

Saint-Gobain Construction Products UK Limited
trading as Celotex

Lady Lane Industrial Estate
Hadleigh
Ipswich
Suffolk IP7 6BA

Tel: 01473 822093 Fax: 01473 820880

e-mail: technical@celotex.co.uk

website: www.celotex.co.uk



Agrément Certificate

17/5405

Product Sheet 2

CELOTEX INSULATION

CELOTEX TB4000, GA4000 AND XR4000 PIR INSULATION BOARDS FOR FLOOR INSULATION

This Agrément Certificate Product Sheet⁽¹⁾ relates to Celotex TB4000, GA4000 and XR4000 PIR Insulation Boards for Floor Insulation, comprising rigid polyisocyanurate (PIR) foam boards with foil-facings, for use as insulation in ground-bearing or suspended concrete ground floors or between the joists of suspended timber ground-floors and also for use with exposed or semi-exposed intermediate concrete or timber floors, in new or existing domestic or similar buildings.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.

KEY FACTORS ASSESSED

Thermal performance — the products have a declared thermal conductivity (λ_D) of $0.022 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ (see section 6).

Condensation risk — the products can contribute to limiting the risk of condensation (see section 7).

Floor loading — the products, when installed in accordance with this Certificate, can support a design loading for domestic applications (see section 9).

Durability — the products are durable, rot proof and sufficiently stable to remain effective as insulation for the life of the building (see section 12).

The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Fourth issue: 20 November 2018

John Albon — Head of Approvals
Construction Products

Claire Curtis-Thomas
Chief Executive

Originally certificated on 20 March 2017

The BBA is a UKAS accredited certification body — Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk
Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.
Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.



British Board of Agrément

Bucknalls Lane
Watford
Herts WD25 9BA

©2018

tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk

Regulations

In the opinion of the BBA, Celotex TB4000, GA4000 and XR4000 Insulation Boards for Floor Insulation, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations (the presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	A1	Loading
Comment:		The products can contribute to satisfying this Requirement. See section 9.2 of this Certificate.
Requirement:	C2(c)	Resistance to moisture
Comment:		The products can contribute to satisfying this Requirement. See sections 7.1 and 7.4 of this Certificate.
Requirement:	L1(a)(i)	Conservation of fuel and power
Comment:		The products can contribute to satisfying this Requirement. See section 6 of this Certificate.
Regulation:	7	Materials and workmanship
Comment:		The products are acceptable. See section 12 and the <i>Installation</i> part of this Certificate.
Regulation:	26	CO₂ emission rates for new buildings
Regulation:	26A	Fabric energy efficiency rates for new dwellings (applicable to England only)
Regulation:	26A	Primary energy consumption rates for new buildings (applicable to Wales only)
Regulation:	26B	Fabric performance values for new dwellings (applicable to Wales only)
Comment:		The products can contribute to satisfying these Regulations. See section 6 of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)	Durability, workmanship and fitness of materials
Comment:		The products are acceptable. See section 12 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	1.1(b)	Structure
Comment:		The products can contribute to satisfying this Standard, with reference to clause 1.1.1 ⁽¹⁾ . See section 9.2 of this Certificate.
Standard:	3.15	Condensation
Comment:		The products can contribute to satisfying this Standard, with reference to clauses 3.15.1 ⁽¹⁾ , 3.15.4 ⁽¹⁾ and 3.15.5 ⁽¹⁾ . See sections 7.1 and 7.5 of this Certificate.
Standard:	6.1(b)	Carbon dioxide emissions
Standard:	6.2	Building insulation envelope
Comment:		The products can contribute to satisfying these Standards, with reference to clauses or parts of clauses 6.1.1 ⁽¹⁾ , 6.1.6 ⁽¹⁾ , 6.2.1 ⁽¹⁾ , 6.2.3 ⁽¹⁾ , 6.2.4 ⁽¹⁾ , 6.2.6 ⁽¹⁾ , 6.2.7 ⁽¹⁾ , 6.2.9 ⁽¹⁾ , 6.2.10 ⁽¹⁾ , 6.2.11 ⁽¹⁾ and 6.2.13 ⁽¹⁾ . See section 6 of this Certificate.

Standard:	7.1(a)(b)	Statement of sustainability
Comment:		The products can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard. In addition, the products can contribute to a construction meeting a higher level of sustainability as defined in this Standard with reference to clauses 7.1.4 ⁽¹⁾ [Aspects 1 ⁽¹⁾ and 2 ⁽¹⁾], 7.1.6 ⁽¹⁾ [Aspects 1 ⁽¹⁾⁽²⁾ and 2 ⁽¹⁾] and 7.1.7 ⁽¹⁾ [Aspect 1 ⁽¹⁾]. See section 6.1 of this Certificate.
Regulation:	12	Building standards applicable to conversions
Comment:		Comments made in relation to these products under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 ⁽¹⁾ and Schedule 6 ⁽¹⁾ .
(1) Technical Handbook (Domestic).		



The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	23	Fitness of materials and workmanship
Comment:		The products are acceptable. See section 12 and the <i>Installation</i> of this Certificate.
Regulation:	29	Condensation
Comment:		The products can contribute to satisfying this Regulation. See section 7.1 of this Certificate.
Regulation:	30	Stability
Comment:		The products can contribute to satisfying this Regulation. See section 9.2 of this Certificate.
Regulation:	39(a)(i)	Conservation measures
Regulation:	40(2)	Target carbon dioxide emission rate
Comment:		The products can contribute to satisfying these Regulations. See section 6 of this Certificate.

Construction (Design and Management) Regulations 2015

Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

See section: 3 *Delivery and site handling* (3.4) of this Certificate.

Additional Information

NHBC Standards 2018

In the opinion of the BBA, Celotex TB4000, GA4000 and XR4000 PIR Insulation Boards for Floor Insulation, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 5.1 *Substructure and ground bearing floors* and 5.2 *Suspended ground-floors*.

CE marking

The Certificate holder has taken the responsibility of CE marking the products in accordance with harmonised European Standard BS EN 13165 : 2012. An asterisk (*) appearing in this Certificate indicates that data shown is given in the manufacturer's Declaration of Performance.

Technical Specification

1 Description

Celotex TB4000, GA4000 and XR4000 PIR Insulation Boards for Floor Insulation comprise rigid polyisocyanurate (PIR) foam boards with foil-facings. The nominal characteristics of the products are given in Table 1 of this Certificate.

Table 1 Nominal characteristics

Product	Facings	Board size (mm)	Thickness range (mm)	Edge profile	Deviation from flatness (mm) (board length $\leq$ 2.5 m)
Celotex TB4000	Composite foil-facing both sides (printed on one side only) ⁽¹⁾	1200 x 2400	12 to 45	square edge	≤ 10 (area $> 0.75 \text{ m}^2$)
Celotex GA4000	Composite foil-facing both sides (printed on one side only) ⁽¹⁾	1200 x 2400	50 to 100	square edge	≤ 10 (area $> 0.75 \text{ m}^2$)
Celotex XR4000	Composite foil-facing both sides (printed on one side only) ⁽¹⁾	1200 x 2400	110 to 200	square edge	≤ 10 (area $> 0.75 \text{ m}^2$)

(1) See sections 4.5 and 13.11.

2 Manufacture

2.1 Celotex PIR insulation is manufactured by a lamination process, formed between aluminium foil-facings that are glued together in a continuous laminator, where the adhesive is a mixture of two primary chemicals, polyol and MDI. An added blowing agent causes the adhesive to expand into foam that hardens, which is then cut to its finished board size and packed.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the Certificate holder/manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

2.3 The management system of Celotex has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 and BS EN ISO 14001 : 2015 by SGS UK Ltd (Certificates GB91/504 and GB11/83526).

3 Delivery and site handling

3.1 The products are delivered to site in polythene-wrapped packs. Each pack of boards contains a label with the manufacturer's name, board dimensions and the BBA logo incorporating the number of this Certificate.

3.2 The products must be protected from prolonged exposure to sunlight, and stored dry, flat and raised above ground level (to avoid contact with ground moisture). Where possible, packs should be stored inside. If stored outside, they should be under cover, or protected with opaque polythene sheeting.

3.3 The products are light and easy to handle and care should be exercised to avoid crushing the edges or corners. If damaged, the products should be discarded.

3.4 The products must not be exposed to open flame or other ignition sources, or to solvents or other chemicals.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Celotex TB4000, GA4000 and XR4000 PIR Insulation Boards for Floor Insulation.

Design Considerations

4 Use

4.1 Celotex TB4000, GA4000 and XR4000 PIR Insulation Boards for Floor Insulation are suitable for use as floor insulation and are effective in reducing the thermal transmittance (U value) of ground-bearing or suspended concrete or timber ground-floors, and also exposed or semi-exposed intermediate concrete or timber floors, in new or existing domestic or similar buildings. The products can also be used on suitably designed beam-and-block floors incorporating Type R2 semi-resisting or resisting blocks to BS EN 15037-2 : 2009 and self-bearing beams to BS EN 15037-1 : 2008.

4.2 Ground-bearing floors should only be used where the depth of compacted fill is less than 600 mm and is defined as non-shrinkable. Shrinkable fills are defined as material containing more than 35% fine particles (silt and clay) and having a Plasticity Index of 10% or greater (shrinkable fills are susceptible to clay heave).

4.3 Ground-bearing concrete and suspended concrete ground-floors incorporating the products must include a suitable damp-proof membrane (dpm), laid beneath the insulation, in accordance with the relevant sections of CP 102 : 1973, and BS 8215 : 1991 (see sections 13.5 and 13.6 of this Certificate).

4.4 Suspended concrete or timber ground-floors incorporating the insulation boards must include suitable ventilation of the sub-floor void (minimum 150 mm void between the underside of the floor and the ground surface) or a dpm. For suspended floors in locations where clay heave is anticipated, an additional void of up to 150 mm may be required to accommodate the possible expansion of the ground below the floor. In such cases where the risk of clay heave has been confirmed by geotechnical investigations by a competent individual, a total void of up to 300 mm may be required.

4.5 When used as insulation in suspended timber ground-floors, for optimum thermal performance, the boards must be installed with the correct orientation of their printed foil-facings. See section 13.11 of this Certificate.

4.6 The overlay to the insulation boards should be:

- a vapour control layer (VCL) as required (see sections 4.3 and 7.3)

and:

- a cement-based floor screed of minimum 65 mm thickness⁽¹⁾, laid in accordance with the relevant clauses of BS 8204-1 : 2003 and/or BS 8204-2 : 2003, and BS 8000-9 : 2003

or

- a wood-based floor, eg tongue-and-groove plywood to BS EN 636 : 2012, flooring grade particle board (Types P5 to P7) to BS EN 312 : 2010 or oriented strand board (OSB) of type OSB/3 or OSB/4 to BS EN 300 : 2006, of a suitable thickness (to be determined by a suitably qualified and experienced individual), installed in accordance with PD CEN/TR 12872 : 2014 and BS EN 12871 : 2013

or

- a concrete slab to BS EN 1992-1-1 : 2004.

(1) NHBC only accept ground-bearing floor slabs with at least 100 mm thick concrete including monolithic screed.

4.7 Where a concrete screed or slab finish is to be laid directly over the product, a polyethylene separating layer/VCL must be installed between the insulation and the concrete to prevent chemical attack and seepage between the boards (see section 13.7). Any gaps between insulation boards or around service openings, visible prior to installing the concrete, must be filled with expanding foam or strips of insulation.

4.8 Loadbearing internal walls must not be built on the floor.

4.9 If present, mould or fungal growth should be treated prior to commencement of the installation of the products.

5 Practicability of installation

The products are designed to be installed by a competent general builder, or a contractor, experienced with these types of products.

6 Thermal performance



6.1 Calculations of the thermal transmittance (U value) of a floor should be carried out in accordance with BS EN ISO 6946 : 2017, BS EN ISO 13370 : 2017 and BRE Report BR 443 : 2006 using the following values:

- PIR insulation core — declared thermal conductivity(λ_D)* of $0.022 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$
- composite foil-facings both sides, printed on one side only — for unprinted facing, an aged emissivity (ϵ) (to BS EN 15976 : 2011) of 0.05.

6.2 The U value of a completed floor will depend on the insulation thickness, the perimeter/area ratio and the floor type. Calculated U values for example constructions are given in Table 2.

Table 2 Example U values — ground-floor construction

Celotex TB4000, GA4000 and XR4000 Insulation thickness (mm)						
Floor Type	Target U value ($\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$)	P/A ratio				
		0.2	0.4	0.6	0.8	1.0
Ground-bearing concrete floor ⁽⁴⁾⁽⁷⁾	0.13	90 ⁽²⁾	120 ⁽³⁾	130 ⁽³⁾	140 ⁽³⁾	140 ⁽³⁾
	0.15	70 ⁽²⁾	100 ⁽²⁾	110 ⁽³⁾	120 ⁽³⁾	120 ⁽³⁾
	0.20	40 ⁽¹⁾	65 ⁽²⁾	75 ⁽²⁾	80 ⁽²⁾	85 ⁽²⁾
	0.22	30 ⁽¹⁾	55 ⁽²⁾	65 ⁽²⁾	70 ⁽²⁾	75 ⁽²⁾
	0.25	20 ⁽¹⁾	45 ⁽¹⁾	55 ⁽²⁾	60 ⁽²⁾	65 ⁽²⁾
Suspended concrete ground-floor ⁽⁵⁾⁽⁷⁾	0.13	110 ⁽³⁾	130 ⁽³⁾	140 ⁽³⁾	140 ⁽³⁾	140 ⁽³⁾
	0.15	90 ⁽²⁾	110 ⁽³⁾	120 ⁽³⁾	120 ⁽³⁾	120 ⁽³⁾
	0.20	55 ⁽²⁾	75 ⁽²⁾	80 ⁽²⁾	85 ⁽²⁾	85 ⁽²⁾
	0.22	45 ⁽¹⁾	70 ⁽²⁾	70 ⁽²⁾	75 ⁽²⁾	75 ⁽²⁾
	0.25	35 ⁽¹⁾	50 ⁽²⁾	60 ⁽²⁾	60 ⁽²⁾	65 ⁽²⁾
Suspended timber ground-floor ⁽⁶⁾	0.13	200 ⁽³⁾	200 ⁽³⁾	—	—	—
	0.15	140 ⁽³⁾	165 ⁽³⁾	200 ⁽³⁾	200 ⁽³⁾	200 ⁽³⁾
	0.20	75 ⁽²⁾	110 ⁽³⁾	120 ⁽³⁾	130 ⁽³⁾	130 ⁽³⁾
	0.22	65 ⁽²⁾	90 ⁽²⁾	110 ⁽³⁾	110 ⁽³⁾	120 ⁽³⁾
	0.25	45 ⁽¹⁾	75 ⁽²⁾	85 ⁽²⁾	90 ⁽²⁾	95 ⁽²⁾

(1) Celotex TB4000

(2) Celotex GA4000.

(3) Celotex XR4000.

(4) Ground-bearing concrete floor construction (Celotex insulation on top of slab, under screed finish) 65 mm concrete screed $\lambda = 1.15 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$, polyethylene separating layer, Celotex insulation, dpm, 100 mm concrete oversite, 150 mm sand-blinded hardcore.

(5) Suspended concrete ground-floor construction (Celotex insulation on top of beam and block, below screed finish) 65 mm concrete screed $\lambda = 1.15 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$, polyethylene separating layer, Celotex insulation, beam and block floor (12%), beam $\lambda = 2.00 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$, dense block infill $\lambda = 1.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$, ventilated void.

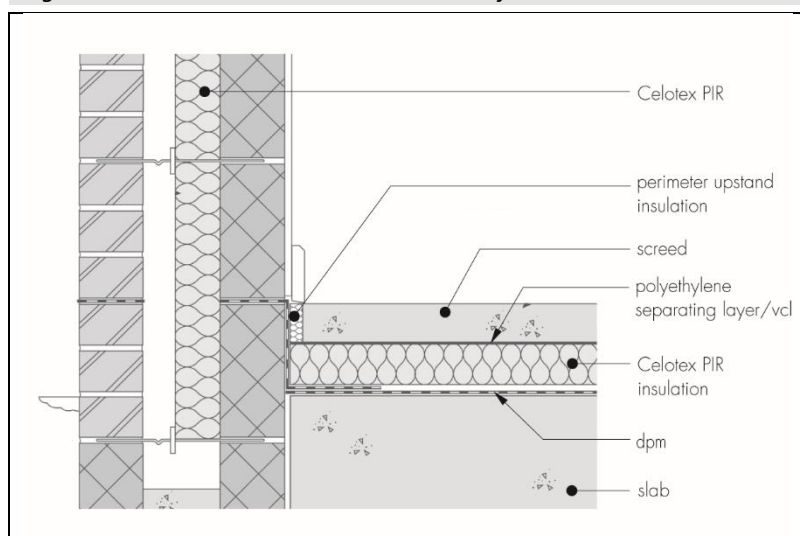
(6) Suspended timber ground-floor construction (Celotex between floor joists) — floor deck thermal resistance $0.169 \text{ m}^2\cdot\text{K}\cdot\text{W}^{-1}$ (based on 22 mm chipboard $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$), Celotex insulation (87%) between 47 mm wide joists at 400 mm centres. The depth of the joists = 100 to 200 mm depending on the depth of insulation between floor joists (13%) based on BR 443 : 2006 (nogging every 3 metres at 38 mm wide).

