

SCAFFOLDING, SHORING AND FORMWORK ULMA

Product Family

Scaffolding, formwork, and shoring

Scaffolding:
BRIO, DORPA

Formwork for walls and columns:
ORMA, LGW, BATEK, LGR, CLR

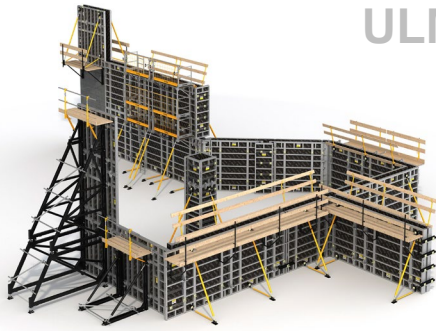
Formwork for slabs:
CC-4, ENKOFLEX, RAPID, RECUB, ONADEK,
VR TABLE

Shoring:
T-500, T-60, Post Shore EP / SP-B / ALUPROP

Formwork for bridges and tunnels:
ENKOFORM HMK, FORMWORK MK, CVS,
CARRIAGES MK

Climbing systems and safety:
ATR, RKS, KSP, BMK, HWS, SARE UP, MBP

SCAFFOLDING, SHORING AND FORMWORK



ULMA

Product family representative

- Scaffolding: BRIO, DORPA
- Shoring and Formwork: ORMA, LGW, BATEK, LGR, CLR, CC-4, ENKOFLEX, RAPID, RECUB, ONADEK, VR TABLE, T-500, T-60, POST SHORE EP / SP-B / ALUPROP, ENKOFORM HMK, FORMWORK MK, CARRIAGES MK, CVS, ATR, RKS, KSP, BMK
- Safety Systems: HWS, SARE UP, PLAT. PILLARS, MBP

Description

- Multidirectional and frame scaffolds
- Formwork for concrete structures (walls, columns, slabs, climbing formwork, tunnels, and bridges).
- Shoring and props for floor slabs, bridge decks, capitals, tunnel vaults, etc.

Contact information

Garibai,9 • 20560 OÑATI (Spain)
 Phone: +34 943 034800
 www.ulmaconstruction.com



Issue date: January 2024

Summary table: Environmental parameters in which the product(s) have a specific contribution.
 Detailed in the files of the respective LEED and BREEAM environmental certifications.

Supporting documentation		Certifications: EPD, CSR, REACH			Auto-declarations			Potential	
Site. Mobility	Solar Reflectance Index SRI	Rainwater Management	Lighting	...					
Energy Atmosphere	Embedded Energy	Greenhouse gases	Energy Demand Reduction	Equipment Efficiency	Other polluting gases	Renewable energy	Energy management	...	
Materials	Accredited location	Pre-consumer recycled content	Post-consumer recycled content	Potential reuse	Certified wood	Construction waste	Chemical composition	...	
Water	Consumption < reference	Water management	...						
Indoor Environment	Low emitting VOC's	Low emitting formaldehyde	Comfort. Control	Lighting comfort	Acoustic comfort	Air quality	...		
Innovation	Innovation	...							

NOTES:

1. The information included in this document shows product compliance with environmental certification (LEED or BREEAM) criteria. The analysis is performed based on the information provided by manufacturer. To ensure credit compliance, it will be necessary, in the process of any of the certification, to verify the validity of the information and data provided by the company.
2. This document does not constitute a product certification, nor does it guarantee compliance with local regulations.
3. The conclusions of this study apply only to products included in this report, and are subject to the invariability of product technical conditions.
4. The validity of this document is subject to supporting documents expiration date, regulations variation, and environmental certification systems updates.
5. This document informs about products possible contribution to LEED or BREEAM certifications. However, the final decision on whether or not a product meets certification requirements is exclusive to certification bodies: GBCI (Green Business Certification Inc.) for LEED certification and BREEAM.

Table of contents

CREDIT SUMMARY	4
LEED v4	4
• MR Construction and Demolition Waste Management	5
INNOVATION (ID)	7
• IN Innovation	7
REQUIREMENTS SUMMARY BREEAM	8
MANAGEMENT	9
• MAN 3 Construction sites impacts	9
• MAN 3 Responsible construction practices	9
WASTE	10
• WST 1 Construction waste management	10
INNOVATION	12
• INNOVATION	12

CREDIT SUMMARY

LEED v4



MATERIALS AND RESOURCES (MR)

MR Construction and Demolition Waste Management



INNOVATION (ID)

ID Design Innovation. Exemplary performance

LEED Categories



(LT)
Location &
Transportation



(SS)
Sustainable
Sites



(WE)
Water
Efficiency



(EA)
Energy &
Atmosphere



(MR)
Material &
Resources



(IEQ) Indoor
Environmental
Quality



(ID)
Innovation



(RP)
Regional
Priority

LEED (v4) Rating Systems

EB Existing Building
NC New Construction
CI Commercial Interiors
CS Core & Shell
SNC School New Construction
SEB School Existing Building
MMR Multifamily Mid Rise

RNC Retail New Construction
REB Retail Existing Building
RCI Retail Commercial Interiors
HC Healthcare
HNC Hospitality-New Constr.
HEB Hospitality-Existing Building
HCI Hospitality-Commercial Int.

