Daylight glare control

Criteria
For office spaces all of the following criteria must be met:
• occupant-controlled window coverings (typically blinds or screens) are fitted to the external windows and atria that receive sunlight directly or indirectly;
• coverings are designed to provide optimum glare control and allow the best possible retention of views out with the coverings drawn closed; and
• fabric screens, where specified, have a visual light transmittance (VLT) of less than 10%.
For retail spaces one of the following criteria must be met for all visual display units (VDU) e.g. tills, ATMs:
• the VDU must be positioned so that light from the window does not fall on it or cause reflections;
• the VDU must be fitted with an anti-glare screen; or
• the workspace must be provided with a screen that

Scoping
Office spaces: this measure applies if window coverings are specified or installed.
Retail spaces: this measure applies if VDUs are installed within 6m of an external window or adjacent to roof lights or sunpipes.
This measure is in scope whether procured by a client directly or part of main build works contract.

Assessment
At design stage: check specifications and manufacturer’s literature and policies for compliance with criteria.
At handover stage: check materials’ receipts for compliance with specification or carry out a site visit. For retail spaces, a site visit must be carried out.
At occupancy stage: if window coverings have been changed or added to then repeat the handover stage assessment. If this measure was achieved at handover stage and the window coverings have not been changed or added to, this measure will be achieved by default. For retail, check that each VDU still has the appropriate glare control.

Rationale
Glare control is important for occupants comfort, particularly in relation to users’ workstations. The Health and Safety (Display Screen Equipment) Regulations 1992 (Amended 2002) Schedule to Regulation 3 requires that: ‘Windows shall be fitted with a suitable system of adjustable covering to attenuate the daylight that falls on the workstation’. This requirement is
Thermal comfort assessment (continued)

commonly met by provision of internally fitted, externally fitted or encapsulated blinds to external windows and atria windows.
In a retail environment, where there are few VDUs and where it may not be appropriate cover to the windows, the provision of individual glare control for each VDU is acceptable.

Guidance

Window coverings

The manufacture of window coverings and their materials should not contribute to resource depletion or persist in the environment if disposed of (e.g. to landfill). This aspect is covered by good practice measures relating to material selection; however, for blinds, and particularly fabric blinds, the material selection for reasons of wellbeing and its physical and environmental performance are closely linked and should be considered together in any process of specification. For example fabric blinds should meet the Eco-tex 100 Standard.

Although the VLT rate is provided by most suppliers of blinds the following guidance can assist in the calculation of glare reduction:

Glare reduction is the percentage reduction in visible light transmission through glazing, from glass without covering to that with covering. It can be calculated from the following formula:

\[
GR = \left( \frac{VLT1 - VLT2}{VLT1} \right) \times 100
\]

Where:

- VLT1 is the visible light transmission of the window without treatment; and
- VLT2 is visible light transmission of window after treatment.

Visible light transmission and glare reduction are related and to reduce glare the amount of visible light transmitted must be reduced.

Retail space

This measure is only in scope where VDUs are installed in a space where daylight falls; in practice this is the space that is less than 6m from the window. If the window has been boxed in as part of the fitout, then this measure is not in scope. Where the retail space is within a shopping mall and the windows open onto the covered landlord space then this measure will not be in scope.

Bespoke joinery can be used to create a screen that prevents glare.

Useful papers on daylight and window treatments, Daylight Dividends.