(7) Edge insulation used, Celotex TB4020 (20 mm thick x 65 mm high).

Junctions

6.3 Care must be taken in the overall design and construction of junctions with other elements and openings to minimise thermal bridges and air infiltration. Detailed guidance can be found in the documents supporting the national Building Regulations. An example of an acceptable junction detail is shown in Figure 1.

Figure 1 Junction between the wall and the floor



7 Condensation risk

Interstitial condensation



7.1 Floors will adequately limit the risk of interstitial condensation when they are designed and constructed in accordance with BS 5250 : 2011 Annex F and the relevant guidance.

7.2 The foil-facings have a water vapour resistance of $1000 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}\cdot\text{m}^{-1}$ and the insulation core has a water vapour resistivity of $300 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}\cdot\text{m}^{-1}$ and, therefore, will provide a significant resistance to water vapour transmission.

7.3 When the products are used above the dpm on a ground-supported or a suspended floor, a VCL is installed on the warm side of the insulation to limit the risk of interstitial condensation, unless a risk assessment shows this is not necessary.

Surface condensation



7.4 Floors will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed $0.7 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$ at any point, and the junctions with walls are designed in accordance with section 6.3 of this Certificate.



7.5 Floors will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed $1.2 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$ at any point. Guidance may be obtained from BS 5250 : 2011 Annex F. Further guidance may be obtained from BRE Report BR 262 : 2002 and section 6.3 of this Certificate.

8 Behaviour in relation to fire

8.1 The Certificate holder has declared a reaction to fire classification* to EN 13501-1 : 2007 of Class E for the products.

8.2 When properly installed, the products will not add significantly to any existing fire hazard. The products will be contained within the floor by the overlay until the overlay itself is destroyed. Therefore, the products will not contribute to the development stages of a fire or present a smoke or toxic hazard.

9 Floor loading

9.1 The products have a compressive strength (compressive stress at 10% deformation* to BS EN 826 : 2013) of /140KPa.



9.2 The products are suitable for domestic occupancies defined in this Certificate when covered with a suitable floor overlay (see section 4.6), and are capable of resisting a uniformly distributed load of $1.5 \text{ kN}\cdot\text{m}^{-2}$ or a concentrated load of 2 kN for category A1 and A2 (domestic) situations as defined in BS EN 1991-1-1 : 2002 and National Annex Table NA.2. Further assessment is necessary in the case of duty walkways and floors subject to physical activities.

9.3 The performance of the floor construction will depend on the insulation properties and type of floor overlay used (including thickness and strength). When the products are used under a concrete slab, resistance to concentrated and distributed loads is a function of the slab specification. Further guidance on the suitability of floor overlays can be found in BS EN 13810-1 : 2002, DD CEN/TS 13810-2 : 2003, BS 8204-1 : 2003 and BS EN 312 : 2010, and from the flooring manufacturer.

10 Incorporation of services

10.1 De-rating of electrical cables should be considered where installation restricts air cooling of cables; the products must not be used in direct contact with electrical heating cables or hot water pipes. Where underfloor heating systems are to be used, the advice of the Certificate holder should be sought.

10.2 Where possible, electrical conduits, gas and water pipes or other services should be contained within ducts or channels within the concrete slab of ground-bearing floors. Where this is not possible, the services may be accommodated within the insulation, provided they are securely fixed to the concrete slab. Electric cables should be enclosed in a suitable conduit. With hot pipes, the insulation must be cut back to maintain an air space.

10.3 Where water pipes are installed below the insulation, they must be pre-lagged with close-fitting pipe insulation. Pipes installed above the insulation will not require lagging, although some provision needs to be made for expansion and contraction.

10.4 Where the products are installed on a floor of a suspended beam-and-block design, all services must be installed so as not to impair the floor performance.

10.5 On overlay board floors, in situations where access to the services is desirable, a duct may be formed by mechanically fixing to the floor, timber bearers of the same thickness as the insulation to provide support for a particle board cover. The duct should be as narrow as possible and not exceed 400 mm in width or the maximum particle board spans given in PD CEN/TR 12872 : 2014 without intermediate support. Services should be suitably fixed to the floor base and not to the insulation boards.

10.6 On intermediate/exposed floor, all the services should be incorporated beneath the existing floor, above the insulation if possible.

11 Maintenance

As the products are confined within the floor by the overlay and have suitable durability (see section 12), maintenance is not required.

12 Durability



The products are rot proof, dimensionally stable and, when installed with the overlays specified in this Certificate, will remain effective as an insulating material for the life of the building in which they are incorporated.

13 General

13.1 Installation of Celotex TB4000, GA4000 and XR4000 PIR Insulation Boards for Floor Insulation must be in accordance with the Certificate holder's instructions and the requirements of this Certificate.

13.2 Typical methods of installation are shown in Figures 2 and 3. Reference should also be made to BRE Report BR 262 : 2002.

Figure 2 Over a ground-bearing concrete floor slab

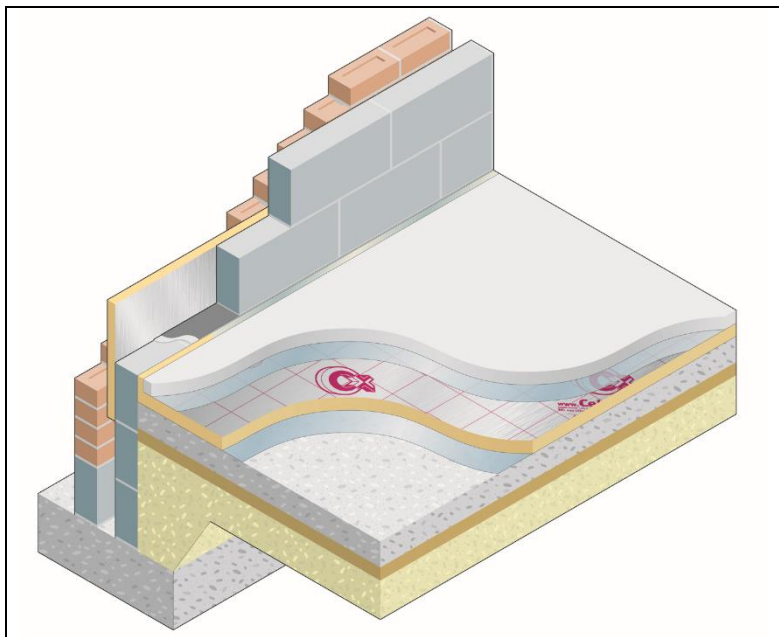
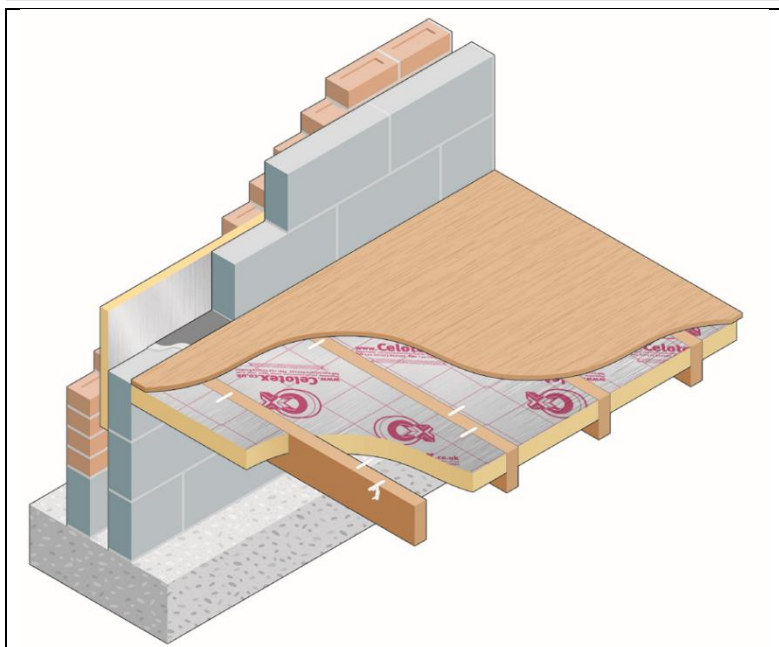


Figure 3 Between the joists in a suspended timber floor



13.3 In ground-bearing concrete floors (see Figure 2), the concrete floor slab over which the boards are to be laid should be left for as long as possible to maximise drying out and dissipation of constructional moisture, in accordance with BS 8203 : 2017, section 3.1.2.

13.4 The concrete floor surface should be smooth, level and flat to within 5 mm when measured with a two-metre straight-edge. Irregularities greater than this must be removed. Minor irregularities (up to 10 mm deep) may be levelled with mortar or thin screed.

13.5 Where the insulation is used over ground-bearing concrete floor slabs, a suitable dpm in accordance with CP 102 : 1973, should be laid to resist moisture from the ground. If a liquid-type dpm is applied to the slabs, it should be of a type compatible with the products and allowed to dry out fully before laying the insulation.

13.6 Where the insulation is used on hardcore bases beneath ground-bearing concrete slabs, the hardcore must be compacted and blinded with a thin layer of sand, before application of the dpm followed by the insulation boards.

13.7 A VCL is installed on the warm side of the insulation to inhibit the risk of interstitial condensation if necessary (see section 7.3). Where a concrete screed or slab finish is to be laid directly over the product, a polyethylene separating layer/VCL must be installed between the insulation and the concrete to prevent chemical attack and seepage between the boards.

13.8 The insulation can be used on suitable beam-and-block suspended concrete floors (see section 4.1).

13.9 Where a screed or concrete slab is laid over the insulation, vertical upstands of insulation should be provided and be of sufficient depth to fully separate the screed or slab from the wall. If used, a suitable cavity wall insulation material should be extended below the dpc level to provide edge insulation to the floor.

13.10 To limit the risk of condensation and other sources of dampness, the insulation and overlays should only be laid after the construction is made substantially weathertight, eg after glazing. During construction, the insulation and overlay must be protected from damage by traffic and moisture sources, such as water spillage and plaster droppings.

13.11 The products may be installed between timber floor joists using Celotex insulation clips or timber stop beads. The products have printed logos applied to the outer foil-facing on one side only. To ensure optimum thermal performance, the products must be installed with the unprinted foil-face always facing the cavity side. Tongue-and-groove particle board flooring or softwood floor boarding is then installed in the conventional manner.

14 Procedure

14.1 The product is cut to size (using a sharp knife or fine-toothed saw), as necessary, and laid with closely butted, staggered cross-joints, ensuring all spaces are completely filled.

14.2 The laying pattern should ensure that all cut edges are at the perimeter of the floor or some other feature, eg matwells, thresholds or access ducts. Spreader boards should be used to protect the insulation.

Cement-based screed overlay (Figure 2)

14.3 Perimeter edge pieces are cut and placed around the edges and taped at joints. A polyethylene VCL, at least 0.125 mm thick (500 gauge), is laid over the insulation. The VCL should have 150 mm overlaps, taped at the joints, and turned up 100 mm at the walls. A properly compacted screed of minimum thickness 65 mm is then laid over. The relevant clauses of BS 8204-1 : 2003 should be followed.

Timber-based board overlay

14.4 Before installing the overlay, preservative-treated timber battens, in accordance with BS 8417 : 2011, are positioned at doorways and access panels. Adequate time should be allowed for preservatives to be fixed, and the solvents from solvent-based preservatives to evaporate.

14.5 A polyethylene VCL of at least 0.125 mm (500 gauge) thickness is laid between the insulation and the timber board overlay. The VCL should have 150 mm overlaps, taped at the joints, and turned up 100 mm at the walls.

14.6 Timber based overlay boards as specified in section 4.6 are laid with staggered cross-joints, in accordance with PD CEN/TR 12872 : 2014 and BS EN 12871 : 2013.

Concrete slab overlay (ground-bearing only)

14.7 Perimeter edge pieces are cut and placed around the edges and taped at the joints. A polyethylene VCL, minimum 0.125 mm thick (500 gauge), is laid over the insulation. The VCL should have 150 mm overlaps, taped at the joints and turned up 100 mm at the walls. The concrete slab is laid to the required thickness in accordance with BS 8000-9 : 2003 and BS 8204-1 : 2003.

Suspended timber floor (Figure 3)

14.8 Insulation boards can be supported between timber joists using either Celotex insulation clips or timber beads. Where timber beads are used, a void may be incorporated above the insulation to accommodate services, if required. For correct orientation of the products, see section 13.11.

14.9 The product is cut to size to fit tightly between the joists. The saddle clip spikes are pressed into the long edges of the insulation board, ensuring the flange sits flat on the face of the board. Clips should be fitted at one metre intervals. The insulation board is then pushed into place until the clip is level with the surface of the joist. For additional security, the clip can be fixed to the joist with a small flat-head nail driven through the flange of the clip.

14.10 Where a service void is required above the insulation, preservative-treated timber beads may be used to retain the insulation boards. Beads should be wide enough to retain the insulation boards in place and secured with corrosion-protected fixings at a depth that will accommodate the thickness of the insulation board and leave a suitable depth void (minimum 25 mm) between the top of the insulation and the underside of the flooring deck. The product is cut to fit between the joists and pushed down onto the beads.

Technical Investigations

15 Tests

- load compression characteristics
- effect of cyclic loading
- thermal conductivity
- compressive strength.

16 Investigations

16.1 An examination was made of data relating to:

- dimensional accuracy
- dimensional stability
- water vapour resistance
- diffusion-tight property of facings
- compressive strength at 10% deformation
- density.

16.2 A condensation risk analysis was carried out.

16.3 A series of U value calculations was carried out

16.4 The manufacturing process was examined, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

Bibliography

BS 5250 : 2011 + A1 : 2016 *Code of practice for control of condensation in buildings*

BS 8000-9 : 2003 *Workmanship on building sites — Cementitious levelling screeds and wearing screeds — Code of practice*

BS 8203 : 2017 *Code of practice for installation of resilient floor coverings*

BS 8204-1 : 2003 + A1 : 2009 *Screeds, bases and in-situ floorings — Concrete bases and cement sand levelling screeds to receive floorings — Code of practice*

BS 8204-2 : 2003 + A2 : 2011 *Screeds, bases and in-situ floorings — Concrete wearing surfaces — Code of practice*

BS 8215 : 1991 *Code of practice for design and installation of damp-proof courses in masonry construction*

BS 8417 : 2011 + A1 : 2014 *Preservation of wood — Code of practice*

BS EN 300 : 2006 *Oriented Strand Boards (OSB) — Definitions, classification and specifications*

BS EN 312 : 2010 *Particleboards — Specifications*

BS EN 636 : 2012 + A1 : 2015 *Plywood — Specifications*

BS EN 826 : 2013 *Thermal Insulating Products for Building Applications — Determination of Compression Behaviour*

BS EN 1991-1-1 : 2002 *Eurocode 1 : Actions on structures — General actions— Densities, self-weight, imposed loads for buildings*

NA to BS EN 1991-1-1 : 2002 *UK National Annex to Eurocode 1 : Actions on structures — General actions— Densities, self-weight, imposed loads for buildings*

BS EN 1992-1-1 : 2004 + A1 : 2014 *Eurocode 2 : Design of concrete structures — General rules and rules for buildings*

NA + A2 : 2014 to BS EN 1991-1-1 : 2004 *UK National Annex to Eurocode 1 : Actions on structures — General actions— Densities, self-weight, imposed loads for buildings*

BS EN 12871 : 2013 *Wood-based panels — Performance specifications and requirements for load bearing boards for use in floors, walls and roofs*

BS EN 13165 : 2012 + A2 : 2016 *Thermal insulation products for buildings — Factory made rigid polyurethane foam (PU) products — Specification*

BS EN 13501-1 : 2007 + A1 : 2009 *Fire Classification of construction products and building elements Part 1 — Classification using data from reaction to fire tests*

BS EN 13810-1 : 2002 *Wood-based panels — Floating floors — Performance specifications and requirements*

BS EN 15037-1 : 2008 *Precast concrete products — Beam-and-block floor systems — Beams*

BS EN 15037-2 : 2009 + A1 : 2011 *Precast concrete products — Beam-and-block floor systems — Concrete blocks*

BS EN 15976 : 2011 *Flexible sheets for waterproofing — Determination of emissivity*

BS EN ISO 6946 : 2017 *Building components and building elements — Thermal resistance and thermal transmittance — Calculation method*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

BS EN ISO 13370 : 2017 *Thermal Performance of Buildings — Heat Transfer via the Ground — Calculation Methods*

BS EN ISO 14001 : 2015 *Environmental Management systems — Requirements with guidance for use*

CP 102 : 1973 *Code of practice for protection of buildings against water from the ground*

PD CEN/TR 12872 : 2014 *Wood-based panels — Guidance on the use of load-bearing boards in floors, walls and roofs*

DD CEN/TS 13810-2 : 2003 *Wood-based panels — Floating floors — Test methods*

BRE Report (BR 262 : 2002) *Thermal insulation: avoiding risks*

BRE Report (BR 443 : 2006) *Conventions for U-value calculations*

17 Conditions

17.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

17.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

17.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

17.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

17.5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- actual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to CE marking.

