KERING

KERING STANDARD FOR STORES

STORE PLANNING AND CONSTRUCTION

March 2020

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INTRODUCTION

As part of the 2025 Sustainability Strategy, “Crafting Tomorrow’s Luxury”, Kering committed to reducing its overall environmental impact by 40% and its controlled greenhouse gas emission by 50% between 2015 and 2025. Kering reports publicly every year in its Reference Document its progress vis-à-vis these ambitious goals.

An important impact of Kering activities on the environment is related to renovating and operating the more than 1500 stores around the world. There is where we have the most lever to decrease direct energy use and direct waste production for instance.

This document is meant to operationalise how to achieve environmental efficiency for store planning and construction.

As shown in Exhibit 1, this document is part of a more complete set of documents, the Kering Standard for Stores, that encompasses not only Store Planning and Construction but also Real Estate (which regards features falling within the landlord’s action perimeter and not any action to be directly implemented by any of the Group’s teams) and Store Operation and Management.

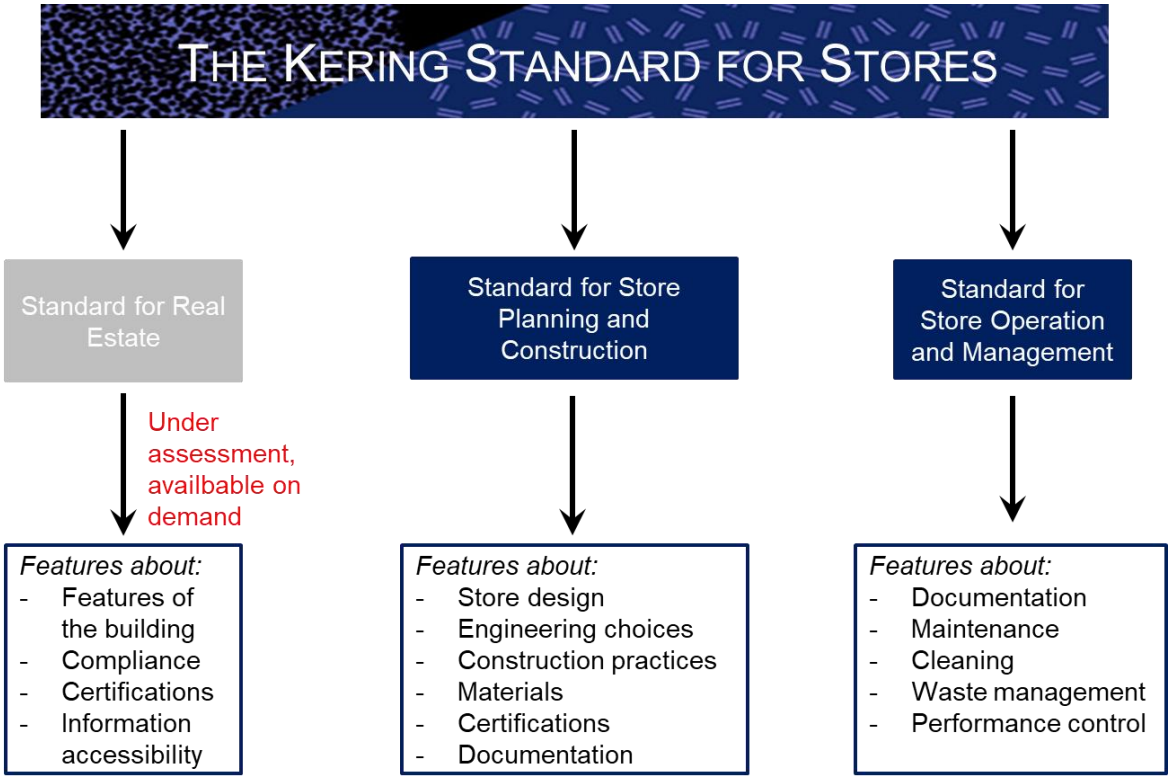


Exhibit 1: the Kering Standard for Stores

SP-i General description and instructions for use

SP-i.1 Why a Standard on Store Planning and Construction

We want our stores to be fully sustainable, showcasing that a luxury store can be beautiful, comfortable, functional and attractive as it shall be, but operating with limited amounts of energy and water, without wasting materials during construction and renovation works, and producing minimal amounts of non-recyclable and non-reusable waste.

The way in which a store is designed and built determines most of its environmental impact: these two phases determine the materials that are used, how they are installed, the amount of debris and construction waste that are produced and eventually recovered for reuse and/or recycling, the impacts on the neighbourhood of construction activities. These phases also determine most of the store's energy and water demand during operations, as these depend on the choice of technical equipment. The core structure of the building and the core technical systems (if common to other parts of the building) have an impact that is covered in the Standard for Real Estate, but if not well performing these deficiencies can be mitigated by proper choices in the design and construction phases. Finally, properly foreseeing sufficient space and correct location of waste containers eases a lot the possibility of properly storing and recycling materials.

So, store planning and construction are the key phases in determining the environmental impact of a luxury store. This is a great responsibility of our store planning and construction teams, and this standard comes to support them in making the right choices in the right moment and in a straightforward way.

SP-i.2 What is requested by Kering Standard for Store Planning and Construction

This standard provides guidance on how to reach our sustainability goals, calling for the use of advanced and innovative technologies and techniques in a rational, effective and cost-effective way.

The standard directly calls for certifications – LEED in particular – for flagship stores, and provides indications on how to design, build and modify all other stores through indications that are inspired by these certification schemes.

All flagship stores shall obtain the LEED certification – or another equivalent certification, and follow these additional requirements unique to Kering:

- the avoidance of:
    1. Variable Refrigerant Volume (VRV), Variable Refrigerator Flow (VRF), and split systems, unless they use natural refrigerants
    2. Drinking water as a heat sink in air conditioning
- and the ban of:
    3. Electrical resistance heaters as the main heating system
    4. Polyvinyl chloride (PVC) containing materials.

All other stores shall follow the comprehensive set of indications of the Standard on how to design, build and modify a store. These indications are largely in line with LEED: they give less care to – or do not treat – topics where a store renovation has less levers and pose a stronger accent on topics which are either more impacting or that are quick wins normally overlooked during design, construction and renovation activities.

Appendix 3 provides a comparison between LEED, BREEAM and the Kering Standard.

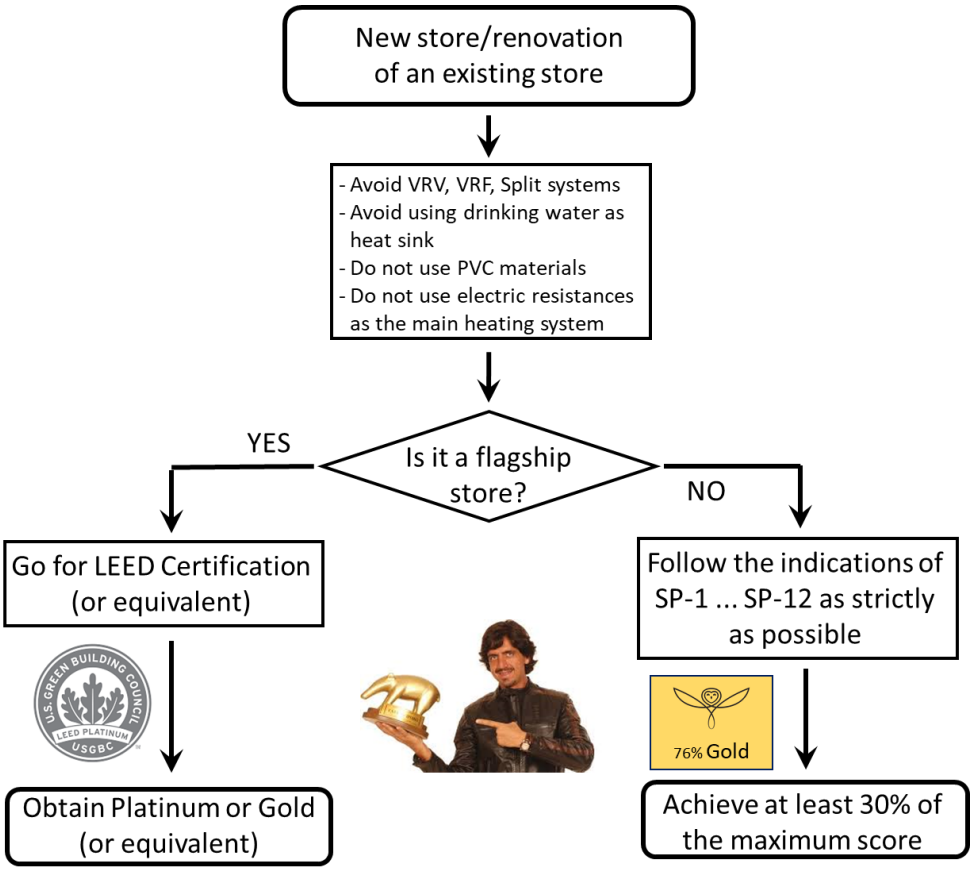


Exhibit 2: implementation of the Kering Standard

SP-i.2.1 Implementation Kering Standard at flagship Stores

Flagship stores are those that most tangibly communicate the Brand, its style and its values through their unique design, architecture and experience. As sustainability is at the root of our Group's and Brands' values, this has also to be implemented and communicated by flagships.

To this regard, a third-party verified certification is more solid than a self-assessment. These certifications have normally a rating system based on the level of alignment of the project to what the certification considers the best that can be done. The rating has 3 to 6 levels depending on certification scheme.

Sustainability certifications, like LEED (Leadership in Energy and Environmental Design), offer a powerful tool to improve the environmental performance of offices and stores. These certifications address all sustainability topics of interest for Kering (such as energy, waste,

water and air quality) and offer a streamlined approach and high communication value since they are delivered by an independent evaluator.

There are several schemes of sustainability certifications for buildings, the most important ones are showed in Exhibit 3. Out of them LEED and BREEAM are available worldwide, whereas the other have typically only a national diffusion but may be extremely popular (respect to LEED) in their country of origin. As Exhibit 3 shows, some of these certification schemes address more topics than other. The differences among them are not only on the perimeter of the assessed impacts, but also on the process of certification and on the maturity achieved by the protocols used in the certification process.

Certification Name	Geographic Region	Energy	Water	Materials	Indoor Env. Quality	Transport	Waste
LEED	Worldwide	X	X	X	X	X	X
BREEAM	Widespread throughout Europe	X	X	X	X	X	X
HQE	France, parts of Europe	X	X	X	X		X
Hong Kong BEAM Plus	Hong Kong	X	X	X	X		
Korea G-SEED	Korea	X	X	X	X	X	
Singapore Green Mark	Singapore	X	X		X		
China GBDL or 3-Star[i]	China	X	X	X	X		
Taiwan EEWH[ii]	Taiwan	X	X		X		X
Japan - CASBEE[iii]	Japan	X		X	X		

Exhibit 3: Main existing sustainability certifications

The environmental performance of a store depends on both:

1) The structure, the envelope and the main plants and services of the building – whole building topics, which are normally within the action perimeter of the owner/landlord.
2) Local plants and services, finishing and space organization, which are typically within the tenant's influence.

Most of the certification schemes consider environmental performance and foresee that scopes related to renovation and construction are typically determined by the landlord, while other scopes are dependent on the tenant's choices. These certification schemes allow the two scopes to be obtained independently, although the best result is achieved when landlords and tenants act in a coherent and coordinated way.

Certifications are becoming more and more common in new commercial buildings and malls. If the building hosting the store is certified with a certain scheme, it is normally easier to follow the same scheme also for the store, as some credits are already warranted and

recognized by the building's core and shell certification are available "for free" also for the store.

Kering started in mid-2018 to strongly encourage the Brands to certify their projects for new flagship stores and headquarters. In order to support brands on certifications, in early 2019 Kering signed framework agreements with some of the best consultants worldwide for these certifications.

Since then the number of sites with such certifications grew by one order of magnitude. By the end of 2019, the Group had more than 70 sites that had obtained or were in progress of obtaining a certification worldwide.

In this period, the Group gained a much deeper experience and knowledge on these schemes and understood that LEED is by far the most preferable scheme. This is because it is a way more widespread than the other and because it is a more mature scheme, with fewer uncertainties during the project evolution.

So, to properly communicate sustainability as a Brand's value, **all new flagship projects should obtain a LEED certification with Platinum or Gold rating**, or another certification with a high rating if the project's specific conditions make another scheme simpler to be implemented.

The costs associated to the certification process depend on the project's size and on the consultant chosen but are negligible compared to the typical costs associated with the realization of a flagship store.

In order to get the certification in a smooth way, maximizing the rating obtained and minimizing the costs related to the actions needed to get a high rating, **it is recommended to start the certification process engaging the consultant from the very earliest steps of the project.**

Brand sustainability department and Kering's sustainability department can support the store planning teams on this.

Aside getting the certification, Kering also asks to respect four specific requirements, related to the Group's commitment in saving resources, fighting climate change and avoiding the use of dangerous materials. These requirements are detailed in section SP-0, later in this document.

SP-i.2.1 Implementation Kering Standard at smaller Stores

For all stores other than flagships the Kering standard indicates to follow as much as possible the specifications indicated in the sections SP-0 to SP-12, of this document.

These are designed to be used for all types of stores: from a free-standing DOS, to SIS, to department stores, corner stores, pop-ups, windows and temporary stores.

The cost of the certification itself would become a heavy burden for small stores and in the smallest ones it may be even not possible due to the fact that certifications have often minimum thresholds.

The following set of specifications is inspired by LEED and other certification schemes: it covers largely the same topics and has a rating system that assesses the alignment of a project with the standard.

Differently from LEED, however, this standard allows to tune the scope of the requirements to what is actually relevant to the project: it considers everything that can be present and managed within the renovation of a free standing DOS, but allows not to consider the topics that are not relevant for the specific project (as, for example, heating, cooling and ventilation in a SIS, which are often non managed by the store).

Feature	Topic	Main Impact Addressed
SP-0 Kering Specific Requirements	SP-0.1 Avoid VRV, VRF and split systems	Energy, Climate Change
	SP-0.2 Avoid use of potable water as the heat sink in air conditioning	Water
	SP-0.3 Ban of electric resistance heaters as the main heating system	Energy
	SP-0.4 Ban of PVC	Materials
SP-1 Lighting	SP-1.1 High performance internal lighting	Energy
	SP-1.2 Optimized light intensity	
	SP-1.3 High performance external lighting	Health and wellbeing
	SP-1.4 Lighting control	
SP-2 Cooling and Heating	SP-2.1 High performance cooling production	Energy
	SP-2.2 High performance heat generation	
	SP-2.3 High performance distribution	
	SP-2.4 High performance terminals	
	SP-2.5 Required performance of VRF and split systems, if installed	
	SP-2.6 Efficient hot water system	
	SP-2.7 Control and management of thermal systems	Health and wellbeing
SP-3 Ventilation	SP-3.1 Energy efficient ventilation	Energy
	SP-3.2 Airtight ventilation	Health and wellbeing

Feature	Topic	Main Impact Addressed
	SP-3.3 Ventilation control	
SP-4 Metering and automation	SP-4.1 Metering and Monitoring	Energy
	SP-4.2 Building Management System (BMS)	Water
	SP-4.3 Air quality monitoring	Health and wellbeing
SP-5 Plumbing	SP-5.1 Indoor water efficient equipment	Water
	SP-5.2 Non purified water use	Water
SP-6 Waste and circular use of materials	SP-6.1 Identification and Inventory	Waste
	SP-6.2 Reuse	
	SP-6.3 Recycling	
SP-7 Electric appliances	SP-7.1 Energy efficient equipment	Energy
SP-8 Materials	SP-8.1 Low emitting materials	Health and wellbeing
	SP-8.2 Sustainable and circular use of materials	Materials
	SP-8.3 Responsible sourcing	Materials
	SP 8.4 Use of low toxicity products	Materials
SP-9 Construction	SP-9.1 Avoidance of soil, water and air pollution	Materials
	SP-9.2 Construction waste management plan	
	SP-9.3 Respect of residents and neighborhood	Health and wellbeing
	SP-9.4 Socially responsible construction contracts	
SP-10 Green power and carbon offsets	SP-10.1 Green power and carbon offsets	Energy
SP- 11 Building envelope	SP-11.1 Envelope thermal insulation – opaque surfaces	Energy
	SP-11.2 High-performance external windows	
	SP-11.3 Barriers to humidity diffusion	Energy
		Health and wellbeing
SP-12 Design and construction Management	SP-12.1 Dynamic energy simulation	Energy
	SP-12.2 Documentation for facility management	Management
	SP-12.3 Commissioning	Management

Exhibit 4: Features, topics and main impacts touched by the store planning and construction standard

The Standard covers the already mentioned specific requirements unique to Kering and 12 main features, subdivided by topics. Exhibit 4 lists them. For each topic, the standard explains the range of applicability and the requested action(s) or feature(s).

