Hea 01 Natural light

(All buildings)

Aim

To ensure daylighting is considered at the design stage and ensure best practice in visual performance, visual comfort, and overall wellbeing for building occupants.

Overview

Assessment type	Available credits	Applicable assessment criteria
Fully fitted	6 + 2 exemplary	All
Shell and core	5 + 1 exemplary	5-9, 12 (see ref 1.0 and 1.1)
Shell only	5 + 1 exemplary	5-9, 12 (see ref 1.0 and 1.1)
Residential: Fully fitted	6 + 2 exemplary	All
Residential: Partially fitted	5 +1 exemplary	5-9 (see ref 1.0 and 1.1)
EU Taxonomy	-	None

Minimum standards

Rating level	Criteria
Outstanding	Minimum standard - Natural light

Assessment type specific notes

Reference	Assessment type specific note
1.0	**View out** Where it is not possible to confirm which areas of the building will contain workstations or benches or desks, then all areas of the building designed for or likely to be occupied by workstations or benches or desks must comply with the relevant criteria.
1.1	**Daylighting** Where the building is speculative and therefore the final layout is not defined (e.g. only an open plan shell is provided in each tenanted space), the required percentage of each open plan shell should meet the daylighting requirements. However, where it is possible to designate separable ancillary areas that would be required in the space (such as toilets or server rooms), these can be excluded from the calculation.

Building type specific notes

Reference	Building type specific note
2.0	**Residential institution (Long term stay) – living rooms** **Residential care home – Communal lounges, individual bedrooms** All relevant areas are to be within 5m of a wall which has a window or permanent opening providing an adequate view out. The window or opening must be ≥ 20% of the surrounding wall area.
2.1	**Residential, Residential institutions, and Hospitality - Bedrooms** Glare is not considered to be problematic in bedrooms in residential institutions (long term and short-term stay), Hospitality and Residential assessments where the occupants are assumed to be elsewhere during the daylight hours. The only exception to this is where designated additional office working space is provided within a bedroom. In these circumstances it is the role of the assessor to determine if individual spaces should be determined as 'relevant building areas' in accordance with guidance provided.
2.2	**Commercial kitchens** It is not necessary to provide a view out for commercial kitchens. This is because in such a space it is likely that kitchen staff will move around, doing various tasks. This makes the requirements for the view out to rest the eyes unnecessary.

Assessment criteria

This issue is split into seven parts:

- Minimum standard - Natural light
- Glare control – one credit
- Daylighting – three credits
- Direct sunlight to windows – one credit
- View out – one credit
- Exemplary credit – Evaluation glare from daylight
- Exemplary credit - Daylighting

Minimum standard - Natural light

1 Achieve one of the below:

1.a At least 95% of all relevant building areas for daylight, have vertical and/or inclined windows with a glazed area ≥ 20 % of the surrounding wall area (see Definitions and M1).

OR

1.b At least 80% of relevant building areas for daylight have a glazed area as a percentage of floor area ≥ 8% (see Definitions and M1).

Glare control – one credit

2 Identify areas at risk of glare using a glare control assessment. The glare control assessment also justifies any areas deemed not at risk of glare.

3 Where risk has been identified within a relevant building area (see Definitions), a glare control strategy is used to design out the potential for glare, see M2.

4 The glare control strategy does not increase energy consumption used for lighting. This is achieved by maximising daylight levels in all weather, cloudy or sunny

Daylighting –three credits

5 The relevant building areas meet the daylighting criteria in the SS EN 17037:2018+A1:2021 as outlined in Table 12 (see M3.2)

Direct sunlight to windows – one credit

(Residential, Healthcare, Residential institution – Long term stay)

6 All relevant units have at least one relevant area that receives at least 1.5 hours of direct sunlight at windows on equinox day (21 March or 21 September, as the average representation of annual conditions) assuming a cloudless sky (see M4).

View out – one credit

7 At least 75% of the floor area in 95% of spaces for each relevant building areas can meet both of the following criteria:

7.a Horizontal sight angle ≥ 28° AND

7.b The landscape layer and at least one additional layer (sky or ground) are visible through a permanent opening (see M5.4).

