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# Soft Landings

*a primer*

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Developed 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*** systems, and ensure the occupiers understand how to ***control and best use*** their buildings



### Stage 1: Inception and briefing

Soft Landings requires the designers and constructors to spend more time on constructive dialogue with the client, and in setting expectations and performance targets on energy and end-user satisfaction. Roles and responsibilities need to be assigned from the start. Intermediate evaluation workshops can be very effective in flushing out misconceptions on all sides. They ensure stakeholders are fully engaged in the process and that input from key building users is obtained and not lost along the way. The level of expertise within the client body to maintain and control their internal environment needs clarification at the start, so that design for managability can be realistically undertaken.

Well-written user guides are vital for informing occupants on how to operate their new building, especially where complex or unusual technologies have been provided. Designers should not assume that such systems will be intuitively obvious.



### Stage 2: Design development and review

Design development and technical design needs to be informed about what works and what needs more attention. This means a culture of reviewing past performance and of reality-checking designs against desired operational outcomes. Designers need to make sure options are realistic about constraints, robustness, manageability and risks. At this stage designers also need to begin the process of post-completion monitoring, training and familiarisation, and consider likely fine-tuning activities after handover. The project team should also keep reflecting on its experience, performance and outputs.



#### 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 draughts

# WHAT IS SOFT

Soft Landings documentation extends the duties of the team. Soft Landings was originally devised by architect Mark W...

# SOFT LANDINGS

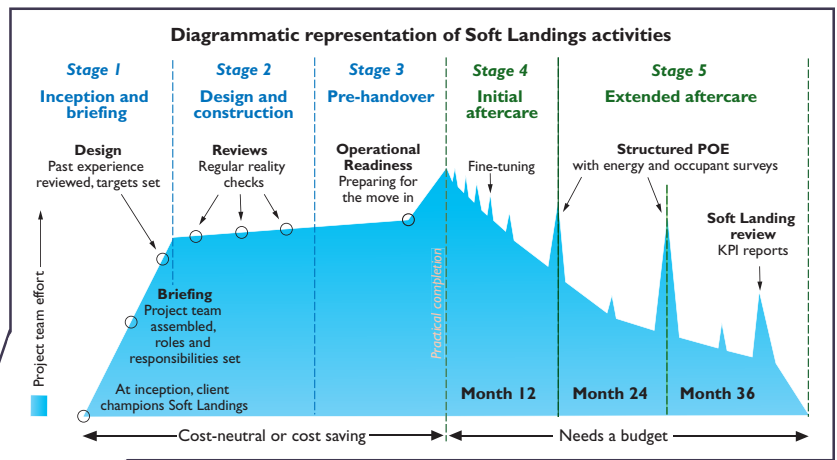
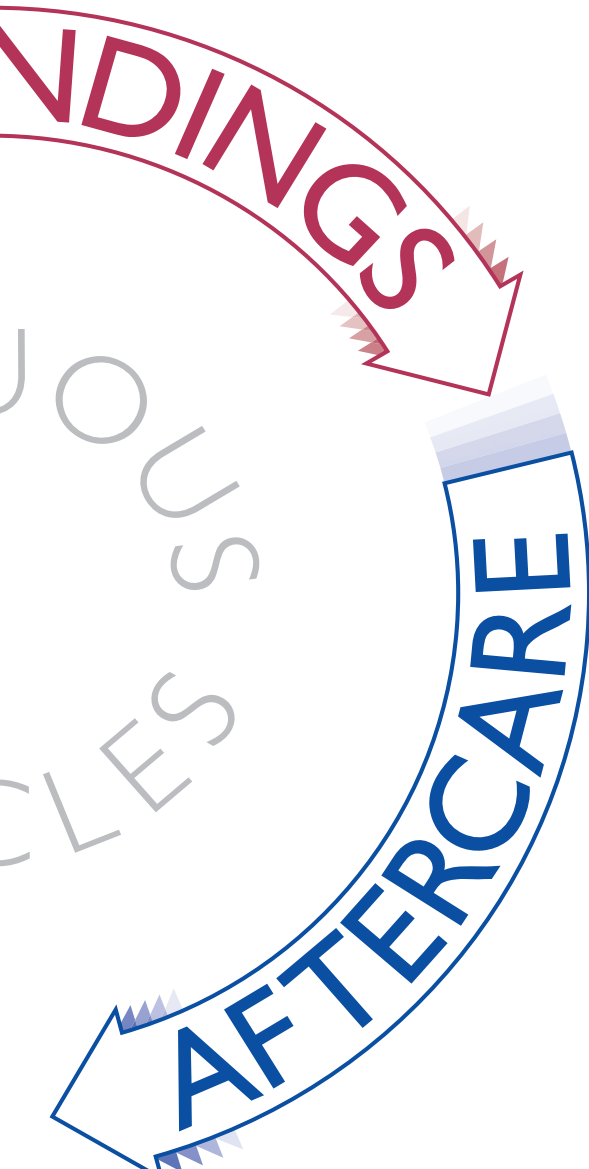
# FEEDBACK