Not all of the topics touched are relevant for each store. Some of them may be out of scope because managed by the landlord. Exhibit 5 shows the most representative situations occurring in practice. Exhibit 6 provides the indication on when some topics can be put out of scope (more detailed indications are given along sections SP-0 to SP-12).

Free Standing Store

The store manages:	The landlord manages:
- Lighting	
- Heating and cooling generation (very often), distribution, terminals and controls	- Heating and cooling generation and delivery to the store (sometimes)
- Ventilation	
- Hot water	
- plumbing	
- Waste collection and separation	
- Electric and electronic equipment	
- Furniture and finishing materials	
- Construction	
- Insulation from the interior and windows	- Exteriors and insulation from the exterior
- Green and renewable energy	
- Management	
- Maintenance of the existing systems and equipment	

Large Store in Store

The store manages:	The landlord manages:
- Interiors' Lighting	- Lighting of common parts and exteriors
- Cooling and heating local distribution, terminals and local controls	- Cooling and heating generation, main distribution and main controls
- Local ventilation equipment	- General ventilation equipment
	- Hot Water
	- Plumbing
	- Waste collection and separation
- Electric and electronic equipment	
- Furniture and finishing materials	
- Construction	
	- Insulation and windows
- Green and renewable energy	- Green and renewable energy
- Management	
- Maintenance of the existing systems and equipment	

Small SIS – Corner store – department store

The store manages:	The landlord manages:
- Lighting of the parcel	- Lighting of common parts and exteriors
	- Heating and cooling generation (very often), distribution, terminals and controls
	- Ventilation
	- Hot Water
- Furniture and finishing materials	- Plumbing
- Construction	- Waste collection and separation
	- Insulation and windows
	- Green and renewable energy

Exhibit 5: Who manages what in the more common types of stores.

For the Kering standard, features managed by the landlord are out of scope. Moreover, not all prescriptions of the standard may be followed in each project due to the specific situation (type of store, local climate, time or budget constraints, etc). For this reason, the standard assigns a score to each topic, and in some situations, it provides different alternatives allowing to each the maximum for the topic or (as a second or third option) only part of it.

In order to provide more flexibility to the project team, and to avoid situations where doing the best possible choice is impossible, too expensive, too slow or too difficult, the standard allows a project to comply with only a part of the maximum achievable score.

An overall rating of the project is calculated as the ratio between the sum of the score achieved by the project on each topic and the maximum score achievable considering the sole topics within the project's scope. This ratio, expressed as a percentage, indicates the level of alignment of the project with the standard.

The **minimum acceptable ratio is set for the moment at 30%.** This value will be gradually increased with time, as the knowledge and confidence over the standard increases.

Topic	Scope	Indications
SP-0.1 Avoid VRV, VRF and split systems	**y/n**	Only if the store has its own heating/air conditioning system
SP-0.2 Avoid use of potable water as the heat sink in air conditioning	**y/n**	Only if the store has its own heating/air conditioning system
SP-0.3 Ban of electric resistance heaters as the main heating system	**y/n**	Only if the store has its own heating/air conditioning system, only out of tropical climates
SP-0.4 Ban of PVC	**y**	Always
SP-1.1 High performance internal lighting	**y**	Always
SP-1.2 Optimized light intensity	**y**	Always
SP-1.3 High performance external lighting	**y/n**	Only if the store has external lights
SP-1.4 Lighting control	**y/n**	Not for corner stores and department stores
SP-2.1 High performance cooling production	**y/n**	Only if the store has an autonomous cooling production plant
SP-2.2 High performance heat generation	**y/n**	Only if the store has an autonomous heat production plant
SP-2.3 High performance distribution	**y/n**	Always if the store has a heating and/or cooling distribution system or part of them
SP-2.4 High performance terminals	**y/n**	Always if the store has terminals
SP-2.5 Required performance of VRF and split systems, if installed	**y/n**	Only if the store is served by a VRV, VRF or split system, with a few exceptions listed
SP-2.6 Efficient hot water system	**y/n**	Only if the store has a hot water system
SP-2.7 Control and management of thermal systems	**y/n**	Only if the store controls thermal systems
SP-3.1 Energy efficient ventilation	**y/n**	Only if the store has a ventilation system or part of it
SP-3.2 Airtight ventilation	**y/n**	Only if the store has a ventilation system or part of it
SP-3.3 Ventilation control	**y/n**	Only if the store has a ventilation system or part of it

Topic	Scope	Indications
SP-4.1 Metering and Monitoring	**y/n**	According to the size of the store, as explained in the relevant paragraph. If the landlord has smart meters for its customers, their information can be shared instead of installing a second meter on the same line
SP-4.2 Building Management System (BMS)	**y/n**	Only if the store uses water
SP-4.3 Air quality monitoring	**y/n**	Only if the store has a ventilation system or part of it
SP-5.1 Indoor water efficient equipment	**y/n**	Only if the store uses water
SP-5.2 Non purified water use	**y/n**	Only if the store has toilets
SP-6.1 Identification and Inventory	**y/n**	Only if the store manages waste
SP-6.2 Reuse	**y/n**	Only if the store manages waste
SP-6.3 Recycling	**y/n**	Only if the store manages waste
SP-7.1 Energy efficient equipment	**y/n**	Not for corner and department stores
SP-8.1 Low emitting materials	**y**	Always. See more details on scoring in the paragraph describing the measure
SP-8.2 Sustainable and circular use of materials	**y**	Always. See more details on scoring in the paragraph describing the measure
SP-8.3 Responsible sourcing	**y**	Always. See more details on scoring in the paragraph describing the measure
SP 8.4 Use of low toxicity products	**y/n**	Only if construction is managed by Kering
SP-9.1 Avoidance of soil, water and air pollution	**y/n**	Only if construction is managed by Kering and not by the landlord
SP-9.2 Construction waste management plan	**y/n**	Only if construction is managed by Kering and not by the landlord. In any case, this is relevant only if the site has residential neighbourhoods
SP-9.3 Respect of residents and neighbourhood	**y/n**	Only if construction is managed by Kering and not by the landlord
SP-9.4 Socially responsible construction contracts	**y**	Always
SP-10.1 Green power and carbon offsets	**y/n**	Only if the store has parts of the envelope facing external or unheated spaces
SP-11.1 Envelope thermal insulation – opaque surfaces	**y/n**	Only if the store has windows facing external or unheated spaces
SP-11.2 High-performance external windows	**y/n**	Not for department and corner stores
SP-11.3 Barriers to humidity diffusion	**y/n**	For places where heating and air conditioning is managed by Kering. A **large bonus** can be obtained with this action, as described in the related paragraph

Topic	Scope	Indications
SP-12.2 Documentation for facility management	**y**	Always
SP-12.1 Dynamic energy simulation	**y/n**	Not for department and corner stores

Exhibit 6: Scoping Table on Store Planning and Construction

Following the scoping phase, the maximum number of points is scaled down to take into account topics that have been left out.

A score is assigned for each topic, reflecting the relative importance that is attributed to them. This score is given considering a balance between its impact, the difficulty in satisfying the specifications and the difference between its implementation and the common practice in our store planning departments. Exhibit 7 shows the score for each topic and provides an evaluation of the difficulty in complying with the topics (under the hypothesis that they fall within project scope).

Topic	Max Score	Indications
SP-0.1 Avoid VRV, VRF and split systems	**0 (penalty of -10 if not fulfilled)**	Doable nearly everywhere when rebuilding the air conditioning. Issues may come in case of limited heights of rooms (piping of hydronic systems is thicker)
SP-0.2 Avoid use of potable water as the heat sink in air conditioning	**0 (penalty of -10 if not fulfilled)**	Doable nearly everywhere, despite in a very few situations it might be not possible to deal with this
SP-0.3 Ban of electric resistance heaters as the main heating system	**y/n**	No difficulty. Costs for installing a serious heating system are balanced by lower bills in a very short time
SP-0.4 Ban of PVC	**y/n**	Easy provided that this is mentioned in the specifications for materials
SP-1.1 High performance internal lighting	**6**	Easy and already common. Some limits, similar to those of LEED, exist for maximum lighting power
SP-1.2 Optimized light intensity	**2**	Easy and already common. It might require some more care in the back of house
SP-1.3 High performance external lighting	**2**	Easy
SP-1.4 Lighting control	**2**	Easy. The standard stresses on the importance of more advanced controls and calls for a widespread use of movement sensors in the back of house
SP-2.1 High performance cooling production	**5**	The highest score can be obtained through difficult solutions (either expensive, not always available or both)
SP-2.2 High performance heat generation	**5**	The highest score can be obtained through difficult solutions (either expensive, not always available or both)
SP-2.3 High performance distribution	**2**	Easy

Topic	Max Score	Indications
SP-2.4 High performance terminals	**1**	Easy
SP-2.5 Required performance of VRF and split systems, if installed	**3**	Easy
SP-2.6 Efficient hot water system	**4**	Easy, but equipment may be not easy to find.
SP-2.7 Control and management of thermal systems	**8**	Easy. The standard stresses on the importance of more advanced controls
SP-3.1 Energy efficient ventilation	**2**	Easily doable but must be included in the design since the very beginning
SP-3.2 Airtight ventilation	**1.5**	Easy
SP-3.3 Ventilation control	**4.5**	Easily doable but must be included in the design since the very beginning
SP-4.1 Metering and Monitoring	**3.5**	Easy, despite not very widespread
SP-4.2 Building Management System (BMS)	**2**	Easy, despite not very widespread
SP-4.3 Air quality monitoring	**1.5**	Easy, despite not very widespread
SP-5.1 Indoor water efficient equipment	**2.5**	Easy
SP-5.2 Non purified water use	**1.5**	Depends on the availability of rainwater, well water or other recovered water source
SP-6.1 Identification and Inventory	**0.5**	Easy but rarely considered in store design
SP-6.2 Reuse	**0.5**	Easy but rarely considered in store design
SP-6.3 Recycling	**7**	Easy but rarely considered in store design
SP-7.1 Energy efficient equipment	**2**	Easy
SP-8.1 Low emitting materials	**3**	Easy provided that this is mentioned in the specifications for materials
SP-8.2 Sustainable and circular use of materials	**1.5**	Easy provided that this is mentioned in the specifications for materials
SP-8.3 Responsible sourcing	**5.5**	Easy provided that this is mentioned in the specifications for materials
SP 8.4 Use of low toxicity products	**1**	Easy provided that this is mentioned in the specifications for materials
SP-9.1 Avoidance of soil, water and air pollution	**3**	May require some external support for GC in developing countries
SP-9.2 Construction waste management plan	**2**	It may impact construction timing. It must be discussed with the GC (or included in the GC tender specs, if any) and included in the contract

Topic	Max Score	Indications
SP-9.3 Respect of residents and neighborhood	**1**	Where weak workers' categories are not legally defined, this is out of scope. Where they are defined, this requirement is easy if included in the contract (or in the tender)
SP-9.4 Socially responsible construction contracts	**1**	Easy
SP-10.1 Green power and carbon offsets	**5**	Higher score can be obtained with some effort. Medium score is easy to obtain.
SP-11.1 Envelope thermal insulation – opaque surfaces	**4**	Higher score can be obtained with some effort. Medium score is easy to obtain.
SP-11.2 High-performance external windows	**1**	Easy.
SP-11.3 Barriers to humidity diffusion	**6**	Easy
SP-12.2 Documentation for facility management	**4**	Theoretically easy. Consider documentation delivery among the required things to receive before the issuance of the last invoice by the direct suppliers.
SP-12.1 Dynamic energy simulation	**3**	Easy

Exhibit 7: Scoring table on Store Planning and Construction

The Standard not only sets a minimum performance level but is also organized to praise the best performance. Therefore, this Standard foresees three levels of performance, Bronze, Silver and Gold. The threshold for each level is expressed in percentage of maximum points:

- Gold > 70%
- Silver between 50% and 70%
- Bronze between 30% and 50%

Exhibit 8: Example rating etiquettes for Kering bronze, silver and gold levels

An easy to use **scoring tool**, provided with this standard at Appendix SP-1.1, helps the project team in assessing the topics within the project scope and in assessing the score obtained. See Appendix 1.1 for accessing the tool and reading instructions.

Note that the levels of Kering Standard are designed to be roughly equivalent to those of external certification schemes through the equivalence table shown in Exhibit 9.

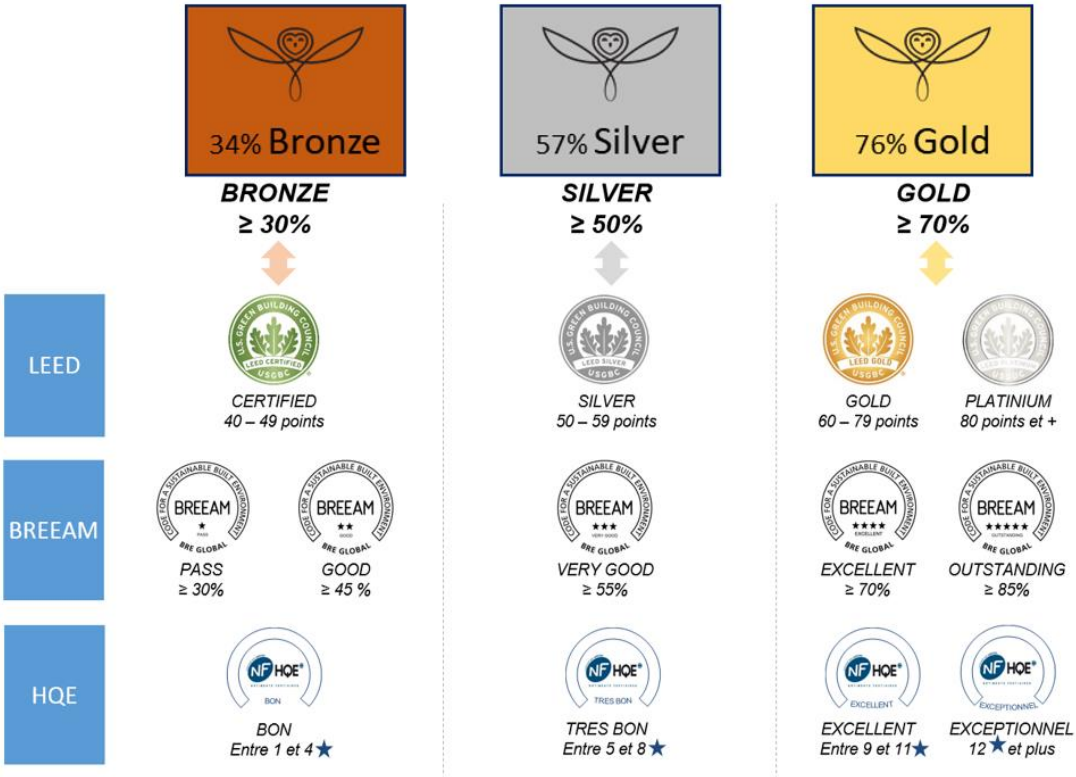


Exhibit 9: Equivalence between the main Building Certification Schemes and the Kering Standard

Exhibit 10 shows an excerpt of the main sheet of the scoring tool to assess the rating of a store according to the Kering standard for store planning and construction.