Exemplary credit – Evaluation glare from daylight

8 Achieve the credit for 'Glare control' (criteria 1–3).

9 An evaluation has been undertaken to demonstrate compliance that the Daylight Glare Probability (DGP) does not exceed 0.40 over more than 5% of annual operating hours at all workstations in all relevant building areas.

Exemplary credit – Daylighting

10 Relevant building areas meet the medium rating in SS EN 17037:2018+A1:2021 and the relevant criteria in Table 13.

Checklists and tables

Table 12: Space type and illuminance requirements – in Option 1 both criteria (average illuminance and minimum point illuminance) must be met

Area type	Minimum area to comply		EN 17037
	2 credit	3 credits	
Preschools, schools, – occupied spaces	60%	80%	E_{TM} ≥ 100 lux in 95% of the room AND E_T ≥ 300 lux in 50% of the room [
Universities, colleges and higher education – occupied spaces			
Kitchens	100%		E_{TM} ≥ 100 lux in 95% of the room AND E_T ≥ 300 lux in 50% of the room
Living rooms, dining rooms, studies (including home offices)			
Non-residential or communal occupied spaces	80%	-	
Kitchens	100%	-	E_{TM} ≥ 70 lux in 95% of the room AND E_T ≥ 200 lux in 50% of the room
Living rooms, dining rooms, studies (including home offices)	100%	-	
Sales areas	35%	-	E_{TM} ≥ 100 lux in 95% of the room AND E_T ≥ 300 lux in 50% of the room For at least 50% of the annual daylight hours
Other occupied areas	80%	-	
All occupied spaces, unless indicated in Definitions	60%	80%	E_{TM} ≥ 100 lux in 95% of the room AND E_T ≥ 300 lux in 50% of the room
Internal association or atrium area	60%	80%	E_{TM} ≥ 100 lux in 95% of the room AND E_T ≥ 300 lux in 50% of the room
Teaching, lecture and seminar spaces			
All occupied spaces, unless indicated in Definitions			
Staff and public areas	60%	80%	E_{TM} ≥ 100 lux in 95% of the room AND E_T ≥ 300 lux in 50% of the room
Occupied patients' areas (dayrooms, wards) and consulting rooms			
Staff and public areas	-	80%	
Occupied patients areas (dayrooms, wards) and consulting rooms	-		

Table 13 : Exemplary level illuminance value requirements (both criteria – average illuminance and minimum point illuminance – must be met for daylight illuminance method)

Area type	Exemplary credits	Minimum relevant area to comply	SS EN 17037:2018
Multi-storey buildings - Occupied spaces (unless indicated below)	1	80%	E_{TM} ≥ 300 lux in 95% of the room AND E_T ≥ 500 lux in 50% of the room
Single storey buildings - Occupied spaces (unless indicated below)		80%	E_{TM} ≥ 300 lux in 95% of the room AND E_T ≥ 500 lux in 50% of the room
Retail buildings - Sales areas	1	50%	E_{TM} ≥ 300 lux in 95% of the room AND E_T ≥ 500 lux in 50% of the room
Retail buildings - Other occupied areas		80%	E_{TM} ≥ 300 lux in 95% of the room AND E_T ≥ 500 lux in 50% of the room

Methodology

M1: Natural light – minimum standard

The minimum standard for Natural light is applicable to relevant areas for daylight, (see definition).

M1.1: Window to wall area

The following steps must be followed in order to assess whether the asset demonstrates compliance with the minimum performance requirements, Criterion 1.a.

1. For each relevant space, calculate the total glazed area of vertical and/or inclined windows. The frames are not included in the calculation, only the area of glass.
2. Calculate the total area of surrounding walls containing the windows within each relevant area.
3. For each relevant space, compare the ratio of total glazed area to the total surrounding wall area of 20% to assess whether the occupied space is compliant or not.
4. Calculate the percentage of all relevant areas within the asset that meets the minimum performance requirements, as follows:

Percentage of relevant area = (Total net internal area of compliant space / Total net internal area of all relevant space) x 100

Criterion 1a is not applicable to horizontal daylight openings. Where horizontal daylight openings are used, criterion 1b applies.

M1.2: Glazing to floor area

The following steps must be followed in order to assess whether the asset demonstrates compliance with the minimum performance requirements, Criterion 1.b.

