Design: the Requirement Only This Standard Has

GUIDING QUESTION *Think of the last refurbishment your property completed, and spend five minutes listing the decisions in it that changed how much energy the building uses: not the plant, the finishes, the fittings, the fixtures. Then ask whether anybody, at any point in that project, wrote down that they had thought about the energy consequence of any of them. The requirement is not that you choose the efficient option. It is that you know you are choosing.*

Property: _____ Completed by: _____ Date: _____

How to use this sheet: work through the five parts with the people who own the process. The text in the left-hand columns comes from the book; the empty columns are for what is true in your property.

1. Verification Pact: what is commonly believed, what actually holds, and your property

What is commonly believed	What actually holds	In our property
«The design requirement means choosing the efficient option.»	It means considering it. You may choose otherwise for commercial reasons and comply, if somebody thought about it and it shows.	
«This applies to new buildings.»	New, modified and renovated. In an operating hotel the renovation case is the normal one.	
«We would need a life cycle analysis.»	The guidance says explicitly that it does not require one. It requires somebody who knows the building to read the specification.	
«Refurbishment is a capital project, not an energy matter.»	It is the moment the property fixes its consumption for a decade, and the one project the energy function is usually absent from.	
«The energy review covers our significant uses.»	It must be transferred into the specification, design and procurement activities. A review nobody routes anywhere is not transferred.	
«The fittings schedule was a construction document.»	It is the record of your consumption decisions, and the standard requires design information related to energy performance to be retained.	

2. What the standard requires, and what demonstrates it

From Table 2.4.a. The third column of the book (what is method, not requirement) is left out here: write what your property actually holds as evidence.

What is required	What demonstrates it in a hotel	In our property
Energy performance considered in design	A note on four or five items saying the consequence was weighed	
Applies to new, modified and renovated	The requirement invoked at a refurbishment, not only at a build	
Significant impact over the operating lifetime	A comparison expressed per year rather than at purchase	
Operational control considered in design	Asking whether the new arrangement can be controlled and metered	
Results transferred into specification, design, procurement	The energy review reaching the person writing the specification	
Documented information on design activities retained	The fittings schedule still in the property's own files	

What is required	What demonstrates it in a hotel	In our property
Alternative and less polluting energy considered for new facilities	One line recording that it was looked at	

3. The instrument: Table 2.4.b, The design decisions that matter in a hotel

The instrument of this subchapter. Seven rows, reviewed in an hour, before the specification is issued.

Decision	Who takes it	Horizon	What to consider
Shower and tap fittings	Interior designer	Ten to fifteen years	Flow rate against the largest use in most hotels
Anything running in every room continuously	Designer or brand standard	Life of the fitting	Standby draw multiplied by the room count
Lighting specification and control	Designer and electrical engineer	Ten years	Load, hours, and whether it can be switched
Kitchen equipment	Chef and supplier	Ten to fifteen years	Consumption data before the order, and warm-up time
Envelope: glazing, insulation, shading	Architect	Decades	The only decision here that cannot be revisited
Plant replaced during the works	Engineer or contractor	Fifteen to twenty years	Efficiency, and whether it can be zoned and metered
Zoning and controllability	Designer, by omission	Life of the installation	Whether anything installed can be switched off separately

The rows above are the book's; the empty rows are for lines your property needs to add.

4. Common mistakes: self-check

Common mistake	Present here? (Yes / Partly / No)	Where we see it
Treating refurbishment as a capital project with no energy dimension.		
Reading the requirement as an obligation to choose the efficient option.		
Never routing the energy review into the specification or the designer's brief.		
Comparing options on purchase price when the requirement names the operating lifetime.		
Assessing efficiency and ignoring controllability, which the standard names alongside it.		
Leaving the schedules with the contractor when the project closes.		

5. Action plan

Step from the book / gap found	Action in our property	Owner	Deadline
Get on the distribution list for the specification before it is issued.			
Know the four or five items that carry the requirement, so the review takes an hour.			

Step from the book / gap found	Action in our property	Owner	Deadline
Write the consideration down, one line per item, including the ones you decide against.			
Express the comparison in annual consumption, not in specification units.			
Consider controllability as well as efficiency; the standard names operational control too.			
Keep the schedules in your own files, not the contractor’s.			
Say at the first meeting that no life cycle analysis is required. It is in the guidance.			
Put one paragraph in the designer’s brief at the start of the project.			
Ask the designer what they have specified elsewhere and why; it is usually a good reason.			

In brief

This is the requirement that neither of the other standards in this series contains, and it reaches the moment at which a hotel actually decides its consumption: the design of new, modified and renovated facilities and equipment. In an operating property the renovation case is the normal one, and it recurs every few years.

Source: The Helm and the Lens, Volume 4a: The Helm, subchapter 2.4. This sheet does not reproduce the text of the standard; work with your own copy of ISO 50001:2018 from an authorised source.