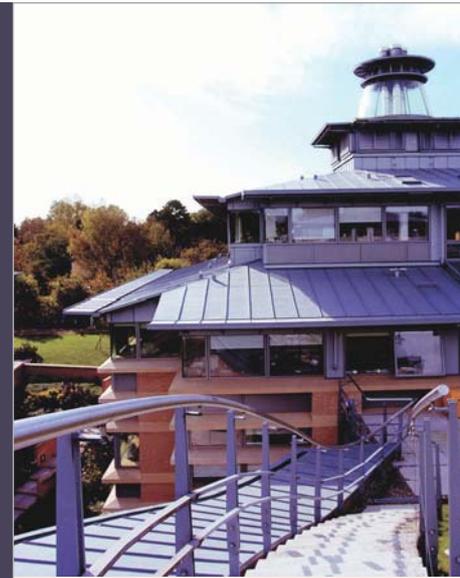




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# Introducing Soft Landings

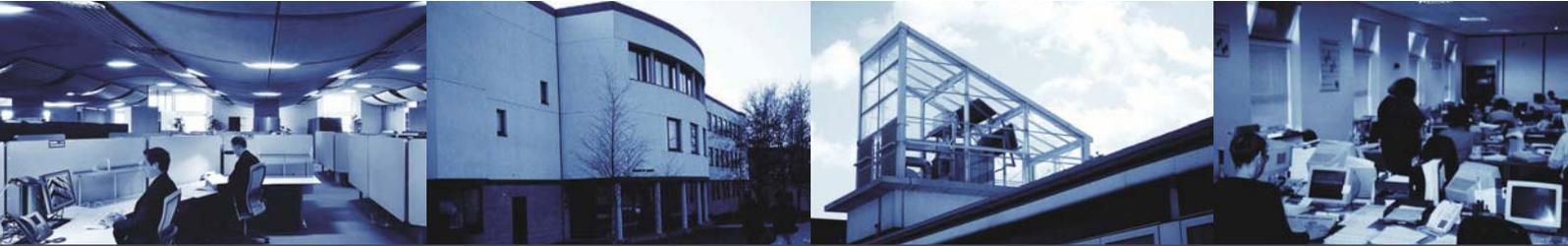
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Project initiated by

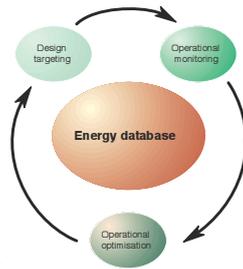


**Soft Landings** means **designers and constructors** staying involved with buildings beyond practical completion, to **assist the client** during the first months of operation and beyond, to help **fine-tune and de-bug** the systems, and ensure the occupiers understand how to **control and best use** their buildings



### Step 1: Inception and briefing

The seeds of underperformance and client disappointment are often sown during the early stages of procurement. Soft Landings addresses this by the designers and constructors spending more time on constructive dialogue with the client, and in setting expectations and performance targets on energy and end-user satisfaction. Soft Landings complements environmental assessments such as BREEAM. Budget is set aside for the pre-handover and aftercare steps. As buildings often evolve during design, the Soft Landings team can anticipate this and consider how to respond to the client's calls for adaptations.



### Step 4: Feedback

This step is essential. Without feedback, there is no learning. Soft Landings closes the loop between design expectation and reality, creating virtuous circles for all. It is also a process that brings together the three elements of the Constructing Excellence 'Three Pillars' initiative: post-occupancy evaluation (POE), true evidence-based design, and better project briefing. Soft Landings is also a vehicle for occupant satisfaction surveys, energy monitoring and reporting, and benchmarking.