1 For each relevant space, calculate the total glazed area (m2) of all windows and roof lights within the space. The frames are not included in the calculation, only the area of glass.
2 For each relevant space, calculate the percentage of glazed area to floor area as follows:

Percentage glazed area to floor area = (Total glazed area in relevant space / Net internal area of relevant space) x 100

3 For each relevant space, compare to glazed to floor area percentage of 7% to assess whether the space is compliant or not.
4 Calculate the percentage of all relevant areas within the asset that meets the minimum performance requirements, as follows:

Percentage of relevant area = (Total net internal area of compliant space / Total net internal area of all relevant space) x 100

M2: Glare control

M2.1: Glare control assessment

A glare control assessment is used to determine the areas of the building that are at risk of glare, including a demonstration of the building areas not at risk. This can be achieved through a survey of or modelling of the relationship between sunlight and the building. The design must consider the possibility of glare from all sources, including direct sunlight, reflected sunlight and contrast glare. Design studies can be used to demonstrate that glare cannot reach the eyes of building occupants, or the computer screens they are using, during occupied hours.

Where compliant shading measures are specified for all relevant building areas regardless of the risk of glare, a glare control assessment will not be necessary. The glare control strategy must demonstrate building design measures are specified for all relevant building areas, while also complying with criteria 4 to 4.b.

It is acceptable to account for surrounding buildings, structures or other permanent environmental features when using simulation modelling to assess the risk of glare, provided this accounts for both direct sunlight and reflected glare from glazing or reflective surfaces.

Where roof lights are present, they must be considered when demonstrating that the glare control strategy provides adequate control/measures for minimising glare in that space.

M2.2: Assessing compliant forms of glare control

Compliant shading measures for meeting glare control criteria are:

1 Internal, mid-pane, or external shading such as opaque Venetian or close weave fabric blinds where:
   1.a The openness factor of blinds is ≤ 1% and the fabric light transmittance value is ≤ 0.1 (10%).
   OR
   1.b The openness factor of blinds is ≤ 3% and the fabric light transmittance value is ≤ 0.03 (3%).
2 The shading can be occupant controlled or automatically controlled with manual override.

The following measures can be used in addition to the above, but are not compliant on their own:

- Building-integrated measures (e.g. overhangs, brise-soleil, fins, or light shelves).
- Variable transmittance glazing (e.g. electrochromic, photochromic, or thermochromic glass).
- Window films and tinted glazing.

Transmittance values should be based on those quoted for ‘visible light’ or ‘optical transmittance’.

Glare control must provide shading from both high-level summer and low-level winter sun where relevant to the location of assessment. Design studies can be used to demonstrate the sunlight is prevented from reaching the eyes of building occupants, or the computer screens they are using, during occupied hours.

M2.2.1: Alternative shading measure

Variable transmittance glazing (e.g. electrochromic, photochromic, or thermochromic glass) as well as window films can reduce glare from the bright sky but may have little impact on glare from the sun. Therefore, such shading options should be used in conjunction with other glare control measures in all cases where control of glare from the sun is required.

Solar control or ‘tinted’ glazing could potentially support the attainment of this requirement. It should be noted that whilst certain types of glazing, such as low emissivity glazing, may be slightly tinted, they may not necessarily be effective in reducing disabling glare. For facades receiving direct sunlight, tinted windows alone are unlikely to be sufficient in most situations. The assessor must provide evidence to demonstrate that the particular glazing type, when

used on the assessed building for a given location, meets the overarching aim of preventing disabling glare.

Curtains (where used without other forms of shading) do not meet the criteria for the glare control credit. This is because they do not provide sufficient control to optimise daylight into the space. As such, the use of curtains to control glare is likely to cause occupants to rely more on artificial lighting.

M2.3: Applicability of glare control – Atrium spaces

The 'Glare control' criteria are applicable to all spaces that meet the definition for 'relevant building areas – glare control'. This includes reception and atrium spaces where these spaces meet this definition. Where an atrium space does not meet the definition of 'relevant building areas – glare control' it does not need to comply with the criteria. However, the risk of glare must be considered for any relevant building areas that connect off the atrium space. This is because sunlight could pass through the atrium causing discomfort for users of other relevant building areas that connect to the atrium space. Where this is the case, building design measures or the provision of shading will be required to enable glare to be controlled or eliminated.

