements for common materials used on Landsec development and portfolio projects. Those specifying or procuring materials should refer to the relevant material section to see the Prohibited Materials and materials to be Avoided where possible, as well as the Preferred and Ideal material attributes. This list of materials has been put together in consideration of four aspects of sustainable sourcing of materials:

- Health impacts
- Responsible sourcing (both environmental and ethical)
- Embodied impact
- Resource efficiency

The requirements of this document are aligned with sustainability assessment schemes including BREEAM, LEED and WELL, and Landsec's Sustainability Preliminaries, Sustainability Brief on Developments. It builds on the requirements of the Prohibited Materials List and shouldn't be treated as additional.

[Section 3](#) of the document lays out the procedure for implementing this strategy.

2 Materials

Common materials have been chosen for this document to make it easy to use and to capture the largest impacts. Where other materials are being used in high quantities on the project, the nearest category should be used, or bespoke targets should be agreed. Any deviation from this list must have prior approval by Landsec and would only be permitted from a safety (e.g. fire proofing), structural or other critical perspective (eg: cost or programme) and where it can be evidenced that no compliant alternatives are available.

2.1 Modern Slavery

Landsec expect that their contractors and suppliers are committed to addressing the human rights challenges within the industry and expects that they collaborate and engage with stakeholders to stay informed about workers' issues and concerns and find solutions to address modern slavery.

Landsec expect their contractors, as a minimum to:

- Have a due diligence process which determines human rights risks in the supply chain and takes appropriate actions as a result.



- Have a training programme, which is implemented to all relevant decision-makers within the company (including procurement teams) on risks, policies and standards related to modern slavery, human trafficking and forced labour. For the rest of the staff, implement awareness raising of the signs of modern slavery, and information on how to raise complaints within the company.
- Publish clear policies on modern slavery.
- Implement company-level grievance mechanisms (such as an anonymous hotline that all workers have access to).
- Include clauses on modern slavery in contracts and processes of selecting contractors, suppliers, and agencies, that demonstrate consideration for practices regarding labour rights.

Evidence of the documents above will be requested at the time of tender.

To enable us to assess geographical areas at higher risk of modern slavery, this list is based on the *Walkfree Foundation Global Slavery Index* and the *Trafficking Victims Protection Act (TVPA) 2018 List of Goods Produced by Child Labor or Forced Labor*. We've identified countries at risk for each relevant raw material or product. Landsec will not tolerate any material sourced from a supplier at risk of modern slavery. To minimise risk, materials proposed from high risk areas are subject to prior approval from Landsec and must actively demonstrate compliance with each point listed above.

2.2 Health and Safety

In addition to the requirements stated below, all products must comply with relevant legislation, including but not limited to legislation prohibiting asbestos, the EU Paints Directive, and the Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations (REACH).

In finished products, either the finished product or all of the constituent parts must comply with the requirements. For example, where furniture items contain finished timber, the timber must comply with the timber requirements and the finishes must comply with the paints and coatings requirements.

The Classification, Labelling and Packaging Regulation (CLP), which implements the United Nations' Globally Harmonized System for classification and labelling of chemicals (GHS) has been used to define the terms "Acutely Toxic", "Serious Health Hazard" and "Hazardous to the Environment" in this document. These labels can be found on product data sheets and on product packaging:

		
Acutely Toxic	Serious Health Hazard	Hazardous to the environment



In accordance with Landsec Sustainability Preliminaries and Landsec Prohibited Materials List, all materials should be sourced from the UK or European Union unless approved by Landsec.