17.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

Unique identification code of the product type: **CELOTEX GA4000**

Intended use(s): **Thermal insulation for buildings**

Manufacturer: **SOPREMA UK Ltd
SOPREMA House, Freebournes Road, Witham
ESSEX
CM8 3UN
United Kingdom**

System(s) of AVCP: **System 4 (Reaction to fire)
System 3 (Other characteristics)**

Harmonised standard: **EN 13165:2012+A2:2016**

Approved body/ies: **0836**

Declared performances

Essential characteristics	Performances	Test standard	Designated standard
Thermal conductivity - λ_D (W/(mK)) $50 \leq d \leq 100$ mm	0,022	EN 12667	EN 13165:2012 + A2:2016
Thermal resistance - R_D ($m^2.K/W$) 50-100 mm	2,25-4,50	EN 12667	
Thickness tolerance - d_N (mm)	T2	EN 823	
Reaction to fire	F	EN 13501-1	
Durability of reaction to fire against heat, weathering, ageing/degradation	F ¹	EN 13501-1	
Durability against heat, weathering, ageing/degradation			
- Thermal conductivity - λ_D (W/(mK)) $50 \leq d \leq 100$ mm	0,022	EN 12667	
- Thermal resistance - R_D ($m^2.K/W$) 50-100 mm	2,25-4,50	EN 12667	
- Dimensional stability (%)	DS(70,90)3	EN 1604	
- Deformation under specified compressive load and temperature conditions (%)	NPD	EN 1605	
Compressive strength at 10 % deformation (kPa)	CS(10\Y)140	EN 826	
Tensile strength perpendicular to faces (kPa)	NPD	EN 1607	
Durability of compressive creep against ageing/degradation (kPa)	NPD	EN 1606	
Short term water absorption	NPD	EN 1609	
Long term water absorption by immersion	NPD	EN 12087	
Flatness after partial immersion	NPD	EN 825	
Water vapour diffusion resistance - μ	NPD	EN 12086	
Acoustic absorption index	NPD	EN 354	
Continuous glowing combustion	NPD ²	-	
Dangerous substances	NPD ²	-	

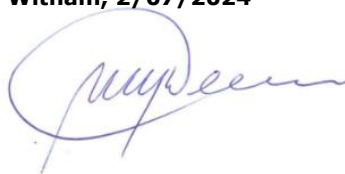
NPD = no performance determined

1) The fire performance does not deteriorate with time

2) In the absence of European harmonized test methods, verification and declaration on release and content has to be done taking into account national provisions in the place of use

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of conformity is issued, in accordance with UK Regulation, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by: **Marnix Derks, Technical Director**
Witham, 2/07/2024



SOPREMA UK Ltd reserves the right to amend the composition of its material and consequently their prices, without prior notice. For this reason, all orders will be accepted only in accordance with the conditions and technical specifications in force at the date of order.

DECLARATION OF PERFORMANCE

Document No. 24-DOPGA4000-01 UK

UK
CA

- 1. Unique identification of the product type:**
Celotex GA4000
- 2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4) of the CPR:**
See product label
- 3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:**
Thermal Insulation for Buildings
- 4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):**
Soprema Insulation Ltd trading as Celotex, Lady Lane Industrial Estate, Hadleigh, Ipswich, IP7 6BA
- 5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):**
N/A
- 6. System or systems of Assessment and Verification of Constancy of Performance (AVCP) of the construction product as set out in Annex V:**
System 4 (Reaction to Fire) and System 3 (other properties)
- 7. Covered by designated standard:**
BS EN 13165:2012 + A2:2016
Name and address of the approved body determining product-type on the basis of initial type testing:
British Board of Agrément (No. 0836), Bucknalls Lane, Watford, Herts WD25 9BA

24-DOPGA4000-01 UK

8. Declared performance:

Essential characteristics	Declared performance			Designated standard
Thickness tolerance	d _N 50-100mm		T2	BS EN 13165:2012 + A2:2016
Thermal resistance	Thermal resistance	m².K/W	2.25 (for d _N 50 mm) 4.50 (for d _N 100 mm)	
	Thermal conductivity	W/m.K	0.022	
Length and width	<1000mm	mm	± 5	
	1000 to 2000mm	mm	± 7.5	
	2001 to 4000mm	mm	± 10	
Squareness	S _b	mm/m	≤ 5	
Flatness	Length < 2.5m ≤ 0.75m² > 0.75m²	mm	≤ 5 ≤ 10	
Reaction to fire	Reaction to fire	Euroclass	F	
Durability of Reaction to fire against heat, weathering, ageing/degradation	Durability of Reaction to fire of the product as placed on the market	Euroclass	Does not change with time	
Durability of thermal resistance against heat, weathering, ageing/degradation	Thermal resistance	m².K/W	2.25 (for d _N 50 mm) 4.50 (for d _N 100 mm)	
	Thermal conductivity	W/m.K	0.022	
	Durability characteristics	m².K/W	2.25 (for d _N 50 mm) 4.50 (for d _N 100 mm)	
		W/m.K	0.022	
	Dimensional stability		DS(70,90)3 DS(-20,-)1	
	Deformation under specified compressive load and temperature conditions		NPD	
	Determination of the aged values of thermal resistance and thermal conductivity	W/m.K	0.022	
Compressive strength	Compressive stress or compressive strength	kPa	CS(10\Y)140	
Tensile/flexural strength	Tensile strength perpendicular to faces		NPD	
Durability of compressive strength against ageing/degradation	Compressive creep		NPD	
Water permeability	Short term water absorption Long term water absorption		NPD NPD	
	Flatness after one side wetting		NPD	
Water vapour permeability	Water vapour transmission		NPD	
Acoustic absorption index	Sound absorption		NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances		NPD (a)	
Reaction to fire of the product in standardised assemblies simulating end-use applications	Reaction to fire of the product in standardised assemblies simulating end-use applications		NPD	
Continuous glowing combustion	Continuous glowing combustion		NPD (a)	

NPD = No Performance Determined
(a) No harmonised standard test method available

24-DOPGA4000-01 UK

Celotex reserves the right to alter or amend product specification without notice. The information given in this publication is correct to the best of our knowledge at the time of publication. Whilst Celotex will endeavor to ensure publications are up to date, it is the users responsibility to check with us that it is correct prior to use.

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

A handwritten signature in black ink, appearing to read 'Marnix Derks', written over a light gray grid background.

**Marnix Derks
Soprema NV**

Product Data Sheet

Application: Multi-Purpose

CELOTEX GA4000



PIR Insulation for Multiple Applications

Celotex GA4000 is an easy to install polyisocyanurate (PIR) insulation board with excellent thermal performance, featuring a low emissivity foil facing. Available in thicknesses from 50mm to 100mm, it can be considered for roof, wall and floor applications.

Features & Benefits



Thermal Performance

Excellent thermal performance with a thermal conductivity of 0.022 W/m.K, reducing the thickness of insulation required to hit the target U-value.



High Performance Facer

Low emissivity foil facing provides improved thermal performance in sealed cavity air spaces, improving the achievable U-value.



Easy to Install

Celotex boards are light and rigid assisting with ease of transportation, handling and fitting.



BBA Certified

Celotex GA4000 has been assessed by the BBA as fit for use in defined roof, wall and floor applications if installed, used and maintained as set out in the certificate. Please read the certification at insulation-uk.com/BBA for full details and restrictions.



Sustainability

Celotex GA4000 achieves a BRE Green Guide Rating of A, which can assist in demonstrating environmental performance in your BREEAM assessments. Please visit the Celotex page at GreenBookLive.com for further details.



Key Considerations

When using Celotex GA4000, you need to satisfy yourself that use of the product meets all relevant national Building Regulations and guidance as well as local, national and other applicable standards relevant for your construction or application, including requirements in relation to fire and applicable height restrictions.

Please refer to the following product documents which are available at insulation-uk.com/products/celotex-ga4000 (product properties) and insulation-uk.com/healthandsafety (safety properties):

- BBA certificate
- Declaration of Performance
- Health & safety datasheet

Celotex GA4000 should not be used in the external walls of buildings over 11 metres in height. Recent changes to Building Regulations mean that only non-combustible insulation or insulation of limited combustibility should be used in buildings of that height.

Product Specification

Thickness (mm)	Lambda Value (W/m.K)	R-Value (m².K/W)	Length (mm)	Width (mm)	Maximum Weight (kg/m²)	Pieces per Pallet
50	0.022	2.25	2400	1200	1.92	48
60	0.022	2.70	2400	1200	2.26	40
70	0.022	3.15	2400	1200	2.61	32
75	0.022	3.40	2400	1200	2.78	30
80	0.022	3.60	2400	1200	2.96	30
90	0.022	4.05	2400	1200	3.31	24
100	0.022	4.50	2400	1200	4.15	24

Characteristics

Thermal	Celotex GA4000 has a declared thermal conductivity of 0.022 W/m.K, according to BS EN 13165 for factory made rigid polyurethane foam (PU) products.	Certification	BBA Approved (Cert no 17/5405) for floors, dry lining and pitched roof applications, when installed, used and maintained as set out in the certification. Please visit insulation-uk.com/BBA to read the full certification for details and restrictions. UKCA Marked to BS EN 13165.
Fire	Euroclass F Reaction to Fire classification, according to BS EN 13501-1. Products with this level of classification are not provided with a rating for smoke emission.	Handling, Storage, Health and Safety	Information regarding storage, installation and handling of Celotex products and health & safety information (including as to products of combustion), can be found at insulation-uk.com/healthandsafety
Environmental	All Celotex products are manufactured under Environmental Management System – ISO 14001:2015. Celotex has complied with the requirements of Environmental Profile BRE Global Scheme Document SD028 and BRE Methodology for Environmental Profile of Construction Products SD6050. Celotex GA4000 has obtained the BRE Global Certification Mark. Certificate number ENP413.	Quality	All Celotex products are manufactured under Quality Management Standard – ISO 9001:2015.

Celotex

by **SOPREMA**

head office
HADLEIGH

Lady Lane Industrial Estate,
Hadleigh IP7 6BA

Tel: +44 1473 822093

EGGBOROUGH

Weeland Road, Eggborough,
Goole DN14 0FG

Published date: **28 Mar 2024**
Document reference: **20240328**

Celotex reserves the right to amend or revise product specification without notice.
The information in this publication is correct at the time of publication. The information herein should not be read in isolation as it is meant only as guidance for the user, who should always ensure that they are fully conversant with the products and systems being used and their subsequent installation prior to the commencement of work.

CELOTEX GA4000

Description

CELOTEX GA4000 is a rigid thermal insulation board made of polyisocyanurate (PIR) foam. The boards are provided on both sides with a low emissivity aluminium composite foil facing. **CELOTEX GA4000** is mainly used as thermal insulation in roof, wall and floor applications.

Packing & Storage

Thickness (mm)	Boards/ pack	m ² /pack	Boards/ pallet	m ² /pallet	Thermal resistance (R _D) (m ² .K/W)
50	8	23,0	48	138,5	2,25
60	5	14,7	40	115,2	2,70
70	4	11,5	32	92,2	3,15
75	5	14,4	30	86,4	3,40
80	5	14,4	30	86,4	3,60
90	4	11,5	24	69,1	4,05
100	4	11,5	24	69,1	4,50

Store the boards on a flat surface, keep dry and protected from sunlight.

Characteristics

Thermal conductivity - λ_D (W/(m.K)) (EN 12667)	50 ≤ d ≤ 100 mm	0,022
Length (mm) (EN 822)		2400 ± 10
Width (mm) (EN 822)		1200 ± 7,5
Thickness tolerance - d _N (EN 823)		T2
Density (kg/m ³)		NPD
Edge profile		straight
Compressive strength at 10 % deformation (kPa) (EN 826)		CS(10\Y)140
Dimensional stability (%) (EN 1604)		DS(70,90)3 DS(-20,-)1
Long term water absorption by total immersion (%) (EN 12087)		NPD
Reaction to fire (EN 13501-1)		F
Water vapour diffusion resistance - μ (EN 12086)		NPD
Tensile strength perpendicular to faces (kPa) (EN 1607)		NPD
Durability of compressive creep against ageing/degradation (kPa) (EN 1606)		NPD

NPD = no performance determined

Installation

Always consult the local regulations and contact the manufacturer for technical questions. Immediately after installation the insulation boards must be protected against weather conditions and sunlight.

Certifications

- BBA 16/5405 (UK)

Special indications

Hygiene, Health and Environment

The product does not contain any substance which is likely to be detrimental to your health or to the environment and complies with generally admitted Health and Safety Requirements.

Quality-, Environment- and Safety Management

SOPREMA always recognises as a high level of importance the quality of the products, the environment and safety. For this reason, we operate independently monitored Quality and Environment Assurance Systems in line with **EN ISO 9001** and **EN ISO 14001**.

SOPREMA reserves the right to amend the composition of its material and consequently their prices, without prior notice. For this reason, all orders will be accepted only in accordance with the conditions and technical specifications in force at the date of order.

Contact: www.soprema.com

INVOICE TO:	DELIVERY TO:
Keystone Investments N.I.Ltd Unit 8, Elagh Business Park Buncrana Road Derry BT48 8GH	KEYSTONE CIVILS NEW GREGGS, GEORGE AND DRAGON BATH ROAD READING RG30 2HA

INVOICE NO	INVOICE DATE	CUSTOMER REF	SALES	ACCOUNT	TIME	PAGE
103833	27/09/2024	03.G&D.LD033	JOHN	1098	12:55	1

CODE	DESCRIPTION	QTY	PRICE	TOTAL	VAT
INSULATE	75MM CELOTEX CW4000 CAVITY INSULATION PER M2	0.000	9.38	0	1
INSULATE	2400X1200X100MM CELOTEX GA4100 delivery ex Markovitz. note: 01450799	68.000	29.10	1978.8	1

CHARGED TO ACCOUNT 2,374.56

VAT BREAKDOWN				NETT	1,978.80
CODE	RATE%	NETT	VAT	VAT	395.76
1	20.00	1,978.80	395.76	TOTAL	2,374.56

1.0 Scope

1.1 Overview

- 1.1.1 This report documents J Mould (Reading) Limited's Register of Environmental Legislation as required under their Environmental Management System, which has been completed in line with ISO14001:2015 Environmental Management Systems.
- 1.1.2 A register of legal requirements is provided in Section 4.
- 1.1.3 The report has been completed by undertaking a desktop review of environmental legislation relevant to J Mould (Reading) Limited's operations at Reading.
- 1.1.4 The government website 'www.legislation.gov.uk' is the main source of information, in conjunction with the 'ENDS Report' and ENDS 'Compliance Manager'.

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 1 of 98

2.0 Responsibilities

2.1 Overview

- 2.1.1 Responsibilities for ensuring activities are compliant with all relevant environmental legislation and policy are as follows:
- 2.1.2 The Technically Competent Manager, supported by J Mould (Reading) Limited's Company Director, responsible for implementation of relevant legislation into the working practices of the J Mould (Reading) Limited's site, and evaluating compliance;
- 2.1.3 Site Manager responsible for the general upkeep of all fixed and mobile plant and utilities; and
- 2.1.4 Relevant Site Personnel: carrying out the activities and following the relevant procedures and processes.