M3: Daylight

M3.1: Calculating the percentage of assessed area

The percentage of the total floor area of all relevant areas must comply where the criteria specify that a percentage of floor area must have adequate daylight illuminance. For example, six relevant rooms each have a floor area of 150 m² making a total relevant floor area of 900 m²; 80% of this floor area must meet the criterion, so 720 m² must comply. This is the equivalent to 4.8 rooms. As daylight illuminance is a measure of daylight across the whole room, only whole rooms can be compliant. The number of rooms must always be rounded up so, in this example, five rooms must comply to achieve the credit.

Spaces whose size is substantially larger should meet the daylight criteria on their own. In these cases, the percentage requirement is still applicable to the floor area of the remaining rooms.

For example, where 80% of 'teaching, lecture and seminar spaces' need to comply with the daylight illuminance criteria, if we have a large lecture theatre of 200m2 and 3 seminar spaces of 30m2 each, the requirement for 80% would mean 232m2 of the floor area need to comply. This would require the lecture theatre and two seminar spaces to comply.

Where areas within a building have different daylighting requirements for the same credit, all relevant areas must meet the requirements to award the daylighting credit(s).

M3.2: Calculation model

Daylighting calculations will require assessment via detailed computer modelling to simulate the daylight illuminance at calculation points within the assessed spaces. The calculation model should include all the room surfaces, and any surface outside the room that could affect the direction or quantity of light received.

If any of the assessed spaces is expected to contain moveable shading device (such as blinds), then a dynamic modelling of their use should be included in the calculation for option 1. For options 2 and 3, consideration should be made to the shading guidance in EN17037.

Calculations should be carried out using climatic data for the location of the site (via the use of an appropriate weather file within the software) at an at least hourly interval for a typical year and using appropriate simulation parameters as described in Guidance Note 50.

M4: Direct sunlight

M4.1: Relevant building areas

Relevant units (see definitions) must each be assessed separately with at least one relevant area meeting the criteria in each unit.

M4.2 Calculation

The criterion applies to rooms of all orientations, although if a room faces north of due east or west it is less likely to be met (as experienced in the northern hemisphere).

A geometrical calculation model should be used and include in detail any surrounding obstructions and surfaces outside the room that could affect the sunlight received. Surface reflectances are not needed for this calculation. This can be determined using either a manual procedure or adequate software. Further reference can also be made to CEN 17037, Annex D.

Where window positions are already known, a reference point on the inside face of the window aperture at the centre of the opening width and at least 1.2m above the floor and 0.3m above the sill (whichever is the higher) should be used. For a horizontal daylight opening (such as a rooflight), the reference point should be taken its geometrical centre on the inside face of the opening.

Sunlight blocked by window reveals and balconies or overhangs above the window should not be included, but the effect of window frames and bars can be discounted.

If a room has multiple windows, the amount of sunlight received by each can be added together provided they occur at different times and sunlight hours are not double counted.

M5: View out

M5.1: Relevant building areas

The view out criteria apply to all ‘relevant building areas’ (see Definitions). The assessment is based on distinct spaces that are considered relevant building areas. These are referred to as ‘relevant spaces’ (see Definitions).

- A relevant space is compliant where the required percentage of the floor area has an adequate view out.
- Credits are awarded based on the percentage of all relevant spaces that are compliant.

For example, 19 out of 20 relevant spaces have adequate view out for 95% of each separate space's floor area. This results in 95% of the relevant spaces meeting the view out requirements, from which the number of available credits can be determined.

Where rooms contain areas of different functions, only relevant areas should be assessed. In this case a notional line can be drawn on the plans and calculations made based on these relevant areas only. However, spaces such circulation routes or other transient spaces within a relevant area can only be excluded if the route or area is clearly defined by the building layout. If this is arbitrary or based solely on a proposed furniture layout, it cannot be excluded. Features of the building layout which may be considered as dictating a function area would include, for example, the position of doors or fixed furniture such as a reception desk or canteen servery.

M5.2: Calculating the window to wall ratio

This should be calculated based on the glazed area of window or opening, expressed as a percentage of the area of the external wall in which the window or opening sits.

The frames are not included in the calculation, only the area of glass. The external wall area also includes the area of the window or opening itself.