DCNC Data Center NC
DCEB Data Center EB
WNC Warehouse NC
WEB Warehouse EB
NDP Neighborhood Devel. Plan
ND Neighborhood Develop.
HM Homes

CREDIT ANALYSIS



LEED v4



CATEGORY

MATERIALS AND RESOURCES (MR)

MR Construction and Demolition Waste Management (NC, CS, SNC, RNC, HC, HNC, DCNC, WNC, CI, RCI, HCI)

Intent	To reduce construction and demolition waste disposed of in landfills and incineration facilities through waste prevention and by reusing, recovering, and recycling materials.
Compliance information	<p>ULMA products are supplied using reusable elements: containers (baskets, metal pallets, big-bag sacks) or packaging (creating packages with the product itself, strapping with wooden blocks or pallets to ensure the rigidity of the package).</p> <p>ULMA formwork can be reused on site, minimizing waste production.</p> <p>Both the products and the packaging are delivered to ULMA after the equipment rental is completed. The equipment undergoes a cleaning, repair and/or remanufacturing process at ULMA's facilities. The repair allows them to be reused in other works in 95-99% of the cases.</p> <p>If the products cannot be repaired, their materials are reused, reconvertng them into other items (of smaller dimensions, for example). Products that cannot be repaired or reconverted are recovered. ULMA's primary warehouse is certified as "Zero Waste", which certifies a recovery rate of more than 90%.</p> <p>The analyzed ULMA products therefore contribute to waste reduction.</p>
LEED Requirements	<p>Option 1. Diversion</p> <ul style="list-style-type: none"> • BD+C: Recycle 50-75 of waste generated on site, including recycling of 3-4 differentiated products. • EBOM: Recycle 70% of construction site waste. <p>Option 2. Waste Prevention Do not generate more than 12.2 kilograms of construction waste per square meter of building constructed.</p> <p>EP* BD+C, CI: Fulfill the two options contemplated in the credit. EP* EBOM: Recycle 95% of construction site waste. <i>*EP – Exemplary performance: (see Innovation in Design category).</i></p>
Example	N/A
Support Documentation	<ul style="list-style-type: none"> • Sustainability Certificate • Zero Waste Certificate
Reference Standards	<ul style="list-style-type: none"> • <i>European Commission Waste Framework Directive 2008/98/EC</i> • <i>European Commission Waste Incineration Directive 2000/76/EC</i> • <i>EN 303-1—1999/A1—2003</i> • <i>EN 303-3—1998/AC—2006</i>

- *EN 303-4—1999*
- *EN 303-5—2012*
- *EN 303-6—2000*
- *EN 303-7—2006*





CATEGORY INNOVATION (ID)



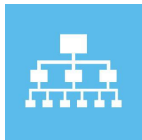
IN Innovation

(NC, CS, SNC, RNC, HC, HNC, DCNC, WNC, CI, RCI, HCI EB, SEB, REB, HEB, DCEB, WEB)

Intent	To rewards projects that achieve exceptional or innovative performance of the specific credit compliance.
Compliance Information	ULMA can contribute to meeting the exemplary performance requirements in the MR - Construction and Demolition Waste Management credit.
LEED Requirements	<p>Option 3: Exemplary Performance (Exemplary Performance – EP)</p> <p>Some LEED credits have the option of obtaining an additional point for Exemplary Performance (EP) if the requirements of said credit are exceeded, reaching the values defined by LEED as Exemplary Performance (EP).</p>
Example	N/A
Support Documents	<i>See corresponding credit</i>
Reference Standards	<i>See corresponding credit</i>

REQUIREMENTS SUMMARY

BREEAM



MANAGEMENT

- MAN 3 Construction sites impacts
- MAN 3 Responsible construction practices



WASTE

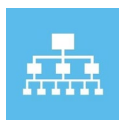









- WST 1 Construction waste management



INNOVATION

- INNOVATION

Environmental categories BREEAM ES

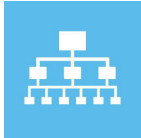
									
Management	Health and wellbeing	Energy	Transport	Water	Materials	Waste	Land use and ecology	Pollution	Innovation