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 2 of 98

3.0 Register of Environmental Legislation

Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
DIRECTIVE (EU) 2015/2193 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants	2015/2193	Implemented by the EA through the Environmental Permitting Regulations	Emissions to air	Directive (EU) 2015/2193 on the limitation of emissions of certain pollutants into the air from MCPs known as the Medium Combustion Plant Directive (MCPD) regulates pollutant emissions from the combustion of fuels in plants with a rated thermal input equal to or greater than 1 Megawatt thermal (MWth) and less than 50 MWth.	Meet all conditions in the Permit. EMS. Plant meets BAT and applicable emissions standards. Emissions monitoring.	Compliance monitoring for combustion plant. Internal audits	Yes
The Environmental Permitting (England and Wales) Regulations 2016	2016/1154	Environment Agency (EA)	All	These Regulations replaced previous version and set out an environmental permitting and compliance regime that applies to various activities and industries.	Meet all conditions in the Environmental Permit. Environmental Management System (EMS).	Internal Audits and EA Inspections	Yes
The Environmental Permitting (England and Wales) (Amendment)	2016/475	EA	All	Provides for the regulation of “flood risk activities” within the Environmental Permitting framework,	For information only as the Facility is not close to a main river.	N/A	N/A

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 3 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
(No.2) Regulations 2016				replacing the current “flood defense consent scheme”. It is intended to reduce administrative burdens on applicants undertaking activities which require prior approval because they may impact on flood risk or flood risk management.			
The Environmental Permitting (England and Wales) (Amendment) Regulations 2018	2018/110	EA	All	Transposes EU Directive 2015/2193 (“the Medium Combustion Plant Directive) and introduce domestic emission controls in respect of certain types of electricity generator. The instrument extends the scope of the 2016 regulations to include permitting requirements for the operation of medium combustion plants (>1MWt and <20MWt) in order to regulate emissions to protect air quality.	Meet all conditions in the Environmental Permit. Environmental Management System (EMS).	Internal Audits and EA Inspections	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 4 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				This amendment also extends enforcement undertakings to flood risk activities.			
The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018	2018/428	EA	All	Transposes EU Directive 2013/59/Euratom (Basic Safety Standards Directive). The directive lays down basic safety standards for the protection against the dangers arising from exposure to ionising radiation.	For information only	For information only	N/A
The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019	2019/39	EA	All	Amends the Regulations to ensure that on the United Kingdom's exit from the European Union they remain fully operable	For information only	For information only	N/A
The Waste and Environmental Permitting etc (Legislative Functions and Amendment etc) (EU Exit) Regulations 2020	2020/1540	EA	All	Implements changes to ensure that waste regulation and environmental permitting can continue to be effectively managed after the end of the EU Exit transition period.	For information only	For information only	N/A

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 5 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023	2023/651	EA	All	Makes a number of amendments to allow tools for managing and protecting groundwater quality. These amendments include for example enabling the EA to apply regulatory controls and issue permits as necessary for groundwater activities that present a significant risk of introducing pollution.	Meet all conditions in the Environmental Permit. Environmental Management System (EMS).	Internal Audits and EA Inspections	Yes
The Environmental Permitting (England and Wales) (Amendment) (England) (No. 2) Regulations 2023	2023/1046	EA	All	Strengthens the civil sanctions available for environmental regulators in England in order to provide a greater deterrent against environmental offences for operators. This change removes the cap on the amount of the penalty imposed (under the Environmental Civil Sanctions (England) (amendment) Order 2023) and the expansion of	Meet all conditions in your Environmental Permit. Environmental Management System (EMS).	Internal Audits and EA Inspections	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 6 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				penalties across more offences.			
The Environmental Permitting (England and Wales) (Amendment) Regulations 2023	2023/1156	EA	All	This amendment expands the scope of material facilities ("MFs") required to comply with requirements to sample waste, to enhance the data on waste and to provide evidentiary support for Extended Producer Responsibility for Packaging (pEPR). Schedule 9, Part 2 of the 2016 Regulations requires operators of permitted MFs to notify the regulator, if they receive mixed waste material of 1,000 tonnes or more. Under the 2016 Regulations, MFs sort mixed waste material into specified waste streams which is subsequently transferred or sent to be recycled.	.Meet all conditions in the Environmental Permit. Environmental Management System (EMS).	Internal Audits and EA Inspections	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 7 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Environment Act 1995	C25	Secretary of State	All	The aim of the Act relates to a wide range of environmental issues, from the establishment of the Environment Agency, to provisions for contaminated land and abandoned mines, National Parks, the control of pollution, conservation of the environment, obligations relating to products and materials, and fisheries. Local authorities are given powers to review and assess local air quality impacts and can designate Air Quality Management Areas, within which action plans can be produced to improve air quality.	Meet all conditions in the Environmental Permit. Environmental Management System (EMS).	Internal audits and EA inspections	For information
The Environment Act 2021	2021/30	Secretary of State	All	This Act provides for a domestic replacement for the scrutiny and enforcement function of the	Meet all conditions in the Environmental Permit.	Internal Audits and EA Inspections	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 8 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				European Commission. It makes provision for new domestic policies to improve air quality, conserve and enhance nature, improve management of resources and waste and modernise water regulation. It also establishes the Office for Environmental Protection	Environmental Management System (EMS). Plant meets BAT and applicable emissions standards. Emissions monitoring.		
<u>The REACH Enforcement Regulations 2008</u>	2008/2852	For information	For Information	REACH places the burden of proof on companies. To comply with the regulation, companies must identify and manage the risks linked to the substances they manufacture and market in the EU. They have to demonstrate to ECHA how the substance can be safely used, and they must communicate the risk management measures to the users.	For information only	For information only	For information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 9 of 98



J. Mould

Document Type: System Procedure
Title: Legal Register Ref: JMLEMS401

Issue Date: July 2024 – Version: 2

Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				If the risks cannot be managed, authorities can restrict the use of substances in different ways. The most hazardous substances should be substituted with less dangerous ones. <u>Applies to substances produced or imported into the EU in quantities of one tonne or more per year.</u> For substances manufactured or imported in quantities of more than 10 tonnes per year, information must be supplied to demonstrate that they are safe for the identified uses. You must register new substances before you put them on the market at 1 tonne per annum or greater. Failure to register means the substance can't be manufactured or imported into the			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 10 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				EU in quantities of one tonne or more per year. Further guidance. EA website guidance The Reach Enforcement Regulations sets out responsibilities, powers, offences and penalties for enforcing REACH.			
The REACH Enforcement (Amendment) Regulations 2013	2013/2919	For information	For Information	2919 allows second-hand articles containing asbestos to be placed on the market, under conditions that ensure a high level of protection for human health, and to provide for some other amendments to the REACH Enforcement Regulations 2008.	For information only	For information only	For information only
The REACH Enforcement (Amendment) Regulations 2014	2014/2882	For information	For Information	2882 gives effect to an optional derogation in the EU REACH Regulation ¹ to allow the supply and professional use in the UK of paint strippers based on the solvent dichloromethane (DCM). Without the	For information only	For information only	For information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 11 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				instrument professional use of such paint strippers would be banned.			
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019	2019/758	For information	For Information	758 corrects deficiencies in retained EU law relating to the registration, evaluation, authorisation and restriction of chemicals. The instrument ensures that the EU legislation will operate effectively in the domestic context after the UK leaves the EU. It also makes transitional provisions to minimise the disruption to existing supply chains following EU Exit.	For information only	For information only	For information only
The REACH etc. (Amendment etc.) (EU Exit) (No. 2) Regulations 2019	2019/858	For information	For Information	1858 amends the Reach (Amendment) (EU Exit) 2019, and add to transitional provisions surrounding	For information only	For information only	For information only
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 12 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				imported substances			
The REACH etc. (Amendment etc.) (EU Exit) (No. 3) Regulations 2019	2019/1144	For information	For Information	SI1144 makes minor amendments to dates and cross-references.	For information only	For information only	For information only
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020	2020/1577	For information	For Information	SI1577 amends the REACH (Amendment) (EU EXIT) Regulations 2019 (SI 2019/758) and the REACH Enforcement Regulations 2008 (SI 2008/2852) to help ensure the UK meets its obligations under the Protocol on Ireland/Northern Ireland in respect to REACH, by making changes to UK's REACH regime and ensuring it only applies to chemicals in Great Britain. It also amends transitional provisions to mitigate potential disruption to industry from the move to the new system and makes	For information only	For information only	For information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 13 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				some minor amendments.			
The REACH etc. (Amendment) Regulations 2021	2021/904	For information	For Information	904 amends the UK REACH Regulation and related legislation that also forms part of retained EU law. It corrects deficiencies to ensure that the legislation operates effectively in the domestic context. It also makes some related minor amendments to ensure consistency in respect of references to medical devices.	For information	For Information	For information
The REACH (Amendment) Regulations 2023	2023/722	For information	For Information	722 extends the current legislative deadlines for registrants to submit information to the Health and Safety Executive ("HSE") under UK REACH. It also extends the period in which downstream users and distributors who were importing before the end of the EU Exit Implementation Period ("pre-IP	For information	For Information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 14 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				completion”) can continue to import chemicals from the EU without submitting a full registration. Extending these timelines will provide sufficient time for the government to develop and introduce a new transitional registration model.			
Environmental Information Regulations 2004	2004/3391	Secretary of State	For Information Only	Duty on public authorities to make information available to the public. Information provided to public authorities by J Mould (Reading) Limited may be viewed by the public. Regulation 12 details possible exclusions e.g. commercial sensitivity.	Ensure authorities are aware of any commercially sensitive information and whether it is presents a risk to national security.	For information only	For information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 15 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Waste (England and Wales) Regulations 2011	2011/988	EA	1, 7	Transposes the requirements of the revised Waste Framework Directive. Revokes The Environmental Protection (Duty of Care) Regulations 1991, The Waste Management Licensing Regulations 1994, The Controlled Waste (Registration of Carriers and Seizure of Vehicles) (Amendment) Regulations 1998 as they apply in England and Wales. Revokes the whole of The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003 and The Environmental Protection Act 1990 (Amendment of Section 57) (England and Wales) Regulations 2005. Requires businesses to apply the waste management	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05. EMS Use only authorised waste contractors.	Internal Audit as documented in EMS Audit by Environment Agency Waste recording & monitoring	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 16 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				hierarchy, introduces a two-tier system for waste carrier and broker registration, and excludes some categories of waste from waste controls. Amends the Hazardous Waste Regulations 2005.			
The Waste (England and Wales) (Amendment) Regulations 2012	2012/1889	EA	1, 7	Amended in 2012 to transpose the Revised Waste Framework Directive.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05. EMS Use only authorised waste contractors.	Internal Audit as documented in EMS Audit by Environment Agency Waste recording & monitoring	Yes
The Waste (England and Wales) (Amendment) Regulations 2014	2014/656	EA	1, 7	Amended in 2014 to add a new list of “relevant offences” and other minor amendments relevant to carriers, brokers and dealers.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05. EMS Use only authorised waste contractors.	Internal Audit as documented in EMS Audit by Environment Agency Waste recording & monitoring	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 17 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Waste Enforcement (England and Wales) Regulations 2018	2018/369	EA	1, 7	This instrument enhances powers to tackle illegal activity at waste sites. It gives waste regulation authorities and waste collection authorities in England and Wales the power by notice to require waste from a site to be removed where it has been unlawfully kept or disposed of, including waste that was initially lawfully deposited. It also gives the Environment Agency and Natural Resource Body for Wales the power, by notice or by application to court for an order, to restrict access and the importation of waste to premises.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05. EMS	Internal Audit as documented in EMS Audit by Environment Agency Waste recording & monitoring	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 18 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Waste Enforcement (Fixed Penalty Receipts) (Amendment) (England and Wales) Regulations 2024	2024/365	EA	For information	This instrument amends the qualifying functions on which local authorities can spend the receipts of fixed penalty notices issued for littering, fly-tipping and breaching the household waste duty of care.	For information	For information	For information
Environmental Protection Act 1990 - Part II	C43	EA	1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 13	The EPA places responsibility for waste on the person who produces it and everyone who handles it, right through to final disposal or reclamation. This part of the Act applies to "controlled waste"; this includes household, industrial and commercial waste and "Hazardous waste". It is an offence under section 33 to keep, treat or dispose of controlled waste without a waste management license or in a manner that is likely	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 19 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				to cause pollution of the environment or harm to human health. Waste Management Licensing as set out in these regulations has now been replaced with that contained within the 'Environmental Permitting (England and Wales) Regulations'.			
The Waste Electrical and Electronic Equipment Regulations 2013	2013/3113	EA	1	Producers of electrical and electronic equipment (EEE) must be registered and that they will be financially responsible for managing the waste that arises from products they place on the Community market. Sets targets for the amount of WEEE to be collected separately from private households requires the UK to establish and maintain a register of EEE producers.	Retain evidence that WEEE was transferred to a specialised waste contractor and that it has been treated and disposed of in accordance with the regulations.	WEEE is segregated for collection by contractor	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 20 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				WEEE must be collected at designated collection facilities and then transported to an approved authorized treatment facility (AATF) or approved exporter for treatment, recovery or recycling. SI3113 transposes the main provisions of Directive 2012/19/EU. It provides that EEE producers will be financially responsible for managing waste that arises from products they place on the Union market, and they must be registered with national authorities in any Member state where they place EE onto the market. Member states must establish systems for WEEE collection, treatment, recovery and, for most types, its environmentally sound disposal. EEE			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 21 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				distributers are also obliged to establish systems for the return of WEEE from consumers free of charge. Producers that place less than 5 tonnes of EEE onto the market in a year will discharge their obligation by registering with appropriate authorities.			
The Waste Electrical and Electronic Equipment and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (Amendment) Regulations 2014	2014/1771	EA	1	SI1771 amendment corrects minor drafting errors.	Retain evidence that WEEE was transferred to a specialist waste contractor and that it has been treated and disposed of in accordance with the regulations.	WEEE is segregated for collection by contractor	Yes
The Waste Electrical and Electronic Equipment (Amendment) Regulations 2015	2015/1968	Environment Agency	1	SI1968 provide for an adjustment to producer and producer compliance scheme financial obligations in specific circumstances. Maintain the	Retain evidence that WEEE was transferred to a specialist waste contractor and that it has been treated and disposed of in	WEEE is segregated for collection by contractor	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 22 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				meaning of certain regulations in light of the European Commission's interpretation of the meaning of WEEE from private households. Clarify the meaning of certain regulations and correct a number of errors in the WEEE regulations.	accordance with the regulations.		
The Waste Electrical and Electronic Equipment (Amendment) Regulations 2018	2018/102	EA	1	SI102 amends The Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113). They clarify the rights of local authorities under Regulation 34, and correct an omission in the Waste Electrical and Electronic Equipment (Amendment) Regulations 2015	Retain evidence that WEEE was transferred to a specialised waste contractor and that it has been treated and disposed of in accordance with the regulations.	WEEE is segregated for collection by contractor	Yes
The Waste Electrical and Electronic Equipment (Amendment) Regulations 2018	2018/1214	EA	1	SI1214 makes amendments to the Waste Electrical and Electronic Equipment Regulations 2013 (SI	Retain evidence that WEEE was transferred to a specialised waste contractor and that it has been	WEEE is segregated for collection by contractor	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 23 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
(No. 2) Regulations 2018				2013/3113) such as making membership by all producer compliance schemes (PCSs) of the PCS Balancing System (PBS) mandatory and for the Secretary of State to approve such a PBS.	treated and disposed of in accordance with the regulations.		
Hazardous Waste (England and Wales) Regulations 2005	2005/894	EA	1	The main requirements include: •Producers must register annually with the EA if waste produced is >500kg. •Hold hazardous waste consignment notes for all transfer for at least 3 years. Hazardous wastes are defined by the "List of Waste Wales Regulations 2005 The mixing of different types of Hazardous Waste and Non-Hazardous Waste is prohibited. Hazardous waste must be stored separately on site. Each consignment will require a fee to	Ensure all waste streams are identified and classified and segregated and disposed of correctly. Consignees are required to keep records of all consignments. Consignment notes are required to be kept for a minimum of three years. Hazardous waste registration with EA required if hazardous waste produced.	Annual review to ensure waste remains non-hazardous	Yes – no hazardous waste produced

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 24 of 98



J. Mould

Document Type: System Procedure
Title: Legal Register Ref: JMLEMS401

Issue Date: July 2024 – Version: 2

Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				be paid to the EA by the consignee along with quarterly returns to the EA. Registered sites will be subject to inspection from the EA. All Hazardous waste entering landfill must comply with Waste Acceptance Criteria. Hazardous waste will be sampled & tested to in order to determine whether the waste complies with WAC. Amended by The Waste (England and Wales) Regulations 2011 SI 988 (see above).			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 25 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Hazardous Waste (England and Wales) (Amendment) Regulations 2009	2009/507	EA	1	SI507 amends SI895 to increase the qualifying limitation (which determines which premises may be exempted from the requirement to notify the production, collection and removal of hazardous waste) in regulation 30 from 200kg to 500kg in any period of twelve months. It also clarifies certain other provisions in the 2005 Regulations, including in relation to asbestos waste which is domestic waste, the treatment of separated domestic fractions of hazardous waste and the arrangements for the transfer of a rejected consignment of hazardous waste. NB changes from CHIP to CLP will impact on how waste is classified. EA have re-issued	Ensure all waste streams are identified and classified and segregated and disposed of correctly. Consignees are required to keep records of all consignments. Consignment notes kept for a minimum of three years. Hazardous waste registration with EA required if hazardous waste produced. Technical guidance including WM3	Annual review to ensure waste remains non-hazardous	Yes – no hazardous waste produced

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 26 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Hazardous waste: interpretation of the definition and classification of hazardous waste (WM2) which is available via the guidance links in the next column.			
The Hazardous Waste (Miscellaneous	2015/1360	EA	1	SI1360 updates domestic legislation in light of amendments to two	Ensure all waste streams are identified and classified and	Annual review to ensure waste remains	Yes, no hazardous waste produced

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 27 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Amendments Regulations 2015				EU instruments establishing the classification for waste and hazardous waste and the replacement of an EU instrument concerning waste electrical equipment.	segregated and disposed of correctly. Consignees are required to keep records of all consignments. Consignment notes kept for a minimum of three years. Hazardous waste registration with EA required if hazardous waste produced. Guidance – general waste Technical guidance including WM3	non-hazardous	
The Hazardous Waste (England and Wales) (Amendment) Regulations 2016	2016/336	EA	1	SI336 revokes Part 5 of the Hazardous Waste (England and Wales) Regulations 2005 (S.I. 2005/894) (“the 2005 Regulations”) which requires the notification of premises at which hazardous waste is produced at, collected at or removed from. The instrument also	Ensure all waste streams are identified and classified and segregated and disposed of correctly. Consignees are required to keep records of all consignments. Consignment notes are required to be kept for a	Annual review to ensure waste remains non-hazardous	Yes, no hazardous waste produced