Where the ceiling height of the room is unusually high, relative to the window height, the wall area can be calculated based on a standard ceiling height for the building type.

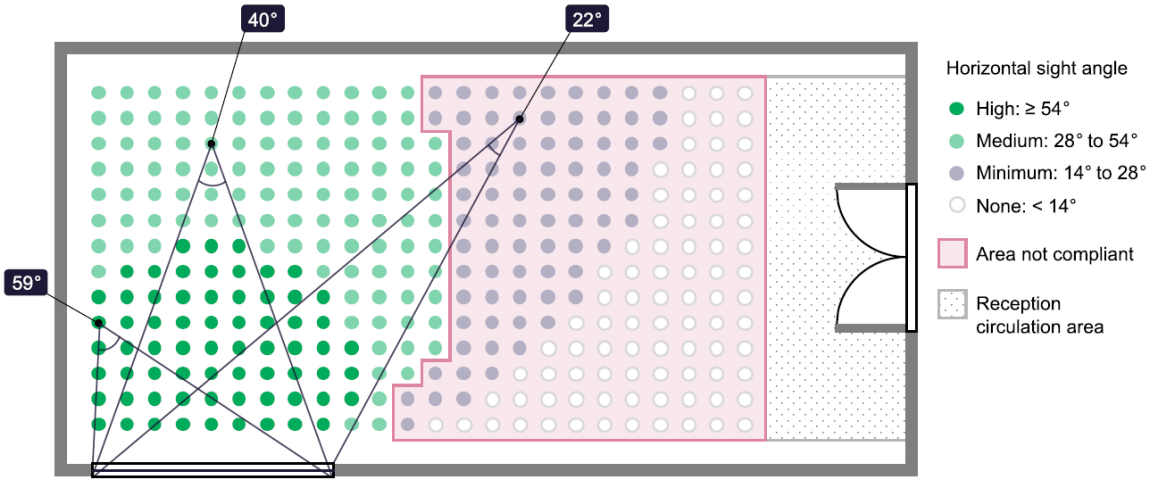
Where there are windows or openings in different walls within a space, the window or opening nearest to each desk or work space can be considered in the calculation.

M5.3: Horizontal sight angle

This defines the width of the view from a specific reference point in the assessed space.

To assess the horizontal sight angle over a room area, a horizontal grid should be built as illustrated in Figure 3. The grid spacing should be no more than 0.3m in residential applications and no more than 0.5m in non-residential applications. The horizontal sight angle as formed by the view opening reveals should be determined at each grid point, and then the percentage room area with a horizontal sight angle above a certain threshold can be calculated from the percentage of grid points exceeding that threshold.

Where a space has more than one opening, the horizontal sight angle at a reference point can be taken as the sum of the horizontal single angles determined for each opening as seen from the reference point unless the openings are on opposite walls. Further reference can



also be made to CEN 17037, Annex C.

Figure 3: Example of horizontal sight angle assessment in a space with one opening (circles indicate grid points)

M5.4: View layer

A view is considered to comprise three distinct layers: the sky layer; the landscape layer; and the ground layer. The ground layer can include information of activities, whilst the landscape layer can consist of buildings, nature, a combination of these, or only the horizon. The more view layers are visible from a reference point, the higher the view quality for that point.

To assess the number of visible view layers over a room area, a horizontal grid should be built as illustrated in Figure 3. The grid spacing should be no more than 0.3m in residential applications and no more than 0.5m in non-residential applications. The number of visible view layers should be determined at each grid point, and then the percent room area with the number of visible view layers above a certain threshold can be calculated from the percentage of grid points exceeding that threshold.

Where a space has more than one opening, the number of visible view layers at a reference point can be taken as the number of visible view layers seen from the reference point through all openings that are not on opposite walls.

M6: Evaluating glare from daylight

M6.1: Daylight Glare Probability

Daylight Glare Probability (DGP) is a discomfort glare metric developed for side lit spaces. It factors in vertical daylight illuminances at the eye as well as brightness and position of potential sources of glare in the visual field of an observer.

Guidance Note 50 provides guidance on the methodology and application of the Daylight Glare Probability requirements. EN 17037 uses DGP to assess protection from glare for spaces where the activities are comparable to reading, writing, or using display devices and the occupants are not able to choose position and viewing direction.