SELECT IN THIS COLUMN	PROJECT SCORE	PENDING SCORE	MAXIMUM SCORE IN	MAXIMUM SCORE	TOPIC	
	0.00	0.00	0.00	0.00	SP-0. KERING specific requirements	
	0.00	0.00	0.00	0.00	SP-0.1	Avoid Variable Refrigerant Volume (VRV), Variable Refrigerator Flow (VRF) and split systems
No	0.00	0.00	0.00	0.00		There are some of these systems, but their power is below 30% of total thermal power of the store
No	0.00	0.00	0.00	0.00		There are some of these systems, and their power is above 30% of total thermal power of the store
	0.00	0.00	0.00	0.00	SP-0.2	Avoid use of potable water as the heat sink in air conditioning
No	0.00	0.00	0.00	0.00		use of potable water as a heat sink in air conditioning
Yes	0.00	Y	Y	Y	SP-0.3	BAN of electric resistance heaters as the main heating source
Yes	0.00	Y	Y	Y	SP-0.4	BAN of Polyvinyl Chloride (PVC)
	7.00	12.00	12.00	12.00	SP-1. Lighting	
	4.50	6.00	6.00	6.00	SP-1.1 High performance internal lighting	
Pending	0.00	1.50	1.50	1.50		Lighting fixtures
Yes	1.50	1.50	1.50	1.50		Lighting power - Back of House
	3.00	3.00	3.00	3.00		Lighting power - Sales Area
Yes	1.50	1.50	1.50	1.50		General lighting< 19W/m^2
Yes	1.50	1.50	1.50	1.50		Additional lighting< 28 W/m^2
	1.00	2.00	2.00	2.00	SP-1.2 Optimized light intensity	
	1.00	1.00	1.00	1.00		Illuminance
Yes	0.25	0.25	0.25	0.25		Sales area >300 lux
Yes	0.25	0.25	0.25	0.25		Cash desk >500 lux
Yes	0.25	0.25	0.25	0.25		Enclosed office >300 lux
Yes	0.25	0.25	0.25	0.25		Corridors and passage areas >100 lux
Pending	0.00	1.00	1.00	1.00		Lighting simulation
	0.00	2.00	2.00	2.00	SP-1.3 High performance external lighting	
Out of Scope	0.00	1.00	1.00	1.00		Lighting fixtures
Out of Scope	0.00	1.00	1.00	1.00		Lighting Power
	1.50	2.00	2.00	2.00	SP-1.4 Lighting Control	
Yes	0.25	0.25	0.25	0.25		Motion sensors
Yes	0.25	0.25	0.25	0.25		Clocks
Yes	0.25	0.25	0.25	0.25		Sales area, shut off
Yes	0.25	0.25	0.25	0.25		Sales area, dimming
Out of Scope	0.00	0.25	0.25	0.25		External areas
No	0.00	0.25	0.25	0.25		BMS/remote control
Yes	0.50	0.50	0.50	0.50		Lighting controls - Individual spaces

Exhibit 10: Excerpt from the store planning scoring tool

SP-i.3 Roles and Responsibilities

The internal project team, i.e. the project manager of the store realization/renovation within the store planning/construction department, is the first responsible of the compliance of the project with the standard.

This responsibility is cascaded to the local architect and the general contractor and their suppliers by including the standard and its respect in the contracts, and requiring they are included in the contracts with subcontractors. The Brand sustainability team and the Kering Corporate sustainability team provide support.

SP-i.4 Timeline for Implementation

Implementation of the Standard throughout a Store Project

The Store Planning and Construction Standard is to be used in two situations:

- When **a new store is opened**. This situation provides the best opportunity for achieving a sustainable store.
- When **a store faces any permanent renovation or change**. Improvements here depend on the depth of the renovation undertaken.

The standard application shall occur since the very beginning of the designing phase project, in the moment in which the early technical design choices are taken.

Trying to implement it as the project has already started will end up in getting worse results and/or higher efforts. The following section explains, step by step, the path to follow for implementing the standard.

Timeline for the roll-out of the Standard throughout the Kering Brands

Rollout of the standard will be gradual, with a limited number of test projects starting Q3 2020; according to the early results and eventual difficulties encountered, the standard application will be gradually extended through all the new projects, either through its direct implementation in project or via its integration into the store planning, design and construction procedures that each brand follows. By 2025, it is expected that all new project will follow the standard by default.

During this period and beyond, Kering will support the Brands with:

- Dedicated trainings,
- Development of tools allowing make the use of the standard easier and easier,
- Framework agreements with consultants and suppliers providing services to better implement the standard and solutions making parts of it automatically compliant.

SP-i.5 How to implement the standard in a Project, step by step

The implementation of the standard relies on the scoring tool for Store Planning and Construction, that goes through all the topics and subtopics described in the following of the document.

Step 0: include clauses in the contracts with your suppliers about implementation of "Kering Standard for stores – Store Planning and Construction"

The "step 0", before entering into any project, is to include the compliance with this standard into the contracts (and, if the case, into the tenders) with your direct suppliers (architect, general contractor and, if directly contracted, millworker and other suppliers), working with your sustainability and legal department. Appendix 1.3 provides a letter to present the standard to them, and Appendix 1.4 a commitment letter that shall be provided to them and that they shall sign. Of course, different contractual arrangements can be chosen, but it is of paramount importance that the compliance with the standard gets integrated into the contracts.

Step 1: share the standard with your architect

After a site for the new store is individuated – or the decision for making a renovation is taken –, the architect (or the possible architects bidding for the design of the new store) is provided with this standard document and with the standard scoring tool (See Appendix 1.1).

The architect(s) is provided of all the general data and of all the available data available for the project, and then invited to visit the site.

The following step is to ask the architect(s) to go through each topic treated into the standard and to include into the project all features requested by the standard, as long as they consider it in scope and feasible.

Step 2: clarify and agree what is out of scope

This is the "scoping" phase, as explained in paragraph 1.2 (see Exhibit 6). It is suggested to start with a first run of the Scoring tool (see Appendix 1.1) in which the focus is on what is out of scope, in order to reduce the attention to the sole topics relevant for the project.

For each topic and subtopic on which a decision has to be taken, the scoring tool (Appendix 1.1 provides four possibilities of answer:

- Yes, when a feature can be considered into the project since the beginning;
- No, when a feature must be rejected since the beginning ("no"s should be a very limited number, especially at the initial stage)
- Out of scope, in case the topic is out of the scope of renovation. The next subsection and following description of the Standard topics clearly indicate when the topic is out of scope.
- Pending, in case the point cannot be defined at this stage.

As some topics touched by the standard relate to local climate, it is suggested to use the standard's tool to determine the climate zone of the project, available at Appendix 1.2 of this document.

Step 3: agree with the architect the first version of the scorecard, and attach it to the contract

After this stage, a first version of the scoring table is agreed between the Brand's project manager and the architect. It is suggested to limit as much as possible the "pending" points, which should be limited to topics where authorizations must be obtained, deliveries are uncertain and/or depend on external factors.

Wherever possible, **target the highest score**.

The contract shall explicitly indicate that the **project will follow the standard where topic is agreed**, and that the architect will make its **best efforts on the "pending" topics**. (See Appendix 1.5 for a template of clause to be included in the contract)

Foresee penalties in case agreed points of the standards are not fulfilled by the architect and/or any of his suppliers.

Step 4: refine the scorecard with the general contractor and any other direct supplier

Several topics treated by the Standard (i.e. "SP-8.3 Responsible sourcing of materials", "SP-9.1 Minimizing soil, water and air pollution", "SP-9.2 Construction waste management plan", "SP-9.3 Residents and neighbourhood peacefulness", "SP-9.4 Socially responsible construction contracts"), as well as the verification of the fulfilment of the Standard on topics that will be not checkable at the end of works, must be agreed with the General contractor. Again, on these topics the maximum score must be targeted and an effort on reducing the "pending" topics must be done.

A version 2 of the scoring tool is then agreed and attached to the GC contract, and is shared with the architect.

Foresee penalties in case agreed points of the standards are not fulfilled by the architect and/or any of his suppliers.

Step 5: address all the "pending" points before the executive project is done

At the end of the executive project, all "pending" points shall become a "yes" or a "no".

Step 6: verify the real fulfilment of the standard at every milestone of the project

In case anything is done differently than expected, update the scorecard.

Step 7: verify the fulfilment of the standard at the end of the construction activities

At the end of construction, commissioning shall be done to ensure that the construction has followed the requirements, and that the scorecard correctly represents the as-built situation.

SP-i.6 Costs associated to realize a standard compliant store

The vast majority of the requirements of this standard does not trigger major costs by themselves. They may sometimes imply some additional cost but very often also some saving. Only very few requirements may have a substantial impact on costs. Kering's experience so far shows that total alignment with Kering Standard for store planning triggers an additional cost of less than 5% of the total cost of construction/renovation. Exhibit 11 shows where extra costs are expectable, and their indicative impact.

Topic	Extra cost	Other economic impacts
SP-0.1 Avoid VRV, VRF and split systems	If conceived at the beginning to cover all needs, the costs of a hydronic system are similar to these systems to avoid	A hydronic system will have 15-25% lower consumption than these systems along a life cycle of 10 years, meaning 20-200 Eur/m^2 surface in 10 years
SP-0.2 Avoid use of potable water as the heat sink in air conditioning	If an alternative is possible, its cost is in line with that of a system using potable water	Water costs 1 to 10 Eur/m^3 depending on the country. Consumption for this type of air conditioning may result in 10 to 30 m^3 water per m^2 store surface per year.
SP-0.3 Ban of electric resistance heaters as the main heating system	There is virtually no store having no air conditioning system, this should also produce and distribute heating.	A recommended system uses 3 to 5 times less energy than an electric resistance system, meaning 100 to 1000 Eur/m^2 in ten years
SP-0.4 Ban of PVC	May be a cost or a saving	
SP-1.1 High performance internal lighting	None	Expect a saving of tens of Eur/m^2/year
SP-1.2 Optimized light intensity	None	
SP-1.3 High performance external lighting	None	
SP-1.4 Lighting control	Cost for sensors highly variable but below 20 Eur per lighting point	Expect a saving of tens of Eur/m^2/year
SP-2.1 High performance cooling production	the highest score is obtainable through expensive solutions, whereas the medium score solution has no extra-costs respect to other possibilities	Highest score solutions bring significant energy savings respect to conventional solutions (-40%), medium score solutions are more in line with commonly adopted technologies
SP-2.2 High performance heat generation	the highest score is obtainable through expensive solutions, whereas the medium score solution has no extra-costs respect to other possibilities	Highest score solutions bring significant energy savings respect to conventional solutions (-40% or more), medium score solutions are more in line with commonly adopted technologies
SP-2.3 High performance distribution	Negligible	Lower consumption during operation
SP-2.4 High performance terminals	Negligible	Lower consumption during operation

Topic	Extra cost	Other economic impacts
SP-2.5 Required performance of VRF and split systems, if installed	Often no extra-cost	Lower consumption during operation and lower need for refrigerant recharges
SP-2.6 Efficient hot water system	Negligible	Lower consumption during operation
SP-2.7 Control and management of thermal systems	Basic controls have negligible cost, more advanced solutions bring some costs	Significant savings and ease-of-use of equipment during operation
SP-3.1 Energy efficient ventilation	The exhaust air heat recovery system may cost 2,000 to 20,000 Eur depending on size, extra-costs for good insulation are negligible	Large energy savings
SP-3.2 Airtight ventilation	Consider 2,000 to 4,000 Eur for testing	Lower consumption and improved air quality during operation
SP-3.3 Ventilation control	Requires some more investment in design, equipment extra-costs are not significantly higher than conventional equipment costs	Large energy savings and improved air quality during operation
SP-4.1 Metering and Monitoring	Consider 100 to 300 Eur/measurement point for electricity, higher costs for hot water and gas	Easier individuation of mismanagement of time schedules, idling equipment and malfunctions
SP-4.2 Building Management System (BMS)	Consider 5,000 to 30,000 Eur for a full store	Significant savings for energy, maintenance and management
SP-4.3 Air quality monitoring	Consider 2,000 to 10,000 Eur per store	Returns in image if internal air quality data vs external ones are communicated to customers
SP-5.1 Indoor water efficient equipment	Negligible	Savings in water bills (which are negligible, in most of the countries)
SP-5.2 Non purified water use	Normally expensive, but in some situations, it may be doable and cheap	Savings in water bills (which are negligible, in most of the countries)
SP-6.1 Identification and Inventory	Negligible	May bring to easier cleaning and recycling, thus reducing costs for these services
SP-6.2 Reuse	Negligible	May bring to easier cleaning and recycling, thus reducing costs for these services
SP-6.3 Recycling	Negligible	May bring to easier cleaning and recycling, thus reducing costs for these services
SP-7.1 Energy efficient equipment	Negligible	Lower electricity consumption
SP-8.1 Low emitting materials	Normally negligible	None

Topic	Extra cost	Other economic impacts
SP-8.2 Sustainable and circular use of materials	Normally negligible	None
SP-8.3 Responsible sourcing	Normally negligible	None
SP 8.4 Use of low toxicity products	Normally negligible	None
SP-9.1 Avoidance of soil, water and air pollution	Normally negligible	None
SP-9.2 Construction waste management plan	Normally negligible	None
SP-9.3 Respect of residents and neighborhood	Normally negligible	None
SP-9.4 Socially responsible construction contracts	Normally negligible	None
SP-10.1 Green power and carbon offsets	Negligible	None
SP-11.1 Envelope thermal insulation – opaque surfaces	Materials and installation is normally very cheap (add 10-20 Eur/m^2 insulated surface). High insulation levels may bring to a 1-3% reduction in floor area	Huge energy saving, improved acoustic performance
SP-11.2 High-performance external windows	Large ground level windows with double glazing may be significantly more expensive. Lower size windows pose no serious economic constraint	Huge energy saving, improved acoustic performance
SP-11.3 Barriers to humidity diffusion	Negligible	Savings in energy use due to avoidance of dehumidification devices. Huge savings from the reduction of damaged stock
SP-12.2 Documentation for facility management	Negligible	Saves time and costs for O&M
SP-12.1 Dynamic energy simulation	Consider 2,000 to 4,000 Eur per store	It actually allows optimizing costs by assessing the impact of each single design choice on energy behaviour of the store, thus allowing an overall optimization of construction costs

Exhibit 11: costs and savings related to the implementation of the Kering standard for store planning

SP-0 KERING SPECIFIC REQUIREMENTS

SP-0.1 – Avoid VRV/VRF/Split systems (- 5 to -10 points if not respected)

Scoping: Consider only if the store has an autonomous cooling production plant.

AVOID BY ALL MEANS: VRF/VRV/split systems, unless they use natural refrigerants. These systems require large volumes of hydrofluorocarbon (HFC) refrigerant gases, which are among the most powerful greenhouse gases and have a very long lifetime in the atmosphere. With time, these gases leak through piping junctions, the system loses efficiency and needs to be refilled to restore it, while the leaked gas contributes to global warming. Alternatives to HFC already in commerce are either toxic, highly flammable, or require high pressures, so their substitution is not feasible in most plants. Due to their impact on climate change, these HFCs were included into the Montreal Protocol in 2016 and their phase-out will start before 2020 in some countries. Exhibit 12 provides more information on fluorinated gas emissions.

More information can be found at: http://www.unep.fr/ozonaction/information/mmcfiles/7809-e-Factsheet_Kigali_Amendment_to_MP_2017.pdf

Or, for a 2-minute video: https://www.youtube.com/watch?v=xhlDUjKPqeY

Alternatives to these systems are numerous: heat pumps and chillers producing chilled water or air into a sealed-at-factory refrigerator loop. **If it is decided, for any reason, to use such a system, a penalty of 10 points is applied.**

The penalty is reduced to 5 points if such system has nominal power below 30% of the total heating and cooling power of the store.

SP-0.2 – Avoid use of potable water as a heat sink in air conditioning (-10 points if not respected)

AVOID BY ALL MEANS: the use of direct drinking water as a heat sink in cooling systems. These systems use huge amounts of water, with high management costs and waste a precious resource. **If it is decided, for any reason, to use such a system, a penalty of 10 points is applied.**

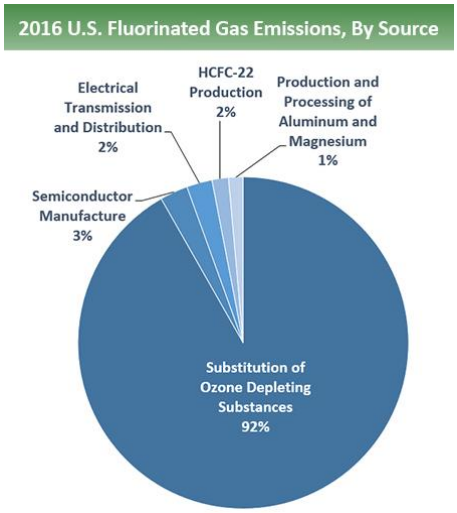
We **avoid, by all means,** systems that use water as a heat sink and discharge it directly into the sewage not to systems using cooling towers.