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 28 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				makes consequential amendments arising from the revocation of Part 5, and corrects an error in regulation 49(4) of the 2005 Regulations. The requirement for the SIC code on the consignment note has changed. The change to the regulation specifies the use of SIC 2007 which matches the requirements for waste transfer notes. NACE codes will continue to be allowed to be used.	minimum of three years. Hazardous waste registration with EA required if hazardous waste produced. Guidance – general waste Technical guidance including WM3 Registration		
<u>The Waste Batteries and Accumulators Regulations 2009</u>	2009/890	EA	For Information	Establishes a legal framework and schemes for collecting, treating and recycling portable, industrial and vehicle batteries. Applies to all types of batteries except when used for military and space equipment.	For Information Only	For Information Only	For Information Only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 29 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Waste Batteries and Accumulators (Amendment) Regulations 2015	2015/1935	EA	For information	SI1935 enact the following changes: a) removal of the requirement to provide operational plans; b) removal of the requirement to submit independent audit reports; c) allows an “approved person” to delegate the responsibility for signing off reports.	For Information Only	For Information Only	For Information Only
<u>The End of Life Vehicle (Amendment) Regulations 2010</u>	2010/1094	EA	For Information	When End of Life Vehicles (ELVs) are sent for dismantling or disposal, you must ensure that the site has an environmental permit and is an authorised treatment facility. If you dismantle or store waste motor vehicles that have been de-polluted, you can apply for a scrap metal exemption. The Regulations require producers to register responsibility for	Relevant for J Mould (Reading) Ltd-owned vehicles.	Review as required (when vehicles require disposal)	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 30 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				vehicles placed on the market and apply for approval of their vehicle collection system. Introduces reuse, recovery and recycling targets for end-of-life vehicles treated at authorised treatment facilities.			
The Transfrontier Shipment of Waste Regulations 2007	2007/1711	For information	For Information	The transfrontier shipment of waste (TFS) is the shipment of waste across national boundaries. The controls on transfrontier shipments of waste aim to ensure a high level of protection for the environment and for human health. They also aim to prevent the unauthorised disposal of international waste shipments and the unregulated recovery of hazardous wastes, without hindering the legitimate trade in waste. If you intend to transport	For information	Not applicable, review if waste is transferred across national boundaries.	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 31 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				waste into, out of, the United Kingdom, you must comply with the international agreements, regulations and policies governing the transfrontier shipment of wastes.			
Transfrontier Shipment of Waste (Amendment) Regulations 2008	2008/9	For information	For information	The Transfrontier Shipment of Waste (Amendment) Regulations 2008 create offences for failure to comply with the requirements of the new EC Regulation	For information only	For information only	For information only
The Transfrontier Shipment of Waste (Amendment) Regulations 2014	2014/861	For information only	For information only	SI861 amends the Transfrontier Shipment of Waste Regulations 2007 (SI 2007/1711) ("the 2007 Regulations"), and to redefines the competent authorities and transfer certain competent authority responsibilities from the Secretary of State to the Environment Agency, Scottish	For information only	For information only	For information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 32 of 98



J. Mould

Document Type: System Procedure
Title: Legal Register Ref: JMLEMS401

Issue Date: July 2024 – Version: 2

Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Environment Protection Agency and Department of the Environment in Northern Ireland and from the Secretary of State and Environment Agency to the Natural Resources Body for Wales; to provide a power for HM Revenue and Customs to disclose certain information to competent authorities for enforcement purposes; to allow Border Force to stop and detain waste for up to five working days in certain prescribed circumstances; and to make changes to the fees for notification of waste shipments starting or finishing in Northern Ireland.			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 33 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Control of Pollution Act 1974	C40	EA	All	The aim of the Act is to deal with a variety of environmental issues, including waste on land, water pollution, abandoned mines, noise pollution and the prevention of atmospheric pollution. Any person who transports or makes arrangements for management of waste in the course of any business without being registered with the appropriate registration authority commits an offence, unless they are exempt. Requires carriers of controlled waste to register with the EA and outlines the penalties (including seizure and disposal) for vehicles shown to have been used for illegal waste disposal.	Ensure Hazardous (if produced) and Non-hazardous wastes are segregated and disposed of via the approved contractor. Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05.	Internal audit	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 34 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Control of Pollution (Amendment) Act 1989	C14	EA	All	Strengthens some provisions within the original Act	Ensure Hazardous (if produced) and Non-hazardous wastes are segregated and disposed of via the approved contractor. Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05.	Review waste documentation Audited by EA Review annually	Yes
Clean Neighbourhoods and Environment Act 2005	C16	For information	7	Implement the Landfill Directive in England and Wales. Landfills must be defined as hazardous, non-hazardous or inert waste and only accept wastes of these types.	Ensure Hazardous (if produced) and Non-hazardous wastes are segregated and disposed of via the approved contractor. Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05.	Review waste documentation Audited by EA Review annually	Yes
The Controlled Waste (England and Wales) Regulations 2012 revokes the Controlled Waste	2012/811	EA	7	The Controlled Waste (England and Wales) Regulations 2012 replace the Controlled Waste Regulations 1992.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/VO 05	Review waste documentation Audited by EA	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 35 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Regulations 1992 (SI 1992/588) and the Waste Management Licensing (Amendments etc.) Regulations 1995 (SI1992/288).				The regulations classify waste as household, industrial or commercial. They also list the type of waste for which local authorities may make a charge for collection and disposal.		Review annually	
The Controlled Waste (England and Wales) (Amendment) Regulations 2012	2012/2320	EA	7	Amended 2012 within minor amends	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05	Review waste documentation Audited by EA Review annually	Yes
The Control of Waste (Dealing with Seized Property) (England and Wales) Regulations 2015	2015/426	EA	7	This instrument establishes the procedures which a waste collection authority (most local authorities), the Environment Agency and Natural Resources Wales (“the seizure authority”) must follow once they have seized property (a vehicle and/or its contents) under either section 5 of the Control of Pollution (Amendment) Act	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05	Review waste documentation Audited by EA Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 36 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				1989 ("the 1989 Act") or section 34B of the Environmental Protection Act 1990 ("the 1990 Act") because of suspected involvement in offences concerning the transport or disposal of waste (such as fly-tipping).The instrument sets out what a seizure authority must do to ensure the safe custody and determine the rightful owner of any seized vehicle or other property. It also sets out the circumstances in which the authority must return the property to its owner and the circumstances in which it can sell, destroy or otherwise dispose of the property.			
The Controlled Waste (England and Wales) (Amendment)	2023/1243	EA	7	This instrument amends the Controlled Waste (England and Wales)	For Information	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 37 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
(England) Regulations 2023				Regulations 2012 (“the 2012 Regulations”) to add an additional purpose for when waste produced from construction works (“construction waste”) should be treated as household waste, which is for the purpose of section 51 of the Environmental Protection Act 1990 (“the 1990 Act”), but only where the construction waste meets a certain description. Where the construction waste meets the description, this will mean that householders are able to dispose of this waste for free at Household Waste Recycling Centres (“HWRCs”) as it will be household waste and not industrial waste.			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 38 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2010	2010/2849	EA	For information	Obligations are placed on certain businesses to register with the Environment Agency to recover and recycle specific tonnages of packaging waste. The current thresholds for obligation are the handling of 50 tonnes of packaging and a turnover of £2 million or more. If handling under 50 metric tons, the regulations are not applicable. More than 50 metric tons, must register with EA or join compliance scheme and recycle a percentage of their packaging	Under threshold, review annually	Under threshold, review annually	Information only
The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2012	2012/3082	EA	For information	3082 amends the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. 2007/871) ("the 2007 Regulations") by including packaging waste	Under threshold, review annually	Under threshold, review annually	Information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 39 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				recovery and recycling targets for 2013-7, and introducing split targets for glass based on the end use.			
<u>The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2013</u>	2013/1857	EA	For information	1857 corrects an error in the formula for calculating the glass re-melt recycling target for producers of glass packaging as set out in Schedule 2 to the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. 2007/871) ("2007 Regulations")	Under threshold, review annually	Under threshold, review annually	Information only
<u>The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2014</u>	2014/2890	EA	For information	SI2890 amendment changes targets for glass re-melt.	Under threshold, review annually	Under threshold, review annually	Information only
<u>The Producer Responsibility Obligations (Packaging Waste) (Miscellaneous</u>	2016/241	EA	For information	SI241 amends existing instruments establishing the system of packaging waste producer responsibility in Great Britain and	Under threshold, review annually	Under threshold, review annually	Information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 40 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Amendments Regulations 2016				Northern Ireland (SI 2007/891 and SR (NI) 2007/198). This instrument will make Producer Responsibility more efficient by reducing regulatory burdens on producer businesses. By freeing producers to focus on core elements of the system, it will be more likely that environmental outcomes and EU imposed targets will be achieved.			
The producer Responsibility obligations (Packaging Waste) (Amendment) Regulations 2016	2016/1146	EA	For information	SI146 amends the existing regulations by setting packaging target for recycling plastic for 2016 to 2020 and for glass for 2018 to 2020.	Under threshold, review annually	Under threshold, review annually	Information only
The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2017	2017/1221	EA	For information	SI1221 amends the Producer Obligations (Packaging Waste) Regulations 2007 (SI 2007/871) by setting new packaging waste recycling	Under threshold, review annually	Under threshold, review annually	Information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 41 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				targets for paper, steel, aluminium and wood and overall new packaging waste recovery and recycling targets from 2018 to 2020.			
The Producer Responsibility Obligations (Packaging Waste) (Amendment) (England) Regulations 2020	2020/1336	EA	For information	Amends existing regulations by varying packaging waste targets for all materials as well as the targets set for specific materials.	Under threshold, review annually	Under threshold, review annually	Information only
The Producer Responsibility Obligations (Packaging Waste) (Amendment) (England and Wales) Regulations 2022	2022/1222	EA	For information	1222 amends overall and material-specific recycling targets for packaging producers for the year 2023, as the Regulations currently cover up to and including the year 2022	Under threshold, review annually	Under threshold, review annually	Information only
The Producer Responsibility Obligations (Packaging Waste) (Amendment) (England and Wales) Regulations 2023	2023/1244	EA	For information	1244 amends overall and material-specific recycling targets for packaging producers for the year 2024, as the current Producer Responsibility Regulations cover the year 2023 only.	Under threshold, review annually	Under threshold, review annually	Information only

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 42 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Landfill Tax Regulations 1996	1996/1527	HM Customs and Excise	For information	Empower HM Customs and Excise to levy against the disposal of waste to a landfill.	J Mould (Reading) will follow the waste hierarchy wherever possible and only use landfill as a disposal method once all other methods have been exhausted.	Minimal wastes are sent for disposal to landfill, Wastes will only be sent to landfill when all other options for re-use and recycling have been exhausted.	Yes
The Landfill Tax (Amendment) Regulations 2015	2015/744	HM Customs and Excise	For information	Following devolution of landfill tax to Scotland provided for by sections 30 and 31 of the Scotland Act 2012, which take effect on 1 April 2015, this instrument will apply to England, Northern Ireland and Wales.	J Mould (Reading) will follow the waste hierarchy wherever possible and only use landfill as a disposal method once all other methods have been exhausted.	Minimal wastes are sent for disposal to landfill, Wastes will only be sent to landfill when all other options for re-use and recycling have been exhausted.	Yes
The Landfill Tax (Amendment) (No. 2) Regulations 2015	2015/846	HM Customs and Excise	For information	SI846 - These Regulations, which came into force on 1 April 2015, made provisions for information to be provided to HMRC	J Mould (Reading) will follow the waste hierarchy wherever possible and only use landfill as a	Minimal wastes are sent for disposal to landfill, Wastes will only be sent	Yes
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 43 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				about waste fines that are to be disposed of by means of landfill to support decisions about liability to landfill tax of waste fines. These are the smaller fractions of waste produced by any waste treatment process that includes an element of mechanical treatment.	disposal method once all other methods have been exhausted.	to landfill when all other options for re-use and recycling have been exhausted.	
The Landfill Tax (Amendment) (No. 3) Regulations 2015	2015/1453			SI1453 - These Regulations, which came into force on 2 July 2015, amend the Landfill Tax Regulations 1996 (S.I. 1996/1527) to update references to other secondary legislation. They reflect the fact that the Landfill Tax (Qualifying Fines) Order 2015 (S.I. 2015/845) has lapsed and was replaced by the Landfill Tax (Qualifying Fines) (No.2) Order 2015 (S.I. 2015/1385).	J Mould (Reading) will follow the waste hierarchy wherever possible and only use landfill as a disposal method once all other methods have been exhausted.	Minimal wastes are sent for disposal to landfill, Wastes will only be sent to landfill when all other options for re-use and recycling have been exhausted.	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 44 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Landfill Tax (Amendment) Regulations 2016	2016/376			SI376 changes the maximum credit that landfill site operators may claim against their annual landfill tax liability when making contributions in respect of the Landfill Communities Fund ('LCF'); simplify record keeping requirements i.e. introduces a 6 year limit on the requirement for environment bodies to retain certain records; remove the provisions that allow landfill operators to stipulate that funds must be invested for the purpose of generating interest; and remove the provisions permitting administration services to be provided by one environmental body to another.	J Mould (Reading) will follow the waste hierarchy wherever possible and only use landfill as a disposal method once all other methods have been exhausted.	Minimal wastes are sent for disposal to landfill, Wastes will only be sent to landfill when all other options for re-use and recycling have been exhausted.	Yes
The Landfill Tax (Amendment) Regulations 2017	2017/332			SI332 amends the Landfill Tax Regulations 1996 to	J Mould (Reading) will follow the waste	Minimal wastes are sent for	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 45 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				change the maximum credit that landfill site operators may claim against their annual landfill tax liability when making contributions in respect of the landfill Communities Fund (LCF).	hierarchy wherever possible and only use landfill as a disposal method once all other methods have been exhausted.	disposal to landfill, Wastes will only be sent to landfill when all other options for re-use and recycling have been exhausted.	
The Landfill Tax (Miscellaneous Provisions) Regulation 2018	2018/396	HM Customs and Exercise	Landfill no longer accepting waste	These Regulations make changes to the provisions concerning the notification of the commencement of taxable activities at unauthorised sites, concerning the registration of such activities, record keeping, and the weighing of material disposed at them. They also make definitional and other minor consequential changes, including provision to ensure that no credit to Landfill Tax is available where material disposed of at an authorised	J Mould (Reading) will follow the waste hierarchy wherever possible and only use landfill as a disposal method once all other methods have been exhausted.	Minimal wastes are sent for disposal to landfill, Wastes will only be sent to landfill when all other options for re-use and recycling have been exhausted.	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 46 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				landfill site in England or Northern Ireland is required to be removed, unless that removal is to another authorised site in any part of the United Kingdom.			
Environmental Protection Act 1990, Part III (Amended by the Noise and Statutory Nuisance Act 1993 & the Environment Act 1995)	C43	EA and Local Authorities	1, 4, 9, 10, 15	Controls statutory nuisance and gives local authorities and individuals powers to stop nuisances by issuing an Abatement Notice to the offender. A statutory nuisance is defined as any of the following: any premises in such a state that they are prejudicial to health or a nuisance; smoke emitted from premises that is prejudicial to health or a nuisance; any dust, steam, smells etc. from industrial, trade or business premises that is prejudicial to health or a nuisance; any accumulation or deposit which is prejudicial to health or a nuisance; noise	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V005.	Facility is not inherently dusty or odorous. Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 47 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				emitted from premises, or from a vehicle, machinery or equipment in a street that is prejudicial to health or a nuisance; or any other matter declared to be a nuisance. It is an offence not to comply with an Abatement Notice.			
Noise and Statutory Nuisance Act 1993	C40	EA and Local Authorities	1, 4, 9, 10, 15	Statutory nuisance – noise, fumes, smoke, vibration, gas, dust, steam, smell. Act to make provision for noise in a street to be a statutory nuisance; to make provision with respect to audible intruder alarms; to make provision for expenses incurred by local authorities in abating, or preventing the recurrence of, a statutory nuisance to be a charge on the premises to which they relate; and for connected purposes	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V005.	Review annually.	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 48 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Environmental Protection Act 1990 – Part 1	C43	EA and Local Authorities	1, 4, 9, 15	Part I of the 1990 Act contains the Integrated Pollution Control (IPC) regime and Local Air Pollution Control (LAPC) regime. IPC is concerned with preventing or minimising pollution of the environment due to the release of substances into the air, water or land. LAPC is concerned with preventing or minimising air pollution. Environmental permitting as set out in these regulations has now been replaced with that contained within the 'Environmental Permitting (England and Wales) Regulations 2010'.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05.	For information	For information
The Clean Air (Miscellaneous Provisions) (England) Regulations 2014	2014/3318	Local Authorities	1, 4, 9, 15	The consolidation forms part of the Government's Better Regulation Agenda and review of the Clean Air Act 1993 and aims to improve the accessibility and	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05.	Information only	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 49 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				clarity of these Regulations. There will be no increase in burdens on local authorities and industries as they will not be required to do anything different under the Regulations. These Regulations revoke and replace: - the Dark Smoke (Permitted Periods) (Vessels) Regulations 1958 (SI 1958/878); - the Clean Air (Arrestment Plant) (Exemption) Regulations 1969 (SI 1969/1262); - the Clean Air (Height of Chimneys) (Exemption) Regulations 1969 (SI 1969/411); - the Control of Atmospheric Pollution (Research and			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 50 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Publicity) Regulations 1977 (SI 1977/19); - the Control of Atmospheric Pollution (Appeals) Regulations 1977 (SI 1977/17); and - the Control of Atmospheric Pollution (Exempted Premises) Regulations 1977 (SI 1977/18).			
The Clean Air Zones Central Services (Fees) (England) Regulations 2020	2020/1444	Local Authorities.	For information	For information as may apply to the transport of waste through designated Clean Air Zones			
The Air Quality Standard Regulations 2010	2010/1001	Local Authorities	1, 4, 9, 15	The Air Quality Standards Regulations 2007 are revoked. Management of ambient air quality and compliance with air quality limit values, target values and objectives. EPR Permit limits are driven by	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V005.	Audit by EA	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 51 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				compliance with the relevant AQS in addition to application of BAT. Local authority will assign 'Air Quality Management Zones' where limits are exceeded.			
The Air Quality Standards (Amendment) Regulations 2016	2016/1184	Local Authorities	1, 4, 9, 15	SI184 amends the 2010 Regulations to make changes to current technical standards which regulate how air quality is monitored making the methods and data collected more accurate and reliable and bringing these in line with international standards.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05.	Audit by EA	Yes
The Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019	2019/74	Local Authorities	1, 4, 9, 15	SI74 amends domestic legislation that implements EU air quality legislation to ensure it continues to be operable after the withdrawal of the UK from the EU.	Meet all conditions in Environmental Permit ref: EPR/JB3132AR/V0 05.	Audit by EA	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 52 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Fluorinated Greenhouse Gas Regulations 2008.	2008/41	Secretary of State	For Information	To reduce the emission of HFC's (F-Gases) to into the environment. Creates offences and penalties for not complying with recovery of f-gases legislation, labelling, qualifications (>3kg of fluorinated greenhouse gases) and certificates required to work with products or equipment containing them. Carry out leak detection of F-gas in air conditioning units. Install leakage detection systems, where applications contain 300kg or more off-gas Safe disposal of any F-Gases at the end of the life cycle of the equipment. Ensure training certificates of contractors and in-	For Information	Not applicable, maintain on register for awareness.	Information only.