Compliance with the BREEAM exemplary level criteria is achieved if for all workstations in all relevant building areas the calculated DGP value does not exceed 0.40 over more than 5% of annual operating hours.

The DGP assessment can be applied to a space with vertical or inclined daylight openings but is not applicable for a space with daylight openings in a horizontal surface (such as rooflights).

Additionally, DGP cannot be applied to cases where vertical illuminance is not expected to be a good indicator for the perception of glare; for example, vending areas of shops, sports halls and deep or dark spaces with very small daylight openings. Furthermore, DGP cannot be applied to positions in a space which are far away from daylight openings or receive low daylight levels.

Compliance notes

Reference	Terms	Description
Glare control		
CN1	No relevant areas	If the scope of the assessment does not include any relevant building areas (see Definitions), the criteria for glare control can be considered as met by default.
CN2	No windows in relevant areas	Where a relevant area (see Definitions) does not include any windows, the glare control criteria can be considered as met for this area. Note that the view out and daylighting criteria would not be achieved in rooms with no windows.
Daylight		
CN3	Compliant daylight metrics	As outlined in the criteria, only daylight illuminance methods are accepted. Only the daylight illuminance method from these standards is compliant with the criteria, other methods such as daylight factor are not.
View out		
CN4	First aid rooms	The view out criteria do not apply to dedicated first aid or medical rooms in non-healthcare projects.
CN5	Security and sensitive rooms	The view out criteria do not apply to rooms containing security, critical systems or sensitive material, such as CCTV monitoring rooms, where the presence of compliant windows would compromise a critical function of the space.
CN6	No relevant areas	If the scope of the assessment does not include any relevant building areas, as defined within the manual, the criteria for 'view out' can be considered as met by default.
CN7	Percentage area	For the view out credit, compliance must be demonstrated for the percentage of the floor area in each relevant building area, rather than the percentage of the total relevant building area in the building.
CN8	Exclusion of non-relevant areas	Only relevant areas within rooms should be assessed. However, spaces such as circulation routes or other transient spaces within a relevant area can only be excluded if the route or area is clearly defined by the building layout, this is further explained within M5.1.

Evidence

Criteria	Interim design stage	Post construction stage
Minimum standard		
1	Design drawings and calculations.	Assessor site inspection report and photographic evidence. OR Final construction drawings or equivalent. Updated calculations where required.
Glare control		
2-4	Design drawings and relevant section or clauses of the building specification or contract. Glare control assessment, where required.	Assessor site inspection report and photographic evidence. Final construction drawings or equivalent. Where relevant, manufacturer's data sheets or product literature. Glare control assessment, where required.
Daylighting		
5 and 12	Design drawings and daylight calculations. OR Relevant section or clauses of the building specification or contract confirming national best practice daylighting guidelines or BREEAM requirements.	Final construction drawings or equivalent or assessor site inspection report and photographic evidence. Daylight calculations, where not provided at design stage or updated. Confirmation from the design team that daylighting is in accordance with national best practice daylighting guidelines or BREEAM requirements.
Direct sunlight to windows		
6-7	Design drawings and calculations (manual or computer simulated). OR Relevant section or clauses of the building specification or contract confirming BREEAM requirements.	Where not provided at design stage or updated, calculations (manual or computer simulated). Assessor site inspection report and photographic evidence. OR Final construction drawings or equivalent.
View out		
8-9	Design drawings, window schedules and calculations.	Assessor site inspection report and photographic evidence. OR Final construction drawings or equivalent. Updated calculations where required.
Evaluating glare from sunlight		
10-11	Design drawings and calculations.	Assessor site inspection report and photographic evidence. OR Final construction drawings or equivalent. Updated calculations where required.

Definitions

Adequate view out

BREEAM defines an adequate view out as a view of a landscape or buildings (rather than just the sky) at seated eye level (1.2m) within the relevant building areas and should ideally be through an external window. A view into an internal courtyard or atrium will comply provided the distance from the opening to the back wall of the courtyard or atrium is at least 10m (therefore allowing enough distance for the eyes to refocus). The view cannot be an internal view across the room, as this is likely to become obstructed by partitions, filing cabinets etc.