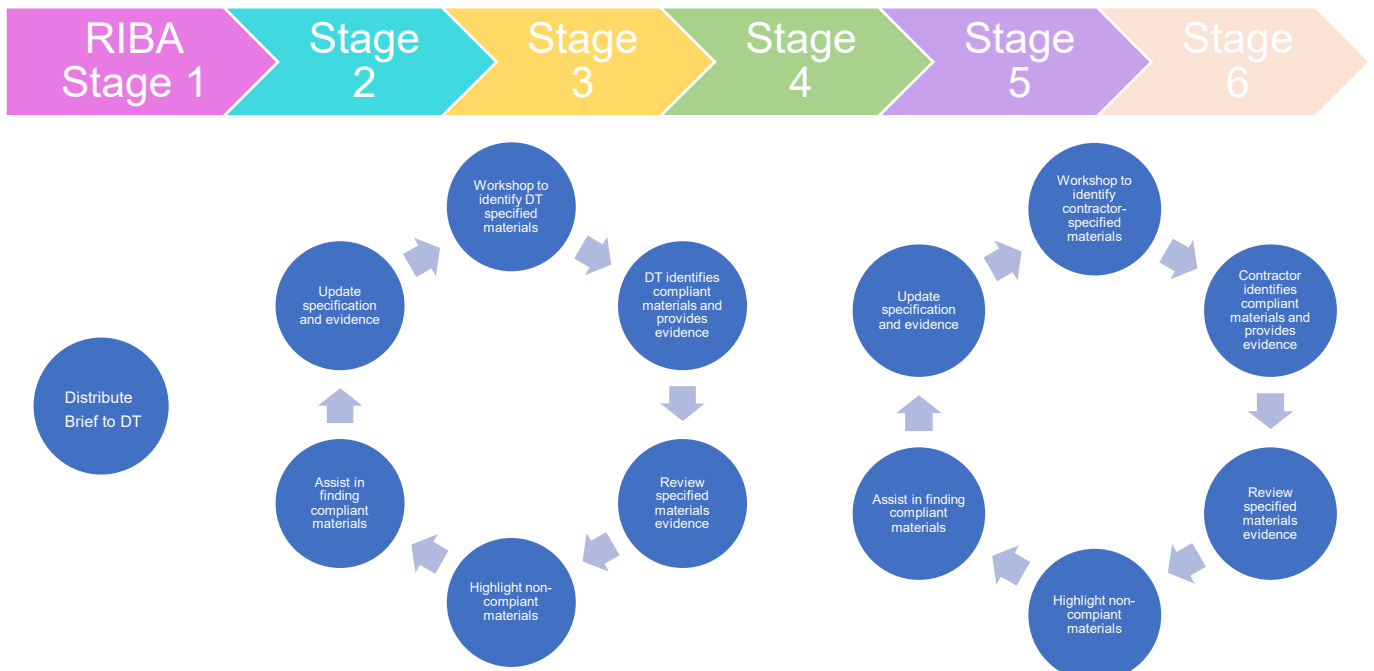
3 Process

This document is intended for use by design teams and contractors, as well as any other parties involved in the specification and procurement of products for use in construction.

The following diagram sets out an indicative process for using this document. The responsible parties and potential reporting deliverables are addressed in each material section in this document.

Conversations should begin as early in the design process as possible, and this document should form a key part of the brief, alongside other relevant sustainability documents.

The flow chart below demonstrates the process to be followed. The Brief should be distributed to the design team as early as RIBA Stage 1 with the aim of embedding the requirements in the specifications. These will then need to be inserted into the Contractor tender specifications and procurement clauses as well as the delivery requirements at RIBA Stages 3 and 4.





4 Material Requirements

4.1 Adhesives and Sealants

	Healthy	Efficient
Prohibited	Products labelled as Acutely Toxic. Products labelled as Serious Health Hazard.	-
Avoid	Products labelled as Hazardous to the Environment. Formaldehyde based adhesives (PF, PRF, MF, MUF, UF). Polyurethane adhesives. Epoxy adhesives. <u>BREEAM</u> <i>Products emitting >0.06mg/m³ formaldehyde, >1mg/m³ TVOC and >0.001mg/m³ Cat 1A and 1B carcinogen tested per EN 13999 1-4, or ISO 16000-9 or EN 16516, or CDPH Standard Method v1.1.</i> <u>WELL</u> <i>Adhesives containing urea formaldehyde >100ppm.</i>	Using adhesives to create composite materials that cannot be recycled.