# VIRTUAL CIRCLES



# T LANDINGS?

m during handover and the first three years of occupation.  
 ay and developed by a construction industry task group



### Stage 3: Pre-handover

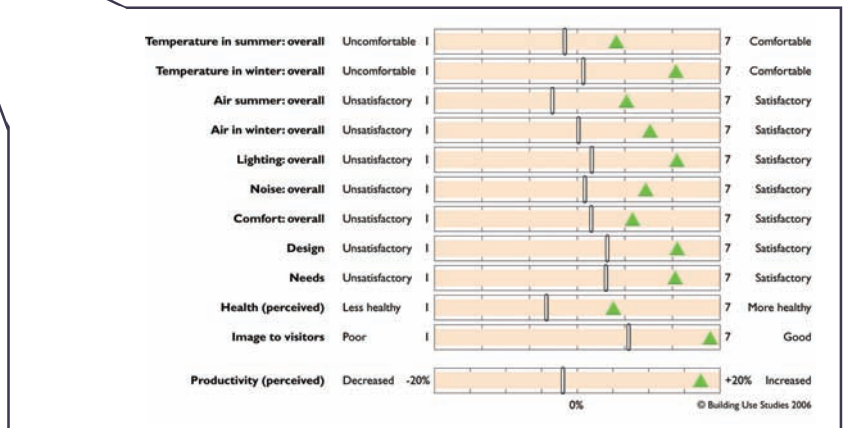
Many common post-handover problems can be traced back to inadequate preparation for handover. This means that buildings – although physically complete – are not operationally ready. The worksteps in Soft Landings enable operators and users to spend more time on understanding interfaces and systems before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

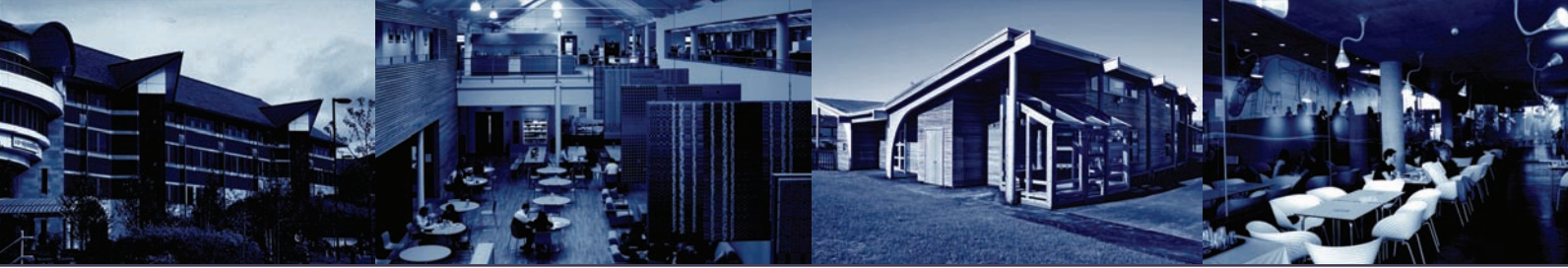


A moving-in event can put the right relationships in place between the designers and constructors and building users.

### Stages 4-5: Professional aftercare

The continuing involvement by the client, the designers and the 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. The feedback from aftercare should be used at the inception and briefing stage of the next project, thereby closing the loop between design ambition and operational reality.





# Why should you bother?

Fine-tuning and post-handover surveys are crucial for ensuring sustainability targets are realised. The international community is gradually setting targets for low and zero-carbon buildings. This means more effort is needed to ensure a closer match between client and user expectations and the predictions of the delivery team. Clients and designers 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. It is 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, green leases, and corporate social responsibility

Soft Landings only requires small extra funding for the aftercare stages, well within the margin of competitive bids and within the variations in other costs, particularly energy. The early stages may be cost-neutral or even lead to cost savings, as many functions of the Soft Landings process are already part of the current construction process, but perhaps not carried out systematically.

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



## Download the guidance

The *Soft Landings Framework* is published by BSRIA with support from the Usable Buildings Trust. BSRIA has set up a UK Soft Landings User group where clients and construction professionals can develop their knowledge experience of Soft Landings and share experience of implementing the *Framework* on live construction projects

You can download a free copy of the *Soft Landings Framework* at [www.bsria.co.uk/goto/softlandings-anz](http://www.bsria.co.uk/goto/softlandings-anz)



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