Computer simulation

Software tools that can be used to model more complex room geometries for daylighting.

Illuminance

The amount of light falling on a surface per unit area, measured in lux.

Occupied space

A room or space within the assessed building that is likely to be occupied for 30 minutes or more by a building user.

Reflectance

The ratio of the luminous flux reflected from a surface to the luminous flux incident on it.

Relevant building areas – Daylighting

For BREEAM this is defined as areas within the building where good daylighting is of benefit to the building users if it is occupied space (see definition. This includes the following, specifically stated because they are often omitted:

1. Sports hall exercise spaces
2. Laboratory areas (unless the type of research that will be carried out requires strictly controlled environmental conditions, such as the exclusion of natural light
3. Self-contained flats
4. Kitchen and catering areas
5. General communal areas
6. Small offices (including those within residential buildings and residential institutions)
7. Meeting rooms (including those within residential buildings and residential institutions)
8. Leisure areas
9. Any area that may involve close up work.

However, this excludes the following (where present):

- Media, arts production, SEN sensory spaces, x-ray rooms and other areas requiring strictly controlled acoustic or lighting conditions.

Relevant building areas – Direct sunlight

For direct sunlight, only occupied living areas within the unit are required to assess the provision of direct sunlight. For example, within a healthcare building this would include in-patient bedrooms and day care living rooms.

Relevant building areas – Glare control

Glare control criteria apply to areas of the building where resultant glare could be problematic for users. This includes but not exclusively:

1. Areas that have been designed to contain or use workstations, projector screens, such as offices, study bedrooms, libraries, facility management offices and reception desks.
2. Areas where people must spend time in fixed locations and cannot change their viewing direction, such as classrooms and hospital wards.
3. Sports halls.
4. Areas where occupants are expected to spend a significant amount of time in the day such as care home bedrooms

Building areas described above, should not be assessed when they are excluded for the daylight and view out criteria.

Relevant building areas – View out

The aim of the view out criteria is to allow occupants to refocus their eyes from close work. Relevant areas are spaces where close work in a fixed position is carried out for sustained periods of time. The view out criteria is therefore not applicable to occupied areas such as meeting rooms, or other spaces where such close work is not being carried out.

BREEAM defines relevant building areas requiring a view out to include spaces where close work in a fixed position is carried out for sustained periods of time:

1. There are or will be workstations or benches or desks for building users
2. Close work will be undertaken, or visual aids will be used
3. Occupants spend a significant amount of time, and a view out is deemed to be of benefit to the building occupants, this includes:
   3.a Bedrooms (Residential care home)
   3.b Living rooms (Residential institution – long term stay, and Residential)

Excluded areas for view out might include:

1. Conference rooms, meeting rooms, lecture theatres, sports halls, acute SEN rooms, kitchens

2 Any spaces where the exclusion or limitation of natural light is a functional requirement, e.g. laboratories, media spaces, etc.
3 Individual booths or enclosed workstations that are intended for temporary non-permanent work
4 Bedrooms where occupants mainly use the space for sleeping, such as in hospitality, residential and residential institutions (long- and short-term stay) and bedrooms that are not specified above and in (building type specific note 2.1).

Relevant spaces – View out

A distinct space that falls within the definition of 'Relevant building area'.

Relevant unit – Direct sunlight

A relevant unit would be a distinct building or space intended for single residential-like occupancy type. Where units are self-contained, such as a house or flat each self-contained unit must be considered separately. Where there are shared communal areas such as in residential care home, then the whole care home can be considered one relevant unit. In a healthcare scenario a healthcare ward which overnight patients have direct access too would be considered one unit.

Surrounding wall area

Surrounding wall area refers to the internally measured area (in m²) of the external wall on which the window or opening is located, including the area of the window or opening itself.

View of sky

Areas of the working plane have a view of sky when they receive direct light from the sky, i.e. when the sky can be seen from working plane height.

Working plane

Horizontal, vertical, or inclined plane in which a visual task lies. The standard height for Swedish daylight calculations has traditionally been 0.8 m but for purpose of BREEAM-SE, daylight calculations are to be performed on a reference plane that is at a height of 0,85 in accordance with the guidelines of the SS 17037:2018+A1:2021.

Additional information

None.