Alternatives to these systems: systems using air as the heat sink, or, better:

- Air cooled systems, masking the external units, if necessary, or locating them in non-visible locations
- District cooling, if available

Geothermal heat pumps or hydrothermal heat pumps (using river or other non-drinkable water sources)

There are four main categories of fluorinated gases—hydrofluorocarbons (HFCs) or F-gases, perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The largest sources of fluorinated gas emissions are described below.



Emission estimates for the United States, from the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2016*.

Substitution for Ozone-Depleting Substances. HFCs are used as refrigerants, aerosol propellants, foam blowing agents, solvents, and fire retardants. The major emissions source of these compounds is their use as refrigerants—for example, in air conditioning systems in both vehicles and buildings. These chemicals were developed as a replacement for chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) because they do not deplete the stratospheric ozone layer. CFCs and HCFCs are being phased out under an international agreement, called the Montreal Protocol. HFCs are potent greenhouse gases with high GWPs, and are released into the atmosphere during manufacturing processes and through leaks, servicing, and disposal of equipment in which they are used. The Kigali Amendment to the Montreal Protocol calls for a phasedown in the production and consumption of the most potent HFCs. Newly developed hydrofluoroolefins (HFOs) are a subset of HFCs and are characterized by short atmospheric lifetimes and low GWPs. HFOs are currently being introduced as refrigerants, aerosol propellants and foam blowing agents.

In stores, direct expansion heating and air conditioning systems (VRV, VRF and split systems) are the largest emitters of F-gases. Their circuits contain large amounts of these substances, which gradually leak through piping junctions. These leaks total typically about 5 to 15% of the total gas weight every year. Moreover, as gas content in the circuit decreases, the systems' efficiency also decreases, leading to lower energy efficiency. (This can be addressed through better maintenance by refilling the system more frequently. Reducing leaks is doable with maintenance, but is more difficult). Alternatives to F-gases for refrigeration exist, such as hydrocarbons, ammonia and CO_2, but these are either highly flammable, toxic or require high pressure, respectively. Thus, they are suitable only for plants having a short and compact refrigerant circuit sealed at the factory, such as water-water and air-water heat pumps. This is why Kering recommends the latter.

Exhibit 12: Sources of Fluorinated Hydrocarbons

SP-0.3 – BAN of electric resistance heaters as the main heating system

If a heating system is installed, it cannot rely only on resistance heaters. Use heat pumps or gas fired systems. Having only electric resistance heaters prevents a shop from compliance with the standard.

SP-0.3 – BAN of PVC

Kering committed to remove PVC from its products in 2012. This is extended to stores, including furniture, finishing materials, plumbing and electrical cables.

SP-1. LIGHTING

SP-1.1: High performance internal lighting (up to 6 points)

Lighting fixtures (1.5 points)

Scoping: to always be considered for what is relevant for the store.

Implement light-emitting diode (LED) lighting systems with lighting efficiency greater than 65 lumens per watt (lm/W) for at least 90% of lighting power installed in the store, including the back of house.

Lighting power - Back of House (1.5 points)

Scoping: to always be considered for what is relevant for the store.

Comply with the following maximum lighting powers:

- Office: 7 W/m^2
- Restrooms: 7 W/m^2
- Active storage: 5 W/m^2
- Stairs: 9 W/m^2

Lighting power - Sales Area (3 points)

Scoping: to always be considered for what is relevant for the store.

Comply with the following maximum lighting powers (sales area):

- General lighting: 19 W/m^2 (**1.5 points**). To assess this, consider all the installed power for general lighting and divide it by the sales area.
- Additional lighting: 28 W/m^2 (**1.5 points**). To assess this, consider all the installed power for additional lighting and divide it by the area (vertical or horizontal) interested by this additional lighting.

SP-1.2: Optimized light intensity (up to 2 points)

Illuminance (1 point)

Scoping: not for department and corner stores

Design internal lighting in all areas of the store to ensure an illuminance (lux) level appropriate to the tasks undertaken, accounting for building user concentration and comfort levels.

Average illuminance levels should respect the minimum following values:[1]

[1] Requirements come from the European standard EN 12464:2011, Light and lighting – Lighting of workspaces. Lighting levels for areas where computer screens are regularly used can specify 300 lux instead of what is prescribed in EN 12464:2011, per CIBSE Lighting Guide 7.

- Sales areas: 300 lux (**0.25 points**)
- Cash desk: 500 lux (**0.25 points**)
- Enclosed office: 300 lux (**0.25 points**)
- Corridors and passage areas: 100 lux (**0.25 points**)

Lighting simulation (1 point)

Scoping: not for department and corner stores

Optimize light intensity through a light simulation.

SP-1.3: High performance external lighting (up to 2 points)

Lighting fixtures (1 point)

Scoping: To be considered only when the store has external lighting in external areas.

Use LEDs and lighting systems with lighting efficiency greater than 65 lm/W (**1 point**).

Lighting power (1 point)

Comply with the strictest of the following lighting powers (W/m^3) (**1 point**):

- The value indicated in Exhibit 13 (based on ASHRAE indications)
- Local regulatory limitations

Exhibit 13 provides the maximum lighting power levels provided by ASHRAE. Data are in W/m^2.

Lighting zones are those used by ASHRAE, i.e.:

- Lighting zone 0: Undeveloped areas within national parks, state parks, forest land, rural areas, and other undeveloped areas as defined by the authority having jurisdiction
- Lighting zone 1: Developed areas of national parks, state parks, forest land and rural areas
- Lighting zone 2: Areas predominantly consisting of residential zoning, neighbourhood business districts, light industrial with limited night-time use and residential mixed use areas
- Lighting zone 3: All other areas
- Lighting zone 4: High activity commercial districts in major metropolitan areas as designated by the local jurisdiction

	Lighting zone 2	Lighting zone 3	Lighting zone 4
Uncovered parking areas			
Parking areas and drive	0.65	1.1	1.4
Building grounds			
Walkways 3m wide or greater / Plaza areas / Special feature areas	1.65	1.7	2.2
Stairways	10.8	10.8	10.8
Pedestrian tunnels	1.6	2.2	3.2
Landscaping	0.54	0.54	0.54
Building entrances and exits			
Main entries	66	98	98
Other doors	66	66	66
Entry canopies	2.7	4.3	4.3
Nontradable surfaces			
Building facades2	1.1	1.6	2.2

Exhibit 13: External power limits per each lighting zone, in Watt/m^2

SP-1.4: Lighting control (up to 2 points)

Scoping: always to be considered. For corner and department stores, consider only Clocks, Sales Areas and Building Management System (BMS)/remote control

Lighting controls shall be implemented per zone in order to separate general lighting and additional lighting (i.e. lighting to highlight products).

- Motion sensors (**0.25 points**): Install motion sensors for lighting in the back of house including toilets, corridors, storage areas (when not permanently occupied) and bathrooms. Regulate the turn-on time according to the use of spaces (i.e. 0.5-2 feet for toilets and corridors, 2-5 feet for storage areas, 10-15 feet for offices).
- Clocks (**0.25 points**): Install clocks that manage night turn-off for all lights.
- Sales area, shut off (**0.25 points**): Visible sales area and showcases can be exempted from the shutoff requirement for marketing reasons, but the equipment shall in all cases include the ability to do so for the operation phase.
- Sales areas, dimming (**0.25 points**): Provide controls that can reduce the ambient light levels 0 to 100% of the maximum illumination level, not including daylight contributions.
- External areas (**0.25 points**): For external areas, manage lighting through natural light sensors and timers for facades and showcases. Use natural sight sensors and movement sensors for parking, stairs and doors.
- BMS/Remote control (**0.25 points**): Manage all building lighting fixtures with a BMS or a Digital Addressable Lighting Interface (DALI), which will implement an automatic lighting shutoff, with a time schedule defined, in accordance with the store timetable.

[2] The value is in W/m^2 of illuminated wall area

For smaller stores (corners, department stores and small SIS), simple remote control and monitoring systems are sufficient to get this credit.

Lighting controls – Individual spaces (0.5 points)

Scoping: To consider where there are individual work areas (counter, back office etc.)

Provide individual manual lighting controls for at least **75%** of the individual occupant spaces in office and administrative areas, enabling adjustments to suit individual task needs and preferences.

SP-2. COOLING AND HEATING

SP-2.1: High performance cooling production (up to 5 points)

Install, alternatively, one of the following systems:

- District cooling (**5 points**): Connect the building/store to the district cooling system

OR

- Geothermal or hydrothermal heat pump system (not using potable water) (**5 points**): Geothermal or hydrothermal (not using potable water) heat pump with **$COP_R \geq 5$** water-to-water, in compliance with standard conditions of AHRI 1301 (American standard) or EN 14511

OR

- Water chiller with evaporative tower on the roof (**4 points, to avoid in areas with water scarcity problems**): Water chiller shall respect: **$COP_R \geq 4.7$** electricity-to-water, in compliance with conditions of AHRI 550/590 (American standard) or EN 14511 and 14825 (European standard).

OR

- Reversible air/water heat pump system (**3 points**): It shall respect: **$COP_R \geq 3$** electricity-to-water, in compliance with standard conditions of AHRI 340/360 (American standard) or EN 14511 and 14825 (European standard)

OR

- Water chiller with dry cooling system on the roof (**3 points**): Water chiller shall respect: **$COP_R \geq 4.7$** electricity-to-water, in compliance with conditions of AHRI 550/590 (American standard) or EN 14511 and 14825 (European standard).

Apart for the system determining penalties, any other system (e.g., heat pumps with lower COP_R) will give a score of zero points.

SP-2.2: High performance heat generation (up to 5 points)

Scoping: Consider only if the store has an autonomous heat production plant.

BAN: electric resistance heaters. These systems are the least efficient heat production systems, and their use shall be banned from good design practices.

Install, alternatively, one of the following systems:

- District heating (**5 points**): Connect the building/store to the district heating system

OR

- Geothermal or hydrothermal heat pump **(not using potable water)** (**5 points**): Geothermal or hydrothermal (not using potable water) heat pump with **$COP_R \geq 5$** water-to-water, in compliance with standard conditions of AHRI 1301 (American standard) or EN 14511

OR

- Biomass boiler (**5 points, only in areas with no air pollution issues**): Install a wood biomass boiler. This option can be considered only for stores in large metropolitan areas with pollution problems.

OR

- Reversible air/water heat pump system (**3 points**): It shall respect: **COP_H[3] ≥ 3.4**, in compliance with standard conditions of AHRI 340/360 (American standard) or EN 14511 and 14825 (European standard)

OR

- Water chiller with dry cooling system on the roof (**3 points**)**:** Water chiller shall respect: **$COP_H \geq 4.7$** electricity-to-water, in compliance with conditions of AHRI 550/590 (American standard) or EN 14511 and 14825 (European standard).

Apart for the system determining penalties, any other system (e.g., gas boilers) will give a score of zero points.

SP-2.3: High performance heating and cooling distribution (up to 2 points)

Scoping: Consider only if the store has a heating and/or cooling distribution system or part of one.

Piping insulation (1 point)

Insulation of the cooling and heating water distributions (even for sanitary hot water) shall ensure a thermal loss that is less than or equal to 7 watts per meter-Kelvin (W/mK).

Design of the insulation shall respect the following standards for external temperatures, for external distribution:

- Winter: Heating design temperature from Normative Appendix D – ASHRAE 90.1-2010
- Summer: Cooling design temperature from Normative Appendix D – ASHRAE 90.1-2010

Design of the insulation shall respect the following internal temperature, for internal distribution:

- Winter: 20°C
- Summer: 26°C

[3] COP_H: Heating Coefficient of Performance (in kW/kW). Ratio of the Net Heating Capacity to the total input power at any given set of standard conditions.

Leakage Test during Commissioning (1 point)

For existing systems, leakage tests shall be conducted on liquid refrigerant piping at static pressures of 30 bars with hydrogenated nitrogen. Any detected leakage shall be fixed.

SP-2.4: High performance terminals (1 point)

Scoping: Consider only if the store has fan coils or equivalent terminals for heating and cooling, when cooling and/or heating are managed by the Store and the distribution is done with water. For systems with heating/cooling integrated with air distribution, refer directly to SP-3. For systems using VRV/VRF/split systems, refer to SP-2.5.

A score of **1 point** is guaranteed if fan coils shall have a minimum efficiency of:

- Class A for cooling (FCEER) and heating (FCCOP) based on Eurovent Certification Program[4]
- Or a FEG of 75, based on manufacturers' certified data, as defined by AMCA 205

SP-2.5: Required performance of VRF and split systems, if installed (up to 3 points)

Scoping: these systems should not be installed in new Kering stores. Installing or keeping this system implies a penalty of -10 points but some points can be recovered if the system has some quality features.

Kering strongly recommends to **avoid by all means** VRV, VRF and split systems and attributes a penalty of -10 credits to projects that use them.

However, sometimes these systems may be the only practical option. This may happen, for example:

- If the store under construction/renovation is served by a centralized system that serves other stores (this can happen at SIS).
- If the system is owned by the landlord and is not old enough (less than 8 years old) to justify its replacement with another system within the renovation.

Points can be recovered if:

- Installation has an energy label (**1 point**)
- Efficiency respects one of the following (**2 point**):
  - For variable speed refrigerator: **COP_H and COP_R[5] ≥ 3.6**, according to ANSI_AHRI_Standard_1230_2010
  - For split systems: **COP_H and COP_R[6] ≥ 3.1** electricity to air, according to ANSI_AHRI_Standard_1230_2010

[4] Class definitions are provided in Eurovent Certification Program. RS 6/C/002A-2017 v2 for Duct fan coil units and RS 6/C/002-2017 v2 for Non-duct fan coil units.

[5] COP_H: Heating Coefficient of Performance (in kW/kW). Ratio of the Net Heating Capacity to the total input power at any given set of standard conditions.

[6] COP_R: Cooling Coefficient of Performance in kW/kW. Ratio of the Net Refrigerating Capacity to the total input power at any given set of standard conditions.

SP-2.6: Efficient hot water system (up to 4 points)

Hot water – Piping (1 point)

Scoping: Consider only if the store has a hot water piping system longer than 1 meter.

Piping shall be insulated as ensure a thermal loss that is less than or equal to 7 W/mK with a temperature difference of 30 degrees between the exterior and interior of the pipe.

Hot water – Thermostatic valve (1 point)

Scoping: Consider only if the store has a hot water system.

A thermostatic valve limiting tap temperature to 40°C shall be installed between the heat generator and hot water taps.

Hot water – Production system (2 points)

Scoping: Consider only if the store has a hot water production system (boiler, furnace etc.).

Hot water exploits either:

- The space heating system during the heating season, heating sanitary water with a heat exchanger in parallel to fan coils fed by the heating network (see Exhibit 14)
- A CO_2 heat pump boiler instead of an electric boiler

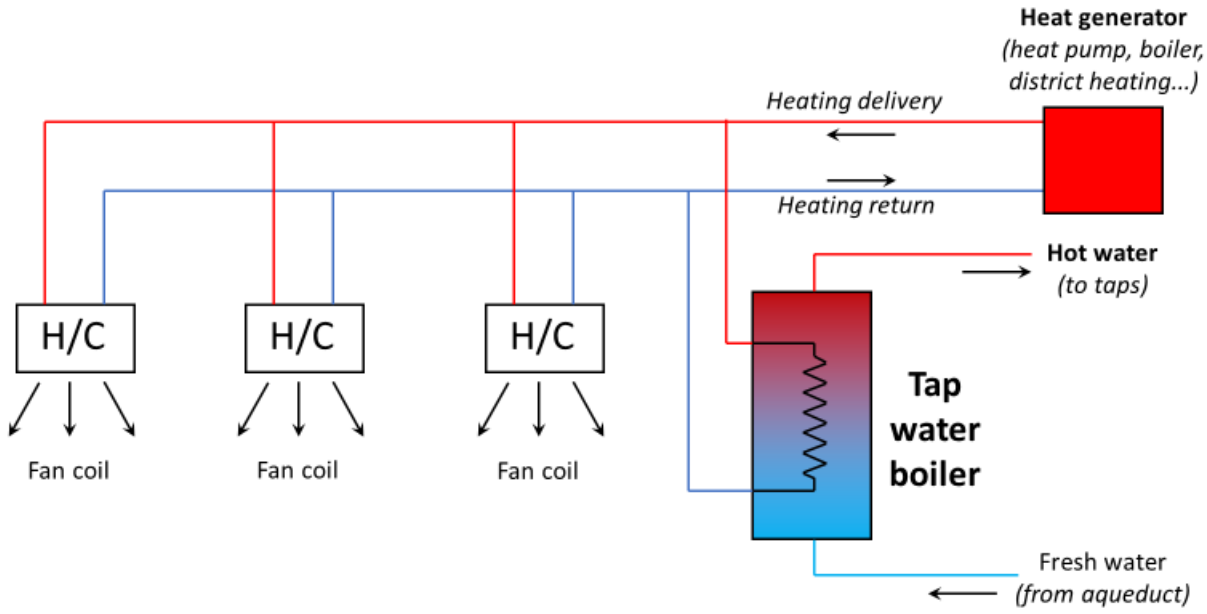


Exhibit 14: Hot water boiler fed by the space heating system

SP-2.7: Control and management of thermal systems (up to 8 points)

Zoning (1 point)

Scoping: Not relevant in all stores having one single room

Provide independent regulation for all rooms/volumes of the store (i.e. sale rooms and back offices).