BREEAM ES Certification Standards

- | | | | | | |
|-----|----------------------------|-----|-------------------|-----|------------------|
| URB | BREEAM ES Urban Planning | VIV | BREEAM ES Housing | USO | BREEAM ES In Use |
| NC | BREEAM ES New Construction | | | | |

REQUIREMENTS SHEET

BREEAM ES



CATEGORY

MANAGEMENT

- **MAN 3 Construction sites impacts**
- **MAN 3 Responsible construction practices**
(BREEAM ES NEW CONSTRUCTION 2015, BREEAM ES HOUSING 2020)

Intent	Recognize and encourage the management of construction sites to be carried out in an environmentally friendly manner in terms of resource use, energy consumption and pollution.
Compliance information	ULMA recoverable formwork are made of plywood with phenolic resin sheet, crafted from legally harvested wood, providing PEFC and FSC certificates. Therefore, they can contribute to meeting the requirement.
BREEAM Requirements	Among other aspects, MAN 3 assesses the legal harvesting of timber. To this end, it requires confirmation that all timber used in the project is legally harvested and traded. This can be demonstrated by a manufacturer's declaration or by a sustainable forest management seal such as FSC or PEFC.
Example	NA
Support Documentation	<ul style="list-style-type: none"> • PEFC Certification • FSC Certification
Reference Standards	<ul style="list-style-type: none"> • <i>UNE-EN ISO 14001:2004. Environmental management systems. Requirements with guidance for use</i>



CATEGORY WASTE

WST 1 Construction waste management (BREEAM ES NEW CONSTRUCTION 2015, BREEAM ES HOUSING 2020)

Intent To promote resource efficiency via the effective and appropriate management of construction waste.

Compliance information ULMA products are supplied using reusable elements: containers (baskets, metal pallets, big-bag sacks) or packaging (creating packages with the product itself, strapping with wooden blocks or pallets to ensure the rigidity of the package).

ULMA formwork can be reused on site, minimizing waste production.

Both the products and the packaging are delivered to ULMA after the equipment rental is completed. The equipment undergoes a cleaning, repair and/or remanufacturing process at ULMA's facilities. The repair allows them to be reused in other works in 95-99% of the cases.

If the products cannot be repaired, their materials are reused, reconverting them into other items (of smaller dimensions, for example). Products that cannot be repaired or reconverted are recovered. ULMA's main warehouse is certified as "Zero Waste", which certifies a recovery rate of more than 90%.

The ULMA products analyzed therefore contribute to waste reduction.

BREEAM ES Requirements

BREEAM ES assesses the following strategies:

Pre-Implementation Audit BREEAM ES HOUSING 2020, BREEAM NC); for existing buildings

Efficiency of construction resources:

Reduction of waste production during construction by implementing procedures for the classification, reuse, and recycling of waste. The waste generated is also monitored and tracked.

Diversion of resources from landfill:

10% Recycling or reuse of waste improvement over national rate, in order to justify the criterion, it must be documented:

- Destination of the non-hazardous waste leaving the site (i.e. address and facility)
- Level of waste diverted from landfill as a percentage of overall arising or m3 of waste per 100m2 or tons of waste per 100m2

Exemplary level criteria:

Meet all requirements of the criterion and exceed the percentage of non-hazardous construction and demolition waste diverted from landfill by 25% of the national rate.

Example

N/A

**Support
Documentation**

- *Sustainability Certificate*
- *Zero Waste Certificate*

**Reference
Standards**

N/A





CATEGORY INNOVATION



INNOVATION

(BREEAM ES NEW CONSTRUCTION 2015, BREEAM ES HOUSING 2020)

Intent	To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.
Compliance information	<p>The ULMA products analyzed can contribute to meeting the exemplary points in the requirements:</p> <ul style="list-style-type: none"> • MAT 1, Life cycle impacts • WST 1, Construction waste management / and demolition <p>NOTE: See exemplary level criteria in the corresponding requirement.</p>
BREEAM ES Requirements	<p>Up to a maximum of 10 points in innovation can be obtained for a combination of the following options:</p> <p>Exemplary level of performance in existing BREEAM issues Some BREEAM credits give the option of obtaining extra points for demonstrating exemplary performance through the achievement of the exemplary level criteria defined in those credits.</p> <p>Approved innovations One bonus point may be earned for each BREEAM ES Approved Innovation Application provided that the criteria defined in an approved innovation application form are met.</p>
Example	N/A
Support Documentation	See corresponding requirements
Reference Standards	N/A