

CASE STUDY:

The Carbon, Design and Cost Benefits of Adhesive-free Flooring Installation

FUTUREPROOFED FLOORING

Following specification by Landsec, BW: Workplace Experts have used adhesive-free installation on all floor finishes for their recent office refit for a private equity firm.

Adhesive-free IOBAC MagTabs® were used to attach Desso carpet tiles onto the existing metal raised access flooring across two floors.

Magnetic on one side and dry-tack on the other, MagTabs hold floor tiles securely in place over the life of the install.

Hard to Shift, Easy to Lift - Acting as a reversible fixing mechanism, they enable the flooring to be uplifted without contamination or damage to the floor tile or access flooring.

Independent testing has confirmed that MagTabs comply with the "Exemplary" criteria on VOC emissions for BREEAM and exceeded all points for LEED specification.

SUMMARY OF BENEFITS

CIRCULARITY

- Uplifted flooring is free from adhesive contamination, meaning it can be reused or more easily recycled through the manufacturer's take-back scheme.
- BREEAM credits awarded for material efficiency, reuse and waste reduction.
- Extra embodied carbon avoided through material reuse, rather than renewal.

ASSET PROTECTION

- Access flooring left undamaged
- Zero mess, cleaning or remediation costs needed
- Reduced install, maintenance & disposal costs

DESIGN FOR DECONSTRUCTION

- Reversible fixing enables flooring and base to be easily separated
- Easy uplift of tiles for repair and redesign
- Combine flooring types and brands in one design



PROJECT DETAILS

Client: Private equity firm, Victoria, London
Developer: Landsec
Architect: Hassell
Fit-out contractor: BW: Workplace Experts
Flooring contractor: Loughton Contracts
Size: 48,400 sq ft/4,500 sq m
Flooring: Desso AirMaster Earth carpet tiles installed with IOBAC MagTabs
Rating: BREEAM Excellent

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BENEFITS EXPLAINED

ASSET PROTECTION



TOTAL FLOOR AREA = 4,500m²
 Cost of Access Flooring @£35/m² = £157,500
 Cost of Carpet Tiles @£22/m² = £99,000
APPROXIMATE TOTAL FLOORING ASSET VALUE = £256,500

USING ADHESIVE-BASED INSTALLATION

Asset Impact

Cost of Adhesive @£0.50/m² = £2,250
 = 0.88% Total Asset Value

£256,500 WORTH OF DAMAGED ASSETS
 NEW ASSET VALUE = ZERO



Remedial Costs

Decontamination of access floor @£12/m² = £54,000
 Disposal of contaminated tiles @£0.45/m² = £20,250
TOTAL COSTS BEFORE NEXT INSTALL = £74,250

USING ADHESIVE-FREE INSTALLATION

Asset Impact

Cost of MagTabs @£1/m² = £4,500
 = 1.75% Total Asset Value

£256,500 WORTH OF UNDAMAGED ASSETS
 NEW ASSET VALUE = £256,500



Remedial Costs

Decontamination of access floor @£12/m² = £0
 Downcycle of MagTabs @£0.01/m² = £45
TOTAL COSTS BEFORE NEXT INSTALL = £45



CIRCULARITY

60 year life of building **5** year design replacement **10** Service life - carpet **25** Service life - access floor

Reusing materials avoids additional embodied carbon.

Giving carpet tiles with carbon footprint of 5.24 kg CO₂e /m²* one extra life and assuming a 50% reuse rate = (4,500 x 5.24)/2
= 11,790kg CO₂ saving

Wst 01: Waste Management

Up to 7 credits for reduction of waste e.g. for used carpet tiles

- 3 points for on-site reuse of original carpet tiles
- 2 points for off-site reuse on other projects
- 1 point for direct recycling via a manufacturer



DESIGN FOR DECONSTRUCTION

- Universal Fixing Mechanism for seamless merging of carpet, Luxury Vinyl Tile and woven vinyl tile
- Proven on projects including:

ShawContract®

BALSAN

Milliken

Forbo

DESSO
A Tarkett Company

Tarkett

BOLON

ntgrate®
premium woven vinyl

Interface®

BLOQ



[usable]
 [configurable]
 [versible]

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PROJECT IMAGES



Photo credits: BW: Workplace Experts

IOBAC MagTabs are suitable for use on metal raised access floors.

For adhesive-free flooring onto non-metal raised access flooring, concrete, wood, ceramic or vinyl sub-floors, use IOBAC Tab-It® installation.

CLICK FOR MORE INFORMATION



IOBAC MagTabs
- Product Information



IOBAC Tab-It
- Product Information



More Adhesive-free
Case Studies



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Adhesive-Free Flooring