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 53 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				house staff are available.			
Fluorinated Greenhouse Gas Regulations 2009 (revoked).	2009/261	Secretary of State	For Information	SI261 focused on controlling emissions through better leak repairs, F-gas recovery and technician training.	For Information	Not applicable, maintain on register for awareness.	Information only.
The Fluorinated Greenhouse Gases Regulations 2015	2015/310	Secretary of State	For Information	SI 310 was brought into force as although the earlier Regulations stabilized emissions, it has not led to a significant reduction. The new Regulations aim to lead to an 80% cut in emissions across the EU by 2035. It will achieve that by: phasing down the amount of F-gases that can be placed on the market through gradually reducing quotas for F-gas producers and importers; bans on certain F-gases in some applications; and strengthening of obligations on	For Information	Not applicable, maintain on register for awareness.	Information only.

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 54 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				leak checks, repairs, recovery and training.			
The Fluorinated Greenhouse Gases (Amendment) Regulations 2018	2018/98	Secretary of State	For Information	SI98 amends the Fluorinated Greenhouse Gases Regulations 2015 (SI 2015/310). They enforce the provisions of the EU Fluorinated Greenhouse Gases Regulation 517/2014 which aims to reduce F-gas emissions and places a duty on EU Member states to “lay down the rules on penalties applicable to infringements of this regulation and take all measures necessary to ensure that they are implemented”. They also make amendments to update names and definitions.	For Information	Not applicable, maintain on register for awareness.	Information only.
The Ozone-Depleting Substances and	2019/583	Secretary of State	For Information	583 address deficiencies in retained EU law	For Information	Not applicable, maintain on	Information only.

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 55 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019				relating to restrictions on the use of ozone depleting substances and fluorinated greenhouse gases to ensure the legislation continues to operate effectively at the point at which the United Kingdom (UK) leaves the European Union (EU), if there is no withdrawal agreement.		register for awareness.	
The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2020	2020/1616	Secretary of State	For Information	1616 implements the Protocol on Ireland / Northern Ireland ("the Protocol") for restricting the use of ozone depleting substances ("ODS") and fluorinated greenhouse gases ("F gases"), as required for implementation period completion day. This will be done by making changes to the previous EU Exit SI (The Ozone-Depleting Substances and	For Information	Not applicable, maintain on register for awareness.	Information only.
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 56 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/583), so that the UK can properly implement relevant EU law in Northern Ireland only. It also amends dates to prevent errors of law caused by dates currently falling before the end of the implementation period.			
The Fluorinated Greenhouse Gases (Amendment) (EU Exit) Regulations 2021	2021/543	Secretary of State	For Information	543 corrects deficiencies in two European Union Implementing Regulations relating to restrictions on the use of fluorinated greenhouse gases ("Fgases"). These corrections are necessary to ensure that the legislation continues to operate effectively following the United Kingdom's exit from the EU and now that the Transition Period has ended.	For Information	Not applicable, maintain on register for awareness.	Information only.

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 57 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Fluorinated Greenhouse Gases (Amendment) Regulations 2023	2023/1161	Secretary of State	For Information	1616 corrects a technical error in Article 16(3) of Regulation (EU) No 517/2014 of the European Parliament and of the Council on fluorinated greenhouse gases (which is retained direct EU legislation), as amended. The correction will ensure annual quotas (which limit the quantity of hydrofluorocarbons (HFCs) which can be placed on the market in Great Britain each year by producers and importers are calculated as intended.	For Information	Not applicable, maintain on register for awareness.	Information only.
EC Regulation 1005/2009 on Substances that Deplete the Ozone Layer (recast)	1005/2009	DEFRA Implemented by SI 1543 below	For Information	This Regulation came into force in 2000 and it has already banned the use of ozone depleting HCFC refrigerants such as R22 in new systems. The Regulation will ban the use of R22 as a “top-up” fluid for	Remove all refrigerant systems containing R22 by 2015.	Not applicable, maintain on register for awareness.	For information
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 58 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				maintenance between 2010 (for virgin fluid) and 2015 (for recycled fluid).			
EU Regulation 744/2010 on Substances that Deplete the Ozone Layer, with regard to the critical use of Halogens	744/2010	DEFRA Implemented by SI 1543 below	For Information	744/2010 amends 1005/2009 by banning the use of halons in firefighting equipment except for military and aviation uses. Allows governments to impose new requirements on handling, use, import, export, recovery, recycling, reclaiming, destruction and trading of listed substances. Sets out plan to phase out production, trade and use of HCFCs.	Remove all refrigerant systems containing R22 by 2015.	Not applicable, maintain on register for awareness.	For information
The Ozone-Depleting Substances Regulations 2015	2015/168	DEFRA	For Information	SI168 consolidates, and therefore revokes, the following sets of regulations without changing their substance, provisions or effects,	Remove all refrigerant systems containing R22 by 2015.	Not applicable, maintain on register for awareness.	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 59 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				other than to update names: • The Ozone-Depleting Substances (Qualifications) Regulations 2009 (S.I. 2009/216), • The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011 (S.I. 2011/1543).			
The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019	2019/583	DEFRA	For Information	This instrument is being made in order to address deficiencies in retained EU law relating to restrictions on the use of ozone depleting substances and fluorinated greenhouse gases to ensure the legislation continues to operate effectively at the point at which the United Kingdom (UK) leaves the European Union (EU), if there is no	For information	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 60 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				withdrawal agreement.			
The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2020	2020/1616	DEFRA	For Information	1616 implements the Protocol on Ireland / Northern Ireland ("the Protocol") for restricting the use of ozone depleting substances ("ODS") and fluorinated greenhouse gases ("F gases"), as required for implementation period completion day. This will be done by making changes to the previous EU Exit SI (The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/583), so that the UK can properly implement relevant EU law in Northern Ireland only. It also amends dates to prevent errors of law caused by dates currently falling before the end of the	For Information	For Information	For Information
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 61 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				implementation period.			
Road Traffic Act 1988	C52	Secretary of State for Transport	For Information	Vehicles must be properly maintained so that they do not discharge noxious fumes or particulates into the atmosphere and must meet statutory emissions standards. It is an offence to operate a vehicle that emits avoidable smoke or other visible vapour. It is an offence to use a vehicle that emits such substances as oil, which is likely to cause damage to any property or injury or danger to other road users. It is also an offence to cause unnecessary emissions by leaving a vehicle's engine running unnecessarily whilst stationary (Section 42).	Vehicles are serviced and maintained regularly and undergo a MOT on a yearly basis. When vehicles are stationary for extended periods the engine is switched off.	Annual MOT Spot checks by DVLA Servicing in line with manufacturers recommendations	Yes
Road Traffic (Vehicle Emissions) (Fixed	2002/1808	Secretary of State for Transport	For Information	The regulations empower authorised officers to check emissions from road	Vehicles are serviced and maintained regularly and	Annual MOT Spot checks by DVLA	Requires review