Prefer	<p>Low VOC options such as peel and stick adhesives rather than wet applied.</p> <p>Acrylic adhesives and sealants.</p> <p>Silicone adhesives and sealants.</p> <p>All products, whether applied on-site or off-site should have low VOC emissions/content.</p> <p>Any of the following certifications:</p> <p><u><i>BREEAM, LEED and WELL</i></u></p> <p><i>Indoor Advantage Gold, Indoor Air Comfort Gold, Greenguard Gold, M1, Eco-INITIUT, Floorscore, Green Label Plus (CRI), Emission EC1/EC1 plus.</i></p> <p><u><i>BREEAM only</i></u></p> <p><i>EU Ecolabel, Natureplus.</i></p> <p><u><i>LEED only:</i></u></p> <p><i>MAS Certified Green.</i></p> <p><u><i>WELL only:</i></u></p> <p><i>MAS Certified Green, EU Ecolabel, Natureplus.</i></p>	-
Ideal	Mechanical fixings in lieu of adhesives.	
Ownership	Architect, Contractor, Services Engineer, Structural Engineer, Furniture Consultant, Interior Designer	
Outcome / Alignment	<p>BREEAM 2018 Hea 02.</p> <p>LEED v4 BD+C EQ Credit: Low-Emitting Materials.</p> <p>WELL v2 Optimisations: X05, X06.</p>	BREEAM 2018 Wst 06.
Reporting Deliverables	<p>Product name & manufacturer</p> <p>Category</p> <p>Package</p> <p>Subcontractor</p> <p>Prohibited status</p> <p>VOC certification</p> <p>Material Safety Data Sheets</p>	

4.2 Aluminium

	Healthy	Responsible	Embodied	Efficient
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Prohibited	Chromium (VI) pre-treatment for polyester powder coating.	Products without BES 6001, or ISO 14001 certification for the product manufacture (eg. cladding manufacture) and raw material extraction/manufacture (e.g. ingot production).	-	-
Avoid	-	-	Products without minimum recycled content of 20%.	Aluminium composites that cannot be recycled at end of life.
Prefer	-	Products with at least BES Good/Very Good 6001 certification.	Products with an EPD. Products with a minimum recycled content of 40%. Powder coated aluminium (opposed to anodized).	-
Ideal	-	-	Products with Cradle to Cradle certification or a product specific EPD.	-
Ownership	Architect, Contractor.			
Outcome / Alignment	-	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02. LEED v4 BD+C MR Credit: Building Product Disclosure and Optimization – EPDs.	BREEAM 2018 Wst 06.
Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status			



	Recycled content (%) Responsible sourcing certification EPD Distance from manufacture to site (miles)
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4.3 Blockwork

	Responsible	Embodied
Prohibited	Products without BES 6001, or ISO 14001 certification for the product manufacture (e.g. block) and raw material extraction/manufacture (e.g. cement production, aggregate extraction/production).	-
Avoid	-	Products without minimum 50% recycled content.
Prefer	Products with at least BES 6001 Good/Very Good certification.	Products with an EPD. Products sourced from within 500 miles of the project.
Ideal	-	Products with a product-specific EPD. Products sourced from within 100 miles of the project.
Ownership	Architect, Contractor, Structural Engineer.	
Outcome / Alignment	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02. LEED v4 BD+C MR Credit: Building Product Disclosure and Optimization – EPDs.
Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status Responsible sourcing certification EPD Distance from manufacture to site (miles)	

4.4 Bricks



	Responsible	Embodied
Prohibited	<p>Products without BES 6001, or ISO 14001 certification for the product manufacture (e.g. brick manufacture) and raw material extraction / manufacture (eg. clay extraction).</p> <p>Bricks from countries at high risk of modern slavery for raw materials or finished products which are: Afghanistan, Argentina, Bangladesh, Bolivia, Brazil, Burma, Cambodia, China, Colombia, Ecuador, Egypt, India, Iran, Nepal, North Korea, Pakistan, Paraguay, Peru, Russia, Uganda, and Vietnam (clay bricks).</p>	-
Avoid	-	-
Prefer	Products with BES 6001 certification.	<p>Products with an EPD.</p> <p>Products sourced from within 500 miles of the project.</p>
Ideal	-	<p>Products with Cradle to Cradle certification or a product specific EPD.</p> <p>Products sourced within 100 miles of the project.</p>
Ownership	Architect, Contractor.	
Outcome / Alignment	BREEAM Mat 03.	<p>BREEAM Mat 01, Mat 02.</p> <p>LEED MR Credit: Building Product Disclosure and Optimization – EPDs.</p>
Reporting Deliverables	<p>Product name & manufacturer</p> <p>Package</p> <p>Subcontractor</p> <p>Prohibited status</p> <p>Responsible sourcing certification</p> <p>EPD</p> <p>Distance from manufacture to site (miles)</p>	