Temperature management (up to 7 points)

Scoping: Not relevant when temperature is regulated by the landlord/mall

Temperature is managed via:

- A remotely manageable system or BMS (**0.5 points**)[7]
- A locally manageable system or BMS (**0.5 points**)
- Temperature measurement in each zone (**1 point**)
- Timers for each zone switching heating and cooling off out of opening hours (**1 point**)
- Intelligent algorithms assess ideal thermal comfort for customers and set temperature in sale areas (**2 points**)
- Store entrance air curtain is controlled by a movement sensor (**1 point**)
- Irregularly occupied back of house rooms have no heating and cooling, or have it controlled by presence sensors regulating temperature between a stand-by temperature of 15°C or less in the heating season to 30° C or more in the cooling season (**1 point**)

[7] These points can sum up, and usually do: A remotely manageable system is also locally manageable; it allows temperature control via external and internal temperature data and allows defining setpoints and using intelligent algorithms.

SP-3. VENTILATION

Scoping: In general, these features are relevant only when the shop controls ventilation (this is not common in SIS and does not occur in department stores).

SP-3.1: Energy efficient ventilation system (up to 2 points)

Energy recovery (1.5 points)

Scoping: Out of scope if SIS are in department stores. Also, out of scope when the location is in ASHRAE 1, 2A and 3A climate zones (tropical to subtropical humid climates)

Implement a bypassable heat recovery system pre-heating/cooling air, with a minimum recovery rate of 75%. Use the tool at Appendix 1.2 to determine the climate zone of the project.

Insulation (0.5 points)

All supply and return ducts installed as part of a cooling or heating air distribution system shall be thermally insulated in accordance with Table 6.8.2A and 6.8.2B of ASHRAE 90.1:2010.

SP-3.2: Airtight ventilation system (up to 1.5 points)

Airtightness class of ventilation networks (0.5 points)

All transverse and longitudinal junctions are sealed with joint sealants (such as joint compounds and adhesive tapes). Seals must be pre-integrated to duct when possible.

Commissioning (1 point)

Introduce a commissioning process and procedures for ventilation systems that ensure the performance of the completed network respects the airtightness class of ventilation networks.

SP-3.3: Ventilation control (up to 4.5 points)

Consider only if the store has a ventilation system or part of one.

Airflow (1 point)

Meet the minimum requirements of the applicable local regulations for outdoor air ventilation rates.

Ventilation shall be scheduled to start 1 hour before beginning operations and stop 30 minutes after ending operations.

Ventilation controls (3.5 points)

The ventilation system has VSD-driven fans and is controlled (directly or via the BMS) by a sensor monitoring CO_2, humidity and VOC concentrations in internal air.

SP-4. METERING AND AUTOMATION

SP-4.1: Metering and monitoring (3.5 points)

Scoping: Consider according to the size of the store. This measure proposes a metering scheme based on the main energy consumption of the store. The metering system can include only one meter for stores with just lights and cashier (like department stores, corner stores and most SIS), and can be more complicated in directly operated stores (DOS) and large flagship stores. Consider only the energy directly used by the Kering portion of the shop.

Install smart meters, to measure energy use in the store, at least 1 meter per energy type (electricity, natural gas, if present, and chilled/hot water if cooling/heat is supplied this way). Meters shall measure consumption for any type of use that exceeds 10% of total energy consumption, in particular:

- Lighting (**0.5 points**)
- Cooling and heating (**0.5 points**)*, out of scope if not controlled within the Kering shop*
- Ventilation (**0.5 points**)*, out of scope if not controlled within the Kering shop*
- Hot sanitary water (**0.5 points**)*, out of scope if not present or controlled within the Kering shop*
- IT systems (**0.5 points**)*, out of scope if not present within the Kering shop*
- Any other end use needed to achieve 90% of design energy use (**0.5 points**, automatically earned if the sum of the above exceeds 90%)
- Water (**0.5 points**)

Metering intervals shall be of 30 minutes or less.

Metering is done separately floor by floor, and separately for the sale area and for the back office/storage area.The metered data are sent and collected to an electronic platform accessible onsite and offsite.

SP-4.2: Building Management System (2 points)

Scoping: Only for DOS above 400 m^2

Install a BMS for the store. The BMS shall be:

- Web-based or web-connected, potentially managing all Brand or Kering sites.
- Open, allowing the connection of meters, sensors and modules from any supplier through clear communication and connection specifications.

In stores, some of the indicated systems are not present and the system can be simpler (see Exhibit 15).

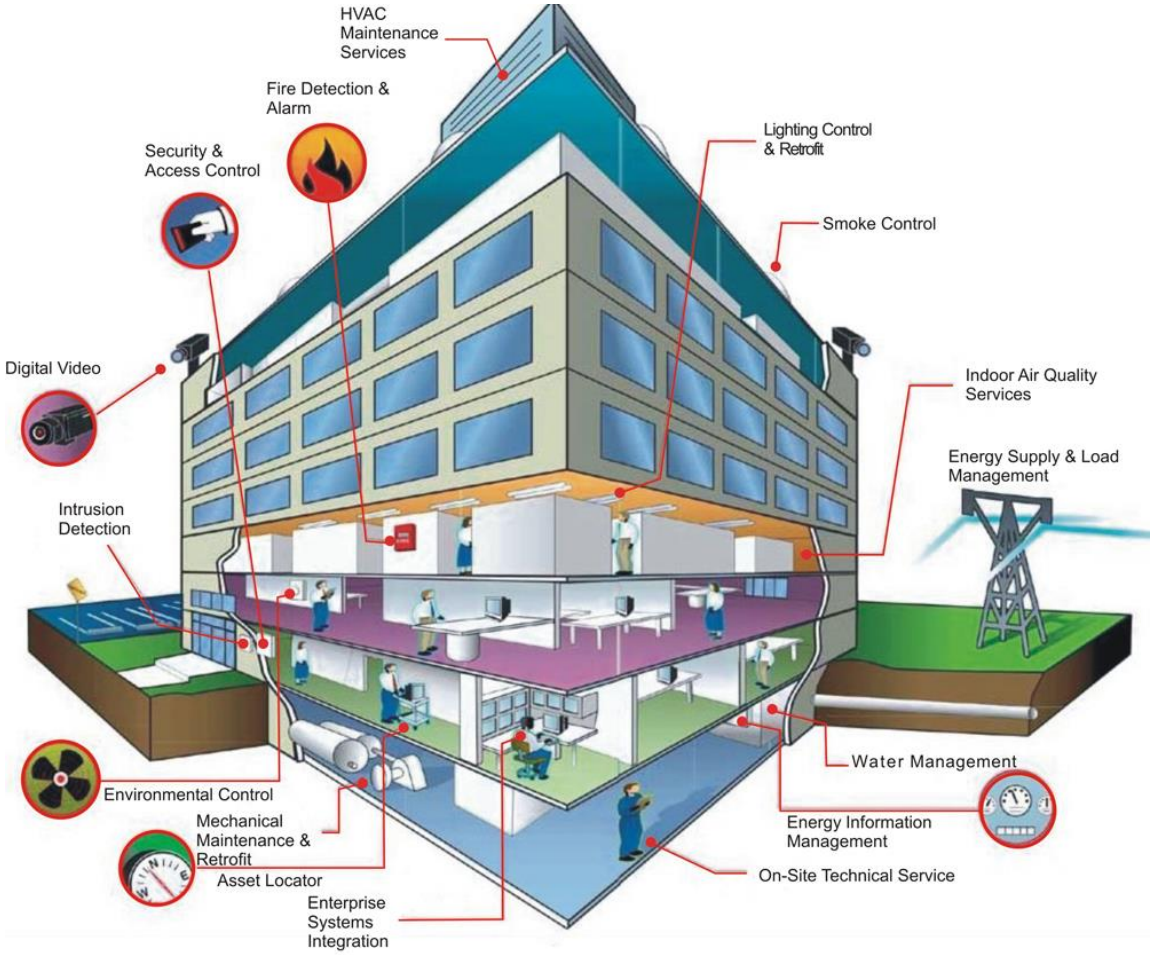


Exhibit 15: Typical features of a building management system

SP-4.3: Air quality monitoring (1.5 points)

Scoping: Not relevant in corner stores and department stores, or where the landlord has installed the monitoring system.

Install at least one air quality smart sensor to measure and transmit air quality data in the sales area. The sensor(s) must measure concentration of dust, VOCs, carbon dioxide, relative humidity as well as temperature (unless temperature data are recorded elsewhere).

If possible, a thermometer measuring external temperature also must be installed unless the local value can be taken by a web service.

The Energy Management System (EMS)/BMS shall also manage air quality data and be able to provide alarms for exceedances.

SP-5. PLUMBING

SP-5.1: Indoor water efficient equipment (up to 2.5 points)

Scoping: Consider only if the store uses water.

Ensure that water pressure does not exceed 3 Bar. If it does exceed 3 Bar, install a water pressure regulator.

The maximum flow recommendations for this level are the following (1 point each, maximum 4 points achievable):

- Water closets for employees: 2/4 litres per minute (L/min) if using potable water, no limit if using non-purified water (**0.5 points**)
- Water closets for customers: 3/4.5 L/min if using potable water, no limit if using non-purified water (**0.5 points**)
- Urinals: 0.8 litre (L) per flush if using potable water, no limit if using non- purified water (**0.5 points**)
- Lavatory faucets: 1.35 L/min with infrared detection at least for employees (**0.5 points**)
- Kitchen sink faucets: 4.5 L/min (**0.25 points**)
- Showers: 5 L/min (**0.25 points**)

SP-5.2: non-purified water use (1.5 points)

Scoping: Consider only if the store uses water.

Non-purified water (river water, well water or rainwater) is used for non-drinking uses:

- For toilet flushes and urinals (**1 points**)
- For a tap, clearly indicate in local language and English that water is not potable and should only be used for cleaning purposes (**0.5 points**, *not relevant if local legislation explicitly prohibits this*)

SP-6. WASTE AND CIRCULAR USE OF MATERIALS

SP-6.1: Recyclable waste selection and separation – Identification & inventory (0.5 points)

Scoping: Consider only if the store manages waste (i.e. normally not for corner stores and department stores, partial for SIS).

Identification and inventorying serve to assess the quantities of waste by type produced during operation, and to assess what is practically recyclable at the end of the project or in the short-term perspective (1 to 5 years).

If waste is totally or partly managed by the landlord/mall operator, both must be assessed to determine the best possible options. A mall may have already recycling practices in place, or plan to develop them in the short term.

SP-6.2: Recyclable waste selection and separation – Reuse (0.5 points)

Scoping: Consider only if the store manages waste (i.e. normally not corner stores and department stores).

Transportation packaging shall be reused whenever possible (for B2B transfers for example). Areas to store transportation packaging shall be defined at the design stage.

SP-6.3: Recyclable waste selection and separation – Recycling (up to 7 points)

Scoping: Consider only if the store manages waste (i.e. normally not corners and department stores).

Waste bins location and indications (up to 2.5 points)

Areas designed for storing waste fractions (recyclable and not) shall be defined at the design stage, following this organization:

- Sales area – or close to it: paper, plastics and residual fraction (**0.2 points**)
- Kitchen/break area: paper, plastics, organic, glass and residual fraction (**0.2 points**)
- Printer area: paper, printer cartridges, batteries and residual fraction (**0.2 points**)
- Bathrooms and toilets: paper and residual fraction (**0.2 points**)
- Storage area: paper, paperboard, plastic films and generic waste (**0.2 points**)
- Bins and colour code: the materials to dispose into each bin are clearly indicated on the bin. Each fraction is marked by the colour of the bin (or of its top) which is, where possible, the same used locally for selective waste collection (e.g. in Paris yellow baskets are used for paper, plastic packaging and metals, white baskets are used for glass and another baskets for the rest; in Milan green baskets are used for glass, yellow ones for metals and plastics, brown ones for organic (food) waste, white ones for paper and cardboard and another one for the rest) (**0.5 points**)
- The recycling of waste follows at least the same grouping of materials and the same colour codes of local municipal waste collection (**1 point**)

Waste recycling (up to 4.5 points)

Scoping: Consider only if the store manages waste (i.e. normally not for corners and department stores).

The following waste fractions are collected for recycling:

- Paper and paperboard, together or separately (**1 point**)
- Plastic packaging and consumables (separately or together with metals and/or glass) (**0.5 points**)
- Metals (separately or together with plastics and/or glass) (**0.5 points**)
- Glass (separately or together with metals and/or plastics) (**0.5 points**)
- Organic waste (**0.5 points**)
- Hangers (**0.5 points**) *(not relevant for jewellery and watch stores)*
- Batteries (**0.5 points**)
- Printer cartridges (**0.5 points**)

SP-7. ELECTRIC APPLIANCES

SP-7.1: Energy efficient equipment (up to 2 points)

Energy efficiency labels (1 points)

Scoping: always consider

Ninety percent of appliances (in number) shall be Energy Star labelled (excluding lighting): office equipment, electronics and commercial food service equipment (i.e. refrigerators, computers, sound systems, flat screens and dishwaters), or shall comply with the highest level for EU Energy label (A, A+, A++, A+++ depending on the type of electrical appliances) where this is available.

Screens (1 points)

Scoping: Consider only if screens are installed.

Where screens are installed, more than 70% shall be organic light-emitting diode (OLED), the rest shall be LED.

SP-8. MATERIALS

SP-8.1 Low emitting materials (up to 3 points)

Exhibit 16 indicates certifications that are accepted (any of the listed ones) to warrant that VOC and formaldehyde emission levels are compliant with the following requirements:

Finishing materials (1 point)

Scoping: may not be relevant for several corner stores and department stores

More than 90% of interior surface materials shall respect the following requirements:

- VOC emissions shall be less than 1,000 micrograms per cubic meter (µg/m^3)
- Formaldehyde emissions shall be less than 10 µg/m^3

Materials likely to cause VOC and formaldehyde emissions include paints, glues, wood, synthetics, and textile lining materials for ceilings, walls and floors (product certifications that comply with these requirements on the following page).

Paints (1 point)

Scoping: always consider

- Paints shall not contain VOCs (detailed in the Safety Data Sheet [SDS])
- Paints used shall be fungal and algal resistant in wet areas (e.g. bathrooms, kitchens and utility rooms)

Furniture (1 point)

Scoping: always consider

More than 50% (in cost) of furniture shall not emit VOCs or formaldehyde (i.e. metal elements) and/or have the Greenguard label.