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 62 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Penalty) Regulations 2002				vehicles, issuing fixed penalty notices to drivers of vehicles failing the test. They also enable fixed penalty notices to be issued to drivers who leave their vehicle running unnecessarily. Ensure all J Mould (Reading) Ltds site vehicles are regularly serviced and they meet any relevant emission standards.	undergo a MOT on a yearly basis. When vehicles are stationary for extended periods the engine is switched off.	Servicing in line with manufacturers recommendations	
The Groundwater (England and Wales) Regulations 2009 (revoked)	2009/2902	EA	2, 3, 5, 14, 15, 16	The Groundwater Regulations control the disposal of List I and List II substances to groundwater List II substances are less harmful, but must be controlled to prevent pollution of groundwater. They include: many metals, such as zinc, lead, copper, many biocides, phosphorus, fluorides, ammonia and nitrates anything that will	Do not release any List I or II substances to groundwater. Ensure liquids are stored appropriately.	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 63 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				make groundwater unfit to drink. Environmental permitting as set out in these regulations has now been replaced with that contained within the 'Environmental Permitting (England and Wales) Regulations 2010'.			
<u>EU Water Framework Directive</u>	2000/60/EC	EA	2, 3, 5, 14, 15, 16	Provides a framework for improved water protection through the implementation of river basin management plans. .	For information. Minimise fugitive emissions to water	For information	For information
<u>The Water Environment (Water Framework Directive) (England and Wales) (Amendment) Regulations 2015</u>	2015/1623	EA	2, 3, 5, 14, 15, 16	SI1623 amends certain provisions of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 to transpose aspects of Directive 2013/39/EU ("the Priority Substances	For information. Minimise fugitive emissions to water	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 64 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Directive”). Three Pharmaceuticals have been removed from the priority substance directive, along with Implementation of the EQS Directive, as amended by the Priority Substances Directive.			
The Water Environment (Water Framework Directive) (England and Wales) (Amendment) Regulations 2016	2016/138	EA	2, 3, 5, 14, 15, 16	SI138 - amends the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 (“the 2003 Regulations”) to provide specific powers for the designation of transitional and coastal waters where shellfish are harvested. These amendments are made following the repeal of the Shellfish Waters Directive (79/923/EEC) by the Water Framework Directive (2000/60/EC). These	For information. Minimise fugitive emissions to water	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 65 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Regulations also revoke the Surface Waters (Shellfish) (Classification) Regulations 1997, which implemented the Shellfish Waters Directive			
The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017	2017/407	EA	2, 3, 5, 14, 15, 16	SI407 – consolidates the previous amendments to the original 2003 regulations and makes some aspects of the regulations more detailed and transparent e.g. make clearer the key objectives for water bodies, the deadlines by which they must be achieved and the exemptions which can be relied on. An additional provision in Regulation 3 explains how regulators are to ensure WFD compliance when making certain regulatory decisions.	For information. Minimise fugitive emissions to water	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 66 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Water Act 2003	2003 C37	EA	For Information	The Act received Royal Assent on 20 November 2003. The Act amends the Water Resources Act 1991 to improve long-term water resource management. It sets out the framework for abstraction licensing, regulates impoundments, increases competition in water supply and includes measures for drought management and flood defence work in England and Wales.	Monitor, reduce and minimise water use on our premises. Meet conditions in Environmental Permit ref: EPR/JB3132AR/A0 05.	Review annually	Yes
Water Act 2014	C21	EA	For Information	Significant re-draft, full details of explanation available on EA website here . Main aims are: The purposes of the act are to: reform the water industry to make it	Monitor, reduce and minimise water use on our premises. Meet conditions in Environmental Permit ref: EPR/JB3132AR/A0 05.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 67 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				more innovative and responsive to customers and to increase the resilience of water supplies to natural hazards such as drought and floods to bring forward measures to address the availability and affordability of insurance for those households at high flood risk and ensure a smooth transition to the free market over the longer term.			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 68 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Water Resources Act 1991	C57	EA	2, 3, 5, 14, 15, 16	Set offences to cause or knowingly permit poisonous, noxious or polluting matter or any solid matter to enter controlled waters. Discharge consents were obtained from Environment Agency. Environmental Permitting Regulations (and prior to that IPC/IPPC for some industrial processes) now streamlines permitting process for all licenses.	Do not discharge any contaminated materials/effluents to controlled waters. Ensure adequate maintenance of interceptors and controls to prevent accidental release to water. There are no direct discharges to water.	Review annually	Yes
<u>Water Resources Act 1991 (Amendment) Regulations 2009</u>	2009/3104	EA	2, 3, 5, 14, 15, 16	S3104 amends the Water Resources Act 1991 by extending the use of Water Protection Zones and Works Notices, in particular to deal with harm to aquatic ecosystems caused by the physical characteristics of a water course such as the condition of river banks.	Do not discharge any contaminated materials/effluents to controlled waters. Ensure adequate maintenance of interceptors and controls to prevent accidental release to water. There are no direct	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 69 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
					discharges to water.		
The Control of Pollution (Oil Storage) (England) Regulations 2001	2001/2954	EA	2	Imposes general requirements for preventing pollution of controlled waters from oil storage, particularly fixed tanks or mobile bowzers. Makes contravention a criminal offence.	Regulations only apply if storage is over 200 litres and it's not covered in your environmental permit.	Review annually	Yes
The Contaminated Land (England) Regulations 2006	2006/1380	Environment Agency/Local Authority	All	Requires the Local Authority identify who is responsible for contamination of land (the appropriate persons), what needs to be done by way of remediation, and to serve notices on those persons to carry out the work. Class A appropriate	Containment, hard standing. Meet conditions in Environmental Permit ref: EPR/JB3132AR/V0 05.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 70 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				persons are those who cause or knowingly permit the pollutant to be in, on or under the land. Where no Class A persons can be found, then the owner or occupier of the land becomes liable, and are known as Class B appropriate persons. Appropriate persons are liable for all or part of the cost of remediating the land.			
The Contaminated Land (England) (Amendment) Regulations 2012	2012/263	Environment Agency/Local Authority	All	Amends SI 2006/1380 by limiting the application of regulation 11, take into account the existence of protected areas under the Water Framework Directive, take into account the updated definition of 'controlled waters'.	Containment, hard standing. Meet conditions in Environmental Permit ref: EPR/JB3132AR/V005.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 71 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
Town and Country Planning Act 1990	C8 For information	For information	For Information	Planning permission is required generally from the local planning authority (LPA) for development of land or buildings. Developments likely to have a significant environmental effect because of their “nature, size or location” to be subject to an assessment of those effects i.e. environmental impact assessment (EIA), when the information provided in the assessment must be taken into account in the consideration of planning applications	For information	For information	For information
The Climate Change Agreements (Eligible Facilities) Regulations 2012	2012/2999	Environment Agency	For Information	These Regulations revoke SI 662/2001, SI 60/2006, SI 1931/2006 and SI 2458/2009 providing a consolidated and amended version. Climate change agreements (CCAs) are voluntary agreements	Energy use Policies and Procedures required by Aspects Register Action A1.	Review annually	Yes
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 72 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				containing targets for eligible industry sectors to increase energy efficiency or reduce carbon dioxide (CO2) emissions. Operators who hold a CCA are eligible to claim a discount to the Climate Change Levy (CCL) charged on their energy bills. The new scheme starts on 1 April 2013 when participants can start claiming their CCL discount at the revised rate of 90% for electricity and 65% for other fuels.			
The Climate Change Agreements (Eligible Facilities) (Miscellaneous Amendments) Regulations 2013	2013/505	Environment Agency	For Information	505 amends the requirements under the Climate Change Agreements (Eligible Facilities) Regulations (SI 2012/2999) ("the 2012 Regulations") as to the information that must be used in order to determine whether a facility is eligible to be included in a climate	Energy use Policies and Procedures required by Aspects Register Action A1.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 73 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				change agreement (“CCA”) to accommodate facilities for which a full year of data may not be available in some circumstances.			
The Climate Change Agreements (Administration) (Miscellaneous Amendments) Regulations 2013	2013/508	Environment Agency	For information only	508 amends the provisions of the Climate Change Agreements (Administration) Regulations 2012 (SI 2012/1976) (“the 2012 Regulations”) to provide that emissions are measured in carbon dioxide equivalent, not carbon dioxide, in order to align the emissions factors used in the climate change agreements schemes with other energy efficiency schemes. It also amends provisions of the 2012 Regulations in relation to the calculation of financial penalties imposed on target	Energy use Policies and Procedures required by Aspects Register Action A1	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 74 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				units which include a greenfield facility during the first year that the target unit is covered by a climate change agreement ("CCA"), in order to accommodate greenfield facilities which would not have any data during the first year of a CCA on the amount of climate change levy that has been payable in the past on supplies of energy to the facility.			
The Climate Change Agreements (Eligible Facilities) (Amendment) Regulations 2014	2014/1318	Environment Agency	For information only	SI1318 amendment adds two new descriptions of relevant processes and activities carried out at an installation or a site for the purposes of determining whether or not the installation or site is a facility that is eligible for inclusion in a climate change agreement. Further information can be found here .	Energy use Policies and Procedures required by Aspects Register Action A1	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 75 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Climate Change Agreements (Administration) (Amendment) Regulations 2014	2014/2872	Environment Agency	For information only	SI2872 - amendment is to remove the requirement on the scheme administrator to take reasonable steps to ensure that from, at the latest, 1 December 2014, if requested by an operator ¹ , (a) as far as reasonably practicable, that operator can communicate with the administrator using the IT Register ² and (b) that operator can access its account to input any information to meet its obligations under its Climate Change Agreement (“CCA”) ((a) and (b) together referred to as “full read-write access”).	Energy use Policies and Procedures required by Aspects Register Action A1	Review annually	Yes
The Climate Change Agreements (Administration) (Amendment and Related Provision) Regulations 2016	2016/1189	Environment Agency	For information only	SI1189 amends the terms relating to the buy-out fee for future Target Periods that must be included in the agreements in the Climate Change Agreements	Energy use Policies and Procedures required by Aspects Register Action A1.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 76 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Scheme. They provide that for Target Period 3 and 4 the buy-out fee is calculated on the basis of £14 per tonne of carbon dioxide equivalent by which the target is missed. For Target Period 1 and 2, the buy-out fee calculated on the bases of £12/tCO ₂ e by which a target is missed.			
The Climate Change Agreements (Amendment of Agreements) (EU Exit) Regulations 2018	2018/1205	Environment Agency	For information only	SI1205 address legal inoperabilities that arise from the withdrawal of the UK from the EU.	Energy use Policies and Procedures required by Aspects Register Action A1.	Review annually	Yes
The Climate Change Agreements (Administration and Eligible Facilities) (Amendment) Regulations 2020	2020/958	Environment Agency	For information only	SI958 amendment enables a two-year extension to the Climate Change Agreements scheme, adding a new Target Period 5 and enabling eligibility for a reduced rate of the Climate Change	Energy use Policies and Procedures required by Aspects Register Action A1.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 77 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				Levy through to 31 March 2025.			
The Climate Change Agreements (Administration and Eligible facilities) (Amendment) Regulations 2023	2023/1226	Environment Agency	For information only	1226 makes amendments to the Climate Change Agreements (Administration) Regulations 2012 (S.I. 2012/1976) and the Climate Change Agreements (Eligible Facilities) Regulations 2012 (S.I. 2012/2999) to enable a two-year extension to the Climate Change Agreements scheme, add a new Target Period from 1 January to 31 December 2024 (Target Period 6) and enable eligibility for a reduced rate of Climate Change Levy through to 31 March 2027. This instrument also amends the terms which the administrator must include in climate change agreements “CCAs” to increase	Energy use Policies and Procedures required by Aspects Register Action A1.	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 78 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				the buy-out fee and amends S.I. 2012/1976 to increase the amount of the financial penalty that may be imposed, enable the administrator to impose a lower amount if it considers appropriate and amend or withdraw a financial penalty once issued. It will also require the administrator to publish certain information relating to penalties imposed after the instrument comes into force			
<u>Climate Change Act 2008</u> I	C27	DESNZ	For Information	Sets the target for reduction of greenhouse gas emissions (all six Kyoto greenhouse gases for the year 2050 to be at least 80% lower than the 1990 baseline); provides for a system of carbon budgeting; confers powers to establish trading schemes for the purpose of	For information only	For information only	For information only
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 79 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				limiting greenhouse gas emissions or encouraging activities that reduce such emissions or remove greenhouse gas from the atmosphere; provides for adaptation to climate change. The Act requires the Government to issue guidance on the way organisations should report their greenhouse gas emissions. Two key aims underpinning the Act: • to improve carbon management and help the transition towards a low carbon economy in the UK; • to demonstrate strong UK leadership			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 80 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				internationally			
The Climate Change Act 2008 (2050 Target Amendment) Order 2019	2019/1056	DESNZ	For Information	SI1056 amends section 1 of the Climate Change Act 2008 so that the target is for net zero greenhouse gas emissions.	For information	For information	For information
The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) Regulations 2012	2012/1386	Environment Agency	For Information	Impose charges by providing for the allocation and issue of allowances in return for payment in the trading scheme established by the CRC Energy Efficiency Scheme Order 2010 SI 2010/768.	For information	For information	For information
The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) Regulations 2013	2013/3101	Environment Agency	For Information	SI3013 revokes and replaces the CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) Regulations 2012 [S.I. 2012/1386].	For information	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 81 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) (Amendment) Regulations 2014	2014/495	Environment Agency	For Information	SI495 amends SI3013 to correct an error and set the price of allowances issued in relation to the first phase sale of allowances under the CRC Energy Efficiency Scheme Order 2010 at £12, which is the intended policy.	For information	For information	For information
The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) (Amendment) (No.2) Regulations 2014	2014/3262	Environment Agency	For Information	This amendment sets the price of allowances from 2015. It also provide that payments for allowances may not be made using a credit card.	For information	For information	For information
The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) (Amendment) Regulations 2017	2017/211	Environment Agency	For Information	S211 amends S2103 and sets the price of allowances purchased in forecast and compliance application periods and for special occasions. They provide for a final forecast sale in 2018 and a final	For information	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 82 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				compliance sale in 2019.			
The CRC Energy Efficiency Scheme (Amendment) (EU Exit) Regulations 2018	2018/1336	Environment Agency	For Information	The purpose of this statutory instrument is to amend the CRC Energy Efficiency Order 2013 (S.I. 2013/1119) as amended by various instruments, and as saved by the provisions of S.I. 2018/841 ("the CRC Order") to address legal inoperabilities that arise from the withdrawal of the United Kingdom from the European Union taken together with the operation of other provisions made under the European Union (Withdrawal) Act 2018.	For information	For information	For information
The Climate Change Agreements, CRC Energy Efficiency Scheme and Energy Savings Opportunity Scheme (Amendment)	2020/711	Environment Agency	For Information	The instrument amends the Energy Savings Opportunity Scheme (Amendment) (EU Exit) Regulations 2018 to retain the provision in the Energy Savings	For information	For information	For Information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 83 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
(EU Exit) Regulations 2020				Opportunity Scheme Regulations 2014 for converting the financial threshold to euros with respect to a qualification date that falls before Implementation Period (IP) completion day			
The Energy Savings Opportunity Scheme Regulations 2014	2014/1643	EA	For Information	This instrument introduces a scheme – the Energy Savings Opportunity Scheme (ESOS) - under which all large undertakings (and any small or medium undertakings which are members of the same corporate group as a large undertaking) must audit their energy use, in four-yearly cycles. ESOS requires these undertakings to calculate their total energy use, and then to audit that use (subject to some exceptions) in each cycle. The audit must be carried out	For information	For information	For Information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 84 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				or reviewed by an approved assessor, who must analyse the undertaking's energy consumption and energy efficiency, and identify reasonably practicable and cost effective ways in which they can improve their energy efficiency.			
The Energy Savings Opportunity Scheme (Amendment) Regulations 2015	2015/1731	EA	For Information	SI1731 - This instrument corrects drafting errors in Schedules 1, 2 and 4 to the Energy Savings Opportunity Scheme Regulations 2014 ("the 2014 Regulations").	For information	For information	For information
The Energy Savings Opportunity Scheme (Amendment) (EU Exit) Regulations 2018	2018/1342	EA	For Information	SI1342 amends SI1643 to address deficiencies that arise from the withdrawal of the UK from the EU.	For information	For information	For information
The Energy Savings Opportunity Scheme	2023/1182	EA	For information only	SI182 makes changes to the Energy Savings Opportunity Scheme	For information	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 85 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
(Amendment) Regulations 2023				(ESOS) to strengthen and standardise the requirements for ESOS audits, improve their quality, and require public disclosure of information relating to them. The changes are intended to increase the energy and related carbon savings of the scheme's participants.			
The Classification, Labelling and Packaging of Chemicals (Amendments to Secondary Legislation) Regulations 2015	2015/21	HSE	For Information	CLP Regulation (CHIP repeal) : The Dangerous Substances Directive and the Dangerous Preparations Directive are being replaced by the direct-acting European CLP Regulation. From 1 June 2015, both Directives will be fully withdrawn and will no longer have any legal effect. As a result, the CHIP Regulations will also be repealed. There are transitional arrangements in	For Information	Review annually and upon changes to raw materials/products	Yes
Site	Reading Quarry			Approved By:			
Date of Review:	July 2024			Page Number:	Page 86 of 98		



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				place to help suppliers make the move to the CLP system. From 1 June 2015, chemical suppliers must comply with the CLP Regulation. SI21 The CLP Regulation implements in the EU the United Nations Globally Harmonised System on the classification and labelling of chemicals and it primarily about ensuring free trade as it introduces a classification system that is recognized internationally this reduced barriers to trade that currently exist due to different systems being used worldwide.			
<u>EU regulation on classification, labeling and packaging of substances and mixtures 1272/2008</u>	1272/2008	HSE	For information	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and	HSE guidance	Review annually	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 87 of 98



J. Mould

Document Type: System Procedure
Title: Legal Register Ref: JMLEMS401

Issue Date: July 2024 – Version: 2

Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC (CHIP), and amending Regulation (EC) No 1907/2006 Requires manufacturers, importers and users to follow UN criteria for classifying, labeling and packaging hazardous substances and mixture. Amends a number of Directives and domestic regulations including: • The Management of Health and Safety at Work Regulations 1999 (SI 1999/3242) • The Health and Safety at Work etc. Act 1974			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 88 of 98



J. Mould

Document Type: System Procedure
Title: Legal Register Ref: JMLEMS401

Issue Date: July 2024 – Version: 2

Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				(Application to Environmentally • Hazardous Substances) Regulations 2002 (SI 2002/282) • The Control of Substances Hazardous to Health Regulations 2002 (SI 2002/2677) • The REACH Enforcement Regulations 2008 (SI 2008/2852) • The Control of Asbestos Regulations 2012 (SI 2012/632). Change impacts COMAH classification as detailed above and will also impact how			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 89 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				hazardous waste is classified. Comes fully into force 1/6/2015.			
<u>The Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007</u>	2007/79	Local Authorities	For Information	Makes it an offence to use heavy fuel oil or gas oil containing more than the prescribed amount of sulphur.	Ensure supplier of fuel oil adheres to regulations if fuel oil used (not used at present)	Review supplier information.	For information
<u>The Sulphur Content of Liquid Fuels (England and Wales) (Amendment) Regulations 2014</u>	2014/1975	Local Authorities	For Information	SI1975 - This instrument amends the Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007 (S.I. 2007/79) in order to transpose the land-based provisions of the sulphur content of liquid fuels Directive (1999/32/EC) as amended by the marine fuels Directive ¹ (2012/33/EU). Key changes: Changes to the definition of heavy fuel oil and gas oil. B) Member States to	Ensure supplier of fuel oil adheres to regulations if fuel oil used (not used at present)	Review supplier information.	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 90 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				ensure that heavy fuel oils are not used within their territory if their sulphur content exceeds 1 per cent by mass. c) Member States are required to take necessary measures to check by sampling that the sulphur content of fuels used complied with the Directive			
Control of Substances Hazardous to Health Regulations 2002	2002/2677	HSE	For information only	Requires assessment of health risks before exposing employees to hazardous substances and where appropriate, taking steps to prevent or control exposure	MSDS / COSHH data sheets Assessment of new substances. J Mould's Asbestos Procedure.	Annual review	Yes
<u>The Control of Substances Hazardous to Health (Amendment) Regulations 2004</u>	2004/3386	HSE	For Information	Requires assessment of health risks before exposing employees to hazardous substances and where appropriate, taking steps to prevent or control exposure	MSDS / COSHH data sheets Assessment of new substances. J Mould's Asbestos Procedure.	Annual review	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 91 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
<u>The Control of Asbestos Regulations 2012</u>	2012/632	HSE	For Information	Controls asbestos management and requires employers to assess risks and limit employees' exposure. Also requires employers to have the correct license before working with asbestos and to ensure that their employees have proper training.	Asbestos Management Procedure in place J Mould's Asbestos Procedure. Inspection regime, awareness training in place. Risk assessment.	Review annually	Yes
<u>Wildlife and Countryside Act 1981</u>	C69	For information	For Information	An Act to repeal and re-enact with amendments the Protection of Birds Acts 1954 to 1967 and the Conservation of Wild Creatures and Wild Plants Act 1975; to prohibit certain methods of killing or taking wild animals; to amend the law relating to protection of certain mammals; to restrict the introduction of certain animals and plants; to amend the Endangered Species (Import and Export) Act 1976; to amend the law relating to nature conservation,	For information	For information	For information

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 92 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				the countryside and National Parks and to make provision with respect to the Countryside Commission; to amend the law relating to public rights of way; and for connected purposes.			
Wildlife and Countryside (Amendment) Act 1991	C39	For information only	For information only	C39 Amends sections 5 a	For information	For information	For Information
The Environmental Damage (Prevention and Remediation) Regulations 2009	2009/153	EA	For Information	Directive 2004/35 has the objective of making operators of activities which cause damage financially liable for that damage (the 'polluter pays' principle). The Regulations apply to serious environmental damage to land, water and to species and habitats. They cover not only species and habitats protected by the Birds and Habitats Directives but also any other species and habitats	Ensure compliance with Permit Reference EPR/JB3132AR/V0 05 as defence.	EA and internal audit	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 93 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				protected on Sites of Special Scientific Importance (SSSIs) They impose duties on operators of economic activities to take immediate steps to prevent damage if there is an imminent threat, and to control damage which is occurring so as to limit its effects. Operators of activities listed in Schedule 2 of the regulations will be liable for damage caused by them whether or not they are at fault, whereas operators of any other activities can also be liable for species and habitat damage, but only if they are at fault (that is, if they intended to cause damage or were negligent). Once environmental damage has occurred, the Regulations introduce procedures for the			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 94 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
				establishment of appropriate remedial measures. Operators will be expected to propose remedial measures themselves, and there will then be consultation with interested parties before a remediation notice is served. The regulations contain certain defences. For example, an operator may not be liable for damage caused if he can show that he was operating in accordance with the conditions of a permit listed in Schedule 3, or if the damage was the result of an act of a third party which occurred despite appropriate safety precautions.			

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 95 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Environmental Damage (Prevention and Remediation) (Amendment) Regulations 2009	2009/3275	EA	For Information	SI3275 amendment extends to the seabed out to the limits of the continental shelf and anywhere other than the seabed out to the limits of the renewable energy zone around England. The Amendment will also correct the Regulations for acts expressly authorized by wildlife legislation in the offshore area.	Ensure compliance with Permit Reference EPR/JB3132AR/V0 05 as defence.	EA and internal audit	Yes
The Environmental Damage (Prevention and Remediation) (Amendment) Regulations 2010	2010/587	EA	For Information	SI587 amendment devolves enforcement of the EDRs in the Scottish offshore region to the Scottish Ministers.	Ensure compliance with Permit Reference EPR/JB3132AR/V0 05 as defence.	EA and internal audit	Yes
The Environmental Damage (Prevention and Remediation) (England) Regulations 2015	2015/810	EA	For Information	SI810 consolidates and contains additional provisions to transpose Article 38 of the Offshore Safety Directive (OSD) (2013/30/EU).	Ensure compliance with Permit Reference EPR/JB3132AR/V0 05 as defence.	EA and internal audit	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 96 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Environmental Damage (Prevention and Remediation) (England) (Amendment) Regulations 2015	2015/1391	EA	For Information	SI1391 - To amend the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 (S.I. 2015/810) ("the principal Regulations), which came into force on 19th July 2015, so as to extend the categories of environmental damage to include damage to marine waters beyond 12 nautical miles from the baselines in Northern Ireland. The Regulations also correct two other defects in the principal Regulations.	Ensure compliance with Permit Reference EPR/JB3132AR/V0 05 as defence.	EA and internal audit	Yes
The Environmental Damage (Prevention and Remediation) (England) (Amendment) Regulations 2017	2017/1177	EA	For Information	The instrument also amends the ED Regulations (in relation to England only) to remove an unnecessary procedural step; and to correct a flaw in the transposition of the Directive	Ensure compliance with Permit Reference EPR/JB3132AR/V0 05 as defence.	EA and internal audit	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 97 of 98



Title	SI No.	Regulatory Body / Organisation	Aspects References	Summary of requirements	Control Measures	Compliance Review	Compliant (Yes / No)
The Environmental Damage (Prevention and Remediation) (England) (Amendment) Regulations 2019	2019/1285	EA	For Information	This amendment is required to comply with the updated EU directive. This requires the EA to notify the secretary of state details of the relevant environmental damage	Ensure compliance with Permit Reference EPR/JB3132AR/V005 as defence.	EA and internal audit	Yes

Site	Reading Quarry	Approved By:	
Date of Review:	July 2024	Page Number:	Page 98 of 98



Etag Fixings UK Limited
Etag Fixings UK Limited
Unit 14E Thames Gateway Park
Chequers Lane
Dagenham RM9 6FB
United Kingdom

Invoice

#INV.01.016041

15/11/2024

Bill To

Office
Balcar Developments
07493489674
61 Bracken Park
Derry bt48 8az
United Kingdom

Ship To

Reading - RG30 2HA
Seby 07444 775109
Balcar Developments
07493 489674
Greggs (New)
Bath Road
Reading RG30 2HA
United Kingdom

TOTAL

£2,496.00

Due Date: 31/12/2024

Terms	Customer Account Code	Due Date	SO #	PO #
30 DAYS MONTH END	BAD001-UK Balcar Developments	31/12/2024	Sales Order #SO.01.010007	03.G&D.LD0147

Quantity	Item Code	Item	Tax Code	Unit Price	VAT Amt	Amount
65	ZERO INV	Mannok PIR 100 x 2400 x1200mm Mannok PIR 100 x 2400 x1200mm	VAT:S-GB	£32.00	£416.00	£2,080.00

Subtotal £2,080.00

Tax Total (%) £416.00

Total £2,496.00

Consider it done.