4.5 Concrete

	Responsible	Embodied
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Prohibited	<p>In-situ concrete without BES 6001 Very Good / Excellent certification.</p> <p>Pre-cast concrete without ISO 14001 certification for the product manufacture and raw material extraction/manufacture (cement production and aggregate extraction/production).</p>	-
Avoid	-	<p>Products without minimum cement replacement as follows:</p> <ul style="list-style-type: none"> • 20% (in-situ superstructure) • 50% (in-situ substructure) • 10% (pre-cast)
Prefer	Pre-cast concrete with BES 6001 certification.	<p>In-situ concrete which meets one credit in BREEAM 2018 Wst 02.</p> <p>Products with EPD.</p> <p>Up to 100% cement replacement (eg: Earth Friendly Concrete) for in-situ concrete in non-structural applications.</p>
Ideal	Concrete Sustainability Council Certification.	<p>In-situ concrete which meets the Exemplary level credit in BREEAM 2018 Wst 02.</p> <p>Up to 100% cement replacement.</p> <p>Cradle to Cradle certification.</p>
Ownership	Contractor, Structural Engineer.	
Outcome / Alignment	BREEAM 2018 Mat 03.	<p>BREEAM 2018 Mat 01, Mat 02, Wst 02.</p> <p>LEED v4 BD+C MR Credit: Building Product Disclosure and Optimization – EPDs.</p> <p>LEED v4 BD+C: MR Credit: Sourcing of Raw Materials.</p> <p>LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.</p>
Reporting Deliverables	Product name & manufacturer Package Subcontractor	



	Prohibited status Responsible sourcing certification Cement replacement content (%) EPD Distance from manufacture to site (miles)
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4.6 Flooring

	Healthy	Responsible	Embodied	Efficient
Prohibited	Products labelled as Acutely Toxic. Products labelled as Serious Health Hazard. <u>For textile flooring:</u> <ul style="list-style-type: none"> - PVC backing for carpets. - Antimicrobial treatments where the active ingredients are classified as PBT. - Fly ash in carpet backing. <u>For resilient flooring:</u> <ul style="list-style-type: none"> - Rubber and vinyl flooring made from post-consumer recycled content. 	Flooring from countries at high risk of modern slavery for carpets are: Afghanistan, India, Iran, Nepal and Pakistan.	-	-
Avoid	<u>For textile flooring:</u> <ul style="list-style-type: none"> - Halogenated flame retardants <u>For resilient flooring:</u> <ul style="list-style-type: none"> - Products made from or containing polyvinyl chloride (PVC). <p><u>BREEAM</u></p> <p><i>Products emitting >0.06mg/m³ formaldehyde, >1mg/m³ TVOC and >0.001mg/m³ Cat 1A and 1B carcinogen tested per ISO 10580, or ISO 16000-9, or EN 16516, or CDPH Standard Method v1.1.</i></p>	Products without ISO 14001 certification for the manufacture.	-	-
Prefer	Products with any of the following certifications: <u>BREEAM, LEED and WELL:</u>	Products with ISO 14001 for the manufacture (e.g. product) and raw material	Products with an EPD.	Mechanically (as opposed to chemically) fixed methods.