Product Type	*Approved Alternative VOC Scheme*
Interior paints and coatings*	- Eco-INSTITUT-Label (2015 version) - EMICODE EC 1 PLUS (2015 version) - EMICODE EC 1 (2015 version) - EMICODE EC 2 (2015 version) - GREENGUARD Certified (2013 version) - GREENGUARD Gold (2013 version) - Indoor Advantage™ Gold – Building Materials (2014 version) - Indoor Air Comfort® (2015 version) - Indoor Air Comfort Gold® (2015 version) - M1 Emission Classification of Building Materials (2015 version) - Byggvarubedömningen (2011 version) - French VOC emissions labelling (2012 version - Finnish Emission Classification of Building Materials v22.1.2015
Wood-based products	- Eco-INSTITUT-Label (2015 version) - GREENGUARD Certified (2013 version) - GREENGUARD Gold (2013 version) - Indoor Advantage™ Gold – Building Materials (2014 version) - Indoor Air Comfort® (2015 version) - Indoor Air Comfort Gold® (2015 version) - M1 Emission Classification of Building Materials (2015 version) - Blue Angel – RAL UZ 76 - Byggvarubedömningen (2011 version) - French VOC emissions labelling (2012 version - Finnish Emission Classification of Building Materials v22.1.2015
Flooring materials (including floor levelling compounds and resin flooring)	- Eco-INSTITUT-Label (2015 version) - EMICODE EC 1 PLUS (2015 version) - FloorScore® (2014 version) - GREENGUARD Certified (2013 version) - GREENGUARD Gold (2013 version) - Indoor Air Comfort® (2015 version) - Indoor Air Comfort Gold® (2015 version) - M1 Emission Classification of Building Materials (2015 version) - Blue Angel – RAL UZ 113, UZ 120, UZ 128 - Byggvarubedömningen (2011 version) - French VOC emissions labelling (2012 version - Finnish Emission Classification of Building Materials v22.1.2015
Ceiling, wall and acoustic and thermal insulation materials	- Eco-INSTITUT-Label (2015 version) - GREENGUARD Certified (2013 version) - GREENGUARD Gold (2013 version) - Indoor Advantage™ Gold – Building Materials (2014 version) - Indoor Air Comfort® (2015 version) - Indoor Air Comfort Gold® (2015 version) - M1 Emission Classification of Building Materials (2015 version) - Blue Angel – RAL UZ 132, UZ 156 - Byggvarubedömningen (2011 version) - French VOC emissions labelling (2012 version

Product Type	*Approved Alternative VOC Scheme*
	- Finnish Emission Classification of Building Materials v22.1.2015
Interior adhesives and sealants (including flooring adhesives)	- Eco-INSTITUT-Label (2015 version) - EMICODE EC 1 PLUS (2015 version) - EMICODE EC 1 (2015 version) - EMICODE EC 2 (2015 version) - FloorScore® (2014 version) - GREENGUARD Certified (2013 version) - GREENGUARD Gold (2013 version) - Indoor Advantage™ Gold – Building Materials (2014 version) - Indoor Air Comfort® (2015 version) - Indoor Air Comfort Gold® (2015 version) - M1 Emission Classification of Building Materials (2015 version) - GUT Test Criteria 2011 - Byggvarubedömningen (2011 version) - French VOC emissions labelling (2012 version - Finnish Emission Classification of Building Materials v22.1.2015

Exhibit 16: Accepted product certifications are compliant with the BREEAM 2016 or LEEDv4 Certifications

SP-8.2 Sustainable and circular materials (up to 1.5 points)

This topic considers different subtopics in each level that contribute to the total score. If the store fulfils some of them at different levels, sum only the relevant subtopics to get the right score.

Bio-based materials (0.5 points)

Scoping: Always consider.

Use at least 1 bulky construction material or the finishing product should be made of bio-based materials (e.g. a matte paint based on natural plant binders for walls and ceilings of low humidity rooms)

Recycled materials (1 point)

Use at least:

- 20% in weight of bulky construction materials of recycled origin, (e.g. acoustic insulation made of recycled textile, gypsum board from recycled materials, use of recycled materials as inerts in mortar and screed) *(not relevant for corner stores, department stores and often in SIS)*
- One finishing product made of recycled material (i.e. recycled carpets) *(normally not relevant for corner stores and department stores)*
- 30% of furniture weight made of recycled materials (e.g. Masonite and other recycled wood materials, padding upcycled materials…) *(always doable)*

SP-8.3 Responsible sourcing of materials (up to 5.5 points)

Wood (1.5 points)

Scoping: to consider if the store uses wood materials

All wood and wood derived products must be legally harvested and traded. At least 90% (in weight) of wood derived materials shall be FSC or PEFC certified or from recycled materials.

Leather (1 point)

Scoping: to consider if the store uses leather

At least 90% (in weight) of leather shall comply with Kering Standard on leather.

Fabrics (1 point)

Scoping: to consider if the store uses textiles

At least 90% (in weight) of fabric finishing materials shall comply with Kering Standard on textiles.

Locally sourced structural materials (1 point)

Scoping: only for DOS

More than 40% (in cost) of bulky building material comes from local sources.

Locally sourced fit-out materials (0.5 points)

More than 10% (in cost) of materials comes from local sources (country, continent accepted from some exceptions).

Decorative stone (e.g. marble, granite) and timber materials (0.5 points)

Scoping: to consider if the store uses stone

Stone is sourced from quarries with low environmental stress.

SP 8.4 Use of low toxicity products (1 point)

Identify the potentially polluting products used at the construction site. The main categories of products that are more likely to contain polluting or toxic substances are:

- Sealants
- Paints and varnishes
- Stains
- Foams
- Glues

Choose low toxicity products, such as products without or with low classification hazard in their SDS (an example excerpt of a SDS is provided in Exhibit 18). Exhibit 17 shows symbols to take particular notice of in the SDSs of the used products.

Banned

To be avoided

Exhibit 17: Symbols of substances banned and to be avoided in the safety data sheets of products used

2. Hazards identification

GHS Classification

Flammable liquids , Category 4	H227: Combustible liquid.
Respiratory sensitization , Category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization , Category 1	H317: May cause an allergic skin reaction.
Carcinogenicity , Category 1A	H350: May cause cancer.

GHS Label element

Hazard pictograms :

Signal Word : Danger

Exhibit 18: Excerpt from a safety data sheet

SP-9. CONSTRUCTION

SP-9.1: Avoidance of soil, water and air pollution (up to 3 points)

Scoping: to consider only for DOS

- For existing elements, identify hazardous content products: asbestos, lead, PCB/PCT16, ensure a decontamination of the space with an adapted treatment of associated wastes (**0.5 points**)
- For existing elements where refrigerant is present, set up a collect procedure with a specialized company and ensure adapted and regulatory treatment of those products (**0.5 points**)
- For any product covered by a SDS, observe the instructions on the sheet (**0.5 points**)
- Ensure proper treatment of waste (such as, prohibition of wild deposits and specific treatment for hazardous wastes) (**0.5 points**)
- Ensure proper treatment of effluent: ban pollutant discharges into the sewerage networks (**0.5 points**)
- Require filtered aspiration on each grinder, power saws, and other equipment that produces dust, to reduce dispersion of dust (**0.5 points**)

SP-9.2: Construction waste management plan (up to 3 points)

Scoping: to consider only for DOS, and if relevant

Diversion and recycling (up to 1.5 points)

- Establish waste diversion goals for the project by identifying at least eight materials (both structural and nonstructural) targeted for diversion (**0.5 points**)
- Specify whether materials will be separated or comingled and describe the diversion strategies planned for the project (**0.25 points**).
- Describe where the material will be taken and how the recycling facility will process the material (**0.25 points**).
- Recycle and/or recovery of non-hazardous construction and demolition debris: at least 50% in weight (**0.5 points**).

Provide a final report detailing all major waste streams generated, including disposal and diversion rates.

Reuse (1.5 points)

- Resell/donate at least 30% (in weight) of the used furniture and finishing material instead of managing it as waste (**1 point**)
- Reuse at least 30% of construction debris (**0.5 point**)

SP-9.3: Respect of residents and neighborhood (up to 2 points)

Scoping: to consider only for DOS, and if relevant

Consider only if construction is managed by Kering and not by the landlord.

- Unobstructed and safe footpaths (**0.25 points**)
- Protection of the public from site activities (e.g. vehicle movement and debris) (**0.25 points**)
- Communication, notification and accessible information concerning site activities (**0.25 points**)
- Maintenance and cleanliness of the perimeter and adjacent areas (**0.25 points**)
- Measure to avoid dispersion of dust on the public area and private neighbourhood (**0.25 points**)
- Measure to avoid noise before 8:00 a.m. and after 7:00 p.m. (**0.25 points**)
- Site image, including visually appropriate hoardings (**0.25 points**)
- Turn off lights at night and make sure they are not directed towards residents (**0.25 points**)

SP-9.4: Socially responsible contracts (1 point)

Scoping: Relevant only if construction is managed by Kering and not by the landlord, and only if local legislation regulates and makes accountable the employment within social and professional insertion programs.

Minimum amount of insertion/integration hours per supplier (1 point)

Include an additional clause to contracts to promote the employment of persons in social and professional insertion (or integration) programs. These programs help people in need to re-enter the social and professional world by the means of coaching and support to learn and understand the social norms and rules, which helps them become independent of aids.

Ensure follow-up of the insertion clause and guarantee the achievement of a certain number of hours of insertion during the construction site, among the total number of manpower hours: at least 5%.

Each supplier involved in the construction ensuring employment of people within social and professional insertion (or integration) programs brings one point.

SP-10. GREEN POWER AND CARBON OFFSETS

SP-10.1 Green power and carbon offsets (1 point)

Scoping: Relevant only if construction is managed by Kering

Record electricity used at the construction yard during construction (**1 point**)

Kering will then purchase green energy certificates (GOs/RECs/iRECs) corresponding to the amount of electricity used during construction, or buy carbon offsets to compensate carbon emissions arising from the used electricity (0.5 points)

In power grids electricity from all sources is mixed, and electrons are physically indistinguishable. While it is impossible to get energy from a green plant only, but it is possible to buy it on a mass balance through green energy certificates. Green energy certificates are government, third- or second- party certified documents issued by renewable energy sources for the amount of energy produced.

Normally, Kering buys green energy contracts from utilities, so that the utility buys on the market and redeems certificates for the amount of energy corresponding to Kering's consumption. Kering can also buy electricity from a utility and certificates from another supplier.

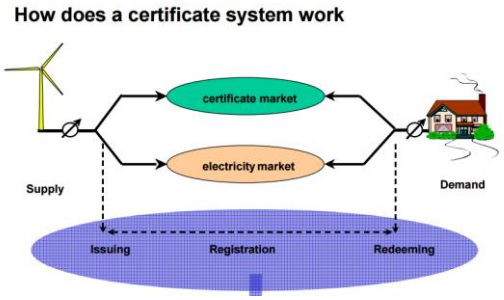


Exhibit 19: How Green Energy Certificates Work

SP-11. BUILDING ENVELOPE

The envelope insulation is crucial in determining energy consumption for heating and air conditioning, which are the largest energy users in stores with efficient LED lighting. Its optimal features depend however on the climatic zone. Use the tool "Tool Climatic zones.xlsx" or an official ASHRAE reference to determine the climatic zone of the project.

SP-11.1: Envelope thermal insulation – Opaque surfaces (up to 5 points)

Roofs

Scoping: Not for corner stores nor department stores, and only if the store has ceilings towards external or unheated spaces.

Optimal roofs insulation (1.5 points)

The average thermal transmittance of the ceiling/roof package (for the sole ceiling surface towards external spaces) is below the following thresholds (in W/m^2K), depending on the climatic zone:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Optimal (**1.5 point**)	0.134	0.11	0.11	0.11	0.11	0.11	0.11

Mean roofs insulation (0.75 points)

Where the store ceilings face the roof or an unheated part of the building a layer of some centimetres of insulating material (natural material, synthetic foam or mineral wool with barrier to humidity diffusion) is laid along the surface between the ceiling or the false ceiling or, in back of house, directly along the ceiling (in this case, a hard finishing in gypsum board or other hard material is needed).

Walls

Scoping: Not for corner stores nor department stores, and only if the store has walls towards external or unheated spaces.

Optimal walls insulation (2 points)

The average thermal transmittance of the opaque walls (for the sole walls' surface towards external spaces) is below the following thresholds (in W/m^2K), depending on the climatic zone:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Optimal (**2 points**)	1.153	0.3	0.25	0.21	0.18	0.16	0.14

Mean walls insulation (1 point)

Where the store walls face the roof or an unheated part of the building a layer of some centimetres of insulating material (natural material, synthetic foam or mineral wool with barrier to humidity diffusion) is laid along the surface between the wall and the counterwall filling every empty space (see Exhibit 20) or, in back of house, directly along the wall (in this case, a hard finishing in gypsum board or other hard material is needed).

Exhibit 20: Insulating layer behind counterwall

Floors

Optimal floors insulation (1.5 points)

Scoping: Not for corner stores nor department stores, and only if the store has floors towards the ground or unheated spaces.

The average thermal transmittance of floors (for the sole floor surface towards the ground or unheated spaces) is below the following thresholds (in W/m^2K), depending on the climatic zone:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Optimal (**1.5 points**)	0.73	0.24	0.24	0.2	0.17	0.15	0.15

Mean floors insulation (0.75 points)

Where the store walls face the roof or an unheated part of the building a layer of some centimetres of insulating material (natural material, synthetic foam or mineral wool with barriers to humidity diffusion) is laid along the surface between the floor structure and the screed/finishing (or between the floor structure and the floating pavement).

SP-11.2: Envelope thermal insulation - windows (up to 4 points)

Small size windows (2 points)

Scoping: Not for corner stores nor department stores, and only if the store has windows of standard size (up to 140 x 228 cm).

The average thermal transmittance of the windows and glazed surfaces (for the sole ones towards external spaces) is below the following thresholds (in W/m^2K), depending on the climatic zone:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Thermal transmittance	3.41	2.13	1.85	1.56	1.56	1.56	1.28

Windows having no commercial purpose (e.g. windows at upper floors) must have:

- low emissivity glasses
- Glass Solar factor: Fs ≤ 0.4

Large size windows (2 points)

Scoping: Not for corner stores nor department stores, and only if the store has street level, large windows

The average thermal transmittance of the windows and glazed surfaces (for the sole ones towards external spaces) is below the following thresholds (in W/m^2K), depending on the climatic zone:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Thermal transmittance	3.41	2.13	1.85	1.56	1.56	1.56	1.28

SP-11.3: Barriers to humidity diffusion (1 point)

Scoping: Not for corner stores nor department stores. Not in desertic climates, unless the local water table is shallow

Walls and pavements in basement and underground floors, as well as at ground floors up to 1 meter above ground level, have a continuous damp barrier to prevent rising damp to cause the formation of molds and potentially the damage of adjacent materials.

Insulating materials used have a high vapour resistance or a condensation damp break on their surface facing the store interiors.

SP-12. DESIGN AND CONSTRUCTION MANAGEMENT

SP-12.1: Dynamic energy simulation (up to 6 points, plus BONUS)

Scope: Consider only for places where heating and cooling is managed by Kering.

Develop a model of the store and perform a dynamic energy simulation compliant with ASHRAE 90.1-2010 to assess energy consumption of the project during normal use and assess the total yearly energy consumption per type of use. Set up and run the simulation at the preliminary project stage, then fine tune it and run it again once the project is finalized. Use this simulation to drive design of insulation, HVAC and lighting.

The simulation provides the following score, depending on the result:

- If the simulated total annual consumption of final energy (electricity + fuels) is below 200 kilowatt-hours (kWh)/m^2 year: **2 points + BONUS**: the highest between the design score and 25% of the maximum achievable score for all topics treated in SP-1.1, SP-1.2, SP-1.3, SP-1.4, SP-2.1, SP-2.2, SP-2.6, SP-2.7, SP-3.1, SP-3.3, SP-11.1 and SP-11.2 if falling within the scope of the store.
- If the simulated total annual consumption of final energy (electricity + fuels) is below 120 kWh/m^2 year: **4 points + BONUS**: the highest between the design score and 50% of the maximum achievable score for all topics treated in SP-1.1, SP-1.2, SP-1.3, SP-1.4, SP-2.1, SP-2.2, SP-2.6, SP-2.7, SP-3.1, SP-3.3, SP-11.1 and SP-11.2 if falling within the scope of the store..
- If the simulated total annual consumption of final energy (electricity + fuels) is below 80 kWh/m^2 year: **2 points + BONUS**: the highest between the design score and 100% of the maximum achievable score for all topics treated in SP-1.1, SP-1.2, SP-1.3, SP-1.4, SP-2.1, SP-2.2, SP-2.6, SP-2.7, SP-3.1, SP-3.3, SP-11.1 and SP-11.2, if falling within the scope of the store..

SP-12.2: Documentation for facility management – O&M Manual (up to 4 points)

Scoping: Not for department and corner stores.

The following documentation is kept, in electronic and in paper form, at the store premises and at the store planning department. Appendix 1.6 provides a template of O&M manual, the basic document to allow keeping the store in perfect operation conditions.

User guide for Store managers & employees (1 point)

A simple user guide explains how to correctly use, clean and maintain all the systems and equipment is realized and is provided to the store managers. It also indicates the specifications for cleaning and managing waste.