**Feedback helps designers to understand users' perception of**

- Noise versus ventilation
- Ventilation versus draught
- Draught versus control over windows and blinds
- Natural light versus glare
- Glare control versus views out
- Clothing freedom versus comfort setpoint
- Air temperature versus radiation and downdraughts

# WHAT IS SOFT

Soft Landings documentation extends the duties of the building occupation. Soft Landings was created and developed

SOFT LANDINGS

FEEDBACK

VIRTUOUS CIRCLES



Members of the Soft Landings Task Group

ARUP

EDWARD CULLINAN ARCHITECTS

FULCRUMCONSULTING

Bennetts Associates Architects

ANN BODKIN  
Sustainability + Architecture

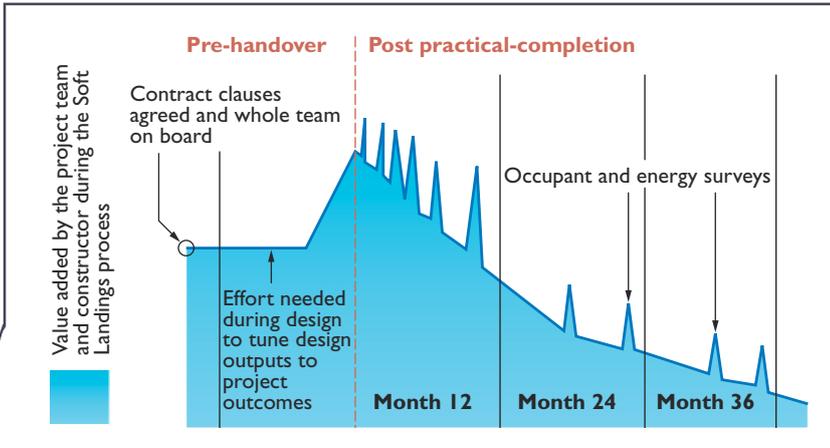
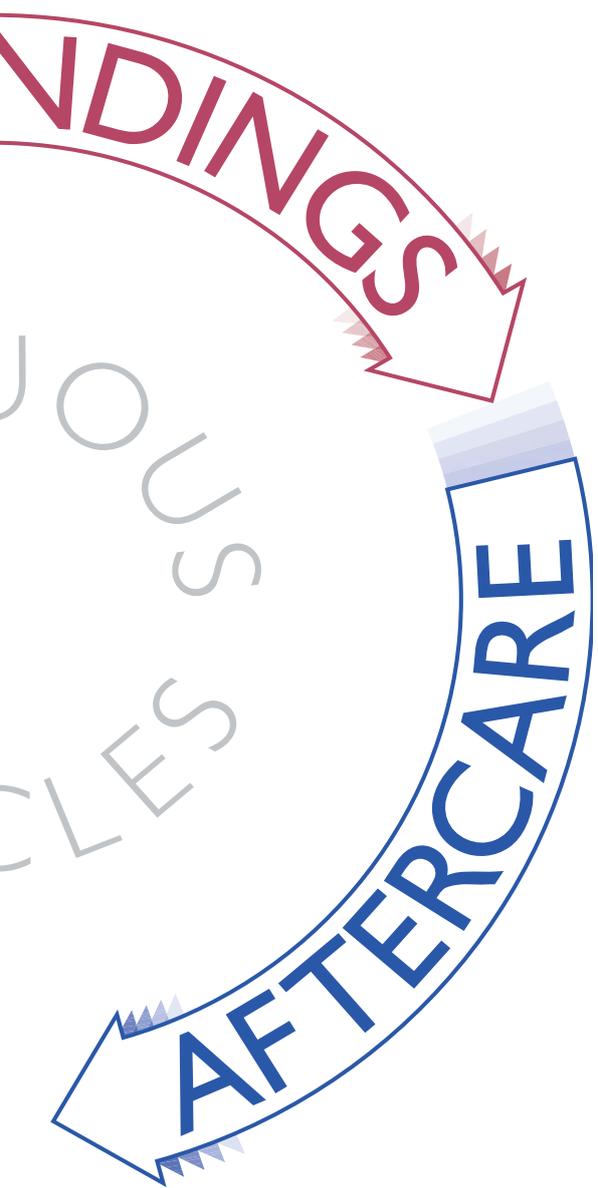
DAVIS LANGDON