	<p><i>Indoor Air Comfort Gold, Greenguard Gold, French A+/A, M1 Classification, Eco-INSTITUT-Label, Emicode EC1/EC1 Plus, Floorscore, Green Label Plus, GUT.</i></p> <p><u>BREEAM only:</u></p> <p>AgBB.</p> <p><u>LEED only:</u></p> <p>Blue Angel, MAS Certified Green.</p> <p><u>WELL only:</u></p> <p>AgBB, Natureplus, Global Green Tag, Blue Angel, MAS Certified Green.</p>	extraction/ manufacturing process (e.g. polymer production, wool sourcing, etc).		
Ideal	<p><u>WELL:</u></p> <p><i>Products with any of the following certifications/declarations: Health Product Declarations, Cradle to Cradle, Declare, ProductLens, Facts.</i></p>	Products with BES 6001.	Products with Cradle to Cradle certification.	Products with established closed loop recycling systems (take back schemes).
Ownership	Architect, Contractor, Interior Designer, Furniture Consultant			
Outcome / Alignment	<p>BREEAM 2018 Hea 02.</p> <p>LEED v4 BD+C MR Credit: Material Ingredients, EQ Credit: Low-Emitting Materials.</p> <p>WELL v2 , . X05, X06, X07</p>	BREEAM 2018 Mat 03.	<p>BREEAM 2018 Mat 01, Mat 02.</p> <p>LEED v4 BD+C MR Credit: Building Product Disclosure and Optimization – EPDs.</p> <p>LEED v4 BD+C: MR Credit: Sourcing of Raw Materials.</p> <p>LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.</p>	



Reporting Deliverables	Product name & manufacturer Category Package Subcontractor Prohibited status Responsible sourcing certification VOC certification EPD
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4.7 Furniture

	Healthy	Responsible	Embodied	Efficient
Prohibited	Products labelled as Acutely Toxic. Products labelled as Serious Health Hazard.	<ul style="list-style-type: none"> - Rayon. - Animal hides. - Countries at high risk of modern slavery for finished products are: Bangladesh (steel furniture), Turkey and Vietnam. - Countries at high risk of modern slavery for fabrics are: Bangladesh, Cambodia, China, Ethiopia (hand woven), North Korea and Vietnam. 	-	-
Avoid	<u>WELL:</u> <i>Products containing Mercury >100ppm, Cadmium >100ppm, Antimony >100ppm, Chromium (VI) >1000ppm, halogenated flame retardants (>100ppm).</i>	Products without ISO 14001 certification for the finished product.	-	-
Prefer	<u>LEED/WELL:</u> <i>Furniture meeting VOC requirements of ANSI/BIFMA e3-2011 Furniture Sustainability Standard sections 7.6.1/7.6.2, tested in accordance with ANSI/BIFMA Standard Method M7.1-2011 or any more recent standard.</i> <i>Products with any of the following certifications: Indoor Air Comfort Gold, Greenguard Gold, M1, Eco-INSTITUT-Label,</i>	-	Products with an EPD.	-



	<p><i>Emicode EC1/EC1 Plus, Global Green Tag, TUV Rheinland Green Product Mark, Blue Angel, MAS Certified.</i></p> <p><u>WELL only:</u></p> <p><i>AFRDI Green Tick, or Level© certification.</i></p>			
Ideal	<p><u>WELL:</u></p> <p><i>Products with any of the following certification: Declare Label, Health Product Declaration, Declare: Living Building Challenge Red List Free, Declare: Living Building Challenge Compliant or Living Product Challenge Label, Cradle to Cradle Certified with Bronze/Silver/Gold or Platinum in the Material Health Category or Material Health Certificate from the Cradle to Cradle Products Innovation Institute.</i></p>	-	Materials / products with Cradle to Cradle certification.	Products with an established closed loop recycling scheme (eg. takeback scheme).
Ownership	Architect, Client, Contractor, Interior Designer, Furniture Consultant			
Outcome / Alignment	<p>BREEAM 2018 Hea 02.</p> <p>LEED v4 BD+C MR Credit – Material Ingredients, EQ Credit – Low Emitting Materials.</p> <p>WELL v2 X08,, ,. X05, X06, X07</p>	BREEAM 2018 Mat 03.	<p>BREEAM 2018 Mat 01, Mat 02.</p> <p>LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs.</p>	<p>BREEAM 2018 Mat 06, Wst 06.</p>
Reporting Deliverables	<p>Product name & manufacturer</p> <p>Category</p> <p>Package</p> <p>Subcontractor</p> <p>Prohibited status</p> <p>Responsible sourcing certification</p> <p>VOC certification</p> <p>EPD</p>			