O&M Manual – Electric Systems (1 point)

An O&M Manual is produced, indicating the list of all electric equipment and of lights installed in the store. For each type of equipment, the manual indicates:

- The cleaning mode and frequency
- The preventive and predictive maintenance operations to be done on it.

The manual also contains information on how to use and maintain the meters and the automation related to electric systems, and as-built schemes and maps of these systems.

The manual is produced by the designers of the store in case of new realization or refurbishment of a store by requiring it contractually, or by an external specialized technician in case it is produced for an existing and operating stores.

O&M Manual – Mechanical Systems (1.5 points)

An O&M Manual is produced, indicating the list of all HVAC equipment and all plumbing systems in the store. For each type of equipment, the manual indicates:

- The cleaning mode and frequency
- The preventive and predictive maintenance operations to be done on it.

The manual also contains as-built schemes and maps of the mechanical systems.

The manual also contains information on how to use and maintain the meters and the automation related to mechanical system, and as-built schemes and maps of these systems.

The manual is produced by the designers of the store in case of new realization or refurbishment of a store by requiring it contractually, or by an external specialized technician in case it is produced for an existing and operating stores.

O&M Manual – Plumbing (0.5 points)

An O&M Manual is produced, indicating the list of all HVAC equipment and all plumbing systems in the store. For each type of equipment, the manual indicates:

- The cleaning mode and frequency
- The preventive and predictive maintenance operations to be done on it.

The manual also contains as-built schemes and maps of plumbing systems.

The manual also contains information on how to use and maintain the meters and the automation related to plumbing systems, and as-built schemes and maps of these systems.

The manual is produced by the designers of the store in case of new realization or refurbishment of a store by requiring it contractually, or by an external specialized technician in case it is produced for an existing and operating store.

SP-12.3: Commissioning (3 points)

Not for department and corner stores.

Fundamental Commissioning (2 points)

Complete the following commissioning (Cx) process activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies, in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1–2007 for HVAC&R Systems, as they relate to energy, water, indoor environmental quality, and durability.

1) Requirements for exterior enclosures are limited to inclusion in the owner's project requirements (OPR), written by the Store Planner, and basis of design (BOD) written by the designers and collected by the architect, as well as the review of the OPR, BOD and project design. NIBS Guideline 3-2012 for Exterior Enclosures provides additional guidance.
   - Develop the OPR.
   - Develop a BOD.
2) By the end of the design development phase, engage a commissioning authority with the following qualifications.
   - The CxA must have documented commissioning process experience on at least two building projects with a similar scope of work. The experience must extend from early design phase through at least 10 months of occupancy;
   - The CxA may be a qualified employee of the owner, an independent consultant, or an employee of the design or construction firm who is not part of the project's design or construction team, or a disinterested subcontractor of the design or construction team.
   - For projects smaller than 20,000 square feet (1,860 square meters), the CxA may be a qualified member of the design or construction team. In all cases, the CxA must report his or her findings directly to the owner.
3) The commissioning authority (CxA) must do the following:
   - Review the OPR, BOD, and project design.
   - Develop and implement a Cx plan.
   - Confirm incorporation of Cx requirements into the construction documents.
   - Develop construction checklists.
   - Develop a system test procedure.
   - Verify system test execution.
   - Maintain an issues and benefits log throughout the Cx process.
   - Prepare a final Cx process report.
   - Document all findings and recommendations and report directly to the owner throughout the process.
4) The review of the exterior enclosure design may be performed by a qualified member of the design or construction team (or an employee of that firm) who is not directly responsible for design of the building envelope.

Enhanced Commissioning (1 points)

Projects must complete the following commissioning process (CxP) activities for mechanical, electrical, domestic hot water, and renewable energy systems and assemblies in accordance with ASHRAE Guideline 0–2005 and ASHRAE Guideline 1.1–2007 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability.

- Review contractor submittals.
- Include systems manual requirements in construction documents.
- Include operator and occupant training requirements in construction documents.
- Verify systems manual updates and delivery.
- Verify operator and occupant training delivery and effectiveness.
- Verify seasonal testing.
- Review building operations 10 months after substantial completion.
- Develop an on-going commissioning plan.

APPENDIX SP-1. TOOLS, TEMPLATES, CLAUSES AND SPECIFICATIONS FOR IMPLEMENTING THE KERING STANDARD FOR STORE PLANNING

List of tools, templates, clauses and specifications

Appendix 1.1: Score card for store planning and construction (excel tool)

Appendix 1.2: Tool to determine the climate zone of the project (excel tool)

Appendix 1.3: Template of letter of to the supplier (Architect, General Contractor and their suppliers) to invite them to the compliance with the Kering Standard for Store Planning.

Appendix 1.4: Template of commitment letter for the supplier (Architect, General Contractor and their suppliers).

Appendix 1.5: Clauses and Specifications to the Contract with a supplier

Appendix 1.6: Template of Operation and Maintenance Manual

Appendix SP-1.1 – Scoring tool for store planning and construction (Excel tool)

This tool permits to assess the project alignment against the Kering standard for store planning and construction. It consists of 5 spreadsheets:

- The cover sheet;

- The sheet "**Store General data"**, requesting the user to indicate the main data of the project (date, brand, project name, address, country, store type, if the store is a new project or a renovation, surface, climate zone, main responsibles, physical and/or virtual location of the storage of data and documents of the project);

- The sheet "**Store Planning_tool**", the main one. It touches at each row all the titles of issues, topics and subtopics coherently with this document.
  The table resembles the ones used for assessing the score in LEED projects. The first column proposes a drop-down menu on each line where a choice can be done, the following ones report the points obtained by the project, the pending points, the maximum achievable within project's scope, and the maximum points assigned in general by the standard (including those non in project scope). Finally, columns F and G report the issue/topic/subtopic title.
  For each choice that may attribute points or not or be out of scope, the user can choose among four possibilities, i.e. "Yes", "No", "Out of Scope" or "Pending":
    - "Yes" means that the requirement is relevant to the project and satisfied by the design and construction choices done; when the user types "yes", the related score is considered within the maximum achievable score and attributed to the project,
    - "No" means that the requirement is relevant to the project but not satisfied by the design and construction choices done; when the user types "no", the related score is considered within the maximum achievable score and not attributed to the project,
    - "Out of scope" means that the requirement is not relevant to the project (e.g. ventilation in an open airport store, or waste management in a department store)
    - "Pending" means that a choice on the requirement has not yet been taken, as not yet clear at the stage of development of the project. In terms of score, pending points are considered as "No".

  The user only has to make his choices in column A. The "Pending" choice is meant as a provisional one during project development. The file related to a project is expected to evolve from the project beginning to its end with the number of "Pending" points gradually becoming "Yes", "No" or in a few cases "Out of Scope" (as described in the document introduction, deciding whether something is in scope or out of scope should be the first thing to clarify).
  In order to ease compilation, the rows where a choice has to be done are written with red characters, whereas the other are in black.

- The sheet "**rating and summary**" provides a summary of what is achieved by the project and provides the indication of the obtained rating.
  Nothing must be written here, it is a simple summary providing an overview of how the project scores, how much is still pending and where are, issue by issue, the areas where the project is closer to the best possible result in scope and those where it is weaker.

- Finally, the sheet "**Contract Sheet**" reports what has to be included in contracts simply repeating the scorecard in a black and way, A4 easily printable format.

To access the tool, please click on the following link:

Store_Planning_Scoring_Tool%20v200408.xls

Appendix SP-1.2 – Tool to determine the climate zone of the project (Excel tool)

This tool permits to get the indication of the climatic zone of the project. This information is very important as climate determines a large part of the store energy consumption and several design choices, and due to this several specifications included in the Kering standard for store planning refer explicitly to the climate zone. The reference used is the ASHRAE classification of climates. To access the tool, please click on the following link in the electronic version of this document. The first spreadsheet of the tool contains the instructions needed to use it.

Climate_Zones_Tool.xlsx

Appendix SP-1.3 – Template of letter of to the supplier (Architect, General Contractor, millworker and their suppliers) to invite to the compliance with the Kering Standard for Store Planning.

This letter template is meant to be used for introducing suppliers to the Kering standard on store planning and to our sustainability requirements, as well as to explain the reason why we need them to follow it. The store planning team of a project is invited to use it when first contacting the supplier or, better, (in case a tender precedes the supplier selection) when inviting a potential supplier to apply to the tender for designing or realizing the store.

(Place and Date)

Project: *(indicate the brand, name and address of the project under development)*_____

Sustainability is a long-term commitment and a major priority for *Kering Group*/*Brand*. We believe that taking the road of sustainability, in all aspects of our business, is in the best interest of the group but most importantly our clients.

This is now engraved in the group's strategy and materialized in its environmental commitments: reducing its environmental impact by 40% for 2025 in Environmental Profit & Loss (EP&L) terms and by 50% in terms of greenhouse gases (GHG) emissions.

With this in mind, *Kering* /*Brand* has developed an internal green building standard that focuses on the environmental impact of its shops. To ensure an optimized performance during their lifetime, a Standard was developed specifically for the construction, refurbishment and fit out of stores. Kering intends to systematically ask all the contractors (architectures, engineering design companies, construction companies, etc.) to commit to complying with this standard at the highest possible level in all projects of retrofitting and of new stores.

You can find attached the standard on store planning and construction, as well as a template of a letter committing to its application.

We kindly ask you to take to study this document and show us your agreement by returning this letter duly filled out and signed.

Best Regards,

(Brand Representative and Role)

Attached documents

- Standard on store planning and construction
- Kering score card on store planning and construction
- Commitment letter template for contractors.

Appendix SP-1.4 – Commitment letter for the supplier (Architect, General Contractor, millworker and their suppliers)

This letter template is meant to be used by any supplier to commit to the compliance of the project to the Kering standard at the level that is agreed with the Brand. Having a written commitment by the architect, the GC, the millworker, any other direct supplier and their subsuppliers is fundamental to get the standard followed during the project.

As indicated in the invitation letter (Appendix 1.3), this template should be shared with the supplier when inviting him to follow the Kering standard, during the tendering and/or assignment phase.

(Place and Date)

Project: *(indicate the brand, name and address of the project under development)*_____

With this letter I, __*(name and surname)*_____,

in my capacity of _*(role)*_____

and legal representative of __*(company name, registered address, role in the project)*_____

_____

hereby declare that ____*(company name)*_____commits to applying the Kering building standard, by following the requirements stated in the *Standard on store planning and construction* document that I received from Kering.

Following the project kick off with the Kering Brand, it has been agreed to follow as closely as possible all the indications included in the Standard, which bring to the specifications indicated in the agreed attached scorecard. These specifications include technical choices for the project, features of the materials and of construction techniques as well as certifications and features proper of our company and of our suppliers.

Where the scorecard indicates that a topic is still "pending", we and our Supplier commit to do our best effort in achieving the maximum possible score. Once the final decision on the topic will be taken, the topic will pass from "pending" to the chosen solution and the supply will be determined with an official change order, if needed.

As such, _*(company name)*_____

will undertake all necessary actions to implement said requirements in the scope of our activity, as detailed in the agreed scorecard, that is agreed to attach to this contract together with the Kering Standard for Store Planning and Construction main document.

Done at ……..

The legal representative

Appendix SP-1.5 – Clauses and Specifications to the Contract with a supplier

The Contract made between the Brand and any suppliers involved in the design, construction or renovation shall include as a Clause or an Article the compliance with the Kering standard for store planning and construction. The below text provides the indication on how to include the many requirements of the standard within the contract.

Article/Clause (·) - Compliance with the Kering Standard for store planning and construction

The Supplier commits to follow in the closest possible way the indications of the Kering Standard for store planning and construction, whose reference document is attached to this contract.

Specifically to the project, the parts agreed that some of the indication of the standard will be followed, some of are not relevant, a few cannot be followed and for some of them it is not yet possible to decide at the time of the signature.

with reference to the attached scorecard, the Parts agree that:

- The supplier will strictly comply with the features and topics for which the scorecard indicates “yes”,
- The supplier will not comply with the with the features and topics for which the scorecard indicates “out of scope”, as not relevant within the project,
- The supplier will not comply with the with the features and topics for which the scorecard indicates “no”, as not doable due to clarified obstacles
- The supplier will do its best efforts to comply with the features indicated as “pending”, as it is not possible at the current status to take a decision. When this will be possible, a specific change order/change request will be agreed and issued by the Client.

The Supplier commits to include these requirements into the contract with their suppliers and sub-suppliers.

Attachments:

1. Document “Kering standard for Stores – Store planning and construction”
2. Scorecard “Kering standard Scorecard” compiled for the project.

Appendix SP-1.6 – Template of Operation and Maintenance Manual

The template is into an external file. As indicated in the template, the Manual must include the equipment inventory list, all technical schemes and as-built drawings and all the equipment data sheets, and indicate the periodic and predictive maintenance operations that must be done on each piece of equipment. The template can be followed or not, but any O&M manual shall indicate at least the information mentioned.

Kering-Template%20O&M%20Manual.doc

APPENDIX SP-2. GLOSSARY

AFUE: *Annual Fuel Utilization Efficiency*, a thermal efficiency measure of space-heating devices.

AHU: *Air Handling Unit* or air handler, in French *Centrale de Traitement d'Air (*CTA), in Italian UTA (*Unità di Trattamento Aria*). It is a device used to regulate and circulate air as part of a heating, ventilating, and air-conditioning (HVAC) system. An air handler is usually a large metal box containing a blower, heating or cooling elements, filter racks or chambers, sound attenuators, and dampers. Air handlers usually connect to a ductwork ventilation system that distributes the conditioned air through the building and returns it to the AHU. Sometimes AHUs discharge (supply) and admit (return) air directly to and from the space served without ductwork.

AI: *Artificial Intelligence*

ATU: *Air Treatment Unit*, see AHU

AMCA 205: Standard on efficiency of fans and ventilation systems from AMCA, the *Air Movement and Control Association*: http://www.amca.org/UserFiles/file/AMCA%20205-10%20(Rev_%202011).pdf

ASHRAE: *American Society of Heating, Refrigerating and Air-Conditioning Engineers*. The ASHRAE standards are the most important reference standards on Heating, Ventilation and Air Conditioning & Refrigeration (HVAC&R), used at global level.

BEAM: *BEAM Plus* is a sustainability certification scheme developed in Hong Kong by the Hong Kong Green Building Council (HKGBC). It is quite well-used within Hong Kong, but not outside of it.

BMS: *Building Management Systems,* these systems allow local and centralized monitoring and active management of all systems of a building or of a part of it, therein including lighting, heating, air conditioning, ventilation, lifts, gates, IT and any other technological system of the structure. They can cover a larger or smaller scope, and greatly improve the possibility of management and maintenance of a building.

BREEAM: *Building Research Establishment Environmental Assessment Method*, it is the world's longest established method of assessing, rating, and certifying the sustainability of buildings first published by the Building Research Establishment (BRE) in 1990 in the UK. Despite being the oldest system and being very flexible, it used far less at the international level then the American LEED protocol.

CASBEE: *Comprehensive Assessment System for Built Environment Efficiency*. It is a sustainability certification scheme developed in Hong Kong by the Japan Green Building Consortium (JGBC). It is quite often used within Japan, but not outside of it.

CDD: *Cooling Degree-Day*. It considers the difference of temperature during 1 day and a reference temperature (in the USA, this is 18°C) during the hot season. The sum of the degree-days along the season provides an indication of the need of seasonal cooling, and can be correlated with a building or store's energy demand.

CDP: *Carbon Disclosure Project*, is an organization to which companies (and cities) report on their impacts on carbon, water and forests.

CFC: *Chlorofluorocarbons,* are fully halogenated paraffins, a family of chemical compounds made of chlorine, Fluorine and Carbon only that were once very used for refrigeration and other purposes. They are the main responsible of the depletion of the ozone layer in the upper atmosphere and powerful Greenhouse Gases, and started being gradually banned from the early '90s within the framework of the Montreal Convention, the international agreement on the contrast of the Ozone Hole.

CMR: a chemical substance that is *Carcinogenic, Mutagenic, or Toxic* for reproduction.

COP: within the document the acronym COP refers to the *Coefficient of Performance*, that measures the energy efficiency of air conditioning systems and heat pumps in heating mode as the ratio between heating energy produced and input energy. This value is normally between 2 and 3 (these systems do not convert energy into heat or cooling, but pump heat from a colder area to a hotter one) in common systems, but can be much higher for efficient systems.