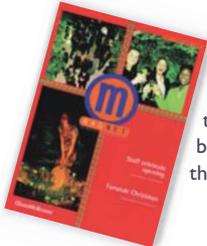
# SOFT LANDINGS?

the team during handover and the first three years of  
 led by architect Mark Way of the Darwin Consultancy



### Step 2: Pre-handover

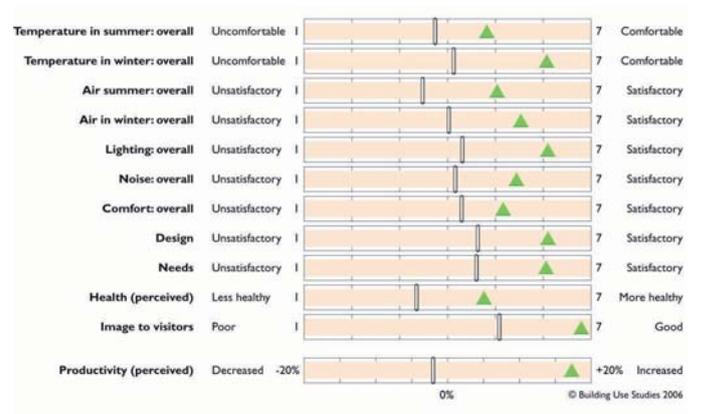
Many common post-handover problems can be traced back to inadequate preparation for handover. This means that buildings – although physically complete – are not operationally ready. The worksteps in Soft Landings enable operators and users to spend more time on understanding interfaces and systems before they occupy the building. The designers and key contractors are tuned to understand and support the end-users in the critical early period of occupation.



A moving-in event can put the right relationships in place between the building users and the designers and constructors.

### Step 3: Professional aftercare

The continuing involvement by the client, design and building team during a three-year aftercare period will help the operators get the best out of the building. Everybody involved will benefit from the lessons learned from occupant satisfaction surveys (below) and energy monitoring. The amount of time spent on aftercare will tail off as the results of the surveys help the building's facilities team deliver a sustained high level of environmental and business performance.



FeildenCleggBradleyStudios





## Why bother?

Fine-tuning and post-handover surveys are crucial for ensuring sustainability targets are realised. The setting of new targets for zero-carbon buildings by government means that greater emphasis has to be placed on obtaining more certainty in delivering buildings that achieve a closer match between client and user expectations and the predictions of the delivery team. We also need to know what works in practice and what needs to be improved

Soft Landings provides a unified vehicle for achieving tighter environmental performance and the best opportunity for producing zero-carbon buildings that actually meet their design targets

Soft Landings shifts the emphasis for good performance away from just design aspiration to the way buildings are actually managed and maintained. This dovetails with energy performance certification, building logbooks, green leases, and corporate social responsibility

Soft Landings only requires small extra funding, well within the margin of competitive bids. Many functions of the Soft Landings process are already part of the current construction process, but perhaps not carried out systematically. The three-year aftercare period, typically involving the architect and building services engineer, does involve extra costs, but these are modest in relation to the value that's added to the client's building

Soft Landings creates virtuous circles for all and offers the best hope for truly integrated and robust design

## Next steps

A **Soft Landings Task Group** has been convened to turn Soft Landings into formal documentation that clients and professional teams can adopt and adapt for their construction projects. The Soft Landings project is led by BSRIA with the Usable Buildings Trust (UBT)

A **Soft Landings Code of Practice**, with framework documentation and enabling tools, will be published in November 2008. The Task Group is seeking industry and government support and adoption

A **Soft Landings User Group** will be formed to enable early adopters to develop and test Soft Landings on real projects, exchange information and obtain support and assistance

A licensed **Scope of Service Document Set**, designed to sit alongside most existing procurement processes, will be produced for use by clients and construction teams. Training and certification schemes will follow



This document was produced by BSRIA with help from the Usable Buildings Trust and the originator of Soft Landings, Mark Way of Darwin Services Ltd  
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