

Light Reflectance Value - LRV Reflektionsvärde

February 2021

			LRV-	
Brand	ArtNr 2	Produkt	värde	Stdev
Karelia	6438117011789	Oak Light Smoked Matt 3S	7	1,1
Karelia	6438117006822	Walnut Story 138 Spirit	15	2,8
Karelia	6438117011598	Oak Natural Matt 3S 5G 24	26	5,4
Karelia	6438117011703	Oak Story Dacite Grey FP 188	28	2,1
Karelia	6438117011710	Oak Dacite Grey 3S	29	3,1
Karelia	6438117012656	Oak Chalky Grey 3S	30	4,3
Karelia	6438117013103	Oak Kuopio Matt 3S 5G	32	4,6
Karelia	6438117012441	Oak Vanilla Matt 3S 5G 24	35	9,0
Karelia	6438117011635	Oak Story 188 Natur BR Matt 5G	35	3,6
Karelia	151131220	Oak FP 200 Natur Vanilla Matt	37	3,6
Karelia	6438117013110	Oak Kuopio Vanilla Matt 3S 5G	39	3,6
Karelia	6438117011604	Oak Natural Vanilla Matt 3S 5G 24	40	5,3
Karelia	6438117009625	Oak FP 138 Vanilla Matt 5G	46	3,3
Karelia	6438117011833	Oak Creamy White 3s	47	4,0
Karelia	6438117011826	Oak Story Creamy White 188	49	2,1
Karelia	6438117010393	Ash Country Vanilla Matt 3S	58	4,5
Karelia	6438117012649	Oak Milky White	65	2,7
Karelia	6438117010508	Ash Natur Vanilla Matt 5G 2S	66	4,2
Karelia	6438117011475	Ash FP 138 Sel Vanilla Matt 5G	66	3,0
Karelia	6438117920289	Ash Classic Vanilla Mat 3S 188	68	4,6
Karelia	6438117920272	Ash Natur Vanilla Matt 3S 188	70	3,0

Measurement method: Measured with an Cromocon LRV meter.

STDev -Standard Deviation: LRV light reflectance values shown above are the results of testing, however, due to the natural variation in wood there will be some deviation from these test values. Standard deviation is a statistical term used to measure the amount of variability around an average.

Mätmetod: Mätt direkt med en Cromocon LRV-mätare.

STDAV-standardavvikelse: LRV-ljusreflektionsvärdena som visas ovan är resultaten av testning, men på grund av den naturliga variationen i trä kommer det att finnas någon avvikelse från dessa testvärden. Standardavvikelse är en statistisk term som används för att mäta variationens variation runt ett genomsnitt.

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	ł	HARDWOOD FLOORS								
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

Light Reflectance Value scale

The current guidance in the Regulations and in Codes of Practice, BS 8300:2009, is that adequate visual contrast is provided if the Luminous Reflectance Factor - Light Reflectance Values (LRV) of the contrasting areas differ by at least 30 points. The current British Standard for the measurement of LRV is BS8493:2008+A1:2010.

Y - Luminous Reflectance factor

The luminous reflectance factor Y, is the physical value of the quantity of light energy reflected by a surface, expressed as the percentage of light reflected under the same conditions by a perfect reflecting diffuser. Y, is based on a scale of 0 to 100, where zero = black and therefore represents total light absorption and white = 100 and therefore total light reflection. The CIE model capitalizes on this fact by defining *Y* as luminance.

LIGHT REFLECTIVE VALUE (LRV) The Equality Act 2010 (UK) (which replaced the 2004 Disability Discrimination Act) requires that all new and refurbished public buildings and work places comply with current regulations via their 'Access Statement', ensuring safe entry, exit and safe passage throughout the building. Obligations regarding building access and usage are covered under BS8300 / Building Regulations Approved Document. Failure to comply with the Equality Act could result in building owners and facility managers being fined up to £50,000.

How does it affect finishes? The regulations mean that people, regardless of disability, age or gender, must be able to gain equal access to public buildings. For visually impaired people this means amongst other things that there must be a good visual contrast between various elements of the building, including doorways, fixtures and fittings. Therefore, the contrast between for example doors and walls must achieve a certain level – measured by something called Light Reflectance Value (LRV).

What is Light Reflectance Value? LRV is a universal value for 'contrast'. It measures the proportion of useful light reflected by a colored object. It represents a relative light and darkness value rather than an actual color. Therefore, dissimilar colors could have the same LRV. LRV is measured on a scale of 0 to 100, 0 being perfect absorbing black and 100 being perfect reflecting

white (in reality you never find these perfect objects - a bright white would typically have a result of an LRV of 85)

Why do we need Contrast? Most registered blind people will still have some vision in color. Only a small percentage (less than 5%) can see nothing at all, and even people within this group will generally have some sensitivity to light and shade. Ensuring that a minimum of 30 points of LRV



difference is specified for adjacent surfaces will in the majority of cases help to ensure that visually impaired people are not discriminated against.

Examples where visual contrast will be required:

- Door faces and/or frames to walls
- Floors to Walls