COP21: within the world of international climate agreements, the COPs are the *Conferences of Parties*, i.e. the yearly meetings of the United Nations Framework Convention on Climate Change (UNFCCC). The COP3, held in Kyoto in 1997, ended with the signing of the Kyoto Protocol, which first set some binding commitments to the signing countries. The COP21 was held in Paris, and was concluded with the Paris Agreement, in which the signatory countries agree on a set of commitments aimed at keeping the global temperature increase due to climate change of the planet below 2°C.

DALI: Digital Addressable Lighting Interface (DALI) is a trademark for network-based systems that control lighting in building automation, allowing to control and regulate lighting. It is based on an open protocol, and functionally equivalent to a BMS (Building Management System) based on an open protocol.

DOS: *Directly Operated Store*. These are the typical free-standing stores in city centres. In these stores, the shop typically directly manages all the electric and mechanical systems needed for its operation, as well as maintenance, cleaning and waste management services.

EAC: *Energy Attribute Certificate,* a publicly, second- or third-party verified certificate system that certifies that a certain amount of energy is produced by a certain power plant, and that can be sold and bought by producers, traders, distributors until the final user. It allows a user to claim, for example, that the energy they use comes from renewable sources if they or their energy distributor cancel an amount of EACs from renewable power plants corresponding to the user's total energy consumption. EACs include the European system of GOs, the North American REC system and the international iREC system.

EER: *Energy Efficiency Ratio*, is the equivalent of COP for machines (heat pumps, refrigerators and air conditioners) working in cooling mode.

EMS: *Energy Management System* or *Energy Monitoring System*. EMS systems are constituted by smart meters measuring electricity (from the main lines and typically for areas of the controlled site(s), and by final use – e.g. lighting, IT, boilers, heating, ventilation), heat, cooling, water flows, temperatures, a communication architecture, a data storage system and an analysis software with several functions allowing tracking of consumption with time, checks of consumption of the site(s) and its parts under similar conditions in different times, automated reporting and several tools allowing to easily detect inefficiencies, maintenance needs and saving opportunities.

EPA: *U.S. Environmental Protection Agency*

EP&L: The *Environmental Profit & Loss* account (EP&L) is a tool, developed by Kering, that allows a company to measure in € value the costs and benefits it generates for the environment, and in turn make more sustainable business decisions.

FCEER: *Fan Coil Energy Efficiency Ratio*, in cooling mode (W/W). It is the EER for air conditioning terminal units.

FCCOP: *Fan Coil Coefficient of Performance*, in heating mode (W/W) It is the COP for air conditioning terminal units.

FEG: *Fan Efficient Grade*

Fs: *Solar Factor*

FSC: *Forest Stewardship Council*, an international multi-stakeholder organization promoting sustainable and responsible forest management. FSC certified wood comes from responsibly managed forests.

GC: General Contractor

GHG: *Greenhouse Gas*, the gas responsible for the ongoing global warming of the planet. The main GHG is CO_2, carbon dioxide, but there are several others, six of which are currently regulated by the UNFCCC.

GHGs: see GHG.

GO: *Guarantee of Origin* - represents one megawatt hour of electricity from a renewable resource. European version of a Renewable Energy Certificate (REC), currently available within 20 European countries. GOs are Energy Attribute Certificates and their emission and control is done by the national Transmission System Operator (TSO) managing the electric grid.

GWP: *Global Warming Potential* – a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO_2). Allows comparisons of the global warming impacts of different gases. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. The time period usually used for GWPs is 100 years. Relevant GWPs include methane (CH_4) at 28–36 over 100 years, R-410A, at 2088, R-134A at 1430, R-32 at 675, and HFO at 4.

HDD: *Heating Degree Day.* It considers the difference of temperature during one day and a reference temperature (in the USA, this is 18°C) during the cold season. The sum of the degree-days along the season provides an indication of the need of seasonal heating, and can be correlated with a building or store's energy demand.

HQE: *Haute Qualité Environnementale,* is a sustainability certification scheme developed in France by the Association française de normalization (AFNOR). It is quite frequently used within France, but not often outside of it.

HFC: *Hydrofluorocarbons,* are partially halogenated paraffins, a family of chemical compounds made of Hydrogen, Fluorine and Carbon that do not contribute to the problem of ozone depletion and are hence used to replace CFCs and *Hydrochlorofluorocarbons* (HCFCs) which do. They are powerful greenhouse gases, and according to the Montreal

Convention (the international agreement on the Ozone Hole), they will gradually be phased out, starting from those with the largest global warming potentials.

HVAC: *Heating, Ventilation and Air Conditioning* is the technology of indoor and vehicular environmental comfort. Its goal is to provide thermal comfort and acceptable indoor air quality. "Refrigeration" is sometimes added to the field's abbreviation, as HVAC&R or HVAC&R.

Illuminance: this is the total luminous flux incident on a surface, per unit area. It is a measure of how much the incident light illuminates the surface, wavelength-weighted by the luminosity function to correlate with human brightness perception. In SI derived units, illuminance is measured in lux or lumens per square meter (cd·sr·m−2). The foot-candle is a non-metric unit of illuminance, most commonly used by lighting professionals and in photography.

I-REC: *International Renewable Energy Certificate*. Each I-REC represents proof that one MWh of renewable energy has been produced and embodies the environmental benefits that amount of renewable energy has generated. Similar to REC system in North America.

LPG: *Liquified Petroleum Gas*

Multi-split: a multi-split system uses one external condensing unit/heat pump connected by refrigerant pipework to several indoor cooling/cooling and heating unit.

LED: *Light-Emitting Diode,* light source using electroluminescence to produce light 90% more efficiently than incandescent light bulbs.

LEED: *Leadership in Energy and Environmental Design*, the sustainability certification scheme developed in America and used around the world.

NGOs: *Non-Governmental Organizations*

O&M: *Operations and Maintenance*

OLED: *Organic Light-Emitting Diode,* a light-emitting diode (LED) using an organic compound to emit light in response to an electric current. Used in digital displays such as television screens.

PCB: *Polychlorinated Biphenyl,* a carcinogenic group of man-made organic chemicals consisting of carbon, hydrogen and chlorine atoms used in hundreds of industrial and commercial applications. Heavily restricted due to environmental persistence and toxicity.

PCT: *Polychlorinated Terphenyls,* a carcinogenic group of man-made organic chemicals consisting of carbon, hydrogen and chlorine atoms used as a substitute for PCBs. Heavily restricted due to environmental persistence and toxicity.

PEFC: *Programme for the Endorsement of Forest Certification,* is an NGO promoting sustainable forest management through third-party certification.

PVC: *Polyvinyl Chloride,* widely-used synthetic plastic polymer known to cause cancer, reproductive, development and immune problems. Kering has banned the use of PVC.

REC: *Renewable Energy Certificate.* Represents one megawatt hour of electricity from a renewable resource

SIS: *Store Within a Store*

SBT: *Science-Based Target*, science-based emissions reduction target, promoted by a joint initiative of CDP, UNGC, WRI, and WWF

Scoping: within this standard, scoping means the activities of understanding if a given specification provided by this Kering standard falls within the project perimeter or if it is out of scope. In a DOS most of the specifications may be relevant apart a few things (like external lighting, that can be present or not, or heat generation if some common system serving the whole building is in place). When a topic is out of scope the project cannot get the corresponding points, but these points are not even into the maximum achievable score within the project so this impact the final rating, by raising the importance of the other topics (the final rating is the ratio between the total points achieved by the project and the maximum points achievable within the project scope).

Scoring: scoring is the procedure that calculates the final rating of a project within this Kering standard. The score is the fraction between the total points achieved by the project and the maximum points achievable within the project scope. The points achieved by the project are the sum of those obtained by complying with the Kering standard specifications. A specific scoring tool has been developed to assist a project team in assessing the score of their project, making easier to make the best choices. This is provided in Appendix SP-1.1. During the project execution some topics may be not clear and clarified in a second moment. The tool takes this into account, allowing to keep some points pending during the project and providing the indication of the minimum and maximum achievable points in case no pending point is gained or all pending points are.

Scorecard: the scorecard is simply the list, issue by issue, topic by topic and subtopic by subtopic, of the points that a project achieves. The Kering standard scoring tool for store planning allows to see the complete scorecard in the main worksheet, and to have a syntetic view showing only the score obtained issue by issue in another synthesis worksheet, also including the rating achieved.

SDS: *Safety Data Sheet*, used to communicate hazards of chemical products

U-value: measures the effectiveness of a material as an insulator, as known as thermal transmittance

UL: *Underwriters Laboratory*

UN Global Compact: A United Nations initiative to encourage businesses to adopt sustainable and socially responsible practices

VRF: *Variable Refrigerant Flow*, also known as Variable Refrigerant Volume (VRF) is an HVAC technology using refrigerant as the heating and cooling method

VRV: *Variable Refrigerant Volume* (see VRF)

WRI: *World Resources Institute*, a non-profit promoting environmental sustainability, economic opportunity, and human health and well-being

WWF: *World Wildlife Federation,* NGO promoting wildlife conservation and protection of endangered species

VOC: *Volatile Organic Compound*, an organic compound that easily becomes a vapor or gas and is toxic to humans or animals when inhaled

APPENDIX SP-3. THE KERING STANDARD AND CERTIFICATIONS

Purpose of this document

This note was written after the completion of the Kering standard for offices, with its user manual, scoring table and various implementation tools. It presents a retrospective analysis of the equivalence between the internal Kering standard and the international certification schemes.

First it exposes the differences and similarities with examples and illustrations, and then it draws a general conclusion on the face value of the internal Kering standard: **as technically sound as international certifications, more focused and easier to implement.**

Differences and similarities

Kering standard addresses all the relevant environmental issues

Building certification schemes have grown over the years in regards the topics they cover, from energy focused to overall environmental impacts. They are designed to tackle all building operations (new construction, refurbishment, fit-out) as well as all building types (residential, retail, education, health care, etc.). They therefore propose a wide range of environmental topics, and let the user decide the exact perimeter depending on the specific situation.

The Kering standard is based on a framework that compiles all the environmental topics covered by three international certifications: the US LEED, the UK BREEAM and the French HQE. The topics covered by the Kering standard were carved out of this global framework, by retaining only the ones relevant for stores in refurbishment / new fit-out and for O&M. Furthermore, some topics that have been reported by the brands, and were not addressed by the certification schemes, have been added to the internal standard.

The process of choosing the relevant topics was an iterative one which involved the contribution of Kering, building experts and the store managers of the brands themselves. It is therefore safe to say that even though international certification schemes may appear broader, the internal Kering standard only treats the topics that would have been addressed anyway in the case of an implementation of a certification. The internal standard is therefore considered equal to certification schemes in regard the comprehensiveness of topics addressed.

LEED	BREEAM	Internal Standard
Location and transport	Transport	*Deemed non-applicable*
Sustainable sites	Land use and ecology	Construction
Water efficiency	Water	Plumbing & Metering
Energy and atmosphere	Energy	Lighting & cooling and heating & Metering & Building envelope & Electrical appliances
Materials and resources	Materials	Materials
Indoor environmental quality	Pollution & health and wellbeing	Ventilation & Materials
Innovation	Innovations	*Deemed non relevant*

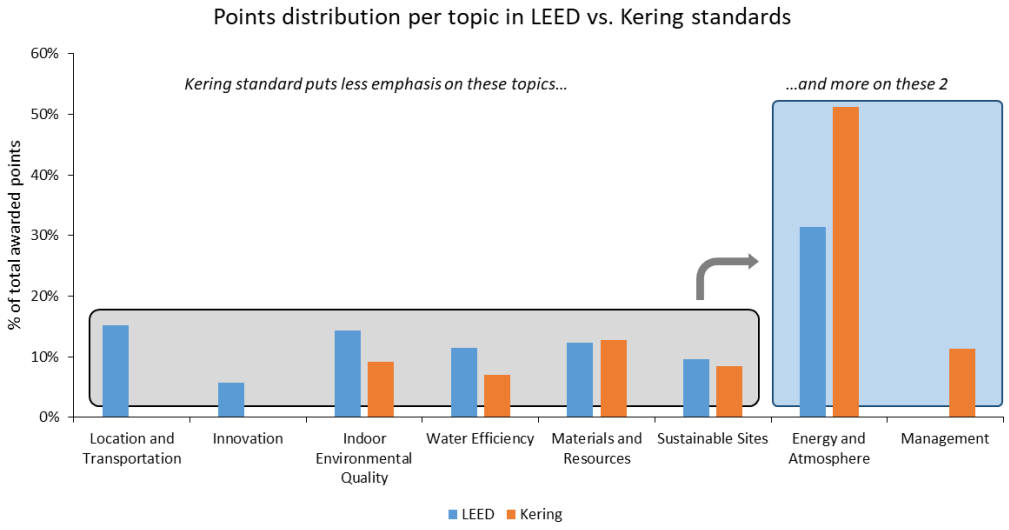
LEED	BREEAM	Internal Standard
Not addressed	Management	Management
Not addressed	*Not addressed*	Waste

Kering Standard puts more emphasis on Energy and Management issues

While certification schemes put an emphasis on the energy consumption and production issue, the large panel of environmental topics it covers spreads the points between all the issues. During the construction of the internal standard, it was clear for all participants that energy was a major issue for stores and the most urgent to address.

Furthermore, some topics covered by the international schemes were left out as they were deemed less relevant, and were replaced with more interesting ones.

The following is an example of the difference between LEED and the Kering standard with regards the points awarded to each topic. As shown, Location and transportation, and Innovation topics were replaced by Management. The energy topic was subdivided into single topics (not shown here for simplification reasons) such as HVAC, lighting, etc. As such, energy has a more important weight in the Kering standard than in LEED.



The emphasis on the energy topic might make it slightly harder to attain a certain level of performance using the Kering Standard compared to international schemes, as there may be less easy points available. However, this may be compensated by the flexibility of the internal standard which enables the user to scope-out topics deemed out of control and subdivide certain actions.

Kering Standard is at least as performing as certification schemes

Requirements of international schemes are a mix of technical solutions and performance objectives. The energy topic however is mostly addressed with an overall performance objective, based on already existing building standards. As such, LEED rates energy performance using the ASHRAE standard, and BREEAM using the local regulatory standard.

This target based method obliges the brands to commission energy optimization studies by building consultants for each and every store. However, knowing that all stores basically function in the same way and that the energy topic is the most important one, Kering wanted to use a more prescriptive method based on actual technical solutions.

Subsequently, the energy topic which is usually treated as a single block in international certifications, was subdivided into subtopics (lighting, HVAC, electrical appliances, etc.) and practical solutions were devised for each one. These solutions are based on the market's best practices. If all energy solutions were to be fully implemented, the performance of the store would exceed what is required by international certifications. For the remaining topics, the solutions proposed by the Kering standard are largely based on a mix of BREEAM, LEED and HQE solutions.

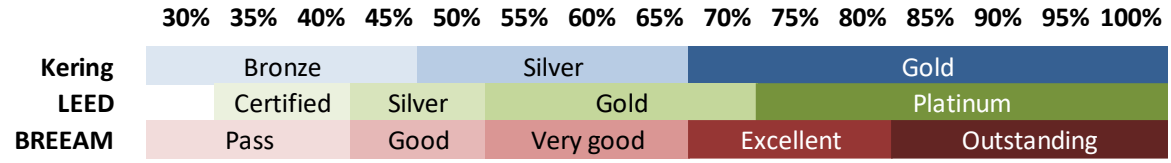
Therefore, we can consider that the internal Kering standard is more detailed than international certifications and is at least as performing, if not outperforming them.

Kering scoring scale is in line with that of certification schemes

The scoring scale of Kering Standard was designed emulate the international certification schemes, while remaining simpler with only three levels of performance available.

As such, each level corresponds to several of the certification schemes, especially the Gold level, which corresponds to LEED Gold and Platinum, and BREEAM Excellent and Outstanding.

The following is a comparison between the scoring scales of Kering, LEED and BREEAM:



Conclusion

The Kering internal standard is largely consistent with the international certification schemes:

- It treats the same main topics. Some of the topics addressed by the certifications are not used (deemed irrelevant for stores, such as Transport and Innovation), while news ones are included (Management);
- Kering focuses a lot on energy (roughly 50% of the points available are energy related), this may make it harder to get easy points. The standard makes up this difficulty in flexibility and scoping.
- The Kering standard largely uses the solutions proposed by the international certifications. When requirements are objective-based, the internal standard goes beyond those and proposes specific solutions;
- The performance of the solutions are at least on the same level as those of the certifications