4.8 Glass



	Healthy	Responsible	Embodied	Efficient
Prohibited	Cadmium and other heavy metals (for fritting or other treatment).	<ul style="list-style-type: none"> - Products without BES 6001 certification, or ISO 14001 certification for the product manufacture (glass production) and raw material extraction/manufacture (sand extraction / soda ash extraction / production). - Countries at high risk of modern slavery for finished products are: Bangladesh. 	-	-
Avoid	-	External glazing / cladding without BES 6001 Good/Very Good certification.		Laminated glass which limits recycling potential of glass.
Prefer	-	-	Products with an EPD.	-
Ideal	-	-	Products with a product-specific EPD or Cradle to Cradle certification.	-
Ownership	Architect, Contractor.			
Outcome / Alignment	-	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02. LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs.	-



Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status Recycled content (%) Responsible sourcing certification EPD Distance from manufacture to site (miles)
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4.9 Gypsum

	Healthy	Responsible	Embodied	Efficient
Prohibited	-	Plasterboard products without BES 6001 Very Good / Excellent certification.	-	-
Avoid	-	-	-	-
Prefer	-	-	Products with an EPD.	Pre-sized boards which avoid cutting on site.
Ideal	Explore products that aim to improve air quality.	-	Products with a product specific EPD or Cradle to Cradle certification.	Products with established closed loop recycling (take back) schemes.
Ownership	Architect, Contractor, Interior Designer.			
Outcome / Alignment	BREEAM 2018 Hea 02. LEED v4 BD+C MR Credit – Material Ingredients, EQ Credit – Low Emitting Materials. WELL v2 A01.	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02. LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs. LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.	BREEAM 2018 Mat 06, Wst 06.
Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status			



	Recycled content (%) Responsible sourcing certification EPD Distance from manufacture to site (miles)
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4.10 Insulation (Thermal and Acoustic)

	Healthy	Responsible	Embodied	Efficient
Prohibited	Products labelled as Acutely Toxic. Products labelled as Serious Health Hazard. Mineral fibres with thickness of 3 microns or less and length of 200 microns or less.	Products without BES 6001, or ISO 14001 certification for the product manufacture (insulation product) and raw material extraction/manufacture (main polymer production or rock/mineral quarry, etc).	Products with blowing agents containing Ozone Depleting Substances or Global Warming Potential over 10.	-
Avoid	Spray foam insulation. Insulation containing halogenated flame retardants. Insulation containing formaldehyde binders. <u>BREEAM:</u> <i>Products emitting >0.06mg/m3 formaldehyde, >1mg/m3 TVOC and >0.001mg/m3 Cat 1A and 1B carcinogen tested per ISO 16000-9, or EN 16516, or CDPH Standard Method v1.1.</i> <u>WELL:</u> <i>Products containing halogenated flame retardants (>100ppm), urea formaldehyde (>100ppm).</i>	-	Products less than A+/A rated in the Green Guide.	-
Prefer	Rockwool using formaldehyde free binders.	Products with at least BES 6001 Good/Very Good certification.	Products with an EPD.	-
Ideal	<i>Products with any of the following certifications:</i>	-	Products with a product-specific	Products with established closed loop



	<p><u>BREEAM, LEED, WELL:</u></p> <p><i>Indoor Air Comfort Gold, Greenguard Gold, French A+/A, M1, Green Label Plus</i></p> <p><i>BREEAM only: AgBB, Natureplus.</i></p> <p><u>LEED only:</u></p> <p><i>MAS Certified Green.</i></p> <p><u>WELL only:</u></p> <p><i>AgBB Natureplus, Global Green Tag, CertiPUR (polyurethane foam only), MAS Certified Green.</i></p>		EPD or Cradle to Cradle certification.	recycling (take back) schemes.
Ownership	Architect, Services Engineer, Structural Engineer, Contractor, Acoustician, Interior Designer			
Outcome / Alignment	<p>BREEAM 2018 Hea 02.</p> <p>LEED v4 BD+C EQ Credit – Low Emitting Materials.</p> <p>WELL v2 X05, X06</p>	BREEAM 2018 Mat 03.	<p>BREEAM 2018 Mat 01, Mat 02.</p> <p>LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs.</p> <p>LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.</p>	BREEAM 2018 Mat 06.
Reporting Deliverables	<p>Product name & manufacturer</p> <p>Package</p> <p>Subcontractor</p> <p>Prohibited status</p> <p>Green Guide rating</p> <p>Responsible sourcing certification</p> <p>VOC certification</p> <p>EPD</p>			

