

The European Voice in Standardization [ANEC](#) has proposed the following draft Annex Legibility to be included in the ISO/DIS 21041 Guidance on unit pricing

Annex Legibility
(informative)

1. General

This Annex x is only about legibility – ability to read. It does not address prominence – ability to notice.

Also, it relates only to unit prices on shelf edge labels displayed in-store. It does not relate to unit prices displayed in-store on other signs or online or in advertisements.

It is based on a German standard DIN 1450 'Typefaces, Legibility'.

2. Minimum character heights for in-store shelf edge labels

Character height has a major impact on legibility.

In a well-lit environment, for persons with normal visual acuity (Visus 0,7) standing upright 0,60 m from the shelf, a minimum character height of 3,2 mm is required for good legibility of unit prices on vertical labels 1,20 m to 1,80 m from the floor.

For larger viewing distances the table shows the required minimum character heights for vertical and angled shelf edge labels with the viewer standing upright and 0,6 m from the shelf¹.

¹ The viewer is standing upright in a distance of 0,6 m to the shelf and can see the labels at height of 1,50 m and above in a viewing distance of about 0,60 m by slightly changing posture. Below 1,50 m the viewing distances are larger than 0,60 m, because the viewer looks diagonally downwards.

Table: Minimum character heights for vertical and angled shelf edge labels for different viewing distances and distances from the floor

Distance of unit price from the floor (m)	Viewing distance (m)	Minimum character heights (mm) for shelf edge labels:	
		vertical	angled (angle 40)
1,10	0,72	3,4	-
1,00	0,78	3,9	-
0,70	1,00	6,4	4,1
0,40	1,25	10,3	5,3
0,10	1,52	15,2	6,7

The table shows that when a shelf edge label sign is close to the ground (for example on the lower shelves), and vertical to the viewer, much larger character heights are required to provide good legibility than when the shelf edge label is angled out towards the viewer.

To take account of the needs of viewers in wheel chairs (with an eye level of 1,2 m):

- Angled shelf edge labels signs should be only up to 0,8 m from the floor and above that should be vertical.
- For vertical shelf edge labels on the upper shelves (1,80 m from the floor) at larger viewing distances (0,85 m) the minimum character height should be 4,7 mm.

The given minimum character heights refer to persons with normal visual acuity (Visus 0,7) and good luminosity ($L = 100 \text{ cd/m}^2$).

If the visual acuity is less (Visus: $< 0,7$ and $\geq 0,5$) the values of these character heights have to be multiplied by 1,4. If the visual acuity is between Visus $< 0,5 \geq 0,4$ these character heights have to be multiplied by 1,75.

If the luminosity is adequate ($L = 10 \text{ cd/m}^2$) these character heights have to be multiplied by 1,25 for people with normal visual acuity (Visus 0,7) or 1,7 for people with reduced/limited visual acuity (Visus 0,5).

If the luminosity is inadequate ($L = 1 \text{ cd/m}^2$) these character heights have to be multiplied by 1,5 for people with normal visual acuity (Visus 0,7) or 2 for people with reduced/limited visual acuity (Visus 0,5).