Account Name: Etag Fixings UK Ltd
Sort Code: 90-21-27
Account Number: 88276756
IBAN: GB40BOFI90212788276756
BIC Number: BOFIGB2BXXX
Bank Name: Bank of Ireland UK Plc, 4 - 8 High Street,
Belfast

VAT Reg. No. 125092927 | Company No. 07642143
etag.ie



INV.01.016041



CERTIFICATION
EUROPE

Part of the **Amtivo** group

CERTIFICATE OF REGISTRATION

The management system of certificate number **526574**

Mannok Insulation Ltd.

Scotchstown, Ballyconnell, Co. Cavan

has been assessed and certified as meeting the requirements of

ISO 9001:2015

Quality Management System

The manufacture of rigid polyurethane thermal insulation products for sale
in Ireland and UK markets.

Further clarifications regarding the scope of this certificate and the applicability of requirements may be obtained by
consulting the certifier.



Valid from:

Initial certification: 09 September 2005

Latest issue: 10 May 2024

Expiry date: 06 May 2026

Recertification before: 06 May 2026

Subject to annual assessments

Authorised by

Mike Tims
Chief Executive Officer

certificationeurope.com

Certificate issued by Certification Europe Ltd.

Certification is conditional on maintaining the required performance standards throughout the certified period of registration.
Certification Europe Ltd. Block 20A, Beckett Way, Park West Business Park, Dublin 12, Ireland.



PIR INSULATION - DECLARATION OF PERFORMANCE

DOP Reference: 004/20

Designation Code: PIR-EN 13165- T2-W2-L2-DS(TH)4-DS(-20)2-WL(T)2-CS(10/Y)150

1. Unique Identification code of Product type

Therm Floor / MF - Insulated Foil Faced Underfloor Board

2. Type, Batch or Serial Number or any other Element allowing identification of the Product

Under Floor Board 20-200mm

3. Intended use or uses of the product, in accordance with the applicable harmonised technical specification

PIR Thermal Insulation board for the construction Industry

4. Name and registered address of manufacturer

Mannok Insulation Ltd,
Scotchtown, Ballyconnell,
Co Cavan, Ireland

5. System or systems and verification of constancy of performance of the product as set out in

AVCP System 3

6. Covered by harmonised standard

EN 13165:2012 +A2:2016

7. Name and address of the notified bodies determining product-type on the basis of type testing

LGAI Tech centre S.A./ Applus
Campus UAB, Apto Correos 08193
Bellaterra, Spain
Notified body no. 0370

8. In case of the Declaration of Performance concerning a construction product for which a European Technical Assessment has been issued

Not applicable



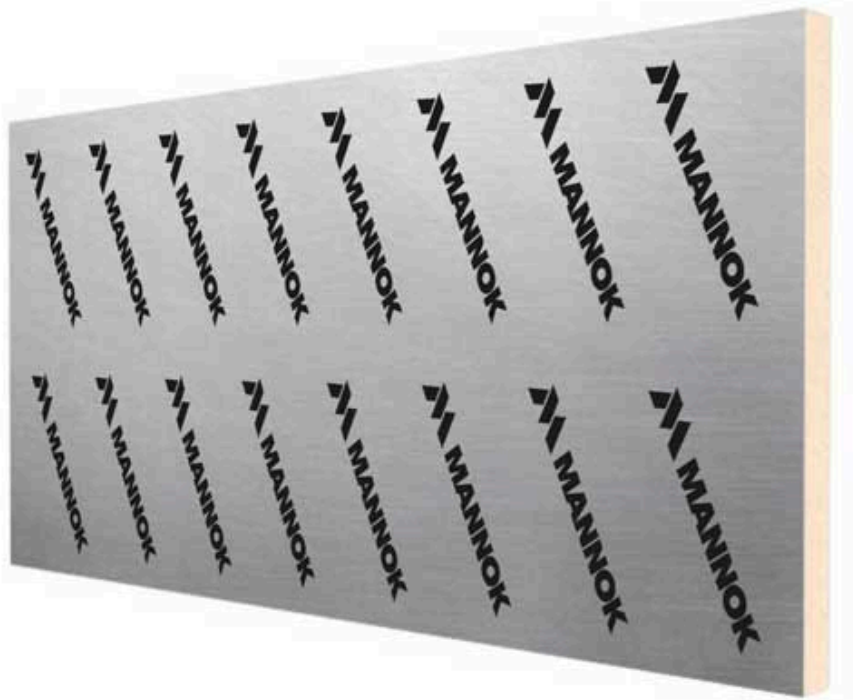
9. Declared Performances

Essential Characteristic	Performance		Harmonised Technical Specification	
Reaction to Fire	Euro Class F		All Thicknesses	EN 13501-1
Thermal Resistance	RD ((m².K)/W)		d ^N 25mm = 1.14 d ^N 30mm = 1.36 d ^N 50mm = 2.27 d ^N 55 mm = 2.5 d ^N 60mm = 2.73 d ^N 70 mm = 3.18 d ^N 80 mm = 3.64 d ^N 90 mm = 4.09 d ^N 100mm = 4.55 d ^N 110mm = 5 d ^N 120 mm = 5.45 d ^N 125 mm = 5.68 d ^N 130mm = 5.91 d ^N 140 mm = 6.36 d ^N 150mm = 6.82 d ^N 200mm = 9.09	EN 12939
Thermal Conductivity	W/mK		0.022	EN12667
Compressive Strength	kPa		CS (10\Y)150	EN826
Long Term Water Absorption			WL (T) 2	EN13950
Length & Width	mm	1200 x 2400	L2&W2 <1000 mm: ± 4mm 1000 to 2000mm: ± 5mm 2001 to 4000mm: ± 8mm >4000mm: ± 12mm	EN822
PIR Thickness	d ^N		20mm - 200mm T ₂	EN 823
Squareness	mm/m		S _b <= 5	EN824
Flatness	mm		Length ≤ 2.50mm Area ≤ 0.75m² : deviation ≤ 5mm Area > 0.75m² : deviation ≤ 10mm	EN825
Release of Dangerous substances	No harmonised test method available			
Flexural Strength	No performance declared.			
Tensile Strength Perpendicular to Faces	No performance declared.			EN1607
Durability of reaction to fire against heat, weathering, aging/ degradation	Reaction to Fire does not change over time			
Dimensional stability under specified temperature and humidity conditions	DS(TH)4 & DS(-20,-)2			EN1604

EN 13165

10. The performance of the product identified in points 1 & 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. Name and position held by the person empowered to sign the declaration on behalf of the manufacturer.

Dara O'Reilly
CEO
20th September 2024



MANNOK THERM FLOOR / MF PIR INSULATION

Mannok Therm Floor / MF insulation is a high performance, fibre free board, with a rigid thermoset insulation core and faced on both sides with a low emissivity composite foil facing.

The high compressive strength of Mannok Therm Floor / MF enables it to withstand the dead and imposed loads transmitted through the floor.

Mannok Therm Floor / MF is suitable for new build and refurbishments projects in both domestic and commercial build. With specific properties that optimise the performance of underfloor heating.

For suspended timber floors in particular, Mannok Therm Floor / MF reduces heat loss by an air infiltration method, making it the ideal solution for upgrading the thermal performance of existing floors.

**Mannok Therm Floor / MF (previously Quinn Therm QF)*

[Documentation](#)

Specification

- Low thermal conductivity, minimising the thickness required to achieve the design U-value.
- Certified under BBA certificate number 07/4444 and IAB certificate number 05/0223
- Available as a BIM object
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- Achieves an A+ rating when compared to the BRE Green Guide.

Performance & Properties

Applications

For more information call: **08000 322 122** (UK&NI) **1800 322 122** (ROI)

-

-

-

-

CPD

Video

NBS Plus

U-Value Calculator

-

-

-

-

Accredited Construction

Technical Support

BIM Objects

Product Converter

Products

> PIR Insulation

Technical

> BIM

> [Aircrete Thermal Blocks](#)

> [EPS Insulation](#)

> [Roof Tiles](#)

> [Cement](#)

> [Precast](#)

> [Quarry & Aggregate](#)

> [Road Surfacing](#)

Company

> [About](#)

> [Disclosures](#)

> [Stockists](#)

> [News](#)

> [CPD](#)

> [Careers](#)

> [Contact Us](#)

> [U-Value Calculator](#)

> [Accredited Construction Details](#)

> [Product Converter Tool](#)

> [NBS Plus](#)

> [Technical Support](#)

> [Technical Articles](#)

> [Technical Videos](#)

Contact Details

187 Ballyconnell Road,
Derrylin, Enniskillen,
Co. Fermanagh,
BT92 9GP

☎ 08000 322 122 (UK)

☎ 1800 322 122 (ROI)

✉ info@mannokbuild.com

[Home](#)

[Sitemap](#)

[Privacy Policy](#)

[Disclaimer](#)

[Anti-Slavery Statement](#)

Company Reg No. NI013573



Mannok Therm Floor / MF

Mannok Therm Floor / MF is one of the range of PIR (polyisocyanurate) foam boards we manufacture for the insulation of floors, walls and roofs.

Benefits of Mannok Therm Floor / MF (MF)

- MF has a high compressive strength to withstand the dead and imposed loads transmitted through the floor. It is suitable for domestic and most commercial applications.
- MF is suitable for new build and refurbishment projects.
- MF optimises the performance of any underfloor heating.
- MF is an ideal solution for upgrading the thermal performance of existing floors.
- MF can reduce heat loss by air infiltration through a suspended timber floor.
- MF has a low thermal conductivity, minimising the thickness required to achieve the design U-value.

Composition

Mannok Therm Floor / MF consists of a core of PIR (polyisocyanurate) foam with bonded foil facings. The gas filled cells give MF its high thermal performance and strength while its foil facings maximises performance in individual applications.

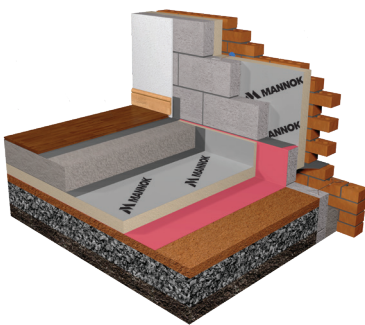
Thermal Performance

Mannok Therm Floor / MF has a thermal conductivity of 0.022W/mK, making it one of the most effective rigid board insulations available.

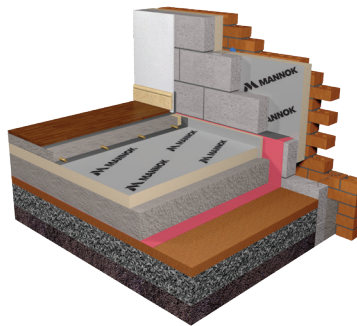
Environmental

Mannok PIR Insulation has an ozone depletion potential (ODP) of zero. It has a low Global Warming Potential (GWP), certified to ISO 14001 - Environmental Management Systems. .

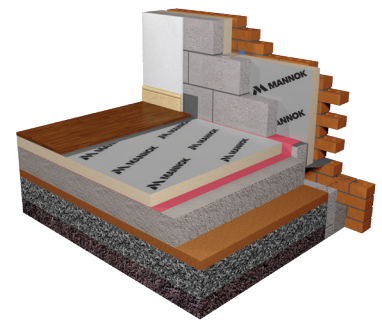
Applications



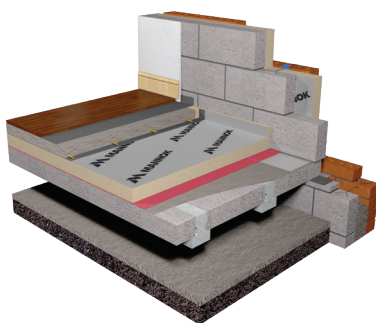
*Solid ground floor:
MF below groundbearing slab*



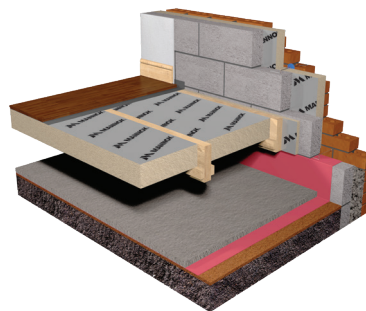
*Solid ground floor:
MF above groundbearing slab*



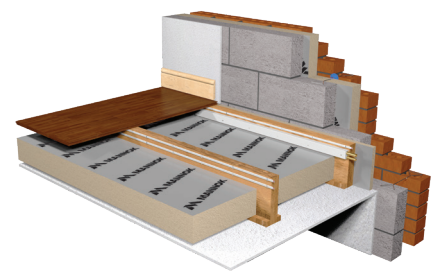
*Solid ground floor:
MF under timber floating floor*



Suspended beam and block floor



Suspended timber ground floor



Suspended timber floor other than ground floor

CE Marking



Construction Products Regulation (CPR) requires mandatory CE marking for all thermal insulation products. Mannok Therm Floor is CE marked to harmonised standard EN 13165. The Declaration of Performance, 004/20†, is available on our website.
(see bottom of page for link)

Delivery & Storage

Mannok PIR Insulation boards are shrinkwrapped in clear polyethylene for delivery to site. Each pack is labelled with the product description, product characteristics, manufacturer's name and brand name, quantity per pack, and any identification marks.

Biological / Chemical

Mannok PIR Insulation does not rot and does not support mould or fungus.
Mannok PIR Insulation is chemically inert, and poses no threat to anyone using it.

Technical Support

All as per IsoFrame

Mannok provides a comprehensive technical support service for designers and contractors.

Mannok can provide:

- copies of Agrément and test certificates
- U-value calculations
- interstitial risk calculations
- design advice
- guidance on the most effective ways to meet current Building Regulations and Building Standards.

Contact Technical Support:

- Call: +44 (0) 28 6774 8866
- Email: technical@mannokbuild.com

Physical & Performance Characteristics

Surface	Composite foil facings
Edge:	Butt
Thicknesses:	20mm - 200mm
Length x width:	1200mm x 2400mm
Thermal conductivity	0.022W/mK
Core water vapour resistivity	≈300MNs/gm
Compressive strength:	>150kPa

Fire Performance

Thickness	BS 476-7	BS EN 13501-1
20-200 mm	Class 1	Euroclass F

Dimensional stability / Durability

When tested to EN 1604 Mannok PIR Insulation achieves level DS(TH)4 to EN 13165.
Mannok Therm Floor tested to BS EN 1606-1 Compressive Creep (extrapolated 25 years).
Mannok PIR Insulation will perform for the service life of the building.

Design and Installation

For design and installation information plus required thicknesses of Mannok Therm Floor / MF to achieve specific U-values in all flooring applications, consult our Product & Installation Guide, available via our website.

For further information:

Mannok, Derrylin, Co. Fermanagh, Northern Ireland BT92 9GP

t: +44 (0) 28 6774 8866 | www.mannokbuild.com | info@mannokbuild.com



Every effort has been taken in the preparation of this data sheet to ensure the accuracy of representations contained herein. Recommendations as to the use of materials, construction details and methods of installation are given in good faith and relate to typical situations. However, every site has different characteristics and reliance should not be placed upon the foregoing recommendations. Advice can be given as to specific applications of the products, upon request to Mannok.



CERTIFICATION
EUROPE

Part of the **Amtivo** group

CERTIFICATE OF REGISTRATION

The management system of certificate number **526575**

Mannok Insulation Ltd.

Scotchstown, Ballyconnell, Co. Cavan

has been assessed and certified as meeting the requirements of

ISO 14001:2015

Environmental Management System

The manufacture of rigid polyurethane thermal insulation products for sale
in Ireland and UK markets.

Further clarifications regarding the scope of this certificate and the applicability of requirements may be obtained by
consulting the certifier.



Valid from:

Initial certification: 23 May 2008

Latest issue: 10 May 2024

Expiry date: 06 May 2026

Recertification before: 06 May 2026

Subject to annual assessments

Authorised by

Mike Tims
Chief Executive Officer

certificationeurope.com

Certificate issued by Certification Europe Ltd.

Certification is conditional on maintaining the required performance standards throughout the certified period of registration.
Certification Europe Ltd. Block 20A, Beckett Way, Park West Business Park, Dublin 12, Ireland.