4.11 Natural stone



	Healthy	Responsible	Embodied	Efficient
Prohibited	Stones containing asbestos, for example some green serpentines.	Products without BES 6001 certification, or ISO 14001 certification for the product manufacture (stone product) and raw material extraction/production (quarry).	-	-
Avoid	-	-	Stone sourced from outside the UK or EU.	-
Prefer	-	-	Stone sourced within 500 miles of the project, EPD.	-
Ideal	-	Stone with BES 6001 certification.	Stone sourced within 100 miles of the project.	Block utilisation should be used as a means to reduce transportation and associated environmental impact, as well as minimise waste.
Ownership	Architect, Contractor.			
Outcome / Alignment	-	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02. LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs. LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.	-



Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status Responsible sourcing certification EPD Distance from manufacture to site (miles)
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4.12 Paints and Coatings (applied on site)

	Healthy	Responsible	Embodied	Efficient
Prohibited	Products labelled as Acutely Toxic. Products labelled as Serious Health Hazard. Products with total lead content >90ppm. Coatings emitting >1mg/m ³ TV Antimicrobial coatings where active ingredients are classed as Persistent Bio-accumulative Toxic (PBT).	Products without ISO BES 6001 certification or 14001 certification for the product manufacture.	-	-
Avoid	Products labelled as "Hazardous to the Environment". Solvent based finishes. Polyurethane varnishes. BREEAM: Products containing >0.06mg/m ³ formaldehyde, >1mg/m ³ TVOC and >0.001mg/m ³ Cat 1A and 1B carcinogen tested per EN 16402 or ISO 16000-9, or EN 16516 or CDPH Standard Method v1.1.	-	-	-



Prefer		Products with BES 6001 certification.	Products with an EPD.	-
Ideal	<p>Paints and coatings with emissions testing as well as low VOC content.</p> <p>All paints and coatings, including those applied off-site, meet low VOC requirements.</p> <p>Air purifying paints such as Airlite and Boysen KNOxOUT</p> <p>Microbicidal paint such as Paint Shield, Dulux Sterishield, Crown Steracryl</p> <p><i>BREEAM, LEED, WELL:</i></p> <p><i>Indoor Air Comfort Gold, Greenguard Gold, French A+/A, M1, Green Label Plus</i></p> <p><i>BREEAM only:</i></p> <p><i>AgBB, Natureplus, EU Ecolabel</i></p> <p><i>LEED only:</i></p> <p><i>MAS Certified Green.</i></p> <p><i>WELL only:</i></p> <p><i>AgBB Natureplus, Global Green Tag, CertiPUR (polyurethane foam only), MAS Certified Green, EU Ecolabel.</i></p>	-	-	Products with established closed loop recycling schemes for excess and packaging
Ownership	Architect, Contractor.			
Outcome / Alignment	<p>BREEAM 2018 Hea 02.</p> <p>LEED v4 BD+C EQ Credit – Low Emitting Materials.</p> <p>WELL v2 X01, X05, X06, X07</p>	BREEAM 2018 Mat 03.	<p>BREEAM 2018 Mat 01, Mat 02.</p> <p>LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs.</p>	BREEAM 2018 Mat 06.



Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status Responsible sourcing certification VOC certification EPD
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4.13 Plastic

The requirements for plastic apply where plastic is the key material in a product.

	Healthy	Responsible	Embodied	Efficient
Prohibited	Products labelled as "Acutely Toxic" or "Serious Health Hazard". <u>WELL:</u> <i>Plastic lumber containing any of the following: polystyrene, PVC.</i>	Products without BES 6001 certification or ISO 14001 certification for the product manufacture.	-	<u>WELL:</u> <i>Plastic lumber containing any of the following: wood composites, multiple comingles recycled consumer plastics, fiberglass.</i>
Avoid	<u>WELL:</u> <i>Products with phthalates content >100ppm.</i>	-	Single use plastic packaging and composite packaging that cannot be recycled.	-
Prefer	-	-	Products with an EPD.	-
Ideal	-	-	Products with Cradle to Cradle certification.	-
Ownership	Architect, Contractor, Interior Designer, Furniture Consultant.			
Outcome / Alignment	WELL v2 X05, X06.	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02. LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs.	WELL v2 X10.



Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status Responsible sourcing certification EPD
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4.14 Steel

	Responsible	Embodied	Efficient
Prohibited	Structural steel sections without BES 6001 certification Pass/Good certification. Steel used in cladding, steel plates or other key elements without ISO 14001 certification for the product manufacture (steel product) and raw material extraction/production (electric arc furnace or basic oxygen furnace). Reinforcement steel without BES 6001, Eco-reinforcement or CARES Sustainability certification.	-	-
Avoid	-	Products not meeting minimum recycled content 20% for structural steel and 98% for steel reinforcement.	-
Prefer	-	Products with an EPD.	-
Ideal	Products with ResponsibleSteel certification.	Products with Cradle to Cradle certification.	Re-used steel.
Ownership	Architect, Contractor, Structural Engineer.		
Outcome / Alignment	BREEAM 2018 Mat 03.	BREEAM 2018 Mat 01, Mat 02.	BREEAM 2018 Mat 06.



		LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs. LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.	
Reporting Deliverables	Product name & manufacturer Package Subcontractor Prohibited status Recycled content (%) Responsible sourcing certification EPD Distance from manufacture to site (miles)		

4.15 Timber

	Healthy	Responsible	Embodied	Efficient
Prohibited	Products for internal use not meeting E1 Formaldehyde.	Non-FSC timber (<i>PEFC permitted only for structural timber by exception</i>). This applies to both permanent and non-permanent timber. Countries at high risk of modern slavery for timber products are: Burma (teak), Brazil, Cambodia, North Korea, Peru, Russia and Vietnam.	-	-
Avoid	Avoid fire retardants and preservative treatments. Arsenic containing preservatives. <u>BREEAM:</u> <i>Products containing >1mg/m³ TVOC and ≤0.001mg/m³ Cat 1A and 1B carcinogen tested per ISO 16000-9, or EN 16516, or CDPH Standard Method</i>	-	-	Chemically fixed composite materials (with reduced recyclability)



	<p>v1.1, or EN 717-1 (formaldehyde only).</p> <p><u>WELL:</u></p> <p>Products containing urea formaldehyde >100ppm.</p>			
Prefer	<p>CARB phase 2 or E0 compliant boards.</p> <p>Where preservative treatments are required, less hazardous treatments such as borate oxide should be used.</p> <p>Zero added formaldehyde boards, avoiding methylene diisocyanate (MDI) or isocyanate based resin alternatives.</p>	-	Products with an EPD.	-
Ideal	Solid wood unfinished or finished offsite.	Products with FSC 100% Label (as opposed to FSC Mix Label).	Products with “Grown in Britain” label.	-
Ownership	Architect, Structural Engineer, Contractor.			
Outcome / Alignment	<p>BREEAM 2018 Hea 02.</p> <p>LEED v4 BD+C EQ Credit – Low Emitting Materials.</p> <p>WELL v2 X01, X03, X05, X06</p>	BREEAM 2018 Man 03, Mat 03.	<p>BREEAM 2018 Mat 01, Mat 02.</p> <p>LEED v4 BD+C: MR Credit: Building Product Disclosure and Optimization – EPDs.</p> <p>LEED v4 BD+C: MR Credit: Building Life-Cycle Impact Reduction.</p>	BREEAM 2018 Wst 06.
Reporting Deliverables	<p>Product name & manufacturer</p> <p>Package</p> <p>Subcontractor</p> <p>Prohibited status</p> <p>Responsible sourcing certification</p> <p>Grown in Britain</p>			



	VOC certification EPD
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4.16 Other Materials

Mercury (in illuminated exit signs, meters, thermostats, switches, electrical relays and lighting).

Lead (in drinking water systems, paints and electronics).

Countries at high risk of modern slavery for electronics are: China and Malaysia

In finished products or composite products, either the finished product or the constituent parts must comply with the requirements. For example, where furniture items contain finished timber, the timber must comply with the timber requirements and the finishes must comply with the paints and coatings requirements.